

In The Matter Of:
ICAHN SCHOOL of MEDICINE at MOUNT SINAI

Vol. 1
July 6, 2023

Burke Court Reporting, LLC
64 Magnolia Place
Wayne, NJ 0747
(973) 692-0660



Min-U-Script® with Word Index
BURKE
**COURT REPORTING
& TRANSCRIPTION**

Page 1

1 BEFORE THE
2 NATIONAL LABOR RELATIONS BOARD
3 -----:
4 In the Matter of: : Case No.:
5 ICAHN SCHOOL of MEDICINE at MOUNT SINAI, :
6 Employer, :
7 and :
8 INTERNATIONAL UNION, UNITED AUTOMOBILE, :
9 AEROSPACE, and AGRICULTURAL IMPLEMENT :
10 WORKERS of AMERICA, :
11 Petitioner. :
12 -----:
13 The above-entitled matter came on for hearing Pursuant to
14 Notice, before AVI KUMAR, Hearing Officer, at the National
15 Labor Relations Board, Region 2, Jacob K. Javits Federal
16 Building, 26 Federal Plaza, Suite 36-130, New York, New York,
17 on Thursday, July 6, 2023, at 9:30 a.m.
18
19
20
21
22
23
24
25
26

Page 2

1 A P P E A R A N C E S
2 On Behalf of the Employer:
3 ADAM M. LUPION, ESQ.
4 MELISSA FELCHER, ESQ.
5 RAYMOND ARROYO, ESQ.
6 JOSHUA FOX, ESQ.
7 YONATAN GROSSMAN-BODER, ESQ.
8 Proskauer Rose LLP
9 Eleven Times Square, 19th Floor
10 New York, New York 10036-8299
11 (212) 969-3558
12 alupion@proskauer.com
13 mfelcher@proskauer.com
14 rarroyo@proskauer.com
15 jfox@proskauer.com
16 ygrossman-boder@proskauer.com
17
18 ANDREW E. RICE, ESQ.
19 MARINA O. LOWY, ESQ.
20 Mount Sinai General Counsel
21 150 East 42nd Street, 2nd Floor
22 New York, New York 10017-5612
23 (212) 659-8105
24 andrew.rice@mountsinai.org
25 marina.lowy@mountsinai.org

Page 3

1 A P P E A R A N C E S (continued)
2 On Behalf of the Petitioner:
3 THOMAS W. MEIKLEJOHN, ESQ.
4 NICOLE M. ROTHGEB, ESQ.
5 LOGAN J. PLACE, ESQ.
6 Livingston Adler Pulda Meiklejohn & Kelly PC
7 557 Prospect Avenue
8 Hartford, Connecticut 06105-2922
9 (860) 214-9676
10 twmeiklejohn@lapm.org
11 nmrothgeb@lapm.org
12 jkplace@lapm.org
13
14 Also in Attendance
15 On behalf of Sinai Student Workers - UAW:
16 Corin Coetzee, International Representative
17 Sebastian Vivancos, International Representative
18 Ken Lang, International Representative
19 Minah Kim, International Representative
20
21
22
23
24
25
26

Page 4

1 I N D E X
2 WITNESS DIRECT CROSS REDIRECT RECROSS VOIR DIRE
3 (None.)
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

Page 5

E X H I B I T S		
EXHIBITS	IDENTIFIED	RECEIVED
BOARD'S		
B-1(a-d)	7	8
B-2	8	9
B-3	12	12
B-4	18	18
EMPLOYER'S		
E-16	24	28
E-17	36	36
PETITIONER'S		
P-46	34	40

Page 7

1 organizations in the hearing room who claim an interest in this
 2 proceeding?
 3 (No response.)
 4 HEARING OFFICER KUMA: Let the record show no further
 5 response.
 6 MR. LUPION: Avi, just -- Andrew Rice, counsel at Mount
 7 Sinai.
 8 HEARING OFFICER KUMA: Yes, sorry.
 9 MR. RICE: Associate General Counsel for the Mount Sinai
 10 Health System, Andrew Rice.
 11 HEARING OFFICER KUMA: Okay.
 12 Lanny, did you get that?
 13 COURT REPORTER: (Nods affirmative.)
 14 HEARING OFFICER KUMA: Okay.
 15 (Board's B-1(a-d) marked)
 16 HEARING OFFICER KUMA: I now propose to receive the Formal
 17 Papers. They have been marked for identification as Board
 18 Exhibit 1(a) through 1(d), inclusive; Exhibit 1(a) being an
 19 index and description of the entire exhibit. The exhibit has
 20 already been shown to all parties.
 21 Are there any objections to the receipt of the exhibits
 22 into the record?
 23 MR. MEIKLEJOHN: No objection.
 24 HEARING OFFICER KUMA: Adam?
 25 MR. LUPION: No objection.

Page 6

P R O C E E D I N G S
 (Time Noted: 10:03 a.m.)

3 HEARING OFFICER KUMA: On the record.
 4 All right, the hearing will be in order for Case No. 02-
 5 RC-319437, Case Name, "Icahn School of Medicine at Mount
 6 Sinai." All parties have been informed of the procedures at
 7 the Formal Hearing before the Board by the service of
 8 Description of Procedures During the Representation Case, with
 9 the Notice of Hearing. I have additional copies of this
 10 document for distribution if any party wants more.
 11 Counsels for the for the Petitioner, please state your
 12 name -- please state --
 13 MR. MEIKLEJOHN: For the Petitioner --
 14 HEARING OFFICER KUMA: -- your names for the record.
 15 MR. MEIKLEJOHN: For the Petitioner, Thomas Meiklejohn,
 16 Nicole Rothgeb, and Logan Price [sic], of Livingston, Adler,
 17 Pulda, Meiklejohn & Kelly, Hartford, Connecticut.
 18 HEARING OFFICER KUMA: For the Employer.
 19 MR. LUPION: For the Employer, Adam Lupion, Joshua Fox,
 20 and Melissa Filcher, Proskauer Rose.
 21 HEARING OFFICER KUMA: Are there any other appearances?
 22 (No response.)
 23 HEARING OFFICER KUMA: Let the record show no further
 24 responses.
 25 Are there any other persons, parties, or labor

Page 8

1 HEARING OFFICER KUMA: Okay. Hearing no objections, the
 2 Formal Papers are received in evidence.
 3 (Board's B-1(a-d) received.)
 4 HEARING OFFICER KUMA: Are there any motions to intervene
 5 in these proceedings to be submitted to the hearing officer for
 6 ruling at this time?
 7 (No response.)
 8 HEARING OFFICER KUMA: Hearing no -- hearing no further
 9 responses, let the record show [sic].
 10 (Board's B-2 marked.)
 11 HEARING OFFICER KUMA: The parties to this proceeding have
 12 executed a document, which is marked as Board Exhibit 2. The
 13 exhibit contains a series of stipulations, including among --
 14 among other items, that the Petitioner is a labor organization
 15 within the meaning of the Act; there is no collective
 16 bargaining agreement covering any of the employees in the unit
 17 in the petition herein; and there is no contract bar; and the
 18 Employer met -- meets the jurisdictional standards of the
 19 Board.
 20 Are there any objections to the receipt of Board Exhibit
 21 2?
 22 MR. MEIKLEJOHN: No objection.
 23 MR. LUPION: No objection.
 24 HEARING OFFICER KUMA: Hearing no objection, Board Exhibit
 25 2 received in evidence.

Page 9

1 (Board's B-2 received.)
 2 HEARING OFFICER KUMA: Can it be stipulated that a
 3 bargaining unit that includes all graduate students enrolled at
 4 Icahn School of Medicine at Mount Sinai who are employed to
 5 provide research or instructional services at any of the
 6 Employer's facilities, regardless of funding sources, and
 7 exclude all other employees, guards, or -- and supervisors as
 8 defined in the Act, is appropriate for the purpose of the
 9 collective bargaining unit?
 10 MR. LUPION: No.
 11 HEARING OFFICER KUMA: Okay. Can there be a partial unit,
 12 and can it be stipulated that any unit found appropriate by the
 13 regional director should include all master's degrees and PhD
 14 students in the Neuroscience and Biomedical Science who conduct
 15 research regardless of fun -- regardless of funding, and
 16 exclude all other employees, guards, and supervisors as defined
 17 in the Act?
 18 MR. LUPION: No, sir.
 19 HEARING OFFICER KUMA: Okay. Tom?
 20 MR. MEIKLEJOHN: Yes?
 21 HEARING OFFICER KUMA: Could you stipulate to either the
 22 full unit or the partial unit?
 23 MR. MEIKLEJOHN: the Union is prepared to proceed in a --
 24 to an election in any unit found appropriate by the regional
 25 director.

Page 10

1 Our position is -- do you want me to elaborate? Or is
 2 that --
 3 HEARING OFFICER KUMA: Please. Elaborate.
 4 MR. MEIKLEJOHN: Okay. Our position is that doctoral
 5 students who are paid by the Employer, and who conduct
 6 research, are statutory employees because they meet the
 7 definition of employee under Columbia. That is, they conduct
 8 services for the -- the University, they do so under the
 9 supervision of the University, and they are paid for doing so.
 10 The -- we would contend that -- or our understanding is
 11 that the students who conduct research for compensation are
 12 doctoral students in the neurosciences -- the Neuroscience and
 13 Biological Sciences PhD program. To the best of our knowledge,
 14 those are all of the students who meet the statutory definition
 15 of employee based upon the conduct of research.
 16 In addition, there are students who provide instructional
 17 services who we contend also meet the statutory definition of
 18 employee who should be included in the unit with the doctoral
 19 students who conduct research for compensation.
 20 Is that clear enough?
 21 HEARING OFFICER KUMA: Okay.
 22 MR. MEIKLEJOHN: The instructional services employees are
 23 not limited to the Biological Sciences and Neuroscience PhD
 24 program, but there are graduate students elsewhere who conduct
 25 such -- provide such instructional services for compensation.

Page 11

1 Finally, there is a joint MD-PhD program in which students
 2 obtain both a PhD and an MD. Our position is that while
 3 they're in the MD portion of that program in Biological
 4 Sciences or Neuroscience, and -- in Neuroscience, that they are
 5 statutory employees and should be included in the unit with the
 6 other PhD students who are conducting research for
 7 compensation.
 8 HEARING OFFICER KUMA: Now that differs from your RSOP; is
 9 that correct?
 10 MR. MEIKLEJOHN: No, I don't believe it does. I'll take a
 11 look.
 12 HEARING OFFICER KUMA: It says here, "Petitioner agrees
 13 with the Employer that the student employed in joint PhD-MD
 14 program should be excluded from the unit during the MD portion
 15 of their of their studies."
 16 MR. MEIKLEJOHN: Right. We're contending they should be
 17 included during the PhD portion of their studies. So yes, we
 18 agree -- agree that when they're -- when they're studying
 19 medicine, in the traditional sense that leads to an MD, that
 20 they should be excluded. So that they're excluded when they're
 21 in the in the MD program, included in the PhD program.
 22 HEARING OFFICER KUMA: And are you stating that and
 23 master's students and PhD students in the clinical research
 24 should be excluded?
 25 MR. MEIKLEJOHN: We agree that they -- that they do

Page 12

1 not meet the statutory definition of employee and should be
 2 excluded, yes, based upon the evidence and the information that
 3 we have regarding their current circumstances.
 4 (Board's B-3 marked.)
 5 HEARING OFFICER KUMA: So, the Employer has completed, and
 6 I have marked for identification as Board Exhibit 3, a
 7 Statement of Position in this matter .
 8 Are there any objections to the receipt of this exhibit
 9 into the record?
 10 MR. MEIKLEJOHN: No objection.
 11 MR. LUPION: No objection.
 12 (Board's B-3 received.)
 13 HEARING OFFICER KUMA: Off record.
 14 (Whereupon, a brief recess was taken)
 15 HEARING OFFICER KUMA: Back on the record.
 16 Okay, give me one second.
 17 (Pause.)
 18 HEARING OFFICER KUMA: Employer, what is your position
 19 with respect to the issues raised in your Statement of Position
 20 with respect to the Petitioner's petitioned for unit
 21 description?
 22 MR. LUPION: (No audible response.)
 23 HEARING OFFICER KUMA: You're muted.
 24 MR. LUPION: Sorry, thank you. So, as a threshold matter,
 25 the students at issue here are not statutory employees under

Page 13

1 the Act. They are factually very distinguishable from the
 2 students at issue in Columbia. They are not paid to perform
 3 research. They, unlike -- unlike the RA's at issue in
 4 Columbia, we are prepared, and have ready, an offer of proof on
 5 -- on that issue. As well as the fact that any teaching
 6 assistants should not be included in any unit.
 7 I believe the parties had discussed, it should not be in
 8 dispute, that there is no teaching requirement for graduate
 9 students. All teaching activities are completely 100 percent
 10 voluntary, and the student's funding is not conditioned on any
 11 service requirement, including but not limited to, teaching.
 12 Our offer of proof will address those issues.
 13 With respect to Mr. Meiklejohn's assertion a few moments
 14 ago regarding master's students and PhD students in clinical
 15 research, based on e-mails between the parties, where Mr.
 16 Meiklejohn had indicated that we would not seek to have
 17 master's students included in the unit, he says first, "My
 18 understanding is that you told me that master's students do not
 19 get paid in connection with the performance of research, that
 20 is our understanding as well. Assuming that to be the case, we
 21 would not seek to have master's students included in the unit."
 22 That e-mail was on June 14, 2023.
 23 On June 20, 2023, Mr. Meiklejohn wrote to me and said, "I
 24 can now clarify that based on the understanding that students
 25 in the program for the PhD in clinical research are not paid,

Page 14

1 we can agree that they are excluded from the bargaining unit."
 2 So based on that, we were led to believe, reasonably, that
 3 master's students and PhD students in clinical research would
 4 not be the subject of -- of the petition.
 5 And our Statement of Position and attachments, there are
 6 two, were prepared with -- based on those representations
 7 from -- from the Petitioner
 8 MR. MEIKLEJOHN: Are you suggesting that's inconsistent
 9 with what I said before?
 10 MR. LUPION: I am.
 11 MR. MEIKLEJOHN: Okay. Because we're seeking to include
 12 teaching assistants who are in those other programs; is that
 13 the --
 14 HEARING OFFICER KUMA: Tom?
 15 MR. LUPION: Yes.
 16 HEARING OFFICER KUMA: Let the Employer finish what his --
 17 what the issues raised and -- and if --
 18 MR. LUPION: Yes, that is -- that is the basis -- that is
 19 the basis for our disagreement, Tom.
 20 MR. MEIKLEJOHN: Okay. Well, I -- I may have been
 21 imprecise in those emails that you sent, although I think the
 22 issue was clearly raised in your Statement of Position that you
 23 contend that teaching assistants should not be in the unit with
 24 researchers.
 25 HEARING OFFICER KUMA: Okay.

Page 15

1 MR. MEIKLEJOHN: And we -- we raised that in our
 2 Responsive Statement of Position, as well. And I think the
 3 emails regarding the -- the issues to be litigated did preserve
 4 that issue. Obviously, the e-mail your citing were sent in the
 5 context of a discussion of which researchers are included in
 6 the unit.
 7 I -- also, it's been pointed out to me during the last off
 8 the record discussion that I misspoke, and I referred to it as
 9 the "Biological Sciences PhD program," the correct term, I
 10 understand, is the Biomedical Sciences PhD program.
 11 HEARING OFFICER KUMA: So --
 12 MR. LUPION: Can I -- can I respond briefly?
 13 HEARING OFFICER KUMA: Yes.
 14 MR. LUPION: So, Tom, a couple things.
 15 You said that you didn't want -- you were not seeking them
 16 in the unit, period. You didn't clarify whether it was a
 17 research unit or a teaching unit. It is a different -- it is a
 18 different pool of students, and while we did preserve the issue
 19 in our Statement of Position, if you're seeking now, despite
 20 your representations, to include the master's students who
 21 teach, and the PhD students in clinical research who teach, we
 22 would need to amend certain exhibits to our Statement of
 23 Position.
 24 And we believe if the region is going to allow the
 25 Petitioner to seek those students, and let me be clear, we

Page 16

1 don't think they should, based on -- based on the
 2 correspondence between the parties, there is certainly good
 3 cause to allow us to amend our -- the exhibits to our Statement
 4 of Position.
 5 MR. MEIKLEJOHN: Well, I would have no objection to -- I
 6 mean, I don't think that goes to the principal issue that
 7 we're -- that your Statement of Position would address. But
 8 I-- I mean -- I wouldn't -- I understand --
 9 First of all, I think we clearly preserved the position.
 10 If you look at our Responsive Statement of Position, which is
 11 not in the record yet, which -- which I understand will be
 12 Employer Exhibit 4 [sic], our Point No. 4 in our Responsive
 13 Statement of Position is that, referring to the Employer's
 14 position, graduate students who are paid to perform
 15 instructional services share a community of interest with PhD
 16 graduate students who are paid to conduct research. So, I
 17 think I made it clear that we were preserving that issue with
 18 respect to students who provide-- perform instructional
 19 services.
 20 MR. LUPION: But there's no -- there's no mention of
 21 master's students.
 22 MR. MEIKLEJOHN: So, you're not just -- okay, I understand
 23 what you're saying. No, I -- there is no specific mention of
 24 master's students; it says "graduate students."
 25 MR. LUPION: PhD graduate students.

Page 17

1 MR. MEIKLEJOHN: It does say PhD graduate students. Well,
 2 you certainly can take the position that we waived our --our
 3 argument on master's students.
 4 MR. LUPION: I -- I am indeed taking -- taking that
 5 position.
 6 And, you know, I would also note the subpoena also was
 7 limited to PhD --well, not limited, it was -- concerned only --
 8 MR. MEIKLEJOHN: It was directed to PhD -- that's right.
 9 MR. LUPION: Only the --
 10 MR. MEIKLEJOHN: And it's certainly the main --
 11 MR. LUPION: -- the PhD.
 12 MR. MEIKLEJOHN: -- thrust of this hearing.
 13 HEARING OFFICER KUMA: So, just to summarize your
 14 Statement of Position and the issues you feel should be
 15 litigated for the Employer, can you state that again just so
 16 the record is clear, Adam, so we have it because there was a
 17 lot of back and forth and I just want to make sure that it's
 18 clear for the Employer's position.
 19 MR. LUPION: Sure. The issues to be litigated here are
 20 that the students at issue are not employees under the National
 21 Labor Relations Act, and within the meaning of the Board's
 22 decision in Columbia.
 23 The evidence will show that there is no service
 24 requirement like there was for the students at Columbia. And
 25 second, even if there is a unit, that the teaching assistants

Page 18

1 lack a community of interest with students who perform
 2 research.
 3 HEARING OFFICER KUMA: All right.
 4 (Board's B-4 marked.)
 5 HEARING OFFICER KUMA: Petitioner has completed, and I
 6 have marked for identification as Board Exhibit 4, a Statement
 7 of Position [sic] in this matter.
 8 Are there any objections to have -- the receipt of this
 9 exhibit into recording?
 10 MR. MEIKLEJOHN: No objection.
 11 MR. LUPION: No objection.
 12 (Board's B-4 received.)
 13 HEARING OFFICER KUMA: Before the Petitioner moves on to
 14 discuss their Responsive Statement of Position, I want the
 15 Employer to discuss the students at issue. I wanted to make
 16 sure that we're talking and describing the particulars of which
 17 students. If it's as he says, "Students are not employees
 18 under the NLRB," I want there to be specifics to discuss to
 19 make sure that if it's the PhD's or the master's, and with
 20 specific departments, okay?
 21 So, Adam, can you just clarify for that -- for me?
 22 MR. LUPION: Sure. No student who is enrolled in the
 23 Graduate School is an employee within the meaning of the Act.
 24 That would include PhD students in Biomedical Sciences, PhD
 25 students in Neuroscience, PhD students in clinical research,

Page 19

1 and students pursuing a dual degree in the School's MD-PhD
 2 program. As well as master's students who, I believe, the
 3 Petitioner has now suggested that they have waived their right
 4 to include those students in -- in any -- in any unit. But to
 5 be clear, no student is an employee under the Act or Columbia.
 6 HEARING OFFICER KUMA: All right, thank you.
 7 MR. MEIKLEJOHN: And I would move to amend my -- I -- I
 8 said you could make the argument. I'll move to amend my
 9 Responsive Statement of Position to provide that we are -- are
 10 seeking students who provide instructional -- all graduate
 11 students who provide instructional services.
 12 MR. LUPION: Yeah, and we would -- we would object to that
 13 amendment, and ask that the region rule that the issue is
 14 waived. I mean we -- we are now at the evidentiary hearing, so
 15 that would be unfairly prejudicial to Mount Sinai.
 16 HEARING OFFICER KUMA: I'll wait Tom finishes his RSOP
 17 introduction and the issues, and then I'll get back to you on
 18 that, okay?
 19 Tom, go ahead and state your response on the record, and
 20 then go into your amendment afterwards so we have it clear what
 21 you initially proposed and then afterwards what your --
 22 MR. MEIKLEJOHN: Our -- our position is that under
 23 Columbia the students are paid. I -- I think I did this
 24 already, but students who conduct research in those two
 25 programs are paid, they provide services for the University,

Page 20

1 and they do so under the direction and supervision of the
 2 University; therefore, they are statutory employees and should
 3 be permitted to decide whether they wish to be represented by a
 4 union or not. It should be up to them to make that decision,
 5 and they shouldn't be deprived of that opportunity based upon
 6 the Employer's attempts, which that we think will fail, to
 7 distinguish this case from Columbia. We don't think that there
 8 is any principled way of distinguishing this case from
 9 Columbia.
 10 Our position is that students who provide instructional
 11 services are paid separately for doing that work, and that
 12 based upon that payment for -- for serving as teaching
 13 assistants and providing other instructional services to other
 14 students, that they meet the statutory definition of employees
 15 and are also entitled to an election.
 16 And finally, we contend that they share a community of
 17 interest with the with the students who are paid to provide
 18 research services.
 19 The Employer's Statement of Position also appeared to
 20 raise the claim that students who are on a leave of absence
 21 should be excluded from the unit. The Petitioner's position is
 22 that they should be included. I understand -- I believe that's
 23 a small number of people and that that issue need not be
 24 litigated here, but I did want to make it clear the
 25 Petitioner's position that they should be included.

Page 21

1 MR. MEIKLEJOHN: Does that answer your question?
 2 HEARING OFFICER KUMA: Are you -- you say "students," and
 3 as I asked Adam earlier, just to clarify just to who
 4 specifically -- which students, which classifications; can you
 5 just state so that we have it clear?
 6 MR. MEIKLEJOHN: Well, the -- our contention is that
 7 doctoral students in the Biomedical Sciences and Neuroscience
 8 doctoral programs are paid to conduct research, and that they
 9 are statutory employees, unless they are self-funded, so that
 10 those who are paid by the University are statutory employees
 11 and should be in the unit.
 12 We additionally contend that TAs and any other students
 13 who are paid to provide instructional services share a
 14 community of interest and should be in the unit.
 15 HEARING OFFICER KUMA: Now your amendment to your RSOP.
 16 MR. MEIKLEJOHN: As -- as counsel pointed out in my
 17 Responsive Statement of Position, I refer to PhD students --
 18 PhD graduate students who provided instructional services being
 19 included in the unit. Our position is that all graduate
 20 students -- I would seek to amend that Statement of Position to
 21 provide that all graduate students who provide instructional
 22 services should be included. But the original, yeah, that
 23 was -- that is reflected in the original petition in this
 24 matter.
 25 HEARING OFFICER KUMA: Adam, for the Employer you can

Page 22

1 state your argument in what you were stating earlier.
 2 MR. LUPION: Yeah. I mean it -- it's a waiver, and the
 3 waiver should be upheld by the region.
 4 Master's program is very -- it's fundamentally different
 5 from the PhD programs. We believe, and we proceeded to put on
 6 evidence based on the representation that -- in Mr.
 7 Meiklejohn's emails to us that he was not seeking to include
 8 master's students or PhD students in clinical research in any
 9 bargaining unit. That's what he said and that's how we have
 10 prepared our case.
 11 So, we believe in -- in that case, we are prepared, as I
 12 said with our offer of proof, which is very substantial. And
 13 on the first day of the evidentiary hearing to allow an
 14 amendment based on his waiver would be unfairly prejudicial to
 15 Mount Sinai.
 16 HEARING OFFICER KUMA: Okay. Let's proceed you're your
 17 offer of proof for the Employer. And then after you provide
 18 your offer of proof, we'll take a break, go off record, and
 19 I'll discuss it with the Employer [sic] and we'll discuss the
 20 motion to amend the RSOP at the same time.
 21 MR. LUPION: Avi, how would -- we can -- do you want to by
 22 e-mail and e-file?
 23 MR. LUPION: You can -- yes, that'll be better -- sounds
 24 best.
 25 MR. LUPION: Okay. But the file, it is large, so you

Page 23

1 might get a bounce back, but we'll try to work around that. If
 2 you could confirm receipt. We'll send it to the Petitioner's
 3 counsel as -- at the same time as you and e-file it. But if
 4 you --
 5 HEARING OFFICER KUMA: Okay.
 6 MR. LUPION: -- confirm receipt that that would be great.
 7 HEARING OFFICER KUMA: I will.
 8 MR. MEIKLEJOHN: Can you include Nicole and Logan in
 9 the -- in the in the e-mail? I believe you have their e-mail
 10 addresses.
 11 MR. LUPION: Yeah. I'm -- I will -- we will try. I'm not
 12 the one who's hitting "send," because I would inevitably mess
 13 that up. So --
 14 MR. MEIKLEJOHN: Oh, not as bad as we messed up on Monday,
 15 apparently.
 16 COURT REPORTER: Adam, this is the court reporter. Do you
 17 have my e-mail?
 18 HEARING OFFICER KUMA: No, he doesn't.
 19 MR. LUPION: I do not.
 20 HEARING OFFICER KUMA: He does not. I can give it to him.
 21 Give me one second.
 22 COURT REPORTER: Would you like me to put in the Chat?
 23 HEARING OFFICER KUMA: Oh, okay, yeah, that -- great.
 24 COURT REPORTER: Because everybody's going to have to
 25 e-mail me anyway, so hold on.

Page 24

1 HEARING OFFICER KUMA: Okay.
 2 (Pause.)
 3 MS. ROTHGEB: Adam, I just sent an e-mail with all of
 4 Petitioner's counsel copied on it, if that's easier for you
 5 to --
 6 MR. LUPION: Great. Thank you.
 7 (Pause.)
 8 COURT REPORTER: Tom, you got it right.
 9 MS. ROTHGEB: I'm sorry, what was that?
 10 COURT REPORTER: Tom sent me an e-mail making sure he had
 11 my address right, and I said he got it right.
 12 MR. MEIKLEJOHN: Thank you.
 13 (Pause.)
 14 HEARING OFFICER KUMA: Off the record.
 15 (Whereupon, a brief recess was taken.)
 16 HEARING OFFICER KUMA: Okay, we're back on the record.
 17 (Employer's E-16 marked.)
 18 HEARING OFFICER KUMA: So, we received Employer's Offer of
 19 Proof, and we had the Employer enter it as an exhibit, as the
 20 Employer's Exhibit 1, Offer of Proof.
 21 Are there any objections to this?
 22 MR. MEIKLEJOHN: Just for clarification, are you receiving
 23 the entire document, including all exhibits?
 24 HEARING OFFICER KUMA: Can't hear you; can you say that
 25 again?

Page 25

1 MR. MEIKLEJOHN: Are you receiving the entire document,
 2 including all the attachments to the document as an exhibit?
 3 (Pause.)
 4 HEARING OFFICER KUMA: Sorry, my computer just froze.
 5 (Pause.)
 6 HEARING OFFICER KUMA: Okay so, when you say "all the
 7 exhibits," please clarify.
 8 MR. MEIKLEJOHN: Well, we received a 57-page version and
 9 the page --
 10 HEARING OFFICER KUMA: Right.
 11 MR. MEIKLEJOHN: -- some 500 -- or I don't know, I haven't
 12 seen the one with hundreds of gages.
 13 HEARING OFFICER KUMA: I have 57 pages.
 14 MR. MEIKLEJOHN: That's what I was seeking to clarify,
 15 which -- is that what's being received at the evidence, is the
 16 57-page version?
 17 HEARING OFFICER KUMA: Adam, is there more than 57 pages?
 18 MR. LUPION: Yes, 57 pages is the text of the Offer of
 19 Proof. There are attachments to the Offer of Proof; documents
 20 that are referred to and quoted from in the Offer of Proof are
 21 appended to those 56 pages [sic]. We sent that so that the
 22 region and the Petitioner could see the Offer of Proof as
 23 quickly as possible in case the file is -- the larger file was
 24 too large to transmit.
 25 HEARING OFFICER KUMA: Okay. So, is that titled the

Page 26

1 "Limecast"?
 2 MR. LUPION: Yes.
 3 HEARING OFFICER KUMA: Okay, now I understand. I just
 4 thought it was titled "Offer of Proof." Okay.
 5 COURT REPORTER: I don't have the smaller one, so if
 6 that's the one you're marking, that's the one I need. I got
 7 the 565-page one.
 8 MR. LUPION: Well, I think it should -- it be the larger
 9 one for completeness.
 10 COURT REPORTER: Okay. I'll mark that one.
 11 HEARING OFFICER KUMA: All right. And you need an access
 12 key to --
 13 COURT REPORTER: Yeah, click on the green thing, it'll
 14 send you a code; copy that code in and then you can download
 15 it.
 16 HEARING OFFICER KUMA: I see.
 17 (Pause.)
 18 HEARING OFFICER KUMA: I see, okay. So, Adam, go ahead
 19 and enter your exhibits. We're going to let you offer your
 20 exhibits and I'm going to receive it, okay?
 21 MR. LUPION: Okay, so offered.
 22 HEARING OFFICER KUMA: All right.
 23 MR. MEIKLEJOHN: I have no objection to the document going
 24 into the record.
 25 HEARING OFFICER KUMA: The Employer has offered Offer of

Page 27

1 Proof, to -- as Exhibit 1, Offer --
 2 MR. MEIKLEJOHN: Actually --
 3 HEARING OFFICER KUMA: -- Employer's Exhibit --
 4 MR. MEIKLEJOHN: Actually, can I -- can I just raise an
 5 issue before we go too far down this road?
 6 HEARING OFFICER KUMA: Okay.
 7 MR. MEIKLEJOHN: There is another document which the
 8 Employer submitted in advance of the hearing on July 3rd,
 9 pursuant to our instructions from the region, that has also
 10 been marked as Employer Exhibit 1.
 11 MR. LUPION: That was just a placeholder to allow the
 12 court reporter to identify the documents pursuant to the
 13 Board's instructions, right, so that we could follow up
 14 Employer 1, and it would be marked -- our understanding was
 15 that that would be marked -- the court reporter would then mark
 16 that sequentially, wherever we are in the exhibits.
 17 HEARING OFFICER KUMA: Right. So, it should be Exhibit 2,
 18 not Exhibit 1.
 19 MR. MEIKLEJOHN: No, I think it should be -- well, Adam's
 20 saying something different. My suggestion, to avoid confusion,
 21 is that we mark this one Employer 16 because we have 15 marked
 22 already.
 23 Otherwise, Adam -- Adam, you're going to call a witness
 24 and -- and you're going to show them a witness that's -- a
 25 document that's marked as Employer Exhibit 1, which we're now

Page 28

1 calling Employer 2, and we'll have to go through that with all
 2 of your exhibits.
 3 MR. LUPION: I -- I actually wasn't going to do that, but
 4 I have no objection to your suggestion to mark this as Employer
 5 16.
 6 HEARING OFFICER KUMA: We'll follow what the Employer's
 7 mentioning it as, as Exhibit 16. Okay.
 8 (Employer's E-16 received.)
 9 HEARING OFFICER KUMA: We're going to go back off the
 10 record while I review this.
 11 MR. LUPION: I would just note my co-counsel are telling
 12 me that the order of the exhibits and the offer of proof are
 13 different from -- are different from the ordering of exhibits
 14 that we submitted on -- on July 3rd. I just don't want there
 15 to be any confusion about that.
 16 MS. ROTHGEB: I'm sorry, Adam, I -- we haven't gotten a
 17 chance to look at them. Are they -- are the attachments to the
 18 Offer of Proof different or the same --
 19 MR. LUPION: Well, hold on for one second.
 20 We're off the record, right, Lainy?
 21 COURT REPORTER: No. Now we are.
 22 HEARING OFFICER KUMA: Okay, thank you.
 23 (Whereupon, a brief recess was taken.)
 24 HEARING OFFICER KUMA: Okay, we're on the record.
 25 Okay --

Page 29

1 MR. MEIKLEJOHN: So just -- I wanted to clarify, first of
 2 all, that in agreeing to the admission of Employer 16, we are
 3 agreeing that this would go in as an offer of proof and we are
 4 not conceding that it is all admissible or relevant as
 5 substantive evidence. And as -- as Adam pointed out-- or as
 6 Mister -- as Counsel Lupion pointed out in an off the record
 7 discussion, it -- it is what it says it is, which is clearly an
 8 offer of proof.
 9 With respect to the Motion to Amend the Petition -- the -
 10 our Responsive Statement of Position, Board Exhibit 4, I would
 11 just note that on July 3rd at, I don't have the exact time, but
 12 that on July 3rd I did send an e-mail clarifying the Union's
 13 position on this specific point that sought all in -- all
 14 graduate students who conduct -- who perform instructional
 15 services. So that the parties have -- and counsel for the
 16 Employer did object to our state -- our Statement of Position
 17 on that -- or our e-mail on that point without explaining or
 18 stating his reason for objecting.
 19 If -- and if you want, Mr. Hearing Officer, if you want
 20 that correspondence in the record as an exhibit relevant to the
 21 Motion to Amend, we can -- we can prepare that and submit it.
 22 MR. LUPION: Can I respond briefly?
 23 HEARING OFFICER KUMA: Hold on for one second.
 24 Yes, I think you should submit that as an exhibit for your
 25 Motion to Amend.

Page 30

1 MR. MEIKLEJOHN: And I -- I had one other procedural
 2 question. So yes, there -- there is a lot to look at here in
 3 their Offer of Proof. Before you submit this to the regional
 4 director, will I be provided with some opportunity to address
 5 it briefly?
 6 HEARING OFFICER KUMA: I'll have to speak to the regional
 7 director to find out, to see if he's going to allow you to
 8 respond first, and we'll go from there.
 9 MR. MEIKLEJOHN: Okay. Well, then just I would like
 10 our -- I would like when you communicate with the regional
 11 director, I would like our position to be communicated;
 12 essentially that even if you accept everything stated in the
 13 Offer of Proof, that the Employer is not entitled to a hearing,
 14 and he has failed to distinguish this case from Columbia with
 15 respect to the employee status of the researchers.
 16 MR. LUPION: I would just note that's a remarkable
 17 position, having not yet read the Offer -- the Offer of Proof.
 18 MR. MEIKLEJOHN: Well, that -- that was why I asked if I
 19 get to read it first. But --
 20 HEARING OFFICER KUMA: Okay.
 21 MR. MEIKLEJOHN: -- I could -- I'm certain that I can
 22 elaborate on that position after reviewing the document.
 23 HEARING OFFICER KUMA: So, in your petition to amend, I --
 24 I want you to address what specifically you're amending from
 25 your RSOP -- that differs from your RSOP.

Page 31

1 MR. MEIKLEJOHN: In Paragraph 4, first line, we would
 2 remove the words "PhD" -- the letters "PhD" in the first -- in
 3 the first line of that paragraph.
 4 HEARING OFFICER KUMA: All right. So, you're removing
 5 "PhD students" and --
 6 MR. MEIKLEJOHN: No, just "PhD." Just the four -- I'm
 7 sorry, the three letters and the two periods. Might only be
 8 one period.
 9 HEARING OFFICER KUMA: So, you're removing "PhD" and
 10 you're keeping --
 11 MR. MEIKLEJOHN: "Graduate Students."
 12 HEARING OFFICER KUMA: Is that to be encompass [sic] of
 13 all students, which would include master's students?
 14 MR. MEIKLEJOHN: All -- right. All graduate students,
 15 which I think -- yeah.
 16 MS. ROTHGEB: Not only in the first line; "PhD" also
 17 appears later in that Paragraph 4.
 18 MR. MEIKLEJOHN: We can submit -- we can send you a
 19 highlighted version, if that will facilitate?
 20 HEARING OFFICER KUMA: Is there anything else that you're
 21 amending? Or just solely that?
 22 MR. MEIKLEJOHN: That's it.
 23 HEARING OFFICER KUMA: Okay.
 24 MR. LUPION: Avi, can I respond briefly to the new
 25 argument raised?

Page 32

1 HEARING OFFICER KUMA: You're -- and you're referring to the
 2 Offer of Proof; is that correct?
 3 MR. LUPION: No. I'm referring to the new argument that
 4 counsel just made in support of his motion to amend.
 5 HEARING OFFICER KUMA: Yes.
 6 MR. LUPION: So, he referred to a -- a July 3rd e-mail as
 7 somehow clarifying his position. I would just note that that
 8 was after the waiver had occurred, so that communication is
 9 irrelevant.
 10 And I would also like to submit the emails that I referred
 11 to earlier where counsel for the Union disclaimed any interest
 12 in representing master's students or PhD students in clinical
 13 research in any bargaining unit. So, we -- we can submit that
 14 as an exhibit, as well.
 15 MR. LUPION: And what -- what exhibits would that be for
 16 the Employer? Exhibit numbers.
 17 MR. LUPION: I guess we -- I guess we can mark that as
 18 Employer 17.
 19 HEARING OFFICER KUMA: Okay.
 20 MR. LUPION: We'll send that to the court reporter, you,
 21 and counsel for the Petitioner.
 22 HEARING OFFICER KUMA: And for the Petitioner, your
 23 exhibits will be marked as Exhibit?
 24 MR. MEIKLEJOHN: What are we what -- are our initial
 25 exhibits up to, 45? So, it would 46.

Page 33

1 HEARING OFFICER KUMA: Okay. Lanny?
 2 COURT REPORTER: Yes?
 3 HEARING OFFICER KUMA: Did you receive the Petitioner's
 4 Exhibit, you said 45?
 5 COURT REPORTER: No, I haven't.
 6 MR. MEIKLEJOHN: The ones that we submitted on -- well,
 7 they was submitted on Monday. It was --
 8 HEARING OFFICER KUMA: The new -- the new one?
 9 COURT REPORTER: No. And I sent an e-mail to Melissa
 10 asking her for all the Employer's, too.
 11 MS. ROTHGEB: Yes. We have not submitted 46 yet.
 12 We'll -- we're preparing that now.
 13 COURT REPORTER: I don't have any exhibits from either
 14 party.
 15 MR. LUPION: Lanny, Melissa sent that e-mail.
 16 COURT REPORTER: No. You should have received all the
 17 exhibits I sent.
 18 MS. ROTHGEB: I thought was Avi was sending that.
 19 HEARING OFFICER KUMA: Yeah, I did. I sent them --
 20 MS. ROTHGEB: Are we on the record?
 21 COURT REPORTER: Was that the --
 22 HEARING OFFICER KUMA: Off the record, Lanny.
 23 (Whereupon, a brief recess was taken.)
 24 HEARING OFFICER KUMA: Okay, on the record.
 25 MS. ROTHGEB: I still haven't sent 46. If I could have

Page 34

1 another minute before we go back on, if you want to do both?
 2 HEARING OFFICER KUMA: Okay, so we'll go back off. We'll
 3 give the Union -- I mean, the Petitioner the opportunity to --
 4 additional time they need.
 5 (Whereupon, a brief recess was taken.)
 6 HEARING OFFICER KUMA: Okay, we're back on the record.
 7 Tom, you're entering on the record the exhibit, what is
 8 the exhibit that you're entering?
 9 MR. MEIKLEJOHN: Can I -- can I defer to my co-counsel,
 10 Attorney Rothgeb, for handling this aspect of the proceedings?
 11 HEARING OFFICER KUMA: Sure.
 12 (Petitioner's P-46 marked.)
 13 MS. ROTHGEB: Petitioner will be offering Petitioner's
 14 Exhibit 46, will be -- which will be two pages; an e-mail that
 15 Tom referenced from July 3rd will be Page 1, and a proposed
 16 amendment -- a proposed amended attachment to the responses of
 17 his Statement of Position, making the changes he referenced in
 18 Paragraph 4. Those will be two-page document [sic] that will
 19 be submitted as Petitioner's Exhibit 46.
 20 HEARING OFFICER KUMA: Any objections to this offer?
 21 MR. LUPION: I haven't seen it yet, but assuming it is
 22 just the July 3rd e-mail, I don't anticipate having an
 23 objection.
 24 HEARING OFFICER KUMA: Since there is no objection --
 25 MS. ROTHGEB: It -- it's not just the email, just to be

Page 35

1 clear, Avi. It's two pages. The first page will be the e-
 2 mail, and we thought you wanted to see the proposed amendment
 3 to the Responsive Statement of Position, making the change to
 4 Paragraph 4, so we're submitting both as Petitioner Exhibit 46.
 5 HEARING OFFICER KUMA: Okay.
 6 MR. LUPION: I mean, I would like to see the -- I know --
 7 and I'm not criticizing Nicole here, I know that everybody's
 8 having technical issues, but I would like to reserve until I
 9 actually see the document.
 10 HEARING OFFICER KUMA: Understood. So, we'll defer for
 11 now. And we'll move on to the Employer's submission of his
 12 exhibit earlier.
 13 Adam, just to clarify, you were going to submit, I think,
 14 it was Exhibit 17. Can you just describe --
 15 MR. LUPION: Yeah.
 16 HEARING OFFICER KUMA: -- what that was and --
 17 MR. LUPION: Yes. Exhibit -- Exhibit 17 is an e-mail
 18 exchange, and we've highlighted three separate emails in that
 19 thread, where the Petitioner disclaimed interest in
 20 representing master's students and PhD students in clinical
 21 research in the bargaining unit.
 22 HEARING OFFICER KUMA: Are there any objections to the
 23 submission from the Petitioner?
 24 MR. MEIKLEJOHN: I -- no objection to the receipt of those
 25 emails.

Page 36

1 HEARING OFFICER KUMA: There's -- since there's no
 2 objections, Employer's Exhibit No. 17 is entered into the
 3 record.
 4 All right, Adam, while we're still waiting on the
 5 Petitioner, please -- you wanted to state something for the
 6 record concerning the Petitioner's amendment; is that correct?
 7 (Employer E-17 identified and received)
 8 MR. LUPION: I believe I made the arguments that I wanted
 9 to make on -- on the record. I don't, I don't have anything
 10 further.
 11 HEARING OFFICER KUMA: All right. So, I'm going to allow
 12 you to -- now, tell me and describe your offer of proof, and
 13 discuss specifics about the offer of proof the record.
 14 MR. LUPION: Okay. The -- the offer of proof sets forth
 15 the facts and the evidence that we intend to prove that
 16 distinguishes these students from the students at -- at issue
 17 in Columbia. But as I said we are not -- we are not litigating
 18 in this proceeding that Columbia should be overturned, rather
 19 the offer of proof discusses facts that support our position
 20 that the students at issue here are similarly situated to the
 21 students at issue in the recent MIT case that came down in
 22 Region 1 earlier this spring.
 23 In sum and substance, the stipend -- stipends that the
 24 students receive here, like the students at MIT, come with no
 25 service requirement. There is no requirement that PhD students

Page 37

1 teach. There is no requirement that they perform research
 2 related services outside of their academic program. Indeed,
 3 all of the research that is performed in the lab is in
 4 furtherance of the student's dissertation and their training
 5 and their PhD degree.
 6 Moreover, the student's funding is not conditioned on the
 7 fulfillment of any grant specifications. That -- that is in
 8 sharp contrast to the RA's at issue in Columbia, whose research
 9 appointments were conditioned on the performance of or
 10 fulfillment of grant specifications.
 11 Here the student chooses the research lab where -- where
 12 they want to conduct their studies. The student chooses the
 13 principal investigator and -- and their mentor. And the
 14 student chooses the discipline that they would like to pursue.
 15 That is exactly like the students in MIT.
 16 Moreover, the students at issue here can leave the lab
 17 without losing funding. In other words, they can decide "I
 18 want to associate with a different lab," and they wouldn't lose
 19 their -- their funding at all.
 20 In addition, the student's principal investigator, the
 21 putative supervisor, cannot terminate or otherwise discipline
 22 the student for poor performance or otherwise. That also is in
 23 sharp contrast to the factual record at issue in -- in
 24 Columbia.
 25 I also note that a -- there are circumstances where a

Page 38

1 PI -- that's the principal investigator -- can move from Mount
 2 Sinai to another institution, the student can follow his or her
 3 PI to that other institution and Mount Sinai would continue to
 4 pay the stipend while the student is performing research at
 5 another institution. In short, none of the monies that the PhD
 6 students receive come with any service requirement whatsoever.
 7 And it's for that reason that the students are distinguishable
 8 from the students at Columbia, for the same reasons that the
 9 region in Boston, Region 1, found the students at issue in that
 10 proceeding not to be employees of MIT.
 11 For those and other reasons set forth in the offer of
 12 proof, those are -- those are the undisputed facts, and why the
 13 region should conclude that the students in the petitioned for
 14 unit are not employees under the Act.
 15 HEARING OFFICER KUMA: Okay.
 16 MR. MEIKLEJOHN: And I would respond briefly, I mean,
 17 there -- the undisputed facts when a full record is made will
 18 show that when a student is admitted to the Neuroscience or
 19 Biomedical Sciences PhD program, and they begin their studies,
 20 they are also placed on the Employer's payroll as "Graduate
 21 Assistants." I see that that does not appear in the Employer's
 22 offer a proof, so that may require additional evidence.
 23 But the Employer's offer proof does show, for example,
 24 that the payments made to the graduate students are paid bi-
 25 weekly and are referred to as -- well, maybe that -- I think

Page 39

1 that's in stipulations, but are referred to as compensation.
 2 That's in the handbook, which I think is Attachment 1 to your
 3 Offer of Proof; is that right, Adam?
 4 MR. LUPION: Yeah. I believe that -- I believe
 5 that's the case.
 6 MR. MEIKLEJOHN: So, for example, if you look at -- at
 7 Attachment 1 to the Offer of Proof, on Page 21 I think it is,
 8 it refers to the payments being made to the -- to the students
 9 as compensation, so I would ask compensation for what? They're
 10 being compensated for performing research for the University.
 11 If you look at Employer Exhibit -- or Attachment 1 to the
 12 position statement, on Page 110, you will see that for purposes
 13 of the Employer's drug policies, students are referred to as
 14 "Employees." So, I think that the offer of proof submitted by
 15 the Employer shows that they're students.
 16 We don't dispute that their students and they have an
 17 educational relationship, but we also do not believe that any
 18 serious review of the evidence can lead to the conclusion they
 19 are anything other than also being employees who receive direct
 20 compensation for providing services to the University.
 21 HEARING OFFICER KUMA: Okay. I'm going to go off the
 22 record.
 23 (Whereupon, a brief recess was taken.)
 24 HEARING OFFICER KUMA: Back on the record.
 25 All right, Adam, can you state if there's any objections

Page 40

1 to Petitioner's Exhibit 46?
 2 MR. LUPION: No objection to Petitioner 46.
 3 HEARING OFFICER KUMA: Hearing no objections to
 4 Petitioner's Exhibit 46, the exhibit's entered into the record.
 5 (Petitioner's P-46 received.)
 6 HEARING OFFICER KUMA: Okay. Adam, just some quick
 7 questions. How many -- how many students are in the PhD
 8 Biomedical Science or Neuroscience track?
 9 MR. LUPION: We believe that number is 312.
 10 HEARING OFFICER KUMA: And that's PhD and MD?
 11 MR. LUPION: 312 students in the PhD program in Biomedical
 12 Science and Neuroscience. And the -- that number also includes
 13 the MD-PhD students in the PhD portion of their studies.
 14 HEARING OFFICER KUMA: And how many students and teaching
 15 assistants?
 16 MR. LUPION: So, the -- hmm. In the neuro -- PhD in
 17 Neuroscience and Biomedical Science, there are 39. And in the
 18 MD-PhD, there are 21.
 19 HEARING OFFICER KUMA: And that 350 covers the researchers
 20 in Biomedical Science and Neuroscience?
 21 MR. LUPION: I don't understand what you're asking.
 22 HEARING OFFICER KUMA: The PhD in Biomedical Science and
 23 Neuroscience, including the MD and PhD studies, the 350
 24 students, is that including the researchers -- the -- that do
 25 researching?

Page 41

1 MR. LUPION: There are -- there are 312.
 2 HEARING OFFICER KUMA: 312, I'm sorry.
 3 MR. LUPION: And let me -- there are 312 students who
 4 are -- receive a stipend. Those students are in the PhD
 5 program in Biomedical Science, PhD program in Neuroscience, and
 6 the dual degree MD-PhD students in the PhD portion of their --
 7 of that program. So that's the 312 students who are on
 8 stipend. They are not paid to conduct research. They receive
 9 their stipend to defray costs of living expenses.
 10 HEARING OFFICER KUMA: Okay.
 11 MR. LUPION: And I'll just also note that that number,
 12 inclusive in that 312, there are 66 first year students who are
 13 predominantly in the classroom.
 14 HEARING OFFICER KUMA: All right, so we're going to break.
 15 We're going to go off the record now.
 16 (Whereupon, at 11:58 a.m., a luncheon recess was taken.)
 17
 18
 19
 20
 21
 22
 23
 24
 25

Page 42

1
 2 AFTERNON SESSION
 3 (Time Noted: 1:02 p.m.)
 4 HEARING OFFICER KUMA: Back on the record.
 5 All right, so after reviewing the Petitioner's amendment
 6 to his Responsive Statement of Position, the Region has
 7 determined that it's denying the Petitioner's request to amend
 8 the Statement of Position.
 9 Based off of that, we're providing the Petitioner with the
 10 option withdraw the petition at the current moment, if it truly
 11 wants to include the master's students, and file it again
 12 because if we proceed to move forward with the hearing and
 13 close the record, there will be prejudice found at any point.
 14 So, we want to give the Petitioner the opportunity to withdraw
 15 that petition if they want to move forward. If not, then we'll
 16 deny it and just keep -- and move forward.
 17 MR. MEIKLEJOHN: Can I wait? I mean, I'm going to want to
 18 consult with my client, but can I wait for the ruling on the
 19 other -- the other issue, on the offer of proof.
 20 HEARING OFFICER KUMA: On the offer of proof, the regional
 21 director determined that we're going move forward and open the
 22 record and start litigation.
 23 MR. MEIKLEJOHN: Okay. I -- I just wanted to hear that.
 24 Can you send this to a breakout room?
 25 HEARING OFFICER KUMA: Yes, I can. Off the record.

Page 43

1 (Whereupon, a brief recess was taken.)
 2 HEARING OFFICER KUMA: Back on the record.
 3 So, Petitioner needs to state what they want to do moving
 4 forward based off of the region's position with their
 5 amended -- with the region's denial to their response for the
 6 amended statement to the region's -- excuse me, can't speak
 7 right now -- to the region's denial to their amendment to their
 8 response to the statement of position. The region offered the
 9 Petitioner the option to withdraw the petition, without
 10 prejudice, with the understanding that they did not offer good
 11 cause given the facts, that -- of what they've put on the
 12 record.
 13 In addition, given the Employer's offer proof, the region
 14 decides to move forward with opening the record, and if we do
 15 open the record and Petitioner decides not to withdraw, then
 16 we'll start litigation.
 17 So, now we're going to proceed with understanding what the
 18 Petitioner wants to do.
 19 MR. MEIKLEJOHN: The Petitioner is a highly democratic
 20 organization in which decisions are not made just by appointed
 21 or employed officials of the International and its affiliates,
 22 but in which the leadership of the Union rests with the
 23 organizing committee of the Union. I have consulted with
 24 the -- the formal officials of the Union who are in the process
 25 of contacting members of the organizing committee to obtain

Page 44

1 their support and buy-in for our recommendation. So the -- the
 2 process of making a decision of this magnitude with this kind
 3 of choice, it is -- well to some of it -- us, the choice may
 4 seem easy, it is a decision that needs to be made
 5 democratically with the input of the student workers,
 6 themselves, who are going to be affected by the decision.
 7 It's not just an institutional decision, it's a decision
 8 for the workers to make. So, we -- while you were -- while we
 9 were in the breakout room we were in the process -- or the
 10 leadership of the Union was in the process of contacting
 11 members of the organizing committee to get their buy-in to our
 12 recommendation, but that process has not been completed, and we
 13 would request some additional time to do so.
 14 HEARING OFFICER KUMA: How much time are you seeking?
 15 MR. MEIKLEJOHN: That's what -- that's what I -- that's
 16 what I'm typing into my text box.
 17 (Pause.)
 18 MR. MEIKLEJOHN: Okay, I got an answer. I mean it -- it
 19 might make the most sense to -- to recess until tomorrow
 20 morning, but if push comes to shoves we can -- we can complete
 21 the process in an hour if -- if that's what we're told.
 22 HEARING OFFICER KUMA: And what is the Employer's position
 23 on this?
 24 MR. LUPION: We would like to be accommodating so that the
 25 Union -- the Petitioner can get whatever guidance it needs, but

Page 45

1 we have witnesses who have been made available based on the
 2 understanding that the record would be opened this afternoon.
 3 I don't know -- and I don't know what the witnesses'
 4 availability will be after -- after tomorrow, so I would ask
 5 that the region gives us the same flexibility in the event that
 6 we don't have witnesses available because of scheduling --
 7 scheduling conflicts.
 8 HEARING OFFICER KUMA: All right.
 9 MR. LUPION: Including, you know, including but not
 10 limited to -- I mean our expectation was that, you know, the
 11 hearing would be -- would be completed in fairly short order.
 12 I know I have a personal conflict next Friday, and I'm not
 13 available for the hearing; I thought we would be done by then,
 14 but I cannot -- I cannot be here next -- next Friday. So, you
 15 know, to the extent that these recesses and the like caused the
 16 hearing to be prolonged, I would appreciate the same courtesy
 17 from the Union and the region that I am prepared to extend
 18 today.
 19 HEARING OFFICER KUMA: All right. We'll take a five-
 20 minute recess for now and go off record, and I'll come back
 21 with Letting you know what the region's determination is on it,
 22 okay?
 23 MR. MEIKLEJOHN: Okay. I think we'll -- we'll stay in the
 24 main room for the five minutes.
 25 HEARING OFFICER KUMA: Okay. Off the record

Page 46

1 (Whereupon, a brief recess was taken.)
 2 HEARING OFFICER KUMA: Back on the record.
 3 After hearing all parties' positions, the region has
 4 determined that we're going to adjourn till 4:00 p.m., at which
 5 point if the Petitioner has not made a determination as to how
 6 they want to proceed, we will adjourn for the day and the
 7 Employer will call his first witness, and we'll proceed on the
 8 record with litigation, okay?
 9 MR. LUPION: Thank you.
 10 HEARING OFFICER KUMA: We believe it's fair to give you
 11 the opportunity to review how you want to proceed with this
 12 matter, but also gives the Employer enough time to know where
 13 they stand. And of course, we will provide the Employer the
 14 same courtesy, if needed, when he needs to call his witnesses
 15 or if he needs a recess, as well, okay?
 16 So, we'll take a break again. It's 2:11 now, we'll
 17 adjourn for now and resume back at 4:00 p.m.
 18 (Whereupon, a brief recess was taken.)
 19 HEARING OFFICER KUMA: Back on the record.
 20 MR. MEIKLEJOHN: The Union is prepared to -- the Union is
 21 proceeding with this petition. We are not withdrawing and
 22 refiling.
 23 HEARING OFFICER KUMA: Okay, the Union is not withdrawing.
 24 All right, so that said, we are going to proceed first
 25 thing tomorrow morning. Is the Employer presenting witnesses?

Page 47

1 MR. LUPION: Yes, the Employer is presenting witnesses.
 2 HEARING OFFICER KUMA: The issues -- excuse me. The
 3 regional director has directed the following issues will be
 4 heard in this proceeding:
 5 It is the Employer's burden for its position that there is
 6 no employment relationship between the Employer and the
 7 graduate students, including but not limited to, PhD students
 8 in the Biomedical Science and Neuroscience, including joint
 9 degree MD and PhD students in the Employer's Medical Sciences
 10 training programs, the PhD graduate students based on the
 11 research performed to fulfill academic degree requirements, and
 12 PhD students sought in the petitioned for unit are not
 13 employees as defined in section 2(3) of the NLRA;
 14 There is no employment relationship between the Employer
 15 and the graduate students who do not receive a stipend or other
 16 funding from the Employer, including but not limited to,
 17 students pursuing a master's degree or PhD degree in clinical
 18 research;
 19 And to the extent the petitioned for unit seeks to include
 20 PhD graduate students based on the performance of instructional
 21 services, including serving as teaching assistants or tutors,
 22 such a unit is inappropriate because those students lack
 23 community of interest with the PhD Students performing
 24 research. Additionally, to the extent the petitioned for unit
 25 seeks to include graduate students, other than a PhD graduate

Page 48

1 students, such a unit is inappropriate because the non-PhD
 2 graduate students lack interest with the PhD students.
 3 Those will be the burdens in which -- are to be heard
 4 tomorrow morning by the Employer. Employer will be calling
 5 their first witness.
 6 Are there any questions?
 7 MR. MEIKLEJOHN: No, sir.
 8 HEARING OFFICER KUMA: Okay.
 9 For the Employer?
 10 MR. LUPION: No. 9:30 a.m. start time tomorrow?
 11 HEARING OFFICER KUMA: Yes, sir. That's correct.
 12 Okay, now one question I have for the Employer, how many
 13 master's student -- students are in the master's programs? In
 14 any of those? Do you have -- do you have any numbers for that?
 15 MR. LUPION: No. I --
 16 HEARING OFFICER KUMA: Okay.
 17 MR. LUPION: How many -- which
 18 HEARING OFFICER KUMA: And the joint degree --
 19 MR. LUPION: Could we -- yeah, could we back up? The
 20 master's, I understand, is not --
 21 HEARING OFFICER KUMA: I'm sorry, could -- I'm sorry,
 22 Adam. Could we go off the record?
 23 (Whereupon, at 4:07 p.m., the hearing in the above-entitled
 24 matter was adjourned to reconvene on Friday, July 7, 2023 at
 25 9:30 a.m.)

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

CERTIFICATION

This is to certify that the attached proceedings before the National Labor Relations Board, Region 2, in the matter of Icahn School of Medicine at Mount Sinai and International Union, United Automobile, Aerospace, and Agricultural Implement Workers of America, Case Nos. 02-RC-319437, at New York, New York, on July 6, 2023, was held according to the record, and that this is the original, complete, and true and accurate transcript that has been compared to the recording from the hearing, that the exhibits are complete, and no exhibits received in evidence or in the rejected file are missing.

Elaine M. LaRosee

[advance (1) 27:8	6:21	12:4,12	31:24;38:16
[sic] (8) 6:16;8:9;16:12;18:7; 22:19;25:21;31:12; 34:18	AEROSPACE (1) 1:9 affected (1) 44:6 affiliates (1) 43:21	appeared (1) 20:19 appears (1) 31:17 appended (1) 25:21	B-4 (2) 18:4,12 Back (17) 12:15;17:17;19:17; 23:1;24:16;28:9;34:1, 2,6;39:24;42:4;43:2; 45:20;46:2,17,19; 48:19	Building (1) 1:16 burden (1) 47:5 burdens (1) 48:3 buy-in (2) 44:1,11
A	affirmative (1) 7:13	appointed (1) 43:20	bad (1) 23:14	C
above-entitled (2) 1:13;48:23	afternoon (1) 45:2	appointments (1) 37:9	bar (1) 8:17	call (3) 27:23;46:7,14
absence (1) 20:20	afterwards (2) 19:20,21	appreciate (1) 45:16	bargaining (7) 8:16;9:3,9;14:1; 22:9;32:13;35:21	calling (2) 28:1;48:4
academic (2) 37:2;47:11	again (4) 17:15;24:25;42:11; 46:16	appropriate (3) 9:8,12,24	based (17) 10:15;12:2;13:15,24; 14:2,6;16:1,1;20:5,12; 22:6,14;42:9;43:4; 45:1;47:10,20	came (2) 1:13;36:21
accept (1) 30:12	aglee (1) 11:18	argument (5) 17:3;19:8;22:1; 31:25;32:3	basis (2) 14:18,19	Can (45) 9:2,11,12;13:24; 14:1;15:12,12;17:2,15; 18:21;21:4,25;22:21, 23;23:8,20;24:24; 26:14;27:4,4;29:21,21, 22;30:21;31:18,18,24; 32:13,17;34:9,9;35:14; 37:16,17;38:1,2;39:18, 25;42:17,18,24,25; 44:20,20,25
access (1) 26:11	ago (1) 13:14	arguments (1) 36:8	better (1) 22:23	Case (13) 1:4;6:4,5,8;13:20; 20:7,8;22:10,11;25:23; 30:14;36:21;39:5
accommodating (1) 44:24	agree (3) 11:18,25;14:1	around (1) 23:1	bi- (1) 38:24	cause (2) 16:3;43:11
Act (8) 8:15;9:8,17;13:1; 17:21;18:23;19:5; 38:14	agreeing (2) 29:2,3	aspect (1) 34:10	Biological (4) 10:13,23;11:3;15:9	caused (1) 45:15
activities (1) 13:9	agreement (1) 8:16	assertion (1) 13:13	Biomedical (12) 9:14;15:10;18:24; 21:7;38:19;40:8,11,17, 20,22;41:5;47:8	certain (2) 15:22;30:21
Actually (4) 27:2,4;28:3;35:9	agrees (1) 11:12	assistants (8) 13:6;14:12,23;17:25; 20:13;38:21;40:15; 47:21	BOARD (11) 1:2,15;6:7;7:17;8:12, 19,20,24;12:6;18:6; 29:10	certainly (3) 16:2;17:2,10
Adam (20) 6:19;7:24;17:16; 18:21;21:3,25;23:16; 24:3;25:17;26:18; 27:23,23;28:16;29:5; 35:13;36:4;39:3,25; 40:6;48:22	AGRICULTURAL (1) 1:9	Associate (2) 7:9;37:18	Board's (10) 7:15;8:3,10;9:1;12:4, 12;17:21;18:4,12; 27:13	chance (1) 28:17
Adam's (1) 27:19	ahead (2) 19:19;26:18	Assuming (2) 13:20;34:21	Boston (1) 38:9	change (1) 35:3
addition (3) 10:16;37:20;43:13	allow (6) 15:24;16:3;22:13; 27:11;30:7;36:11	attachment (4) 34:16;39:2,7,11	both (3) 11:2;34:1;35:4	changes (1) 34:17
additional (4) 6:9;34:4;38:22; 44:13	although (1) 14:21	attachments (4) 14:5;25:2,19;28:17	bounce (1) 23:1	Chat (1) 23:22
Adam's (1) 27:19	amend (12) 15:22;16:3;19:7,8; 21:20;22:20;29:9,21, 25;30:23;32:4;42:7	attempts (1) 20:6	break (3) 22:18;41:14;46:16	choice (2) 44:3,3
addition (3) 10:16;37:20;43:13	amended (3) 34:16;43:5,6	Attorney (1) 34:10	breakout (2) 42:24;44:9	chooses (3) 37:11,12,14
additional (4) 6:9;34:4;38:22; 44:13	amending (2) 30:24;31:21	audible (1) 12:22	brief (9) 12:14;24:15;28:23; 33:23;34:5;39:23;43:1; 46:1,18	circumstances (2) 12:3;37:25
additionally (2) 21:12;47:24	amendment (9) 19:13,20;21:15; 22:14;34:16;35:2;36:6; 42:5;43:7	AUTOMOBILE (1) 1:8	briefly (5) 15:12;29:22;30:5;	citing (1) 15:4
address (5) 13:12;16:7;24:11; 30:4,24	AMERICA (1) 1:10	availability (1) 45:4	B-1a-d (2) 7:15;8:3	claim (2) 7:1;20:20
addresses (1) 23:10	among (2) 8:13,14	available (3) 45:1,6,13	B-2 (2) 8:10;9:1	clarification (1) 24:22
adjoin (3) 46:4,6,17	Andrew (2) 7:6,10	AVI (6) 1:14;7:6;22:21; 31:24;33:18;35:1	B-3 (2)	clarify (8) 13:24;15:16;18:21;
adjourned (1) 48:24	anticipate (1) 34:22	avoid (1) 27:20	B	
Adler (1) 6:16	apparently (1) 23:15	B		
admissible (1) 29:4	appear (1) 38:21			
admission (1) 29:2	appearances (1)			
admitted (1) 38:18				

21:3;25:7,14;29:1; 35:13 clarifying (2) 29:12;32:7 classifications (1) 21:4 classroom (1) 41:13 clear (10) 10:20;15:25;16:17; 17:16,18;19:5,20; 20:24;21:5;35:1 clearly (3) 14:22;16:9;29:7 click (1) 26:13 client (1) 42:18 clinical (10) 11:23;13:14,25;14:3; 15:21;18:25;22:8; 32:12;35:20;47:17 close (1) 42:13 co-counsel (2) 28:11;34:9 code (2) 26:14,14 collective (2) 8:15;9:9 Columbia (15) 10:7;13:2,4;17:22, 24;19:5,23;20:7,9; 30:14;36:17,18;37:8, 24;38:8 committee (3) 43:23,25;44:11 communicate (1) 30:10 communicated (1) 30:11 communication (1) 32:8 community (5) 16:15;18:1;20:16; 21:14;47:23 compensated (1) 39:10 compensation (8) 10:11,19,25;11:7; 39:1,9,9,20 complete (1) 44:20 completed (4) 12:5;18:5;44:12; 45:11 completely (1) 13:9 completeness (1) 26:9 computer (1) 25:4 conceding (1)	29:4 concerned (1) 17:7 concerning (1) 36:6 conclude (1) 38:13 conclusion (1) 39:18 conditioned (3) 13:10;37:6,9 conduct (13) 9:14;10:5,7,11,15,19, 24;16:16;19:24;21:8; 29:14;37:12;41:8 conducting (1) 11:6 confirm (2) 23:2,6 conflict (1) 45:12 conflicts (1) 45:7 confusion (2) 27:20;28:15 Connecticut (1) 6:17 connection (1) 13:19 consult (1) 42:18 consulted (1) 43:23 contacting (2) 43:25;44:10 contains (1) 8:13 contend (5) 10:10,17;14:23; 20:16;21:12 contending (1) 11:16 contention (1) 21:6 context (1) 15:5 continue (1) 38:3 contract (1) 8:17 contrast (2) 37:8,23 copied (1) 24:4 copies (1) 6:9 copy (1) 26:14 correspondence (2) 16:2;29:20 costs (1) 41:9 counsel (10)	7:6,9;21:16;23:3; 24:4;29:6,15;32:4,11, 21 Counsels (1) 6:11 couple (1) 15:14 course (1) 46:13 COURT (20) 7:13;23:16,16,22,24; 24:8,10;26:5,10,13; 27:12,15;28:21;32:20; 33:2,5,9,13,16,21 courtesy (2) 45:16;46:14 covering (1) 8:16 covers (1) 40:19 criticizing (1) 35:7 current (2) 12:3;42:10	18:20 deprived (1) 20:5 describe (2) 35:14;36:12 describing (1) 18:16 Description (3) 6:8;7:19;12:21 despite (1) 15:19 determination (2) 45:21;46:5 determined (3) 42:7,21;46:4 different (8) 15:17,18;22:4;27:20; 28:13,13,18;37:18 differs (2) 11:8;30:25 direct (1) 39:19 directed (2) 17:8;47:3 direction (1) 20:1 director (7) 9:13,25;30:4,7,11; 42:21;47:3 disagreement (1) 14:19 discipline (2) 37:14,21 disclaimed (2) 32:11;35:19 discuss (6) 18:14,15,18;22:19, 19;36:13 discussed (1) 13:7 discusses (1) 36:19 discussion (3) 15:5,8;29:7 dispute (2) 13:8;39:16 dissertation (1) 37:4 distinguish (2) 20:7;30:14 distinguishable (2) 13:1;38:7 distinguishes (1) 36:16 distinguishing (1) 20:8 distribution (1) 6:10 doctoral (5) 10:4,12,18;21:7,8 document (11) 6:10;8:12;24:23; 25:1,2;26:23;27:7,25;	30:22;34:18;35:9 documents (2) 25:19;27:12 done (1) 45:13 down (2) 27:5;36:21 download (1) 26:14 drug (1) 39:13 dual (2) 19:1;41:6 During (4) 6:8;11:14,17;15:7
D				
E				
e- (1) 35:1 E-16 (2) 24:17;28:8 E-17 (1) 36:7 earlier (5) 21:3;22:1;32:11; 35:12;36:22 easier (1) 24:4 easy (1) 44:4 educational (1) 39:17 e-file (2) 22:22;23:3 either (2) 9:21;33:13 elaborate (3) 10:1,3;30:22 election (2) 9:24;20:15 else (1) 31:20 elsewhere (1) 10:24 email (1) 34:25 e-mail (17) 13:22;15:4;22:22; 23:9,9,17,25;24:3,10; 29:12,17;32:6;33:9,15; 34:14,22;35:17 emails (6) 14:21;15:3;22:7; 32:10;35:18,25 e-mails (1) 13:15 employed (3) 9:4;11:13;43:21 employee (7) 10:7,15,18;12:1; 18:23;19:5;30:15 employees (18)				

8:16;9:7,16;10:6,22; 11:5;12:25;17:20; 18:17;20:2,14;21:9,10; 38:10,14;39:14,19; 47:13 Employer (44) 1:6;6:18,19;8:18; 10:5;11:13;12:5,18; 14:16;16:12;17:15; 18:15;21:25;22:17,19; 24:19;26:25;27:8,10, 14,21,25;28:1,4;29:2, 16;30:13;32:16,18; 36:7;39:11,15;46:7,12, 13,25;47:1,6,14,16; 48:4,4,9,12 Employer's (22) 9:6;16:13;17:18; 20:6,19;24:17,18,20; 27:3;28:6,8;33:10; 35:11;36:2;38:20,21, 23;39:13;43:13;44:22; 47:5,9 employment (2) 47:6,14 encompass (1) 31:12 enough (2) 10:20;46:12 enrolled (2) 9:3;18:22 enter (2) 24:19;26:19 entered (2) 36:2;40:4 entering (2) 34:7,8 entire (3) 7:19;24:23;25:1 entitled (2) 20:15;30:13 essentially (1) 30:12 even (2) 17:25;30:12 event (1) 45:5 everybody's (2) 23:24;35:7 evidence (10) 8:2,25;12:2;17:23; 22:6;25:15;29:5;36:15; 38:22;39:18 evidentiary (2) 19:14;22:13 exact (1) 29:11 exactly (1) 37:15 example (2) 38:23;39:6 exchange (1) 35:18	exclude (2) 9:7,16 excluded (7) 11:14,20,20,24;12:2; 14:1;20:21 excuse (2) 43:6;47:2 executed (1) 8:12 Exhibit (43) 7:18,18,19,19;8:12, 13,20,24;12:6,8;16:12; 18:6,9;24:19,20;25:2; 27:1,3,10,17,18,25; 28:7;29:10,20,24; 32:14,16,23;33:4;34:7, 8,14,19;35:4,12,14,17, 17;36:2;39:11;40:1,4 exhibits (16) 7:21;15:22;16:3; 24:23;25:7;26:19,20; 27:16;28:2,12,13; 32:15,23,25;33:13,17 exhibit's (1) 40:4 expectation (1) 45:10 expenses (1) 41:9 explaining (1) 29:17 extend (1) 45:17 extent (3) 45:15;47:19,24	feel (1) 17:14 few (1) 13:13 Filcher (1) 6:20 file (4) 22:25;25:23,23; 42:11 Finally (2) 11:1;20:16 find (1) 30:7 finish (1) 14:16 finishes (1) 19:16 first (15) 13:17;16:9;22:13; 29:1;30:8,19;31:1,2,3, 16;35:1;41:12;46:7,24; 48:5 five (1) 45:24 five- (1) 45:19 flexibility (1) 45:5 follow (3) 27:13;28:6;38:2 following (1) 47:3 Formal (4) 6:7;7:16;8:2;43:24 forth (3) 17:17;36:14;38:11 forward (6) 42:12,15,16,21;43:4, 14 found (4) 9:12,24;38:9;42:13 four (1) 31:6 Fox (1) 6:19 Friday (3) 45:12,14;48:24 froze (1) 25:4 fulfill (1) 47:11 fulfillment (2) 37:7,10 full (2) 9:22;38:17 fun (1) 9:15 fundamentally (1) 22:4 funding (7) 9:6,15;13:10;37:6, 17,19;47:16 further (4)	6:23;7:4;8:8;36:10 furtherance (1) 37:4 G gages (1) 25:12 General (1) 7:9 given (2) 43:11,13 gives (2) 45:5;46:12 goes (1) 16:6 good (2) 16:2;43:10 graduate (25) 9:3;10:24;13:8; 16:14,16,24,25;17:1; 18:23;19:10;21:18,19, 21;29:14;31:11,14; 38:20,24;47:7,10,15, 20,25,25;48:2 grant (2) 37:7,10 great (3) 23:6,23;24:6 green (1) 26:13 guards (2) 9:7,16 guess (2) 32:17,17 guidance (1) 44:25 H handbook (1) 39:2 handling (1) 34:10 Hartford (1) 6:17 Health (1) 7:10 hear (2) 24:24;42:23 heard (2) 47:4;48:3 hearing (159) 1:13,14;6:3,4,7,9,14, 18,21,23;7:1,4,8,11,14, 16,24;8:1,1,4,5,8,8,8, 11,24,24;9:2,11,19,21; 10:3,21;11:8,12,22; 12:5,13,15,18,23; 14:14,16,25;15:11,13; 17:12,13;18:3,5,13; 19:6,14,16;21:2,15,25; 22:13,16;23:5,7,18,20,	23;24:1,14,16,18,24; 25:4,6,10,13,17,25; 26:3,11,16,18,22,25; 27:3,6,8,17;28:6,9,22, 24;29:19,23;30:6,13, 20,23;31:4,9,12,20,23; 32:1,5,19,22;33:1,3,8, 19,22,24;34:2,6,11,20, 24;35:5,10,16,22;36:1, 11;38:15;39:21,24; 40:3,3,6,10,14,19,22; 41:2,10,14;42:4,12,20, 25;43:2;44:14,22;45:8, 11,13,16,19,25;46:2,3, 10,19,23;47:2;48:8,11, 16,18,21,23 herein (1) 8:17 highlighted (2) 31:19;35:18 highly (1) 43:19 hitting (1) 23:12 hmm (1) 40:16 hold (3) 23:25;28:19;29:23 hour (1) 44:21 hundreds (1) 25:12 I I- (1) 16:8 ICAHN (3) 1:5;6:5;9:4 identification (3) 7:17;12:6;18:6 identified (1) 36:7 identify (1) 27:12 IMPLEMENT (1) 1:9 imprecise (1) 14:21 inappropriate (2) 47:22;48:1 include (11) 9:13;14:11;15:20; 18:24;19:4;22:7;23:8; 31:13;42:11;47:19,25 included (12) 10:18;11:5,17,21; 13:6,17,21;15:5;20:22, 25;21:19,22 includes (2) 9:3;40:12 including (12) 8:13;13:11;24:23;
--	---	--	--	--

25:2;40:23,24;45:9,9; 47:7,8,16,21 inclusive (2) 7:18;41:12 inconsistent (1) 14:8 indeed (2) 17:4;37:2 index (1) 7:19 indicated (1) 13:16 inevitably (1) 23:12 information (1) 12:2 informed (1) 6:6 initial (1) 32:24 initially (1) 19:21 input (1) 44:5 institution (3) 38:2,3,5 institutional (1) 44:7 instructional (15) 9:5;10:16,22,25; 16:15,18;19:10,11; 20:10,13;21:13,18,21; 29:14;47:20 instructions (2) 27:9,13 intend (1) 36:15 interest (9) 7:1;16:15;18:1; 20:17;21:14;32:11; 35:19;47:23;48:2 INTERNATIONAL (2) 1:8;43:21 intervene (1) 8:4 into (8) 7:22;12:9;18:9; 19:20;26:24;36:2;40:4; 44:16 introduction (1) 19:17 investigator (3) 37:13,20;38:1 irrelevant (1) 32:9 issue (22) 12:25;13:2,3,5; 14:22;15:4,18;16:6,17; 17:20;18:15;19:13; 20:23;27:5;36:16,20, 21;37:8,16,23;38:9; 42:19 issues (10)	12:19;13:12;14:17; 15:3;17:14,19;19:17; 35:8;47:2,3 items (1) 8:14 J Jacob (1) 1:15 Javits (1) 1:15 joint (4) 11:1,13;47:8;48:18 Joshua (1) 6:19 July (9) 1:17;27:8;28:14; 29:11,12;32:6;34:15, 22;48:24 June (2) 13:22,23 jurisdictional (1) 8:18 K keep (1) 42:16 keeping (1) 31:10 Kelly (1) 6:17 key (1) 26:12 kind (1) 44:2 knowledge (1) 10:13 KUMA (135) 6:3,14,18,21,23;7:4, 8,11,14,16,24;8:1,4,8, 11,24;9:2,11,19,21; 10:3,21;11:8,12,22; 12:5,13,15,18,23; 14:14,16,25;15:11,13; 17:13;18:3,5,13;19:6, 16;21:2,15,25;22:16; 23:5,7,18,20,23;24:1, 14,16,18,24;25:4,6,10, 13,17,25;26:3,11,16, 18,22,25;27:3,6,17; 28:6,9,22,24;29:23; 30:6,20,23;31:4,9,12, 20,23;32:1,5,19,22; 33:1,3,8,19,22,24;34:2, 6,11,20,24;35:5,10,16, 22;36:1,11,38;15; 39:21,24;40:3,6,10,14, 19,22;41:2,10,14;42:4, 20,25;43:2;44:14,22; 45:8,19,25;46:2,10,19, 23;47:2;48:8,11,16,18,	21 KUMAR (1) 1:14 L lab (4) 37:3,11,16,18 LABOR (5) 1:2,15;6:25;8:14; 17:21 lack (3) 18:1;47:22;48:2 Lainy (2) 28:20;33:15 Lanny (3) 7:12;33:1,22 large (2) 22:25;25:24 larger (2) 25:23;26:8 last (1) 15:7 later (1) 31:17 lead (1) 39:18 leadership (2) 43:22;44:10 leads (1) 11:19 leave (2) 20:20;37:16 led (1) 14:2 letters (2) 31:2,7 Letting (1) 45:21 Limecast (1) 26:1 limited (7) 10:23;13:11;17:7,7; 45:10;47:7,16 line (3) 31:1,3,16 litigated (4) 15:3;17:15,19;20:24 litigating (1) 36:17 litigation (3) 42:22;43:16;46:8 living (1) 41:9 Livingston (1) 6:16 Logan (2) 6:16;23:8 look (6) 11:11;16:10;28:17; 30:2;39:6,11 lose (1) 37:18	losing (1) 37:17 lot (2) 17:17;30:2 luncheon (1) 41:16 Lupion (73) 6:19,19;7:6,25;8:23; 9:10,18;12:11,22,24; 14:10,15,18;15:12,14; 16:20,25;17:4,9,11,19; 18:11,22;19:12;22:2, 21,23,25;23:6,11,19; 24:6;25:18;26:2,8,21; 27:11;28:3,11,19;29:6, 22;30:16;31:24;32:3,6, 15,17,20;33:15;34:21; 35:6,15,17;36:8,14; 39:4;40:2,9,11,16,21; 41:1,3,11;44:24;45:9; 46:9;47:1;48:10,15,17, 19 M magnitude (1) 44:2 mail (1) 35:2 main (2) 17:10;45:24 making (4) 24:10;34:17;35:3; 44:2 many (5) 40:7,7,14;48:12,17 mark (5) 26:10;27:15,21;28:4; 32:17 marked (16) 7:15,17;8:10,12; 12:4,6;18:4,6;24:17; 27:10,14,15,21,25; 32:23;34:12 marking (1) 26:6 master's (23) 9:13;11:23;13:14,17, 18,21;14:3;15:20; 16:21,24;17:3;18:19; 19:2;22:4,8;31:13; 32:12;35:20;42:11; 47:17;48:13,13,20 Matter (8) 1:4,13;12:7,24;18:7; 21:24;46:12;48:24 may (3) 14:20;38:22;44:3 maybe (1) 38:25 MD (8) 11:2,3,14,19,21; 40:10,23;47:9	MD-PhD (5) 11:1;19:1;40:13,18; 41:6 mean (10) 16:6,8;19:14;22:2; 34:3;35:6;38:16;42:17; 44:18;45:10 meaning (3) 8:15;17:21;18:23 Medical (1) 47:9 MEDICINE (4) 1:5;6:5;9:4;11:19 meet (5) 10:6,14,17;12:1; 20:14 meets (1) 8:18 MEIKLEJOHN (70) 6:13,15,15,17;7:23; 8:22;9:20,23;10:4,22; 11:10,16,25;12:10; 13:16,23;14:8,11,20; 15:1;16:5,22;17:1,8,10, 12;18:10;19:7,22;21:1, 6,16;23:8,14;24:12,22; 25:1,8,11,14;26:23; 27:2,4,7,19;29:1;30:1, 9,18,21;31:1,6,11,14, 18,22;32:24;33:6;34:9; 35:24;38:16;39:6; 42:17,23;43:19;44:15, 18;45:23;46:20;48:7 Meiklejohn's (2) 13:13;22:7 Melissa (3) 6:20;33:9,15 members (2) 43:25;44:11 mention (2) 16:20,23 mentioning (1) 28:7 mentor (1) 37:13 mess (1) 23:12 messed (1) 23:14 met (1) 8:18 might (3) 23:1;31:7;44:19 minute (2) 34:1;45:20 minutes (1) 45:24 misspoke (1) 15:8 Mister (1) 29:6 MIT (4) 36:21,24;37:15;
--	---	--	--	--

<p>38:10 moment (1) 42:10 moments (1) 13:13 Monday (2) 23:14;33:7 monies (1) 38:5 more (2) 6:10;25:17 Moreover (2) 37:6,16 morning (3) 44:20;46:25;48:4 most (1) 44:19 motion (5) 22:20;29:9,21,25; 32:4 motions (1) 8:4 MOUNT (9) 1:5;6:5;7:6,9;9:4; 19:15;22:15;38:1,3 move (9) 19:7,8;35:11;38:1; 42:12,15,16,21;43:14 moves (1) 18:13 moving (1) 43:3 much (1) 44:14 muted (1) 12:23</p>	<p>1:16,16;31:24;32:3; 33:8,8 next (3) 45:12,14,14 Nicole (3) 6:16;23:8;35:7 NLRA (1) 47:13 NLRB (1) 18:18 Nods (1) 7:13 none (1) 38:5 non-PhD (1) 48:1 note (7) 17:6;28:11;29:11; 30:16;32:7;37:25; 41:11 Noted (2) 6:2;42:3 Notice (2) 1:14;6:9 number (4) 20:23;40:9,12;41:11 numbers (2) 32:16;48:14</p>	<p>22,23;39:3,7,14;42:19, 20;43:10,13 offered (3) 26:21,25;43:8 offering (1) 34:13 Officer (138) 1:14;6:3,14,18,21, 23;7:4,8,11,14,16,24; 8:1,4,5,8,11,24;9:2,11, 19,21;10:3,21;11:8,12, 22;12:5,13,15,18,23; 14:14,16,25;15:11,13; 17:13;18:3,5,13;19:6, 16;21:2,15,25;22:16; 23:5,7,18,20,23;24:1, 14,16,18,24;25:4,6,10, 13,17,25;26:3,11,16, 18,22,25;27:3,6,17; 28:6,9,22,24;29:19,23; 30:6,20,23;31:4,9,12, 20,23;32:1,5,19,22; 33:1,3,8,19,22,24;34:2, 6,11,20,24;35:5,10,16, 22;36:1,11;38:15; 39:21,24;40:3,6,10,14, 19,22;41:2,10,14;42:4, 20,25;43:2;44:14,22; 45:8,19,25;46:2,10,19, 23;47:2;48:8,11,16,18, 21 officials (2) 43:21,24 one (17) 12:16;23:12,21; 25:12;26:5,6,6,7,9,10; 27:21;28:19;29:23; 30:1;31:8;33:8;48:12 ones (1) 33:6 only (4) 17:7,9;31:7,16 open (2) 42:21;43:15 opened (1) 45:2 opening (1) 43:14 opportunity (5) 20:5;30:4;34:3; 42:14;46:11 option (2) 42:10;43:9 order (3) 6:4;28:12;45:11 ordering (1) 28:13 organization (2) 8:14;43:20 organizations (1) 7:1 organizing (3) 43:23,25;44:11</p>	<p>original (2) 21:22,23 ot (1) 46:21 Otherwise (3) 27:23;37:21,22 out (4) 15:7;21:16;29:6; 30:7 out- (1) 29:5 outside (1) 37:2 overturned (1) 36:18</p>	<p>29:14;37:1 performance (4) 13:19;37:9,22;47:20 performed (2) 37:3;47:11 performing (3) 38:4;39:10;47:23 period (2) 15:16;31:8 periods (1) 31:7 permitted (1) 20:3 personal (1) 45:12 persons (1) 6:25 petition (9) 8:17;14:4;21:23; 29:9;30:23;42:10,15; 43:9;46:21 petitioned (5) 12:20;38:13;47:12, 19,24 Petitioner (30) 1:11;6:11,13,15; 8:14;11:12;14:7;15:25; 18:5,13;19:3;25:22; 32:21,22;34:3,13;35:4, 19,23;36:5;40:2;42:9, 14;43:3,9,15,18,19; 44:25;46:5 Petitioner's (15) 12:20;20:21,25;23:2; 24:4;33:3;34:12,13,19; 36:6;40:1,4,5;42:5,7 PhD (58) 9:13;10:13,23;11:2, 6,17,21,23;13:14,25; 14:3;15:9,10,21;16:15, 25;17:1,7,8,11;18:24, 24,25;21:17,18;22:5,8; 31:2,2,5,6,9,16;32:12; 35:20;36:25;37:5;38:5, 19;40:7,10,11,13,16, 22,23;41:4,5,6;47:7,9, 10,12,17,20,23,25;48:2 PhD-MD (1) 11:13 PhD's (1) 18:19 PI (2) 38:1,3 placed (1) 38:20 placeholder (1) 27:11 Plaza (1) 1:16 please (5) 6:11,12;10:3;25:7; 36:5 pm (4)</p>	
N	O	P			
<p>Name (2) 6:5,12 names (1) 6:14 NATIONAL (3) 1:2,14;17:20 need (5) 15:22;20:23;26:6,11; 34:4 needed (1) 46:14 needs (5) 43:3;44:4,25;46:14, 15 neuro (1) 40:16 Neuroscience (15) 9:14;10:12,23;11:4, 4;18:25;21:7;38:18; 40:8,12,17,20,23;41:5; 47:8 neurosciences (1) 10:12 New (6)</p>	<p>object (2) 19:12;29:16 objecting (1) 29:18 objection (16) 7:23,25;8:22,23,24; 12:10,11;16:5;18:10, 11;26:23;28:4;34:23, 24;35:24;40:2 objections (11) 7:21;8:1,20;12:8; 18:8;24:21;34:20; 35:22;36:2;39:25;40:3 obtain (2) 11:2;43:25 Obviously (1) 15:4 occurred (1) 32:8 Off (17) 12:13;15:7;22:18; 24:14;28:9,20;29:6; 33:22;34:2;39:21; 41:15;42:9,25;43:4; 45:20,25;48:22 offer (39) 13:4,12;22:12,17,18; 24:18,20;25:18,19,20, 22;26:4,19,25;27:1; 28:12,18;29:3,8;30:3, 13,17,17;32:2;34:20; 36:12,13,14,19;38:11,</p>	<p>officials (2) 43:21,24 one (17) 12:16;23:12,21; 25:12;26:5,6,6,7,9,10; 27:21;28:19;29:23; 30:1;31:8;33:8;48:12 ones (1) 33:6 only (4) 17:7,9;31:7,16 open (2) 42:21;43:15 opened (1) 45:2 opening (1) 43:14 opportunity (5) 20:5;30:4;34:3; 42:14;46:11 option (2) 42:10;43:9 order (3) 6:4;28:12;45:11 ordering (1) 28:13 organization (2) 8:14;43:20 organizations (1) 7:1 organizing (3) 43:23,25;44:11</p>	<p>P-46 (2) 34:12;40:5 page (5) 25:9;34:15;35:1; 39:7,12 pages (6) 25:13,17,18,21; 34:14;35:1 paid (16) 10:5,9;13:2,19,25; 16:14,16;19:23,25; 20:11,17;21:8,10,13; 38:24;41:8 Papers (2) 7:17;8:2 Paragraph (5) 31:1,3,17;34:18;35:4 partial (2) 9:11,22 particulars (1) 18:16 parties (8) 6:6,25;7:20;8:11; 13:7,15;16:2;29:15 parties' (1) 46:3 party (2) 6:10;33:14 Pause (8) 12:17;24:2,7,13; 25:3,5;26:17;44:17 pay (1) 38:4 payment (1) 20:12 payments (2) 38:24;39:8 payroll (1) 38:20 people (1) 20:23 percent (1) 13:9 perform (6) 13:2;16:14,18;18:1;</p>	<p>original (2) 21:22,23 ot (1) 46:21 Otherwise (3) 27:23;37:21,22 out (4) 15:7;21:16;29:6; 30:7 out- (1) 29:5 outside (1) 37:2 overturned (1) 36:18</p>	<p>29:14;37:1 performance (4) 13:19;37:9,22;47:20 performed (2) 37:3;47:11 performing (3) 38:4;39:10;47:23 period (2) 15:16;31:8 periods (1) 31:7 permitted (1) 20:3 personal (1) 45:12 persons (1) 6:25 petition (9) 8:17;14:4;21:23; 29:9;30:23;42:10,15; 43:9;46:21 petitioned (5) 12:20;38:13;47:12, 19,24 Petitioner (30) 1:11;6:11,13,15; 8:14;11:12;14:7;15:25; 18:5,13;19:3;25:22; 32:21,22;34:3,13;35:4, 19,23;36:5;40:2;42:9, 14;43:3,9,15,18,19; 44:25;46:5 Petitioner's (15) 12:20;20:21,25;23:2; 24:4;33:3;34:12,13,19; 36:6;40:1,4,5;42:5,7 PhD (58) 9:13;10:13,23;11:2, 6,17,21,23;13:14,25; 14:3;15:9,10,21;16:15, 25;17:1,7,8,11;18:24, 24,25;21:17,18;22:5,8; 31:2,2,5,6,9,16;32:12; 35:20;36:25;37:5;38:5, 19;40:7,10,11,13,16, 22,23;41:4,5,6;47:7,9, 10,12,17,20,23,25;48:2 PhD-MD (1) 11:13 PhD's (1) 18:19 PI (2) 38:1,3 placed (1) 38:20 placeholder (1) 27:11 Plaza (1) 1:16 please (5) 6:11,12;10:3;25:7; 36:5 pm (4)</p>

<p>42:3;46:4,17;48:23 Point (5) 16:12;29:13,17; 42:13;46:5 pointed (4) 15:7;21:16;29:5,6 policies (1) 39:13 pool (1) 15:18 poor (1) 37:22 portion (5) 11:3,14,17;40:13; 41:6 position (49) 10:1,4;11:2;12:7,18, 19;14:5,22;15:2,19,23; 16:4,7,9,10,13,14;17:2, 5,14,18;18:7,14;19:9, 22;20:10,19,21,25; 21:17,19,20;29:10,13, 16;30:11,17,22;32:7; 34:17;35:3;36:19; 39:12;42:6,8;43:4,8; 44:22;47:5 positions (1) 46:3 possible (1) 25:23 predominantly (1) 41:13 prejudice (2) 42:13;43:10 prejudicial (2) 19:15;22:14 prepare (1) 29:21 prepared (7) 9:23;13:4;14:6; 22:10,11;45:17;46:20 preparing (1) 33:12 presenting (2) 46:25;47:1 preserve (2) 15:3,18 preserved (1) 16:9 preserving (1) 16:17 Price (1) 6:16 principal (4) 16:6;37:13,20;38:1 principled (1) 20:8 procedural (1) 30:1 procedures (2) 6:6,8 proceed (8) 9:23;22:16;42:12;</p>	<p>43:17;46:6,7,11,24 proceeded (1) 22:5 proceeding (6) 7:2;8:11;36:18; 38:10;46:21;47:4 proceedings (2) 8:5;34:10 process (6) 43:24;44:2,9,10,12, 21 program (18) 10:13,24;11:1,3,14, 21,21;13:25;15:9,10; 19:2;22:4;37:2;38:19; 40:11;41:5,5,7 programs (6) 14:12;19:25;21:8; 22:5;47:10;48:13 prolonged (1) 45:16 proof (34) 13:4,12;22:12,17,18; 24:19,20;25:19,19,20, 22;26:4;27:1;28:12,18; 29:3,8;30:3,13,17; 32:2;36:12,13,14,19; 38:12,22,23;39:3,7,14; 42:19,20;43:13 propose (1) 7:16 proposed (4) 19:21;34:15,16;35:2 Proskauer (1) 6:20 prove (1) 36:15 provide (14) 9:5;10:16,25;19:9, 10,11,25;20:10,17; 21:13,21,21;22:17; 46:13 provide- (1) 16:18 provided (2) 21:18;30:4 providing (3) 20:13;39:20;42:9 Pulda (1) 6:17 purpose (1) 9:8 purposes (1) 39:12 Pursuant (3) 1:13;27:9,12 pursue (1) 37:14 pursuing (2) 19:1;47:17 push (1) 44:20 put (3)</p>	<p>22:5;23:22;43:11 putative (1) 37:21 Q quick (1) 40:6 quickly (1) 25:23 quoted (1) 25:20 R raise (2) 20:20;27:4 raised (5) 12:19;14:17,22;15:1; 31:25 RA's (2) 13:3;37:8 rather (1) 36:18 RC-319437 (1) 6:5 read (2) 30:17,19 ready (1) 13:4 reason (2) 29:18;38:7 reasonably (1) 14:2 reasons (2) 38:8,11 receipt (7) 7:21;8:20;12:8;18:8; 23:2,6;35:24 receive (9) 7:16;26:20;33:3; 36:24;38:6;39:19;41:4, 8;47:15 received (13) 8:2,3,25;9:1;12:12; 18:12;24:18;25:8,15; 28:8;33:16;36:7;40:5 receiving (2) 24:22;25:1 recent (1) 36:21 recess (13) 12:14;24:15;28:23; 33:23;34:5;39:23; 41:16;43:1;44:19; 45:20;46:1,15,18 recesses (1) 45:15 recommendation (2) 44:1,12 reconvene (1) 48:24 record (52)</p>	<p>6:3,14,23;7:4,22;8:9; 12:9,13,15;15:8;16:11; 17:16;19:19;22:18; 24:14,16;26:24;28:10, 20,24;29:6,20;33:20, 22,24;34:6,7;36:3,6,9, 13;37:23;38:17;39:22, 24;40:4;41:15;42:4,13, 22,25;43:2,12,14,15; 45:2,20,25;46:2,8,19; 48:22 recording (1) 18:9 refer (1) 21:17 referenced (2) 34:15,17 referred (7) 15:8;25:20;32:6,10; 38:25;39:1,13 referring (3) 16:13;32:1,3 refers (1) 39:8 refiling (1) 46:22 reflected (1) 21:23 regarding (3) 12:3;13:14;15:3 regardless (3) 9:6,15,15 Region (16) 1:15;15:24;19:13; 22:3;25:22;27:9;36:22; 38:9,9,13;42:6;43:8, 13;45:5,17;46:3 regional (7) 9:13,24;30:3,6,10; 42:20;47:3 region's (5) 43:4,5,6,7;45:21 related (1) 37:2 RELATIONS (3) 1:2,15;17:21 relationship (3) 39:17;47:6,14 relevant (2) 29:4,20 remarkable (1) 30:16 remove (1) 31:2 removing (2) 31:4,9 REPORTER (20) 7:13;23:16,16,22,24; 24:8,10;26:5,10,13; 27:12,15;28:21;32:20; 33:2,5,9,13,16,21 Representation (2) 6:8;22:6</p>	<p>representations (2) 14:6;15:20 represented (1) 20:3 representing (2) 32:12;35:20 request (2) 42:7;44:13 require (1) 38:22 requirement (7) 13:8,11;17:24;36:25, 25;37:1;38:6 requirements (1) 47:11 research (34) 9:5,15;10:6,11,15, 19;11:6,23;13:3,15,19, 25;14:3;15:17,21; 16:16;18:2,25;19:24; 20:18;21:8;22:8;32:13; 35:21;37:1,3,8,11; 38:4;39:10;41:8;47:11, 18,24 researchers (5) 14:24;15:5;30:15; 40:19,24 researching (1) 40:25 reserve (1) 35:8 respect (6) 12:19,20;13:13; 16:18;29:9;30:15 respond (5) 15:12;29:22;30:8; 31:24;38:16 response (8) 6:22;7:3,5;8:7; 12:22;19:19;43:5,8 responses (3) 6:24;8:9;34:16 Responsive (9) 15:2;16:10,12;18:14; 19:9;21:17;29:10;35:3; 42:6 rests (1) 43:22 resume (1) 46:17 review (3) 28:10;39:18;46:11 reviewing (2) 30:22;42:5 Rice (3) 7:6,9,10 right (27) 6:4;11:16;17:8;18:3; 19:3,6;24:8,11,11; 25:10;26:11,22;27:13, 17;28:20;31:4,14;36:4, 11;39:3,25;41:14;42:5; 43:7;45:8,19;46:24</p>
---	--	--	--	--

<p>road (1) 27:5</p> <p>room (4) 7:1;42:24;44:9; 45:24</p> <p>Rose (1) 6:20</p> <p>Rothgeb (12) 6:16;24:3,9;28:16; 31:16;33:11,18,20,25; 34:10,13,25</p> <p>RSOP (6) 11:8;19:16;21:15; 22:20;30:25,25</p> <p>rule (1) 19:13</p> <p>ruling (2) 8:6;42:18</p>	<p>11:19;44:19</p> <p>sent (10) 14:21;15:4;24:3,10; 25:21;33:9,15,17,19,25</p> <p>separate (1) 35:18</p> <p>separately (1) 20:11</p> <p>sequentially (1) 27:16</p> <p>series (1) 8:13</p> <p>serious (1) 39:18</p> <p>service (5) 6:7;13:11;17:23; 36:25;38:6</p> <p>services (19) 9:5;10:8,17,22,25; 16:15,19;19:11,25; 20:11,13,18;21:13,18, 22;29:15;37:2;39:20; 47:21</p> <p>serving (2) 20:12;47:21</p> <p>set (1) 38:11</p> <p>sets (1) 36:14</p> <p>share (3) 16:15;20:16;21:13</p> <p>sharp (2) 37:8,23</p> <p>short (2) 38:5;45:11</p> <p>shoves (1) 44:20</p> <p>show (7) 6:23;7:4;8:9;17:23; 27:24;38:18,23</p> <p>shown (1) 7:20</p> <p>shows (1) 39:15</p> <p>similarly (1) 36:20</p> <p>SINAI (9) 1:5;6:6;7:7,9;9:4; 19:15;22:15;38:2,3</p> <p>situated (1) 36:20</p> <p>small (1) 20:23</p> <p>smaller (1) 26:5</p> <p>solely (1) 31:21</p> <p>somehow (1) 32:7</p> <p>sorry (9) 7:8;12:24;24:9;25:4; 28:16;31:7;41:2;48:21, 21</p>	<p>sought (2) 29:13;47:12</p> <p>sounds (1) 22:23</p> <p>sources (1) 9:6</p> <p>speak (2) 30:6;43:6</p> <p>specific (3) 16:23;18:20;29:13</p> <p>specifically (2) 21:4;30:24</p> <p>specifications (2) 37:7,10</p> <p>specifics (2) 18:18;36:13</p> <p>spring (1) 36:22</p> <p>stand (1) 46:13</p> <p>standards (1) 8:18</p> <p>start (3) 42:22;43:16;48:10</p> <p>state (10) 6:11,12;17:15;19:19; 21:5;22:1;29:16;36:5; 39:25;43:3</p> <p>stated (1) 30:12</p> <p>Statement (27) 12:7,19;14:5,22; 15:2,19,22;16:3,7,10, 13;17:14;18:6,14;19:9; 20:19;21:17,20;29:10, 16;34:17;35:3;39:12; 42:6,8;43:6,8</p> <p>stating (3) 11:22;22:1;29:18</p> <p>status (1) 30:15</p> <p>statutory (10) 10:6,14,17;11:5; 12:1,25;20:2,14;21:9, 10</p> <p>stay (1) 45:23</p> <p>still (2) 33:25;36:4</p> <p>stipend (6) 36:23;38:4;41:4,8,9; 47:15</p> <p>stipends (1) 36:23</p> <p>stipulate (1) 9:21</p> <p>stipulated (2) 9:2,12</p> <p>stipulations (2) 8:13;39:1</p> <p>student (12) 11:13;18:22;19:5; 37:11,12,14,22;38:2,4,</p>	<p>18;44:5;48:13</p> <p>students (122) 9:3,14;10:5,11,12,14, 16,19,24;11:1,6,23,23; 12:25;13:2,9,14,14,17, 18,21,24;14:3,3;15:18, 20,21,25;16:14,16,18, 21,24,24,25;17:1,3,20, 24;18:1,15,17,17,24, 25,25;19:1,2,4,10,11, 23,24;20:10,14,17,20; 21:2,4,7,12,17,18,20, 21;22:8,8;29:14;31:5, 11,13,13,14;32:12,12; 35:20,20;36:16,16,20, 21,24,24,25;37:15,16; 38:6,7,8,9,13,24;39:8, 13,15,16;40:7,11,13, 14,24;41:3,4,6,7,12; 42:11;47:7,7,9,10,12, 15,17,20,22,23,25; 48:1,2,2,13</p> <p>student's (4) 13:10;37:4,6,20</p> <p>studies (6) 11:15,17;37:12; 38:19;40:13,23</p> <p>studying (1) 11:18</p> <p>subject (1) 14:4</p> <p>submission (2) 35:11,23</p> <p>submit (7) 29:21,24;30:3;31:18; 32:10,13;35:13</p> <p>submitted (8) 8:5;27:8;28:14;33:6, 7,11;34:19;39:14</p> <p>submitting (1) 35:4</p> <p>subpoena (1) 17:6</p> <p>substance (1) 36:23</p> <p>substantial (1) 22:12</p> <p>substantive (1) 29:5</p> <p>suggested (1) 19:3</p> <p>suggesting (1) 14:8</p> <p>suggestion (2) 27:20;28:4</p> <p>Suite (1) 1:16</p> <p>sum (1) 36:23</p> <p>summarize (1) 17:13</p> <p>supervision (2) 10:9;20:1</p>	<p>supervisor (1) 37:21</p> <p>supervisors (2) 9:7,16</p> <p>support (3) 32:4;36:19;44:1</p> <p>sure (7) 17:17,19;18:16,19, 22;24:10;34:11</p> <p>System (1) 7:10</p>
T				
<p style="text-align: center;">S</p>				<p>talking (1) 18:16</p> <p>TAs (1) 21:12</p> <p>teach (3) 15:21,21;37:1</p> <p>teaching (11) 13:5,8,9,11;14:12, 23;15:17;17:25;20:12; 40:14;47:21</p> <p>technical (1) 35:8</p> <p>telling (1) 28:11</p> <p>term (1) 15:9</p> <p>terminate (1) 37:21</p> <p>that'll (1) 22:23</p> <p>therefore (1) 20:2</p> <p>Thomas (1) 6:15</p> <p>thought (4) 26:4;33:18;35:2; 45:13</p> <p>thread (1) 35:19</p> <p>three (2) 31:7;35:18</p> <p>threshold (1) 12:24</p> <p>thrust (1) 17:12</p> <p>Thursday (1) 1:17</p> <p>till (1) 46:4</p> <p>titled (2) 25:25;26:4</p> <p>today (1) 45:18</p> <p>told (2) 13:18;44:21</p> <p>Tom (10) 9:19;14:14,19;15:14; 19:16,19;24:8,10;34:7, 15</p>

<p>tomorrow (5) 44:19;45:4;46:25; 48:4,10</p> <p>track (1) 40:8</p> <p>traditional (1) 11:19</p> <p>training (2) 37:4;47:10</p> <p>transmit (1) 25:24</p> <p>truly (1) 42:10</p> <p>try (2) 23:1,11</p> <p>tutors (1) 47:21</p> <p>two (5) 14:6;19:24;31:7; 34:14;35:1</p> <p>two-page (1) 34:18</p> <p>typing (1) 44:16</p>	<p>20:4;23:13,14;27:13; 32:25;48:19</p> <p>upheld (1) 22:3</p> <p>upon (4) 10:15;12:2;20:5,12</p>	<p>work (2) 20:11;23:1</p> <p>WORKERS (3) 1:10;44:5,8</p> <p>wrote (1) 13:23</p>	<p>23 (1) 47:13</p> <p>26 (1) 1:16</p>	<p>9:30 (3) 1:17;48:10,25</p>
	V	Y	3	
	<p>version (3) 25:8,16;31:19</p> <p>voluntary (1) 13:10</p>	<p>year (1) 41:12</p> <p>York (2) 1:16,16</p>	<p>3 (1) 12:6</p> <p>312 (7) 40:9,11;41:1,2,3,7,12</p> <p>350 (2) 40:19,23</p> <p>36-130 (1) 1:16</p> <p>39 (1) 40:17</p> <p>3rd (7) 27:8;28:14;29:11,12; 32:6;34:15,22</p>	
	W	0		
	<p>wait (3) 19:16;42:17,18</p> <p>waiting (1) 36:4</p> <p>waived (3) 17:2;19:3,14</p> <p>waiver (4) 22:2,3,14;32:8</p> <p>wants (3) 6:10;42:11;43:18</p>	<p>02- (1) 6:4</p> <p>02-RC-319437 (1) 1:5</p>		4
U				
<p>under (9) 10:7,8;12:25;17:20; 18:18;19:5,22;20:1; 38:14</p> <p>Understood (1) 35:10</p> <p>undisputed (2) 38:12,17</p> <p>unfairly (2) 19:15;22:14</p> <p>UNION (14) 1:8;9:23;20:4;32:11; 34:3;43:22,23,24; 44:10,25;45:17;46:20, 20,23</p> <p>Union's (1) 29:12</p> <p>unit (36) 8:16;9:3,9,11,12,22, 22,24;10:18;11:5,14; 12:20;13:6,17,21;14:1, 23;15:6,16,17,17; 17:25;19:4;20:21; 21:11,14,19;22:9; 32:13;35:21;38:14; 47:12,19,22,24;48:1</p> <p>UNITED (1) 1:8</p> <p>University (7) 10:8,9;19:25;20:2; 21:10;39:10,20</p> <p>unless (1) 21:9</p> <p>unlike (2) 13:3,3</p> <p>up (6)</p>	<p>way (1) 20:8</p> <p>weekly (1) 38:25</p> <p>what's (1) 25:15</p> <p>whatsoever (1) 38:6</p> <p>Whereupon (11) 12:14;24:15;28:23; 33:23;34:5;39:23; 41:16;43:1;46:1,18; 48:23</p> <p>wherever (1) 27:16</p> <p>who's (1) 23:12</p> <p>whose (1) 37:8</p> <p>wish (1) 20:3</p> <p>withdraw (4) 42:10,14;43:9,15</p> <p>withdrawing (2) 46:21,23</p> <p>within (3) 8:15;17:21;18:23</p> <p>without (3) 29:17;37:17;43:9</p> <p>witness (4) 27:23,24;46:7;48:5</p> <p>witnesses (5) 45:1,6;46:14,25;47:1</p> <p>witnesses' (1) 45:3</p> <p>words (2) 31:2;37:17</p>	<p>1 (12) 24:20;27:1,10,14,18, 25;34:15;36:22;38:9; 39:2,7,11</p> <p>1:02 (1) 42:3</p> <p>10:03 (1) 6:2</p> <p>100 (1) 13:9</p> <p>11:58 (1) 41:16</p> <p>110 (1) 39:12</p> <p>14 (1) 13:22</p> <p>15 (1) 27:21</p> <p>16 (4) 27:21;28:5,7;29:2</p> <p>17 (4) 32:18;35:14,17;36:2</p> <p>1a (2) 7:18,18</p> <p>1d (1) 7:18</p>	<p>4 (8) 16:12,12;18:6;29:10; 31:1,17;34:18;35:4</p> <p>4:00 (2) 46:4,17</p> <p>4:07 (1) 48:23</p> <p>45 (2) 32:25;33:4</p> <p>46 (9) 32:25;33:11,25; 34:14,19;35:4;40:1,2,4</p>	
		1		5
		2		6
		<p>2 (6) 1:15;8:12,21,25; 27:17;28:1</p> <p>2:11 (1) 46:16</p> <p>20 (1) 13:23</p> <p>2023 (4) 1:17;13:22,23;48:24</p> <p>21 (2) 39:7;40:18</p>	<p>500 (1) 25:11</p> <p>56 (1) 25:21</p> <p>565-page (1) 26:7</p> <p>57 (3) 25:13,17,18</p> <p>57-page (2) 25:8,16</p>	
				7
				9

In The Matter Of:
ICAHN SCHOOL of MEDICINE at MOUNT SINAI

Vol. 2
July 7, 2023

Burke Court Reporting, LLC
64 Magnolia Place
Wayne, NJ 0747
(973) 692-0660



Min-U-Script® with Word Index
BURKE
**COURT REPORTING
& TRANSCRIPTION**

Page 50

BEFORE THE
NATIONAL LABOR RELATIONS BOARD

-----:

In the Matter of: : Case No.:

ICAHN SCHOOL of MEDICINE at MOUNT SINAI, :
Employer, :
and :
INTERNATIONAL UNION, UNITED AUTOMOBILE, :
AEROSPACE, and AGRICULTURAL IMPLEMENT :
WORKERS of AMERICA, :
Petitioner. :

-----:

The above-entitled matter came on for hearing Pursuant to Notice, before AVI KUMAR, Hearing Officer, at the National Labor Relations Board, Region 2, Jacob K. Javits Federal Building, 26 Federal Plaza, Suite 36-130, New York, New York, on Friday, July 7, 2023, at 9:30 a.m.

Page 51

A P P E A R A N C E S

On Behalf of the Employer:

ADAM M. LUPION, ESQ.
MELISSA FELCHER, ESQ.
RAYMOND ARROYO, ESQ.
JOSHUA FOX, ESQ.
YONATAN GROSSMAN-BODER, ESQ.
Proskauer Rose LLP
Eleven Times Square, 19th Floor
New York, New York 10036-8299
(212) 969-3558
alupion@proskauer.com
mfelcher@proskauer.com
rarroyo@proskauer.com
jfox@proskauer.com
ygrossman-boder@proskauer.com

ANDREW E. RICE, ESQ.
MARINA O. LOWY, ESQ.
Mount Sinai General Counsel
150 East 42nd Street, 2nd Floor
New York, New York 10017-5612
(212) 659-8105
andrew.rice@mountsinai.org
marina.lowy@mountsinai.org

Page 52

A P P E A R A N C E S (continued)

On Behalf of the Petitioner:

THOMAS W. MEIKLEJOHN, ESQ.
NICOLE M. ROTHGEB, ESQ.
LOGAN J. PLACE, ESQ.
Livingston Adler Pulda Meiklejohn & Kelly PC
557 Prospect Avenue
Hartford, Connecticut 06105-2922
(860) 214-9676
twmeiklejohn@lapm.org
nmrothgeb@lapm.org
jkplace@lapm.org

Also in Attendance

On behalf of Sinai Student Workers - UAW:
Corin Coetzee, International Representative
Sebastian Vivancos, International Representative
Ken Lang, International Representative
Minah Kim, International Representative

Page 53

I N D E X

WITNESS	DIRECT	CROSS	REDIRECT	RECROSS	VOIR DIRE
Marta Filizola	70	---	---	---	77
	78	107	137	138	---
	137	---	---	---	---
Matthew O'Connell	140	---	---	---	149
	151	---	---	---	155
	156	192			

Page 54

E X H I B I T S		
EXHIBITS	IDENTIFIED	RECEIVED
EMPLOYER'S		
E-1	75	78
E-2	79	80
E-3	148	151
E-4	153	156
E-5	166	167
E-6	188	191
PETITIONER'S		
P-1	115	116
P-2	132	--
P-3	128	--

Page 56

1 students pursuing a master's degree or PhD degree in Clinical
 2 Research. Again, as pointed out earlier, no evidence will be
 3 given on the master's degree students.
 4 Fourth point --
 5 MR. LUPION: So, Avi, can we take -- we can take issue --
 6 that issue is no longer in the case then, right?
 7 HEARING OFFICER KUMA: Yeah. Right. You'll only be
 8 testifying --
 9 MR. LUPION: Okay.
 10 HEARING OFFICER KUMA: -- be providing evidence on the PhD
 11 students.
 12 MR. LUPION: Understood. Thank you for the clarification.
 13 HEARING OFFICER KUMA: Fourth point, to the extent the
 14 petitioned for unit seeks to include --
 15 MR. LUPION: Avi, you're on mute.
 16 MR. MEIKLEJOHN: No, he's not.
 17 HEARING OFFICER KUMA: I'm not on mute.
 18 So fourth point -- if you can't hear me, let me know and
 19 I'll try to speak up.
 20 MR. MEIKLEJOHN: I think he's frozen.
 21 MR. LUPION: Oh.
 22 MR. MEIKLEJOHN: There. There, he's moving again.
 23 HEARING OFFICER KUMA: Okay. Technology. My apologies.
 24 So, to the extent the petitioned for unit seeks to include
 25 PhD grad students based on the performance of instructional

Page 55

P R O C E E D I N G S
(Time Noted: 9:35 a.m.)

1 HEARING OFFICER KUMA: We are back on the record.
 2 So today we're continuing the hearing in Icahn School of
 3 Medicine at Mount Sinai, in Case No. 02-RC-319437.
 4 In this matter, the Regional Director has decided that we
 5 will not hear any testimony concerning or receiving evidence --
 6 excuse me -- not testimony, evidence regarding master's
 7 students as they are not part of the unit being sought in this
 8 petition.
 9 Therefore, concerning the burden for the Employer, as
 10 discussed yesterday, it will be point -- which are -- which I'm
 11 going to reiterate.
 12 There is no employment relations between the Employer and
 13 the graduate students, including but not limited to, PhD
 14 students in the Biomedical Science, Neuroscience, including
 15 joint degree MD-PhD students, and Employer's Medical Scientist
 16 Training Programs, their PhD graduate students based on
 17 research performing to fulfill academic degree requirements.
 18 Second point, PhD graduate students the Petitioner seeks
 19 to represent are not employees as defined in sector -- Section
 20 2(3) of the NLRA.
 21 Third point, there is no employment relation between the
 22 Employer and graduate students who do not receive a stipend or
 23 other funding from the Employer, including but not limited to,

Page 57

1 services, including serving as teacher assistants or tutors,
 2 such a unit is inappropriate because those students lack
 3 community of interest with PhD graduate students performing
 4 research.
 5 Fifth and final point, to the extent the petitioned for
 6 unit seeks to include graduate students other than PhD graduate
 7 students, such a unit is inappropriate because a non-PhD
 8 graduate student lacks community of interest with PhD graduate
 9 students.
 10 Again, this fifth and final point, no evidence should be
 11 given on it because the RD has ruled that we will not be taking
 12 evidence on master's students.
 13 HEARING OFFICER KUMA: Adam, you are muted. You're not
 14 coming in with sound, so I don't know if you're muted or just
 15 not coming in with sound.
 16 (Pause.)
 17 MR. PLACE: Adam, can you hear us?
 18 (No response.)
 19 MR. PLACE: Seems like some technical difficulties there.
 20 MR. MEIKLEJOHN: It looks like he's -- oh, there he is.
 21 Now he's moving.
 22 HEARING OFFICER KUMA: Moving. But we -- Adam, we can't
 23 hear you.
 24 MS. ROTHGEB: Is -- is the other on with him, Melissa?
 25 No, right?

Page 58

1 MR. LUPION: No, not yet. This is - this is Adam. I
 2 think we're having technical issues on our end. Avi, I missed
 3 everything that you said after Issue 3.
 4 HEARING OFFICER KUMA: After Issue 3, okay.
 5 MR. LUPION: Yeah.
 6 HEARING OFFICER KUMA: Okay, so I'll reiterate what I just
 7 said. So, I -- can you hear me?
 8 MR. LUPION: I can hear you know, yes.
 9 HEARING OFFICER KUMA: Great. So, I went over your fourth
 10 point, which is to the extent the petitioned for unit seeks to
 11 include PhD grad students based on the performance of
 12 instructional services, including serving as teaching
 13 assistants or tutors, such a unit is inappropriate because
 14 those students lack community of interest with PhD graduate
 15 students performing research.
 16 And the filthen final bulletin that you will address is,
 17 to the extent the petitioned for unit seeks to include graduate
 18 students, other than PhD graduate students, such a unit is
 19 inappropriate because non-PhD grad students lack community of
 20 interest with the PhD grad students.
 21 Since this is referring to the master's students, no
 22 evidence should be presented on this, as the Regional Director
 23 has said there will be -- has made a ruling that we will not
 24 receive any evidence on master's students.
 25 HEARING OFFICER KUMA: So, your -- your burden of proof is

Page 59

1 limited to bulletins 1 to 4.
 2 MR. LUPION: Understood. Well, and -- but third -- the
 3 third issue also pertained to the master's, I believe; correct?
 4 HEARING OFFICER KUMA: It was part of it, because it says
 5 "master's degree or a PhD degree in Clinical Research."
 6 MR. LUPION: Okay.
 7 HEARING OFFICER KUMA: Okay.
 8 MR. MEIKLEJOHN: Before -- before you put on any evidence
 9 about clinical research, we'll have a discussion of it in our
 10 sidebar, okay, Adam?
 11 MR. LUPION: Sure.
 12 MR. MEIKLEJOHN: Okay.
 13 MR. LUPION: I think that -- I think that makes sense.
 14 HEARING OFFICER KUMA: So, I don't want to delay putting
 15 on evidence, so if you guys want to discuss this before we
 16 actually do because once we go on the record, I want to just go
 17 with the flow and start with the hearing and proceed without
 18 there being any -- any delays because this hearing will
 19 proceed.
 20 Again, we have -- we wasted a day --
 21 Off the record.
 22 (Whereupon, a brief recess was taken.)
 23 HEARING OFFICER KUMA: Back on the record.
 24 Okay.
 25 MR. LUPION: Good morning. The issue here today is -- is

Page 60

1 one of the most fundamental issues in any representation case,
 2 and that's whether the PhD students at Icahn School of Medicine
 3 at Mount Sinai are employees.
 4 The students at issue in this case are among the best and
 5 brightest in the world, and Mount Sinai has the utmost respect
 6 for all of them. But that does not mean that they are
 7 employees within the of the National Labor Relations Act.
 8 Mount Sinai submits, and the evidence will show, that
 9 under the law these individuals are not employees, and the
 10 petition should be dismissed.
 11 Now, while the University -- excuse me, while the School
 12 submits that the Board's 2016 decision in Columbia was wrongly
 13 decided, it recognizes that Columbia is current law. However,
 14 applying the Board's decision in Columbia to the facts here
 15 leads to the conclusion that PhD students at Mount Sinai are
 16 not -- are not employees. They are students. And no question
 17 concerning representation of employees therefore exists.
 18 The Board in Columbia didn't say that its ruling
 19 mandated -- that it totally mandated a ruling that all graduate
 20 students at all other colleges and universities are employees.
 21 As recently demonstrated by Region 1's decision in
 22 Massachusetts Institute of Technology, that I'll refer to as
 23 "MIT" as shorthand, graduate students are not employees, they
 24 are, among other things, they are not required to satisfy
 25 service requirements in order to receive or maintain their

Page 61

1 financial support. Here, as in MIT, the distinction between
 2 Mount Sinai's PhD graduate students and the graduate students
 3 whom the NLRB found to be employees in Columbia University are
 4 significant and they justify a different -- a different
 5 conclusion.
 6 As background, Mount Sinai contains -- the Icahn School of
 7 Medicine at Mount Sinai contains both a medical school and a
 8 Graduate School of biomedical sciences. The Graduate School
 9 offers four different PhD programs: a PhD program in Biomedical
 10 Science; PhD program in Neuroscience; PhD program in Clinical
 11 research; and a dual degree MD-PhD Medical Scientist Training
 12 program.
 13 For three of those four programs, PhD in Biomedical
 14 Sciences, PhD in Neuroscience, and the dual degree MD-PhD
 15 program, the Graduate School covers tuition and healthcare for
 16 the students. And it also provides a stipend as funding to
 17 defray living expenses and to assist the students in their
 18 ability to focus on their studies.
 19 This is not compensation in exchange for services
 20 performed for Mount Sinai. It is not. The three programs I
 21 just mentioned are -- are the ones that are implicated by the
 22 representation petition. Students in the fourth program, a PhD
 23 in Clinical Research, are -- are self-funded and do not receive
 24 any funding from the Graduate School, and based on my off the
 25 record conversation with the Union's Petitioner [sic], they

Page 62

1 would be included in -- in any petitioned for unit only to the
 2 extent that they receive monies in exchange for instructional
 3 services.
 4 Now, while students in each of the three stipend granting
 5 programs perform research in a lab, this is solely performed as
 6 a way to reinforce their training via research in a lab --
 7 laboratory. Let me be clear, virtually all of the research
 8 performed in the lab is an academic requirement in furtherance
 9 of their own PhD dissertation, and is part and parcel of the
 10 curriculum necessary to graduate and obtain a PhD degree. The
 11 school does not require any research whatsoever outside of that
 12 student's academic curriculum.
 13 Now, Columbia sets forth a two-prong test for common law
 14 employee status: one, the payment of compensation; and two, in
 15 conjunction with the Employer's control. Mount Sinai's PhD
 16 students do not meet this test for employee status under the
 17 Act.
 18 You will hear testimony that the graduate students at
 19 Mount Sinai are distinguishable from the students at Columbia
 20 in the following material respects, among others.
 21 First, Mount Sinai PhD students perform research solely
 22 and exclusively in furtherance of their degree, and their
 23 research is an essential requirement of their academic
 24 curriculum. Indeed, students must enroll in a research course
 25 in order to perform research in a lab. And the students

Page 63

1 receive a grade on their research progress.
 2 Second, unlike Columbia, a PhD student's funding is not
 3 conditioned the PhD student performing any research related
 4 services outside of their core academic program. Such as by
 5 serving as a research assistant or providing any teaching
 6 related services. The only condition placed on a student's
 7 funding is that they continue to make satisfactory academic
 8 progress towards their degree. Indeed, the Board in Columbia
 9 expressly recognized that students who receive funding "subject
 10 only to the general requirement that they make academic
 11 progress" are fundamentally different from the Columbia
 12 students that the Board deemed to be employees. Satisfactory
 13 academic progress is the only condition on continued receipt of
 14 funding.
 15 You will hear testimony that a PhD student's funding will
 16 be unaffected even if the student decides to change labs; even
 17 if the student's faculty mentor or Principal Investigator, or
 18 PI for shorthand, leaves Mount Sinai; even if the student
 19 spends only a certain number of hours in the lab; even if the
 20 student exhibits poor performance in their lab; and/or if the
 21 student decides not to take on a teaching or research
 22 assistantship. None of those things will jeopardize a
 23 student's funding.
 24 Third, PhD students have the flexibility and the
 25 discretion to choose which lab they would like to be in, as

Page 64

1 well as which PI they would like to select as their faculty
 2 mentor. Students select their lab based on their own research
 3 interest in order to pursue their academic degree. In this
 4 way, Mount Sinai is the opposite of Columbia, where students
 5 were assigned to a particular lab. Here, a PhD student chooses
 6 to join in research in a lab solely because it furthers their
 7 own academic pursuits.
 8 Fourth, PhD students are not assigned or beholden to the
 9 specific research project of their PI. Instead, a PI's funding
 10 is typically broad enough to support a number of research
 11 topics, which permits PhD students the flexibility to choose
 12 what research to perform, and what thesis topic to pursue. In
 13 fact, even if a PhD student presented a thesis topic to their
 14 PI that was outside the scope of a PI's grant, the student can
 15 still be permitted to perform the research. In Columbia, the
 16 research assistant's aid package required fulfillment of the
 17 duties defined in the grant. Critically, that condition does
 18 not exist for the students at issue here. The evidence will
 19 show that funding for PhD students is not conditioned on
 20 fulfillment of any grant specifications.
 21 Fifth, unlike Columbia, virtually all of the PhD student's
 22 time in the lab is spent researching toward their dissertation.
 23 Petitioner's position, reduced to its essentials, is that all
 24 graduate students who receive financial assistance from their
 25 universities and conduct thesis research are employees; that is

Page 65

1 not and cannot be the law. In fact, Mount Sinai has procedures
 2 in place to ensure that students are not asked to assistant
 3 their PI or others in the lab with research that is unrelated
 4 to their dissertation at the expense of their own thesis
 5 research.
 6 Sixth, the PI is not a supervisor of -- of PhD students.
 7 And instead, as -- as the evidence will show, the PI is the
 8 student's most important mentor. Someone who can advise the
 9 student on research directions, and may also provide career
 10 guidance. The evidence will show that a PI does not have the
 11 ability to unilaterally remove, terminate, or otherwise
 12 discipline the PhD students in their lab for poor performance
 13 or otherwise; that is done by an academic committee, and
 14 significantly the PI does not even have a vote on that
 15 committee.
 16 Seventh, generally, PhD students have the flexibility to
 17 take as much vacation time as they would like, subject only to
 18 making satisfactory academic progress, without any reduction or
 19 diminution in their stipend.
 20 As I mentioned, there is no teaching requirement as a
 21 condition to receive this funding. All instructional services
 22 are completely voluntarily. You will hear evidence that there
 23 is a small cohort of PhD students who do -- who do volunteer --
 24 who serve as teaching assistants voluntarily. Mount Sinai does
 25 not require any PhD students to service TAs. As I mentioned,

Page 66

1 it has no effect on their stipend, academic standing, or
 2 academic progress. And to the extent that there -- that there
 3 is a collective bargaining unit, which we vigorously oppose,
 4 these -- these TAs would lack any community of interest with
 5 any potential unit.
 6 In short, Mount Sinai's PhD graduate students are just
 7 that, students, and they are not employees under the Act. The
 8 students at issue here are not at all like the students at
 9 issue in Columbia. They are much more analogous to the
 10 students at issue in MIT where the region held they were not
 11 employees under the National Labor Relations Act.
 12 After review of all the facts, we respectfully submit that
 13 the Regional Director should find that the graduate students
 14 who Petitioner seeks to represent are not employees and dismiss
 15 the petition.
 16 With that, I am now ready to call Mount Sinai's first
 17 witness.
 18 MR. MEIKLEJOHN: May I make an opening -- a brief opening
 19 statement? I mean, we've heard the opening statement from the
 20 Employer, and a 53-page [sic] argument document. I think it's
 21 reasonable for me to have an opportunity to speak. I'll be
 22 much more brief.
 23 HEARING OFFICER KUMA: Give me one second, Tom.
 24 (Pause.)
 25 HEARING OFFICER KUMA: Go ahead.

Page 67

1 MR. MEIKLEJOHN: Thank you.
 2 We agree with counsel that these are some of the brightest
 3 and finest students in their field. And in fact, as I say, we
 4 agree that they are students, and we are sure that the Employer
 5 will be able to demonstrate that they are students. That is
 6 not the end of the case. The question is, are they also
 7 employees?
 8 We will show that the payments that counsel refers to as
 9 "stipend" are actually referred in the Employer's official
 10 documents as "direct compensation." That phrase appears
 11 throughout the student handbook, which I understand will be one
 12 of the Employer's exhibits. That poses the question,
 13 compensation for what? And we would submit that it is
 14 compensation for conducting the research that benefits the
 15 Employer. That research -- that therefore, is payment for the
 16 services that they are providing.
 17 We will also show that when an -- when a student begins
 18 their studies, they are also placed in the Employer's payroll
 19 system, and paid every other week, the same as acknowledged
 20 employees of the Employer. They are labeled within the -- that
 21 payroll system "Permanent Employees." They are paid in the
 22 same manner as the student employees at Columbia; the -- the
 23 students found to be employees at Columbia, who were paid with
 24 income tax -- federal and state and, I guess, local income
 25 taxes withheld from their pay. They receive W-2 forms from the

Page 68

1 Employer reflecting the direct compensation that they have
 2 received. This -- these factors alone distinguish this case
 3 from MIT, where MIT did not pay the employees -- or did not pay
 4 the students, rather, in the tax methods applied to employ --
 5 other student employees.
 6 In MIT, the Board drew a -- or the Regional Director drew
 7 a distinctoin between the employees who had their own funding
 8 and were paid without any withholding, in lump sums, and the
 9 employees who were paid through the payroll system with taxes
 10 withheld. Now, our position is that MIT is wrongly decided,
 11 and that the students involved in that case were being paid to
 12 conduct research to fulfill the mission of MIT, under the
 13 direction and supervision of MIT. That issue is pending before
 14 the Board now, but that argument can -- the MIT decision is not
 15 applicable here where the employees are treated -- where the
 16 students are treated by the Employer consistently as employees.
 17 The fact that the -- or assuming it to be true that the
 18 authority of the PI to discipline students under their
 19 direction is constrained and limited, does not mean they're not
 20 supervised by the Employer. First of all, the PI does provide
 21 day-to-day supervision of their work. And second, the
 22 committee that has the authority to decide how they are to be
 23 treated consists of agents of the Employer -- or of Mount
 24 Sinai, what I am referring to as the Employer, and it clearly
 25 has employees. So, the -- the distinction in supervision that

Page 69

1 the Employer is seeking to draw is irrelevant to the Columbia
 2 test.
 3 I would -- I have other responses to make, but I want to
 4 just point to one other significant fact or argument that the
 5 Employer's making.
 6 The Employer says that because the research they're doing
 7 is indistinguishable from the research they're doing for their
 8 thesis, which we do not conceded, but assuming that that is --
 9 were to be the case, that that were true, that -- the argument
 10 that that makes them non-employees is the holding of Leland
 11 Stanford. Leland Stanford was overruled by the Board in
 12 Columbia, so the Employer should not be permitted to make an
 13 argument that Columbia was wrong in overruling Leland Stanford.
 14 But to summarize, our position is, very briefly, these
 15 students receive direct compensation for performing research,
 16 they do that under the direction of agents of the Employer, and
 17 the research benefits not only the students, but Mount Sinai,
 18 as well, and therefore, they meet the Columbia test. And we
 19 don't think there really is any serious evidence to dispute
 20 that argument.
 21 HEARING OFFICER KUMA: All right, after hearing the
 22 parties' opening remarks, will the Employer please present your
 23 first witness?
 24 MR. LUPION: Yes, Mount Sinai calls Dr. Marta Filizola.
 25 DR. FILIZOLA: Hi, everyone.

Page 70

1 HEARING OFFICER KUMA: Hi, Ms. Filizola. Please raise
 2 your right hand.
 3 (Whereupon,
 4 MARTA FILIZOLA, PhD.,
 5 was called as a witness and, after having been duly sworn, was
 6 examined and testified as follows:)
 7 HEARING OFFICER KUMA: All right. Please put your hand
 8 down.
 9 DIRECT EXAMINATION
 10 BY MR. LUPION:
 11 Q. Good morning, Dr. Filizola. Can you please state your
 12 name for the record?
 13 A. Marta Filizola.
 14 Q. And can you spell that for the court reporter, please?
 15 A. Sure, M-a-r-t-a, F as in Frank, i-l-i-z as in zebra, o-l-
 16 a.
 17 Q. Doctor, are you currently employed?
 18 A. Yes.
 19 Q. And by whom?
 20 A. Icahn School of Medicine at Mount Sinaki.
 21 Q. Okay. And what is your current role at the Icahn School
 22 of Medicine at Mount Sinai?
 23 A. I am a professor in the Department of Pharmacological
 24 Sciences as a primary. And I am also dean of the Graduate
 25 School of Biomedical Sciences at Mount Sinai.

Page 71

1 Q. And can you tell us about your educational background,
 2 please?
 3 A. Yes. I am a chemist by background, a computational
 4 chemist by PhD degree. And I am -- I have a laboratory -- a
 5 research laboratory involved in research regarding membrane
 6 proteins and using computational methods to develop drugs, to
 7 develop -- to discover new drugs.
 8 Q. Can you briefly describe your duties as the dean of the
 9 Graduate School of Biomedical Sciences?
 10 A. Yes. I oversee the PhD programs in the Graduate School.
 11 The three PhD programs and the joint MD-PhD program with the
 12 medical addition. And also, nine master's programs. And the
 13 School also oversees the 550 Postdocs that are our trainees
 14 also at Mount Sinai.
 15 Q. Okay. And you mentioned that you have a lab. Are you --
 16 are you a principal investigator, or PI, of that lab?
 17 A. I am. I'm the principal investigator of the Filizola Lab
 18 at Mount Sinai.
 19 Q. How long have you been at the Icahn School of Medicine?
 20 A. I believe 15 years.
 21 Q. And how long have you been the dean?
 22 A. Since 2016. '17.
 23 Q. Okay. And how long have you been a PI?
 24 A. I've been a PI for -- as long as I've been at the Sinai
 25 Medical -- slightly -- slightly more; I will say 20 years.

Page 72

1 Q. Okay. What is the Ichan School of Medicine at Mount
 2 Sinai? Can you just describe it in very broad terms?
 3 A. Right. It's -- it's a research institution that conducts
 4 biomedical research. There are also healthcare, you know,
 5 education programs. And so, for the Grad School of Biomedical
 6 Sciences, we are basically supporting the education of -- of
 7 the School.
 8 Q. And there's also a medical school; correct?
 9 A. Correct.
 10 Q. And --
 11 A. There's a Medical School and the Icahn School of
 12 Biomedical Sciences.
 13 Q. Okay. And is there a distinction between the Medical
 14 School and the Graduate School?
 15 A. Substantial, yes, because we train different types of
 16 students -- medical students for the Medical School, and the --
 17 the medical education program, sorry, and the grad students for
 18 the other school. Graduate students in the PhD and master's
 19 students.
 20 Q. Where is the Icahn School of Medicine located?
 21 A. It's in between 98th and 99 on Madison Avenue.
 22 Q. In New York City?
 23 A. New York City, yeah. The address is 1 Gustave Levy Place
 24 in Manhattan, New York City.
 25 Q. Okay. Can you -- can you describe the layout of the -- of

Page 73

1 the campus?
 2 A. So there are different buildings on the main campus.
 3 There are other campuses that are spread across Manhattan, but
 4 the main campus is mostly between 98th and 99. And the
 5 majority of the classrooms, for instance, for the Graduate
 6 School are in the Annenberg Building, that is right on Madison
 7 Avenue between 98th and 99.
 8 Q. And do PhD students attend classes at locations other than
 9 the ones that you described?
 10 A. Not -- not that I'm aware of. The majority of classes are
 11 in Annenberg. And there are other classes held in the -- the
 12 Icahn Medical Institute that is right across the street. But
 13 that is more or less the campus where the classes are held.
 14 Q. Okay. And when students are performing research, where do
 15 they -- what location would that be?
 16 A. Mostly would be on -- on the main campus, but there are
 17 other locations in science, so some of the students might be in
 18 other locations. But the majority I would say between
 19 Annenberg Building, the Icahn Medical Institute.
 20 Q. At 1 Gustave Levy Place?
 21 A. At 1 Gustave Levy Place.
 22 Q. Okay. Can you describe generally the different programs
 23 offered at the Graduate School?
 24 A. Sure. So, the PhD programs are usually a five degree -- a
 25 five-year degree program that consists of a -- a year of

Page 74

1 instructional activities, basically coursework in -- in
 2 classes. And then research --
 3 Q. Doctor, I'm not asking you to describe the curriculum,
 4 yet.
 5 A. Okay, sorry.
 6 Q. Just the different degree programs at -- at the --
 7 A. Okay. It -- it is based on the involvement in -- in the
 8 research. So the PhD program is mostly a program with a
 9 research activity, so whereas the other master's programs are
 10 shorter and are -- may or may not require research for -- for
 11 an academical purpose.
 12 Q. Okay. How many PhD programs are there at the Graduate
 13 School?
 14 A. So there are three: PhD in Neuroscience; PhD in Biomedical
 15 Sciences and Clinical Research; and then we a dual degree
 16 program with the MD -- the MD-PhD program.
 17 Q. Okay. And you mentioned there were master's programs; how
 18 many different master's programs?
 19 A. There are nine different master's programs. And there are
 20 some -- mostly in public health to biostatistics, biomedical
 21 data science, clinical research, and -- and others. So, I
 22 mean, I can -- I can -- and list all the nine if you want.
 23 Q. I don't think -- I don't think that's necessary here.
 24 And -- and you also said as part of your responsibilities
 25 that you --

Page 75

1 A. Yes.
 2 Q. -- that you oversee the training for Postdocs?
 3 A. And -- yes, correct.
 4 Q. What are Postdocs?
 5 A. Postdocs are after graduation, after having conducted
 6 the -- a PhD program, and they are more experienced trainees
 7 that we have on campus.
 8 Q. So those are students who have already obtained their PhD
 9 degree?
 10 A. Yes, those are not students, actually. Those are
 11 trainees, from our perspective, but they are not students
 12 because they are post-graduation, so basically after they did
 13 their PhD program.
 14 Q. Okay. And are those Postdocs at Mount Sinai currently
 15 represented by a labor union?
 16 A. Yes.
 17 MR. LUPION: I would like to introduce Mount Sinai Exhibit
 18 1, and we're going to attempt to share our screen here, so --
 19 to make it easier on everybody.
 20 (Employer's E- marked.)
 21 BY MR. LUPION:
 22 Q. Doctor, can you see this document?
 23 A. Yes, I can.
 24 Q. Do you recognize it?
 25 A. Yeah. Sure.

Page 76

1 Q. Can you describe it for us, please?
 2 A. Yeah, this is the original chart for the Grad School.
 3 As you can see, the orange box it myself, Dean of the
 4 Graduate School of Biomedical Sciences, reporting directly to
 5 the Dean of the Icahn School of Medicine at Mount Sinai, Dr.
 6 Charney, and the Dean of Academic Affairs and Chief Scientific
 7 Officer, Eric Nestler.
 8 And in blue is my leadership team, composed of the Senior
 9 Associate Dean for the Student Administration, Dr. Caballero --
 10 Mr. Caballero; the Senior Associate Dean for Student &
 11 Postdoctoral Affairs, Dr. Hanss; Senior Associate Dean for
 12 Basic & Clinical Research Training, Dr. Baron; Senior Associate
 13 Dean for MD-PhD Education, Dr. Swartz; the Senior Associate
 14 Dean for PhD Programs, Dr. O'Connell; and the Senior Associate
 15 Dean for Master's Programs, Dr. Nickerson.
 16 Then there is a second layer here with all the faculty
 17 reporting to Dr. Swartz, O'Connell and Nickerson. And then all
 18 the other administration -- the administrative staff reporting
 19 up to -- most of them to Mr. Caballero.
 20 Q. Okay, thank you, Doctor. Is there is a -- based on that
 21 testimony, clearly you are familiar with this document. Is
 22 there -- is this document routinely kept in the course of the
 23 Graduate School's business?
 24 A. Yes.
 25 MR. LUPION: I would move to admit Employer Exhibit --

Page 77

1 Mount Sinai Exhibit 1.
 2 MR. MEIKLEJOHN: May I have one brief line of questions on
 3 Voir Dire?
 4 MR. LUPION: On an original chart?
 5 MR. MEIKELJOHN: Yeah. Just to identify one of the people
 6 on here.
 7 VOIR DIRE EXAMINATION
 8 BY MR. MEIKLEJOHN:
 9 Q. Can I ask, who is K. Dilks?
 10 A. Kathy Dilks. Kathy Dilks is the Administrative Director
 11 of Student & Postdoctoral Affairs. If you'll see on the left
 12 side, is right below the Marketing Manager Raferty. Can you
 13 see it?
 14 Q. I see it, yes. What is her area of responsibility?
 15 A. She's the director of the Student & Postdoctoral Affairs.
 16 The administrative director, I should specify.
 17 The faculty director for that office is Dr. Basil Hanss,
 18 the Senior Associate Dean for Student & Postdoctoral Affairs in
 19 my leadership team.
 20 Q. I'm sorry, I just didn't understand; what did you say Dr.
 21 Hanss was?
 22 A. He's the faculty --
 23 Q. Faculty; that was the --
 24 A. -- director of that office, and he's the senior associate
 25 dean overseeing that office.

Page 78

1 MR. MEIKLEJOHN: No obj to Employer -- to Mount Sinai
 2 Exhibit 1.
 3 HEARING OFFICER KUMA: Okay, offer is received.
 4 (Employer's E-1 received.)
 5 CONTINUED DIRECT EXAMINATION
 6 BY MR. LUPION:
 7 Q. Doctor, I think you may have said it, but who do you
 8 report to?
 9 A. Dr. Dennis Charney, the dean of the Icahn School of
 10 Medicine at Mount Sinai, and Dr. Eric Nestler, the dean for
 11 Academic Affairs & Chief Scientific Officer for Mount Sinai.
 12 Q. Okay. And I think -- I think you said that the purple
 13 boxes are members of the administrative --
 14 A. Yes. On the left side of this chart, you have basically,
 15 mostly the administrative staff on the purple boxes here. And
 16 on the right side, the blue boxes are faculty, directors, or
 17 co-directors, so all the deans which are over programs or
 18 training areas, PhDs or Master's students.
 19 Q. Okay. And you also referred to the senior associate
 20 deans; do they run each of the programs in -- in the Graduate
 21 School?
 22 A. Say that again, sorry.
 23 Q. Okay. You mentioned Matthew O'Connell, the Senior
 24 Associate Dean for PhD Programs.
 25 A. Yes.

Page 79

1 Q. Can you describe his duties as senior associate dean?
 2 A. Right. He oversees all the PhD programs, with the
 3 exclusion of the dual degree program, the MD-PhD, so he
 4 oversees the Biomedical Sciences PhD program, which is --
 5 several different training areas. And the -- dean in real
 6 science and -- research. Whereas, the MD-PhD program or
 7 MSTP program is overseen by Dr. Swartz.
 8 Q. Okay. Do you see the Ombuds listed on this chart?
 9 A. Yes.
 10 Q. What are the -- what are the duties of an Ombuds?
 11 A. The Ombuds has the duty of basically a, you know, someone
 12 who would listen to reports from students without having a
 13 reporting to -- to the administration. So, it's more a
 14 confidential information advising for students.
 15 Q. Okay.
 16 MR. LUPION: We can take this document down, and I'm going
 17 to introduce Mount Sinai Exhibit 2.
 18 (Employer's E-2 marked.)
 19 BY MR. LUPION:
 20 Q. Dr. Finch, do you recognize this document?
 21 A. Yes. This is the Graduate Student Handbook.
 22 Q. Okay. Have -- are you familiar with this document?
 23 A. I'm familiar with this document. I will not know exactly
 24 all the 405 pages by heart, but I'm familiar with the document,
 25 yes.

Page 80

1 Q. Okay. And did you have a hand in either drafting or
 2 updating portions of -- of this --
 3 A. I have updated some portions in collaboration with my
 4 leadership team, yes.
 5 Q. Okay. And is this a document routinely kept in the course
 6 of the Graduate School's affairs?
 7 A. Yes. And updated frequently.
 8 Q. Is this -- is this document provided to all students at
 9 the time they join the Graduate School?
 10 A. Yes. It's -- and it's often referred to and it's
 11 available also online for students to consult.
 12 MR. LUPION: I would offer Mount Sinai Exhibit 2.
 13 MR. MEIKLEJOHN: No objection.
 14 HEARING OFFICER KUMA: Received.
 15 (Employer's E-2 received.)
 16 MR. LUPION: Thank you.
 17 BY MR. LUPION:
 18 Q. Doctor, could you describe in very general terms what --
 19 the nature of this document?
 20 A. It describes all milestones of the -- the educational
 21 programs that we have, all the regulations, and everything that
 22 we use surrounding life (ph), and research and educational
 23 activities of the students at Mount Sinai.
 24 Q. Okay, and we'll -- we'll get to that.
 25 Looking at Page 3 of the handbook --

Page 81

1 A. Yes.
 2 Q. -- the Mission Statement --
 3 A. Right.
 4 Q. -- can you -- did you have a hand in drafting -- drafting
 5 that?
 6 A. Yes. Yes, we did. We --
 7 Q. And what --
 8 A. -- revised this. We reviewed this mission statements
 9 several years ago, yes.
 10 Q. What is the mission of the Graduate School?
 11 A. It's to train the next generation of leaders in scientific
 12 and clinical discovery, innovation, education, health policy,
 13 clinical care, and advocacy, in a diverse, equitable, and
 14 inclusive learning environment as it's stated here on this
 15 paper.
 16 Q. So generally, while the -- what's the purpose of the
 17 graduate degree programs at Mount Sinai?
 18 A. We train the next scientists for the -- in particular
 19 these PhD programs in Biomedical Science and Neurosciences to
 20 train the next generation of neuroscientists and biomedical
 21 scientists.
 22 Q. Okay. I'm going to ask you some questions now about
 23 funding for graduate students.
 24 A. Yeah.
 25 Q. Are -- are you familiar with the different funding sources

Page 82

1 for -- for programs in the Graduate School?
 2 A. Yes, I -- I am.
 3 Q. Okay. Can -- if we turn to page 21 of this document, can
 4 you tell us what this page of the handbook describes?
 5 A. Right, this is the funding package for -- that we give PhD
 6 students in Biomedical Sciences and Neuroscience when they join
 7 Mount Sinai, and it's made of a stipend that they receive, plus
 8 the tuition and a student health insurance plan.
 9 Q. Okay. And they also get moving expenses?
 10 A. They also get moving -- this year, they also got -- also
 11 got moving expenses, this year's students.
 12 Q. Do students have access to subsidized housing at Mount
 13 Sinai?
 14 A. Yes, they do.
 15 Q. Okay. And now --
 16 A. That is part of the package.
 17 Q. And you mentioned student -- Mount Sinai pays for the cost
 18 of health insurance?
 19 A. So, we pay for the cost of health insurance, so they
 20 have -- it's included in the package. And they pay for dental
 21 and vision. They -- they have can dental and vision if they
 22 pay that in addition, themselves.
 23 Q. Okay. Mount Sinai also pays the student's tuition?
 24 A. Yes.
 25 Q. Okay. Do you know what the current stipend is?

Page 83

1 A. It is 47,000 actually effective July 1st.
 2 Q. Okay. Is -- is the funding components that you just
 3 described, is that generally the same for all students I'm the
 4 stipend granting programs, meaning the PhD in Neuroscience, PhD
 5 in Biomedical Science, and the MD-PhD students?
 6 A. So -- so, yes. It's a -- it's the same stipend that they
 7 receive.
 8 Q. Okay. Does the Icahn School of Medicine provide these
 9 type of funding to employees?
 10 A. No.
 11 Q. Okay. Can you tell us why Mount Sinai provides this
 12 funding to the PhD students?
 13 A. This is a tool -- this is their training, so basically
 14 it's to focus and concentrate in research towards their thesis
 15 and their degree.
 16 Q. Are the monies that the student receive that we -- that
 17 you just described, is that in any in exchange for services
 18 performed for the Icahn School of Medicine?
 19 A. No.
 20 Q. Okay. Looking down at this document, do you see where it
 21 says "Funding Sources"?
 22 A. Yes, I do.
 23 Q. Okay. Does that provide an accurate description of -- of
 24 the current funding sources for PhD students?
 25 A. Yeah, I think it does. Yes.

Page 84

1 So, do you want me to describe it?
 2 Q. If I can call your attention to -- I'm having trouble --
 3 give me one second.
 4 (Pause.)
 5 BY MR. LUPION:
 6 Q. So, the first bullet in the parenthetical, can I call your
 7 attention to that, please?
 8 A. The one that says, "For the remainder of the student's
 9 time the PhD program." That one?
 10 Q. No. Where it says, "Graduate School funds 100 percent of
 11 the package" --
 12 A. Oh, oh, sorry. Yes. Yes, so -- so the Graduate School
 13 funds 100 percent of the package in first year. And in the
 14 second year we fund it 20 -- 25 percent. Actually, this is --
 15 this is -- this is incorrect.
 16 Q. Right. That -- that's what I was going to ask you.
 17 A. But --
 18 Q. Just so that we -- just so hat we have a clear record --
 19 A. Yeah, there's a typo there, it's 25 percent during the
 20 second year.
 21 Q. Okay. So the Graduate School funds 25 percent during the
 22 second year, okay.
 23 A. Yes.
 24 Q. Okay. So can -- now with that -- with that correction
 25 noted, can you -- can you describe the correct funding sources

Page 85

1 for PhD students in Biomedical Science and Neuroscience?
 2 A. Yeah. So, the first year, the Graduate School funds 20
 3 percent of their package. And the second year we fund -- fund
 4 25 percent of their package. And the -- this is unless the
 5 student is supported by a training grant, right. And -- and
 6 the remainder is supported by PIs.
 7 Q. Okay. So in Year 2, the -- their PI is responsible for 75
 8 percent of the funding?
 9 A. Correct. And then Year 3 and going further would be 100
 10 percent PIs' responsibility.
 11 Q. Okay. And you mentioned -- you mentioned some -- there
 12 are students who are on a training grant?
 13 A. Right. If they're on a training grant, then part of that
 14 package comes from the training grant, and the difference comes
 15 from the Graduate School or PI, depending on the -- the student
 16 is in.
 17 Q. Okay. For students funded either in whole or in part by
 18 any training grant, does Mount Sinai require those students to
 19 perform any duties or any training activities outside of their
 20 academic requirements?
 21 A. No. Not outside their academic requirements.
 22 Q. In years where the PhD students receive funding from the
 23 PI, what -- where does that funding come from?
 24 A. It can come from several different depending on the
 25 sources of funding of the PI. It can come from -- funds;

Page 86

1 usually they have -- funds, so it can come from a research
 2 grants that they might have.
 3 Q. Okay. And are you familiar with the process to apply for
 4 -- for grant funding from federal agencies?
 5 A. Yes. As a PI, I do have that experience, yes.
 6 Q. Okay. Can you extend -- just explain generally how a PI
 7 would go about applying for grant funding?
 8 A. Yeah. So if -- the majority of -- of funding for research
 9 at Mount Sinai is through NIH, so if you apply to grants for --
 10 to NIH, depending on the mechanism that you are applying to.
 11 Let's say another one that is typical mechanist (ph), you would
 12 provide the basically a research plan, and you would provide
 13 budget for the -- that research plan to be sustainable.
 14 Q. Okay. What information does a PI need to give to a
 15 federal agency to receive -- to receive funding?
 16 A. Usually, I'll -- the results of the research, the -- the
 17 demonstration that there are resources often by the
 18 Institution, a supporting environment to conduct that research.
 19 And then information -- detailed information on how that -- the
 20 funds are going to be spent, whether towards personnel or
 21 towards -- or towards material that one has to purchase, and
 22 things like that.
 23 Q. Okay. Are you familiar with the term "key personnel"?
 24 A. Absolutely. So a PI is by definition a key personnel
 25 because it is a -- an individual contributing substantially to

Page 87

1 the development and the execution of the project.
 2 Q. Okay. Have you ever listed a PhD student as key personnel
 3 on a grant application?
 4 A. No. Not myself. And I say that -- that my lab has
 5 primarily been with the Postdocs, rather than the PhD students.
 6 Q. Okay. And -- and why not? Why haven't -- why haven't you
 7 listed PhD students as -- as key personnel?
 8 A. Well, in my specific case because I -- I did not have any
 9 PhD student at the moment. But in any case, a PhD student
 10 would not be listed by name because they are non-key personnel
 11 on a grant. So, they are not contributing substantially.
 12 But there are research assistants listed as non-key
 13 personnel on a grant.
 14 Q. Okay. Does that have anything to do with the level of the
 15 PhD student's expertise as it relates to the research in your
 16 lab?
 17 A. Yeah. It -- it relates to the fact that they are non --
 18 you know, they are not contributing substantially towards that
 19 research.
 20 Q. Okay. Now, leave aside, so you do not have any PhDs in
 21 your lab?
 22 A. Yeah. No, I don't have any PhD in my lab because my
 23 research, by its nature, requires a higher training than the --
 24 one of the PhD student would have, and so we -- I -- we work
 25 primarily with the Postdocs rather than the PhD students.

Page 88

1 Q. Okay. When a PhD student is working -- excuse me, is
 2 performing research in -- in a lab, is that student's funding
 3 conditioned on the performance of the tasks set forth in his or
 4 her PI's grants?
 5 A. Can you repeat this question, sorry?
 6 Q. Sure. Is a student's funding conditioned on the
 7 performance of specific tasks that would be outlined in the
 8 PI's grant?
 9 A. No.
 10 Q. Okay. Can a student lose funding if the PI's grant terms
 11 are not fulfilled?
 12 A. No. We have a responsibility to maintain the package
 13 throughout the entire duration of their degree. So if a PI
 14 loses their funding, the department or the Graduate School
 15 would bridge those funds and provide those funds.
 16 Q. What does a PI need to do prior to having -- withdrawn.
 17 Are there certain requirements for a PI in order to have a
 18 PhD student in his or her lab?
 19 A. Well, they have to have -- first of all, they needed to be
 20 applying to Graduate School of Biomedical Sciences as a
 21 training or a mentoring track faculty, and that is a separate
 22 appointment that is done from Mount Sinai. It's done through
 23 interviews with myself. And -- and now the School is requiring
 24 also a mentoring -- the mentor training for -- in order for
 25 them to have students or trainees in their labs.

Page 89

1 Q. Does the PI need to demonstrate that they have the ability
 2 to fund the student as -- as a requirement for taking on a PhD
 3 student?
 4 A. So -- yes. We -- we require that they have two years of
 5 funding eventually for the student.
 6 Q. Okay. How could a PhD student lose their funding?
 7 A. They can't lose their funding. They will get funding --
 8 funding is not their problem. Funding is the problem of the PI
 9 or the institution. They should concentrate on their thesis,
 10 and that is the purpose to provide them for those funds.
 11 Q. Okay. Can -- so, can a -- if a -- if the student's PI
 12 lost their grant, would the student lose funding?
 13 A. No. The -- again, the department or the Graduate School
 14 would supply those funds.
 15 Q. Okay. Could a -- could a student lose funding if they
 16 weren't performing well in the lab?
 17 A. Well, if they were not performing well in the lab, they
 18 would be referred to our review committee. We have a committee
 19 that is the disciplinary committee of the Graduate School, who
 20 will evaluate, together with the -- the advisory committee that
 21 student's in, whether or not the student can continue in the
 22 program or be dismissed. In that case, if they are dismissed
 23 from the program, they will lose the funding. But if they are
 24 in the program they will never lose their funding.
 25 Q. Okay. Can we turn to Page 56 of the handbook, please?

Page 90

1 Dr. Filizola, are you familiar with this page?
 2 A. Yes.
 3 Q. Okay. "Satisfactory Academic Progress Policy."
 4 A. Okay.
 5 Q. Let me ask you this, are there conditions other than
 6 maintaining satisfactory academic progress for the continued
 7 receipt of a stipend?
 8 A. No.
 9 Q. Is funding conditioned on a PhD student's completion of
 10 any service requirements to the Graduate School?
 11 A. No.
 12 Q. Turning to Page 35, please. Doctor, can you describe what
 13 the contents of -- of this page of the handbook, please?
 14 A. Right. I believe these are the medical insurance policy
 15 that students are provide when they join at Mount Sinai. And
 16 so there will be -- there will be some details of that policy
 17 described in here.
 18 Q. Okay. Are these policies the same for all students,
 19 regardless of their graduate program?
 20 A. These policy, yes, are the same of all of the students in
 21 the School.
 22 Q. Okay. Do -- well, do PhD students have to pay for the
 23 cost of health insurance? Excuse --
 24 A. No. The package that we provide includes health
 25 insurance. It does not include dental and vision, which they

Page 91

1 can pay by themselves, but it does include the health
 2 insurance.
 3 Q. Okay. Do -- okay. Is the student health insurance plan
 4 the same plan that's provided to employees?
 5 A. No. It's a different one.
 6 Q. Okay. Same question for dental and vision care; is that
 7 the same policy provided to employees?
 8 A. I -- I don't believe so, no.
 9 Q. Okay. Doctor, do you have -- do you have a Mount Sinai
 10 email address?
 11 A. Yes, I do.
 12 Q. What's the domain for that email address?
 13 A. mssm.edu.
 14 Q. okay. Do you know what the domain is for PhD students?
 15 A. Yes, it's icahn.mssm.edu.
 16 Q. Okay. Doctor, just generally I would note that -- thank
 17 you, but if we could slow just a tad so the court reporter can
 18 accurately transcribe your --
 19 A. Oh, I'm sorry.
 20 Q. No, no, don't apologize.
 21 So you said that the student domain is icahn.mssm.edu?
 22 A. Correct. It's icahn.mssm.edu.
 23 Q. And is that domain for the duration of the student's
 24 studies?
 25 A. Yes, it is.

Page 92

1 Q. Okay. Do you know, are those emails maintained on a
 2 different server from your emails at mssm.edu?
 3 A. Yes, they are.
 4 Q. Okay. Doctor, are you familiar with the curriculum for
 5 PhD students in Biomedical Science and Neuroscience?
 6 A. Yes.
 7 Q. Turning to Page 135 of the document, can you tell us what
 8 this page describes?
 9 A. Right, these are the requirement to graduation, and they
 10 need to complete 72 credits with a cumulative GPA of 3 or
 11 higher. Complete 14 letter-graded credits for coursework.
 12 They need to submit by second year a Thesis Proposal. They
 13 need to defend it, and this is evaluated by an advisory
 14 committee for the students. Then they have to conduct research
 15 towards an original dissertation that is presented to a Thesis
 16 Committee made of members of the advisory committee, plus an
 17 external member. Then they need to defend their thesis,
 18 deposit it, and then when they deposit it, after they deposit
 19 it, they are done. They -- they have their PhD.
 20 Q. Do these requirements also apply to the MD-PhD students
 21 when they are enrolled in the PhD portion of the program?
 22 A. They -- they are. Yes.
 23 Q. Okay. Who sets the -- these requirements for the
 24 conferral of the PhD degree?
 25 A. Our accreditation agencies. So we are regulated by Middle

Page 93

1 States and by New York State of Education, so this is -- these
 2 are accredited programs so that -- and these are requirements
 3 as per our accreditation.
 4 Q. okay. What is a Thesis Proposal?
 5 A. The Thesis Proposal is a document containing the premise
 6 of research that a student is going to conduct throughout the
 7 duration of the programs. It contains usually an amount of
 8 preliminary results that might convince the advisory committee
 9 that this research worth pursuing [sic]. And -- and it's a
 10 document of normally six pages and is submitted to the advisory
 11 committee prior to their defense, and both the written document
 12 and the oral presentation of this document is evaluated by the
 13 committee.
 14 Q. Does a Thesis Proposal also function as an entrance exam?
 15 A. It -- it is basically, yes. It's a milestone that they
 16 have to pass. If this milestone is not passed, the student
 17 might be referred to CAR, it is Committee for Academic Review,
 18 and -- and evaluated for continuation in the program.
 19 Q. What role, if any, does a PI play in the developometrn of a
 20 Theis Proposal?
 21 A. Advisory. Certainly advisory.
 22 Q. And can you just elaborate on that?
 23 A. Right. So the -- the PI's roles is guidance -- provides
 24 guidance throughout the research that the student is
 25 conducting. And that, you know, they -- they might actually

Page 94

1 read the Thesis Proposal. You know, such as edits for the
 2 Thesis Proposal, and you know, have rehearsals of the
 3 presentation with the student, and all that is required by a
 4 good mentor, basically.
 5 Q. Thank you.
 6 MR. LUPION: And I just want to make sure if the court
 7 reporter has any issues with taking down this testimony, to
 8 please let me know so that we can -- I can guide the witness
 9 accordingly.
 10 BY MR. LUPION:
 11 Q. Can I ask you this, Doctor, does a student's thesis need
 12 to be based on the grant that their PI is working on?
 13 A. Not necessarily.
 14 Q. And what -- can you elaborate on that?
 15 A. Right. So, this -- this is a -- an original proposal that
 16 they have to come up with. The Thesis Proposal is part of
 17 original research that would be developed by the student. It
 18 can be inspired by an existing research program in the PI's lab
 19 by the expertise that is acquired in the lab, but is not
 20 necessarily, you know, conducting the work -- all the work that
 21 is described on a grant of the PI.
 22 Q. Doctor, what proportion of a student's research in the lab
 23 should be in furtherance of their Thesis Proposal?
 24 A. We -- we actually would like to see 100 percent of that.
 25 Q. Okay. And I think we covered this, but a Thesis Proposal

Page 95

1 is an academic requirement?
 2 A. Yes. It's a milestone. Yes.
 3 Q. Okay. And same with the dissertation?
 4 A. Yes.
 5 Q. Doctor, can you describe the importance of a dissertation
 6 to a student's education?
 7 A. Yes. It's -- well, first of all because without the
 8 dissertation, they would not get degree, so it's a requirement
 9 for their PhD. And it's also an important milestone for them
 10 because it offer them an opportunity to find future jobs,
 11 right, and future applications, so usually it's accompanied by
 12 a publication, by one or multiple publications, and these
 13 publications serve to -- to improve their curriculum and
 14 their -- their presentation to future jobs, whether in academia
 15 or in the industry, or whatever.
 16 Q. Doctor, when students are performing research towards
 17 their own -- towards their dissertation, or -- withdrawn.
 18 When students develop a Thesis Proposal at -- at the
 19 Graduate School, do they have ability to pursue their own
 20 interests and -- and educational goals while forming that
 21 proposal?
 22 A. Oh, yeah. I mean, this is encouraged. Strongly
 23 encouraged. The -- their -- their research must be original,
 24 right, and so the content of the Thesis Proposal is original
 25 research.

Page 96

1 Q. Okay. And you mentioned publication is encouraged. Is
 2 publication a requirement to graduate?
 3 A. It -- it's not a strict requirement, it's strongly
 4 encouraged, though, because again, I mean the future -- your
 5 positions are -- look at these things, right. Look was whether
 6 or not a student has published in a peer reviewed journal.
 7 Q. If a student does public their thesis, is that thesis made
 8 available to the public?
 9 A. Yes.
 10 Q. Okay. And when it is made available to the public --
 11 withdrawn.
 12 If a student does public the thesis, does the Graduate
 13 School receive any revenue as a result of that publication?
 14 A. No.
 15 Q. Doctor, looking at Page 135 of the handbook, are PhD
 16 students required to be teaching assistants in order to
 17 graduate?
 18 A. No. They are not.
 19 Q. Okay. And I think I asked this, but I will ask it again,
 20 what about funding, do students have to teach to continue to
 21 receive funds?
 22 A. No. Teaching is totally volunteering at Mount Sinai. And
 23 it's to improve their training, again, if they want to become
 24 teachers in the future.
 25 Q. Do students need to fulfill any service requirement to the

Page 97

1 school in order to graduate?
 2 A. No.
 3 Q. Okay. Do you know why the School doesn't -- well,
 4 withdrawn.
 5 Why doesn't the School require students to -- to teach?
 6 A. Because that is not part of our accreditation process.
 7 It's not a requirement of their PhD degree. We encourage them,
 8 again, because it's a good training opportunity for them, but
 9 we do not require it.
 10 Q. Okay. Are PhD students required to fulfill obligations
 11 associated with their PI's grant in order to graduate?
 12 A. Not that I'm aware of.
 13 Q. Could a PhD student lose their spot in the program if they
 14 do not fulfill the requirements associated with a PI's grant?
 15 A. No.
 16 MR. LUPION: We've been going about an hour, could we take
 17 a five-minute break?
 18 HEARING OFFICER KUMA: Yes.
 19 MR. MEIKELJOHN: I would endorse that.
 20 HEARING OFFICER KUMA: Off the record.
 21 (Whereupon, a brief recess was taken.)
 22 HEARING OFFICER KUMA: Back on the record.
 23 MR. LUPION: Thank you.
 24 DIRECT EXAMINATION (continued)
 25 BY MR. LUPION:

Page 98

1 Q. Doctor, turning back to Page 56, can you -- can you
 2 describe generally what -- what "Satisfactory Academic
 3 Progress" is at the Graduate School?
 4 A. Yes. They have -- the students have to maintain
 5 cumulative grade, point average of 3.0 and higher, and that
 6 includes their performance in class and in the lab is a
 7 research component of their training.
 8 Q. Is any part of satisfactory academic progress dependent on
 9 the completion of specific tasks in a lab?
 10 A. No.
 11 Q. Is any part of a student's academic progress dependent on
 12 spending a specific amount of time in a research lab?
 13 A. No.
 14 Q. What would happen if a student was not making satisfactory
 15 academic progress?
 16 A. Their advisory committee would refer them to the committee
 17 for academic review called CAR. And this academic review
 18 committee would meet and examine the case and deliberate on
 19 whether or not the student can continue in the program.
 20 Q. When, if at all, would a -- would the senior associate
 21 dean for a program get involved in this process?
 22 A. He might if there are issues related to academic --
 23 satisfactory academic progress. He might participate, for
 24 instance, in the advisory committee meeting deliberating on
 25 whether or not CAR should look at this -- at this specific

Page 99

1 case.
 2 Q. If a PI believed that a student wasn't making satisfactory
 3 academic progress, could the PI remove that student from his or
 4 her lab?
 5 A. No. Not removing. I mean, they -- they might -- they
 6 could refer the student to the advisory committee. This is a
 7 decision of the advisory committee, not the decision of a PI.
 8 Q. Who is -- who comprises the advisory committee?
 9 A. The advisory committee's comprised of a chair who is
 10 usually the MTA director or the senior faculty member of a
 11 specific training area, and two other voting members of the
 12 advisory committee who are usually faculty within the
 13 disciplinary expertise with the -- that involve the student of
 14 the PI who can function as advisory for the thesis of the
 15 student.
 16 Q. Okay. And if a PI -- the process that you just described,
 17 the PI would have to go the advisory committee and -- and so
 18 forth. Can you compare that to Postdocs? In other words, if a
 19 PI believed that a Postdoc was not performing satisfactorily,
 20 what would happen?
 21 A. Yeah, Postdocs would be referred to HR, to human resources
 22 at Mount Sinai, and the process would be, you know, will go
 23 through HR, with HR intervention. And a PI could never dismiss
 24 any trainee without a -- any postdoctoral trainee without a --
 25 an advanced notice at the present time. It is three months

Page 100

1 until the Postdoc can be dismissed eventually from Mount Sinai.
 2 That's totally different then what happens here. This is --
 3 this is a program, again this is a PhD program, and this
 4 regulated by, you know, for accreditation requirements and the
 5 process is -- is taken up by a -- by several different
 6 committees and different people.
 7 Q. Thank you, Doctor. I -- you referred to -- hold on for
 8 just --
 9 (Pause.)
 10 BY MR. LUPION:
 11 Q. Doctor, could you please say who again, and if you can
 12 slow down just a little bit, describe the members of the
 13 advisory committee?
 14 A. Right. So, there is a chair of the committee. Usually,
 15 the chair of the committee is a Multidisciplinary Training Area
 16 director. The PhD program is divided into several different
 17 concentrations, and each one of those have a faculty director
 18 withhold were in the organizational chart that you have seen at
 19 the beginning. Or a senior faculty would chair that -- that
 20 committee.
 21 There are other two members of the committee. Usually,
 22 they are two members of the committee who are also voting
 23 members, and these members usually have interdisciplinary
 24 expertise or different expertise -- scientific expertise with
 25 respect to the PI or the student, as they would advise the

Page 101

1 student on the progression of research and the progression of
 2 thesis that they are conducting.
 3 There may be additional members that are collaborators of
 4 the PI or others, but those are not voting members on the
 5 committee.
 6 Q. Okay. And is a PI -- is the student's PI a voting member
 7 on any of these committees?
 8 A. No. The PI is not a voting member.
 9 Q. Why not?
 10 A. Because it would be a conflict.
 11 Q. And can you elaborate why would it be a conflict?
 12 A. That could be a conflict of interest, you know. I mean,
 13 it's a PI of a student, it's a direct advisor of the student,
 14 direct mentor, so -- so that might -- you know, might -- might
 15 have some -- some conflict, so to prevent that, there is a
 16 committee of faculty members who assess the progression of a
 17 student -- progress of a student in the program.
 18 Q. So we spoke on a lot of -- a lot of committees here. I
 19 just want to break this down a little bit.
 20 One of the committees that you mentioned was the Committee
 21 for Academic Review, or CAR.
 22 A. Yes.
 23 Q. Can you describe that committee, please?
 24 A. That is the main review and disciplinary committee for the
 25 Graduate School.

Page 102

1 Q. Okay.

2 A. And it's composed of representatives of the different

3 training areas of the PhD program in Biomedical Sciences and

4 Neuroscience, and representatives of the other programs that we

5 have; the master's programs.

6 Q. Okay. What's the purpose of the Committee for Academic

7 Review?

8 A. That is to evaluate satisfactory academic progress for

9 students in the various programs --

10 Q. Okay.

11 A. -- at Mount Sinai.

12 Q. Are there subcommittees on the Committee for Academic

13 Review?

14 A. Yes. There are subcommittees for the specific -- for

15 other specific programs.

16 Q. Okay. Do you know how many?

17 A. Obviously, on top -- off top of my head I don't know how

18 many --

19 Q. Well --

20 A. -- subcommittees are there.

21 Q. Let me see if turning to Page 62 of the handbook refreshes

22 your recollection with respect to the number of subcommittees.

23 A. Right. So it's only -- it's only divided by the PhD

24 subcommittee and the Master's subcommittee, because of the

25 different nature -- substantially different nature of the

Page 103

1 programs.

2 Q. Okay. If the student -- would the determination of

3 satisfactory academic progress or the issue -- excuse me, would

4 the issue of satisfactory academic progress be heard first by

5 CAR or the advisory committee?

6 A. No, the advisory committee will -- first of all, I mean,

7 they are the first faculty who would be -- would have access to

8 information about research of the student.

9 The student develops a relationship with them. They are

10 advisory to -- and so -- so they are supposed to meet every

11 semester, at the very least. In some cases, they meet more

12 often depending on requests from the students or from the

13 faculty or whomever.

14 Q. Is there a requirement to meet every six months?

15 A. There is a requirement, yes, at least every six months,

16 but they can meet more if they -- the like.

17 Q. Okay. Does the student have the right to appeal a

18 determination by the Committee for Academic Review?

19 A. Yes. They -- they have it, yes.

20 Q. And can you -- can you describe for us generally the

21 appeal procedure?

22 A. Yeah. The appeal that they would first appeal it to -- to

23 CAR. Then it will go to -- it will go to myself, and they will

24 have 15 days to appeal a decision by CAR. Then I have to have

25 a determination made based on where -- you know, sometimes it

Page 104

1 involves appointing a subcommittee that is advisory to me to

2 evaluate the situation. And -- and if my decision is also

3 appealed, it will go to the dean for Academic Affairs -- so

4 there are two levels of appeal.

5 Q. Thank you, Doctor. We've heard about -- it -- withdrawn.

6 What is the difference, if any, between the advisory

7 committee and the thesis advisory committee? Is there a -- is

8 there a difference between those?

9 A. The only difference usually is the external member that

10 can be brought in for the thesis proposal. But the advisory

11 committee is usually maintained. It can be, you know, enriched

12 by further faculty if there is a need for -- from a research

13 perspective to add the expertise of some additional person.

14 But usually, it's the same committee with the -- with an

15 external member also as a voting member for the thesis.

16 Q. Okay. So that would be members of the faculty from their

17 multidisciplinary training area, their PI, and an external

18 member; that would be the thesis advisory committee?

19 A. Correct.

20 Q. Okay. And is the PI a voting member of the thesis

21 advisory committee?

22 A. No.

23 Q. Okay. What does it mean to be a non-voting member of a

24 thesis advisory committee?

25 A. Well, that you cannot have a decision on whether or not

Page 105

1 the student can continue in the program.

2 Q. Okay. And the same with respect to a non-voting member of

3 an advisory committee?

4 A. Right.

5 Q. Okay. Doctor, do you know the different categories of

6 academic standing at the Graduate School?

7 A. Yes.

8 Q. And what are they?

9 A. You're either in good standing or can be dismissed or can

10 be suspended.

11 Q. What do you mean by -- what's the difference between

12 "dismissed" and "suspended"?

13 A. So suspended means that you're put on probation for a

14 certain period of time, and there is a remediation process

15 that -- remediation plan that is put in place for review. And

16 "dismissed" means that you are terminated from the program.

17 Q. Can we -- can you just say that a little bit slower?

18 A. Yes. So -- so you can be put on probation if you are not

19 making good academic standing and if you are put on probation

20 there is a remediation plan that is put forward for you.

21 And -- and if you are dismissed, on the other hand, means that

22 you are terminated from the program.

23 Q. Okay. And when would a -- which of these categories of

24 academic standing would, if any, would a student lose funding?

25 A. None -- none of them, just the dismissal. If you are

Page 106

1 dismissed from the program you will lose funding.
 2 Q. When could a student's academic standing category change?
 3 A. If there is no satisfactory academic progress.
 4 Q. And who makes the decisions with respect to what category
 5 a student is in?
 6 A. Again, the process goes through the advisory committee
 7 first, and then the CAR, or Committee for Academic Review,
 8 makes the decision whether or not the student is put on
 9 probation or dismissed from the program.
 10 Q. Could a PI ever make a decision regarding a student's
 11 academic standing without going through --
 12 A. No.
 13 Q. -- the advisory committee?
 14 A. They cannot.
 15 Q. So, the answer was "no"?
 16 A. No, they cannot.
 17 Q. Thank you.
 18 MR. LUPION: Let me just -- let me take a -- can we go off
 19 the record for one minute?
 20 HEARING OFFICER KUMA: Yes. Off the record.
 21 (Whereupon, a brief recess was taken.)
 22 HEARING OFFICER KUMA: Back on the record.
 23 MR. LUPION: We have no further questions at this time.
 24 HEARING OFFICER KUMA: All right. Employer's witness is
 25 dismissed.

Page 107

1 MR. MEIKELJOHN: No, I have -- don't I get to cross-
 2 examine?
 3 HEARING OFFICER KUMA: No. No. Not right now. We're
 4 going to take a short recess and then when we come back you'll
 5 have the opportunity to cross-exam.
 6 MR. MEIKLEJOHN: Yeah, how long of -- are you planning?
 7 HEARING OFFICER KUMA: We're going to take a 10-minute
 8 recess.
 9 MR. MEIKLEJOHN: All right.
 10 HEARING OFFICER KUMA: A short recess. Okay.
 11 MR. MEIKLEJOHN: Not as short as --
 12 HEARING OFFICER KUMA: Not as short as the Employer's.
 13 Off the record.
 14 (Whereupon, a brief recess was taken.)
 15 HEARING OFFICER KUMA: Back on the record.
 16 Okay, as the Employer has finished with this witness, the
 17 witness is still under oath, and the Petitioner will now
 18 commence cross-examination.
 19 CROSS-EXAMINATION
 20 BY MR. MEIKLEJOHN:
 21 Q. Good morning, Dr. Filizola. Did I -- my pronunciation
 22 okay?
 23 A. Perfect. Thank you.
 24 Q. Thank you.
 25 Q. So you understand that I'm representing the petitioning

Page 108

1 union in this case?
 2 A. Yes.
 3 Q. And I'm going to also ask you some questions. If you
 4 don't understand my questions, please let me know, because
 5 otherwise the reader of the record will assume that you
 6 understood where I was going.
 7 And second, please, sometimes my questions tend to be
 8 longer than is best for cross-examination, so even if you
 9 figure out what my question's going to be, please wait until I
 10 finish you so that the court reporter can get down both my
 11 question and what you -- what you say in response.
 12 So, in your testimony at several points you referred to
 13 Postdocs as trainees; is that right?
 14 A. Correct.
 15 Q. But you do not consider them to be students; is that
 16 right?
 17 A. They are not students.
 18 Q. Okay. They are learning about conducting research by
 19 conducting research; is that right?
 20 A. They are expanding their expertise in research by
 21 conducting additional research. They have already underwent a
 22 training during their PhD.
 23 Q. And when they were PhDs, they also learned about
 24 conducting research by conducting research; correct?
 25 A. Correct. They --

Page 109

1 Q. Okay, that -- I think if --
 2 A. Yeah.
 3 Q. If you agree, then that's okay, you can stop there.
 4 MR. LUPION: Well, I'm going to object. If the witness
 5 needed to clarify or expand upon her answer, she should be
 6 given the opportunity to do so.
 7 MR. MEIKELJOHN: And I guess I would generally say that
 8 you'll have an opportunity on redirect.
 9 MR. LUPION: Well, she was in the middle of a sentence,
 10 Tom --
 11 HEARING OFFICER KUMA: Objection sustained. Okay.
 12 THE WITNESS: Okay.
 13 HEARING OFFICER KUMA: Ms. Filizola, please elaborate.
 14 THE WITNESS: So, what I was trying to say is that the --
 15 the difference between PhD student and other student in --
 16 conducting the research is that the PhD student is acquiring
 17 a -- an expertise, their first expertise in the research, and
 18 that the Postdoc is expanding upon that expertise in research.
 19 Right, so completely different type of exposure to research, if
 20 you will.
 21 BY MR. MEIKLEJOHN:
 22 Q. Are you saying that the work done by the Postdoc is more
 23 advanced?
 24 A. Absolutely. Yes.
 25 Q. Would you consider the Postdoc to be an apprenticeship

Page 110

1 program?

2 A. Yes, that --

3 MR. LUPION: Object -- object to the form.

4 BY MR. MEIKLEJOHN:

5 Q. My question is do you consider the Postdocs to be in an

6 apprenticeship program?

7 A. A Postdoc to be in an apprenticeship program? What --

8 what do you mean by that, I'm sorry? I don't understand your

9 question.

10 Q. A program where someone learns while they're doing?

11 A. They are not in a program. They are performing research.

12 A Postdoc is performing research. They are not in an

13 educational program, per se. They are performing research.

14 Q. What about -- with that definition of apprenticeship, what

15 about the -- the PhD students, would you consider them to be in

16 an apprenticeship program?

17 A. The PhD is an apprenticeship program.

18 Q. Thank you.

19 A. They are learning to do research.

20 Q. Now, I'm going to -- I'm going to draw your attention to

21 Employer Exhibit 2, and I'm not -- well, this question doesn't

22 require showing it, so I'll start with that.

23 Were you -- you said that you updated this handbook?

24 A. I'm sorry, what are you referring to because I -- I don't

25 know what exhibit numbers you are referring to, what they are.

Page 111

1 Q. Right. Employer Exhibit 2 is -- is the handbook that most

2 of your testimony related to.

3 A. Okay.

4 Q. About 400-and-whatever pages of --

5 A. Okay.

6 Q. -- information. You say that that's been updated since

7 you took over? Or since you assumed your current position?

8 A. It is updated periodically. So -- during the six years it

9 has been updated more than once.

10 Q. And do you -- was -- has there been a substantial

11 rewriting or modification to the document within the last seven

12 years, say, to your knowledge?

13 MR. LUPION: Objection. Are you talking about the entire

14 document? Specific --

15 MR. MEIKLEJOHN: Yes.

16 MR. LUPION: -- specific revisions?

17 HEARING OFFICER KUMA: Reframe the question.

18 BY MR. MEIKLEJOHN:

19 Q. Within the past seven years, has there been a substantial

20 revision of the entire or major portions of the document?

21 MR. LUPION: Do you -- Doctor, do you know what that

22 means?

23 THE WITNESS: I think that I do understand the question.

24 So, I have no idea if the 405 pages have been entirely revised.

25 I doubt it. There have been sections that have been updated,

Page 112

1 for sure. I would not know even the percentage of document

2 that has been reviewed during these six years.

3 MR. MEIKLEJOHN: Well, if I wanted to -- all right, if I

4 wanted to show a particular page on -- on this -- or if I

5 wanted to ask somebody to show the particular page, is there

6 somebody who has Employer Exhibit 2 open in its entirety who

7 can -- is there somebody who has

8 MS. ROTHGEB: Yes.

9 MR. LUPION: Nicole, are you going to be sharing?

10 MS. ROTHGEB: Yes, I can share the screen.

11 MR. LUPION: Okay.

12 MR. MEIKLEJOHN: Okay. Let me -- hope I get this right;

13 can you show Page 21? Can you make it a little bigger?

14 MS. ROTHGEB: Yeah.

15 BY MR. MEIKLEJOHN:

16 Q. Well, let me ask, does the -- do you have a hard copy of

17 the document with you? Or are you relying -- okay, never mind.

18 That's good.

19 So let me just ask you, do you know during your term as

20 dean, has Page 21 or this section had substantial revisions?

21 HEARING OFFICER KUMA: No, you were -- that was good where

22 you had it.

23 THE WITNESS: I would not know the answer to your question

24 I do not know whether this page in particular has been revised

25 with respect to seven years ago. I do not know.

Page 113

1 BY MR. MEIKLEJOHN:

2 Q. So, I would draw your attention to the first bullet point

3 under "General Information" where it provides that the funding

4 package for PhD students and MD-PhD students includes "Direct

5 compensation."

6 Do you know has that phrase been part of the handbook

7 for -- since between you joined Mount -- the -- before you

8 assumed the position of dean? Or is that new?

9 A. I honestly do not know the answer to your question.

10 Q. Okay. But if you look at the parenthetical that follows

11 that, it states that "This direct compensation is sometimes

12 referred to informally as a 'stipend.'"

13 You have used the word stipend in your testimony, but the

14 official, and correct -- the official terminology for the

15 payments made to the graduate students is "direct

16 compensation," correct?

17 MR. LUPION: Objection.

18 HEARING OFFICER KUMA: Relevance?

19 MR. MEIKLEJOHN: Your -- is that the objection, relevance?

20 MR. LUPION: No, the document --

21 HEARING OFFICER KUMA: The relevance for the objection.

22 MR. LUPION: The document -- the document says what it

23 says. And you're mischaracterizing it when it says what the

24 official -- official characterization is. The document speaks

25 for itself.

Page 114

1 MR. MEIKLEJOHN: Okay, I'll --
 2 HEARING OFFICER KUMA: Sustained.
 3 MR. MEIKLEJOHN: Pardon?
 4 HEARING OFFICER KUMA: I sustained the objection.
 5 MR. MEIKLEJOHN: Okay. All right.
 6 BY MR. MEIKLEJOHN:
 7 Q. So the document states that -- well, strike that.
 8 Is the official term for the direct payments made to the
 9 students "direct compensation"?
 10 MR. LUPION: Same objection.
 11 MR. MEIKLEJOHN: Well, the -- your objection was that I --
 12 I was mischaracterizing the document, so now I'm asking her if
 13 that's her interpretation and understanding of the document as
 14 the dean of the Graduate School.
 15 THE WITNESS: As the dean of --
 16 HEARING OFFICER KUMA: Overruled. Overruled.
 17 Ms. Filizola, please answer the question.
 18 THE WITNESS: As the dean of the Graduate School, this is
 19 a stipend that is given to students.
 20 BY MR. MEIKLEJOHN:
 21 Q. And you do not -- did you have any how the phase "direct
 22 compensation" came to be used in this document?
 23 A. As I said, I do not know.
 24 MR. MEIKLEJOHN: All right, you can stop the screen
 25 sharing.

Page 115

1 All right, this one -- let's see how we do this. You
 2 referred to the mission statement of technical engineer
 3 graduate program in -- in the student handbook, which I believe
 4 is on Page 3 of Exhibit 2. I'm not going to ask to show that.
 5 What I would -- I'm going to do is show, hopefully-- give me a
 6 minute.
 7 (Pause.)
 8 MS. ROTHGEB: I can do it, Tom. Just tell me --
 9 MR. MEIKLEJOHN: No, no, no, I got it. I got it on my
 10 screen, so. I just have to do things in the right order.
 11 (Petitioner's P-1 marked.)
 12 BY MR. MEIKLEJOHN:
 13 Q. I show you what's been marked as Petitioner's Exhibit 1.
 14 Do you recognize this as the mission statement that appears in
 15 the faculty handbook?
 16 A. This is the mission statement of the Icahn School of
 17 Medicine at Mount Sinai? I think that in the handbook we were
 18 referring to, the mission statement of the Graduate School?
 19 Q. Correct, right. But this -- you agree this is the mission
 20 statement of the Icahn School of Medicine at Mount Sinai;
 21 correct?
 22 A. Honestly, it might. If you took it from the website, it
 23 must be exactly this. I don't know.
 24 Q. So, you do recognize the symbol of the Icahn School of
 25 Medicine in the upper left hand corner?

Page 116

1 A. Yeah, of course.
 2 Q. And you are a member of the faculty and employed subject
 3 to the faculty handbook?
 4 A. Yes.
 5 Q. Okay. And are you familiar -- do you recognize -- are you
 6 familiar with this mission statement?
 7 A. Yes, I am.
 8 Q. Is this this the mission statement of the Icahn School of
 9 Medicine?
 10 MR. LUPION: Objection. The document speaks for itself.
 11 It's from a faculty handbook.
 12 MR. MEIKELJOHN: Okay. I move -- I move the admission of
 13 Petitioner's 1.
 14 HEARING OFFICER KUMA: Okay. Employer, do you have any
 15 objections to this?
 16 MR. LUPION: No. I'm -- let me -- I am just looking at --
 17 give me one second, please.
 18 (Pause.)
 19 MR. LUPION: Sorry, I'm just pulling up an electronic
 20 copy.
 21 MR. MEIKLEJOHN: Okay.
 22 MR. LUPION: No objection.
 23 HEARING OFFICER KUMA: All right, Petitioner's Exhibit 1
 24 offer is received.
 25 (Petitioner's P-1 received.)

Page 117

1 MR. MEIKLEJOHN: Thank you.
 2 BY MR. MEIKLEJOHN:
 3 Q. If you look at the second sentence, it says -- it begins,
 4 "We conduct groundbreaking research."
 5 Where is that groundbreaking research conducted?
 6 A. Conducted by the faculty and the researchers and staff at
 7 Mount Sinai.
 8 Q. It's -- is it conducted in the PI's labs?
 9 A. It is conducted by PI's staff, investigators. There is an
 10 entire community of researchers at Sinai.
 11 Q. And are PhD students part of that community?
 12 A. PhD students are students.
 13 Q. Are they part of the community that you just referred to?
 14 A. A part of the community of Mount Sinai, yes.
 15 MR. MEIKELJOHN: All right, you can -- oh, I can stop the
 16 share because that's mine.
 17 BY MR. MEIKLEJOHN:
 18 Q. You testified regarding the academic requirements quite a
 19 bit for PhD students. Do those academic requirements include
 20 conducting research?
 21 A. Yes. It's part of their requirements.
 22 Q. And percentage wise, how much of those requirements
 23 involve conducting research?
 24 A. It's after the first year, and after -- starting the
 25 second year, they are enrolled in a course that is a research

Page 118

1 basis, and they are conducting research towards their thesis as
 2 part of that course.
 3 Q. Is that 100 percent of their academic requirements?
 4 A. That --
 5 MR. LUPION: In what -- in what year?
 6 BY MR. MEIKLEJOHN:
 7 Q. I'm sorry, after the first year, starting in the second
 8 year, is that 100 percent of their academic requirements?
 9 A. In the second year is only 75 percent of their requirement
 10 because they are still attending other classes, other
 11 electives. Starting in the third year is 100 percent of their
 12 requirements to be conducting research towards their thesis.
 13 So they are enrolled in a course that is called "Research
 14 Thesis."
 15 Q. And are they also enrolled in that course in the second
 16 year?
 17 A. They're also enrolled in that course in the second year
 18 when they are conducting research towards their thesis, yes.
 19 In the second year the thesis work starts, and the Thesis
 20 Proposal starts to be built. So those are courses that the
 21 students are required to do.
 22 Q. The classes that they take, they take -- how much of their
 23 time in the first year is devoted to attending classes?
 24 A. A hundred percent.
 25 Q. Do they also do rotations during the first year?

Page 119

1 A. They do rotation during the first year.
 2 Q. Does that also take some of their time?
 3 A. That is a part of their time, but they are not required
 4 actually to -- to perform any research, but just to find and
 5 match with their labs. So they are required to have a
 6 rotation, and -- and explore which labs they like eventually to
 7 do their research in.
 8 Q. And they explore which labs they like by spending --
 9 strike that.
 10 Do they spend time in the labs while they explore which
 11 labs they like?
 12 A. Of course. They attend seminars by the lab. They attend
 13 lab meetings. They -- they look at techniques that are used in
 14 those particular labs when they are exposed to research topics.
 15 All of that.
 16 Q. And they also attend classes where people -- where --
 17 traditional classes where people give lectures or seminars?
 18 A. Yes. That is -- as I said, it's 100 percent of their time
 19 that they do the first year, that they are required to attend
 20 classes.
 21 And in the second year, they will do the for the 25
 22 percent of their time because they have electives still to
 23 complete towards their degree.
 24 Q. How does the time spent doing rotations in the first year
 25 get counted towards the time that they're -- this 100 percent

Page 120

1 of their time?
 2 A. Because they are enrolled in the -- in a course that is
 3 rotation. They are -- it's part of the credits that we were
 4 describing a few minutes ago. Those 72 credits that they have
 5 to have to have a degree from Mount Sinai includes research
 6 through rotations or through opportunities of conducting
 7 research in the labs.
 8 Q. And the grades for attending classes other than research,
 9 are those -- how are those -- on what system are those grades
 10 awarded?
 11 A. It depends. If they are core courses, it will be on a
 12 letter grade. Or there are other courses that are pass and
 13 fail. It depends on the course.
 14 Q. And the rotation classes, those are pass/fail; is that
 15 right?
 16 A. Those are pass/fail.
 17 Q. And the -- the thesis research, that's all pass/fail?
 18 A. The -- I'm sorry, which one?
 19 Q. The thesis research.
 20 A. The thesis research is pass/fail, yes.
 21 Q. So you have obtained grants from the NIH you testified.
 22 The "NIH" is the National Institutes of Health; correct?
 23 A. Correct.
 24 Q. And you said that when you apply for the grant -- for the
 25 grants, that includes information regarding the costs of

Page 121

1 personnel?
 2 A. Yes. Correct.
 3 Q. Have you seen grants that provide for funding for graduate
 4 students to conduct research under those grants?
 5 A. Not that I -- not -- not for me. I never --as I -- as I
 6 said before, I never budgeted, if you will, as a part -- as a
 7 on-key personnel a PhD student. But there might be other PIs
 8 that they budget "TBD" towards a research assistant who is
 9 regarded by NIH as a non-key personnel.
 10 Q. So when you say a "research assistant," you are referring
 11 to a PhD student; correct?
 12 A. No. I'm referring --
 13 MR. LUPION: Objection. Objection, mischaracterizes her
 14 testimony. But I -- the witness has answered.
 15 MR. MEIKLEJOHN: She seems capable. She's smart. She's
 16 capable of --
 17 MR. LUPION: Well, she beat me to it.
 18 HEARING OFFICER KUMA: Objection sustained.
 19 THE WITNESS: I was just going by that a research
 20 assistant can be a technician, it can be a grad students, a
 21 researcher, whomever. It's a non-key personnel. And it might
 22 also be sometimes a PhD student if, you know, if a PhD student
 23 decided to do that.
 24 BY MR. MEIKLEJOHN:
 25 Q. And if a PhD student is listed on the grant as a research

Page 122

1 assistant, then the costs to that student, including the
 2 stipend for that student, would be listed as "personnel costs,"
 3 correct?
 4 A. It would be a percentage of the personnel costs, yes.
 5 Q. And -- well, you're -- the stipend or a portion of the
 6 stipend would be listed as a personnel cost on the grant?
 7 A. It might if a PI decides to do so. I'm not sure, I think
 8 that you cannot budget the entire package. I don't think that
 9 you can budget half the insurance, for instance, and other
 10 things on the grant.
 11 Q. Okay. You -- you're making it clear you're not sure about
 12 that, so that's -- don't worry.
 13 Does ISS -- no, ISMMS, right, that's the initials you use
 14 for your school? The Icahn School. Does the Icahn School,
 15 when it obtains National Institutes of Health, receive funding
 16 in the form of facilities and overhead costs?
 17 A. Yes.
 18 Q. And do you know how those -- what is -- is "facilities and
 19 overhead" the right term or am I getting that term a little
 20 off?
 21 A. I think it's overhead what it's referred to.
 22 Q. And do those overhead costs, do you know how they're
 23 calculated?
 24 A. The NIH has us at 69.5 percent calculated over the direct
 25 costs.

Page 123

1 Q. So just to make that clear, the direct costs -- the way
 2 you calculate the overhead is you take the direct costs, and
 3 then they add 69.5 percent to that?
 4 A. Yes.
 5 Q. And those direct costs include the personnel costs funded
 6 under the grant; is that correct?
 7 A. Not only that.
 8 Q. No, not only that. I said includes that.
 9 A. There is a percentage that includes that.
 10 Q. Okay. Now, my -- I may be confused in my notes regarding
 11 these committees, but I believe you said that the PI, that
 12 if -- if the -- if a -- strike that.
 13 I believe you said that if a PhD student was not
 14 successfully conducting research, that this issue would go to
 15 one of the committees. Which committee is that?
 16 MR. LUPION: Mischaracterizes her testimony. She didn't
 17 say if the PI -- if the student was not successfully conducting
 18 research. I think that mischaracterizes what she testified to.
 19 MR. MEIKELJOHN: All right, I'll rephrase the question.
 20 BY MR. MEIKLEJOHN:
 21 Q. Dr. Filizola, there are occasions when a -- an issue
 22 regarding the performance of a PhD student would go to the
 23 academic review committee; is that right?
 24 A. So, if the student is not making satisfactory academic
 25 progress the student is referred by the -- its advisory

Page 124

1 committee to the committee for review and academic -- I'm
 2 sorry, Committee for Academic Review, CAR, which is --
 3 Q. Okay. And all of the people on the CAR committee are
 4 employees of Icahn School at Mount Sinai; correct?
 5 A. The people on the CAR committee are educators representing
 6 the different training areas of the different programs in the
 7 Graduate School of Biomedical Sciences at Mount Sinai.
 8 Q. So, they're all employees of the Graduate School; correct?
 9 A. They are employees of Mount Sinai. They are faculty
 10 members at Mount Sinai.
 11 Q. And how would they go about determining the merits of an
 12 issue regarding a student?
 13 A. They will assess the academic progress, which is, you
 14 know, is defined by what we were saying before, the -- to
 15 have -- maintain the GPA of 3.0, to have defended successfully
 16 their Thesis Proposal, having enough data to defend eventually
 17 a thesis in the end of their program. There are there are
 18 several milestones that have to be -- that have to be met in
 19 order for the committee to decide whether or not the scientific
 20 academic progress is satisfactory.
 21 Q. And how do they get the information that they need to
 22 determine whether or not satisfactory progress is being made?
 23 A. They get this information from the advisory committee, who
 24 has evaluated the student, and from the student directly. The
 25 student is examined all the time when they have these advisory

Page 125

1 committee meetings, the student is presenting their data,
 2 their -- their progress, you know, achieving their data and
 3 everything else. So, they're -- their understanding of the
 4 literature. There are also different metrics and -- different
 5 evaluation assessments that one makes to see whether or not
 6 someone is making progress in a thesis.
 7 Q. You testified that the academic standards set forth in the
 8 handbook are established -- or are established by the state
 9 accrediting agency; is that right?
 10 A. Requirements I said. Requirements for a PhD program that
 11 are according to our accreditation.
 12 Q. And who is the accrediting body?
 13 A. So we are accredited by Middle States and the New York
 14 State Education registers our programs.
 15 Q. Do you know, is Columbia also subject to the -- those
 16 committees?
 17 A. I do not know, actually. I am -- I don't know -- I don't
 18 work at Columbia so I do not -- I cannot answer that.
 19 Q. Well, what is the jurisdiction of the New York committee?
 20 MR. LUPION: Objection, beyond the scope.
 21 HEARING OFFICER KUMA: Sustained.
 22 MR. MEIKELJOHN: I'm sorry, I think I'm going to argue
 23 this. She testified that the -- that the academic standards
 24 are established to meet the criteria of the New York and Middle
 25 States accrediting committees.

Page 126

1 THE WITNESS: But the program --
 2 MR. MEIKELJOHN: I think I'm entitled to ask about those
 3 committees that she testified about.
 4 MR. LUPION: You're asking beyond the scope of her
 5 purview, which is the Graduate School of Biomedical Sciences.
 6 Whether or not that committee has jurisdiction over the
 7 programs at Columbia is irrelevant.
 8 HEARING OFFICER KUMA: That's --
 9 MR. MEIKELJOHN: Let me ask --
 10 HEARING OFFICER KUMA: So, if you want to rephrase the
 11 question to something within her purview, I will allow the
 12 questioning. But if it's outside of her purview, there's
 13 nothing -- she cannot answer it.
 14 BY MR. MEIKLEJOHN:
 15 Q. Why do you have to follow the guidance of these
 16 committees?
 17 A. Because Mount Sinai is accredited by these committee. We
 18 cannot give a PhD degree with a -- with a title from Mount
 19 Sinai because we have an accredited program through these
 20 committees.
 21 Q. And is it required in order to issue the PhD that you be
 22 accredited by these committees?
 23 A. Yes. It is required to be accredited by these committee
 24 at Mount Sinai to give a PhD from Mount Sinai to students at
 25 Mount Sinai.

Page 127

1 Q. And is the accreditation required by state law?
 2 A. It is, I believe.
 3 Q. And the reason it's required by state law is because Mount
 4 Sinai is in New York; correct?
 5 MR. LUPION: Objection, calls for a legal conclusion.
 6 HEARING OFFICER KUMA: Sustained.
 7 BY MR. MEIKLEJOHN:
 8 Q. You heard the -- are you familiar with the phrase "Publish
 9 or perish"?
 10 A. Yes, I'm familiar.
 11 Q. Can you explain what that means?
 12 A. It's a phrase that is used in the scientific world,
 13 meaning that you -- if you publish and if you keep publishing
 14 your success will -- in the scientific world, you'll find jobs
 15 and everything else.
 16 Q. And that phrase is used with respect to faculty members?
 17 A. No. It's just a phrase that is common in the scientific
 18 community. Doesn't --
 19 Q. Including faculty members?
 20 A. Including the scientific community. I don't understand
 21 what you're asking.
 22 Q. Okay. You testified that teaching is voluntary for PhD
 23 students?
 24 A. Serving as a teaching assistant, yes. The PhD students do
 25 not teach.

Page 128

1 Q. Okay. They serve as a teaching assistant. What does a
 2 teaching assistant do, to your knowledge?
 3 A. The teaching assistant is usually mostly involved in
 4 course management. Meaning they make sure the faculty has
 5 access to the slides that they are going to present. And some
 6 are helping other students by tutoring. This is the type of
 7 teaching assistant -- assistant involvement.
 8 Q. And if someone volunteers to be a teaching assistant, do
 9 they get paid for it?
 10 A. Yes. They get paid \$40 an hour for a limited number of
 11 hours. We have a cap.
 12 MR. MEIKELJOHN: Excuse me.
 13 (Pause.)
 14 (Petitioner's P-3 marked.)
 15 BY MR. MEIKLEJOHN:
 16 Q. I'm going to show you a document that has been marked for
 17 identification as Petitioner's Exhibit 3. Can you see this?
 18 A. Yes, I can.
 19 Q. Would you like me to scroll through it so that you can see
 20 the whole thing?
 21 A. Sure. Please.
 22 (Witness examined the document.)
 23 MR. MEIKLEJOHN: Tell me if I'm going too fast.
 24 (Pause.)
 25 THE WITNESS: I can get the gist. I won't tell you that I

Page 129

1 can read all the words while you are scrolling, but I -- I
 2 understand what's the document --
 3 BY MR. MEIKLEJOHN:
 4 Q. And this is --
 5 A. -- to be about.
 6 Q. And this is the Mount Sinai Drug and Alcohol Policy?
 7 A. This is the alcohol policy. I believe you -- if you go
 8 up, it says "Department of Medical Education." We are Graduate
 9 School of Biomedical Sciences, so this is the document that the
 10 Department of Medical Education is using, I believe, for
 11 alcohol and drug use, as stated in this policy.
 12 Q. So, your understanding is that this policy does not apply
 13 to the Graduate School?
 14 A. Well, there is no Grad School within here, is it?
 15 Q. Okay.
 16 MR. MEIKLEJOHN: Could we turn -- this one's on you,
 17 Nicole -- can you show Employer Exhibit 2, Page 110?
 18 MS. ROTHGEB: I'm sorry, I was trying to save the handbook
 19 separately and my Adobe just crashed, so I can in a minute.
 20 MR. MEIKLEJOHN: I have had difficulty working with that
 21 document, as well, which is why I guess I've been trying to put
 22 it on you.
 23 MS. ROTHGEB: Give me just a second.
 24 MR. MEIKLEJOHN: Okay.
 25 (Pause.)

Page 130

1 MR. MEIKLEJOHN: Well, now my computer is not letting me
 2 stop sharing, so.
 3 COURT REPORTER: What exhibit was it?
 4 MR. MEIKLEJOHN: Petitioner -- Employer Exhibit 2, their
 5 handbook we spent most of the time on.
 6 MS. ROTHGEB: What page, Tom?
 7 MR. MEIKELJOHN: Page 110.
 8 BY MR. MEIKLEJOHN: 110.
 9 Q. Do you have -- I started to ask you this before, do you
 10 have a hard copy of the handbook?
 11 A. Not in front of me, no.
 12 Q. No. Yeah, okay.
 13 MS. ROTHGEB: It's up.
 14 MR. MEIKLEJOHN: Okay.
 15 BY MR. MEIKLEJOHN:
 16 Q. All right, just -- are you familiar -- well, you're
 17 familiar with the handbook. Does page -- beginning on Page
 18 110, does that reflect the drug and alcohol policy of the
 19 Graduate School?
 20 A. Well, I believe it's in the -- in the handbook.
 21 Q. Is it -- yeah.
 22 A. If it is in that book, it is. So I'm not sure I
 23 understand your question.
 24 Q. Yeah, I think you answered it, "If it's in the handbook,
 25 that's the policy for the Graduate School."

Page 131

1 And could you read the first sentence of that policy?
 2 A. Yes, "The following statement describes ISMMS's policy
 3 regarding substance abuse for all employees, which include
 4 faculty, administration, house staff, students, graduate
 5 students, fellows, bargaining and non-bargaining unit
 6 employees."
 7 Q. Okay, thank you. So, this policy --
 8 A. Looks like that there is some --
 9 Q. Go ahead.
 10 A. Weird way to phrase this sentence, honestly
 11 Q. Well, as counsel would point out, it says what it says.
 12 And --
 13 A. It is poorly worded in my opinion, but --
 14 Q. Okay. The --
 15 MR. LUPION: I'm sorry, Doctor, I didn't -- I didn't hear
 16 that. You said it was "what" worded?
 17 THE WITNESS: Poorly worded. It seems to me that is
 18 poorly worded.
 19 MR. LUPION: Poorly. Poorly. Thank you.
 20 THE WITNESS: Poorly worded.
 21 MR. LUPION: Thank you, Doctor.
 22 BY MR. MEIKLEJOHN:
 23 Q. When a student is admitted to the graduate program -- the
 24 PhD Program, they are required to pass a drug screen; is that
 25 correct?

Page 132

1 A. I believe so, yes.
 2 Q. And do you know whether that drug screen is referred to as
 3 a "pre-employment drug screen"?
 4 A. Honestly, I -- I don't because I do not regulate the
 5 involvement of this process and procedures.
 6 (Petitioner's P-2 marked.)
 7 BY MR. MEIKLEJOHN:
 8 Q. Showing you a document that's been marked for
 9 identification as Petitioner's Exhibit 2. Do you recognize
 10 this document?
 11 A. Honestly, I -- I don't. I do recognize some numbers here,
 12 but I -- I don't -- I don't know where this document comes
 13 from.
 14 Q. All right, I'll save it.
 15 Do you know when a student enrolls in the graduate
 16 program, are they also enrolled in the payroll system at Mount
 17 Sinai?
 18 A. Honestly, I do not know how -- how students -- how the
 19 stipends are paid, if this is what you're asking me. I do not
 20 know. Again, my office does not handle payroll.
 21 MR. MEIKELJOHN: Can we show the witness Employer Exhibit
 22 2, Page 73?
 23 (Pause.)
 24 MR. MEIKLEJOHN: Could you review this, please?
 25 THE WITNESS: Give me on second, okay?

Page 133

1 (Witness examined the document.)
 2 THE WITNESS: Okay.
 3 BY MR. MEIKLEJOHN:
 4 Q. Is it the -- according to the handbook, is it the policy
 5 of the graduate program -- the Graduate School that employee --
 6 that graduate students are entitled to two weeks of paid
 7 vacation each year?
 8 A. They're entitled -- they can take two weeks of vacation
 9 each year, but I can tell you that is very flexible. There are
 10 students taking more time when they discuss this with the PIs.
 11 Q. But they are entitled to two weeks of paid vacation per
 12 year; correct?
 13 A. It says that they can take two weeks of vacation each
 14 year. Not sure what you mean by "are entitled to two weeks'
 15 vacation."
 16 MR. MEIKLEJOHN: Let's take a look at Page 171.
 17 (Witness examined the document.)
 18 BY MR. MEIKLEJOHN:
 19 Q. So, is it in fact the case under the handbook that PhD
 20 students in Biomedical Sciences or Neuroscience receive two
 21 weeks of paid vacation each year?
 22 A. It is what is written here in this -- this --
 23 Q. In the student handbook?
 24 A. This is what this is.
 25 (Pause.)

Page 134

1 HEARING OFFICER KUMA: Petitioner, what exhibit is that?
 2 MR. MEIKLEJOHN: Employer Exhibit 2. That's the handbook.
 3 HEARING OFFICER KUMA: Okay, Employer Exhibit 2, okay.
 4 MR. MEIKLEJOHN: That's -- okay.
 5 MS. ROTHGEB: Page 171.
 6 (Pause.)
 7 COURT REPORTER: Is it supposed to be on the screen?
 8 MR. MEIKLEJOHN: No. I don't think so.
 9 COURT REPORTER: All right, I -- because I don't see it.
 10 Okay, I just wanted to make sure. Thank you.
 11 (Pause.)
 12 (Petitioner's P-13 marked.)
 13 BY MR. MEIKLEJOHN:
 14 Q. I'm showing you what's been marked as Petitioner's 13, and
 15 ask you is this ISMMS's policy on intellectual property?
 16 A. I'm sorry, what -- what are you showing me? Is this on
 17 the handbook? Or is this something else?
 18 Q. I'm sorry, this is a different document. This --
 19 A. Right.
 20 Q. -- is the document taken from Research Portal of ISMMS.
 21 A. Okay.
 22 Q. Is this the policy on intellectual property?
 23 A. Maybe. I don't know, to be honest with you. You see --
 24 you know, I don't know.
 25 Q. Do you know whether it is the policy of ISMMS that any

Page 135

1 intellectual property developed by any researchers at ISMMS is
 2 the property of ISMMS?
 3 A. Yes.
 4 Q. And that policy applies to students, as well?
 5 A. I believe it does.
 6 MR. MEIKELJOHN: All right, can I have an opportunity to
 7 consult with the -- my team?
 8 HEARING OFFICER KUMA: Yes, but before you do, does the
 9 Employer object to Petitioner Exhibit 13?
 10 MR. LUPION: At the moment, yes. There's no foundation.
 11 MR. MEIKELJOHN: Okay. We'll, I am going --
 12 MR. LUPION: He hasn't -- he hasn't moved --
 13 MR. MEIKLEJOHN: I didn't move it because she did identify
 14 it.
 15 I am going to ask whether the Employer, during a break,
 16 would be willing to review the Petitioner's exhibits and
 17 determine whether those exhibits are authentic ISMMS documents
 18 or whether we would be required to call witnesses to identify
 19 each and every one of them?
 20 MR. LUPION: Yeah, if we're still on the record, I
 21 would --
 22 MR. MEIKLEJOHN: I believe we are, yes.
 23 MR. LUPION: Okay. I would note that, I believe it was
 24 Petitioner 1, the -- which was the faculty handbook for the
 25 entire Icahn School of Medicine, and this is the same. The

Page 136

1 Icahn School of Medicine that, to the extent that there are any
 2 differences between those documents that you pulled and the --
 3 and the policies that pertain specific to graduate students in
 4 accordance with the graduate student handbook, I believe the
 5 mission statement was one such difference that applied to
 6 faculty, and one applied to graduate students.
 7 But I need to confer with my client. I believe that
 8 the -- that these are authentic documents.
 9 HEARING OFFICER KUMA: Okay.
 10 MR. MEIKELJOHN: Well, I think one of them from the
 11 Medical School, so I have to fix that.
 12 MR. LUPION: I'm going to object to that. That -- that we
 13 will not -- that is a -- that is not, but the one -- I think it
 14 was Petitioner 1 and Petitioner 13 --
 15 MR. MEIKLEJOHN: Well, I I got in. I know I got 1 in
 16 there.
 17 MR. LUPION: So it was --
 18 MR. MEIKLEJOHN: That's all right, we don't need to
 19 continue to debate this.
 20 HEARING OFFICER KUMA: All right, so we'll --
 21 MR. LUPION: No, I don't think you did. Did you get --
 22 HEARING OFFICER KUMA: We'll take a recess and go off
 23 record while you convey with your team.
 24 (Whereupon, a brief recess was taken.)
 25 HEARING OFFICER KUMA: Back on the record.

Page 137

1 Does the Petitioner have any more questions for the
 2 witness?
 3 MR. MEIKELJOHN: No, sir.
 4 HEARING OFFICER KUMA: Okay. Does the Employer have any
 5 redirect questions?
 6 MR. LUPION: Yes. Very brief redirect for Dr. Filizola.
 7 Is she -- is the witness back?
 8 THE WITNESS: I'm here. I'm here.
 9 MR. LUPION: Terrific, thank you.
 10 REDIRECT EXAMINATION
 11 BY MR. LUPION:
 12 Q. Doctor, you testified on cross-examination that outside of
 13 our own lab you are aware of PhDs being listed on grants as
 14 non-key personnel for budgeting or cost purposes. Do you
 15 recall -- do you recall that testimony?
 16 A. Yes.
 17 Q. Okay. When that is the case, and a student appears on a
 18 grant, is the student required to perform any services for the
 19 PI outside of their academic thesis requirements?
 20 A. No.
 21 Q. Is the student required to perform any services for the
 22 Graduate School outside of the academic thesis requirement?
 23 A. No.
 24 MR. LUPION: I have no further questions.
 25 MR. MEIKELJOHN: I do have some follow-up to that, if I

Page 138

1 may, please?
 2 HEARING OFFICER KUMA: You may.
 3 MR. MEIKELJOHN: Thank you.
 4 RE-CROSS-EXAMINATION
 5 BY MR. MEIKLEJOHN:
 6 Q. Is the PI who has been awarded the grant responsible for
 7 ensuring that all work funded by that grant furthers the
 8 objectives of the grant?
 9 A. Yes.
 10 MR. MEIKELJOHN: No further questions.
 11 HEARING OFFICER KUMA: Employer?
 12 MR. LUPION: Yeah. One -- one brief question.
 13 FURTHER REDIRECT EXAMINATION
 14 BY MR. LUPION:
 15 Q. When -- what a PhD student appears on a PI's grant, why --
 16 is that because the student's thesis proposal is related to the
 17 subject covered by the grant?
 18 A. Yes.
 19 MR. LUPION: Nothing further.
 20 MR. MEIKELJOHN: Nothing further.
 21 HEARING OFFICER KUMA: All right.
 22 Dr. Filizola, you are dismissed for the day, but as this
 23 hearing continues you may be called back, so please ready to be
 24 called. The Regional Director may need to speak to you again,
 25 or may have additional questions moving forward, and your

Page 139

1 testimony may be needed for clarification. So --
 2 THE WITNESS: I can remain on the call if you --
 3 HEARING OFFICER KUMA: You don't have to remain on the
 4 call.
 5 THE WITNESS: Okay.
 6 HEARING OFFICER KUMA: You're more than welcome. The
 7 Employer -- if you're needed, the Employer can go ahead and
 8 communicate that you're needed and we can wait for you to
 9 appear.
 10 THE WITNESS: Thank you.
 11 MR. MEIKELJOHN: I don't think he meant today, anyway.
 12 HEARING OFFICER KUMA: Not today, but just going on
 13 because this will continue for the next couple days.
 14 THE WITNESS: Thank you.
 15 (Witness excused.)
 16 HEARING OFFICER KUMA: The Employer's going to call their
 17 next witness, but we're going to adjourn for lunch. We're
 18 going to take an hour's recess and we're going to adjourn back
 19 for 2:00 p.m.
 20 (Whereupon, at 1:01 p.m., a luncheon recess was taken.)
 21
 22
 23
 24
 25

Page 140

1 AFTERNOON SESSION
 2 (Time Noted: 2:00 p.m.)
 3 HEARING OFFICER KUMA: Back on the record.
 4 Will the Employer call their next witness?
 5 MR. LUPION: Yes, Mount Sinai calls Dr. Matthew O'Connell.
 6 DR. O'CONNELL: Hey.
 7 HEARING OFFICER KUMA: Dr. O'Connell, please raise your
 8 right hand.
 9 (Whereupon,
 10 MATTHEW J. O'CONNELL, PhD,
 11 was called as a witness and, after having been duly sworn, was
 12 examined and testified as follows:)
 13 HEARING OFFICER KUMA: Okay, put your hand down.
 14 DIRECT EXAMINATION
 15 BY MR. LUPION:
 16 Q. Good afternoon, Dr. O'Connell. Can you please spell your
 17 name for the record?
 18 A. Yes, it's Matthew, M-A-T-T-H-E-W, O'Connell, O,
 19 apostrophe, C-O-N-N-E-L-L.
 20 Q. Doctor, are you currently employed?
 21 A. I am a professor of Oncological Sciences and senior
 22 associate dean for PhD programs at the Icahn School of Medicine
 23 at Mount Sinai in New York City.
 24 Q. Can you tell us about your educational background?
 25 A. I did my PhD and bachelor's degree in Australia,

Page 141

1 University of Adelaide. That's where I was born. I then did
 2 post-doctoral, continuing my training as a post-doctoral fellow
 3 at what was at the time the University of Medicine and
 4 Dentistry of New Jersey, now known I believe as Rutgers Medical
 5 School. I then spent -- I joined a lab that moved. We were
 6 originally at Oxford University in the UK and then moved into
 7 London, into what was at the time called the Imperial Cancer
 8 Research Fund, which became Cancer Research UK.
 9 Q. And when did you start at Mount Sinai?
 10 A. 2002.
 11 Q. Did you have any employment -- did you -- did the
 12 background you sketched out take you from education to your
 13 time at Mount Sinai?
 14 A. No. In the interim, I went back to Australia to the Peter
 15 MacCallum Cancer Centre. It was the Peter MacCallum Institute
 16 at the time, a tertiary care cancer facility with patient care
 17 and research, from 1995 to 2002.
 18 Q. Okay. And you mentioned one of the hats you currently
 19 wear is a professor of oncological study sciences.
 20 A. That's true.
 21 Q. In connection with that role do you run a laboratory?
 22 A. I do.
 23 Q. Are you the PI or principal investigator for that lab?
 24 A. I am.
 25 Q. Okay. And with respect to the other hat that you wear,

Page 142

1 the senior associate dean of PhD programs for the Graduate
 2 School, can you describe your duties and responsibilities in
 3 that role?
 4 A. So as senior associate dean for PhD programs, I spend a
 5 lot of time on the recruitment and admissions of our PhD
 6 classes that, you know, their arrival and integration into our
 7 Graduate School progress as they go through. I am involved in
 8 curricular review and development, as well as a lot of
 9 mentoring and advising of our students.
 10 Q. The mentoring that you mentioned, is that limited to
 11 students in your lab or, or the student population generally?
 12 A. Student population general.
 13 Q. Okay. I'd like to ask you some questions about the
 14 structure of the PhD program. How many -- how many PhD
 15 programs does the Graduate School offer?
 16 A. The Graduate School offers four PhD programs. I am
 17 primarily responsible for two, the PhD in biomedical science
 18 and PhD in neuroscience.
 19 Q. And just for the record, what are the other two programs?
 20 A. PhD in clinical research and the medical science training
 21 program, otherwise known as MD-PhD.
 22 Q. How many students are in the PhD programs in biomedical
 23 science and neuroscience?
 24 A. It fluctuates through the year as people graduate and come
 25 in. I believe at the moment there's about 260. People are

Page 143

1 still graduating. But a new class arrives in August.
 2 Q. Okay. And roughly what percentage of that population is
 3 international -- are international students?
 4 A. Approximately, 20 to 25 percent.
 5 Q. And can you briefly explain the difference in -- between
 6 the two PhD programs, what the one biomedical science on the
 7 one hand and neuroscience on the other?
 8 A. The PhD in neuroscience program is specifically focused on
 9 the study of the different branches of neuroscience and
 10 understanding the human brain and behavior in normalcy and
 11 disease. So that involves molecular neuroscience through to
 12 behavioral. And they have their own curriculum commensurate
 13 with that, those studies.
 14 The PhD in biomedical science is an umbrella program with
 15 seven multidisciplinary training areas under it, which has a
 16 separate curriculum. But the credit structure, overall
 17 structure, progress through the degrees, etc., is the same.
 18 Q. Okay. For students in the PhD program in biomedical
 19 science, you said there are -- how there are different MTAs or
 20 multidisciplinary training areas.
 21 A. Yes.
 22 Q. Can you -- can you identify those?
 23 A. Yeah. They are -- let me get this straight. Artificial
 24 intelligence and emerging technology in medicine, cancer
 25 biology, development and regenerative science, genetics and

Page 144

1 genomic sciences, immunology, microbiology, and the recently
 2 renamed mechanisms of disease and therapeutics, formerly
 3 pharmacology and therapeutic discovery.
 4 Q. And is neuroscience its own MTA?
 5 A. It is.
 6 Q. For students in, in the PhD programs that you -- that you
 7 oversee, can students choose their MTA?
 8 A. They do.
 9 Q. Okay. How does Mount Sinai -- or what, what's the
 10 difference between the, the various MTAs that you just, just
 11 described?
 12 A. It's their research focus. So you shouldn't see them as
 13 completely separate entities. They're more like intersecting
 14 Venn diagrams with concentrations of research under those
 15 descriptive titles.
 16 Q. Okay. And in terms of content, not the specific
 17 disciplines, but can you tell us the, the different things
 18 students would participate in depending on, on their MTA, like
 19 seminars, journals, and the like. Can you -- can you elaborate
 20 on that?
 21 A. Yeah, that -- on the -- that would start in their second
 22 year of their PhD. And then their journal clubs with some
 23 progress seminars, etc., would be more aligned to the training
 24 areas, goals, and research strengths, whereas in the first year
 25 it's an umbrella structure of, you know, the seven biomedical

Page 145

1 sciences that would be all in the same curricular activities.
 2 Q. Okay. Who -- is there a person or persons who sits on top
 3 of each MTA?
 4 A. Yes, there are. It's for most of them there are two
 5 co-directors, yes.
 6 Q. Okay. And is that -- is that -- what's that person's
 7 title?
 8 A. Multidisciplinary training area co-director.
 9 Q. Is that the same thing as a PhD program director?
 10 A. No. It's more specifically the activities of their
 11 training area.
 12 Q. Okay. I want to ask you some questions about the
 13 application process for the PhD students. How many
 14 applications does Mount Sinai receive for admission to its PhD
 15 programs in biomedical science and neuroscience? And you
 16 can -- you can answer with respect to the most recent admission
 17 cycle.
 18 A. I believe last year we received 1,018.
 19 Q. Are there any distinctions in the admissions process for
 20 the biomedical science and neuroscience programs?
 21 A. We ask the applicants to indicate a first, second, and
 22 third choice of interest, which is purely designed to make sure
 23 appropriate scientific expertise looks over their application.
 24 But the application documents, themselves, are identical.
 25 Q. Okay. Of the -- do you then interview a select group of

Page 146

1 those -- of those applications?
 2 A. We do.
 3 Q. And of the 1,018 applications, how many applicants did you
 4 interview?
 5 A. Last year, I think it was about 215, 217, something like
 6 that.
 7 Q. And of that group, how many of those applicants were
 8 offered admission?
 9 A. Approximately 130, I believe.
 10 Q. Of those who were offered admission, how many students
 11 matriculated?
 12 A. I think the final number was 61. I haven't committed
 13 these numbers to memory, but --
 14 Q. So that was the -- that was the application process.
 15 Could you -- could you describe the admissions process for the
 16 PhD programs in biomedical science and neuroscience?
 17 A. So the admissions process is to take all the applicants,
 18 assist them in a wholistic fashion as individual applicants and
 19 then prioritize who we think are the strongest applicants. So
 20 the first stage is to narrow the list to interviewees. We
 21 interview them. They are interviewed by three faculty and one
 22 student representative.
 23 And the rest of the process is information gathering for
 24 the applicants. Confidential reports are filed. Then an
 25 admissions committee assesses those and rank-orders the

Page 147

1 interviewed candidates. From there we make recommendations to
 2 the dean about who should receive an offer.
 3 Q. When a student is offered admission, are -- is the
 4 admission to the PhD program generally or to the PhD program in
 5 biomedical science or PhD --
 6 A. Generally.
 7 Q. Generally, okay.
 8 A. Generally, because it's this -- it's one application. But
 9 having said that, the neuroscience students are -- tend to
 10 remain as in their interest as in neuroscience.
 11 Q. Okay. And for the students in the PhD program in
 12 biomedical science, at what point do -- are students admitted
 13 into a specific MTA?
 14 A. No.
 15 Q. At what point -- do students get to choose their MTA?
 16 A. They come in as a first-year student. They begin their
 17 course work. They carry out research rotations, which are
 18 hands-on experiences in different laboratories which may be
 19 aligned to different MTAs. And when there is a mutual match to
 20 conduct the rest of their research training, it is then that
 21 the MTA is decided upon. So it's largely project driven.
 22 Q. So that would be generally towards the end of the
 23 student's -- after the first year of the course study?
 24 A. In the second half of the first year, yeah.
 25 Q. Okay. Thank you. Can -- can PhD students apply directly

Page 148

1 to join a specific MTA during the application process?
 2 A. No.
 3 Q. Can they apply to research with a specific PI?
 4 A. No.
 5 Q. Or, or can they apply to a specific laboratory?
 6 A. No, they cannot.
 7 Q. Okay. Are the admissions requirements generally the same
 8 for both PhD programs?
 9 A. Yes.
 10 Q. And -- sorry, go ahead?
 11 A. Identical.
 12 Q. And who, who establishes the requirements for, for
 13 admission?
 14 A. The applicant pool establishes the requirements. So we
 15 don't have a formula or a cutoff. We want to get the best
 16 possible trainees into our program. And there are generally
 17 accepted criteria that you want to see, but it's, it's the
 18 applicant pool that sets the bar.
 19 Q. Okay. How are admissions decisions for those who are
 20 offered admission communicated to applicants?
 21 A. They receive a letter via email through our student
 22 management system.
 23 Q. I'm going to introduce Mount Sinai Exhibit 3.
 24 (Employer's E-3 marked.)
 25 BY MR. LUPION:

Page 149

1 Q. Dr. O'Connell, do you recognize this document?
 2 A. I do.
 3 Q. And what is it?
 4 A. It -- let me just make sure I -- this is an offer for
 5 admission.
 6 Q. Is this a form, a template admissions letter?
 7 A. Yes. You can see a dear "chosen" name. It integrates
 8 within the management system to fill fields.
 9 Q. Have you seen this document before?
 10 A. Yes, I have.
 11 Q. Is this a document routinely kept in the ordinary course
 12 of a graduate student's affairs?
 13 A. Yes.
 14 MR. LUPION: I would offer this exhibit, Mount Sinai
 15 Exhibit 3 into evidence.
 16 MR. MEIKELJOHN: Just two questions, please.
 17 VOIR DIRE EXAMINATION
 18 BY MR. MEIKLEJOHN:
 19 Q. First, this was the -- this was the standard form letter
 20 used for the, the incoming class that arrived last summer.
 21 Correct?
 22 A. Correct.
 23 Q. Okay. And this says that you're offering admission to the
 24 Graduate School of biomedical science. Would the letter be the
 25 same for neuroscience?

Page 150

1 A. Neuroscience is part of the Graduate School --
 2 HEARING OFFICER KUMA: Are you asking questions about the
 3 document or for Employer?
 4 MR. MEIKELJOHN: Yes. Well, I'm just --
 5 HEARING OFFICER KUMA: Or are you cross-examining him on
 6 the document?
 7 MR. MEIKELJOHN: I'm asking him questions about the
 8 significance of the document. I don't think --
 9 MR. LUPION: That goes beyond -- that goes beyond voir
 10 dire.
 11 HEARING OFFICER KUMA: No, no --
 12 MR. MEIKELJOHN: I don't think opposing counsel would have
 13 a problem with that but --
 14 HEARING OFFICER KUMA: Tom, then you can do that on cross.
 15 If you're going to use Voir Dire to talk about where the
 16 document came from -- did I miss it? How the document was
 17 given to students, the compensation rates, if it's the actual
 18 figures, if he's familiar with the document then that's fine.
 19 But anything outside of that I have to stop you there, okay?
 20 MR. MEIKELJOHN: I'll ask about how it's used then.
 21 BY MR. MEIKLEJOHN:
 22 Q. Is this the form letter that was used for students being
 23 admitted to the neuroscience program?
 24 A. It may have slightly different language in the opening
 25 paragraph, but all of the details are identical.

Page 151

1 MR. MEIKELJOHN: No objection.
 2 HEARING OFFICER KUMA: Okay. Employer's -- you said this
 3 was Exhibit 3? Offer is received.
 4 (Employer's E-3 received.)
 5 THE WITNESS: May I -- may I add something thing, please?
 6 HEARING OFFICER KUMA: Of course.
 7 THE WITNESS: This is not for the class. It, it's a year
 8 earlier, looking at the dates. But the language will be the
 9 same.
 10 CONTINUED DIRECT EXAMINATION
 11 BY MR. LUPION:
 12 Q. Do you -- do you know who drafted this letter?
 13 A. Originally, I don't know. It's been modified in the
 14 bullet points and subtle detail over the years. But the
 15 essence is the same.
 16 Q. All right. In the middle of the page where the letter
 17 describes funding and benefits package for PhD students, do you
 18 see that?
 19 A. Yes.
 20 Q. Can you walk us through the different benefits listed here
 21 for these students?
 22 A. Okay. So there is their direct compensation, commonly
 23 referred to as a stipend. That is designed to cover their cost
 24 of living. There's an asterisk next to it, because I believe
 25 it refers further down in the letter to the date to which that

Page 152

1 number applies to. The -- any tuition costs, which are
 2 minimal, are covered as health insurance for the -- for the
 3 students. Housing that is highly affordable is offered and the
 4 students can choose to use that or use other options depending
 5 upon their life circumstance. So that's, that's the package.
 6 Q. Okay. And I believe you said that these are to defray
 7 their living expenses?
 8 A. Correct.
 9 Q. And why is that? What's the purpose of, of doing so?
 10 A. Well, they have to pay their rent and utilities, and buy
 11 groceries, and, you know, exist in New York City.
 12 Q. Is that so that they can focus on their studies?
 13 A. Yes.
 14 Q. Okay. Is the amount of the stipend or any other component
 15 of this package in exchange for services to be performed for
 16 the Graduate School?
 17 A. No, there's no stipulation.
 18 Q. Are these -- the benefits outlined in these bullet points,
 19 are those the same for students in biomedical science and
 20 neuroscience?
 21 A. They are.
 22 Q. Does, does Mount Sinai provide these benefits to its
 23 employees?
 24 A. No. This is specifically for PhD students.
 25 Q. I know we discussed that the PhD student couldn't apply to

Page 153

1 a specific lab. Are PhD students in biomedical science or
 2 neuroscience assigned to a specific lab upon acceptance?
 3 A. No. They choose laboratories in consultation with
 4 academic and peer advisors.
 5 Q. Are students assigned to conduct research in a specific
 6 area upon admission?
 7 A. No, same answer.
 8 Q. And same answer with respect to a specific research topic?
 9 A. Correct.
 10 Q. Okay. Do PhD students in biomedical science or
 11 neuroscience required to perform any service to maintain the
 12 funding and benefits outlined here?
 13 A. No. They are required to make sufficient academic
 14 progress through their studies and training.
 15 Q. And there is no -- is there, is there a teaching
 16 requirement?
 17 A. No requirement to teach.
 18 MR. LUPION: I'd like to talk now about the curriculum,
 19 and I'd introduce Mount Sinai Exhibit 4.
 20 (Employer's E-4 marked.)
 21 MR. LUPION:
 22 Q. Dr. O'Connell, do you recognize this document?
 23 A. Yes. It's an example of a Roadmap.
 24 Q. A roadmap for what?
 25 A. Student progress.

Page 154

1 Q. Towards completing a PhD degree?
 2 A. Correct.
 3 Q. Have you seen this document before?
 4 A. Yes. And iterations thereof, yes.
 5 Q. Are you -- leaving aside the format of this document, are
 6 you -- are you one of the authors in determining what those
 7 academic milestones are?
 8 A. Yes, but not the sole author. And the milestones
 9 serve -- well, I'll leave it at that.
 10 Q. Okay. Well, who are the other contributors to the content
 11 of this document?
 12 A. Well, the, you know, the faculty. Of course, the dean.
 13 The MTA co-directors and so on. And like all things in
 14 research, we have to be flexible and evolve. But the rationale
 15 behind these milestones is to facilitate the student to proceed
 16 with their training in a timely fashion.
 17 Q. Okay.
 18 A. It's guidelines.
 19 Q. Is this a document routinely kept in the course of the
 20 graduate student's affairs?
 21 A. Yes
 22 Q. The Graduate School -- yes, okay.
 23 MR. LUPION: I would offer Exhibit 4 into evidence.
 24 MR. MEIKELJOHN: Well, I would ask for voir dire on the
 25 color coding. If, if you're planning to do that, I'll wait.

Page 155

1 MR. LUPION: Not the color coding. Just the content on
 2 the -- on the left-hand side of the -- left-hand side of the
 3 page.
 4 MR. MEIKELJOHN: Then just in order to make -- I think
 5 Voir Dire is appropriate to ensure that the information in the
 6 document is understood.
 7 VOIR DIRE EXAMINATION
 8 BY MR. MEIKLEJOHN:
 9 Q. Could you explain what the color codes mean?
 10 A. I don't believe they're significant other than to
 11 distinguish different types of activities. I should also add
 12 that documents such as these serve to fulfill our accreditation
 13 requirements.
 14 MR. MEIKELJOHN: Can you -- can you make it bigger?
 15 HEARING OFFICER KUMA: Doctor, can you say that again?
 16 I'm sorry. I could not hear what you said.
 17 THE WITNESS: I think it's hard for me to read on my
 18 laptop screen. But memory serves that the colors refer to
 19 different types of activities. There's no actual significance
 20 in the colors per se. But they outline a passage through for a
 21 student, align expectations, and also serve to show that we
 22 have a framework for accreditation purposes, i.e. the agencies
 23 that enable us to confer degrees.
 24 MR. MEIKELJOHN: I have no objection.
 25 HEARING OFFICER KUMA: Okay, thank you.

Page 156

1 MR. MEIKELJOHN: Other than can you make it just a little
 2 bit bigger?
 3 MR. LUPION: Yeah, we'll do our best. When we -- when we
 4 get to the specifics, we will.
 5 HEARING OFFICER KUMA: Okay. Since there is no objection,
 6 Employer's Exhibit 4 offer has been received into evidence.
 7 (Employer's E-4 received.)
 8 CONTINUED DIRECT EXAMINATION
 9 BY MR. LUPION:
 10 Q. Doctor, to the extent you haven't already done so, can you
 11 describe the purpose of this document? Why does it exist?
 12 A. It's, it's a visual representation to monitor student
 13 progress.
 14 Q. Okay. Does this document apply to all PhD students or
 15 just those in the, the two stipend-granting programs?
 16 A. The two stipend-granting programs.
 17 Q. Okay. Doctor, could you explain the -- or describe rather
 18 the curriculum for a PhD student in the first -- in the first
 19 year of study? We can -- we can zoom in if --
 20 A. Yes, I can. Core courses refer to classroom work where
 21 students receive the goal of the core courses. It is for the
 22 students to gain instruction at a breadth and depth to prepare
 23 them for their research.
 24 Statistics is, of which there are more than one option, is
 25 to facilitate analysis of data generated in the course of those

Page 157

1 experiments.
 2 RCR is a federal acronym meaning responsible conduct in
 3 research, which refers to research ethics, behavior, reporting,
 4 work in laboratory environments, and so on. That's line 2.
 5 Q. Okay. Doctor, do you see where it says students must
 6 register for lab rotation?
 7 A. Uh-huh.
 8 Q. Lab rotation is a course?
 9 A. It is. But that's where they -- so what I described on
 10 Line 2 takes approximate 50 percent of their time. And on Line
 11 3 is the majority of the rest of the time. That's when they
 12 move through different laboratories getting hands-on experience
 13 to facilitate the choice of laboratory in which to conduct
 14 their dissertation research.
 15 Q. And the students can choose which labs to rotate through?
 16 A. They can. They, they do it with -- in consultation with,
 17 as I said before, with academic and peer advisors.
 18 Q. Okay. And when would lab rotations begin?
 19 A. For some students, they begin on the first day of the
 20 semester, as indicated in 2022 there. But it's not always
 21 feasible for it to be precisely that date, depending upon if
 22 the student has multiple options or availability of the PI
 23 because of the time of year. But, generally, most are rotation
 24 by early September.
 25 Q. About how many labs can a PhD student choose from in

Page 158

1 selecting their lab rotations?
 2 A. I believe the current -- it varies from year to year,
 3 okay. So there's over 300 basic research laboratories. In any
 4 given year, I would say a little over 200 would be available to
 5 take rotation students.
 6 Q. What are -- generally, what are -- how do those 200 labs
 7 differ from each other?
 8 A. The focus of their research and most importantly. But
 9 also, we're dealing with a level of training that's one-on-one
 10 training and a commitment, a long-term commitment to the
 11 student. And so there has to be a match between the incoming
 12 student and the laboratory, the PI, culture, you know, the
 13 feeling of the lab. So they feel that they've entered an
 14 environment in which they can thrive and obtain training that
 15 takes them to their full potential before they move on to the
 16 next challenges they have in life.
 17 Q. When you said that -- I understood you to be referring to
 18 both a match with respect to subject matter and personality.
 19 Is that -- is that --
 20 MR. MEIKELJOHN: I mean I, I object to leading. You may
 21 have understood that, but that's not what he said. I think --
 22 HEARING OFFICER KUMA: Sustained.
 23 MR. MEIKELJOHN: The testimony --
 24 HEARING OFFICER KUMA: Sustained.
 25 THE WITNESS: Would you like me to repeat my answer?

Page 159

1 BY MR. LUPION:
 2 Q. What did -- what did you mean by a match?
 3 A. A match means the project is what the student is looking
 4 for, okay? Meaning that's the skillset that they want to
 5 develop. And the environment and PI, etc., and in fact often
 6 is influenced, I should say, by their experiences before they
 7 come in. But we're dealing with -- it's not like you join a
 8 class of hundreds, you know. You're now narrowing it down.
 9 And so you have to enter a mentoring relationship that is also
 10 a match. And that's what I meant by environment.
 11 Q. Thank you, doctor. Can you explain the process for lab
 12 rotations for PhD students in biomedical science and
 13 neuroscience?
 14 A. Yes. So in consultation with academic advisors, which
 15 they're assigned very early in the process, and we, we
 16 encourage them to seek experiences of current and former
 17 students as well, they choose a laboratory to rotate in. The
 18 first thing they do and it's listed on line 5 I think is fill
 19 out the rotation agreement form to match expectations between
 20 the PI and the student as to what the goals of the rotation
 21 are. Okay?
 22 And then they begin that rotation. They, after 3 weeks,
 23 they're asked to have a weekly discussion in person, or Zoom,
 24 or email, to check in with how it's going and are they on a
 25 moving forward, on a road ahead to a potential match. Either

Page 160

1 party may determine it's not a match for the reasons that I
 2 outlined before, in which case they can then terminate the
 3 rotation and move onto a different one.
 4 If it is moving towards a match, then they continue that
 5 rotation for 6 to 8 weeks. And then they either declare the
 6 laboratory or move onto a different experience, excuse me,
 7 experience.
 8 Q. During these lab rotations, doctor, what, what are the
 9 expectations of, of the student?
 10 A. Well, the only expectations that the school stipulates is
 11 to average no more than 4 hours a day in this process, to make
 12 sure they have protected time for their course work. And that
 13 there are open lines of communication. And then at the end of
 14 the process there is an evaluation submitted. As to the nuts
 15 and bolts of what happens on a day-to-day basis, that is
 16 completed by mutual agreement on the rotation agreement form.
 17 Q. During their -- these rotations, are students expected to
 18 perform services in furtherance of the PI's grant?
 19 A. No. They're expected to learn is this the right
 20 environment in which they can thrive as a training.
 21 Q. And if a student has no interest in a particular lab early
 22 on in the rotation, would that jeopardize a student's funding?
 23 A. No. They would just move to a different rotation.
 24 Q. Do PhD students receive a grade based on their lab
 25 rotation evaluation?

Page 161

1 A. A pass/fail grade.
 2 Q. What are the -- what if any are the consequences of
 3 failing a lab rotation?
 4 A. It can impact their grade point average. And a good
 5 academic standing in our school means maintenance of a GPA of
 6 3.0 or above. But I should say with proper communication and
 7 alignment of expectations, these are extremely rare.
 8 Q. Would the student lose funding in the event they failed a
 9 particular lab rotation?
 10 A. No.
 11 Q. Moving along to Year 1 spring semester, do you see where
 12 it says fill out dissertation advisor/MTA declaration?
 13 A. Yes. Milestone 1, yes.
 14 Q. Okay. Can you describe the nature of this academic
 15 milestone?
 16 A. So that, which doesn't have a particular date associated
 17 with it, but it's around then that we'd want to make sure that
 18 they found a home. So the rotation process has succeeded in
 19 obtaining that match for their training.
 20 Q. Does this mean -- does this mean that the student then --
 21 is this the equivalent of choosing a lab?
 22 A. Correct.
 23 Q. Okay. And what if any role does the PI of that chosen lab
 24 assume vis-a-vis the PhD student?
 25 A. Well, now they have finished their first year course work

Page 162

1 and so they move to a period of research owning. And so this
 2 is where they would begin their actual dissertation project.
 3 Q. Right. So my question, the student chooses a lab. What
 4 role if any does the PI of that lab assume, what role does that
 5 PI have vis-a-vis the PhD student?
 6 A. Well, they first and foremost, they become their research
 7 mentor, okay. And so they are responsible to advise them and
 8 be patient, and help them develop into scientists of substance,
 9 to provide guidance and training so that the student can begin
 10 under sort of pretty close supervision and advising. And then
 11 as they -- their skills develop, they would become somewhat
 12 more independent.
 13 Q. All right. Does the research mentor, is that -- does the
 14 PI have any role with respect to the student's dissertation?
 15 A. Yes. They are responsible to -- so when they declared a
 16 laboratory, Milestone 1, they also form an advisory committee
 17 of faculty, who is another layer of advisement and, and
 18 training. And they immediately begin moving towards defining
 19 the goals of their dissertation and research.
 20 Q. You used the words when the student declared a laboratory.
 21 A. Mm-hmm.
 22 Q. Is that -- does the student have a choice in which
 23 laboratory to pursue their studies?
 24 A. So long as they have rotated in that laboratory and that
 25 there is a mutual agreement with the PI, yes.

Page 163

1 Q. Okay. If one of the lab --
 2 A. They are not assigned.
 3 Q. They are not assigned, okay. If one of the PIs -- if one
 4 of the labs to which the student rotated, if one of those PIs
 5 was adamant that they had a student in their lab and extended
 6 an offer, can the student decline?
 7 A. Yes.
 8 Q. Okay. Can you describe the various responsibilities,
 9 duties and responsibilities of a PI vis-a-vis the PhD students
 10 in their lab?
 11 A. Yes. And the students are instructed in this as part of
 12 the RCR training, as are the PIs as in faculty development. So
 13 there are many. First and foremost is scientific direction,
 14 guidance, and advice. But you spend the time -- you invest,
 15 okay? And so you spend time with the student to outline what
 16 the questions are and what the thoughts are to go about
 17 researching those questions. Okay.
 18 But in addition, there's things like laboratory safety,
 19 leading by example, training in recordkeeping, much scientific
 20 discussion. You know science is a collaborative process. And
 21 make sure that the student is doing their dissertation and
 22 research, presenting it in both written and oral formats.
 23 That's why the journal clubs and the Works In Progress, because
 24 of they are important skills to obtain during a PhD. And so
 25 these are learned skills. They're not learned by diffusion,

Page 164

1 you know. It's, it's one-on-one training.
 2 Most importantly, I think, what stems from all of these
 3 efforts when they are kneaded together is a rich development of
 4 sort of analytical skills to, to take sort of a known unknown
 5 and turn that into existing knowledge. And those -- that
 6 skillset can be applied in all sorts of endeavors that
 7 contribute to the national scientific effort in the future.
 8 Q. Thank you, doctor. What is the purpose of selecting an
 9 MTA?
 10 A. That just groups them with students with related research
 11 interest and laboratories of related research interest. So
 12 that through things like journal clubs and Works In Progress,
 13 and interactions with peers and faculty, it can build in
 14 another layer of training to, to the students.
 15 Q. And again is that something that's assigned or the student
 16 chooses?
 17 A. A student chooses in consultation with the PI, yeah.
 18 Q. Does the -- once a student selects a PI, does -- is there
 19 any change in the role of the academic advisor who was
 20 initially assigned to, to the student?
 21 A. Yes. That role moves from the academic advisor to the PI.
 22 Q. So let's move along to Year 2. Can you describe the
 23 curriculum in Year 2 of the program?
 24 A. Um-hum. So by Year 2, they're now in a laboratory. And
 25 they undergo less, but still a significant amount of class

Page 165

1 work. But now it is specifically geared towards their research
 2 area, okay, in the sense of what the training area is. And so
 3 there's the ability to mix and match that across training areas
 4 if necessary or also we have some partner institutions.
 5 Journal clubs is where the students get together and discuss
 6 the literature. And that is both educational in terms of
 7 content, but also the process by which one converts research
 8 findings into a report to the community.
 9 The WIP is Works In Progress. That is all presentations
 10 where an important skill is oral presentation of your research,
 11 and that will vary upon audience. That again is a gained skill
 12 that develops over time.
 13 And the departmental seminars are mostly external faculty
 14 who come into Sinai and present their laboratory's work to the
 15 training area/department or the community as a whole. In many
 16 cases, students also have the opportunity to meet those people
 17 and discuss their research. What do you want me to discuss
 18 next?
 19 Q. Well, I will ask -- I will ask you, doctor. How much time
 20 in percentage terms roughly is spent in the classroom during
 21 the second year?
 22 A. About 25 percent.
 23 Q. And where is the remaining 75 percent of their academic
 24 time spent?
 25 A. In the PI's laboratory.

Page 166

1 Q. Okay. Further down on this page, Milestone 2, the
 2 advisory committee declaration. Can you describe that for us,
 3 please?
 4 A. Yeah. So that's where the student and the PI agree upon
 5 at least three Sinai faculty to act as a second level of
 6 advisement to the student to -- for people who are not, what's
 7 the word, weighed down by the day-to-day aspects of the
 8 research, but can see it from a greater height and, and advise
 9 the student on their progress. We ask -- we require students
 10 to meet with their advisory committee at least once per
 11 semester.
 12 (Employer's E-5 marked.)
 13 BY MR. LUPION:
 14 Q. Thank you. I've now marked for identification Mount Sinai
 15 Exhibit 5, the compact for PhD students and preceptor overview
 16 sheet. Do you recognize this document, doctor?
 17 A. I do, yeah.
 18 Q. I'm sorry. I didn't --
 19 A. I recognize the document, yes.
 20 Q. What is it?
 21 A. It outlines expectations for the student and preceptor to
 22 form this mentoring partnership that I spoke about before.
 23 Q. Is preceptor another word for mentor or PI?
 24 A. Yes.
 25 Q. Did you have a hand in drafting this document?

Page 167

1 A. I did.
 2 Q. Is this a document routinely kept in the course of the
 3 Graduate School's affairs?
 4 A. It is.
 5 MR. LUPION: I will offer Exhibit 5 into evidence.
 6 MR. MEIKELJOHN: No objection.
 7 HEARING OFFICER KUMA: The Employer's offer is received
 8 and entered into evidence.
 9 (Employer's E-5 received.)
 10 BY MR. LUPION:
 11 Q. Doctor, how would you describe the objective? What's the
 12 objective of the mentor/mentee relationship between a PhD
 13 student and their PI?
 14 A. The objective -- the overall, overarching objective is,
 15 and it will differ from student to student, but it's, it's that
 16 they reach their full potential of training that they can
 17 obtain during their time in the program. And that will -- what
 18 that potential, the ceiling on that potential will differ
 19 between students. But it doesn't end at graduation. So the
 20 mentor continues. It's certainly something that I've
 21 benefitted from personally with career advisement, scientific
 22 advisement thereafter. So this is a true mentoring
 23 relationship.
 24 Q. And the, the letter or the compact sets forth student
 25 expectations. Can you -- can you describe the student

Page 168

1 expectations for us?
 2 A. Well, they're largely written around the milestones that
 3 we were talking about previously, plus any lab-specific or
 4 classroom-specific expectations were laid out for that
 5 individual student. As outlined here, things like
 6 documentation, laboratory safety, etc.
 7 Q. Okay. And the document also has -- describes expectations
 8 for all PIs. Right?
 9 A. Correct.
 10 Q. Can you briefly describe those for us?
 11 A. Well, this is where a preceptor takes on a mentoring role
 12 that spans again like we discussed from scientific advisement
 13 through to personal and career development. And it's to make
 14 sure that up front the student and the preceptor have written
 15 down in front of them expectations they can align.
 16 Q. Okay. So once a student joins a lab, how does the -- how
 17 does the research that they perform in that lab differ from a
 18 lab rotation?
 19 A. Due to the time constraints in a lab rotation, not all
 20 procedures or experimental approaches can be pursued, okay?
 21 Because many of these have very long time horizons. So the
 22 research rotation should be set out, as I discussed,
 23 specifically so that the student understands what joining that
 24 laboratory means. Once they declare a laboratory, then they
 25 take on a longer time horizon to test hypotheses within the

Page 169

1 aims of their research to build towards their thesis.
 2 Q. And is the -- withdrawn. What's a -- what's a thesis
 3 proposal?
 4 A. The thesis proposal is formulated in consultation with
 5 their PI and their advisory committee. It is the first time
 6 they document what the actual goals of their dissertation
 7 research are going to be and the approaches they will use.
 8 It's not a contract. It, you know, science has to be fluid.
 9 But it's to ensure that the student is proposing a body of work
 10 in which the goals of the training will be obtained and
 11 completion in a feasible time manner is realistic. It also
 12 serves as our qualifying exam where it's, it's a little bit
 13 outmoded now, but the expression is confirm a pantigin (ph.).
 14 So it, it looks for me.
 15 Q. Who is -- who evaluates or grades the, the student's
 16 thesis proposal?
 17 A. It is evaluated by their advisory committee and it may be
 18 supplemented by an MTA co-director or a designate if they are
 19 not already a member of the committee. And the supplementation
 20 is designed such that standards are equitable across all of the
 21 proposed.
 22 Q. You described for us earlier in your testimony the
 23 student's advisory committee. Is there also a thesis advisory
 24 committee?
 25 A. It's the same thing.

Page 170

1 Q. It's the same, okay. Is the PhD student's PI a member of,
 2 of the advisory committee?
 3 A. They are present, but they are not voting on the exams.
 4 Q. Can you explain?
 5 A. In a regular meeting -- well, because there is a conflict
 6 of interest, so the preceptor in their role as a mentor helps
 7 the student formulate the proposal. And so if you were to ask
 8 them to vote on it, they would say, yeah, this is a great idea.
 9 Right? So the goal here is to defend it to other people and
 10 get a fresh set of eyes and thoughts on it. If it's a regular
 11 meeting that's not associated with an exam, so you discuss
 12 progress, difficulties, limitations, technologies, etc., then
 13 the PI is actively involved in those discussions.
 14 Q. Doctor, how much, if any, academic freedom does -- do the
 15 students have to develop their thesis proposal?
 16 A. It varies. But it tends to expand as they move through
 17 the -- through their research.
 18 Q. Is a student's thesis based on their own research or the
 19 research of their PI?
 20 A. It's heavily influenced by the research expertise of the
 21 PI, because after all that's how they chose the lab. All
 22 right? And or it certainly was a significant component of
 23 that. But as to exactly how you go about fulfilling those
 24 goals is, is an evolution that is discussed between the student
 25 and the PI, and any other interested parts including the

Page 171

1 advisory committee.
 2 Q. So if, if a student's thesis proposal is approved, they
 3 pass the qualifying exam, what's the next step?
 4 A. They keep working towards defending their dissertation
 5 with every semester still meeting with the advisory committee.
 6 They will talk about modifications. Sometimes, paths of
 7 research that seemed sensible or, or crystal don't pan out and
 8 so you, you have to change your approach. Sometimes, you have
 9 to change a little bit based upon developments and the
 10 literature. That's what I meant by it not being a contract or
 11 a set like list of tasks. Right? So that's the process.
 12 Q. Okay, thank you. Turning back to the Roadmap, which was
 13 Exhibit 4, Mount Sinai Exhibit 4, are students required to
 14 register for a research course when developing their thesis
 15 proposal?
 16 A. Yes.
 17 Q. Okay. And is that -- is that reflected -- what, what
 18 research course does a student need to register for?
 19 A. Exactly what they're doing in the laboratory. It's just
 20 to say that they're here, they're present, they're doing it,
 21 and they're progressing.
 22 Q. Okay. Are there different courses for -- is there a
 23 different course for after the student's thesis proposal has
 24 been accepted?
 25 A. It's not a course in a traditional sense of an instructor

Page 172

1 and information. It's they are deriving new information and
 2 overall it makes up the credit requirements for accreditation
 3 to obtain the degree.
 4 Q. Would that be ASR-8000 before their approval of the
 5 thesis?
 6 A. Yes. And 9000 thereafter.
 7 Q. And do PhD students receive a grade in, in those courses?
 8 A. Satisfactory progress.
 9 Q. Okay. For, for both?
 10 A. Yes.
 11 Q. And is that denoted by SP?
 12 A. Yes.
 13 Q. How many credit hours, do you know?
 14 A. Per semester or per year?
 15 Q. Per semester.
 16 A. I think it's 10.
 17 Q. Okay.
 18 A. I stand to be corrected on that, but I'm pretty sure.
 19 Q. I have no reason to, to correct you. Is SP the same, the
 20 equivalent of pass/fail?
 21 A. Yes.
 22 Q. Would that grade be reflected on the student's transcript?
 23 A. Yes.
 24 Q. Okay. Looking to where it says Third Year and above, can
 25 you explain the typical curriculum for a PhD student in their

Page 173

1 third year of study and beyond, please?
 2 A. Yes. Now they've passed their qualifier, their thesis
 3 proposal, same thing, they are entirely devoted to their
 4 research training, which is augmented by the seminars and Works
 5 In Progress that you see here. Now that never stops. I mean I
 6 partake in those to this day. And you, you can't live in a
 7 bubble. And so that's where there's no more mandated class
 8 time.
 9 Q. Okay. And at what point is a PhD student prepared to
 10 defend their dissertation?
 11 A. When the advisory committee determines that the student
 12 has developed a body of research that is commensurate with a
 13 strong first or third peer review publication. And so it's,
 14 it's hard to describe that for an individual project, because
 15 each student it's different.
 16 Q. You said 100 percent of their time academically is spent
 17 in the lab. What proportion of that time is spent performing
 18 research in furtherance of the student's dissertation?
 19 A. Well, in its broader sense 100 percent, but that also
 20 involves reading the literature, planning experiments,
 21 analyzing data, etc. You know you don't just churn it out.
 22 You have to do experiments, analyze them, consider them within
 23 the field of study, and continue to move forward.
 24 Q. Can you explain the process generally for defending a
 25 dissertation?

Page 174

1 A. So the student writes their dissertation. And there is a
2 standard, fairly standard format for that in which they
3 describe their research findings, what they conclude from their
4 study, and preface it with an introduction that sets the, the
5 stage for why they did what they did. It also outlines the
6 materials and methods that we use during the course of their
7 study. That is submitted to the thesis defense committee,
8 which is similar to the qualifying exam committee, but by
9 convention includes an additional examiner from another
10 institution, PhD granting institution, who is an expert in the
11 field.

12 Then after consideration of the written document, the
13 student then presents a seminar that will be either part or the
14 whole of their research findings, depending upon the student,
15 and take questions from a public audience, but not from their
16 committee. After the public defense is adjourned, they then
17 meet with the exam committee, who ask for further questions and
18 clarifications, and so on. And then if any modifications to
19 the written document are stemming from those discussions,
20 they're outlined to the student before they deposit their
21 thesis.

22 Q. Thank you, doctor. What is the school's expectation for
23 how long it should take from time to enrollment to a successful
24 dissertation defense?

25 A. Expectation would be a strong word. It's going to depend

Page 175

1 upon the research program, the types of experiments, and
2 whether road blocks came up along the way.

3 Q. Let me -- let me ask the question differently. Is there a
4 typical time?

5 A. A typical time would be around about 5 years, but it's
6 limited to a maximum of no more than 7.

7 Q. And how long does Mount Sinai provide the funding that you
8 described earlier for a PhD student?

9 A. Well, if you mean Mount Sinai the community, it's, it's
10 for the duration.

11 Q. So that would be up to 7 years?

12 A. Up to deposit.

13 Q. What if a student needed longer than 7 years to complete
14 their, their degree?

15 A. Then they petition the dean with a specific reason as to
16 why.

17 Q. How often does that happen?

18 A. Rarely. It was somewhat affected by COVID. But the whole
19 idea behind the milestones is to avoid that becoming the
20 reality.

21 Q. In your time at the Graduate School, has a student ever
22 been denied additional years of funding?

23 A. No.

24 Q. We can go --

25 A. Sorry, I had to think back 21 years of students.

Page 176

1 MR. LUPION: Could we just take a brief five-minute break?

2 THE WITNESS: Sure.

3 HEARING OFFICER KUMA: Well, is this -- like are you
4 anticipating this is a break to decide whether you're done
5 or --

6 MR. LUPION: No. I probably have maybe about a half hour
7 more to go.

8 MR. MEIKELJOHN: Okay, just for my own planning purposes.

9 HEARING OFFICER KUMA: All right. So we'll take a
10 five-minute recess. We'll go off the record.
11 (Whereupon, a brief recess was taken.)

12 HEARING OFFICER KUMA: We're back on the record.

13 DIRECT EXAMINATION (continued)

14 BY MR. LUPION:

15 Q. Dr. O'Connell, how are the areas of research of a given
16 lab determined?

17 A. Well, it's a long process that begins with the PI's own
18 PhD training and develops through the post-doctoral training
19 years. And then when they establish their own laboratory, so
20 the challenge is to carve out a niche where you contribute
21 significant new information to your area of study.

22 Q. And broadly speaking, how, how do the -- the research
23 topic that the PhD chooses, how does that align with the
24 research area of the lab that the student chooses?

25 A. Generally, quite tightly, because it's a natural evolution

Page 177

1 of investigation.

2 Q. And is any of the research performed by a PhD student in a
3 lab, can that be in furtherance of their PI's grant without it
4 being related to their own thesis or dissertation?

5 A. No. Or it should not.

6 Q. Okay. Has a student ever complained to you about
7 performing research that is outside the scope of his or her
8 dissertation?

9 A. Not directly to me.

10 Q. Does Mount Sinai have a policies in place to ensure that a
11 student is not spending time on research outside of the scope
12 of their own dissertation?

13 A. This would be one of the roles of their advisory
14 committee.

15 Q. What about the role -- would the Office of Student Affairs
16 play a role?

17 A. Maybe if it got -- I can't say it never has, but
18 potentially.

19 Q. Can you describe or identify, rather, the various
20 constituents who are performing services in a -- in a research
21 laboratory?

22 A. What do you mean by services?

23 Q. Who is in the lab?

24 A. Okay. So it varies. But a typical lab will have the PI,
25 will have some people who are more advanced in their training,

Page 178

1 whether that be post-doctoral fellows, in some cases residents
 2 or medical fellows, followed by PhD students. Then maybe
 3 master's level students who are trainees as well. Okay. Then
 4 a number of labs will also have in addition to the trainee
 5 base, may have some employees, research assistants,
 6 technicians, whatever you want to call them, who are there not
 7 so much for training but to carry out specific tasks.
 8 Q. Can you describe the differences between a post-doc and a
 9 PhD student in a lab?
 10 A. Yeah. So a post-doc has already completed their PhD and
 11 so they are more developed in their training, and are probably
 12 the equivalent of like a medical resident to consolidate their
 13 training before they move onto independence. Whereas a student
 14 comes in, in a much more undifferentiated state with little to
 15 no knowledge on some occasions, which they will gain during
 16 their years of training.
 17 Q. Can you describe the differences if any in terms of
 18 mentoring time that a PI spends with a PhD student compared to
 19 a post-doc?
 20 A. Yeah. So a PhD student, in my experience, receives much
 21 more mentoring time, because they have more to learn. Whereas
 22 the post-doc, they're building off their prior mentoring
 23 experience. So it's, it's very much heavily weighted towards
 24 the students.
 25 Q. You also identified research assistants. What's the

Page 179

1 difference between a PhD student and a research assistant?
 2 A. A research assistant, you're not responsible for their
 3 training other than to carry out whatever their day-to-day task
 4 may be. They rarely have their own projects. They may assist
 5 other people or assist the general running of the lab. They
 6 may -- it depends from lab to lab. They may -- they're
 7 technical staff.
 8 Q. Okay.
 9 A. So they may be preparing reagents, genotyping mice, etc.
 10 Q. Doctor, if prior to a successful dissertation defense a
 11 student wants to change labs, can they?
 12 A. They can. And there is a process. If they haven't
 13 already, you know, when they're more advanced it's extremely
 14 rare. But if they decide that they've made a choice that
 15 didn't meet what they thought it was going to be or the
 16 research went in a direction other than they were anticipating,
 17 then they can change labs. If they've already rotated in the
 18 lab that they want to change to, simple. Otherwise, they get
 19 time to additional rotation.
 20 Q. Would the student in those cases lose funding?
 21 A. No.
 22 Q. Dr. O'Connell, when working in a lab, do PhD students get
 23 to take time off for vacation?
 24 A. Yes. And in fact I think it's super important that they
 25 do for their health and wellness. And it feeds back into their

Page 180

1 creativity as researchers.
 2 Q. How much time can PhD students take off for vacation?
 3 A. Well, the handbook outlines minimal expectations. I think
 4 they're rarely if ever applied. It would depend upon the
 5 circumstance. So, for example, I'm from Australia, so to visit
 6 my family is a huge time and money investment. I can't go
 7 there for the weekend. And if a student of mine is struggling
 8 and needs to take some time off, they take some time off.
 9 Sometimes, you have to tell them to take some time off because
 10 they're, they're in a rut. And so it's in consultation between
 11 the student and the PI generally.
 12 Q. So, doctor, I believe you were referring to the reference
 13 in the handbook that there's an expectation that students will
 14 take 2 weeks of, of vacation. In your experience --
 15 A. A minimum, plus legal holidays, yes.
 16 Q. In your experience, do students exceed that minimum?
 17 A. Almost always, yes.
 18 Q. Okay. Can we pull up Exhibit 5? Do you see
 19 the -- doctor, this is the compact again.
 20 A. Yes.
 21 Q. Do you see the paragraph where it outlines financial
 22 responsibility?
 23 A. Um-hum.
 24 Q. Can you -- can you describe the funding for PhD students?
 25 A. So it is aligned to the amount of time they're working

Page 181

1 towards their dissertation research. So in the beginning
 2 during the core course work and the rotations, they are 100
 3 percent funded by the institution. When they go into second
 4 year, it's a 75/25 split that reflects the time spent in the
 5 classroom versus the laboratory. And then after their
 6 qualifier, moving into third year and beyond, it's the funding
 7 is provided most commonly by the PI.
 8 Q. Do all PhD students receive this funding packet?
 9 A. Yes.
 10 Q. What about the students, the PhD students in clinical
 11 research?
 12 A. No. They pay tuition to do their PhDs. I'm referring
 13 specifically to the PhDs in biomedical science and
 14 neuroscience.
 15 Q. Thank you. For how many years do the PhD students in
 16 biomedical science and neuroscience receive this funding?
 17 A. For the duration of their studies.
 18 Q. Doctor, are you familiar with the term training grant?
 19 A. Yes.
 20 Q. What is a training grant?
 21 A. A training grant, otherwise known as a T-32 mechanism, is
 22 grants that are provided by the National Institutes of Health
 23 that provide partial support of U.S. citizens and permanent
 24 residents to conduct their research. It, it doesn't change the
 25 expectations of the school. Probably, the only palpable change

Page 182

1 is that they report progress to the program officer associated
 2 with that T-32 grant. And they will continue to monitor their
 3 career path after they've graduated, because it is a goal of
 4 most T-32 grants to funnel researchers into specific areas.
 5 Q. Do --
 6 A. Broad but, you know, so versus infectious disease, versus
 7 neuroscience, etc.
 8 Q. Do students who receive training grants have to perform
 9 services for the Graduate School in order to get funding?
 10 A. No.
 11 Q. For students funded in whole or in part by any training
 12 grant, does the Graduate School require them to perform any
 13 duties or training activities outside of their academic
 14 requirements?
 15 A. No.
 16 Q. For the portion of a PhD student's funding that comes from
 17 the PI, where does their PI get the funds to pay students?
 18 A. Various sources. The most common would be federal grants
 19 from agencies that particularly, because we're a medical
 20 school, the National Institutes of Health, but also the
 21 National Science Foundation. Department of Defense has grants.
 22 Then there would be foundations, which tends to be disease
 23 focused foundations.
 24 Q. Um -- I'm sorry.
 25 A. Institutional funds. And would make up the lion's share

Page 183

1 of the student's funding, yeah.
 2 Q. With respect to grants, do PI's have to apply for those
 3 grants?
 4 A. They do.
 5 Q. And generally speaking, what kind of information does a PI
 6 need to give to an agency in order to receive a grant?
 7 A. They need to provide a scientific premise on which the
 8 research is based, be that their own evidence or evidence in
 9 literature, typically augmented by pilot studies in their own
 10 laboratory during the natural course of their research. And
 11 then a detailed research plan that are specific aims, that test
 12 hypotheses. But again this is not a contract. And so there is
 13 some fluidity in what those aims are.
 14 Q. What do you mean by that, doctor, it's not a contract?
 15 A. A contract is like a company says we want you to produce
 16 this chemical compound and test it in, in this disease or
 17 something. So it has a defined beginning, middle, and an end.
 18 Right? Whereas a grant or a research proposal outlines areas
 19 of unknown knowledge and hypotheses about how it might work,
 20 the testable experiments to gather evidence, to understand
 21 those processes.
 22 Q. Doctor, have you -- are you familiar with the term key
 23 personnel?
 24 A. Yes, I am.
 25 Q. Can you describe the meaning of that term, please?

Page 184

1 A. So that pertains -- the actual expression is coined for
 2 the National Institutes of Health on their research grants.
 3 And key personnel is defined, I believe, and I paraphrase, as
 4 an individual without whom the research could not take place.
 5 Q. Okay. As a PI, have you ever listed a PhD student as a
 6 key personnel on any of your grant applications?
 7 A. Never.
 8 Q. I'm sorry?
 9 A. No, I have not.
 10 Q. You've never, you said. Why not?
 11 A. Because you don't know who they are until they go through
 12 the admissions process. You would -- you would hope that your
 13 mentoring and training would provide someone capable of doing
 14 that later in their career, but they don't have that skillset
 15 at the beginning. Right?
 16 Q. Doctor, if, if a PhD student were listed on a grant
 17 application as, as non-key personnel, would they be required to
 18 perform services in furtherance of that grant?
 19 A. Not services, no. But the natural course of events would
 20 be research under that umbrella of the interests of the lab,
 21 yes.
 22 Q. And but, doctor, if a student happened to have been on a
 23 grant, but decided they were no longer interested in pursuing
 24 the research covered by that grant, could they be taken off?
 25 A. Yes. Because it has to be moving towards the final goal,

Page 185

1 which is to write, and defend, and deposit their dissertation.
 2 Q. When in a lab would the students be required to perform
 3 services outside of their academic requirements to remain
 4 funded?
 5 A. Not in our program.
 6 Q. And are there any conditions that a PhD student in
 7 biomedical science or neuroscience must satisfy in order to
 8 remain funded?
 9 A. They need to maintain a grade point average of 3.0 or
 10 above, and make adequate scientific progress in their research
 11 as determined by their advisory committee.
 12 Q. Okay. And is that -- is that what the Graduate School
 13 determines to be satisfactory academic progress?
 14 A. Correct.
 15 Q. Do PhD students in biomedical science or neuroscience need
 16 to fulfill any service requirements like being a TA in order to
 17 maintain funding?
 18 A. No.
 19 Q. Do PhD students in biomedical science or neuroscience need
 20 to be a research assistant in order to maintain funding?
 21 A. No.
 22 Q. Is a PhD student's funding conditioned on them fulfilling
 23 the requirements of their PI's grants?
 24 A. No.
 25 Q. If a PhD student in biomedical science or neuroscience was

Page 186

1 performing poorly in the lab, could they lose their funding?
 2 A. I doubt it would ever go that far, because the advisory
 3 committee would suggest new lines of investigation.
 4 Q. If a student's PI lost funding, would the PhD student in
 5 that lab lose funding?
 6 A. No.
 7 Q. Who would -- who if anyone would absorb that funding?
 8 A. Various sources. The department may be able to provide
 9 funds. The institute to which that department aligns may be
 10 able to provide funding. And generally those two suffice. And
 11 when not available, the school would pickup the funding.
 12 Q. Doctor, if a PhD student's PI left Mount Sinai,
 13 would -- what happens to the student?
 14 A. In general, if they have already passed their qualifying
 15 exam, they remain enrolled at Mount Sinai, but conduct the
 16 experiments at the location where the PI's lab is. But the
 17 expectations, milestones, etc., are unchanged. If they have
 18 not passed their qualifying exam, then they would also have the
 19 option to either go down that path or, or consider a different
 20 opportunity on campus.
 21 Q. So in the instance where a student has already passed his
 22 qualifying exam and let's say the PI moves to Columbia, the
 23 student would follow the PI to Columbia and perform services in
 24 a Columbia lab?
 25 A. They would perform research in a Columbia lab.

Page 187

1 Q. Thank you. They would perform research in the Columbia
 2 lab. Who if anyone would pay the student's stipend during the
 3 time that the student was performing research in Columbia's
 4 lab?
 5 A. It would be paid identically as if they were physically on
 6 the Mount Sinai campus.
 7 Q. So Mount Sinai would continue to pay the stipend?
 8 A. They are enrolled students at Mount Sinai, so they have
 9 their housing, their health insurance, etc.
 10 Q. Can PhD students receive external funding outside of the
 11 Graduate School?
 12 A. Yes, they can. It's not required. But it's excellent in
 13 terms of their building a professional curriculum vitae.
 14 Q. What are -- what are the sources of such funding?
 15 A. Generally, F-awards, F-fellowship, from the same sorts of
 16 agencies that provide our awards, research grants.
 17 Q. Such as the NIH?
 18 A. Correct.
 19 Q. Does Mount Sinai -- does the Graduate School give the
 20 student any funds in recognition of, of receiving external
 21 sources of, of money?
 22 A. Yes. They receive a \$2,000 per annum bonus and we
 23 request, and to my knowledge this always happens, that it is
 24 matched by the PI. So it's \$4,000.
 25 Q. Does a PhD student need to fulfill any service requirement

Page 188

1 in order to receive the additional \$2,000 from the Graduate
 2 School?
 3 A. No.
 4 Q. If a PhD student's external funds do not cover the full
 5 cost of their stipend, will the Graduate School provide
 6 supplemental funding for the student?
 7 A. The Graduate School -- well, more importantly the PI,
 8 yeah.
 9 Q. Okay. Does the PhD student need to fulfill any service
 10 requirement in order to receive such a supplementation?
 11 A. No.
 12 Q. Does Mount -- does the Graduate School place any
 13 additional requirements on students who receive external,
 14 external funding?
 15 A. Mount Sinai does not, but the funding agency would require
 16 progress reports.
 17 MR. LUPION: Introduce Mount Sinai Exhibit 6, please.
 18 (Employer's E-6 marked.)
 19 BY MR. LUPION:
 20 Q. Doctor, if you'd take a brief moment to review this
 21 document.
 22 A. Mm-hmm.
 23 Q. Do you recognize this?
 24 A. So far, yes. Yep.
 25 Q. What is it? What is this document?

Page 189

1 A. It just outlines the cost of -- you can see there bullet
 2 pointed is the cost for different components of the package.
 3 Q. Doctor, is this a document that's kept in the ordinary
 4 course of the Graduate School's affairs?
 5 A. It is.
 6 MR. LUPION: I'd offer this document into evidence.
 7 MR. MEIKELJOHN: I would object on grounds that this
 8 document is incomplete as it states at the top -- well, in
 9 attachments, it indicates there are several attachments
 10 including how to log into Sinai Cloud, etc. I would submit
 11 that the document is incomplete without the attachments.
 12 HEARING OFFICER KUMA: Okay. The document is objected by
 13 Petitioner and will be received in the rejected file. I
 14 acknowledge on the record that it's been objected by the
 15 Petitioner. It is not entered into the evidence because it is
 16 missing attachments.
 17 MR. LUPION: Well, we're just offering the contents -- the
 18 contents of the communication to the PhD students.
 19 HEARING OFFICER KUMA: Oh, you're solely just, just
 20 submitting just the transcripts of the email, itself.
 21 MR. LUPION: Yes.
 22 HEARING OFFICER KUMA: Not the attachments.
 23 MR. LUPION: Yes. We didn't want to really clutter the
 24 record with all of that. Just the email that the students
 25 receive.

Page 190

1 MR. MEIKELJOHN: I would withdraw my objection if the
 2 attachments can be provided. But, you know, I think the
 3 document without the attachments is not complete.
 4 HEARING OFFICER KUMA: Okay. Since the Employer clarified
 5 the reason for entering this into the record, then I accept it
 6 as offered. However, I'm going to note the Petitioner's
 7 objection, but still submit it into the rejected file. Okay,
 8 you can proceed.
 9 BY MR. LUPION:
 10 Q. Doctor, who is Stephanie Autenrieth?
 11 A. She, I believe her title is the senior associate dean for
 12 enrollment services.
 13 Q. Can you explain the nature of this email communication?
 14 A. Yeah. It's a -- it's an onboarding document. So, for
 15 example, the optional plans are there, plans for dependents,
 16 things that are not covered that the student and/or their
 17 family may want to buy into.
 18 Q. Doctor, do you know is this the same health insurance plan
 19 available to Mount Sinai employees?
 20 A. It is not. It's separate.
 21 Q. Same question with respect to dental and vision plans.
 22 A. That I am not certain of, but I think it's separate. It's
 23 certainly different to mine.
 24 MR. LUPION: Okay, if we can take two minutes, I think I,
 25 I might be done. But I just want to go through my notes.

Page 191

1 HEARING OFFICER KUMA: Okay. Off the record.
 2 (Whereupon, a brief recess was taken.)
 3 HEARING OFFICER KUMA: Back on the record.
 4 Before we proceed with addressing the Employer's witness
 5 and, and addressing if he has any more questions, I just want
 6 to clarify for the record Employer's Exhibit 6. The Employer
 7 moved to offer Exhibit 6 as evidence into the record. The
 8 Petitioner objected because it did not have attachments. The
 9 Employer clarified for the record that he was not applying the
 10 attachments because it was very voluminous. However, it was
 11 specifically the attachments are not necessary because the
 12 contents of Exhibit 6 was solely for just the details in the
 13 email, itself. The attachments are not necessary. As a
 14 result, I am overruling the Petitioner's objection and the
 15 Employer's offer is being received and entered into evidence.
 16 (Employer's E-6 received.)
 17 MR. MEIKELJOHN: I would just note for the record that
 18 while we're not governed by the Federal Rules of Evidence in
 19 this proceeding. They provide some guidance. And the reason
 20 for requiring a party to provide a full document is so that the
 21 party can't pick and choose the parts that are helpful to its
 22 case, while withholding the portions that are not helpful.
 23 So, before we went back on the record, counsel expressed a
 24 willingness to provide the remaining documents. And I guess I
 25 would ask brother counsel when he is willing to do so. I can

Page 192

1 tell you which ones I want.
 2 MR. LUPION: Why don't you tell me which ones you want so
 3 that we can take it under advisement?
 4 MR. MEIKELJOHN: How to log into Sinai Cloud. I think
 5 that's, that's the only one. And I don't want a log-in ID for
 6 myself, although it would probably be helpful.
 7 MR. LUPION: All right. Well, we'll see if we can locate
 8 that pdf and produce it. At this time, are we on the record?
 9 HEARING OFFICER KUMA: We are on the record.
 10 MR. LUPION: At this time, we have no further questions
 11 for Dr. O'Connell.
 12 MR. MEIKELJOHN: I was going to ask this before we went
 13 off the record. Can I consult?
 14 HEARING OFFICER KUMA: Yes.
 15 MR. MEIKELJOHN: Can I have a break?
 16 HEARING OFFICER KUMA: Yes. Off the record
 17 (Whereupon, a brief recess was taken.)
 18 HEARING OFFICER KUMA: We're back on the record.
 19 All right, Petitioner can now begin their cross.
 20 CROSS-EXAMINATION
 21 BY MR. MEIKLEJOHN:
 22 Q. Good afternoon, Mr. O'Connell. Is it O'Connell or
 23 O'Connor?
 24 A. O'Connell.
 25 Q. Okay. I, I have often have trouble reading my own notes,

Page 193

1 so bear with me. Earlier in your -- you understand that I'm
 2 representing the Petitioner Union in this case?
 3 A. Yes.
 4 Q. Okay. At the beginning of your -- early in your
 5 testimony, you gave some numbers regarding the number of
 6 applications, the number of those who were interviewed, etc.
 7 Were those numbers related to the incoming, the class that
 8 arrived 2022 or the class that's arriving this year?
 9 A. This year.
 10 Q. Oh, so that's -- okay. So you said that 61 had
 11 matriculated. What, what exactly does the term matriculated
 12 mean in this context?
 13 A. It, it means they accepted our offer and they are
 14 attending our school for their training.
 15 Q. When do they start their PhD student studies -- when, when
 16 do they first start as students at Mount Sinai?
 17 A. Yes, I understand. I believe it's August 14th.
 18 Q. So they haven't formally started yet?
 19 A. Correct.
 20 Q. Okay. So I am -- I'm going to return to Employer's
 21 Exhibit 6.
 22 MR. MEIKELJOHN: And is the -- is the Employer willing to
 23 put that back up on the screen for me?
 24 MR. LUPION: Sure. We are happy to accommodate to
 25 expedite this hearing.

Page 194

1 BY MR. MEIKELJOHN:
 2 Q. Now this, this letter pertains to last year, but I assume
 3 a similar email will be sent to the students at or about the
 4 time that they arrive this next month?
 5 A. I, I believe, yes. The numbers may be slightly different,
 6 because they're -- they are given by the insurance companies.
 7 Q. Okay. But this email includes instructions on how to log
 8 into Sinai Cloud.
 9 A. Mm-hmm.
 10 Q. And then another attachment related to benefits, Sinai
 11 Cloud Benefits. Can you explain what Sinai Cloud is?
 12 A. Yeah. It's, it's a human resources management system.
 13 Q. So when at the time a student formally matriculates, they
 14 also log into the human resources system?
 15 A. I believe so, yes.
 16 Q. And they're -- does someone -- does Stephanie work under
 17 your direction?
 18 A. No. She works under the direction of Dean Filizola and I
 19 believe also Dean Muller of the medical school, but not under
 20 my direction.
 21 Q. Not under, okay. Is --
 22 A. Sorry, let me correct. I should add -- I'm showing my
 23 ignorance here. She may report directly to the Dean of Mount
 24 Sinai, Dr. Dennis Charney's office and his staff.
 25 Q. I know we have an org chart here somewhere probably.

Page 195

1 A. Okay.
 2 Q. And to that question. But I don't have the org chart in
 3 front of me. So do you know is the reason for the student to
 4 log into Sinai Cloud at the time of their matriculation to set
 5 them up in the payroll so that they can or is a reason for that
 6 to enable them to be paid?
 7 A. That would be a major reason, and to select their
 8 insurance options, and so --
 9 Q. Do you know are they paid every other week?
 10 A. I believe so.
 11 Q. Is that the same schedule upon which you are paid?
 12 A. Yes.
 13 Q. And do you know do they have federal and state income
 14 taxes withheld from their pay?
 15 A. I'm not a tax expert and I should also say that I'm not
 16 involved in the finances of, of the school. So as to the tax
 17 status of a student and their origin, I don't know the answer
 18 to that question.
 19 Q. In the course of -- strike that. You mentioned that
 20 students, PhD students work towards -- I'm sorry, you can stop
 21 sharing that, please. You testified that during -- that the
 22 object of the research, the thesis research conducted by the
 23 doctoral students is to generate a document of a quality in
 24 which they could be listed as the first author. Did I get that
 25 accurate?

Page 196

1 A. That's a minimum requirement.
 2 Q. Okay. And what is the significance of being -- well,
 3 strike that. This would be as the first author in a peer
 4 review journal. Correct?
 5 A. Correct.
 6 Q. And what is the significance of being published in a peer
 7 review journal?
 8 A. It shows that your research has been peer reviewed at
 9 another level. And that it has passed that level of review.
 10 Q. All right.
 11 A. That pertains to their future career paths. It's not a
 12 graduation requirement.
 13 Q. The purpose of the peer review as I understand it, correct
 14 me if I'm wrong, is to ensure that the information contained in
 15 the document, in the publication is accurate and adds to the,
 16 the existing knowledge in the particular field.
 17 A. It ensures that the research has been done under rigorous
 18 conditions. That it is reproducible. That it has been
 19 analyzed in an appropriate manner. And that the conclusions
 20 are justified by the evidence.
 21 Q. Is it also a requirement that the -- or an
 22 expectation -- yes, is it a requirement to be published that
 23 the -- that the research reflected in the publication
 24 contribute in some way to knowledge?
 25 A. All publications contribute to knowledge. We're not in

Page 197

1 the business of reinventing the wheel. But these publications
 2 serve as a stepping stone onto their next level.
 3 Q. Now it is common, is it not, for these publications to
 4 list more than one author --
 5 A. Um-hum.
 6 Q. -- as authors. Correct?
 7 A. Correct.
 8 Q. And I believe that the convention at Mount Sinai, if not
 9 everywhere in the United States, is for the PI responsible for
 10 the lab where the research was conducted to be listed last. Is
 11 that correct?
 12 A. That's correct.
 13 Q. Is that a universal convention or is that the convention
 14 at Mount Sinai?
 15 A. It's not our convention. It's, it's a universally
 16 accepted ethical guideline.
 17 Q. Frequently, in addition to the principal author and the
 18 PI, these publications will list other authors. What is the
 19 significance of the other authors being listed on these
 20 publications?
 21 A. Well, they've contributed design, execution, and reporting
 22 of experiments that appear in the publication.
 23 Q. I tried to get this organized while we were off the
 24 record. There are a lot of things on here I was going to ask
 25 you about that you got to later. So --

Page 198

1 A. Okay.

2 Q. -- you won't have to. You know, I'm going to ask you a
3 question about Petitioner's -- or about Employer's Exhibit 3.
4 You, you are -- without putting the document on the screen,
5 maybe we'll have to, but you are familiar with this form, a
6 similar version which is sent out every year to notify
7 applicants that they've been offered admission to Mount Sinai?
8 A. Correct.

9 Q. And part of the standard requirement for that admission is
10 it states that admission is contingent upon successful
11 completion of a toxicology screening. Are you aware that
12 that's part of the offer letter?
13 A. Yes, I am.

14 Q. Before a student can matriculate, he or she is, or they
15 are required to take a test from a blood testing lab. Is that
16 right?
17 A. I, I don't know if it's blood. I think it might be urine.
18 But an accredited diagnostic laboratory.

19 Q. Right. Are those tests characterized by the laboratories
20 as pre-employment drug screenings?
21 A. No. They're characterized by the enrollment process
22 exactly as described in that document.

23 Q. You testified that the, what you called the stipends, the
24 direct compensation that is paid to the doctoral students can
25 be used to pay for living expenses such as groceries.

Page 199

1 A. Correct.

2 Q. And I -- am I correct that you pay for your living
3 expenses such as groceries out of the salary that you are paid
4 by Mount Sinai?
5 MR. LUPION: Objection, relevance.
6 MR. MEIKELJOHN: The point -- I'll leave it to the Hearing
7 Officer to rule, but I think the relevance is apparent.
8 MR. LUPION: How Mr. O'Connell goes food shopping is
9 hardly relevant to, to this proceeding.

10 HEARING OFFICER KUMA: Can you repeat your question?
11 MR. MEIKELJOHN: Probably not, but I can -- I can ask it
12 differently, I suppose. That's what usually happens when I'm
13 asked to repeat my questions. Do -- like the students who
14 receive stipends from Mount Sinai, do you pay for your living
15 expenses like groceries with money paid to you by Mount Sinai?
16 MR. LUPION: Objection, relevance. The source of funds
17 with which Mr. O'Connell -- Dr. O'Connell supports himself is
18 not relevant to this case.

19 HEARING OFFICER KUMA: What's the relevance to the
20 question? What are your accomplishments with --
21 MR. MEIKELJOHN: Well, I'm assuming that -- the witness
22 testified that the direct compensation is used to pay for
23 living expenses and he gave some examples. My point, the
24 relevance of the question simply is that it is, in fact,
25 customary for employees to pay for their living expenses with a

Page 200

1 salary. And that is, in fact, part of what makes direct
2 compensation a salary.
3 MR. LUPION: And I believe that you're making -- you're
4 making argument and you're mischaracterizing the testimony.
5 The testimony was that the stipend was provided so that the
6 students can focus on being students, while at the same time
7 having the ability to provide for themselves.
8 MR. MEIKELJOHN: He did say that in response to a
9 follow-up question, I believe, yes. That wasn't the question I
10 was asking.
11 HEARING OFFICER KUMA: All right.
12 MR. MEIKELJOHN: What I was asking about.
13 HEARING OFFICER KUMA: Can the court reporter go back?
14 MR. MEIKELJOHN: I'll withdraw the question. I'll
15 withdraw the question.
16 HEARING OFFICER KUMA: Okay.
17 BY MR. MEIKELJOHN:
18 Q. Are there -- are there restrictions on what labs a student
19 can do his or her or their rotations into? That is do they
20 have to be in the MTA that the student is interested in?
21 A. No, because they do not declare their MTA until they
22 decide upon the lab.
23 Q. You testified that working -- that, that research, thesis
24 research is graded on a pass/fail basis, unlike I believe the
25 phrase you used was traditional classes.

Page 201

1 A. Yes.

2 Q. Are the rotations also graded on a pass/fail basis, unlike
3 traditional classes?
4 A. They are. This is outlined by our accreditation
5 documentation.
6 Q. Do you know who it is that accredits Mount Sinai?
7 A. I believe it's a combination of the Department of
8 Education of the State of New York, as well as an organization
9 known as Middle States.
10 Q. Do you know whether those same accrediting agencies
11 accredit Columbia?
12 MR. LUPION: Objection, relevance.
13 MR. MEIKELJOHN: Well, I, I understand -- maybe I'm
14 misunderstanding the argument. But the Employer has offered
15 testimony from a couple of witnesses now that standards are
16 established to meet the requirements of accrediting bodies.
17 And they are also arguing that and they're supposedly putting
18 on evidence for the purpose of demonstrating that somehow Mount
19 Sinai is different from Columbia. So this is clearly an area
20 in which Mount Sinai -- one of many areas in which Mount Sinai
21 and Columbia are, are indistinguishable.
22 MR. LUPION: Hold on. Let me just -- let me just respond
23 to that. There is no dispute what -- there shouldn't be a
24 dispute as to what the accreditation requirements are or the
25 source of, of those requirements. As this witness testified,

Page 202

1 every program operates differently. So how Columbia fulfills
 2 its educational requirements is irrelevant to how Mount Sinai
 3 fulfills its educational requirements. This case -- this case
 4 is about the students at -- who attend Mount Sinai Graduate
 5 School, not Columbia.
 6 MR. MEIKELJOHN: So if I understand counsel correctly,
 7 he's saying that the fact that they're accredited is not -- is
 8 not relevant to their argument that there is a distinction
 9 between Columbia and Mount Sinai?
 10 MR. LUPION: The fact that both are accredited
 11 institutions?
 12 MR. MEIKELJOHN: No, the fact that Mount Sinai established
 13 standards to meet the, the accrediting requirements is not
 14 relevant to their argument that Mount Sinai is different from
 15 Columbia.
 16 MR. LUPION: I'm saying --
 17 HEARING OFFICER KUMA: Okay, we're going to stop now.
 18 This is not about the accreditation aspect of it. We're here
 19 to get witness testimony as to the unit appropriateness. Now,
 20 the Petitioner's asking the witness to address -- and again
 21 repeat the question. If you have to reframe it, that's fine.
 22 I just want to make sure I'm understanding the question
 23 correctly.
 24 BY MR. MEIKLEJOHN:
 25 Q. Do you know, Mr. O'Connell, whether the accrediting bodies

Page 203

1 that govern Mount Sinai's educational or academic requirements
 2 also govern Columbia?
 3 A. I do not know. I am only familiar with my own
 4 institution.
 5 Q. Okay.
 6 HEARING OFFICER KUMA: So anything else over that I'll
 7 have to -- if the Petitioner is to ask anything else outside of
 8 that purview, I'm going to -- and the Employer objects to it,
 9 I'm going to sustain it, because the witness can only testify
 10 to what they know.
 11 MR. MEIKELJOHN: Right. I agree. I will -- I'll move on.
 12 I'll ask about Petitioner's Exhibit 5, which the witness did
 13 display some knowledge of.
 14 HEARING OFFICER KUMA: Okay.
 15 MR. MEIKELJOHN: Can somebody put that on the screen or do
 16 I need to do that? Thank you, Melissa. Can you scroll down to
 17 page 3, the paragraph 6, the financial responsibility
 18 paragraph.
 19 BY MR. MEIKELJOHN:
 20 Q. Dr. O'Connell, you were asked several questions about the
 21 financial responsibility paragraph of Employer Exhibit 6.
 22 A. Mm-hmm.
 23 Q. I would draw your attention to the last sentence, the one
 24 that is highlighted in bold.
 25 A. Mm-hmm.

Page 204

1 Q. Which states that the preceptor is required to show
 2 evidence of at least 2 years of funding support for the student
 3 on the required declaration form.
 4 A. Mm-hmm.
 5 Q. So this is for a student to be admitted to a particular
 6 PI's lab to do their thesis research. Is that correct?
 7 A. It is correct. And it protects the student.
 8 Q. I understand that. Who is the PI or the preceptor
 9 required to show this evidence to?
 10 A. They show it via their grant administration to the
 11 Graduate School financial administration.
 12 Q. And I understand that this protects the, the student. But
 13 could you explain how it protects the student?
 14 A. To make sure that there is no barrier to them conducting
 15 their doctoral research.
 16 Q. How is the PI or the preceptor's -- how could the
 17 preceptor's financing become a barrier to them completing their
 18 thesis research?
 19 A. Well, we spoke about their package. But research is
 20 expensive and you need funds to support the research.
 21 Q. Does that include funds to pay the, the graduate student's
 22 compensation?
 23 A. And, and to pay for the experiments. To be able to afford
 24 to, to do the experiments while working towards their
 25 dissertation research. Reagents, equipment, mice, salines, you

Page 205

1 name it.
 2 Q. Monkeys?
 3 A. Rarely.
 4 Q. Okay. I thought there -- I thought there was at least one
 5 monkey lab there. Okay. Do the -- where do the preceptors get
 6 the funds to pay for the, those lab expenses?
 7 A. The same source as I indicated previously. Federal
 8 grants, National Institutes of Health, National Science
 9 Foundation, Department of Defense, foundation grants, start-up
 10 money from an institution would make up the lion's share.
 11 Q. Now with respect to the direct compensation to the
 12 students, do you know is there any difference in the way that
 13 they are paid depending upon the source of the funds from which
 14 they are paid?
 15 MR. LUPION: Objection. Vague and ambiguous.
 16 BY MR. MEIKLEJOHN:
 17 Q. Did you understand the question?
 18 A. Could you repeat it, please?
 19 Q. Right. We already established that I rarely can manage to
 20 repeat the same question, but I'll try. With respect to the
 21 direct compensation --
 22 A. Mm-hmm.
 23 Q. -- to the graduate students.
 24 A. Yes.
 25 Q. Are they paid the same way regardless of the source of the

Page 206

1 funds from which they are paid?
 2 A. They are.
 3 Q. Are the -- are the -- the lab is here, but are the PIs
 4 grouped by MTA?
 5 A. Loosely. But most PIs are aligned multiple MTAs. I,
 6 myself, are a cancer biologist, but I'm also a member of
 7 development and regenerative sciences, and genetics and genetic
 8 sciences. So most, most labs, you know, it's driven by the
 9 research. So you could have two students in the same
 10 laboratory who are in different MTAs depending upon the focus
 11 of their research.
 12 MR. MEIKELJOHN: Okay, it is -- I've got 2 minutes till
 13 5:00. And I actually would -- oops, wait a minute. I was
 14 going to suggest, somebody else just did, that this would be a
 15 time to stop. I will -- I will say nobody ever believes me,
 16 but when I get an opportunity to think over my cross, it goes a
 17 lot faster after the break because I know where I'm going. I
 18 should know where I'm going better. But I have enough so that
 19 I'm not going to be able to finish today.
 20 HEARING OFFICER KUMA: Okay. So --
 21 MR. MEIKELJOHN: And I do have a couple of housekeeping
 22 issues to address before we leave.
 23 HEARING OFFICER KUMA: Okay.
 24 MR. MEIKELJOHN: First, I had requested the, the first
 25 attachment to Employer Exhibit 6, and I actually think that

Page 207

1 the, the witness nodded his head when I said I was requesting
 2 those that he does, does know that those documents are still
 3 accessible. After looking at the document more closely, I'm
 4 also -- I'm asking for the first two attachments to Employer
 5 Exhibit 6.
 6 Second, I would note that Petitioner's Exhibit 2, which we
 7 did not move previously, is a document that was produced by the
 8 Employer in response to subpoena so as an Employer document.
 9 So on that basis I would move the admission of Petitioner's
 10 Exhibit 2.
 11 MR. LUPION: What was 2?
 12 MR. MEIKELJOHN: It was the chart showing compensation,
 13 and cost, and things.
 14 MR. LUPION: Okay. Let us confer and get back to you on,
 15 on Monday. I don't anticipate an issue.
 16 MR. MEIKELJOHN: I mean just for -- this is the document
 17 that we're talking about.
 18 MR. LUPION: I see it. I've got it.
 19 MR. MEIKELJOHN: Okay. Yeah, just if you could verify it.
 20 And the third item is I would -- you know, one of our -- I
 21 can't remember whether it's paragraph 6 or paragraph 7, but one
 22 of the paragraphs of our subpoena calls for production of a
 23 grant from somebody who is going to be -- well, we said we
 24 would limit it to someone who was going to be your witness.
 25 I know that you have carefully called people whose grants

Page 208

1 do not include PhD students on them so far. But I would
 2 request that those grants that you're planning to produce in
 3 response to that paragraph be produced forthwith without
 4 waiting for that witness to be called. There is no reason to
 5 wait for the witness to be called and it would certainly end up
 6 saving a lot of time if I don't have to take a break after the
 7 witness' direct testimony to review those grants.
 8 MR. LUPION: Understood. First of all, we would object to
 9 the characterization that we are carefully calling witnesses.
 10 MR. MEIKELJOHN: I'm sorry. I apologize for that. That
 11 was a cheap shot, and I would like to withdraw it and strike it
 12 from the record. But I'm sure Lainy can't do that.
 13 MR. LUPION: I'm glad I'm still alert at 5 o'clock on a
 14 Friday. But in any case, we are in the process of obtaining a
 15 responsive grant. As you know, we just came to an agreement of
 16 sorts, yesterday. So it's not -- I wish it was as easy as
 17 pushing a button and getting it. But we are -- we are
 18 endeavoring to get those documents to avoid any disruption to
 19 the hearing.
 20 MR. MEIKELJOHN: I was just sort of concerned that that's
 21 what was happening. But I accept -- I accept your
 22 representation that you're not holding that.
 23 HEARING OFFICER KUMA: So can the Employer produce that by
 24 Monday, the grant documents?
 25 MR. LUPION: I think we can -- we can be in a -- in a

Page 209

1 position to produce some. I don't know about all.
 2 HEARING OFFICER KUMA: Will the Petitioner accept some or
 3 a piecemeal of it, or do you want all of it?
 4 MR. MEIKELJOHN: I'm okay with having them supply
 5 piecemeal. Whether the piecemeal is sufficient will be easier
 6 to judge and evaluate after I've seen the production.
 7 HEARING OFFICER KUMA: All right.
 8 MR. MEIKELJOHN: And I think everybody should thank me for
 9 having an appointment at 5 o'clock. We can get out of here at
 10 a decent hour on Friday, except for making the witness --
 11 HEARING OFFICER KUMA: I just want to go over it. You
 12 said the first one was Employer's Exhibit 6, you said the first
 13 two attachments?
 14 MR. MEIKELJOHN: Right. Both of which relate to Sinai
 15 Cloud, which the witness testified was a human resources, I'm
 16 going to say portal which might not have been his word, but --
 17 HEARING OFFICER KUMA: Right. And can the Employer
 18 produce that document?
 19 MR. LUPION: I need to, to see what -- to see what it is.
 20 I mean I, I don't want to blindly agree to produce something
 21 that I haven't laid eyes on.
 22 HEARING OFFICER KUMA: Understandable. So we'll discuss
 23 this on Monday. And we'll discuss the Petitioner's motion to
 24 move Exhibit 2 on Monday, after the Employer reviews it a bit
 25 more. And then now we have to discuss the doctor's

1 availability. It's my understanding the doctor is not
 2 available Monday. Is that correct?
 3 THE WITNESS: Let me just check my calendar, please, one
 4 moment, sir.
 5 MR. MEIKELJOHN: Are we still on the record?
 6 HEARING OFFICER KUMA: Yes, we are. Off the record.
 7 (Whereupon, a brief recess was taken.)
 8 HEARING OFFICER KUMA: All right. In this matter, we're
 9 adjourning for the day. All parties and the witness are to
 10 appear on Monday. The witness will appear for 9:30 to continue
 11 his cross-examination. The witness is notified that he's still
 12 under oath. Everything the witness states he's held to
 13 underneath, underneath Pope Edition (ph.). The parties will
 14 appear 9:15 to go over the subpoena topics. The Petitioner's
 15 exhibits to move to motion and the Employer's Exhibit 6,
 16 discuss the submission of those documents.
 17 All right, off the record.
 18 (Whereupon, at 5:09 p.m., the hearing in the
 19 above-entitled matter was recessed, to reconvene on Monday,
 20 July 10, 2023 at 9:15 a.m.)
 21
 22
 23
 24
 25

1 **CERTIFICATION**
 2 This is to certify that the attached proceedings before
 3 the National Labor Relations Board, Region 2, in the matter of
 4 Icahn School of Medicine at Mount Sinai and International
 5 Union, United Automobile, Aerospace, and Agricultural
 6 Implement Workers of America, Case No. 02-RC-319437, at New
 7 York, New York, on July 7, 2023, was held according to the
 8 record, and that this is the original, complete, and true and
 9 accurate transcript that has been compared to the recording
 10 from the hearing, that the exhibits are complete, and no
 11 exhibits received in evidence or in the rejected file are
 12 missing.
 13
 14
 15
 16 _____
 17 Elaine M. LaRosee
 18
 19
 20
 21
 22
 23
 24
 25

	148:17;171:24; 193:13;197:16	74:9	Adobe (1) 129:19	86:15;125:9;183:6; 188:15
\$	access (3) 82:12;103:7;128:5	actual (5) 150:17;155:19; 162:2;169:6;184:1	advanced (4) 99:25;109:23; 177:25;179:13	agents (2) 68:23;69:16
\$2,000 (2) 187:22;188:1	accessible (1) 207:3	actually (11) 59:16;67:9;75:10; 83:1;84:14;93:25; 94:24;119:4;125:17; 206:13,25	advice (1) 163:14	ago (3) 81:9;112:25;120:4
\$4,000 (1) 187:24	accommodate (1) 193:24	Adam (5) 57:13,17,22;58:1; 59:10	advise (4) 65:8;100:25;162:7; 166:8	agree (7) 67:2,4;109:3;115:19; 166:4;203:11;209:20
\$40 (1) 128:10	accompanied (1) 95:11	adament (1) 163:5	advisement (6) 162:17;166:6; 167:21,22;168:12; 192:3	agreement (5) 159:19;160:16,16; 162:25;208:15
[accomplishments (1) 199:20	add (5) 104:13;123:3;151:5; 155:11;194:22	advising (3) 79:14;142:9;162:10	AGRICULTURAL (1) 50:9
[sic] (3) 61:25;66:20;93:9	accordance (1) 136:4	addition (5) 71:12;82:22;163:18; 178:4;197:17	advisor (3) 101:13;164:19,21	ahead (5) 66:25;131:9;139:7; 148:10;159:25
A	according (2) 125:11;133:4	additional (9) 101:3;104:13; 108:21;138:25;174:9; 175:22;179:19;188:1, 13	advisor/MTA (1) 161:12	aid (1) 64:16
ability (6) 61:18;65:11;89:1; 95:19;165:3;200:7	accordingly (1) 94:9	address (6) 58:16;72:23;91:10, 12;202:20;206:22	advisors (3) 153:4;157:17;159:14	aims (3) 169:1;183:11,13
able (5) 67:5;186:8,10; 204:23;206:19	accredit (1) 201:11	addressing (2) 191:4,5	advisory (47) 89:20;92:13,16;93:8, 10,21,21;98:16,24; 99:6,7,8,9,12,14,17; 100:13;103:5,6,10; 104:1,6,7,10,18,21,24; 105:3;106:6,13; 123:25;124:23,25; 162:16;166:2,10; 169:5,17,23,23;170:2; 171:1,5;173:11; 177:13;185:11;186:2	Alcohol (4) 129:6,7,11;130:18
above (3) 161:6;172:24;185:10	accreditation (12) 92:25;93:3;97:6; 100:4;125:11;127:1; 155:12,22;172:2; 201:4,24;202:18	adds (1) 196:15	advised (1) 171:1,5;173:11; 177:13;185:11;186:2	alert (1) 208:13
above-entitled (2) 50:13;210:19	accredited (9) 93:2;125:13;126:17, 19,22,23;198:18;202:7, 10	Adelaide (1) 141:1	advocacy (1) 81:13	align (3) 155:21;168:15; 176:23
Absolutely (2) 86:24;109:24	accrediting (7) 125:9,12,25;201:10, 16;202:13,25	adequate (1) 185:10	AEROSPACE (1) 50:9	aligned (4) 144:23;147:19; 180:25;206:5
absorb (1) 186:7	accredits (1) 201:6	adjoin (2) 139:17,18	Affairs (13) 76:6,11;77:11,15,18; 78:11;80:6;104:3; 149:12;154:20;167:3; 177:15;189:4	alignment (1) 161:7
abuse (1) 131:3	accurate (3) 83:23;195:25;196:15	adjourn (1) 174:16	affected (1) 175:18	aligns (1) 186:9
academia (1) 95:14	accurately (1) 91:18	adjourned (1) 210:9	afford (1) 204:23	allow (1) 126:11
academic (75) 55:19;62:8,12,23; 63:4,7,10,13;64:3,7; 65:13,18;66:1,2;76:6; 78:11;85:20,21;90:3,6; 93:17;95:1;98:2,8,11, 15,17,17,22,23;99:3; 101:21;102:6,8,12; 103:3,4,18;104:3; 105:6,19,24;106:2,3,7, 11;117:18,19;118:3,8; 123:23,24;124:1,2,13, 20;125:7,23;137:19, 22;153:4,13;154:7; 157:17;159:14;161:5, 14;164:19,21;165:23; 170:14;182:13;185:3, 13;203:1	achieving (1) 125:2	Administration (6) 76:9,18;79:13;131:4; 204:10,11	affordable (1) 152:3	Almost (1) 180:17
academical (1) 74:11	acknowledging (1) 189:14	administrative (5) 76:18;77:10,16; 78:13,15	afternoon (2) 140:16;192:22	alone (1) 68:2
academically (1) 173:16	acknowledged (1) 67:19	admission (16) 116:12;145:14,16; 146:8,10;147:3,4; 148:13,20;149:5,23; 153:6;198:7,9,10; 207:9	Again (22) 56:2,22;57:10;59:20; 78:22;89:13;96:4,19, 23;97:8;100:3,11; 106:6;132:20;138:24; 155:15;164:15;165:11; 168:12;180:19;183:12; 202:20	along (3) 161:11;164:22;175:2
accept (4) 190:5;208:21,21; 209:2	acquired (1) 94:19	admissions (9) 142:5;145:19; 146:15,17,25;148:7,19; 149:6;184:12	afternoon (2) 140:16;192:22	although (1) 192:6
acceptance (1) 153:2	acquiring (1) 109:16	admitted (4) 131:23;147:12; 150:23;204:5	agency (4) 86:4;92:25;155:22; 182:19;187:16;201:10	always (3) 157:20;180:17; 187:23
accepted (4)	acronym (1) 157:2			ambiguous (1) 205:15
	across (4) 73:3,12;165:3; 169:20			AMERICA (1) 50:10
	Act (5) 60:7;62:17;66:7,11; 166:5			among (3) 60:4,24;62:20
	actively (1) 170:13			amount (5) 93:7;98:12;152:14; 164:25;180:25
	activities (8) 74:1;80:23;85:19; 145:1,10;155:11,19; 182:13			analogous (1) 66:9
	activity (1)			analysis (1) 156:25
				analytical (1) 164:4

<p>analyze (1) 173:22</p> <p>analyzed (1) 196:19</p> <p>analyzing (1) 173:21</p> <p>and/or (2) 63:20;190:16</p> <p>Annenberg (3) 73:6,11,19</p> <p>annum (1) 187:22</p> <p>answered (2) 121:14;130:24</p> <p>anticipate (1) 207:15</p> <p>anticipating (2) 176:4;179:16</p> <p>apologies (1) 56:23</p> <p>apologize (2) 91:20;208:10</p> <p>apostrophe (1) 140:19</p> <p>apparent (1) 199:7</p> <p>appeal (6) 103:17,21,22,22,24; 104:4</p> <p>appealed (1) 104:3</p> <p>appear (5) 139:9;197:22; 210:10,10,14</p> <p>appears (4) 67:10;115:14; 137:17;138:15</p> <p>applicable (1) 68:15</p> <p>applicant (2) 148:14,18</p> <p>applicants (9) 145:21;146:3,7,17, 18,19,24;148:20;198:7</p> <p>application (8) 87:3;145:13,23,24; 146:14;147:8;148:1; 184:17</p> <p>applications (6) 95:11;145:14;146:1, 3;184:6;193:6</p> <p>applied (5) 68:4;136:5,6;164:6; 180:4</p> <p>applies (2) 135:4;152:1</p> <p>apply (11) 86:3,9;92:20;120:24; 129:12;147:25;148:3, 5;152:25;156:14;183:2</p> <p>applying (5) 60:14;86:7,10;88:20; 191:9</p>	<p>appointing (1) 104:1</p> <p>appointment (2) 88:22;209:9</p> <p>apprenticeship (6) 109:25;110:6,7,14, 16,17</p> <p>approach (1) 171:8</p> <p>approaches (2) 168:20;169:7</p> <p>appropriate (3) 145:23;155:5;196:19</p> <p>appropriateness (1) 202:19</p> <p>approval (1) 172:4</p> <p>approved (1) 171:2</p> <p>approximate (1) 157:10</p> <p>Approximately (2) 143:4;146:9</p> <p>area (12) 77:14;99:11;100:15; 104:17;145:8,11; 153:6;165:2,2;176:21, 24;201:19</p> <p>area/department (1) 165:15</p> <p>areas (12) 78:18;79:5;102:3; 124:6;143:15,20; 144:24;165:3;176:15; 182:4;183:18;201:20</p> <p>argue (1) 125:22</p> <p>arguing (1) 201:17</p> <p>argument (10) 66:20;68:14;69:4,9, 13,20;200:4;201:14; 202:8,14</p> <p>around (3) 161:17;168:2;175:5</p> <p>arrival (1) 142:6</p> <p>arrive (1) 194:4</p> <p>arrived (2) 149:20;193:8</p> <p>arrives (1) 143:1</p> <p>arriving (1) 193:8</p> <p>Artificial (1) 143:23</p> <p>aside (2) 87:20;154:5</p> <p>aspect (1) 202:18</p> <p>aspects (1) 166:7</p>	<p>ASR-8000 (1) 172:4</p> <p>assess (2) 101:16;124:13</p> <p>assesses (1) 146:25</p> <p>assessments (1) 125:5</p> <p>assigned (9) 64:5,8;153:2,5; 159:15;163:2,3; 164:15,20</p> <p>assist (4) 61:17;146:18;179:4, 5</p> <p>assistance (1) 64:24</p> <p>assistant (16) 63:5;65:2;121:8,10, 20;122:1;127:24; 128:1,2,3,7,7,8;179:1, 2;185:20</p> <p>assistants (7) 57:1;58:13;65:24; 87:12;96:16;178:5,25</p> <p>assistant's (1) 64:16</p> <p>assistantship (1) 63:22</p> <p>Associate (16) 76:9,10,11,12,13,14; 77:18,24;78:19,24; 79:1;98:20;140:22; 142:1,4;190:11</p> <p>associated (5) 97:11,14;161:16; 170:11;182:1</p> <p>assume (4) 108:5;161:24;162:4; 194:2</p> <p>assumed (2) 111:7;113:8</p> <p>assuming (3) 68:17;69:8;199:21</p> <p>asterisk (1) 151:24</p> <p>attachment (2) 194:10;206:25</p> <p>attachments (13) 189:9,9,11,16,22; 190:2,3;191:8,10,11, 13;207:4;209:13</p> <p>attempt (1) 75:18</p> <p>attend (6) 73:8;119:12,12,16, 19;202:4</p> <p>attending (4) 118:10,23;120:8; 193:14</p> <p>attention (5) 84:2,7;110:20;113:2; 203:23</p>	<p>audience (2) 165:11;174:15</p> <p>augmented (2) 173:4;183:9</p> <p>August (2) 143:1;193:17</p> <p>Australia (3) 140:25;141:14;180:5</p> <p>Autenrieth (1) 190:10</p> <p>authentic (2) 135:17;136:8</p> <p>author (5) 154:8;195:24;196:3; 197:4,17</p> <p>authority (2) 68:18,22</p> <p>authors (4) 154:6;197:6,18,19</p> <p>AUTOMOBILE (1) 50:8</p> <p>availability (2) 157:22;210:1</p> <p>available (7) 80:11;96:8,10;158:4; 186:11;190:19;210:2</p> <p>Avenue (2) 72:21;73:7</p> <p>average (4) 98:5;160:11;161:4; 185:9</p> <p>AVI (4) 50:14;56:5,15;58:2</p> <p>avoid (2) 175:19;208:18</p> <p>awarded (2) 120:10;138:6</p> <p>awards (1) 187:16</p> <p>aware (4) 73:10;97:12;137:13; 198:11</p>	<p>Baron (1) 76:12</p> <p>barrier (2) 204:14,17</p> <p>base (1) 178:5</p> <p>based (13) 55:18;56:25;58:11; 61:24;64:2;74:7;76:20; 94:12;103:25;160:24; 170:18;171:9;183:8</p> <p>Basic (2) 76:12;158:3</p> <p>basically (9) 72:6;74:1;75:12; 78:14;79:11;83:13; 86:12;93:15;94:4</p> <p>Basil (1) 77:17</p> <p>basis (5) 118:1;160:15; 200:24;201:2;207:9</p> <p>bear (1) 193:1</p> <p>beat (1) 121:17</p> <p>became (1) 141:8</p> <p>become (4) 96:23;162:6,11; 204:17</p> <p>becoming (1) 175:19</p> <p>begin (8) 147:16;157:18,19; 159:22;162:2,9,18; 192:19</p> <p>beginning (6) 100:19;130:17; 181:1;183:17;184:15; 193:4</p> <p>begins (3) 67:17;117:3;176:17</p> <p>behavior (2) 143:10;157:3</p> <p>behavioral (1) 143:12</p> <p>behind (2) 154:15;175:19</p> <p>beholden (1) 64:8</p> <p>believes (1) 206:15</p> <p>below (1) 77:12</p> <p>benefits (9) 67:14;69:17;151:17, 20;152:18,22;153:12; 194:10,11</p> <p>benefitted (1) 167:21</p> <p>best (4) 60:4;108:8;148:15;</p>
B				
		<p>bachelor's (1) 140:25</p> <p>back (23) 55:3;59:23;97:22; 98:1;106:22;107:4,15; 136:25;137:7;138:23; 139:18;140:3;141:14; 171:12;175:25;176:12; 179:25;191:3,23; 192:18;193:23;200:13; 207:14</p> <p>background (5) 61:6;71:1,3;140:24; 141:12</p> <p>bar (1) 148:18</p> <p>bargaining (2) 66:3;131:5</p>		

<p>156:3 better (1) 206:18 beyond (6) 125:20;126:4;150:9, 9;173:1;181:6 bigger (3) 112:13;155:14;156:2 biologist (1) 206:6 biology (1) 143:25 Biomedical (47) 55:16;61:8,9,13; 70:25;71:9;72:4,5,12; 74:14,20;76:4;79:4; 81:19,20;82:6;83:5; 85:1;88:20;92:5;102:3; 124:7;126:5;129:9; 133:20;142:17,22; 143:6,14,18;144:25; 145:15,20;146:16; 147:5,12;149:24; 152:19;153:1,10; 159:12;181:13,16; 185:7,15,19,25 biostatistics (1) 74:20 bit (8) 100:12;101:19; 105:17;117:19;156:2; 169:12;171:9;209:24 blindly (1) 209:20 blocks (1) 175:2 blood (2) 198:15,17 blue (2) 76:8;78:16 BOARD (8) 50:2,15;60:18;63:8, 12;68:6,14;69:11 Board's (2) 60:12,14 bodies (2) 201:16;202:25 body (3) 125:12;169:9;173:12 bold (1) 203:24 bolts (1) 160:15 bonus (1) 187:22 book (1) 130:22 born (1) 141:1 both (10) 61:7;93:11;108:10; 148:8;158:18;163:22; 165:6;172:9;202:10;</p>	<p>209:14 box (1) 76:3 boxes (3) 78:13,15,16 brain (1) 143:10 branches (1) 143:9 breadth (1) 156:22 break (8) 97:17;101:19; 135:15;176:1,4; 192:15;206:17;208:6 bridge (1) 88:15 brief (16) 59:22;66:18,22;77:2; 97:21;106:21;107:14; 136:24;137:6;138:12; 176:1,11;188:20; 191:2;192:17;210:7 briefly (4) 69:14;71:8;143:5; 168:10 brightest (2) 60:5;67:2 broad (3) 64:10;72:2;182:6 broader (1) 173:19 broadly (1) 176:22 brother (1) 191:25 brought (1) 104:10 bubble (1) 173:7 budget (4) 86:13;121:8;122:8,9 budgeted (1) 121:6 budgeting (1) 137:14 build (2) 164:13;169:1 Building (5) 50:16;73:6,19; 178:22;187:13 buildings (1) 73:2 built (1) 118:20 bullet (5) 84:6;113:2;151:14; 152:18;189:1 bulletin (1) 58:16 bulletins (1) 59:1 burden (2)</p>	<p>55:11;58:25 business (2) 76:23;197:1 button (1) 208:17 buy (2) 152:10;190:17</p> <p style="text-align: center;">C</p> <p>Caballero (3) 76:9,10,19 calculate (1) 123:2 calculated (2) 122:23,24 calendar (1) 210:3 call (9) 66:16;84:2,6;135:18; 139:2,4,16;140:4; 178:6 called (11) 70:5;98:17;118:13; 138:23,24;140:11; 141:7;198:23;207:25; 208:4,5 calling (1) 208:9 calls (4) 69:24;127:5;140:5; 207:22 came (5) 50:13;114:22; 150:16;175:2;208:15 campus (8) 73:1,2,4,13,16;75:7; 186:20;187:6 campuses (1) 73:3 can (208) 56:5,5;57:17;58:7,8; 64:14;65:8;68:14; 70:11,14;71:1,8;72:2, 25,25;73:22;74:22,22; 75:22,23;76:1,3;77:9, 12;79:1,16;81:4;82:3, 3,21;83:11;84:2,6,24, 25,25;85:24,25;86:1,6; 88:5,10;89:11,11,21, 25;90:12;91:1,17;92:7; 93:22;94:8,8,11,14,18; 95:5;98:1,1,19;99:14, 18;100:1,11;101:11, 23;103:16,20,20; 104:10,11;105:1,9,9, 17,17,18;106:18; 108:10;109:3;112:7, 10,13,13;114:24; 115:8;117:15,15; 121:20,20;122:9; 127:11;128:17,18,19, 25;129:1,17,19;</p>	<p>132:21;133:8,9,13; 135:6;139:2,7,8; 140:16,24;142:2; 143:5,22,22;144:7,17, 19,19;145:16,16; 147:25,25;148:3,5; 149:7;150:14;151:20; 152:4,12;155:14,14,15; 156:1,10,19,19,20; 157:15,16,25;158:14; 159:11;160:2,20; 161:4,14;162:9;163:6, 8;164:6,13,22;166:2,8; 167:16,25,25;168:10, 15,20;170:4;172:24; 173:24;175:24;177:3, 19;178:8,17;179:11,12, 17;180:2,18,24,24; 183:25;187:10,12; 189:1;190:2,8,13,24; 191:25;192:3,7,13,15, 19;194:11;195:5,20; 198:14,24;199:10,11, 11;200:6,13,19;203:9, 15,16;205:19;208:23, 25,25;209:9,17 Cancer (6) 141:7,8,15,16; 143:24;206:6 candidates (1) 147:1 cap (1) 128:11 capable (3) 121:15,16;184:13 CAR (11) 93:17;98:17,25; 101:21;103:5,23,24; 106:7;124:2,3,5 care (4) 81:13;91:6;141:16, 16 career (6) 65:9;167:21;168:13; 182:3;184:14;196:11 carefully (2) 207:25;208:9 carry (3) 147:17;178:7;179:3 carve (1) 176:20 Case (24) 50:4;55:5;56:6;60:1, 4;67:6;68:2,11;69:9; 87:8,9;89:22;98:18; 99:1;108:1;133:19; 137:17;160:2;191:22; 193:2;199:18;202:3,3; 208:14 cases (4) 103:11;165:16; 178:1;179:20 categories (2)</p>	<p>105:5,23 category (2) 106:2,4 ceiling (1) 167:18 Centre (1) 141:15 certain (4) 63:19;88:17;105:14; 190:22 Certainly (5) 93:21;167:20; 170:22;190:23;208:5 chair (4) 99:9;100:14,15,19 challenge (1) 176:20 challenges (1) 158:16 change (10) 63:16;106:2;164:19; 171:8,9;179:11,17,18; 181:24,25 characterization (2) 113:24;208:9 characterized (2) 198:19,21 Charney (2) 76:6;78:9 Charney's (1) 194:24 chart (8) 76:2;77:4;78:14; 79:8;100:18;194:25; 195:2;207:12 cheap (1) 208:11 check (2) 159:24;210:3 chemical (1) 183:16 chemist (2) 71:3,4 Chief (2) 76:6;78:11 choice (4) 145:22;157:13; 162:22;179:14 choose (10) 63:25;64:11;144:7; 147:15;152:4;153:3; 157:15,25;159:17; 191:21 chooses (6) 64:5;162:3;164:16, 17;176:23,24 choosing (1) 161:21 chose (1) 170:21 chosen (2) 149:7;161:23 churn (1)</p>
--	--	--	--	---

<p>173:21 circumstance (2) 152:5;180:5 citizens (1) 181:23 City (5) 72:22,23,24;140:23; 152:11 clarification (2) 56:12;139:1 clarifications (1) 174:18 clarified (2) 190:4;191:9 clarify (2) 109:5;191:6 class (9) 98:6;143:1;149:20; 151:7;159:8;164:25; 173:7;193:7,8 classes (16) 73:8,10,11,13;74:2; 118:10,22,23;119:16, 17,20;120:8,14;142:6; 200:25;201:3 classroom (3) 156:20;165:20;181:5 classrooms (1) 73:5 classroom-specific (1) 168:4 clear (4) 62:7;84:18;122:11; 123:1 clearly (3) 68:24;76:21;201:19 client (1) 136:7 Clinical (12) 56:1;59:5,9;61:10, 23;74:15,21;76:12; 81:12,13;142:20; 181:10 close (1) 162:10 closely (1) 207:3 Cloud (7) 189:10;192:4;194:8, 11,11;195:4;209:15 clubs (4) 144:22;163:23; 164:12;165:5 clutter (1) 189:23 codes (1) 155:9 coding (2) 154:25;155:1 co-director (2) 145:8;169:18 co-directors (3) 78:17;145:5;154:13</p>	<p>cohort (1) 65:23 coined (1) 184:1 collaboration (1) 80:3 collaborative (1) 163:20 collaborators (1) 101:3 collective (1) 66:3 colleges (1) 60:20 color (3) 154:25;155:1,9 colors (2) 155:18,20 Columbia (36) 60:12,13,14,18;61:3; 62:13,19;63:2,8,11; 64:4,15,21;66:9;67:22, 23;69:1,12,13,18; 125:15,18;126:7; 186:22,23,24,25;187:1; 201:11,19,21;202:1,5, 9,15;203:2 Columbia's (1) 187:3 combination (1) 201:7 coming (2) 57:14,15 commence (1) 107:18 commensurate (2) 143:12;173:12 commitment (2) 158:10,10 committed (1) 146:12 committee (84) 65:13,15;68:22; 89:18,18,19,20;92:14, 16,16;93:8,11,13,17; 98:16,16,18,24;99:6,7, 8,12,17;100:13,14,15, 20,21,22;101:5,16,20, 23,24;102:6,12;103:5, 6,18;104:7,7,11,14,18, 21,24;105:3;106:6,7, 13;123:15,23;124:1,1, 2,3,5,19,23;125:1,19, 126:6,17,23;146:25; 162:16;166:2,10; 169:5,17,19,23,24; 170:2;171:1,5;173:11; 174:7,8,16,17;177:14; 185:11;186:3 committees (12) 100:6;101:7,18,20; 123:11,15;125:16,25; 126:3,16,20,22</p>	<p>committee's (1) 99:9 common (4) 62:13;127:17; 182:18;197:3 commonly (2) 151:22;181:7 communicate (1) 139:8 communicated (1) 148:20 communication (4) 160:13;161:6; 189:18;190:13 community (14) 57:3,8;58:14,19; 66:4;117:10,11,13,14; 127:18,20;165:8,15; 175:9 compact (3) 166:15;167:24; 180:19 companies (1) 194:6 company (1) 183:15 compare (1) 99:18 compared (1) 178:18 compensation (21) 61:19;62:14;67:10, 13,14;68:1;69:15; 113:5,11,16;114:9,22; 150:17;151:22;198:24; 199:22;200:2;204:22; 205:11,21;207:12 complained (1) 177:6 complete (5) 92:10,11;119:23; 175:13;190:3 completed (2) 160:16;178:10 completely (3) 65:22;109:19;144:13 completing (2) 154:1;204:17 completion (4) 90:9;98:9;169:11; 198:11 component (3) 98:7;152:14;170:22 components (2) 83:2;189:2 composed (2) 76:8;102:2 compound (1) 183:16 comprised (1) 99:9 comprises (1) 99:8</p>	<p>computational (2) 71:3,6 computer (1) 130:1 conceded (1) 69:8 concentrate (2) 83:14;89:9 concentrations (2) 100:17;144:14 concerned (1) 208:20 concerning (3) 55:7,11;60:17 conclude (1) 174:3 conclusion (3) 60:15;61:5;127:5 conclusions (1) 196:19 condition (4) 63:6,13;64:17;65:21 conditioned (6) 63:3;64:19;88:3,6; 90:9;185:22 conditions (3) 90:5;185:6;196:18 conduct (13) 64:25;68:12;86:18; 92:14;93:6;117:4; 121:4;147:20;153:5; 157:2,13;181:24; 186:15 conducted (7) 75:5;117:5,6,8,9; 195:22;197:10 conducting (19) 67:14;93:25;94:20; 101:2;108:18,19,21,24, 24;109:16;117:20,23; 118:1,12,18;120:6; 123:14,17;204:14 conducts (1) 72:3 confer (3) 136:7;155:23;207:14 conferral (1) 92:24 confidential (2) 79:14;146:24 confirm (1) 169:13 conflict (5) 101:10,11,12,15; 170:5 confused (1) 123:10 conjunction (1) 62:15 connection (1) 141:21 C-O-N-N-E-L-L (1) 140:19</p>	<p>consequences (1) 161:2 consider (6) 108:15;109:25; 110:5,15;173:22; 186:19 consideration (1) 174:12 consistently (1) 68:16 consists (2) 68:23;73:25 consolidate (1) 178:12 constituents (1) 177:20 constrained (1) 68:19 constraints (1) 168:19 consult (3) 80:11;135:7;192:13 consultation (6) 153:3;157:16; 159:14;164:17;169:4; 180:10 contained (1) 196:14 containing (1) 93:5 contains (3) 61:6,7;93:7 content (5) 95:24;144:16; 154:10;155:1;165:7 contents (4) 90:13;189:17,18; 191:12 context (1) 193:12 contingent (1) 198:10 continuation (1) 93:18 continue (12) 63:7;89:21;96:20; 98:19;105:1;136:19; 139:13;160:4;173:23; 182:2;187:7;210:10 continued (7) 63:13;78:5;90:6; 97:24;151:10;156:8; 176:13 continues (2) 138:23;167:20 continuing (2) 55:4;141:2 contract (5) 169:8;171:10; 183:12,14,15 contribute (4) 164:7;176:20; 196:24,25</p>
---	--	--	--	--

contributed (1) 197:21	156:20,21;171:22; 172:7	cutoff (1) 148:15	decline (1) 163:6	70:23;88:14;89:13; 129:8,10;182:21; 186:8,9;201:7;205:9
contributing (3) 86:25;87:11,18	coursework (2) 74:1;92:11	cycle (1) 145:17	deemed (1) 63:12	departmental (1) 165:13
contributors (1) 154:10	court (8) 70:14;91:17;94:6; 108:10;130:3;134:7,9; 200:13	D		
control (1) 62:15	cover (2) 151:23;188:4	data (6) 74:21;124:16;125:1, 2;156:25;173:21	defend (6) 92:13,17;124:16; 170:9;173:10;185:1	depend (2) 174:25;180:4
convention (5) 174:9;197:8,13,13, 15	covered (5) 94:25;138:17;152:2; 184:24;190:16	date (3) 151:25;157:21; 161:16	defended (1) 124:15	dependent (2) 98:8,11
conversation (1) 61:25	covers (1) 61:15	dates (1) 151:8	defending (2) 171:4;173:24	dependents (1) 190:15
converts (1) 165:7	COVID (1) 175:18	day (6) 59:20;138:22; 157:19;160:11;173:6; 210:9	defense (7) 93:11;174:7,16,24; 179:10;182:21;205:9	depending (10) 85:15,24;86:10; 103:12;144:18;152:4; 157:21;174:14;205:13; 206:10
convey (1) 136:23	crashed (1) 129:19	day-to-day (4) 68:21;160:15;166:7; 179:3	defined (5) 55:21;64:17;124:14; 183:17;184:3	depends (3) 120:11,13;179:6
convince (1) 93:8	creativity (1) 180:1	deals (2) 103:24;139:13	defining (1) 162:18	deposit (6) 92:18,18,18;174:20; 175:12;185:1
copy (3) 112:16;116:20; 130:10	credit (3) 143:16;172:2,13	dealing (2) 158:9;159:7	definition (2) 86:24;110:14	depth (1) 156:22
core (5) 63:4;120:11;156:20, 21;181:2	credits (4) 92:10,11;120:3,4	dean (36) 70:24;71:8,21;76:3, 5,6,9,10,11,13,14,15; 77:18,25;78:9,10,24; 79:1,5;98:21;104:3; 112:20;113:8;114:14, 15,18;140:22;142:1,4; 147:2;154:12;175:15; 190:11;194:18,19,23	defray (2) 61:17;152:6	deriving (1) 172:1
corner (1) 115:25	criteria (2) 125:24;148:17	deans (2) 78:17,20	degree (33) 55:17,19;56:1,1,3; 59:5,5;61:11,14;62:10, 22;63:8;64:3;71:4; 73:24,25;74:6,15;75:9; 79:3;81:17;83:15; 88:13;92:24;95:8;97:7; 119:23;120:5;126:18; 140:25;154:1;172:3; 175:14	describe (34) 71:8;72:2,25;73:22; 74:3;76:1;79:1;80:18; 84:1,25;90:12;95:5; 98:2;100:12;101:23; 103:20;142:2;146:15; 156:11,17;161:14; 163:8;164:22;166:2; 167:11,25;168:10; 173:14;174:3;177:19; 178:8,17;180:24; 183:25
corrected (1) 172:18	Critically (1) 64:17	dear (1) 149:7	degrees (2) 143:17;155:23	described (11) 73:9;83:3,17;90:17; 94:21;99:16;144:11; 157:9;169:22;175:8; 198:22
correction (1) 84:24	cross (3) 150:14;192:19; 206:16	debate (1) 136:19	delay (1) 59:14	describes (6) 80:20;82:4;92:8; 131:2;151:17;168:7
correctly (2) 202:6,23	cross- (1) 107:1	decent (1) 209:10	delays (1) 59:18	describing (1) 120:4
cost (10) 82:17,19;90:23; 122:6;137:14;151:23; 188:5;189:1,2;207:13	cross-exam (1) 107:5	decide (5) 68:22;124:19;176:4; 179:14;200:22	deliberate (1) 98:18	description (1) 83:23
costs (12) 120:25;122:1,2,4,16, 22,25;123:1,2,5,5; 152:1	cross-examination (6) 107:18,19;108:8; 137:12;192:20;210:11	decided (6) 55:6;60:13;68:10; 121:23;147:21;184:23	deliberating (1) 98:24	descriptive (1) 144:15
counsel (7) 67:2,8;131:11; 150:12;191:23,25; 202:6	cross-examining (1) 150:5	decides (3) 63:16,21;122:7	demonstrate (2) 67:5;89:1	design (1) 197:21
counted (1) 119:25	crystal (1) 171:7	decision (11) 60:12,14,21;68:14; 99:7,7;103:24;104:2, 25;106:8,10	demonstrated (1) 60:21	designate (1) 169:18
couple (3) 139:13;201:15; 206:21	culture (1) 158:12	declaration (3) 161:12;166:2;204:3	demonstrating (1) 201:18	designed (3) 145:22;151:23; 169:20
course (34) 62:24;76:22;80:5; 116:1;117:25;118:2, 13,15,17;119:12;120:2, 13;128:4;147:17,23; 149:11;151:6;154:12, 19;156:25;157:8; 160:12;161:25;167:2; 171:14,18,23,25;174:6; 181:2;183:10;184:19; 189:4;195:19	cumulative (2) 92:10;98:5	declare (3) 160:5;168:24;200:21	dental (5) 82:20,21;90:25;91:6; 190:21	detail (1) 151:14
courses (7) 118:20;120:11,12;	current (7) 60:13;70:21;82:25; 83:24;111:7;158:2; 159:16	declared (2) 162:15,20	Dentistry (1) 141:4	detailed (2) 86:19;183:11
	curricular (2) 142:8;145:1		Department (10)	details (3)
	curriculum (13) 62:10,12,24;74:3; 92:4;95:13;143:12,16; 153:18;156:18;164:23; 172:25;187:13			
	customary (1) 199:25			

<p>90:16;150:25;191:12 determination (3) 103:2,18,25 determine (3) 124:22;135:17;160:1 determined (2) 176:16;185:11 determines (2) 173:11;185:13 determining (2) 124:11;154:6 develop (7) 71:6,7;95:18;159:5; 162:8,11;170:15 developed (4) 94:17;135:1;173:12; 178:11 developing (1) 171:14 development (7) 87:1;142:8;143:25; 163:12;164:3;168:13; 206:7 developments (1) 171:9 developmetn (1) 93:19 develops (3) 103:9;165:12;176:18 devoted (2) 118:23;173:3 diagnostic (1) 198:18 diagrams (1) 144:14 differ (4) 158:7;167:15,18; 168:17 difference (11) 85:14;104:6,8,9; 105:11;109:15;136:5; 143:5;144:10;179:1; 205:12 differences (3) 136:2;178:8,17 different (53) 61:4,4,9;63:11; 72:15;73:2,22;74:6,18, 19;79:5;81:25;85:24; 91:5;92:2;100:2,5,6,16, 24;102:2,25,25;105:5; 109:19;124:6,6;125:4, 4;134:18;143:9,19; 144:17;147:18,19; 150:24;151:20;155:11, 19;157:12;160:3,6,23; 171:22,23;173:15; 186:19;189:2;190:23; 194:5;201:19;202:14; 206:10 differently (3) 175:3;199:12;202:1 difficulties (2)</p>	<p>57:19;170:12 difficulty (1) 129:20 diffusion (1) 163:25 Dilks (3) 77:9,10,10 diminution (1) 65:19 Dire (8) 77:3,7;149:17; 150:10,15;154:24; 155:5,7 direct (29) 67:10;68:1;69:15; 70:9;78:5;97:24; 101:13,14;113:4,11,15; 114:8,9,21;122:24; 123:1,2,5;140:14; 151:10,22;156:8; 176:13;198:24;199:22; 200:1;205:11,21;208:7 direction (8) 68:13,19;69:16; 163:13;179:16;194:17, 18,20 directions (1) 65:9 directly (5) 76:4;124:24;147:25; 177:9;194:23 Director (14) 55:6;58:22;66:13; 68:6;77:10,15,16,17, 24;99:10;100:16,17; 138:24;145:9 directors (1) 78:16 disciplinary (3) 89:19;99:13;101:24 discipline (2) 65:12;68:18 disciplines (1) 144:17 discover (1) 71:7 discovery (2) 81:12;144:3 discretion (1) 63:25 discuss (10) 59:15;133:10;165:5, 17,17;170:11;209:22, 23,25;210:16 discussed (5) 55:12;152:25; 168:12,22;170:24 discussion (3) 59:9;159:23;163:20 discussions (2) 170:13;174:19 disease (5) 143:11;144:2;182:6,</p>	<p>22;183:16 dismiss (2) 66:14;99:23 dismissal (1) 105:25 dismissed (12) 60:10;89:22,22; 100:1;105:9,12,16,21; 106:1,9,25;138:22 display (1) 203:13 dispute (3) 69:19;201:23,24 disruption (1) 208:18 dissertation (28) 62:9;64:22;65:4; 92:15;95:3,5,8,17; 157:14;161:12;162:2, 14,19;163:21;169:6; 171:4;173:10,18,25; 174:1,24;177:4,8,12; 179:10;181:1;185:1; 204:25 distinction (4) 61:1;68:25;72:13; 202:8 distinctions (1) 145:19 distinctoin (1) 68:7 distinguish (2) 68:2;155:11 distinguishable (1) 62:19 diverse (1) 81:13 divided (2) 100:16;102:23 Doctor (51) 70:17;74:3;75:22; 76:20;78:7;80:18; 90:12;91:9,16;92:4; 94:11,22;95:5,16; 96:15;98:1;100:7,11; 104:5;105:5;111:21; 131:15,21;137:12; 140:20;155:15;156:10, 17;157:5;159:11; 160:8;164:8;165:19; 166:16;167:11;170:14; 174:22;179:10;180:12, 19;181:18;183:14,22; 184:16,22;186:12; 188:20;189:3;190:10, 18;210:1 doctoral (3) 195:23;198:24; 204:15 doctor's (1) 209:25 document (89) 66:20;75:22;76:21,</p>	<p>22;79:16,20,22,23,24; 80:5,8,19;82:3;83:20; 92:7;93:5,10,11,12; 111:11,14,20;112:1,17; 113:20,22,22,24;114:7, 12,13,22;116:10; 128:16,22;129:2,9,21; 132:8,10,12;133:1,17; 134:18,20;149:1,9,11; 150:3,6,8,16,16,18; 153:22;154:3,5,11,19; 155:6;156:11,14; 166:16,19,25;167:2; 168:7;169:6;174:12, 19;188:21,25;189:3,6, 8,11,12;190:3,14; 191:20;195:23;196:15; 198:4,22;207:3,7,8,16; 209:18 documentation (2) 168:6;201:5 documents (11) 67:10;135:17;136:2, 8;145:24;155:12; 191:24;207:2;208:18, 24;210:16 domain (4) 91:12,14,21,23 done (9) 65:13;88:22,22; 92:19;109:22;156:10; 176:4;190:25;196:17 doubt (2) 111:25;186:2 down (15) 70:8;79:16;83:20; 94:7;100:12;101:19; 108:10;140:13;151:25; 159:8;166:1,7;168:15; 186:19;203:16 Dr (34) 69:24,25;70:11;76:5, 9,11,12,13,14,15,17; 77:17,20;78:9,10;79:7, 20;90:1;107:21; 123:21;137:6;138:22; 140:5,6,7,16;149:1; 153:22;176:15;179:22; 192:11;194:24;199:17; 203:20 drafted (1) 151:12 drafting (4) 80:1;81:4,4;166:25 draw (4) 69:1;110:20;113:2; 203:23 drew (2) 68:6,6 driven (2) 147:21;206:8 Drug (7) 129:6,11;130:18;</p>	<p>131:24;132:2,3;198:20 drugs (2) 71:6,7 dual (4) 61:11,14;74:15;79:3 Due (1) 168:19 duly (2) 70:5;140:11 duration (5) 88:13;91:23;93:7; 175:10;181:17 during (21) 84:19,21;108:22; 111:8;112:2,19; 118:25;119:1;135:15; 148:1;160:8,17; 163:24;165:20;167:17; 174:6;178:15;181:2; 183:10;187:2;195:21 duties (8) 64:17;71:8;79:1,10; 85:19;142:2;163:9; 182:13 duty (1) 79:11</p>
E				
			<p>E- (1) 75:20 E-1 (1) 78:4 E-2 (2) 79:18;80:15 E-3 (2) 148:24;151:4 E-4 (2) 153:20;156:7 E-5 (2) 166:12;167:9 E-6 (2) 188:18;191:16 earlier (5) 56:2;151:8;169:22; 175:8;193:1 early (4) 157:24;159:15; 160:21;193:4 easier (2) 75:19;209:5 easy (1) 208:16 Edition (1) 210:13 edits (1) 94:1 education (12) 72:5,6,17;76:13; 81:12;93:1;95:6; 125:14;129:8,10; 141:12;201:8 educational (10)</p>	

<p>71:1;80:20,22;95:20; 110:13;140:24;165:6; 202:2,3;203:1</p> <p>educators (1) 124:5</p> <p>effect (1) 66:1</p> <p>effective (1) 83:1</p> <p>effort (1) 164:7</p> <p>efforts (1) 164:3</p> <p>either (7) 80:1;85:17;105:9; 159:25;160:5;174:13; 186:19</p> <p>elaborate (5) 93:22;94:14;101:11; 109:13;144:19</p> <p>electives (2) 118:11;119:22</p> <p>electronic (1) 116:19</p> <p>else (6) 125:3;127:15; 134:17;203:6,7;206:14</p> <p>email (10) 91:10,12;148:21; 159:24;189:20,24; 190:13;191:13;194:3,7</p> <p>emails (2) 92:1,2</p> <p>emerging (1) 143:24</p> <p>employ (1) 68:4</p> <p>employed (3) 70:17;116:2;140:20</p> <p>employee (3) 62:14,16;133:5</p> <p>employees (38) 55:21;60:3,7,9,16,17, 20,23;61:3;63:12; 64:25;66:7,11,14;67:7, 20,21,22,23;68:3,5,7,9, 15,16,25;83:9;91:4,7; 124:4,8,9;131:3,6; 152:23;178:5;190:19; 199:25</p> <p>Employer (53) 50:6;55:11,14,24,25; 66:20;67:4,15,20;68:1, 16,20,23,24;69:1,6,12, 16,22;76:25;78:1; 107:16;110:21;111:1; 112:6;116:14;129:17; 130:4;132:21;134:2,3; 135:9,15;137:4; 138:11;139:7,7;140:4; 150:3;190:4;191:6,9; 193:22;201:14;203:8, 21;206:25;207:4,8,8;</p>	<p>208:23;209:17,24</p> <p>Employer's (31) 55:17;62:15;67:9,12, 18;69:5;75:20;78:4; 79:18;80:15;106:24; 107:12;139:16;148:24; 151:2,4;153:20;156:6, 7;166:12;167:7,9; 188:18;191:4,6,15,16; 193:20;198:3;209:12; 210:15</p> <p>employment (3) 55:14,23;141:11</p> <p>enable (2) 155:23;195:6</p> <p>encourage (2) 97:7;159:16</p> <p>encouraged (4) 95:22,23;96:1,4</p> <p>end (8) 58:2;67:6;124:17; 147:22;160:13;167:19; 183:17;208:5</p> <p>endeavoring (1) 208:18</p> <p>endeavors (1) 164:6</p> <p>endorse (1) 97:19</p> <p>engineer (1) 115:2</p> <p>enough (3) 64:10;124:16;206:18</p> <p>enriched (1) 104:11</p> <p>enroll (1) 62:24</p> <p>enrolled (9) 92:21;117:25; 118:13,15,17;120:2; 132:16;186:15;187:8</p> <p>enrollment (3) 174:23;190:12; 198:21</p> <p>enrolls (1) 132:15</p> <p>ensure (5) 65:2;155:5;169:9; 177:10;196:14</p> <p>ensures (1) 196:17</p> <p>ensuring (1) 138:7</p> <p>enter (1) 159:9</p> <p>entered (4) 158:13;167:8; 189:15;191:15</p> <p>entering (1) 190:5</p> <p>entire (6) 88:13;111:13,20; 117:10;122:8;135:25</p>	<p>entirely (2) 111:24;173:3</p> <p>entirety (1) 112:6</p> <p>entities (1) 144:13</p> <p>entitled (5) 126:2;133:6,8,11,14</p> <p>entrance (1) 93:14</p> <p>environment (6) 81:14;86:18;158:14; 159:5,10;160:20</p> <p>environments (1) 157:4</p> <p>equipment (1) 204:25</p> <p>equitable (2) 81:13;169:20</p> <p>equivalent (3) 161:21;172:20; 178:12</p> <p>Eric (2) 76:7;78:10</p> <p>essence (1) 151:15</p> <p>essential (1) 62:23</p> <p>essentials (1) 64:23</p> <p>establish (1) 176:19</p> <p>established (6) 125:8,8,24;201:16; 202:12;205:19</p> <p>establishes (2) 148:12,14</p> <p>etc (12) 143:17;144:23; 159:5;168:6;170:12; 173:21;179:9;182:7; 186:17;187:9;189:10; 193:6</p> <p>ethical (1) 197:16</p> <p>ethics (1) 157:3</p> <p>evaluate (4) 89:20;102:8;104:2; 209:6</p> <p>evaluated (5) 92:13;93:12,18; 124:24;169:17</p> <p>evaluates (1) 169:15</p> <p>evaluation (3) 125:5;160:14,25</p> <p>even (8) 63:16,16,18,19; 64:13;65:14;108:8; 112:1</p> <p>event (1) 161:8</p>	<p>events (1) 184:19</p> <p>eventually (4) 89:5;100:1;119:6; 124:16</p> <p>everybody (2) 75:19;209:8</p> <p>everyone (1) 69:25</p> <p>everywhere (1) 197:9</p> <p>evidence (33) 55:7,8;56:2,10; 57:10,12;58:22,24; 59:8,15;60:8;64:18; 65:7,10,22;69:19; 149:15;154:23;156:6; 167:5,8;183:8,8,20; 189:6,15;191:7,15,18; 196:20;201:18;204:2,9</p> <p>evolution (2) 170:24;176:25</p> <p>evolve (1) 154:14</p> <p>exactly (6) 79:23;115:23; 170:23;171:19;193:11; 198:22</p> <p>exam (9) 93:14;169:12; 170:11;171:3;174:8, 17;186:15,18,22</p> <p>EXAMINATION (12) 70:9;77:7;78:5; 97:24;137:10;138:13; 140:14;149:17;151:10; 155:7;156:8;176:13</p> <p>examine (2) 98:18;107:2</p> <p>examined (6) 70:6;124:25;128:22; 133:1,17;140:12</p> <p>examiner (1) 174:9</p> <p>example (4) 153:23;163:19; 180:5;190:15</p> <p>examples (1) 199:23</p> <p>exams (1) 170:3</p> <p>exceed (1) 180:16</p> <p>excellent (1) 187:12</p> <p>except (1) 209:10</p> <p>exchange (4) 61:19;62:2;83:17; 152:15</p> <p>exclusion (1) 79:3</p> <p>exclusively (1)</p>	<p>62:22</p> <p>excuse (7) 55:8;60:11;88:1; 90:23;103:3;128:12; 160:6</p> <p>excused (1) 139:15</p> <p>execution (2) 87:1;197:21</p> <p>Exhibit (50) 75:17;76:25;77:1; 78:2;79:17;80:12; 110:21,25;111:1; 112:6;115:4,13; 116:23;128:17;129:17; 130:3,4;132:9,21; 134:1,2,3;135:9; 148:23;149:14,15; 151:3;153:19;154:23; 156:6;166:15;167:5; 171:13,13;180:18; 188:17;191:6,7,12; 193:21;198:3;203:12, 21;206:25;207:5,6,10; 209:12,24;210:15</p> <p>exhibits (5) 63:20;67:12;135:16, 17;210:15</p> <p>exist (3) 64:18;152:11;156:11</p> <p>existing (3) 94:18;164:5;196:16</p> <p>exists (1) 60:17</p> <p>expand (2) 109:5;170:16</p> <p>expanding (2) 108:20;109:18</p> <p>expectation (4) 174:22,25;180:13; 196:22</p> <p>expectations (14) 155:21;159:19; 160:9,10;161:7; 166:21;167:25;168:1, 4,7,15;180:3;181:25; 186:17</p> <p>expected (2) 160:17,19</p> <p>expedite (1) 193:25</p> <p>expense (1) 65:4</p> <p>expenses (10) 61:17;82:9,11;152:7; 198:25;199:3,15,23,25; 205:6</p> <p>expensive (1) 204:20</p> <p>experience (8) 86:5;157:12;160:6,7; 178:20,23;180:14,16</p> <p>experienced (1)</p>
---	--	---	--	--

75:6 experiences (3) 147:18;159:6,16 experimental (1) 168:20 experiments (9) 157:1;173:20,22; 175:1;183:20;186:16; 197:22;204:23,24 expert (2) 174:10;195:15 expertise (13) 87:15;94:19;99:13; 100:24,24,24;104:13; 108:20;109:17,17,18; 145:23;170:20 explain (12) 86:6;127:11;143:5; 155:9;156:17;159:11; 170:4;172:25;173:24; 190:13;194:11;204:13 explore (3) 119:6,8,10 exposed (1) 119:14 exposure (1) 109:19 expressed (1) 191:23 expression (2) 169:13;184:1 expressly (1) 63:9 extend (1) 86:6 extended (1) 163:5 extent (9) 56:13,24;57:5;58:10, 17;62:2;66:2;136:1; 156:10 external (10) 92:17;104:9,15,17; 165:13;187:10,20; 188:4,13,14 extremely (2) 161:7;179:13 eyes (2) 170:10;209:21	199:24;200:1;202:7, 10,12 factors (1) 68:2 facts (2) 60:14;66:12 faculty (36) 63:17;64:1;76:16; 77:17,22,23;78:16; 88:21;99:10,12; 100:17,19;101:16; 103:7,13;104:12,16; 115:15;116:2,3,11; 117:6;124:9;127:16, 19;128:4;131:4; 135:24;136:6;146:21; 154:12;162:17;163:12; 164:13;165:13;166:5 fail (1) 120:13 failed (1) 161:8 failing (1) 161:3 fairly (1) 174:2 familiar (20) 76:21;79:22,23,24; 81:25;86:3,23;90:1; 92:4;116:5,6;127:8,10; 130:16,17;150:18; 181:18;183:22;198:5; 203:3 family (2) 180:6;190:17 far (3) 186:2;188:24;208:1 fashion (2) 146:18;154:16 fast (1) 128:23 faster (1) 206:17 F-awards (1) 187:15 feasible (2) 157:21;169:11 Federal (10) 50:15,16;67:24;86:4, 15;157:2;182:18; 191:18;195:13;205:7 feeds (1) 179:25 feel (1) 158:13 feeling (1) 158:13 fellow (1) 141:2 fellows (3) 131:5;178:1,2 few (1) 120:4	F-fellowship (1) 187:15 field (4) 67:3;173:23;174:11; 196:16 fields (1) 149:8 Fifth (3) 57:5,10;64:21 figure (1) 108:9 figures (1) 150:18 file (2) 189:13;190:7 filed (1) 146:24 Filizola (15) 69:24,25;70:1,4,11, 13;71:17;90:1;107:21; 109:13;114:17;123:21; 137:6;138:22;194:18 fill (3) 149:8;159:18;161:12 filthen (1) 58:16 final (5) 57:5,10;58:16; 146:12;184:25 finances (1) 195:16 financial (6) 61:1;64:24;180:21; 203:17,21;204:11 financing (1) 204:17 Finch (1) 79:20 find (4) 66:13;95:10;119:4; 127:14 findings (3) 165:8;174:3,14 fine (2) 150:18;202:21 finest (1) 67:3 finish (2) 108:10;206:19 finished (2) 107:16;161:25 First (48) 62:21;66:16;68:20; 69:23;84:6,13;85:2; 88:19;95:7;103:4,6,7, 22;106:7;109:17; 113:2;117:24;118:7, 23,25;119:1,19,24; 131:1;144:24;145:21; 146:20;147:23,24; 149:19;156:18,18; 157:19;159:18;161:25; 162:6;163:13;169:5;	173:13;193:16;195:24; 196:3;206:24,24; 207:4;208:8;209:12,12 first-year (1) 147:16 five (1) 73:24 five-minute (3) 97:17;176:1,10 five-year (1) 73:25 fix (1) 136:11 flexibility (3) 63:24;64:11;65:16 flexible (2) 133:9;154:14 flow (1) 59:17 fluctuates (1) 142:24 fluid (1) 169:8 fluidity (1) 183:13 focus (7) 61:18;83:14;144:12; 152:12;158:8;200:6; 206:10 focused (2) 143:8;182:23 follow (2) 126:15;186:23 followed (1) 178:2 following (2) 62:20;131:2 follows (3) 70:6;113:10;140:12 follow-up (2) 137:25;200:9 food (1) 199:8 foremost (2) 162:6;163:13 form (11) 110:3;122:16;149:6, 19;150:22;159:19; 160:16;162:16;166:22; 198:5;204:3 formally (2) 193:18;194:13 format (2) 154:5;174:2 formats (1) 163:22 former (1) 159:16 formerly (1) 144:2 forming (1) 95:20 forms (1)	67:25 formula (1) 148:15 formulate (1) 170:7 formulated (1) 169:4 forth (5) 62:13;88:3;99:18; 125:7;167:24 forthwith (1) 208:3 forward (4) 105:20;138:25; 159:25;173:23 found (3) 61:3;67:23;161:18 foundation (4) 135:10;182:21; 205:9,9 foundations (2) 182:22,23 four (3) 61:9,13;142:16 Fourth (6) 56:4,13,18;58:9; 61:22;64:8 framework (1) 155:22 Frank (1) 70:15 freedom (1) 170:14 frequently (2) 80:7;197:17 fresh (1) 170:10 Friday (3) 50:17;208:14;209:10 front (4) 130:11;168:14,15; 195:3 frozen (1) 56:20 fulfill (9) 55:19;68:12;96:25; 97:10,14;155:12; 185:16;187:25;188:9 fulfilled (1) 88:11 fulfilling (2) 170:23;185:22 fulfillment (2) 64:16,20 fulfills (2) 202:1,3 full (4) 158:15;167:16; 188:4;191:20 function (2) 93:14;99:14 fund (5) 84:14;85:3,3;89:2;
F				
facilitate (3) 154:15;156:25; 157:13 facilities (2) 122:16,18 facility (1) 141:16 fact (14) 64:13;65:1;67:3; 68:17;69:4;87:17; 133:19;159:5;179:24;				

<p>141:8 fundamental (1) 60:1 fundamentally (1) 63:11 funded (7) 85:17;123:5;138:7; 181:3;182:11;185:4,8 funding (80) 55:25;61:16,24;63:2, 7,9,14,15,23;64:9,19; 65:21;68:7;81:23,25; 82:5;83:2,9,12,21,24; 84:25;85:8,22,23,25; 86:4,7,8,15;88:2,6,10, 14;89:5,6,7,7,8,8,12,15, 23,24;90:9;96:20; 105:24;106:1;113:3; 121:3;122:15;151:17; 153:12;160:22;161:8; 175:7,22;179:20; 180:24;181:6,8,16; 182:9,16;183:1; 185:17,20,22;186:1,4, 5,7,10,11;187:10,14; 188:6,14,15;204:2 funds (23) 84:10,13,21;85:2,25; 86:1,20;88:15,15; 89:10,14;96:21; 182:17,25;186:9; 187:20;188:4;199:16; 204:20,21;205:6,13; 206:1 funnel (1) 182:4 further (12) 85:9;104:12;106:23; 137:24;138:10,13,19, 20;151:25;166:1; 174:17;192:10 furtherance (7) 62:8,22;94:23; 160:18;173:18;177:3; 184:18 furtherers (2) 64:6;138:7 future (7) 95:10,11,14;96:4,24; 164:7;196:11</p>	<p>geared (1) 165:1 general (6) 63:10;80:18;113:3; 142:12;179:5;186:14 generally (25) 65:16;73:22;81:16; 83:3;86:6;91:16;98:2; 103:20;109:7;142:11; 147:4,6,7,8,22;148:7, 16;157:23;158:6; 173:24;176:25;180:11; 183:5;186:10;187:15 generate (1) 195:23 generated (1) 156:25 generation (2) 81:11,20 genetic (1) 206:7 genetics (2) 143:25;206:7 genomic (1) 144:1 genotyping (1) 179:9 gist (1) 128:25 given (8) 56:3;57:11;109:6; 114:19;150:17;158:4; 176:15;194:6 glad (1) 208:13 goal (4) 156:21;170:9;182:3; 184:25 goals (7) 95:20;144:24; 159:20;162:19;169:6, 10;170:24 goes (5) 106:6;150:9,9;199:8; 206:16 Good (12) 59:25;70:11;94:4; 97:8;105:9,19;107:21; 112:18,21;140:16; 161:4;192:22 govern (2) 203:1,2 governed (1) 191:18 GPA (3) 92:10;124:15;161:5 grad (9) 56:25;58:11,19,20; 72:5,17;76:2;121:20; 129:14 grade (9) 63:1;98:5;120:12; 160:24;161:1,4;172:7,</p>	<p>22;185:9 graded (2) 200:24;201:2 grades (3) 120:8,9;169:15 graduate (113) 55:15,18,20,24;57:3, 6,6,8,8;58:14,17,18; 60:19,23;61:2,2,8,8,15, 24;62:10,18;64:24; 66:6,13;70:24;71:9,10; 72:14,18;73:5,23; 74:12;76:4,23;78:20; 79:21;80:6,9;81:10,17, 23;82:1;84:10,12,21; 85:2,15;88:14,20; 89:13,19;90:10,19; 95:19;96:2,12,17;97:1, 11;98:3;101:25;105:6; 113:15;114:14,18; 115:3,18;121:3;124:7, 8;126:5;129:8,13; 130:19,25;131:4,23; 132:15;133:5,5,6; 136:3,4,6;137:22; 142:1,7,15,16,24; 149:12,24;150:1; 152:16;154:20,22; 167:3;175:21;182:9, 12;185:12;187:11,19; 188:1,5,7,12;189:4; 202:4;204:11,21; 205:23 graduated (1) 182:3 graduating (1) 143:1 graduation (4) 75:5;92:9;167:19; 196:12 grant (49) 64:14,17,20;85:5,12, 13,14,18;86:4,7;87:3, 11,13;88:8,10;89:12; 94:12,21;97:11,14; 120:24;121:25;122:6, 10;123:6;137:18; 138:6,7,8,15,17; 160:18;177:3;181:18, 20,21;182:2,12;183:6, 18;184:6,16,18,23,24; 204:10;207:23;208:15, 24 granting (3) 62:4;83:4;174:10 grants (23) 86:2,9;88:4;120:21, 25;121:3,4;137:13; 181:22;182:4,8,18,21; 183:2,3;184:2;185:23; 187:16;205:8,9; 207:25;208:2,7 Great (2)</p>	<p>58:9;170:8 greater (1) 166:8 groceries (4) 152:11;198:25; 199:3,15 groundbreaking (2) 117:4,5 grounds (1) 189:7 group (2) 145:25;146:7 grouped (1) 206:4 groups (1) 164:10 guess (4) 67:24;109:7;129:21; 191:24 guidance (7) 65:10;93:23,24; 126:15;162:9;163:14; 191:19 guide (1) 94:8 guideline (1) 197:16 guidelines (1) 154:18 Gustave (3) 72:23;73:20,21 guys (1) 59:15</p>	<p>208:21 happens (5) 100:2;160:15; 186:13;187:23;199:12 happy (1) 193:24 hard (4) 112:16;130:10; 155:17;173:14 hardly (1) 199:9 hat (2) 84:18;141:25 hats (1) 141:18 head (2) 102:17;207:1 health (19) 74:20;81:12;82:8,18, 19;90:23,24;91:1,3; 120:22;122:15;152:2; 179:25;181:22;182:20; 184:2;187:9;190:18; 205:8 healthcare (2) 61:15;72:4 hear (11) 55:7;56:18;57:17,23; 58:7,8;62:18;63:15; 65:22;131:15;155:16 heard (4) 66:19;103:4;104:5; 127:8 hearing (122) 50:13,14;55:3,4; 56:7,10,13,17,23; 57:13,22;58:4,6,9,25; 59:4,7,14,17,18,23; 66:23,25;69:21,21; 70:1,7;78:3;80:14; 97:18,20,22;106:20,22, 24;107:3,7,10,12,15; 109:11,13;111:17; 112:21;113:18,21; 114:2,4,16;116:14,23; 121:18;125:21;126:8, 10;127:6;134:1,3; 135:8;136:9,20,22,25; 137:4;138:2,11,21,23; 139:3,6,12,16;140:3,7, 13;150:2,5,11,14; 151:2,6;155:15,25; 156:5;158:22,24; 167:7;176:3,9,12; 189:12,19,22;190:4; 191:1,3;192:9,14,16, 18;193:25;199:6,10, 19;200:11,13,16; 202:17;203:6,14; 206:20,23;208:19,23; 209:2,7,11,17,22; 210:6,8,18 heart (1)</p>
G		H	<p>half (3) 122:9;147:24;176:6 hand (10) 70:2,7;80:1,81:4; 105:21;115:25;140:8, 13;143:7;166:25 handbook (32) 67:11;79:21;80:25; 82:4;89:25;90:13; 96:15;102:21;110:23; 111:1;113:6;115:3,15, 17;116:3,11;125:8; 129:18;130:5,10,17,20, 24;133:4,19,23;134:2, 17;135:24;136:4; 180:3,13 handle (1) 132:20 hands-on (2) 147:18;157:12 Hanss (3) 76:11;77:17,21 happen (3) 98:14;99:20;175:17 happened (1) 184:22 happening (1)</p>	

79:24 heavily (2) 170:20;178:23 height (1) 166:8 held (4) 66:10;73:11,13; 210:12 help (1) 162:8 helpful (3) 191:21,22;192:6 helping (1) 128:6 helps (1) 170:6 Hey (1) 140:6 Hi (2) 69:25;70:1 higher (3) 87:23;92:11;98:5 highlighted (1) 203:24 highly (1) 152:3 himself (1) 199:17 hold (2) 100:7;201:22 holding (2) 69:10;208:22 holidays (1) 180:15 home (1) 161:18 honest (1) 134:23 honestly (6) 113:9;115:22; 131:10;132:4,11,18 hope (2) 112:12;184:12 hopefully- (1) 115:5 horizon (1) 168:25 horizons (1) 168:21 hour (4) 97:16;128:10;176:6; 209:10 hours (4) 63:19;128:11; 160:11;172:13 hour's (1) 139:18 house (1) 131:4 housekeeping (1) 206:21 housing (3) 82:12;152:3;187:9	HR (3) 99:21,23,23 huge (1) 180:6 human (5) 99:21;143:10; 194:12,14;209:15 hundred (1) 118:24 hundreds (1) 159:8 hypotheses (3) 168:25;183:12,19	95:5 important (5) 65:8;95:9;163:24; 165:10;179:24 importantly (3) 158:8;164:2;188:7 improve (2) 95:13;96:23 inappropriate (4) 57:2,7;58:13,19 include (12) 56:14,24;57:6;58:11, 17;90:25;91:1;117:19; 123:5;131:3;204:21; 208:1 included (2) 62:1;82:20 includes (9) 90:24;98:6;113:4; 120:5,25;123:8,9; 174:9;194:7 including (10) 55:15,16,25;57:1; 58:12;122:1;127:19, 20;170:25;189:10 inclusive (1) 81:14 income (3) 67:24,24;195:13 incoming (3) 149:20;158:11;193:7 incomplete (2) 189:8,11 incorrect (1) 84:15 Indeed (2) 62:24;63:8 independence (1) 178:13 independent (1) 162:12 indicate (1) 145:21 indicated (2) 157:20;205:7 indicates (1) 189:9 indistinguishable (2) 69:7;201:21 individual (5) 86:25;146:18;168:5; 173:14;184:4 individuals (1) 60:9 industry (1) 95:15 infectious (1) 182:6 influenced (2) 159:6;170:20 informally (1) 113:12 information (17)	79:14;86:14,19,19; 103:8;111:6;113:3; 120:25;124:21,23; 146:23;155:5;172:1,1; 176:21;183:5;196:14 initially (1) 164:20 initials (1) 122:13 inn (1) 106:5 innovation (1) 81:12 inspired (1) 94:18 instance (4) 73:5;98:24;122:9; 186:21 Instead (2) 64:9;65:7 Institute (5) 60:22;73:12,19; 141:15;186:9 Institutes (6) 120:22;122:15; 181:22;182:20;184:2; 205:8 institution (8) 72:3;86:18;89:9; 174:10,10;181:3; 203:4;205:10 Institutional (1) 182:25 institutions (2) 165:4;202:11 instructed (1) 163:11 instruction (1) 156:22 instructional (5) 56:25;58:12;62:2; 65:21;74:1 instructions (1) 194:7 instructor (1) 171:25 insurance (14) 82:8,18,19;90:14,23, 25;91:2,3;122:9;152:2; 187:9;190:18;194:6; 195:8 integrates (1) 149:7 integration (1) 142:6 intellectual (3) 134:15,22;135:1 intelligence (1) 143:24 interactions (1) 164:13 interdisciplinary (1) 100:23	interest (13) 57:3,8;58:14,20; 64:3;66:4;101:12; 145:22;147:10;160:21; 164:11,11;170:6 interested (3) 170:25;184:23; 200:20 interests (2) 95:20;184:20 interim (1) 141:14 INTERNATIONAL (3) 50:8;143:3,3 interpretation (1) 114:13 intersecting (1) 144:13 intervention (1) 99:23 interview (3) 145:25;146:4,21 interviewed (3) 146:21;147:1;193:6 interviewees (1) 146:20 interviews (1) 88:23 into (32) 100:16;141:6,7; 142:6;147:13;148:16; 149:15;154:23;156:6; 162:8;164:5;165:8,14; 167:5,8;179:25;181:3, 6;182:4;189:6,10,15; 190:5,7,17;191:7,15; 192:4;194:8,14;195:4; 200:19 introduce (5) 75:17;79:17;148:23; 153:19;188:17 introduction (1) 174:4 invest (1) 163:14 investigation (2) 177:1;186:3 Investigator (4) 63:17;71:16,17; 141:23 investigators (1) 117:9 investment (1) 180:6 involve (2) 99:13;117:23 involved (7) 68:11;71:5;98:21; 128:3;142:7;170:13; 195:16 involvement (3) 74:7;128:7;132:5 involves (3)
	I			
	ICAHN (25) 50:5;55:4;60:2;61:6; 70:20,21;71:19;72:11, 20;73:12,19;76:5;78:9; 83:8,18;115:16,20,24; 116:8;122:14,14; 124:4;135:25;136:1; 140:22 icahnsssmedu (3) 91:15,21,22 Ichan (1) 72:1 ID (1) 192:5 idea (3) 111:24;170:8;175:19 identical (3) 145:24;148:11; 150:25 identically (1) 187:5 identification (3) 128:17;132:9;166:14 identified (1) 178:25 identify (5) 77:5;135:13,18; 143:22;177:19 ie (1) 155:22 ignorance (1) 194:23 i-i-i-z (1) 70:15 immediately (1) 162:18 immunology (1) 144:1 impact (1) 161:4 Imperial (1) 141:7 IMPLEMENT (1) 50:9 implicated (1) 61:21 importance (1)			

<p>104:1;143:11;173:20 irrelevant (3) 69:1;126:7;202:2 ISMMS (6) 122:13;134:20,25; 135:1,2,17 ISMMS's (2) 131:2;134:15 ISS (1) 122:13 issue (19) 56:5,6;58:3,4;59:3, 25;60:4;64:18;66:8,9, 10;68:13;103:3,4; 123:14,21;124:12; 126:21;207:15 issues (5) 58:2;60:1;94:7; 98:22;206:22 item (1) 207:20 iterations (1) 154:4</p>	<p style="text-align: center;">K</p> <p>Kathy (2) 77:10,10 keep (2) 127:13;171:4 kept (6) 76:22;80:5;149:11; 154:19;167:2;189:3 key (7) 86:23,24;87:2,7; 183:22;184:3,6 kind (1) 183:5 kneaded (1) 164:3 knowledge (10) 111:12;128:2;164:5; 178:15;183:19;187:23; 196:16,24,25;203:13 known (5) 141:4;142:21;164:4; 181:21;201:9 KUMA (111) 55:3;56:7,10,13,17, 23;57:13,22;58:4,6,9, 25;59:4,7,14,23;66:23, 25;69:21;70:1,7;78:3; 80:14;97:18,20,22; 106:20,22,24;107:3,7, 10,12,15;109:11,13; 111:17;112:21;113:18, 21;114:2,4,16;116:14, 23;121:18;125:21; 126:8,10;127:6;134:1, 3;135:8;136:9,20,22, 25;137:4;138:2,11,21; 139:3,6,12,16;140:3,7, 13;150:2,5,11,14; 151:2,6;155:15,25; 156:5;158:22,24; 167:7;176:3,9,12; 189:12,19,22;190:4; 191:1,3;192:9,14,16, 18;199:10,19;200:11, 13,16;202:17;203:6, 14;206:20,23;208:23; 209:2,7,11,17,22; 210:6,8</p>	<p>142:11;153:1,2;157:6, 8,18;158:1,13;159:11; 160:8,21,24;161:3,9, 21,23;162:3,4;163:1,5, 10;168:16,17,18,19; 170:21;173:17;176:16, 24;177:3,23,24;178:9; 179:5,6,6,18,22; 184:20;185:2;186:1,5, 16,24,25;187:2,4; 197:10;198:15;200:22; 204:6;205:5,6;206:3 labeled (1) 67:20 LABOR (5) 50:2,15;60:7;66:11; 75:15 laboratories (6) 147:18;153:3; 157:12;158:3;164:11; 198:19 laboratory (27) 62:7;71:4,5;141:21; 148:5;157:4,13; 158:12;159:17;160:6; 162:16,20,23,24; 163:18;164:24;165:25; 168:6,24,24;171:19; 176:19;177:21;181:5; 183:10;198:18;206:10 laboratory's (1) 165:14 labs (19) 63:16;88:25;117:8; 119:5,6,8,10,11,14; 120:7;157:15,25; 158:6;163:4;178:4; 179:11,17;200:18; 206:8 lab-specific (1) 168:3 lack (4) 57:2;58:14,19;66:4 lacks (1) 57:8 laid (2) 168:4;209:21 Lainy (1) 208:12 language (2) 150:24;151:8 laptop (1) 155:18 largely (2) 147:21;168:2 last (7) 111:11;145:18; 146:5;149:20;194:2; 197:10;203:23 later (2) 184:14;197:25 law (6) 60:9,13;62:13;65:1;</p>	<p>127:1,3 layer (3) 76:16;162:17;164:14 layout (1) 72:25 leaders (1) 81:11 leadership (3) 76:8;77:19;80:4 leading (2) 158:20;163:19 leads (1) 60:15 learn (2) 160:19;178:21 learned (3) 108:23;163:25,25 learning (3) 81:14;108:18;110:19 learns (1) 110:10 least (6) 103:11,15;166:5,10; 204:2;205:4 leave (4) 87:20;154:9;199:6; 206:22 leaves (1) 63:18 leaving (1) 154:5 lectures (1) 119:17 left (4) 77:11;78:14;115:25; 186:12 left-hand (2) 155:2,2 legal (2) 127:5;180:15 Leland (3) 69:10,11,13 less (2) 73:13;164:25 letter (12) 120:12;148:21; 149:6,19,24;150:22; 151:12,16,25;167:24; 194:2;198:12 letter-graded (1) 92:11 letting (1) 130:1 level (7) 87:14;158:9;166:5; 178:3;196:9,9;197:2 levels (1) 104:4 Levy (3) 72:23;73:20,21 life (3) 80:22;152:5;158:16 limit (1)</p>	<p>207:24 limitations (1) 170:12 limited (7) 55:15,25;59:1;68:19; 128:10;142:10;175:6 line (5) 77:2;157:4,10,10; 159:18 lines (2) 160:13;186:3 lion's (2) 182:25;205:10 list (5) 74:22;146:20; 171:11;197:4,18 listed (16) 79:8;87:2,7,10,12; 121:25;122:2,6; 137:13;151:20;159:18; 184:5,16;195:24; 197:10,19 listen (1) 79:12 literature (5) 125:4;165:6;171:10; 173:20;183:9 little (10) 100:12;101:19; 105:17;112:13;122:19; 156:1;158:4;169:12; 171:9;178:14 live (1) 173:6 living (8) 61:17;151:24;152:7; 198:25;199:2,14,23,25 local (1) 67:24 locate (1) 192:7 located (1) 72:20 location (2) 73:15;186:16 locations (3) 73:8,17,18 log (5) 189:10;192:4;194:7, 14;195:4 log-in (1) 192:5 London (1) 141:7 long (10) 71:19,21,23,24; 107:6;162:24;168:21; 174:23;175:7;176:17 longer (5) 56:6;108:8;168:25; 175:13;184:23 long-term (1) 158:10</p>
<p style="text-align: center;">J</p> <p>Jacob (1) 50:15 Javits (1) 50:15 jeopardize (2) 63:22;160:22 Jersey (1) 141:4 jobs (3) 95:10,14;127:14 join (6) 64:6;80:9;82:6; 90:15;148:1;159:7 joined (2) 113:7;141:5 joining (1) 168:23 joins (1) 168:16 joint (2) 55:17;71:11 journal (7) 96:6;144:22;163:23; 164:12;165:5;196:4,7 journals (1) 144:19 judge (1) 209:6 July (3) 50:17;83:1;210:20 jurisdiction (2) 125:19;126:6 justified (1) 196:20 justify (1) 61:4</p>	<p>known (5) 141:4;142:21;164:4; 181:21;201:9 KUMA (111) 55:3;56:7,10,13,17, 23;57:13,22;58:4,6,9, 25;59:4,7,14,23;66:23, 25;69:21;70:1,7;78:3; 80:14;97:18,20,22; 106:20,22,24;107:3,7, 10,12,15;109:11,13; 111:17;112:21;113:18, 21;114:2,4,16;116:14, 23;121:18;125:21; 126:8,10;127:6;134:1, 3;135:8;136:9,20,22, 25;137:4;138:2,11,21; 139:3,6,12,16;140:3,7, 13;150:2,5,11,14; 151:2,6;155:15,25; 156:5;158:22,24; 167:7;176:3,9,12; 189:12,19,22;190:4; 191:1,3;192:9,14,16, 18;199:10,19;200:11, 13,16;202:17;203:6, 14;206:20,23;208:23; 209:2,7,11,17,22; 210:6,8 KUMAR (1) 50:14</p> <p style="text-align: center;">L</p> <p>lab (90) 62:5,6,8,25;63:19,20, 25;64:2,5,6,22;65:3,12; 71:15,16,17;87:4,16, 21,22;88:2,18;89:16, 17;94:18,19,22;98:6,9, 12;99:4;119:12,13; 137:13;141:5,23;</p>	<p>largely (2) 147:21;168:2 last (7) 111:11;145:18; 146:5;149:20;194:2; 197:10;203:23 later (2) 184:14;197:25 law (6) 60:9,13;62:13;65:1;</p>	<p>level (7) 87:14;158:9;166:5; 178:3;196:9,9;197:2 levels (1) 104:4 Levy (3) 72:23;73:20,21 life (3) 80:22;152:5;158:16 limit (1)</p>	<p>long-term (1) 158:10</p>

<p>Look (7) 96:5,5;98:25;113:10; 117:3;119:13;133:16</p> <p>Looking (8) 80:25;83:20;96:15; 116:16;151:8;159:3; 172:24;207:3</p> <p>looks (4) 57:20;131:8;145:23; 169:14</p> <p>Loosely (1) 206:5</p> <p>lose (14) 88:10;89:6,7,12,15, 23,24;97:13;105:24; 106:1;161:8;179:20; 186:1,5</p> <p>loses (1) 88:14</p> <p>lost (2) 89:12;186:4</p> <p>lot (7) 101:18,18;142:5,8; 197:24;206:17;208:6</p> <p>lump (1) 68:8</p> <p>lunch (1) 139:17</p> <p>luncheon (1) 139:20</p> <p>LUPION (121) 56:5,9,12,15,21;58:1, 5,8;59:2,6,11,13,25; 69:24;70:10;75:17,21; 76:25;77:4;78:6;79:16, 19;80:12,16,17;84:5; 94:6,10;97:16,23,25; 100:10;106:18,23; 109:4,9;110:3;111:13, 16,21;112:9,11;113:17, 20,22;114:10;116:10, 16,19,22;118:5;121:13, 17;123:16;125:20; 126:4;127:5;131:15, 19,21;135:10,12,20,23; 136:12,17,21;137:6,9, 11,24;138:12,14,19; 140:5,15;148:25; 149:14;150:9;151:11; 153:18,21;154:23; 155:1;156:3,9;159:1; 166:13;167:5,10; 176:1,6,14;188:17,19; 189:6,17,21,23;190:9, 24;192:2,7,10;193:24; 199:5,8,16;200:3; 201:12,22;202:10,16; 205:15;207:11,14,18; 208:8,13,25;209:19</p>	<p>141:15,15</p> <p>Madison (2) 72:21;73:6</p> <p>main (4) 73:2,4,16;101:24</p> <p>maintain (8) 60:25;88:12;98:4; 124:15;153:11;185:9, 17,20</p> <p>maintained (2) 92:1;104:11</p> <p>maintaining (1) 90:6</p> <p>maintenance (1) 161:5</p> <p>major (2) 111:20;195:7</p> <p>majority (5) 73:5,10,18;86:8; 157:11</p> <p>makes (7) 59:13;69:10;106:4,8; 125:5;172:2;200:1</p> <p>making (11) 65:18;69:5;98:14; 99:2;105:19;122:11; 123:24;125:6;200:3,4; 209:10</p> <p>manage (1) 205:19</p> <p>management (4) 128:4;148:22;149:8; 194:12</p> <p>Manager (1) 77:12</p> <p>mandated (3) 60:19,19;173:7</p> <p>Manhattan (2) 72:24;73:3</p> <p>manner (3) 67:22;169:11;196:19</p> <p>many (18) 74:12,18;102:16,18; 142:14,14,22;145:13; 146:3,7,10;157:25; 163:13;165:15;168:21; 172:13;181:15;201:20</p> <p>marked (15) 75:20;79:18;115:11, 13;128:14,16;132:6,8; 134:12,14;148:24; 153:20;166:12,14; 188:18</p> <p>Marketing (1) 77:12</p> <p>Marta (3) 69:24;70:4,13</p> <p>M-a-r-t-a (1) 70:15</p> <p>Massachusetts (1) 60:22</p> <p>master's (19) 55:8;56:1,3;57:12;</p>	<p>58:21,24;59:3,5;71:12; 72:18;74:9,17,18,19; 76:15;78:18;102:5,24; 178:3</p> <p>match (13) 119:5;147:19; 158:11,18;159:2,3,10, 19,25;160:1,4;161:19; 165:3</p> <p>matched (1) 187:24</p> <p>material (2) 62:20;86:21</p> <p>materials (1) 174:6</p> <p>matriculate (1) 198:14</p> <p>matriculated (3) 146:11;193:11,11</p> <p>matriculates (1) 194:13</p> <p>matriculation (1) 195:4</p> <p>Matter (6) 50:4,13;55:6;158:18; 210:8,19</p> <p>Matthew (4) 78:23;140:5,10,18</p> <p>M-A-T-T-H-E-W (1) 140:18</p> <p>maximum (1) 175:6</p> <p>may (32) 65:9;66:18;74:10,10; 77:2;78:7;101:3; 123:10;138:1,2,23,24, 25;139:1;147:18; 150:24;151:5,5; 158:20;160:1;169:17; 178:5;179:4,4,6,6,9; 186:8,9;190:17;194:5, 23</p> <p>Maybe (6) 134:23;176:6; 177:17;178:2;198:5; 201:13</p> <p>MD (1) 74:16</p> <p>MD-PhD (12) 55:17;61:11,14; 71:11;74:16;76:13; 79:3,6;83:5;92:20; 113:4;142:21</p> <p>mean (25) 60:6;66:19;68:19; 74:22;95:22;96:4;99:5; 101:12;103:6;104:23; 105:11;110:8;133:14; 155:9;158:20;159:2; 161:20,20;173:5; 175:9;177:22;183:14; 193:12;207:16;209:20</p> <p>meaning (6)</p>	<p>83:4;127:13;128:4; 157:2;159:4;183:25</p> <p>means (9) 105:13,16,21; 111:22;127:11;159:3; 161:5;168:24;193:13</p> <p>meant (3) 139:11;159:10; 171:10</p> <p>mechanism (2) 86:10;181:21</p> <p>mechanisms (1) 144:2</p> <p>mechanist (1) 86:11</p> <p>Medical (23) 55:17;61:7,11;71:12, 25;72:8,11,13,16,16, 17;73:12,19;90:14; 129:8,10;136:11; 141:4;142:20;178:2, 12;182:19;194:19</p> <p>MEDICINE (22) 50:5;55:5;60:2;61:7; 70:20,22;71:19;72:1, 20;76:5;78:10;83:8,18; 115:17,20,25;116:9; 135:25;136:1;140:22; 141:3;143:24</p> <p>meet (14) 62:16;69:18;98:18; 103:10,11,14,16; 125:24;165:16;166:10; 174:17;179:15;201:16; 202:13</p> <p>meeting (4) 98:24;170:5,11; 171:5</p> <p>meetings (2) 119:13;125:1</p> <p>MEIKELJOHN (71) 77:5;97:19;107:1; 109:7;112:12;116:12; 117:15;123:19;125:22; 126:2,9;128:12;130:7; 132:21;135:6,11; 136:10;137:3,25; 138:3,10,20;139:11; 149:16;150:4,7,12,20; 151:1;154:24;155:4, 14,24;156:1;158:20, 23;167:6;176:8;189:7; 190:1;191:17;192:4, 12,15;193:22;194:1; 199:6,11,21;200:8,12, 14,17;201:13;202:6, 12;203:11,15,19; 206:12,21,24;207:12, 16,19;208:10,20;209:4, 8,14;210:5</p> <p>MEIKLEJOHN (75) 56:16,20,22;57:20; 59:8,12;66:18;67:1;</p>	<p>77:2,8;78:1;80:13; 107:6,9,11,20;109:21; 110:4;111:15,18; 112:3,15;113:1,19; 114:1,3,5,6,11,20,24; 115:9,12;116:21; 117:1,2,17;118:6; 121:15,24;123:20; 126:14;127:7;128:15, 23;129:3,16,20,24; 130:1,4,8,14,15; 131:22;132:7,24; 133:3,16,18;134:2,4,8, 13;135:13,22;136:15, 18;138:5;149:18; 150:21;155:8;192:21; 202:24;205:16</p> <p>Melissa (2) 57:24;203:16</p> <p>member (15) 92:17;99:10;101:6,8; 104:9,15,15,18,20,23; 105:2;116:2;169:19; 170:1;206:6</p> <p>members (15) 78:13;92:16;99:11; 100:12,21,22,23,23; 101:3,4,16;104:16; 124:10;127:16,19</p> <p>membrane (1) 71:5</p> <p>memory (2) 146:13;155:18</p> <p>mentioned (14) 61:21;65:20,25; 71:15;74:17;78:23; 82:17;85:11,11;96:1; 101:20;141:18;142:10; 195:19</p> <p>mentor (11) 63:17;64:2;65:8; 88:24;94:4;101:14; 162:7,13;166:23; 167:20;170:6</p> <p>mentor/mentee (1) 167:12</p> <p>mentoring (12) 88:21,24;142:9,10; 159:9;166:22;167:22; 168:11;178:18,21,22; 184:13</p> <p>merits (1) 124:11</p> <p>met (1) 124:18</p> <p>methods (3) 68:4;71:6;174:6</p> <p>metrics (1) 125:4</p> <p>mice (2) 179:9;204:25</p> <p>microbiology (1) 144:1</p>
M				
MacCallum (2)				

<p>Middle (7) 92:25;109:9;125:13,24;151:16;183:17;201:9</p> <p>might (19) 73:17;86:2;93:8,17,25;98:22,23;99:5;101:14,14,14;115:22;121:7,21;122:7;183:19;190:25;198:17;209:16</p> <p>milestone (8) 93:15,16;95:2,9;161:13,15;162:16;166:1</p> <p>milestones (8) 80:20;124:18;154:7,8,15;168:2;175:19;186:17</p> <p>mind (1) 112:17</p> <p>mine (3) 117:16;180:7;190:23</p> <p>minimal (2) 152:2;180:3</p> <p>minimum (3) 180:15,16;196:1</p> <p>minute (4) 106:19;115:6;129:19;206:13</p> <p>minutes (3) 120:4;190:24;206:12</p> <p>mischaracterizes (3) 121:13;123:16,18</p> <p>mischaracterizing (3) 113:23;114:12;200:4</p> <p>miss (1) 150:16</p> <p>missed (1) 58:2</p> <p>missing (1) 189:16</p> <p>mission (12) 68:12;81:2,8,10;115:2,14,16,18,19;116:6,8;136:5</p> <p>misunderstanding (1) 201:14</p> <p>MIT (10) 60:23;61:1;66:10;68:3,3,6,10,12,13,14</p> <p>mix (1) 165:3</p> <p>Mm-hmm (7) 162:21;188:22;194:9;203:22,25;204:4;205:22</p> <p>modification (1) 111:11</p> <p>modifications (2) 171:6;174:18</p> <p>modified (1) 151:13</p>	<p>molecular (1) 143:11</p> <p>moment (5) 87:9;135:10;142:25;188:20;210:4</p> <p>Monday (7) 207:15;208:24;209:23,24;210:2,10,19</p> <p>money (4) 180:6;187:21;199:15;205:10</p> <p>monies (2) 62:2;83:16</p> <p>monitor (2) 156:12;182:2</p> <p>monkey (1) 205:5</p> <p>Monkeys (1) 205:2</p> <p>month (1) 194:4</p> <p>months (3) 99:25;103:14,15</p> <p>more (33) 66:9,22;71:25;73:13;75:6;79:13;103:11,16;109:22;111:9;133:10;137:1;139:6;144:13,23;145:10;156:24;160:11;162:12;173:7;175:6;176:7;177:25;178:11,14,21,21;179:13;188:7;191:5;197:4;207:3;209:25</p> <p>morning (3) 59:25;70:11;107:21</p> <p>most (16) 60:1;65:8;76:19;111:1;130:5;145:4,16;157:23;158:8;164:2;181:7;182:4,18;206:5,8,8</p> <p>mostly (7) 73:4,16;74:8,20;78:15;128:3;165:13</p> <p>motion (2) 209:23;210:15</p> <p>MOUNT (114) 50:5;55:5;60:3,5,8,15;61:2,6,7,20;62:15,19,21;63:18;64:4;65:1,24;66:6,16;68:23;69:17,24;70:20,22,25;71:14,18;72:1;75:14,17;76:5;77:1;78:1,10,11;79:17;80:12,23;81:17;82:7,12,17,23;83:11;85:18;86:9;88:22;90:15;91:9;96:22;99:22;100:1;102:11;113:7;115:17,20;117:7,14;120:5;124:4,7,9,10;126:17,</p>	<p>18,24,24,25;127:3;129:6;132:16;140:5,23;141:9,13;144:9;145:14;148:23;149:14;152:22;153:19;166:14;171:13;175:7,9;177:10;186:12,15;187:6,7,8,19;188:12,15,17;190:19;193:16;194:23;197:8,14;198:7;199:4,14,15;201:6,18,20,20;202:2,4,9,12,14;203:1</p> <p>move (19) 76:25;116:12,12;135:13;157:12;158:15;160:3,6,23;162:1;164:22;170:16;173:23;178:13;203:11;207:7,9;209:24;210:15</p> <p>moved (4) 135:12;141:5,6;191:7</p> <p>moves (2) 164:21;186:22</p> <p>moving (13) 56:22;57:21,22;82:9,10,11;138:25;159:25;160:4;161:11;162:18;181:6;184:25</p> <p>mssmedu (2) 91:13;92:2</p> <p>MSTP (1) 79:7</p> <p>MTA (15) 99:10;144:4,7,18;145:3;147:13,15,21;148:1;154:13;164:9;169:18;200:20,21;206:4</p> <p>MTAs (5) 143:19;144:10;147:19;206:5,10</p> <p>much (13) 65:17;66:9,22;117:22;118:22;163:19;165:19;170:14;178:7,14,20,23;180:2</p> <p>Muller (1) 194:19</p> <p>Multidisciplinary (5) 100:15;104:17;143:15,20;145:8</p> <p>multiple (3) 95:12;157:22;206:5</p> <p>must (5) 62:24;95:23;115:23;157:5;185:7</p> <p>mute (2) 56:15,17</p> <p>muted (2) 57:13,14</p> <p>mutual (3)</p>	<p>147:19;160:16;162:25</p> <p>myself (6) 76:3;87:4;88:23;103:23;192:6;206:6</p> <p style="text-align: center;">N</p> <p>name (5) 70:12;87:10;140:17;149:7;205:1</p> <p>narrow (1) 146:20</p> <p>narrowing (1) 159:8</p> <p>NATIONAL (13) 50:2,14;60:7;66:11;120:22;122:15;164:7;181:22;182:20,21;184:2;205:8,8</p> <p>natural (3) 176:25;183:10;184:19</p> <p>nature (6) 80:19;87:23;102:25,25;161:14;190:13</p> <p>necessarily (2) 94:13,20</p> <p>necessary (5) 62:10;74:23;165:4;191:11,13</p> <p>need (25) 86:14;88:16;89:1;92:10,12,13,17;94:11;96:25;104:12;124:21;136:7,18;138:24;171:18;183:6,7;185:9,15,19;187:25;188:9;203:16;204:20;209:19</p> <p>needed (6) 88:19;109:5;139:1,7,8;175:13</p> <p>needs (1) 180:8</p> <p>Nestler (2) 76:7;78:10</p> <p>Neuroscience (36) 55:16;61:10,14;74:14;82:6;83:4;85:1;92:5;102:4;133:20;142:18,23;143:7,8,9,11;144:4;145:15,20;146:16;147:9,10;149:25;150:1,23;152:20;153:2,11;159:13;181:14,16;182:7;185:7,15,19,25</p> <p>Neurosciences (1) 81:19</p> <p>neuroscientists (1) 81:20</p> <p>New (20) 50:16,16;71:7;72:22,</p>	<p>23,24;93:1;113:8;125:13,19,24;127:4;140:23;141:4;143:1;152:11;172:1;176:21;186:3;201:8</p> <p>next (12) 81:11,18,20;139:13,17;140:4;151:24;158:16;165:18;171:3;194:4;197:2</p> <p>niche (1) 176:20</p> <p>Nickerson (2) 76:15,17</p> <p>Nicole (2) 112:9;129:17</p> <p>NIH (7) 86:9,10;120:21,22;121:9;122:24;187:17</p> <p>nine (3) 71:12;74:19,22</p> <p>NLRA (1) 55:22</p> <p>NLRB (1) 61:3</p> <p>nobody (1) 206:15</p> <p>nodded (1) 207:1</p> <p>non (1) 87:17</p> <p>non-bargaining (1) 131:5</p> <p>None (3) 63:22;105:25,25</p> <p>non-employees (1) 69:10</p> <p>non-key (6) 87:10,12;121:9,21;137:14;184:17</p> <p>non-PhD (2) 57:7;58:19</p> <p>non-voting (2) 104:23;105:2</p> <p>normalcy (1) 143:10</p> <p>normally (1) 93:10</p> <p>note (5) 91:16;135:23;190:6;191:17;207:6</p> <p>Noted (3) 55:2;84:25;140:2</p> <p>notes (3) 123:10;190:25;192:25</p> <p>Notice (2) 50:14;99:25</p> <p>notified (1) 210:11</p> <p>notify (1) 198:6</p> <p>number (9)</p>
---	---	--	---	--

63:19;64:10;102:22; 128:10;146:12;152:1; 178:4;193:5,6 numbers (6) 110:25;132:11; 146:13;193:5,7;194:5 nuts (1) 160:14	192:23 Off (23) 59:21;61:24;97:20; 102:17;106:18,20; 107:13;122:20;136:22; 176:10;178:22;179:23; 180:2,8,8,9;184:24; 191:1;192:13,16; 197:23;210:6,17 offer (19) 78:3;80:12;95:10; 116:24;142:15;147:2; 149:4,14;151:3; 154:23;156:6;163:6; 167:5,7;189:6;191:7, 15;193:13;198:12 offered (9) 73:23;146:8,10; 147:3;148:20;152:3; 190:6;198:7;201:14 offering (2) 149:23;189:17 offers (2) 61:9;142:16 office (6) 77:17,24,25;132:20; 177:15;194:24 Officer (116) 50:14;55:3;56:7,10, 13,17,23;57:13,22; 58:4,6,9,25;59:4,7,14, 23;66:23,25;69:21; 70:1,7;76:7;78:3,11; 80:14;97:18,20,22; 106:20,22,24;107:3,7, 10,12,15;109:11,13; 111:17;112:21;113:18, 21;114:2,4,16;116:14, 23;121:18;125:21; 126:8,10;127:6;134:1, 3;135:8;136:9,20,22, 25;137:4;138:2,11,21; 139:3,6,12,16;140:3,7, 13;150:2,5,11,14; 151:2,6;155:15,25; 156:5;158:22,24; 167:7;176:3,9,12; 182:1;189:12,19,22; 190:4;191:1,3;192:9, 14,16,18;199:7,10,19; 200:11,13,16;202:17; 203:6,14;206:20,23; 208:23;209:2,7,11,17, 22;210:6,8 official (6) 67:9;113:14,14,24, 24;114:8 often (6) 80:10;86:17;103:12; 159:5;175:17;192:25 o-l- (1) 70:15 Ombuds (3)	79:8,10,11 onboarding (1) 190:14 once (6) 59:16;111:9;164:18; 166:10;168:16,24 Oncological (2) 140:21;141:19 one (53) 60:1;62:14;66:23; 67:11;69:4;77:2,5; 84:3,8,9;86:11,21; 87:24;91:5;95:12; 100:17;101:20;106:19; 115:1;116:17;120:18; 123:15;125:5;135:19; 136:5,6,10,13;138:12, 12;141:18;143:6,7; 146:21;147:8;154:6; 156:24;160:3;163:1,3, 3,4;165:7;177:13; 192:5;197:4;201:20; 203:23;205:4;207:20, 21;209:12;210:3 one-on-one (2) 158:9;164:1 ones (4) 61:21;73:9;192:1,2 one's (1) 129:16 on-key (1) 121:7 online (1) 80:11 only (19) 56:7;62:1;63:6,10, 13,19;65:17;69:17; 102:23,23;104:9; 118:9;123:7,8;160:10; 181:25;192:5;203:3,9 onto (4) 160:3,6;178:13; 197:2 oops (1) 206:13 open (2) 112:6;160:13 opening (5) 66:18,18,19;69:22; 150:24 operates (1) 202:1 opinion (1) 131:13 opportunities (1) 120:6 opportunity (10) 66:21;95:10;97:8; 107:5;109:6,8;135:6; 165:16;186:20;206:16 oppose (1) 66:3 opposing (1)	150:12 opposite (1) 64:4 option (2) 156:24;186:19 optional (1) 190:15 options (3) 152:4;157:22;195:8 oral (3) 93:12;163:22;165:10 orange (1) 76:3 order (19) 60:25;62:25;64:3; 88:17,24;96:16;97:1, 11;115:10;124:19; 126:21;155:4;182:9; 183:6;185:7,16,20; 188:1,10 ordinary (2) 149:11;189:3 org (2) 194:25;195:2 organization (1) 201:8 organizational (1) 100:18 organized (1) 197:23 origin (1) 195:17 original (7) 76:2;77:4;92:15; 94:15,17;95:23,24 originally (2) 141:6;151:13 others (4) 62:20;65:3;74:21; 101:4 otherwise (6) 65:11,13;108:5; 142:21;179:18;181:21 out (17) 56:2;108:9;131:11; 141:12;147:17;159:19; 161:12;168:4,22; 171:7;173:21;176:20; 178:7;179:3;198:6; 199:3;209:9 outline (2) 155:20;163:15 outlined (7) 88:7;152:18;153:12; 160:2;168:5;174:20; 201:4 outlines (6) 166:21;174:5;180:3, 21;183:18;189:1 outmoded (1) 169:13 outside (16) 62:11;63:4;64:14;	85:19,21;126:12; 137:12,19,22;150:19; 177:7,11;182:13; 185:3;187:10;203:7 over (14) 58:9;78:17;111:7; 122:24;126:6;145:23; 151:14;158:3,4; 165:12;203:6;206:16; 209:11;210:14 overall (3) 143:16;167:14;172:2 overarching (1) 167:14 overhead (5) 122:16,19,21,22; 123:2 overruled (3) 69:11;114:16,16 overruling (2) 69:13;191:14 oversee (3) 71:10;75:2;144:7 overseeing (1) 77:25 overseen (1) 79:7 oversees (3) 71:13;79:2,4 overview (1) 166:15 own (21) 62:9;64:2,7;65:4; 68:7;95:17,19;137:13; 143:12;144:4;170:18; 176:8,17,19;177:4,12; 179:4;183:8,9;192:25; 203:3 owning (1) 162:1 Oxford (1) 141:6
O				
P				
oath (2) 107:17;210:12 obj (1) 78:1 object (9) 109:4;110:3,3;135:9; 136:12;158:20;189:7; 195:22;208:8 objected (3) 189:12,14;191:8 objection (27) 80:13;109:11; 111:13;113:17,19,21; 114:4,10,11;116:10,22; 121:13,13,18;125:20; 127:5;151:1;155:24; 156:5;167:6;190:1,7; 191:14;199:5,16; 201:12;205:15 objections (1) 116:15 objective (4) 167:11,12,14,14 objectives (1) 138:8 objects (1) 203:8 obligations (1) 97:10 obtain (5) 62:10;158:14; 163:24;167:17;172:3 obtained (3) 75:8;120:21;169:10 obtaining (2) 161:19;208:14 obtains (1) 122:15 Obviously (1) 102:17 occasions (2) 123:21;178:15 o'clock (2) 208:13;209:9 O'Connell (22) 76:14,17;78:23; 140:5,6,7,10,16,18; 149:1;153:22;176:15; 179:22;192:11,22,22, 24;199:8,17,17; 202:25;203:20 O'Connor (1)	P-1 (2) 115:11;116:25 P-13 (1) 134:12 P-2 (1) 132:6 P-3 (1) 128:14 package (18) 64:16;82:5,16,20; 84:11,13;85:3,4,14; 88:12;90:24;113:4; 122:8;151:17;152:5, 15;189:2;204:19 packet (1) 181:8 Page (30) 80:25;82:3,4;89:25;			

<p>90:1,12,13;92:7,8; 96:15;98:1;102:21; 112:4,5,13,20,24; 115:4;129:17;130:6,7, 17,17;132:22;133:16; 134:5;151:16;155:3; 166:1;203:17</p> <p>pages (4) 79:24;93:10;111:4, 24</p> <p>paid (23) 67:19,21,23;68:8,9, 11;128:9,10;132:19; 133:6,11,21;187:5; 195:6,9,11;198:24; 199:3,15;205:13,14,25; 206:1</p> <p>palpable (1) 181:25</p> <p>pan (1) 171:7</p> <p>pantigin (1) 169:13</p> <p>paper (1) 81:15</p> <p>paragraph (8) 150:25;180:21; 203:17,18,21;207:21, 21;208:3</p> <p>paragraphs (1) 207:22</p> <p>paraphrase (1) 184:3</p> <p>parcel (1) 62:9</p> <p>Pardon (1) 114:3</p> <p>parenthetical (2) 84:6;113:10</p> <p>part (27) 55:9;59:4;62:9; 74:24;82:16;85:13,17; 94:16;97:6;98:8,11; 113:6;117:11,13,14,21; 118:2;119:3;120:3; 121:6;150:1;163:11; 174:13;182:11;198:9, 12;200:1</p> <p>partake (1) 173:6</p> <p>partial (1) 181:23</p> <p>participate (2) 98:23;144:18</p> <p>particular (11) 64:5;81:18;112:4,5, 24;119:14;160:21; 161:9,16;196:16;204:5</p> <p>particularly (1) 182:19</p> <p>parties (2) 210:9,13</p> <p>parties' (1)</p>	<p>69:22</p> <p>partner (1) 165:4</p> <p>partnership (1) 166:22</p> <p>parts (2) 170:25;191:21</p> <p>party (3) 160:1;191:20,21</p> <p>pass (4) 93:16;120:12; 131:24;171:3</p> <p>pass/fail (8) 120:14,16,17,20; 161:1;172:20;200:24; 201:2</p> <p>passage (1) 155:20</p> <p>passed (6) 93:16;173:2;186:14, 18,21;196:9</p> <p>past (1) 111:19</p> <p>path (2) 182:3;186:19</p> <p>paths (2) 171:6;196:11</p> <p>patient (2) 141:16;162:8</p> <p>Pause (13) 57:16;66:24;84:4; 100:9;115:7;116:18; 128:13,24;129:25; 132:23;133:25;134:6, 11</p> <p>pay (22) 67:25;68:3,3;82:19, 20,22;90:22;91:1; 152:10;181:12;182:17; 187:2,7;195:14; 198:25;199:2,14,22,25; 204:21,23;205:6</p> <p>payment (2) 62:14;67:15</p> <p>payments (3) 67:8;113:15;114:8</p> <p>payroll (6) 67:18,21;68:9; 132:16,20;195:5</p> <p>pays (2) 82:17,23</p> <p>pdf (1) 192:8</p> <p>peer (8) 96:6;153:4;157:17; 173:13;196:3,6,8,13</p> <p>peers (1) 164:13</p> <p>pending (1) 68:13</p> <p>people (14) 77:5;100:6;119:16, 17;124:3,5;142:24,25;</p>	<p>165:16;166:6;170:9; 177:25;179:5;207:25</p> <p>per (9) 93:3;110:13;133:11; 155:20;166:10;172:14, 14,15;187:22</p> <p>percent (27) 84:10,13,14,19,21; 85:3,4,8,10;94:24; 118:3,8,9,11,24; 119:18,22,25;122:24; 123:3;143:4;157:10; 165:22,23;173:16,19; 181:3</p> <p>percentage (6) 112:1;117:22;122:4; 123:9;143:2;165:20</p> <p>Perfect (1) 107:23</p> <p>perform (19) 62:5,21,25;64:12,15; 85:19;119:4;137:18, 21;153:11;160:18; 168:17;182:8,12; 184:18;185:2;186:23, 25;187:1</p> <p>performance (8) 56:25;58:11;63:20; 65:12;88:3,7;98:6; 123:22</p> <p>performed (6) 61:20;62:5,8;83:18; 152:15;177:2</p> <p>performing (19) 55:19;57:3;58:15; 63:3;69:15;73:14;88:2; 89:16,17;95:16;99:19; 110:11,12,13;173:17; 177:7,20;186:1;187:3</p> <p>period (2) 105:14;162:1</p> <p>periodically (1) 111:8</p> <p>perish (1) 127:9</p> <p>Permanent (2) 67:21;181:23</p> <p>permits (1) 64:11</p> <p>permitted (2) 64:15;69:12</p> <p>person (3) 104:13;145:2;159:23</p> <p>personal (1) 168:13</p> <p>personality (1) 158:18</p> <p>personally (1) 167:21</p> <p>personnel (20) 86:20,23,24;87:2,7, 10,13;121:1,7,9,21; 122:2,4,6;123:5;</p>	<p>137:14;183:23;184:3, 6,17</p> <p>persons (1) 145:2</p> <p>person's (1) 145:6</p> <p>perspective (2) 75:11;104:13</p> <p>pertain (1) 136:3</p> <p>pertained (1) 59:3</p> <p>pertains (3) 184:1;194:2;196:11</p> <p>Peter (2) 141:14,15</p> <p>petition (5) 55:10;60:10;61:22; 66:15;175:15</p> <p>petitioned (6) 56:14,24;57:5;58:10, 17;62:1</p> <p>Petitioner (19) 50:11;55:20;61:25; 66:14;107:17;130:4; 134:1;135:9,24; 136:14,14;137:1; 189:13,15;191:8; 192:19;193:2;203:7; 209:2</p> <p>Petitioner's (22) 64:23;115:11,13; 116:13,23,25;128:14, 17;132:6,9;134:12,14; 135:16;190:6;191:14; 198:3;202:20;203:12; 207:6,9;209:23;210:14</p> <p>petitioning (1) 107:25</p> <p>ph (4) 80:22;86:11;169:13; 210:13</p> <p>Pharmacological (1) 70:23</p> <p>pharmacology (1) 144:3</p> <p>phase (1) 114:21</p> <p>PhD (210) 55:15,18,20;56:1,10, 25;57:3,6,8;58:11,14, 18,20;59:5;60:2,15; 61:2,9,9,10,10,13,14, 22;62:9,10,15,21;63:2, 3,15,24;64:5,8,11,13, 19,21;65:6,12,16,23, 25;66:6;70:4;71:4,10, 11;72:18;73:8,24;74:8, 12,14,14;75:6,8,13; 76:14;78:24;79:2,4; 81:19;82:5;83:4,4,12, 24;84:9;85:1,22;87:2, 5,7,9,9,15,22,24,25;</p>	<p>88:1,18;89:2,6;90:9, 22;91:14;92:5,19,21, 24;95:9;96:15;97:7,10, 13;100:3,16;102:3,23; 108:22;109:15,16; 110:15,17;113:4; 117:11,12,19;121:7,11, 22,22,25;123:13,22; 125:10;126:18,21,24; 127:22,24;131:24; 133:19;138:15;140:10, 22,25;142:1,4,5,14,14, 16,17,18,20,22;143:6, 8,14,18;144:6,22; 145:9,13,14;146:16; 147:4,4,5,11,25;148:8; 151:17;152:24,25; 153:1,10;154:1; 156:14,18;157:25; 159:12;160:24;161:24; 162:5;163:9,24; 166:15;167:12;170:1; 172:7,25;173:9; 174:10;175:8;176:18, 23;177:2;178:2,9,10, 18,20;179:1,22;180:2, 24;181:8,10,15; 182:16;184:5,16; 185:6,15,19,22,25; 186:4,12;187:10,25; 188:4,9;189:18; 193:15;195:20;208:1</p> <p>PhDs (6) 78:18;87:20;108:23; 137:13;181:12,13</p> <p>phrase (8) 67:10;113:6;127:8, 12,16,17;131:10; 200:25</p> <p>physically (1) 187:5</p> <p>PI (95) 63:18;64:1,9,14; 65:3,6,7,10,14;68:18, 20;71:16,23,24;85:7, 15,23,25;86:5,6,14,24; 88:13,16,17;89:1,8,11; 93:19;94:12,21;99:2,3, 7,14,16,17,19,23; 100:25;101:4,6,6,8,13; 104:17,20;106:10; 122:7;123:11,17; 137:19;138:6;141:23; 148:3;157:22;158:12; 159:5,20;161:23; 162:4,5,14,25;163:9; 164:17,18,21;166:4,23; 167:13;169:5;170:1, 13,19,21,25;177:24; 178:18;180:11;181:7; 182:17,17;183:5; 184:5;186:4,12,22,23; 187:24;188:7;197:9,</p>
--	--	---	---	--

<p>18;204:8,16 pick (1) 191:21 pickup (1) 186:11 piecemeal (3) 209:3,5,5 pilot (1) 183:9 PIs (9) 85:6;121:7;133:10; 163:3,4,12;168:8; 206:3,5 PIs' (1) 85:10 PI's (20) 64:9,14;88:4,8,10; 93:23;94:18;97:11,14; 117:8,9;138:15; 160:18;165:25;176:17; 177:3;183:2;185:23; 186:16;204:6 PLACE (10) 57:17,19;65:2;72:23; 73:20,21;105:15; 177:10;184:4;188:12 placed (2) 63:6;67:18 plan (9) 82:8;86:12,13;91:3, 4;105:15,20;183:11; 190:18 planning (5) 107:6;154:25; 173:20;176:8;208:2 plans (3) 190:15,15,21 play (2) 93:19;177:16 Plaza (1) 50:16 please (35) 69:22;70:1,7,11,14; 71:2;76:1;84:7;89:25; 90:12,13;94:8;100:11; 101:23;108:4,7,9; 109:13;114:17;116:17; 128:21;132:24;138:1, 23;140:7,16;149:16; 151:5;166:3;173:1; 183:25;188:17;195:21; 205:18;210:3 plus (4) 82:7;92:16;168:3; 180:15 pm (4) 139:19,20;140:2; 210:18 point (20) 55:12,20,23;56:4,13, 18;57:5,10;58:10;69:4; 98:5;113:2;131:11; 147:12,15;161:4;</p>	<p>173:9;185:9;199:6,23 pointed (2) 56:2;189:2 points (3) 108:12;151:14; 152:18 policies (3) 90:18;136:3;177:10 policy (20) 81:12;90:3,14,16,20; 91:7;129:6,7,11,12; 130:18,25;131:1,2,7; 133:4;134:15,22,25; 135:4 pool (2) 148:14,18 poor (2) 63:20;65:12 poorly (7) 131:13,17,18,19,19, 20;186:1 Pope (1) 210:13 population (3) 142:11,12;143:2 Portal (2) 134:20;209:16 portion (3) 92:21;122:5;182:16 portions (4) 80:2,3;111:20; 191:22 poses (1) 67:12 position (6) 64:23;68:10;69:14; 111:7;113:8;209:1 positions (1) 96:5 possible (1) 148:16 Postdoc (7) 99:19;100:1;109:18, 22,25;110:7,12 post-doc (4) 178:8,10,19,22 Postdocs (11) 71:13;75:2,4,5,14; 87:5,25;99:18,21; 108:13;110:5 Postdoctoral (5) 76:11;77:11,15,18; 99:24 post-doctoral (4) 141:2,2;176:18; 178:1 post-graduation (1) 75:12 potential (6) 66:5;158:15;159:25; 167:16,18,18 potentially (1) 177:18</p>	<p>preceptor (8) 166:15,21,23; 168:11,14;170:6; 204:1,8 preceptors (1) 205:5 preceptor's (2) 204:16,17 precisely (1) 157:21 pre-employment (2) 132:3;198:20 preface (1) 174:4 preliminary (1) 93:8 premise (2) 93:5;183:7 prepare (1) 156:22 prepared (1) 173:9 preparing (1) 179:9 present (6) 69:22;99:25;128:5; 165:14;170:3;171:20 presentation (4) 93:12;94:3;95:14; 165:10 presentations (1) 165:9 presented (3) 58:22;64:13;92:15 presenting (2) 125:1;163:22 presents (1) 174:13 pretty (2) 162:10;172:18 prevent (1) 101:15 previously (3) 168:3;205:7;207:7 primarily (3) 87:5,25;142:17 primary (1) 70:24 Principal (5) 63:17;71:16,17; 141:23;197:17 prior (4) 88:16;93:11;178:22; 179:10 prioritize (1) 146:19 probably (6) 176:6;178:11; 181:25;192:6;194:25; 199:11 probation (4) 105:13,18,19;106:9 problem (3)</p>	<p>89:8,8;150:13 procedure (1) 103:21 procedures (3) 65:1;132:5;168:20 proceed (5) 59:17,19;154:15; 190:8;191:4 proceeding (2) 191:19;199:9 process (30) 86:3;97:6;98:21; 99:16,22;100:5; 105:14;106:6;132:5; 145:13,19;146:14,15, 17,23;148:1;159:11, 15;160:11,14;161:18; 163:20;165:7;171:11; 173:24;176:17;179:12; 184:12;198:21;208:14 processes (1) 183:21 produce (7) 183:15;192:8;208:2, 23;209:1,18,20 produced (2) 207:7;208:3 production (2) 207:22;209:6 professional (1) 187:13 professor (3) 70:23;140:21;141:19 program (75) 61:9,10,10,12,15,22; 63:4;71:11;72:17; 73:25;74:8,8,16,16; 75:6,13;79:3,4,6,7; 84:9;89:22,23,24; 90:19;92:21;93:18; 94:18;97:13;98:19,21; 100:3,3,16;101:17; 102:3;105:1,16,22; 106:1,9;110:1,6,7,10, 11,13,16,17;115:3; 124:17;125:10;126:1, 19;131:23,24;132:16; 133:5;142:14,21; 143:8,14,18;145:9; 147:4,4,11;148:16; 150:23;164:23;167:17; 175:1;182:1;185:5; 202:1 Programs (53) 55:18;61:9,13,20; 62:5;71:10,11,12;72:5; 73:22,24;74:6,9,12,17, 18,19;76:14,15;78:17, 20,24;79:2;80:21; 81:17,19;82:1;83:4; 93:2,7;102:4,5,9,15; 103:1;124:6;125:14; 126:7;140:22;142:1,4,</p>	<p>15,16,19,22;143:6; 144:6;145:15,20; 146:16;148:8;156:15, 16 progress (42) 63:1,8,11,13;65:18; 66:2;90:3,6;98:3,8,11, 15,23;99:3;101:17; 102:8;103:3,4;106:3; 123:25;124:13,20,22; 125:2,6;142:7;143:17; 144:23;153:14,25; 156:13;163:23;164:12; 165:9;166:9;170:12; 172:8;173:5;182:1; 185:10,13;188:16 progressing (1) 171:21 progression (3) 101:1,1,16 project (6) 64:9;87:1;147:21; 159:3;162:2;173:14 projects (1) 179:4 pronunciation (1) 107:21 proof (1) 58:25 proper (1) 161:6 property (4) 134:15,22;135:1,2 proportion (2) 94:22;173:17 Proposal (28) 92:12;93:4,5,14,20; 94:1,2,15,16,23,25; 95:18,21,24;104:10; 118:20;124:16;138:16; 169:3,4,16;170:7,15; 171:2,15,23;173:3; 183:18 proposed (1) 169:21 proposing (1) 169:9 protected (1) 160:12 protects (3) 204:7,12,13 providers (1) 71:6 provide (25) 65:9;68:20;83:8,23; 86:12,12;88:15;89:10; 90:15,24;121:3; 152:22;162:9;175:7; 181:23;183:7;184:13; 186:8,10;187:16; 188:5;191:19,20,24; 200:7 provided (7)</p>
---	---	---	--	---

80:8;91:4,7;181:7, 22;190:2;200:5 provides (4) 61:16;83:11;93:23; 113:3 providing (3) 56:10;63:5;67:16 public (7) 74:20;96:7,8,10,12; 174:15,16 publication (8) 95:12;96:1,2,13; 173:13;196:15,23; 197:22 publications (7) 95:12,13;196:25; 197:1,3,18,20 Publish (2) 127:8,13 published (3) 96:6;196:6,22 publishing (1) 127:13 pull (1) 180:18 pulled (1) 136:2 pulling (1) 116:19 purchase (1) 86:21 purely (1) 145:22 purple (2) 78:12,15 purpose (9) 74:11;81:16;89:10; 102:6;152:9;156:11; 164:8;196:13;201:18 purposes (3) 137:14;155:22;176:8 Pursuant (1) 50:13 pursue (4) 64:3,12;95:19; 162:23 pursued (1) 168:20 pursuing (3) 56:1;93:9;184:23 pursuits (1) 64:7 purview (4) 126:5,11,12;203:8 pushing (1) 208:17 put (12) 59:8;70:7;105:13,15, 18,19,20;106:8; 129:21;140:13;193:23; 203:15 putting (3) 59:14;198:4;201:17	Q	195:3,5,7;208:4 reasonable (1) 66:21 reasons (1) 160:1 recall (2) 137:15,15 receipt (2) 63:13;90:7 receive (38) 55:24;58:24;60:25; 61:23;62:2;63:1,9; 64:24;65:21;67:25; 69:15;82:7;83:7,16; 85:22;86:15,15;96:13, 21;122:15;133:20; 145:14;147:2;148:21; 156:21;160:24;172:7; 181:8,16;182:8;183:6; 187:10,22;188:1,10,13; 189:25;199:14 received (17) 68:2;78:3,4;80:14, 15;116:24,25;145:18; 151:3,4;156:6,7;167:7, 9;189:13;191:15,16 receives (1) 178:20 receiving (2) 55:7;187:20 recent (1) 145:16 recently (2) 60:21;144:1 recess (16) 59:22;97:21;106:21; 107:4,8,10,14;136:22, 24;139:18,20;176:10, 11;191:2;192:17;210:7 recessed (1) 210:19 recognition (1) 187:20 recognize (12) 75:24;79:20;115:14, 24;116:5;132:9,11; 149:1;153:22;166:16, 19;188:23 recognized (1) 63:9 recognizes (1) 60:13 recollection (1) 102:22 recommendations (1) 147:1 reconvene (1) 210:19 record (43) 55:3;59:16,21,23; 61:25;70:12;84:18; 97:20,22;106:19,20,22; 107:13,15;108:5;	135:20;136:23,25; 140:3,17;142:19; 176:10,12;189:14,24; 190:5;191:1,3,6,7,9,17, 23;192:8,9,13,16,18; 197:24;208:12;210:5, 6,17 recordkeeping (1) 163:19 RE-CROSS-EXAMINATION (1) 138:4 recruitment (1) 142:5 redirect (5) 109:8;137:5,6,10; 138:13 reduced (1) 64:23 reduction (1) 65:18 refer (5) 60:22;98:16;99:6; 155:18;156:20 reference (1) 180:12 referred (15) 67:9;78:19;80:10; 89:18;93:17;99:21; 100:7;108:12;113:12; 115:2;117:13;122:21; 123:25;132:2;151:23 referring (10) 58:21;68:24;110:24, 25;115:18;121:10,12; 158:17;180:12;181:12 refers (3) 67:8;151:25;157:3 reflect (1) 130:18 reflected (3) 171:17;172:22; 196:23 reflecting (1) 68:1 reflects (1) 181:4 Reframe (2) 111:17;202:21 refreshes (1) 102:21 regarded (1) 121:9 regarding (10) 55:8;71:5;106:10; 117:18;120:25;123:10, 22;124:12;131:3;193:5 regardless (2) 90:19;205:25 regenerative (2) 143:25;206:7 Region (3) 50:15;60:21;66:10 Regional (5)	55:6;58:22;66:13; 68:6;138:24 register (3) 157:6;171:14,18 registers (1) 125:14 regular (2) 170:5,10 regulate (1) 132:4 regulated (2) 92:25;100:4 regulations (1) 80:21 rehearsals (1) 94:2 reinforce (1) 62:6 reinvesting (1) 197:1 reiterate (2) 55:13;58:6 rejected (2) 189:13;190:7 relate (1) 209:14 related (10) 63:3,6;98:22;111:2; 138:16;164:10,11; 177:4;193:7;194:10 relates (2) 87:15,17 relation (1) 55:23 RELATIONS (5) 50:2,15;55:14;60:7; 66:11 relationship (4) 103:9;159:9;167:12, 23 Relevance (9) 113:18,19,21;199:5, 7,16,19,24;201:12 relevant (4) 199:9,18;202:8,14 relying (1) 112:17 remain (6) 139:2,3;147:10; 185:3,8;186:15 remainder (2) 84:8;85:6 remaining (2) 165:23;191:24 remarks (1) 69:22 remediation (3) 105:14,15,20 remember (1) 207:21 remove (2) 65:11;99:3 removing (1)
	R			
	Raferty (1) 77:12 raise (2) 70:1;140:7 rank-orders (1) 146:25 rare (2) 161:7;179:14 Rarely (5) 175:18;179:4;180:4; 205:3,19 rates (1) 150:17 rather (5) 68:4;87:5,25;156:17; 177:19 rational (1) 154:14 RCR (2) 157:2;163:12 RD (1) 57:11 reach (1) 167:16 read (4) 94:1;129:1;131:1; 155:17 reader (1) 108:5 reading (2) 173:20;192:25 ready (2) 66:16;138:23 reagents (2) 179:9;204:25 real (1) 79:5 realistic (1) 169:11 reality (1) 175:20 really (2) 69:19;189:23 reason (9) 127:3;172:19; 175:15;190:5;191:19;			

<p>99:5 renamed (1) 144:2 rent (1) 152:10 repeat (7) 88:5;158:25;199:10, 13;202:21;205:18,20 rephrase (2) 123:19;126:10 report (4) 78:8;165:8;182:1; 194:23 reporter (8) 70:14;91:17;94:7; 108:10;130:3;134:7,9; 200:13 reporting (6) 76:4,17,18;79:13; 157:3;197:21 reports (3) 79:12;146:24;188:16 represent (2) 55:21;66:14 representation (5) 60:1,17;61:22; 156:12;208:22 representative (1) 146:22 representatives (2) 102:2,4 represented (1) 75:15 representing (3) 107:25;124:5;193:2 reproducible (1) 196:18 request (2) 187:23;208:2 requested (1) 206:24 requesting (1) 207:1 requests (1) 103:12 require (11) 62:11;65:25;74:10; 85:18;89:4;97:5,9; 110:22;166:9;182:12; 188:15 required (27) 60:24;64:16;94:3; 96:16;97:10;118:21; 119:3,5,19;126:21,23; 127:1,3;131:24; 135:18;137:18,21; 153:11,13;171:13; 184:17;185:2;187:12; 198:15;204:1,3,9 requirement (25) 62:8,23;63:10;65:20; 89:2;92:9;95:1,8;96:2, 3,25;97:7;103:14,15;</p>	<p>118:9;137:22;153:16, 17;187:25;188:10; 196:1,12,21,22;198:9 requirements (38) 55:19;60:25;85:20, 21;88:17;90:10;92:20, 23;93:2;97:14;100:4; 117:18,19,21,22;118:3, 8,12;125:10,10; 137:19;148:7,12,14; 155:13;172:2;182:14; 185:3,16,23;188:13; 201:16,24,25;202:2,3, 13;203:1 requires (1) 87:23 requiring (2) 88:23;191:20 research (212) 55:19;56:2;57:4; 58:15;59:5,9;61:11,23; 62:5,6,7,11,21,23,24, 25;63:1,3,5,21;64:2,6, 9,10,12,15,16,25;65:3, 5,9;67:14,15;68:12; 69:6,7,15,17;71:5,5; 72:3,4;73:14;74:2,8,9, 10,15,21;76:12;79:6; 80:22;83:14;86:1,8,12, 13,16,18;87:12,15,19, 23;88:2,92:14;93:6,9, 24;94:17,18,22;95:16, 23,25;98:7,12;101:1; 103:8;104:12;108:18, 19,20,21,24,24;109:16, 17,18,19;110:11,12,13, 19;117:4,5,20,23,25; 118:1,12,13,18;119:4, 7,14;120:5,7,8,17,19, 20;121:4,8,10,19,25; 123:14,18;134:20; 141:8,8,17;142:20; 144:12,14,24;147:17, 20;148:3;153:5,8; 154:14;156:23;157:3, 3,14;158:3,8;162:1,6, 13,19;163:22;164:10, 11;165:1,7,10,17; 166:8;168:17,22; 169:1,7;170:17,18,19, 20;171:7,14,18;173:4, 12,18;174:3,14;175:1; 176:15,22,24;177:2,7, 11,20;178:5,25;179:1, 2,16;181:1,11,24; 183:8,10,11,18;184:2, 4,20,24;185:10,20; 186:25;187:1,3,16; 195:22,22;196:8,17,23; 197:10;200:23,24; 204:6,15,18,19,20,25; 206:9,11 researcher (1)</p>	<p>121:21 researchers (5) 117:6,10;135:1; 180:1;182:4 researching (2) 64:22;163:17 resident (1) 178:12 residents (2) 178:1;181:24 resources (5) 86:17;99:21;194:12, 14;209:15 respect (16) 60:5;100:25;102:22; 105:2;106:4;112:25; 127:16;141:25;145:16; 153:8;158:18;162:14; 183:2;190:21;205:11, 20 respectfully (1) 66:12 respects (1) 62:20 respond (1) 201:22 response (5) 57:18;108:11;200:8; 207:8;208:3 responses (1) 69:3 responsibilities (4) 74:24;142:2;163:8,9 responsibility (6) 77:14;85:10;88:12; 180:22;203:17,21 responsible (8) 85:7;138:6;142:17; 157:2;162:7,15;179:2; 197:9 responsive (1) 208:15 rest (3) 146:23;147:20; 157:11 restrictions (1) 200:18 result (2) 96:13;191:14 results (2) 86:16;93:8 return (1) 193:20 revenue (1) 96:13 review (25) 66:12;89:18;93:17; 98:17,17;101:21,24; 102:7,13;103:18; 105:15;106:7;123:23; 124:1,2;132:24; 135:16;142:8;173:13; 188:20;196:4,7,9,13;</p>	<p>208:7 reviewed (4) 81:8;96:6;112:2; 196:8 reviews (1) 209:24 revised (3) 81:8;111:24;112:24 revision (1) 111:20 revisions (2) 111:16;112:20 rewriting (1) 111:11 rich (1) 164:3 right (84) 56:6,7;57:25;69:21; 70:2,7;72:3;73:6,12; 77:12;78:16;79:2;81:3; 82:5;84:16;85:5,13; 90:14;92:9;93:23; 94:15;95:11,24;96:5; 100:14;102:23;103:17; 105:4;106:24;107:3,9; 108:13,16,19;109:19; 111:1;112:3,12;114:5, 24;115:1,10,19; 116:23;117:15;120:15; 122:13,19;123:19,23; 125:9;130:16;132:14; 134:9,19;135:6; 136:18,20;138:21; 140:8;151:16;160:19; 162:3,13;168:8;170:9, 22;171:11;176:9; 183:18;184:15;192:7, 19;196:10;198:16,19; 200:11;203:11;205:19; 209:7,14,17;210:8,17 rigorous (1) 196:17 road (2) 159:25;175:2 Roadmap (3) 153:23,24;171:12 role (14) 70:21;93:19;141:21; 142:3;161:23;162:4,4, 14;164:19,21;168:11; 170:6;177:15,16 roles (2) 93:23;177:13 rotate (2) 157:15;159:17 rotated (3) 162:24;163:4;179:17 rotation (24) 119:1,6;120:3,14; 157:6,8,23;158:5; 159:19,20,22;160:3,5, 18;168:18,19,22;</p>	<p>179:19 rotations (12) 118:25;119:24; 120:6;147:17;157:18; 158:1;159:12;160:8, 17;181:2;200:19;201:2 ROTHGEB (10) 57:24;112:8,10,14; 115:8;129:18,23; 130:6,13;134:5 roughly (2) 143:2;165:20 routinely (5) 76:22;80:5;149:11; 154:19;167:2 rule (1) 199:7 ruled (1) 57:11 Rules (1) 191:18 ruling (3) 58:23;60:18,19 run (2) 78:20;141:21 running (1) 179:5 rut (1) 180:10 Rutgers (1) 141:4</p>
S				
				<p>safety (2) 163:18;168:6 salary (3) 199:3;200:1,2 salines (1) 204:25 same (38) 67:19,22;83:3,6; 90:18,20;91:4,6,7; 95:3;104:14;105:2; 114:10;135:25;143:17; 145:1,9;148:7;149:25; 151:9,15;152:19; 153:7,8;169:25;170:1; 172:19;173:3;187:15; 190:18,21;195:11; 200:6;201:10;205:7, 20,25;206:9 satisfactorily (1) 99:19 satisfactory (19) 63:7,12;65:18;90:3, 6,9;8:2,8,14,23;99:2; 102:8;103:3,4;106:3; 123:24;124:20,22; 172:8;185:13 satisfy (2) 60:24;185:7 save (2)</p>

<p>129:18;132:14 saving (1) 208:6 saying (4) 109:22;124:14; 202:7,16 schedule (1) 195:11 SCHOOL (116) 50:5;55:4;60:2,11; 61:6,7,8,15,24;62:11; 70:20,21,25;71:9,10, 13,19;72:1,5,7,8,11,11, 14,14,16,18,20;73:6, 23;74:13;76:2,4,5; 78:9,21;80:9;81:10; 82:1;83:8,18;84:10,12, 21;85:2,15;88:14,20, 23;89:13,19;90:10,21; 95:19;96:13;97:1,3,5; 98:3;101:25;105:6; 114:14,18;115:16,18, 20,24;116:8;122:14,14, 14;124:4,7,8;126:5; 129:9,13,14;130:19,25; 133:5;135:25;136:1, 11;137:22;140:22; 141:5;142:2,7,15,16; 149:24;150:1;152:16; 154:22;160:10;161:5; 175:21;181:25;182:9; 12,20;185:12;186:11; 187:11,19;188:2,5,7, 12;193:14;194:19; 195:16;202:5;204:11 School's (5) 76:23;80:6;167:3; 174:22;189:4 Science (36) 55:16;61:10;73:17; 74:21;79:6;81:19;83:5; 85:1;92:5;142:17,20, 23;143:6,14,19,25; 145:15,20;146:16; 147:5,12;149:24; 152:19;153:1,10; 159:12;163:20;169:8; 181:13,16;182:21; 185:7,15,19,25;205:8 sciences (23) 61:8,14;70:24,25; 71:9;72:6,12;74:15; 76:4;79:4;82:6;88:20; 102:3;124:7;126:5; 129:9;133:20;140:21; 141:19;144:1;145:1; 206:7,8 Scientific (17) 76:6;78:11;81:11; 100:24;124:19;127:12, 14,17,20;145:23; 163:13,19;164:7; 167:21;168:12;183:7;</p>	<p>185:10 Scientist (2) 55:17;61:11 scientists (3) 81:18,21;162:8 scope (5) 64:14;125:20;126:4; 177:7,11 screen (12) 75:18;112:10; 114:24;115:10;131:24; 132:2,3;134:7;155:18; 193:23;198:4;203:15 screening (1) 198:11 screenings (1) 198:20 scroll (2) 128:19;203:16 scrolling (1) 129:1 se (2) 110:13;155:20 Second (30) 55:20;63:2;66:23; 68:21;76:16;84:3,14, 20,22;85:3;92:12; 108:7;116:17;117:3, 25;118:7,9,15,17,19; 119:21;129:23;132:25; 144:21;145:21;147:24; 165:21;166:5;181:3; 207:6 Section (2) 55:21;112:20 sections (1) 111:25 sector (1) 55:21 seek (1) 159:16 seeking (1) 69:1 seeks (7) 55:20;56:14,24;57:6; 58:10,17;66:14 seemed (1) 171:7 Seems (3) 57:19;121:15;131:17 select (4) 64:1,2;145:25;195:7 selecting (2) 158:1;164:8 selects (1) 164:18 self-funded (1) 61:23 semester (7) 103:11;157:20; 161:11;166:11;171:5; 172:14,15 seminar (1)</p>	<p>174:13 seminars (6) 119:12,17;144:19, 23;165:13;173:4 Senior (18) 76:8,10,11,12,13,14; 77:18,24;78:19,23; 79:1;98:20;99:10; 100:19;140:21;142:1, 4;190:11 sense (4) 59:13;165:2;171:25; 173:19 sensible (1) 171:7 sent (2) 194:3;198:6 sentence (5) 109:9;117:3;131:1, 10;203:23 separate (5) 88:21;143:16; 144:13;190:20,22 separately (1) 129:19 September (1) 157:24 serious (1) 69:19 serve (7) 65:24;95:13;128:1; 154:9;155:12,21;197:2 server (1) 92:2 serves (2) 155:18;169:12 service (8) 60:25;65:25;90:10; 96:25;153:11;185:16; 187:25;188:9 services (21) 57:1;58:12;61:19; 62:3;63:4,6;65:21; 67:16;83:17;137:18, 21;152:15;160:18; 177:20,22;182:9; 184:18,19;185:3; 186:23;190:12 serving (4) 57:1;58:12;63:5; 127:24 set (6) 88:3;125:7;168:22; 170:10;171:11;195:4 sets (5) 62:13;92:23;148:18; 167:24;174:4 seven (5) 111:11,19;112:25; 143:15;144:25 Seventh (1) 65:16 several (9)</p>	<p>79:5;81:9;85:24; 100:5,16;108:12; 124:18;189:9;203:20 share (5) 75:18;112:10; 117:16;182:25;205:10 sharing (4) 112:9;114:25;130:2; 195:21 sheet (1) 166:16 shopping (1) 199:8 short (5) 66:6;107:4,10,11,12 shorter (1) 74:10 shorthand (2) 60:23;63:18 shot (1) 208:11 show (19) 60:8;64:19;65:7,10; 67:8,17;112:4,5,13; 115:4,5,13;128:16; 129:17;132:21;155:21; 204:1,9,10 showing (6) 110:22;132:8; 134:14,16;194:22; 207:12 shows (1) 196:8 side (5) 77:12;78:14,16; 155:2,2 sidebar (1) 59:10 significance (5) 150:8;155:19;196:2, 6;197:19 significant (6) 61:4;69:4;155:10; 164:25;170:22;176:21 significantly (1) 65:14 similar (3) 174:8;194:3;198:6 simple (1) 179:18 simply (1) 199:24 SINAI (117) 50:5;55:5;60:3,5,8, 15;61:6,7,20;62:19,21; 63:18;64:4;65:1,24; 68:24;69:17,24;70:22, 25;71:14,18,24;72:2; 75:14,17;76:5;77:1; 78:1,10,11;79:17; 80:12,23;81:17;82:7, 13,17,23;83:11;85:18; 86:9;88:22;90:15;91:9;</p>	<p>96:22;99:22;100:1; 102:11;115:17,20; 117:7,10,14;120:5; 124:4,7,9,10;126:17, 19,24,24,25;127:4; 129:6;132:17;140:5, 23;141:9,13;144:9; 145:14;148:23;149:14; 152:22;153:19;165:14; 166:5,14;171:13; 175:7,9;177:10; 186:12,15;187:6,7,8, 19;188:15,17;189:10; 190:19;192:4;193:16; 194:8,10,11,24;195:4; 197:8,14;198:7;199:4, 14,15;201:6,19,20,20; 202:2,4,9,12,14;209:14 Sinai's (5) 61:2;62:15;66:6,16; 203:1 Sinaki (1) 70:20 sits (1) 145:2 situation (1) 104:2 six (5) 93:10;103:14,15; 111:8;112:2 Sixth (1) 65:6 sketched (1) 141:12 skill (2) 165:10,11 skills (4) 162:11;163:24,25; 164:4 skillset (3) 159:4;164:6;184:14 slides (1) 128:5 slightly (4) 71:25,25;150:24; 194:5 slow (2) 91:17;100:12 slower (1) 105:17 small (1) 65:23 smart (1) 121:15 sole (1) 154:8 solely (5) 62:5,21;64:6;189:19; 191:12 somebody (6) 112:5,6,7;203:15; 206:14;207:23 somehow (1)</p>
---	--	--	---	--

<p>201:18 Someone (8) 65:8;79:11;110:10; 125:6;128:8;184:13; 194:16;207:24 sometimes (7) 103:25;108:7; 113:11;121:22;171:6, 8;180:9 somewhat (2) 162:11;175:18 somewhere (1) 194:25 sorry (27) 72:17;74:5;77:20; 78:22;84:12;88:5; 91:19;110:8,24; 116:19;118:7;120:18; 124:2;125:22;129:18; 131:15;134:16,18; 148:10;155:16;166:18; 175:25;182:24;184:8; 194:22;195:20;208:10 sort (4) 162:10;164:4,4; 208:20 sorts (3) 164:6;187:15;208:16 sought (1) 55:9 sound (2) 57:14,15 source (5) 199:16;201:25; 205:7,13,25 sources (9) 81:25;83:21,24; 84:25;85:25;182:18; 186:8;187:14,21 SP (2) 172:11,19 spans (1) 168:12 speak (3) 56:19;66:21;138:24 speaking (2) 176:22;183:5 speaks (2) 113:24;116:10 specific (25) 64:9;87:8;88:7;98:9, 12,25;99:11;102:14, 15;111:14,16;136:3; 144:16;147:13;148:1, 3,5;153:1,2,5,8;175:15; 178:7;182:4;183:11 specifically (7) 143:8;145:10; 152:24;165:1;168:23; 181:13;191:11 specifications (1) 64:20 specifics (1)</p>	<p>156:4 specify (1) 77:16 spell (2) 70:14;140:16 spend (4) 119:10;142:4; 163:14,15 spending (3) 98:12;119:8;177:11 spends (2) 63:19;178:18 spent (10) 64:22;86:20;119:24; 130:5;141:5;165:20, 24;173:16,17;181:4 split (1) 181:4 spoke (3) 101:18;166:22; 204:19 spot (1) 97:13 spread (1) 73:3 spring (1) 161:11 staff (7) 76:18;78:15;117:6,9; 131:4;179:7;194:24 stage (2) 146:20;174:5 stand (1) 172:18 standard (4) 149:19;174:2,2; 198:9 standards (5) 125:7,23;169:20; 201:15;202:13 standing (8) 66:1;105:6,9,19,24; 106:2,11;161:5 Stanford (3) 69:11,11,13 start (6) 59:17;110:22;141:9; 144:21;193:15,16 started (2) 130:9;193:18 starting (3) 117:24;118:7,11 starts (2) 118:19,20 start-up (1) 205:9 state (10) 67:24;70:11;93:1; 125:8,14;127:1,3; 178:14;195:13;201:8 stated (2) 81:14;129:11 statement (12)</p>	<p>66:19,19;81:2;115:2, 14,16,18,20;116:6,8; 131:2;136:5 statements (1) 81:8 States (11) 93:1;113:11;114:7; 125:13,25;189:8; 197:9;198:10;201:9; 204:1;210:12 Statistics (1) 156:24 status (3) 62:14,16;195:17 stemming (1) 174:19 stems (1) 164:2 step (1) 171:3 Stephanie (2) 190:10;194:16 stepping (1) 197:2 still (13) 64:15;107:17; 118:10;119:22;135:20; 143:1;164:25;171:5; 190:7;207:2;208:13; 210:5,11 stipend (22) 55:24;61:16;62:4; 65:19;66:1;67:9;82:7, 25;83:4,6;90:7;113:13; 114:19;122:2,5,6; 151:23;152:14;187:2, 7;188:5;200:5 stipend' (1) 113:12 stipend-granting (2) 156:15,16 stipends (3) 132:19;198:23; 199:14 stipulates (1) 160:10 stipulation (1) 152:17 stone (1) 197:2 stop (8) 109:3;114:24; 117:15;130:2;150:19; 195:20;202:17;206:15 stops (1) 173:5 straight (1) 143:23 street (1) 73:12 strengths (1) 144:24 strict (1)</p>	<p>96:3 strike (6) 114:7;119:9;123:12; 195:19;196:3;208:11 strong (2) 173:13;174:25 strongest (1) 146:19 Strongly (2) 95:22;96:3 structure (4) 142:14;143:16,17; 144:25 struggling (1) 180:7 student (206) 57:8;63:3,16,18,20, 21;64:5,13,14;65:9; 67:11,17,22;68:5;76:9, 10;77:11,15,18;79:21; 82:8,17;83:16;85:5,15; 87:2,9,24;88:1,10,18; 89:2,3,5,6,12,15,21; 91:3,21;93:6,16,24; 94:3,17;96:6,7,12; 97:13;98:14,19;99:2,3, 6,13,15;100:25;101:1, 13,13,17,17;103:2,8,9, 17;105:1,24;106:5,8; 109:15,15,16;115:3; 121:7,11,22,22,25; 122:1,2;123:13,17,22, 24,25;124:12,24,24,25; 125:1;131:23;132:15; 133:23;136:4;137:17, 18,21;138:15;142:11, 12;146:22;147:3,16; 148:21;152:25;153:25; 154:15;155:21;156:12, 18;157:22,25;158:11, 12;159:3,20;160:9,21; 161:8,20,24;162:3,5,9, 20,22;163:4,5,6,15,21; 164:15,17,18,20;166:4, 6,9,21;167:13,15,15, 24,25;168:5,14,16,23; 169:9;170:7,24; 171:18;172:25;173:9, 11,15;174:1,13,14,20; 175:8,13,21;176:24; 177:2,6,11,15;178:9, 13,18,20;179:1,11,20; 180:7,11;184:5,16,22; 185:6,25;186:4,13,21, 23;187:3,20,25;188:6, 9;190:16;193:15; 194:13;195:3,17; 198:14;200:18,20; 204:2,5,7,12,13 students (243) 55:9,15,16,17,18,20, 24;56:1,3,11,25;57:2,3, 6,7,9,12;58:11,14,15,</p>	<p>18,18,19,20,21,24; 60:2,4,15,16,20,23; 61:2,2,16,17,22;62:4, 16,18,19,21,24,25; 63:9,12,24;64:2,4,8,11, 18,19,24;65:2,6,12,16, 23,25;66:6,7,8,8,10,13; 67:3,4,5,23;68:4,11,16, 18;69:15,17;72:16,16, 17,18,19;73:8,14,17; 75:8,10,11;78:18; 79:12,14;80:8,11,23; 81:23;82:6,11,12;83:3, 5,12,24;85:1,12,17,18, 22;87:5,7,25;88:25; 90:15,18,20,22;91:14; 92:5,14,20;95:16,18; 96:16,20,25;97:5,10; 98:4;102:9;103:12; 108:15,17;110:15; 113:4,4,15;114:9,19; 117:11,12,12,19; 118:21;121:4,20; 126:24;127:23,24; 128:6;131:4,5;132:18; 133:6,10,20;135:4; 136:3,6;142:9,11,22; 143:3,18;144:6,7,18; 145:13;146:10;147:9, 11,12,15,25;150:17,22; 151:17,21;152:3,4,19, 24;153:1,5,10;156:14, 21,22;157:5,15,19; 158:5;159:12,17; 160:17,24;163:9,11; 164:10,14;165:5,16; 166:9,15;167:19; 170:15;171:13;172:7; 175:25;178:2,3,24; 179:22;180:2,13,16,24; 181:8,10,10,15;182:8, 11,17;185:2,15,19; 187:8,10;188:13; 189:18,24;193:16; 194:3;195:20,20,23; 198:24;199:13;200:6, 6;202:4;205:12,23; 206:9;208:1 student's (46) 62:12;63:2,6,15,17, 23;64:21;65:8;82:23; 84:8;87:15;88:2,6; 89:11,21;90:9;91:23; 94:11,22;95:6;98:11; 101:6;106:2,10; 138:16;147:23;149:12; 154:20;160:22;162:14; 169:15,23;170:1,18; 171:2,23;172:22; 173:18;182:16;183:1; 185:22;186:4,12; 187:2;188:4;204:21 studies (10)</p>
---	--	---	---	--

61:18;67:18;91:24; 143:13;152:12;153:14; 162:23;181:17;183:9; 193:15 study (9) 141:19;143:9; 147:23;156:19;173:1, 23;174:4,7;176:21 subcommittee (3) 102:24,24;104:1 subcommittees (4) 102:12,14,20,22 subject (6) 63:9;65:17;116:2; 125:15;138:17;158:18 submission (1) 210:16 submit (5) 66:12;67:13;92:12; 189:10;190:7 submits (2) 60:8,12 submitted (3) 93:10;160:14;174:7 submitting (1) 189:20 subpoena (3) 207:8,22;210:14 subsidized (1) 82:12 substance (2) 131:3;162:8 Substantial (4) 72:15;111:10,19; 112:20 substantially (4) 86:25;87:11,18; 102:25 subtle (1) 151:14 succeeded (1) 161:18 success (1) 127:14 successful (3) 174:23;179:10; 198:10 successfully (3) 123:14,17;124:15 suffice (1) 186:10 sufficient (2) 153:13;209:5 suggest (2) 186:3;206:14 Suite (1) 50:16 summarize (1) 69:14 summer (1) 149:20 sums (1) 68:8	super (1) 179:24 supervised (1) 68:20 supervision (4) 68:13,21,25;162:10 supervisor (1) 65:6 supplemental (1) 188:6 supplementation (2) 169:19;188:10 supplemented (1) 169:18 supply (2) 89:14;209:4 support (5) 61:1;64:10;181:23; 204:2,20 supported (2) 85:5,6 supporting (2) 72:6;86:18 supports (1) 199:17 suppose (1) 199:12 supposed (2) 103:10;134:7 supposedly (1) 201:17 Sure (27) 59:11;67:4;70:15; 73:24;75:25;88:6;94:6; 112:1;122:7,11;128:4, 21;130:22;133:14; 134:10;145:22;149:4; 160:12;161:17;163:21; 168:14;172:18;176:2; 193:24;202:22;204:14; 208:12 surrounding (1) 80:22 suspended (3) 105:10,12,13 sustain (1) 203:9 sustainable (1) 86:13 sustained (8) 109:11;114:2,4; 121:18;125:21;127:6; 158:22,24 Swartz (3) 76:13,17;79:7 sworn (2) 70:5;140:11 symbol (1) 115:24 system (9) 67:19,21;68:9;120:9; 132:16;148:22;149:8; 194:12,14	T	122:19,19;181:18; 183:22,25;193:11 terminate (2) 65:11;160:2 terminated (2) 105:16,22 terminology (1) 113:14 terms (8) 72:2;80:18;88:10; 144:16;165:6,20; 178:17;187:13 Terrific (1) 137:9 tertiary (1) 141:16 test (8) 62:13,16;69:2,18; 168:25;183:11,16; 198:15 testable (1) 183:20 testified (16) 70:6;117:18;120:21; 123:18;125:7,23; 126:3;127:22;137:12; 140:12;195:21;198:23; 199:22;200:23;201:25; 209:15 testify (1) 203:9 testifying (1) 56:8 testimony (21) 55:7,8;62:18;63:15; 76:21;94:7;108:12; 111:2;113:13;121:14; 123:16;137:15;139:1; 158:23;169:22;193:5; 200:4,5;201:15; 202:19;208:7 testing (1) 198:15 tests (1) 198:19 Theis (1) 93:20 therapeutic (1) 144:3 therapeutics (1) 144:2 thereafter (2) 167:22;172:6 Therefore (4) 55:11;60:17;67:15; 69:18 thereof (1) 154:4 thesis (66) 64:12,13,25;65:4; 69:8;83:14;89:9;92:12, 15,17;93:4,5,14;94:1,2, 11,16,23,25;95:18,24;	96:7,7,12;99:14;101:2; 104:7,10,15,18,20,24; 118:1,12,14,18,19,19; 120:17,19,20;124:16, 17;125:6;137:19,22; 138:16;169:1,2,4,16, 23;170:15,18;171:2,14, 23;172:5;173:2;174:7, 21;177:4;195:22; 200:23;204:6,18 Third (11) 55:23;59:2,3;63:24; 118:11;145:22;172:24; 173:1,13;181:6;207:20 though (1) 96:4 thought (3) 179:15;205:4,4 thoughts (2) 163:16;170:10 three (8) 61:13,20;62:4;71:11; 74:14;99:25;146:21; 166:5 thrive (2) 158:14;160:20 throughout (4) 67:11;88:13;93:6,24 tightly (1) 176:25 till (1) 206:12 timely (1) 154:16 title (3) 126:18;145:7;190:11 titles (1) 144:15 today (5) 55:4;59:25;139:11, 12;206:19 together (3) 89:20;164:3;165:5 Tom (5) 66:23;109:10;115:8; 130:6;150:14 took (2) 111:7;115:22 tool (1) 83:13 top (4) 102:17,17;145:2; 189:8 topic (4) 64:12,13;153:8; 176:23 topics (3) 64:11;119:14;210:14 totally (3) 60:19;96:22;100:2 toward (1) 64:22 towards (27)
---	---	----------	--	---

63:8;83:14;86:20,21, 21;87:18;92:15;95:16, 17;118:1,12,18;119:23, 25;121:8;147:22; 154:1;160:4;162:18; 165:1;169:1;171:4; 178:23;181:1;184:25; 195:20;204:24 toxicology (1) 198:11 track (1) 88:21 traditional (4) 119:17;171:25; 200:25;201:3 train (4) 72:15;81:11,18,20 trainee (3) 99:24,24;178:4 trainees (7) 71:13;75:6,11;88:25; 108:13;148:16;178:3 Training (69) 55:18;61:11;62:6; 75:2;76:12;78:18;79:5; 83:13;85:5,12,13,14, 18,19;87:23;88:21,24; 96:23;97:8;98:7;99:11; 100:15;102:3;104:17; 108:22;124:6;141:2; 142:20;143:15,20; 144:23;145:8,11; 147:20;153:14;154:16; 158:9,10,14;160:20; 161:19;162:9,18; 163:12,19;164:1,14; 165:2,3,15;167:16; 169:10;173:4;176:18, 18;177:25;178:7,11,13, 16;179:3;181:18,20, 21;182:8,11,13; 184:13;193:14 transcribe (1) 91:18 transcript (1) 172:22 transcripts (1) 189:20 treated (3) 68:15,16,23 tried (1) 197:23 trouble (2) 84:2;192:25 true (4) 68:17;69:9;141:20; 167:22 try (2) 56:19;205:20 trying (3) 109:14;129:18,21 tuition (5) 61:15;82:8,23;152:1;	181:12 turn (4) 82:3;89:25;129:16; 164:5 Turning (5) 90:12;92:7;98:1; 102:21;171:12 tutoring (1) 128:6 tutors (2) 57:1;58:13 two (24) 62:14;89:4;99:11; 100:21,22;104:4; 133:6,8,11,13,14,20; 142:17,19;143:6; 145:4;149:16;156:15, 16;186:10;190:24; 206:9;207:4;209:13 two-prong (1) 62:13 type (3) 83:9;109:19;128:6 types (4) 72:15;155:11,19; 175:1 typical (5) 86:11;172:25;175:4, 5;177:24 typically (2) 64:10;183:9 typo (1) 84:19	understands (1) 168:23 Understood (7) 56:12;59:2;108:6; 155:6;158:17,21;208:8 underwent (1) 108:21 undifferentiated (1) 178:14 unilaterally (1) 65:11 UNION (4) 50:8;75:15;108:1; 193:2 Union's (1) 61:25 unit (15) 55:9;56:14,24;57:2, 6,7;58:10,13,17,18; 62:1;66:3,5;131:5; 202:19 UNITED (2) 50:8;197:9 universal (1) 197:13 universally (1) 197:15 universities (2) 60:20;64:25 University (5) 60:11;61:3;141:1,3,6 unknown (2) 164:4;183:19 unless (1) 85:4 unlike (4) 63:2;64:21;200:24; 201:2 unrelated (1) 65:3 up (18) 56:19;76:19;94:16; 100:5;116:19;129:8; 130:13;168:14;172:2; 175:2,11,12;180:18; 182:25;193:23;195:5; 205:10;208:5 updated (7) 80:3,7;110:23;111:6, 8,9,25 updating (1) 80:2 upon (18) 109:5,18;147:21; 152:5;153:2,6;157:21; 165:11;166:4;171:9; 174:14;175:1;180:4; 195:11;198:10;200:22; 205:13;206:10 upper (1) 115:25 urine (1) 198:17	use (8) 80:22;122:13; 129:11;150:15;152:4, 4;169:7;174:6 used (12) 113:13;114:22; 119:13;127:12,16; 149:20;150:20,22; 162:20;198:25;199:22; 200:25 using (2) 71:6;129:10 usually (15) 73:24;86:1,16;93:7; 95:11;99:10,12; 100:14,21,23;104:9,11, 14;128:3;199:12 utilities (1) 152:10 utmost (1) 60:5	15;154:24;155:5,7 voluminous (1) 191:10 voluntarily (2) 65:22,24 voluntary (1) 127:22 volunteer (1) 65:23 volunteering (1) 96:22 volunteers (1) 128:8 vote (2) 65:14;170:8 voting (8) 99:11;100:22;101:4, 6,8;104:15,20;170:3
		W		
		V		
		vacation (10) 65:17;133:7,8,11,13, 15,21;179:23;180:2,14 Vague (1) 205:15 varies (3) 158:2;170:16;177:24 various (6) 102:9;144:10;163:8; 177:19;182:18;186:8 vary (1) 165:11 Venn (1) 144:14 verify (1) 207:19 version (1) 198:6 versus (3) 181:5;182:6,6 via (3) 62:6;148:21;204:10 vigorously (1) 66:3 virtually (2) 62:7;64:21 vis-a-vis (3) 161:24;162:5;163:9 vision (5) 82:21,21;90:25;91:6; 190:21 visit (1) 180:5 visual (1) 156:12 vitae (1) 187:13 Voir (8) 77:3,7;149:17;150:9,	W-2 (1) 67:25 wait (5) 108:9;139:8;154:25; 206:13;208:5 waiting (1) 208:4 walk (1) 151:20 wants (1) 179:11 wasted (1) 59:20 way (8) 62:6;64:4;123:1; 131:10;175:2;196:24; 205:12,25 wear (2) 141:19,25 website (1) 115:22 week (2) 67:19;195:9 weekend (1) 180:7 weekly (1) 159:23 weeks (8) 133:6,8,11,13,21; 159:22;160:5;180:14 weeks' (1) 133:14 weighed (1) 166:7 weighted (1) 178:23 Weird (1) 131:10 welcome (1) 139:6 wellness (1) 179:25	

weren't (1) 89:16	189:11;190:3;198:4; 208:3	60:12;68:10	172:16;210:20	217 (1) 146:5
what's (17) 81:16;91:12;102:6; 105:11;115:13;129:2; 134:14;144:9;145:6; 152:9;166:6;167:11; 169:2,2;171:3;178:25; 199:19	witness (60) 66:17;69:23;70:5; 94:8;106:24;107:16, 17;109:4,12,14; 111:23;112:23;114:15, 18;121:14,19;126:1; 128:22,25;131:17,20; 132:21,25;133:1,2,17; 137:2,7,8;139:2,5,10, 14,15,17;140:4,11; 151:5,7;155:17; 158:25;176:2;191:4; 199:21;201:25;202:19, 20;203:9,12;207:1,24; 208:4,5;209:10,15; 210:3,9,10,11,12	Y	100 (12) 84:10,13;85:9;94:24; 118:3,8,11;119:18,25; 173:16,19;181:2	23 (1) 55:22
whatsoever (1) 62:11	witness' (1) 208:7	year (60) 73:25;82:10;84:13, 14,20,22;85:2,3,7,9; 92:12;117:24,25; 118:5,7,8,9,11,16,17, 19,23,25;119:1,19,21, 24;133:7,9,12,14,21; 142:24;144:22,24; 145:18;146:5;147:23, 24;151:7;156:19; 157:23;158:2,2,4; 161:11,25;164:22,23, 24;165:21;172:14,24; 173:1;181:4,6;193:8,9; 194:2;198:6	10-minute (1) 107:7	25 (7) 84:14,19,21;85:4; 119:21;143:4;165:22
wheel (1) 197:1	witnesses (3) 135:18;201:15;208:9	years (20) 71:20,25;81:9;85:22; 89:4;111:8,12,19; 112:2,25;151:14; 175:5,11,13,22,25; 176:19;178:16;181:15; 204:2	110 (4) 129:17;130:7,8,18	26 (1) 50:16
whereas (6) 74:9;79:6;144:24; 178:13,21;183:18	word (5) 113:13;166:7,23; 174:25;209:16	year's (1) 82:11	13 (3) 134:14;135:9;136:14	260 (1) 142:25
Whereupon (13) 59:22;70:3;97:21; 106:21;107:14;136:24; 139:20;140:9;176:11; 191:2;192:17;210:7,18	worded (5) 131:13,16,17,18,20	Yep (1) 188:24	130 (1) 146:9	3
whole (6) 85:17;128:20; 165:15;174:14;175:18; 182:11	words (3) 99:18;129:1;162:20	yesterday (2) 55:12;208:16	135 (2) 92:7;96:15	3 (14) 58:3,4;80:25;85:9; 92:10;115:4;128:17; 148:23;149:15;151:3; 157:11;159:22;198:3; 203:17
wholistic (1) 146:18	work (20) 68:21;87:24;94:20, 20;109:22;118:19; 125:18;138:7;147:17; 156:20;157:4;160:12; 161:25;165:1,14; 169:9;181:2;183:19; 194:16;195:20	York (13) 50:16,16;72:22,23, 24;93:1;125:13,19,24; 127:4;140:23;152:11; 201:8	14 (1) 92:11	3.0 (4) 98:5;124:15;161:6; 185:9
whomever (2) 103:13;121:21	WORKERS (1) 50:10	year's (1) 82:11	14th (1) 193:17	300 (1) 158:3
whose (1) 207:25	working (8) 88:1;94:12;129:20; 171:4;179:22;180:25; 200:23;204:24	Yep (1) 188:24	15 (2) 71:20;103:24	35 (1) 90:12
willing (3) 135:16;191:25; 193:22	Works (5) 163:23;164:12; 165:9;173:4;194:18	Yep (1) 188:24	17 (1) 71:22	36-130 (1) 50:16
willingness (1) 191:24	world (3) 60:5;127:12,14	yesterday (2) 55:12;208:16	171 (2) 133:16;134:5	4
WIP (1) 165:9	worry (1) 122:12	Z	1995 (1) 141:17	4 (7) 59:1;153:19;154:23; 156:6;160:11;171:13, 13
wise (1) 117:22	worth (1) 93:9	zebra (1) 70:15	1's (1) 60:21	400-and-whatever (1) 111:4
wish (1) 208:16	write (1) 185:1	zoom (2) 156:19;159:23	1st (1) 83:1	405 (2) 79:24;111:24
withdraw (4) 190:1;200:14,15; 208:11	writes (1) 174:1	0	2 (27) 50:15;79:17;80:12; 85:7;110:21;111:1; 112:6;115:4;129:17; 130:4;132:9,22;134:2, 3;157:4,10;164:22,23, 24;166:1;180:14; 204:2;206:12;207:6, 10,11;209:24	47,000 (1) 83:1
withdrawn (6) 88:16;95:17;96:11; 97:4;104:5;169:2	written (7) 93:11;133:22; 163:22;168:2,14; 174:12,19	02-RC-319437 (2) 50:5;55:5	2:00 (2) 139:19;140:2	5
withheld (3) 67:25;68:10;195:14	wrong (2) 69:13;196:14	1	20 (4) 71:25;84:14;85:2; 143:4	5 (8) 159:18;166:15; 167:5;175:5;180:18; 203:12;208:13;209:9
withhold (1) 100:18	wrongly (2)	1 (17) 59:1;72:23;73:20,21; 75:18;77:1;78:2; 115:13;116:13,23; 135:24;136:14,15,15; 161:11,13;162:16	200 (2) 158:4,6	5:00 (1) 206:13
withholding (2) 68:8;191:22		1,018 (2) 145:18;146:3	2002 (2) 141:10,17	5:09 (1) 210:18
within (10) 60:7;67:20;99:12; 111:11,19;126:11; 129:14;149:8;168:25; 173:22		1:01 (1) 139:20	2016 (2) 60:12;71:22	50 (1) 157:10
without (14) 59:17;65:18;68:8; 79:12;95:7;99:24,24; 106:11;177:3;184:4;		10 (2)	2022 (2) 157:20;193:8	53-page (1) 66:20
			2023 (2) 50:17;210:20	550 (1) 71:13
			21 (4) 82:3;112:13,20; 175:25	56 (2) 89:25;98:1
			215 (1) 146:5	

In The Matter Of:
ICAHN SCHOOL of MEDICINE at MOUNT SINAI

Vol. 3
July 10, 2023

Burke Court Reporting, LLC
64 Magnolia Place
Wayne, NJ 0747
(973) 692-0660



Min-U-Script® with Word Index
BURKE
**COURT REPORTING
& TRANSCRIPTION**

Page 212

1 BEFORE THE
2 NATIONAL LABOR RELATIONS BOARD
3 -----:
4 In the Matter of: : Case No.:
5 ICAHN SCHOOL of MEDICINE at MOUNT SINAI, :
6 Employer, :
7 and :
8 INTERNATIONAL UNION, UNITED AUTOMOBILE, :
9 AEROSPACE, and AGRICULTURAL IMPLEMENT :
10 WORKERS of AMERICA, :
11 Petitioner. :
12 -----:
13 The above-entitled matter came on for hearing Pursuant to
14 Notice, before AVINISH V. KUMA, Hearing Officer, at the
15 National Labor Relations Board, Region 2, Jacob K. Javits
16 Federal Building, 26 Federal Plaza, Room 36-130, New York, New
17 York, via Zoom, on Monday, July 10, 2023, at 9:30 a.m.
18
19
20
21
22
23
24
25
26

Page 213

1 A P P E A R A N C E S
2 On Behalf of the Employer:
3 ADAM M. LUPION, ESQ.
4 MELISSA FELCHER, ESQ.
5 Proskauer Rose LLP
6 Eleven Times Square, 19th Floor
7 New York, New York 10036-8299
8 (212) 969-3558
9 alupion@proskauer.com
10 mfelcher@prokauer.com
11
12 On Behalf of the Petitioner:
13 THOMAS W. MEIKLEJOHN, ESQ.
14 NICOLE M. ROTHGEB, ESQ.
15 Livingston Adler Pulda Meiklejohn & Kelly PC
16 557 Prospect Avenue
17 Hartford, Connecticut 06105-2922
18 (860) 214-9676
19 twmeiklejohn@lapm.org
20 nmrothgeb@lapm.org
21
22
23
24
25
26

Page 214

1 I N D E X
2 WITNESS DIRECT CROSS REDIRECT RECROSS VOIR DIRE
3 Dr. Matthew O'Connell -- 223 234 236 --
4 Dr. Basil Hanss 240 279 -- -- --
5 Dr. Talia Swartz 302 313 -- -- --
6 Dr. Scott Russo 323 -- -- -- --
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26

Page 215

1 E X H I B I T S
2 EXHIBITS IDENTIFIED RECEIVED
3 JOINT
4 J-1 300 300
5
6 EMPLOYER'S
7 E-6(a) 300 301
8 E-6(b) 301 301
9 E-7 248 249
10 E-8 257 257
11 E-9 270 270
12 E-10 300 300
13 E-11 300 300
14 E-12 300 300
15
16 PETITIONER'S
17 P-2 216 216
18 P-35 267 --
19
20
21
22
23
24
25
26

Page 216

1 P R O C E E D I N G S
2 (Time Noted: 9:22 a.m.)
3 HEARING OFFICER KUMA: All right. We're on the
4 record. So good morning, everyone. I will continue in the
5 hearing and today case concerning Icahn School of Medicine at
6 Mount Sinai, Case Number 02-RC-319437. Will the Employer
7 address the outstanding subpoena documents and exhibit issues
8 that was last related on Friday that was left for us to
9 address?
10 MR. LUPION: Yes, sir. I believe there were three
11 items, I will tick them off in order. The first concerned
12 Petitioner's Exhibit 2, Respondent has no objection to the
13 admission of that exhibit into evidence.
14 (Petitioner's Exhibit Number 2 identified.)
15 HEARING OFFICER KUMA: Since there is no objection, I
16 hear that that Petitioner Exhibit 2 is received and entered
17 into all -- into evidence.
18 (Petitioner's Exhibit Number 2 admitted.)
19 MR. LUPION: The second item concerned a new request
20 for documents or -- or for two attachments that were referenced
21 in an August 8th 2022 email. I believe that was Respondent
22 Exhibit 6. We made inquiry as soon as the hearing adjourned
23 last -- last Friday, it was after business hours. We have not
24 yet received the attachments as I represented on the record
25 last Friday. Once we have an opportunity to review them if

Page 217

1 they -- we will I anticipate being able to produce them, but at
2 -- at the moment as of this hour, we do not have them in -- in
3 our possession, but we have made inquiry. The third item --
4 (Employer's Exhibit Number 6 identified.)
5 MR. MEIKLEJOHN: Can I just speak to that briefly or
6 just make one follow up observation? Well after the documents
7 are provided, Mr. -- you will make Mr. O'Connell available if
8 we have questions about them.
9 MR. LUPION: I -- I don't know the answer to that
10 question.
11 MR. MEIKLEJOHN: Well, we would not want Mr.
12 O'Connell released from testifying until we've had an
13 opportunity to --
14 MR. LUPION: I would need -- I would need to assess
15 the -- the relevance of that document -- of the -- of the
16 documents to that -- to that line of, of questioning. So we're
17 going to -- we're going to resume on that. The third item
18 pertained to grant applications. Tom, I think there -- there
19 may have been -- it was our understanding that you were -- that
20 you were interested in only those grants that identified PhD
21 students on them.
22 MR. MEIKLEJOHN: Not by name.
23 MR. LUPION: Or -- or by -- or by -- or by a PhD
24 student. If a PhD student was -- if there was a place for that
25 on -- on the grant.

Page 218

1 MR. MEIKLEJOHN: Or -- or graduate assistants. To be
2 clear, since it appears students are also classified as
3 graduate by the school in some situations.
4 MR. LUPION: Actually that -- that's not -- that's
5 not correct. The grad -- the -- the -- the school does not
6 refer to them as -- as graduate assistants. But we will -- we
7 are prepared to make production of responsive grants on -- on a
8 rolling basis. And I think we can commence with -- with our
9 production straight away.
10 MR. MEIKLEJOHN: Okay. We -- we didn't get any over
11 the weekend, so --
12 MR. LUPION: Okay. We were still tracking them down,
13 Tom. As I said, it's not a matter of, you know, pressing a
14 button and -- and we get them.
15 HEARING OFFICER KUMA: So when do you plan to receive
16 them?
17 MR. LUPION: Oh, we can -- well, we're -- we're
18 prepared to make production this morning. We have the -- we
19 just have to stick some Bates numbers on them, and we can -- we
20 can get them out.
21 HEARING OFFICER KUMA: So we're looking at basically
22 by lunchtime, say by --
23 MR. LUPION: I think that -- I think that's right.
24 HEARING OFFICER KUMA: Okay. So -- so we was to --
25 so if I was to set a time, say by 2:00 p.m., the Employer can

Page 219

1 produce those documents by 2:00 p.m. to the Petitioner?
2 MR. LUPION: Let me just check with my team here.
3 HEARING OFFICER KUMA: Okay. Just want to make sure,
4 I just don't want to set -- set a hard deadline, then you can't
5 make that.
6 MR. LUPION: Yes. Avi, that is -- that is doable on
7 our end.
8 HEARING OFFICER KUMA: Okay. So -- okay. So then he
9 stepped away?
10 MS. ROTHGEB: I assume he is still within earshot
11 since he's so --
12 MR. LUPION: I'm sorry.
13 HEARING OFFICER KUMA: Oh, no, no. It's fine. I'll
14 wait until you come --
15 MR. LUPION: I went to grab a cup of coffee, I
16 thought I --
17 HEARING OFFICER KUMA: No, no. That's fine. So --
18 so the Employer will have until 2:00 p.m. to produce the
19 documents today to the Petitioner to review as that has been
20 told that that'll be sufficient time to get that to the
21 Petitioner. Okay. Now, the only thing outstanding would be
22 the attachments to Exhibit 6.
23 After the Employer's able to review that, I hear the
24 Employer's -- the -- excuse me, the Petitioner's request to not
25 release Mr. O'Connell. Again, the Employer reserves his rights

Page 220

1 but wants to reviews those documents, and we'll revise that
 2 once those documents are turned over, and we'll come back to
 3 that again and we'll review that, okay?
 4 MR. MEIKLEJOHN: All right. At this point -- at this
 5 point, I -- not to -- well, we got a few minutes, but no, not
 6 many. I just, I would renew my objection to Petitioner -- to
 7 Employer's Exhibit 6 on the ground that without the
 8 attachments, that it is incomplete. As I have said, I am not
 9 insisting upon the production of the other attachments, but the
 10 first two attachments we think --
 11 HEARING OFFICER KUMA: Hold on.
 12 MR. MEIKLEJOHN: -- are relevant and that the
 13 document should not be received unless --
 14 HEARING OFFICER KUMA: Hold on. We -- I went off the
 15 record, so --
 16 MR. MEIKLEJOHN: Oh, you did?
 17 HEARING OFFICER KUMA: Yeah.
 18 MR. MEIKLEJOHN: All right.
 19 HEARING OFFICER KUMA: Adrian, we're off the record,
 20 right? Oh, we're still on. We're on the record? Okay. So,
 21 Tom, go ahead. Which.
 22 MR. MEIKLEJOHN: I -- I did. I finished what I had
 23 to say.
 24 HEARING OFFICER KUMA: Okay. So --
 25 MR. MEIKLEJOHN: We can defer ruling on that until we

Page 221

1 see if the documents are produced.
 2 MR. LUPION: I believe the Petitioner's Exhibit 6 has
 3 already been offered and admitted into evidence pursuant to the
 4 terms that we discussed on the record given -- last Friday,
 5 given that Mr. O'Connell was testifying only about the contents
 6 of the email, it was admitted for that purpose. So it already
 7 is in -- in evidence. Nonetheless, as I said, we are willing
 8 to -- we have made inquiry into the attachments and we'll
 9 proceed as we've discussed.
 10 HEARING OFFICER KUMA: Again --
 11 MR. MEIKLEJOHN: Just so --
 12 HEARING OFFICER KUMA: Okay, let's --
 13 MR. MEIKLEJOHN: There is a confusion later. You're
 14 referring to Employer Exhibit 6, correct?
 15 HEARING OFFICER KUMA: Right. That is correct.
 16 Employer's Exhibit 6. So --
 17 MR. MEIKLEJOHN: Counsel referenced Petitioner's 6.
 18 MR. LUPION: Oh, I misspoke. Yes.
 19 MR. MEIKLEJOHN: I know, I know. Sometimes --
 20 sometimes three weeks from now that creates all sorts of
 21 confusion.
 22 HEARING OFFICER KUMA: Okay. So what I have here for
 23 -- to be clear on the record, is that Employer's Exhibit 6 was
 24 offered. Objections were provided by the Petitioner and the
 25 reasons for the objections, because it didn't have the

Page 222

1 attachments. Your objections were noted, but I overruled your
 2 objections because of the Employer statements, given the facts
 3 that it was solely for the actual email content, not for the
 4 attachments.
 5 And you were only -- and the Employer was solely
 6 bring -- bringing the exhibit up and was raising it for the
 7 contents of the details in the email. The reader -- the writer
 8 of the record will apply the appropriate weight based off of
 9 that, off my ruling. Based off of that, I note that you did
 10 not withdraw your objections and I received the Employer's
 11 offer into evidence based off that reasoning.
 12 We did come to an agreement at -- towards the end on
 13 Friday concerning the attachments, and the Employer did state
 14 that he has no objections to providing it, but when would want
 15 to review it. He wants to review it at first. And that's what
 16 we're doing right now, okay?
 17 Just to summarize what was going on. So now we're
 18 just waiting for the witness to appear. I don't see him in the
 19 chat. I do not see Dr. O'Connell. We -- he was supposed to
 20 appear at 9:30 because he has to leave by 10:45. There he
 21 goes. Okay.
 22 MS. ROTHGEB: Oh, Avi, it looks like maybe Adam is
 23 stuck on mute. Once you mute yourself, we're getting stuck.
 24 HEARING OFFICER KUMA: Thank you, Nicole. I'll try
 25 to be the mute police for you if I can, Avi.

Page 223

1 MR. LUPION: I'll -- I'll just raise my hands or
 2 anybody should just raise their hands and start waving.
 3 HEARING OFFICER KUMA: Okay. So, Dr. O'Connell, just
 4 want you to understand that you're still under oath.
 5 THE WITNESS: Yes.
 6 HEARING OFFICER KUMA: Okay. Good morning, by the
 7 way. Today you're going to continue with your cross
 8 examination by the Petitioner.
 9 CROSS EXAMINATION
 10 BY MR. MIEKLEJOHN:
 11 Q. Good morning, Dr. O'Connell.
 12 A. Good morning.
 13 HEARING OFFICER KUMA: Who are you? Excuse me.
 14 Sorry.
 15 THE WITNESS: That's fine.
 16 HEARING OFFICER KUMA: I don't mean to cut you off.
 17 THE WITNESS: I don't really -- all that ready.
 18 HEARING OFFICER KUMA: I just would -- I would like
 19 for you to state your -- I know you stated this on Friday, but
 20 please, can you spell your name, full name again for the
 21 record?
 22 THE WITNESS: Yes. My name is Matthew O'Connell. M-
 23 A-T-T--H-E-W O'-C-O-N-N-E-L-L.
 24 HEARING OFFICER KUMA: Petitioner can now continue
 25 with their cross.

Page 224

1 BY MR. MIEKLEJOHN:
 2 Q. I'd like to draw your attention to now -- here, I spent
 3 all this time making sure I had the right document. Yeah.
 4 That is the right document. All right. Show you Employer
 5 Exhibit 5, the -- this is the second page and I'm drawing your
 6 attention to Paragraph 3.
 7 (Employer's Exhibit Number 5 identified.)
 8 A. Yes.
 9 Q. And in the -- in -- well, in the second paragraph of
 10 Section 3, it states, students should only perform rotations in
 11 laboratories that have the potential to accept and support the
 12 student for their dissertation research.
 13 A. Mm-hmm.
 14 Q. What conditions must the laboratory or the laboratory's PI
 15 meet in order to have the potential to accept and support the
 16 student?
 17 A. Well, they need to have the space, they need to have the
 18 infrastructure, they need to have the funds to pay for the
 19 experiments that lead to their dissertation research. And
 20 finally, the financial package that we spoke about on Friday.
 21 Q. So the -- the -- the money to pay the compensation to the
 22 student?
 23 A. That's among the things that they need to.
 24 Q. Yes. What -- if a student wants to pursue research in a
 25 laboratory that doesn't have funding for his or her research?

Page 225

1 A. Mm-hmm.
 2 Q. What does the student do?
 3 A. Well, they would -- that lab would not be available for
 4 rotation, so that would not occur.
 5 Q. And what about during the dissertation period? What if
 6 the student was working on his or her dissertation and wanted -
 7 - or had decided on a, an area of research and wanted to pursue
 8 that research in a laboratory that didn't have funding?
 9 A. Should that occur, then funds will be sought from the
 10 preceptor's department and/or institute and if -- in cases
 11 where that's not available, from the graduate school.
 12 Q. Now, drawing your attention to the first page of
 13 Employer's Exhibit 5, I think it's probably the -- well, yeah.
 14 I think it's the third sentence, but it starts six lines down.
 15 Referring to the -- the PhD graduate experience.
 16 A. Mm-hmm.
 17 Q. It states that it is a partnership to maximize research
 18 potential, training, productivity, and outcomes.
 19 A. Mm-hmm.
 20 Q. Is there an attempt to measure the -- or evaluate the
 21 research potential during the -- during the PhD period?
 22 A. Yes. As I mentioned on Friday, there are regular meetings
 23 with an advisory committee outside of the laboratory. And --
 24 and there's also the research proposal/qualifying exam.
 25 Q. And how, if any way, does the school or the PI measure

Page 226

1 training?
 2 A. Well, they measure whether the student is acquiring
 3 additional skills both in terms of physical technical
 4 manipulation for the experiments and academic skills to -- to
 5 reach for their full potential.
 6 Q. And how do you measure the students' productivity?
 7 A. Whether the experiments are moving forward. So that's not
 8 productivity necessarily in --
 9 Q. I think -- I think you answered the question.
 10 MR. LUPION: Could we let we the --
 11 MR. MEIKLEJOHN: I think he's moving on to something
 12 else.
 13 MR. LUPION: Tom, the witness wasn't finished with
 14 his answer and he was about to tell you something that you
 15 apparently didn't like, which is why you cut him off. So I
 16 would ask that the witness be allowed to complete his answer.
 17 MR. MEIKLEJOHN: Well, the witness has answered the
 18 question, then he went on to say --
 19 HEARING OFFICER KUMA: Sorry. Hold on. Gentlemen.
 20 MR. MEIKLEJOHN: Productivity --
 21 HEARING OFFICER KUMA: Gentlemen. Gentlemen. The
 22 witness will continue to speak.
 23 BY MR. MIEKLEJOHN:
 24 A. Okay. What I wanted to add is that the effort that the
 25 student is putting into their experiments is on the straight

Page 227

1 path towards their dissertation research.
 2 Q. And how do you measure the outcomes of the research?
 3 A. Whether the experiments have tested the hypotheses
 4 adequately to make a conclusion.
 5 Q. Is -- does publication go into measuring the outcome in
 6 any way?
 7 A. Well, maybe eventually, but it takes some time.
 8 Q. That is the ultimate objective?
 9 A. No. The ultimate objective is to complete the
 10 dissertation research and defend a -- a high quality thesis.
 11 Q. Turning to Page 4 of the same document, the last paragraph
 12 before Item 9 provides that students who receive fellowships
 13 are paid in annual bonus --
 14 A. Mm-hmm.
 15 Q. -- from the graduate school of \$2,000. And you testified,
 16 I believe that preceptors are requested and almost always pay
 17 the additional \$2,000; is that right?
 18 A. That is correct. I'm not aware of a circumstance where it
 19 has not occurred.
 20 Q. And do you know how this bonus is paid to the students?
 21 Is it paid as a lump sum payment through the payroll system?
 22 A. I don't know the details of the financial compensation
 23 mechanisms, that's not through -- directly through the graduate
 24 school. It's through the Dean's -- Dean Charney's office.
 25 Q. Now from Dean whose office?

Page 228

1 A. Dean Charney, the Dean of Mount Sinai.
 2 Q. Okay. Do - do you know the reason for paying this bonus
 3 to people who receive fellowships?
 4 A. Yes. It -- it -- it -- it is a combination of
 5 encouragement and -- and recognizing their successes. It is
 6 not required for them to conduct their dissertation research.
 7 Q. What is required is that there be funding for the
 8 research, correct? Among other things.
 9 A. Yeah.
 10 Q. Does -- does the university benefit from the publication
 11 of articles in scientific journals reporting on research
 12 conducted in its laboratories?
 13 MR. LUPION: Objection. It's not a university.
 14 BY MR. MIEKLEJOHN:
 15 Q. Okay. Does Icahn School of Medicine at Mount Sinai
 16 benefit from the publication of articles and scientific
 17 journals reporting on research conducted in its laboratories?
 18 A. It's part of the scientific process. So everybody
 19 benefits.
 20 Q. And when a PI applies for additional grants --
 21 A. Mm-hmm.
 22 Q. -- funding
 23 A. Yes.
 24 Q. Is one of the things that the NIH or the other funding
 25 agencies look toward is having successfully published research

Page 229

1 results in the past?
 2 A. Yes. They do. But that is not necessarily by PhD
 3 students as we outlined on Friday.
 4 Q. Right.
 5 A. Lab in general. Yeah.
 6 Q. And which may include publications that -- in which PhD
 7 students participated, correct?
 8 A. It may.
 9 Q. And those grants do bring in money to -- IN -- to -- to
 10 the Icahn --
 11 MR. LUPION: Graduate School.
 12 BY MR. MIEKLEJOHN:
 13 Q. -- School of Medicine at Mount Sinai; is that correct?
 14 A. Yes. That is correct. But that money is to further the
 15 research enterprise.
 16 Q. And that money includes funds for facilities and overhead?
 17 A. I believe so.
 18 Q. And --
 19 A. It would depend upon the agency.
 20 Q. And you say that the funding is to further the research
 21 enterprise. What do you mean by the research enterprise?
 22 A. The -- the more -- the -- the role we play in a global
 23 effort to increase our knowledge of human biology.
 24 Q. And that is at least a part of the mission of IMSSM --
 25 ISMMS?

Page 230

1 A. Yes. It is for any biomedical research institution. Yes.
 2 Q. You testified about the various personnel that conduct
 3 research in laboratories. How would you compare the skills and
 4 abilities of postdocs with the skills and abilities of doctoral
 5 students?
 6 A. Well, the postdoctoral fellows have already undergone
 7 their PhD training elsewhere, and as a result, they're more
 8 advanced, more experienced, and have a skillset that is more
 9 developed.
 10 Q. And you also testified that there are -- well, if I -- I
 11 believe you testified that there are technicians and research
 12 assistants in at least some of the labs. Are those two
 13 different categories, or is that all the same category?
 14 A. It's general, it's different names given to the same type
 15 of position.
 16 Q. And what does -- what does a research assistant or a
 17 technician do in the lab?
 18 A. Well, they -- they are hired to carry out specific tasks.
 19 But there's the mentoring, the development, the training, and
 20 the leading towards a individual project. Doctoral thesis is
 21 not part of it.
 22 Q. They are employees, but not also students, correct?
 23 A. Correct.
 24 Q. Are there -- is there overlap in the duties performed by
 25 these technicians and research assistants with the duties

Page 231

1 performed by doctoral students?
 2 A. No. It can't be redone. But --
 3 Q. How would --
 4 A. -- assist people. But --
 5 Q. They may --
 6 A. They may assist people in the lab through various
 7 mechanisms, but there's a redundancy of effort.
 8 Q. How would you compare the skills and abilities of a
 9 research assistant with the skills and abilities of a doctoral
 10 student?
 11 A. More the -- the research assistant would be more
 12 specialized and the skills would be more technical, not
 13 academic, not -- not on a path to -- of academic development.
 14 Q. I'm going to show you Employer Exhibit 6. This is the
 15 email that is sent to students upon enrollment; is that right?
 16 A. Yes.
 17 Q. And when it is sent to students upon enrollment, it
 18 includes the attachments, correct?
 19 A. Yes.
 20 Q. And in fact, one of the purposes of sending this email, if
 21 not the primary purpose, is to provide the students with those
 22 attachments; is that correct?
 23 MR. LUPION: Objection, the documents -- the document
 24 speaks for itself. What the primary purpose or principle
 25 purpose is counsel's own characterization of the document.

Page 232

1 MR. MEIKLEJOHN: Well, if the -- if the witness
2 disagrees, he can say so.
3 HEARING OFFICER KUMA: Overruled. I'll let the
4 witness answer.
5 BY MR. MEIKLEJOHN:
6 A. The -- I -- I -- I do not write the email. It is not
7 copied to me. Stephanie Autenrieth reports to Dean Charney's
8 office, not to the graduate school. So this is a communication
9 between enrollment services and the incoming student.
10 Q. Do you know whether the attachments listed there are still
11 in existence?
12 A. I do not know for certain, but I think they -- their --
13 their title is what they are.
14 Q. So to your knowledge, when a student enrolls, they're
15 given information on how to log into Sinai Cloud; is that
16 right?
17 A. Yes, I believe so.
18 Q. And Sinai Cloud is the payroll department or human
19 resources department? What is Sinai Cloud?
20 A. Again, I don't see these emails that go out to the
21 students. This is between enrollment services and the incoming
22 candidates. But to the best of my knowledge, it's -- it's a
23 human resources management system.
24 MR. MEIKLEJOHN: I would renew my objection and
25 request reconsideration of the decision to admit Employer

Page 233

1 Exhibit 6. Number 1, it is incomplete as it's clear from the
2 document. These are materials that are provided to students
3 upon enrollment that they -- you know, the -- the -- the cover
4 email standing by itself is not a complete statement of what is
5 being provided to the students.
6 And the complete statement of what's provided to the
7 students is necessary for this document to be complete.
8 Second, the witness has testified that he really doesn't know
9 anything about the sending of the document or what's included.
10 He has nothing to do with the process. So I don't believe
11 there has been adequate authentication -- authentication of the
12 document.
13 MR. LUPION: This objection has now been ruled on
14 three times.
15 HEARING OFFICER KUMA: I note for the record that
16 Petitioner's renewal has been noted and that the Employer's
17 Exhibit 6 already has been ruled. Again, the reader of the
18 record will apply the appropriate weight to Employer's Exhibit
19 6 based upon the reasoning for the Employer's entry into
20 evidence. Okay. Will the Petitioner continue with the cross?
21 Q. I'm showing you Page 127 of Employer Exhibit 2, the
22 student handbook.
23 (Employer's Exhibit Number 2 identified.)
24 A. Mm-hmm.
25 MR. MEIKLEJOHN: Does Counsel want a minute or are

Page 234

1 you good?
2 MR. LUPION: I'm sorry?
3 MR. MEIKLEJOHN: Are you ready? Can --
4 MR. LUPION: Yeah. You want to find -- okay.
5 BY MR. MEIKLEJOHN:
6 Q. Does the -- does the ISMMS policy on business conflicts of
7 interest apply to graduate students?
8 A. I -- I -- to be honest, I don't know.
9 Q. Okay. You just know that it's in the handbook.
10 A. I know it applies to me.
11 MR. MEIKLEJOHN: Okay. No further questions.
12 HEARING OFFICER KUMA: Petitioner has no -- no
13 further questions.
14 MR. LUPION: Avi, could we have a -- a breakout room?
15 HEARING OFFICER KUMA: Yes. Off the record.
16 (Brief Recess at 10:00 a.m./Reconvened at 10:08 a.m.)
17 HEARING OFFICER KUMA: All right. Will the Employer
18 have any questions?
19 MR. LUPION: Yes. Some very brief redirect, please.
20 HEARING OFFICER KUMA: Okay.
21 REDIRECT EXAMINATION
22 BY MR. LUPION:
23 Q. Dr. O'Connell, counsel for Petitioner asked you about the
24 reasons why PI would need to demonstrate funding prior to
25 taking on a student. And one of the reasons you identified was

Page 235

1 the -- the cost of doing research. Can you -- can you
2 elaborate on that?
3 A. Well, just that they have the resources that the
4 experiments can -- can be performed to lead towards the thesis.
5 Q. And meaning because those experiments cost money to
6 conduct?
7 A. It depends upon the nature of the research, but if it's --
8 particularly when it's wet lab research, you need to buy
9 chemicals, mice, cell lines, media, so on.
10 Q. Okay. And Counsel also ask you that part of the reason
11 why a PI needed to demonstrate funding was to be able to pay
12 the PhD student what he termed compensation. Do you recall
13 that?
14 A. Yes.
15 Q. And is that -- is that the -- the stipend to the PhD
16 student?
17 A. Yes. And that's -- it -- it is, and it's part of the
18 overall package.
19 Q. Okay. And is that stipend condition on the performance of
20 any services -- withdrawn. Is that stipend in exchange for the
21 performance of services to the PI?
22 A. No.
23 Q. And Doctor, you were asked a few minutes ago about
24 students who receive external funding which -- which the
25 graduate school calls a fellowship.

Page 236

1 A. Yes.
 2 Q. Do you recall that?
 3 A. Yes.
 4 Q. And that those students are eligible for a \$2,000 bonus
 5 from the school and the PI. Do you recall that?
 6 A. Yes.
 7 Q. Do -- are students who receive a fellowship and -- and the
 8 bonus, does the graduate school require those students to do
 9 anything outside of their academic curriculum?
 10 A. No.
 11 MR. LUPION: I have no further questions.
 12 MR. MEIKLEJOHN: I have a --
 13 HEARING OFFICER KUMA: Does the Petitioner have any
 14 follow up?
 15 MR. MEIKLEJOHN: Yes, please.
 16 HEARING OFFICER KUMA: Okay.
 17 **RECROSS EXAMINATION**
 18 **BY MR. MEIKLEJOHN:**
 19 Q. After the second year, what percentage of a graduate
 20 student's academic work consists of conducting research?
 21 A. After they passed the qualifying exam, almost all their
 22 time is devoted towards the research leading to their doctoral
 23 thesis. In -- in the grander scheme of things, it's a 100%. I
 24 was referring to, as we discussed on Friday, works in progress
 25 in general clubs and so on, which is more about their

Page 237

1 intellectual development that in turn leads towards their
 2 thesis.
 3 Q. I'll show you Employer's Exhibit 2, Page 21, and ask you
 4 to read into the record the elements of the funding package
 5 provided to graduate students.
 6 A. You mean the highlighted texts, sir?
 7 Q. Yes. I believe that's -- that lists the elements. Yes.
 8 A. Comprehensive funding package, which includes direct
 9 compensation, tuition remission. The direct compensation's
 10 also being referred to in this discussion as stipend and a
 11 student health insurance plan. Note that the direct
 12 compensation or stipend -- oh, there, it says, is informally
 13 referred to as a stipend.
 14 MR. MEIKLEJOHN: So it's not just me who refers to it
 15 as direct compensation, correct? Strike that. No further
 16 questions.
 17 HEARING OFFICER KUMA: Okay. Does the Employer have
 18 any questions?
 19 MR. LUPION: No further questions.
 20 HEARING OFFICER KUMA: Okay. Dr. O'Connell, I just
 21 have one question for you. You testified on the Employer's
 22 redirect to a wet lab research. What exactly is a wet lab
 23 research?
 24 THE WITNESS: It's -- it -- wet lab and dry lab are
 25 expressions used to separate work that is done in a

Page 238

1 computational space being dry, and in an experimental situation
 2 where we manipulate cells, tissues, et cetera. Both of these
 3 cost money. But it -- it just refers to the approach that the
 4 research is governed by.
 5 HEARING OFFICER KUMA: Okay. Thank you for the
 6 explanation. So you are released for the remainder of the day,
 7 but you're not released for the rest of the hearing.
 8 THE WITNESS: Okay.
 9 HEARING OFFICER KUMA: All right. Regional Director
 10 may have some follow up questions. In addition, there has been
 11 some objections to your -- to your dismissal from the hearing
 12 based off of some other factors that needs to be discussed
 13 later on. So I just ask that you stay present as this -- is
 14 virtual, so in case the Employer needs to call you back due to
 15 some follow ups, okay? So that you're accessible.
 16 THE WITNESS: Okay.
 17 HEARING OFFICER KUMA: We'll provide you, if you are
 18 -- need to be called back, we'll provide with a date and time
 19 to appear, okay? Make sure that you --
 20 THE WITNESS: I'll (indiscernible).
 21 HEARING OFFICER KUMA: All right. Right. So then
 22 you're released for the day.
 23 MR. LUPION: Thank you, Doctor.
 24 THE WITNESS: Thank you, everybody.
 25 HEARING OFFICER KUMA: All right. Okay. The

Page 239

1 Employer need time to call its next witness, or are you ready
 2 to proceed?
 3 MR. LUPION: We're ready to proceed. Can we just do
 4 so at 10:30?
 5 HEARING OFFICER KUMA: Okay.
 6 MR. LUPION: Just a brief 10 minute break?
 7 HEARING OFFICER KUMA: Yes. Off the record.
 8 (Brief Recess at 10:18 a.m./Reconvened at 10:37 a.m.)
 9 HEARING OFFICER KUMA: All right. All right. Dr.
 10 Hanss?
 11 THE WITNESS: Yes.
 12 HEARING OFFICER KUMA: All right. Can you raise your
 13 right hand?
 14 Whereupon,
 15 **BASIL HANSS,**
 16 was called as a witness having been previously duly sworn, was
 17 examined and testified as follows:
 18 HEARING OFFICER KUMA: All right. Put your hand
 19 down. Can you state your full name for the record?
 20 THE WITNESS: Yes. My first name is Basil, spelled
 21 B-A-S-I-L, like the herb. And my last name is Hanss, spelled
 22 H-A-N, and then two S's like Sam.
 23 HEARING OFFICER KUMA: Lawyer?
 24 MR. LUPION: Did you administer the oath?
 25 HEARING OFFICER KUMA: Yes.

Page 240

1 MR. LUPION: Yes? Okay. Thank you.
 2 DIRECT EXAMINATION
 3 BY MR. LUPION:
 4 Q. Good morning, Dr. Hanss. Are you currently employed?
 5 A. I am.
 6 Q. And by whom?
 7 A. By the Icahn School of Medicine at Mount Sinai.
 8 Q. Okay. Can you describe for us your educational
 9 background, please?
 10 A. Yes. I have a Bachelor's of Science in Biology from Lewis
 11 and Clark College, which is in Portland, Oregon. I then went
 12 to Tulane University in New Orleans, where I received a PhD in
 13 Physiology, specifically Renal Physiology. Renal physiology is
 14 the study of kidneys. And -- and then I did a little over a
 15 year as a postdoctoral fellow at the NIH in Bethesda, Maryland.
 16 Q. And what is your current role at the Icahn School of
 17 Medicine?
 18 A. So my titles at -- at -- at Sinai are -- I'm an associate
 19 professor in the Department of Medicine, Division of
 20 Nephrology. I'm Senior Associate Dean for Postdoctoral and
 21 Student Affairs in the graduate school. And I am Associate
 22 Dean for Graduate School Wellbeing in the Office of Wellbeing
 23 and Resilience, which is an office within Dean Charney's
 24 office.
 25 Q. Prior to Mount Sinai, did you have employment?

Page 241

1 A. Prior to Mount Sinai I did not have scientific employment.
 2 I had a variety of jobs as I went through my schooling.
 3 Q. Okay. Doctor, can you briefly describe your duties and
 4 responsibilities as Senior Associate Dean of Student and
 5 Postdoctoral Affairs?
 6 A. Yeah. So the -- the role of -- of Student and Postdoc
 7 Affairs is to really provide -- provide the trainees, students,
 8 and postdocs with the support they need to -- to succeed in
 9 their training at Mount Sinai. So we generally focus on things
 10 outside of the classroom and the laboratory. So we provide
 11 support around professional development in areas outside of
 12 those two areas.
 13 And we also provide community building to bring the
 14 students together and -- and help ensure that there's a good,
 15 robust educational environment for our students and postdocs.
 16 And then we also are a resource or can point students towards
 17 resources that they need in -- in a variety of different
 18 support areas outside of the classroom and outside of the lab.
 19 Q. And -- and how long have you held that title? The Senior
 20 Associate Dean of Student and Postdoctoral Affairs?
 21 A. So starting, I believe it was in 2016, I was Senior
 22 Associate Dean for Student Affairs. And then about a year and
 23 a half, maybe two years ago, postdoctoral fellows were added to
 24 -- to my portfolio. So formally since 2016 as -- as --
 25 overseeing student affairs and postdoc affairs was added

Page 242

1 recently.
 2 Q. Okay. Can you briefly describe your duties and
 3 responsibilities as Associate Dean of Wellness?
 4 A. Yeah. So -- so the Office of Wellbeing and Resilience is
 5 a -- is an office that focuses on identifying barriers to the
 6 wellbeing of -- of the entire Sinai community and then creating
 7 policies, structures, resources to help overcome what those
 8 barriers are. And within the Office of Wellbeing and
 9 Resilience, there are -- are basically four different
 10 divisions.
 11 There's a division that focuses on medical students.
 12 There's a division that focuses on faculty. There's a division
 13 that focuses on -- on the -- the area called Graduate Med --
 14 Medical Education, which comprises clinical fellows and
 15 clinical residents. And then the final division is the
 16 Graduate Education Division, so postdoctoral fellows and
 17 graduate students.
 18 Q. I'm going to ask you some questions about the role of
 19 student affairs --
 20 A. Okay.
 21 Q. In -- in the graduate school. And I ask you to -- if you
 22 can explain the -- the role generally of student affairs in --
 23 in the grad school.
 24 A. Yeah. So I -- so as I just -- as I just mentioned,
 25 student affairs generally speaking, is helping support the

Page 243

1 students in all elements of their education and their time at
 2 Mount Sinai outside of the direct training in the lab, or the
 3 direct training in the classroom.
 4 And so that entails a number of different areas that
 5 I mentioned briefly before. So there's a -- a whole idea that
 6 some call like soft skills development. I don't really like
 7 that term, but it's -- it's developing skills around the
 8 enterprise of science. So project management, forming teams,
 9 leading teams, managing -- managing teams, that sort of thing.
 10 So there's a whole area around that kind of soft skills
 11 development that -- that we participate in.
 12 We -- student affairs also provide support around
 13 career planning. We have an Office of Career Services and
 14 Strategies. So that helps the -- the students develop a long-
 15 term career plan and executing that plan. We provide a -- a
 16 lot of material around community building.
 17 So we bring students together as a totality, but also
 18 in subgroups of -- of what we often call affinity groups to
 19 bring students together to form communities and to help support
 20 them in their educational endeavors. And then finally as I
 21 mentioned, the resource -- resources that we provide to
 22 students either directly through the office or through
 23 partnerships with other entities.
 24 So those are things like a partnership with the
 25 Office of Disability Services and partnership with student

Page 244

1 health -- and student mental health programs. A variety of
 2 organizations that play -- provide wellness training or
 3 wellness support, that sort of thing. So that -- that's -- I
 4 think that's a -- a pretty comprehensive picture of what we do.
 5 Q. Doctor, what about counseling with regard to student
 6 academic progress? Is that something that also falls under the
 7 umbrella of student affairs?
 8 A. So, I would -- I would say that we provide counseling when
 9 -- when students are generally facing problems or having
 10 barriers to their progress academically, the day to day
 11 counseling comes from other entities. For instance, the -- the
 12 Laboratory PI, the head of the lab, the student is working in
 13 for their -- their dissertation research. So where their --
 14 their research home and base is.
 15 That's an important part of mentorship. One of the
 16 most important structures from my perspective, is their
 17 dissertation committee, their thesis committee. We use a -- a
 18 couple of different terms to refer to that group. That's the -
 19 - the group that oversees their scientific development. They
 20 meet regularly with the students.
 21 They're required to meet at least twice a year. Some
 22 students meet more than that with their committee. That group
 23 provides a tremendous amount of oversight of the scientific --
 24 the scientific development of the student. If there are -- the
 25 students will sometimes come to us in student affairs directly,

Page 245

1 or the -- the -- the dissertation advisor might come to us and
 2 seek counsel or the advisory committee might refer to us and --
 3 and come to us. So we will interact at that point in time.
 4 Q. Okay. Doctor, in your capacity as a Senior Associate Dean
 5 of Student Affairs are -- are you familiar with the curriculum
 6 for PhD students in Biomedical Science and Neuroscience?
 7 A. I -- I am. I have a -- I have a broad overview of the
 8 curriculum for those trainees, yes.
 9 Q. Okay. And as -- are students -- as part of that
 10 curriculum, are students required to engage in a lab rotation
 11 in their first year?
 12 A. Yes, they are.
 13 Q. Okay. And are you familiar with the lab rotation
 14 requirements?
 15 A. I am.
 16 Q. Okay. Can you briefly describe -- describe the lab
 17 rotation process for us?
 18 A. Yeah. So students -- students will come into the PhD
 19 program with some idea of the type of research they would like
 20 to be involved in as part of their -- their training.
 21 And so they will identify faculty members that have
 22 similar interests and they will spend some period of time in
 23 that laboratory getting a sense of the research that's going
 24 on, the scope of the research, the mentoring style of the PI,
 25 and also the environment -- the learning environment in the

Page 246

1 lab.
 2 Q. Okay. What -- what type of tasks would a PhD student be
 3 expected to perform during a lab rotation?
 4 A. So -- I think that the overall expectation from the
 5 graduate school is that they spend enough time in the
 6 laboratory to just get a good solid sense of all of those
 7 elements to see if the -- the -- the lab is a good fit for them
 8 in -- during their training. In terms of expectations in --
 9 beyond that, I think that we would like them to really immerse
 10 themselves in the culture of the lab, to just get a really good
 11 view of what's going on and what types of experiments are --
 12 are available and -- and possible in the laboratory.
 13 Beyond those expectations, there really aren't any
 14 expectations. They may be involved in a small project when
 15 they're in the lab, but not necessarily anything that can, you
 16 know, foster and develop their -- their understanding of how
 17 the lab operates.
 18 Q. Is there -- is there any -- is there any expectation that
 19 students generate data during the lab rotation?
 20 A. There is not.
 21 Q. Is there any expectation that students would be performing
 22 research in furtherance of a PI's grant during the lab
 23 rotation?
 24 A. No.
 25 Q. Is a student's funding conditioned on any activities

Page 247

1 performed during their lab rotation?
 2 A. There is no expectation.
 3 Q. Okay. Does a student get to choose which lab to rotate
 4 through?
 5 A. Yes, they do.
 6 Q. And does a student get to choose ultimate, after the
 7 rotation, of what lab to affiliate with?
 8 A. Yeah. Yes. Absolutely. The -- the decision is -- is
 9 primarily the decision of the student. One caveat I would add
 10 to that is that the laboratory has to be -- the -- the -- the
 11 PI has to be a member of the graduate faculty.
 12 So they have to be -- have an appointment to the
 13 graduate faculty, and they have to have the financial resources
 14 to support the student's training during the time that they're
 15 in the lab. But if those two criteria are met, it's completely
 16 up to the student to choose the laboratory within which they'll
 17 do their dissertation work.
 18 Q. Doctor, why -- can you elaborate on that? Why does a PI
 19 need to have sufficient financial resources to support the
 20 student's training?
 21 A. Yeah. So -- so research training, first and foremost, is
 22 expensive. The experiments that are performed are expensive
 23 oftentimes. The student needs reagents, the student needs
 24 supplies, the student needs the resources, perhaps experimental
 25 technique resources, so our shared core facility, for example.

Page 248

1 And all of those things have associated costs.
 2 And then also the PI is -- is responsible for
 3 covering the student's stipend while they're in training and
 4 also the student's health insurance. And if their funding
 5 source allows it, some tuition cost as well.
 6 Q. Doctor, if a PI makes an offer for a first year PhD
 7 student to join their lab, can the student decline that offer?
 8 A. Yes.
 9 Q. Why is that?
 10 A. Because we -- we rely on the student making the final
 11 determination if the laboratory is the right and best fit for
 12 them. So the student has complete control, again, with the two
 13 caveats I mentioned, but the student has control over whether
 14 or not they'll join a lab.
 15 Q. Doctor, do PhD students receive a grade for the time spent
 16 in a lab rotation?
 17 A. I believe they do receive a pass-fail grade for their time
 18 in a rotation.
 19 Q. If we could pull up Mount Sinai Exhibit 7, please.
 20 Doctor, do you recognize this -- this document?
 21 (Employer's Exhibit Number 7 identified.)
 22 A. Yeah. It looks to be the lab rotation evaluation form,
 23 yes.
 24 Q. Okay. Have you seen this document before?
 25 A. I -- I have.

Page 249

1 Q. And is this a document regular -- regularly kept in the
 2 course of the graduate school's affairs?
 3 A. Yes.
 4 MR. LUPION: I'd offer Exhibit 7 into evidence.
 5 HEARING OFFICER KUMA: Does the Petitioner object?
 6 MR. MEIKLEJOHN: No objection.
 7 HEARING OFFICER KUMA: Hearing no objections, the --
 8 Employer's Exhibit 7 is entered into evidence.
 9 (Employer's Exhibit Number 7 admitted.)
 10 BY MR. LUPION:
 11 Q. Doctor, who completes this form
 12 A. The -- the part of the form is completed by the student
 13 who's -- who's doing the rotation, and I believe there's a
 14 section of this form that's completed by the head of the
 15 laboratory, the PI
 16 Q. Okay. And if we look to the second page of the document,
 17 there are a number of different criteria here. Can you
 18 describe the different evaluation categories?
 19 A. Yeah. So -- so the different categories here, I -- I
 20 think that -- the best way -- let me just take a quick look at
 21 them. The best way to -- for me to explain what these
 22 different categories are, is -- is we think that these are some
 23 of the most fundamental skills needed by a developing research
 24 scientist.
 25 And so we want to seek some information about the

Page 250

1 student's performance in each of those areas. So effort in the
 2 laboratory is -- is -- I think these are pretty self-
 3 explanatory. Effort in the laboratory is -- is, you know, how
 4 -- how hard are they working? How dedicated are they to the --
 5 to the -- the research that they're -- they might be performing
 6 during the -- the rotation.
 7 Level of -- of laboratory skills is an assessment of
 8 their proficiency in the lab with whatever techniques they're
 9 currently using. So it's -- it's a way to provide some insight
 10 to the -- the faculty member, to the graduate school about the
 11 student's abilities. It's also a way to provide formative
 12 feedback to the student themselves and -- in a way that can
 13 help them perhaps, develop their scientific --, their
 14 scientific acumen.
 15 Q. Doctor, is -- is this form used for both PhD students and
 16 the MD-PhD students when they are enrolled in the PhD portion
 17 of the program?
 18 A. Yes. I -- I -- it -- it is. And as you can see in this -
 19 - this area at the top of the screen, there's a checkbox for
 20 the student to indicate whether they're a PhD or an MD-PhD
 21 student.
 22 Q. Okay. And, Doctor, I'm not sure if you --
 23 MR. LUPION: I'm sorry. Where's -- where's that? I
 24 just had -- oh, I see. Okay. Got it. I'm -- I'm -- I'm
 25 looking. Thank you.

Page 251

1 BY MR. LUPION:
 2 Q. Doctor, I'm not sure if you mentioned it already, but so
 3 the record is clear. Do you know, would students receive --
 4 what -- what type of grade would students receive?
 5 A. I -- I believe they're doing a pass-fail. And actually,
 6 now that you've scrolled down to the -- to the page, the fourth
 7 page of the, of the report, it indicates a pass-fail grading
 8 standard.
 9 Q. Okay. Doctor, do postdocs get to rotate through labs
 10 before joining a lab?
 11 A. They do not.
 12 Q. Okay. They apply to a specific lab?
 13 A. Yes. So post -- postdoctoral fellows apply to an open --
 14 open position in a specific lab. They -- they apply to that
 15 lab and are considered for hiring solely by that laboratory.
 16 Q. And would the same be true of a research assistant?
 17 A. A research assistant, yeah. A technician would -- would
 18 apply directly to a lab and be hired by the lab.
 19 Q. Doctor, do -- once -- once the students join the lab, do
 20 you know whether they continue to receive a grade from the --
 21 in their second year and beyond for the time they spent in the
 22 lab?
 23 A. Yeah. There -- there are -- there are continuing
 24 evaluations of the student once they've joined the lab. They
 25 do in fact enroll in a -- a -- a course for their -- their

Page 252

1 dissertation research, their -- their research component of
 2 their training. And they do, I believe, receive a pass-fail
 3 grade for that -- that course.
 4 Q. Right. Doctor, you -- early in your testimony, you
 5 alluded to academic advising resources that are available to
 6 students. Are you generally familiar with those resources?
 7 A. I am.
 8 Q. Okay. And can you describe the different academic
 9 advising resources provided to PhD students?
 10 A. Yes. So are you asking specifically about curriculum
 11 coursework, or are you talking about their developments in the
 12 laboratory?
 13 Q. Both -- let me -- let me start with this.
 14 A. Okay.
 15 Q. What is an -- what is an academic advisor?
 16 A. So an academic advisor is an advisor that every PhD
 17 student gets when they first come to the program. I believe an
 18 academic advisor is -- is someone that's assigned to them from
 19 the very beginning. And the role of that academic advisor is
 20 just to help them work through their transition into the
 21 training program.
 22 So helping them consider coursework to take, advising
 23 them around potential labs to rotate in. So the advisor would
 24 meet with the students and -- and try to help them formulate a
 25 list of folks to -- to do their research with. So that's --

Page 253

1 that's the role of the academic advisor. It's a -- it's a --
 2 it's important during the transition to the program.
 3 Once the student selects a lab, they would then at
 4 the same time join a multidisciplinary training area, an MTA
 5 for short. And each MTA has at least one faculty director.
 6 And so the -- the role of academic advisor would then be taken
 7 over by their MTA director once they joined a lab and an MTA.
 8 Q. Okay. And are you familiar with the term Thesis Advisory
 9 Committee?
 10 A. Yes, I am.
 11 Q. Can you describe what the fee -- what a Thesis Advisory
 12 Committee is?
 13 A. Yeah. So the --
 14 MR. MEIKLEJOHN: I'm going to -- I'm going to object
 15 at this point on -- on grounds of relevance and repetition. I
 16 promise not to keep repeating this point, but I'm going to make
 17 it once. This -- I mean, we -- first, we have gone over the
 18 composition of these committees more than once already. And in
 19 considerable detail with the previous witness.
 20 Second, this entire line of questioning, and in fact,
 21 the Employer's entire case so far, seems designed to establish
 22 that these individuals are students. We do not dispute that
 23 they are students. The question is, are they also employees?
 24 And we would submit that the -- all of evidence that's relevant
 25 to that concerns such matters as their enrollment in the human

Page 254

1 resources system, the -- the payments to them, and the manner
 2 in which the payments are made.
 3 And the Employer seems to be repeatedly covering
 4 issues that are simply irrelevant to the question of whether
 5 these students are also employees.
 6 MR. LUPION: Avi, can I respond briefly to that legal
 7 argument made while I'm examining my witness, which is entirely
 8 inappropriate. The facts here establish that they are students
 9 and nothing more than students, because as the record that we
 10 are building has established and will continue to establish,
 11 the students are not required to do anything beyond their
 12 academic curriculum.
 13 And Tom, if you're willing to stipulate to that,
 14 maybe you don't need to have a hearing at all. There is no
 15 service requirement. These students are not required to
 16 perform specific tasks in a lab. They are not hired to perform
 17 specific tasks in a lab. They are not hired to teach. In that
 18 fact, there is no service requirement at all.
 19 The only condition on their receipt of stipend and
 20 other benefits is the maintenance of satisfactory academic
 21 progress. How students are characterized in the Mount Sinai
 22 Health Systems is irrelevant to that inquiry. And if you want
 23 to build your case on the use of specific words, that is the
 24 quintessential elevation of form over substance.
 25 We can stipulate to the record and as I think you've

Page 255

1 said, there are no or minimal facts in dispute. You can
 2 stipulate to our -- our offer of proof, and we can avoid the
 3 need for any further evidentiary record, if that's what I'm
 4 hearing. So that is my response to your objection.
 5 HEARING OFFICER KUMA: So I just want to make clear
 6 I'm understanding correctly. Is the Petitioner asking to
 7 stipulate to the Employer's offer of proof or are you just
 8 willing to stipulate that the cumulative -- that the evidence
 9 provided so far has been cumulative?
 10 MR. LUPION: Avi, who's that question to?
 11 HEARING OFFICER KUMA: Petitioner.
 12 MR. MEIKLEJOHN: Oh, I mean, our contention is that
 13 the evidence is cumulative.
 14 HEARING OFFICER KUMA: Okay.
 15 MR. MEIKLEJOHN: We -- I mean, we are not --, I mean,
 16 I don't want to get into an argument of how -- how we define
 17 the -- the phrase service requirements. But leaving that
 18 aside, I may be able to stipulate to a major portion of the
 19 Employer's offer of proof if the Employer is prepared to
 20 stipulate to the admission of the Petitioner's exhibits that
 21 have been marked and provided so far.
 22 HEARING OFFICER KUMA: Okay. So then that said,
 23 let's go off the record. Off the record. Let's see. Adrian,
 24 are we off the record?
 25 (Brief Recess at 11:03 a.m./Reconvened at 11:07 a.m.)

Page 256

1 HEARING OFFICER KUMA: Okay. The -- the Petitioner's
 2 objection is overruled. It is understood that the Employer is
 3 trying to make his record. The Petitioner cannot come to a
 4 detailed stipulation concerning the Employer's offer -- offer
 5 of proof and gives a basic -- excuse me. And gives a vague
 6 stipulation at -- at which time, right now, the Petitioner
 7 later on can come with a more detailed stipulation concerning
 8 the Employer's offer of proof.
 9 We can revisit a stipulation. Until then, the
 10 Employer will -- will proceed with going on the record and
 11 presenting as evidence and continue with the questioning of Mr.
 12 Hanss.
 13 MR. LUPION: Can I ask the court reporter to read
 14 back the last question, please?
 15 HEARING OFFICER KUMA: Okay.
 16 MR. LUPION: You know what? That -- I will withdraw
 17 that question and ask what I believed to --
 18 HEARING OFFICER KUMA: You -- you were on the Thesis
 19 Advisory Committee?
 20 MR. LUPION: Yes.
 21 BY MR. LUPION:
 22 Q. What -- what is -- Dr. Hanss, what is a Thesis Advisory
 23 Committee?
 24 A. So, the -- the Thesis Advisory Committee is the group of
 25 faculty who are responsible for advising the student and

Page 257

1 monitoring the students as they progress through their research
 2 training.
 3 Q. I'm going to pull up Mount Sinai Exhibit 8. Doctor, do
 4 you recognize this document?
 5 (Employer's Exhibit Number 8 identified.)
 6 A. I do.
 7 Q. And can you describe it for us, please?
 8 A. This -- is a -- a form that the student completes when he
 9 or she or they declare a dissertation advisor and
 10 simultaneously declare an MTA that they will join.
 11 Q. Is this a document regularly kept in the course of the
 12 graduate students -- the graduate school's affairs?
 13 A. It is.
 14 Q. I offer Exhibit 8 into evidence.
 15 MR. MEIKLEJOHN: No objection.
 16 HEARING OFFICER KUMA: Hearing no objection, the
 17 Employer's Exhibit 8 is entered into evidence.
 18 (Employer's Exhibit Number 8 admitted.)
 19 BY MR. LUPION:
 20 Q. Doctor, what -- what's a dissertation advisor?
 21 A. So a dissertation advisor we also call a PI. It's the
 22 individual that the student will perform their dissertation
 23 research with.
 24 Q. And the students select their dissertation advisor.
 25 A. They do.

Page 258

1 Q. And does the dissertation advisor or PI need to agree to
 2 serve as such?
 3 A. Yes, they do.
 4 Q. Okay. Can you -- can you describe for us generally the
 5 role of a student's dissertation advisor as it relates to --
 6 specifically to PhD students?
 7 A. So, the dissertation advisor is someone who will guide the
 8 student through their -- their dissertation research. It's a -
 9 - a mentor and a guide for their time in the laboratory, so
 10 day-to-day oversight of their scientific, intellectual and
 11 technological advancement in the program.
 12 Q. Okay. Does the dissertation advisor assign a PhD student
 13 specific tasks to perform in the lab?
 14 A. The -- and by specific task, can you expand on that,
 15 please?
 16 Q. Sure. Let -- let me -- let me ask the question a
 17 different way. What are the expectations of a PhD student
 18 while performing research in -- in a lab?
 19 A. Yeah. The expectations of the student are that they will
 20 conduct research towards their dissertation. So the students
 21 provide, at the end of their second year, a thesis proposal
 22 that outlines the experiments that they plan to do for their --
 23 for their dissertation work.
 24 And if that's approved, then they're -- the
 25 expectations that they will -- will conduct the experiments

Page 259

1 that are described in that thesis proposal. So that's the
 2 primary expectation, that they will do that work. They will
 3 also, at times, you know, they're joining a laboratory
 4 community, so there might be some community tasks that they're
 5 asked to do.
 6 But those are really not major, those are general
 7 kind of good citizenship roles. But their primary expectation
 8 is to complete their thesis research.
 9 Q. Doctor, what alignment, if any, exists between a student's
 10 research thesis proposal and the general subject matter of the
 11 lab?
 12 A. So in -- in general terms, there is alignment between the
 13 general research area that's going on in the laboratory and
 14 what is contained within the student's thesis proposal. You
 15 would -- you need -- the student needs that -- that expertise
 16 and guidance and mentorship.
 17 And so they look for a mentor that's doing work in
 18 the area that they're interested in working in. So there is
 19 some alignment with the general area of research that the
 20 student -- that the laboratory is performing and the -- and the
 21 work that's in the thesis proposal.
 22 Q. Doctor, what -- what percentage of the student's research
 23 should be in furtherance of his or her dissertation topic?
 24 A. All -- all -- all -- all of it should be, generally
 25 speaking.

Page 260

1 Q. Does the graduate school have -- what -- let me ask -- let
 2 me ask you this, Doctor. What would happen if the graduate
 3 school became aware that a PI was asking a student to perform
 4 research unrelated to his or her dissertation?
 5 MR. MEIKLEJOHN: Objection, hypothetical question.
 6 Absent some evidence that this has happened, I don't think this
 7 is relevant.
 8 BY MR. LUPION:
 9 Q. Doctor, has that happened in --
 10 A. Yes.
 11 Q. Okay.
 12 A. There -- there have been instances when a student will
 13 come forward and say they feel they're -- they're performing
 14 work that's not relevant to their thesis.
 15 Q. Okay. And how often does that happen?
 16 A. I -- not -- not -- not -- not a lot. I think we probably
 17 come aware of that situation. It comes to -- to the attention
 18 of student affairs maybe once every couple of years.
 19 Q. Okay. And -- and what, if anything, does the school do in
 20 response?
 21 A. So the first -- the first line of defense against that is
 22 with the -- the Thesis Advisory Committee. So if this
 23 information comes to the attention of the advisory committee,
 24 the chair of the committee or someone else on the committee
 25 will oftentimes have a conversation with the PI and -- and ask

Page 261

1 them to -- to redirect the focus of the student back towards
 2 the work that they're supposed to do.
 3 If that -- if that is not successful, then it would
 4 come to the attention of others. It might come to the
 5 attention of the program leadership itself, the MTA, or the
 6 program director. It might come to the attention of the -- the
 7 Office of Student Affairs. If it were a persistent problem and
 8 -- and was not -- there was not seen -- we did not see a
 9 resolution, then it would -- it would almost certainly go to
 10 Dean Filizola.
 11 And -- and generally speaking, when she makes a
 12 request, the PIs will -- will -- will adhere to that request.
 13 So there's a -- there's a -- I would say that there's a multi -
 14 - multi-tiered approach to addressing this depending on the
 15 needs of the student.
 16 Q. Thank you, Doctor. I'm going to switch gears now and ask
 17 you about the general funding conditions for PhD students. Are
 18 you familiar with the funding package for PhD students in
 19 biomedical science and neuroscience?
 20 A. I am. In general terms, yes.
 21 Q. Okay. And could you describe those general terms?
 22 A. Yes. So -- so students are -- are guaranteed -- students
 23 in the two programs you mentioned are guaranteed a full stipend
 24 and benefits package throughout the duration of their time in
 25 their training. That -- that is guaranteed for -- for all

Page 262

1 years that they're in the program. That package consists of a
 2 stipend. It consists of health insurance, a tuition waiver --
 3 I think that's everything.
 4 Q. What about -- what, if any, housing benefits are --
 5 A. Oh, yes. I'm so sorry. I forgot that. That's a --
 6 that's an important one. Yeah. Our students also in those
 7 programs get access to subsidized Mount Sinai owned housing.
 8 Q. Okay. And do students also have an opportunity to
 9 purchase dental or vision insurance?
 10 A. They do. That is not a part of their -- their package.
 11 But there are options, student dental and student vision
 12 insurance available to them at -- at -- at their own cost.
 13 Q. Doctor, the funding and benefits package that you just
 14 described, does that also apply to students enrolled in the
 15 dual degree MD-PhD program?
 16 A. It does.
 17 Q. Okay. Doctor, how -- how could a PhD student lose his or
 18 her funding?
 19 A. Yeah. The only -- the only way that a student in the PhD
 20 in neuroscience and biomedical science program and -- and --
 21 and the MSTP students, the dual degree students as well, the
 22 only time that they lose funding is if they are no longer in
 23 the program. So they're guaranteed that funding throughout
 24 their duration of time in the program.
 25 Q. Well, when you say if they weren't in the program, under

Page 263

1 what circumstances would -- would a student no longer be in the
 2 program?
 3 A. Yeah, so sometimes a student withdraws from the program
 4 and -- and other -- other times students are -- are dismissed
 5 or asked to leave the program.
 6 Q. Why would a student be dismissed?
 7 A. There are a variety of reasons a student might be
 8 dismissed from the program. It could be disciplinary in
 9 nature. It could be failure to make academic progress. And it
 10 could be -- the third possibility is they've timed out of the
 11 program. There's this -- there's a time limit, a maximum time
 12 to degree.
 13 And so there are -- on very rare occasions, a student
 14 is not able to complete their degree within that -- that
 15 timeframe. The most common -- I would say that the most common
 16 reason a student leaves the program is because they fail to
 17 make academic progress.
 18 Q. Doctor, would not completing the requirements of a PI's
 19 grant be relevant to the inquiry of satisfactory academic
 20 progress?
 21 A. I'm sorry, did you say specifically not making progress on
 22 a PI's grant?
 23 Q. Yes.
 24 A. That is not a factor.
 25 Q. Okay. Is the student's funding conditioned on a PhD

Page 264

1 student's completion of any service requirement? Like it is --
 2 like being a teaching assistant, for example?
 3 A. It is not.
 4 Q. Is funding conditioned on the amount of hours a student
 5 spends researching in the lab.
 6 A. It is not.
 7 Q. Could a PhD student change labs while maintaining their
 8 funding?
 9 A. Yes, they can. And they -- and they do.
 10 Q. And can you describe how that happens?
 11 A. Yeah. So when a student -- when a decision is reached
 12 that a student should leave a lab and there are variety of
 13 reasons that might happen, but if a student is going to leave a
 14 lab and search for a new lab, the graduate school picks up
 15 their financial package and their stipend and their benefits,
 16 and maintains that throughout a period -- a defined period of
 17 time for them to -- to find a new lab.
 18 The graduate school allows a student three months to
 19 find a new lab. There are the possibility of extensions of
 20 that period of time, but they have to show good faith efforts
 21 in -- in trying to find a lab in order to extend beyond three
 22 months.
 23 Q. Could a PhD student lose their funding if their PI lost
 24 their sources of funding?
 25 A. Absolutely not. Absolutely not. There are mechanisms in

Page 265

1 place to cover that cost. And frankly, the graduate school,
 2 historically, there are examples where the graduate school has
 3 paid a student stipend for -- for multiple years to allow them
 4 to complete their degree.
 5 Q. Doctor, what would happen to a postdoc if the PI's funding
 6 disappeared?
 7 A. If the PI's funding disappears, the postdoc position --
 8 the postdoc would be given notice. The -- the -- the rules of
 9 engagement for postdocs is there's a three month notification
 10 process. So the students would -- the postdoc rather, would be
 11 given notice that their job was going to terminate in three
 12 months' time.
 13 Q. Doctor, could a PhD student lose funding if they were not
 14 performing well in a lab?
 15 A. Could a student lose funding if they are -- no, no. They
 16 -- they might be asked to leave the lab, but they would not
 17 lose their funding. They'd be given an opportunity to
 18 remediate, if possible find a new lab if needed. And the
 19 graduate school would cover their -- their stipend and package
 20 during that period of time.
 21 Q. And what -- what would happen if a postdoc was performing
 22 unsatisfactorily in -- in the lab?
 23 A. Yeah. If the -- if postdoc is -- is performing
 24 unsatisfactorily, they would be terminated again with that
 25 three month notice period, unless it's for cause in which time

Page 266

1 they can be terminated immediately.
 2 Q. Doctor, do -- does the graduate school allow its students
 3 to take a leave of absence?
 4 A. It does.
 5 Q. And can you describe the process associated with that?
 6 A. Yes. So if a student needs to take a leave of absence,
 7 they -- there are I think three different types of leaves --
 8 leaves of absence that they could take. They can take a
 9 personal leave of absence. They can make -- take a medical
 10 leave of absence.
 11 There's also a mechanism called a -- an
 12 administrative leave of absence. I don't know -- I -- off the
 13 top of my head, I'm not sure whether there's a fourth category
 14 for family leave. That may be incorporated into a medical
 15 leave, I don't -- I don't recall that detail at the moment.
 16 But a student who needs to go out on a leave would fill out a -
 17 - a request to go out on a leave of absence, and that leave of
 18 absence would be granted.
 19 Depending on the type of leave of absence, there are
 20 slightly different -- different types of consequences of the
 21 leave. But basically, we hold the students status as a -- as a
 22 student for them until they're ready to return.
 23 Q. Doctor, if you can, does that -- does the processes you
 24 just described, does that differ or leaves of absence
 25 applicable to employees?

Page 267

1 A. Yeah. Yeah. Absolutely. The employee leave of absence
 2 is -- is managed through HR. And frankly, I don't know what
 3 the terms and conditions of those leaves of absence are. But
 4 it's a completely different mechanism through HR. Our leaves
 5 of absence are -- are -- are managed through the Office of
 6 Student Affairs. In consultation with the faculty involved.
 7 Q. We bring up Petitioner's Exhibit 35 for identification
 8 only. And Doctor, do you see the logo on the top -- top left
 9 corner of the screen and what's written next to it?
 10 (Petitioner's Exhibit Number 35 identified.)
 11 A. Yes. I believe you're referring to the Mount Sinai logo?
 12 Q. Yes.
 13 A. Yes.
 14 Q. Does that -- does that have any significance to you?
 15 Well, let me ask you to take a moment to review this document,
 16 and then I will -- let me know once you -- once you have done
 17 so.
 18 A. Okay.
 19 Q. Doctor, does -- do the words Mount Sinai on -- on this
 20 document have any significance to you?
 21 A. Yeah. And -- yes.
 22 Q. Okay. Can you elaborate on that, please?
 23 A. So Mount Sinai and -- and this logo, if I'm not mistaken
 24 refers to the large parent organization, sometimes refer to as
 25 Mount Sinai Help. There's a -- there's a second entity, the

Page 268

1 Icahn School of Medicine at Mount Sinai, which is -- I don't
 2 know what the right business terminology is, so I apologize if
 3 I'm inaccurate in it's terminology. But -- but in my mind, I
 4 consider Icahn School of Medicine as, as an entity within Mount
 5 Sinai, the parent organization.
 6 Q. Okay. And what distinction, if any, between those
 7 entities can you make with respect to the contents of -- of
 8 this document?
 9 A. So this document looks to be a salary source document for
 10 Carina -- Carina Seah. I'm not sure who Carina is, to be
 11 perfectly honest. I think Carina is a graduate student,
 12 although I'm not 100% certain of that. I don't know all the
 13 students by name. But it's -- it's pointing to a budget source
 14 -- a budget source for -- for this student's stipend and
 15 financial aid packet.
 16 Not -- I'm sorry, not financial aid. I did not mean
 17 financial aid, but financial package, her health insurance and
 18 -- and whatnot. It's saying, I -- I don't know if you want me
 19 to elaborate on the specifics, but it -- the PI is Laura
 20 Huckins, so that's the person that owns the fund number. And
 21 that fund number is within the Department of Genetics and
 22 Genomics Sciences -- the -- the Genomics Institute rather.
 23 That's where Dr. Huckins' faculty appointment
 24 resides. And I think I saw briefly to the right of what's
 25 currently visible on the screen source of that funding, the --

Page 269

1 the fund description, Dr. Huckins' seed funding. So I don't
 2 know if you need me to elaborate on that at all.
 3 Q. No, not -- not right now. Doctor, is -- is the word -- is
 4 the word salary a word that is used at the graduate school
 5 specifically with respect to PhD students?
 6 A. It is not. It is not.
 7 Q. Do you have any understanding as to why that word appears
 8 on this document?
 9 A. So, I -- I think that the -- the -- the -- the
 10 organization, the entity that issues checks for our students is
 11 -- is the -- is --I think it's called Sinai Cloud is a business
 12 entity that issues checks for the institution. So I think they
 13 use a nomenclature for that larger entity.
 14 Q. Okay. We can take this down. Doctor, we spoke very
 15 briefly about a thesis advisory committee a few minutes ago.
 16 Can you explain for us generally the evaluation process and the
 17 interaction between the -- the committee and -- and the PhD
 18 student?
 19 A. Yeah. So the -- the advisory committee is -- is the
 20 entity that's formally responsible for, as I said earlier,
 21 monitoring the scientific development and academic progress of
 22 the student once they've joined the lab. And the -- they meet
 23 with the student on a -- a six-month -- every -- every six
 24 months or once a semester basis.
 25 There is an evaluation form that they fill out. And

Page 270

1 in that evaluation form, there are a couple of different parts
 2 to that form, one of which is commentary by the committee about
 3 I -- I believe it's a checkbox that's similar to the document
 4 that you showed before, that provides feedback to both the PI
 5 and the students in terms of the progress of the student and
 6 how they're -- how they're performing in certain areas.
 7 Q. Okay. Can we bring up Mount Sinai Exhibit 9, please?
 8 Doctor, is this the form that you were just describing?
 9 (Employer's Exhibit Number 9 identified.)
 10 A. I believe it is, yes.
 11 Q. Okay. And is this a document that the graduate school
 12 keeps in the ordinary course of its affairs?
 13 A. Yes.
 14 MR. LUPION: All right. I'll offer Exhibit 9 into
 15 evidence.
 16 HEARING OFFICER KUMA: Does the Petitioner have any -
 17 -
 18 MR. MEIKLEJOHN: No objection.
 19 HEARING OFFICER KUMA: Hearing no objections, the
 20 Employer's Exhibit entered into evidence.
 21 (Employer's Exhibit Number 9 admitted.)
 22 MR. MEIKLEJOHN: What -- what was the last exhibit
 23 that you showed the witness? The petitioner exhibit?
 24 HEARING OFFICER KUMA: Yes.
 25 MR. LUPION: Petitioner 35.

Page 271

1 MR. MEIKLEJOHN: 35. Okay. Thank you. I wrote that
 2 down wrong.
 3 BY MR. LUPION:
 4 Q. So, Doctor, looking at the -- the first page of this
 5 document, do you know who fills this out?
 6 A. Yeah. The -- the -- the items you're scrolling to now are
 7 filled out by the -- by the student.
 8 Q. Okay. And can you describe generally the information that
 9 they're required to fill out?
 10 A. Yeah. So -- so they're -- the -- the information that's
 11 here is -- is intended to -- to -- to get a summary from the
 12 student in terms of the progress they've been making in their -
 13 - primarily in their research. But -- but more generally their
 14 scientific development as -- as they've, you know, through that
 15 period of time since the last -- the previous meeting. So
 16 they're asking about -- I think they're asking about what you
 17 know, for instance, they're showing here the -- the title of
 18 the -- thesis proposal.
 19 They're asking if the student has attended any
 20 meetings, if they've received any awards or prizes. Attending
 21 meetings and disseminating your scientific findings is an
 22 important part of the scientific mission. It's an important
 23 part of being a professional scientist. So the committee wants
 24 to know about that. There's a description of the research
 25 project along with the thesis.

Page 272

1 And then I -- I believe in the, in -- in sections
 2 below this, although I don't have the form in front of me, I
 3 believe there's information about progress they've made in the
 4 actual research that they've done. You know, so more
 5 specifically, you know, if you have a specific -- if you have a
 6 certain number of specific aims, have you made any project --
 7 progress on those specific aims?
 8 And so there's a narrative that the committee is
 9 asking for from the students regarding that. There's also a
 10 section on this document about projection forward. So what are
 11 you anticipating doing over the course of the next months to
 12 years, both with your research and with your professional
 13 development for the next phase after you've finished your --
 14 your -- your dissertation and PhD training.
 15 Q. Doctor, what -- what does IDP stand for?
 16 A. I -- IDP stands for individual development plan, and
 17 that's what -- that's what I was referring to just a moment ago
 18 where we're looking to assess what the student's planning is
 19 for the next period of time, both academically in their pursuit
 20 of their PhD, but also there's -- there should be a section
 21 beyond that.
 22 What are your next -- what are your next steps after
 23 you finish your PhD? And it's a way for the committee to help
 24 structure the student's time and also mentor the student
 25 through those -- those -- those goals and activities.

Page 273

1 Q. Doctor, calling your attention to the bottom of Page 3
 2 that says, please rate your level of satisfaction with the
 3 student in the following areas.
 4 A. Mm-hmm.
 5 Q. Who completes this portion of the IDP?
 6 A. Yeah. This -- this section of the IDP I believe is -- is
 7 completed by the PI.
 8 Q. And can you explain the significance of the categories
 9 listed -- listed here?
 10 A. Yeah. I -- I think I -- I mentioned this -- these
 11 categories just a moment ago. These, again, are the -- the
 12 areas of development that we think are -- are critical for the
 13 success of our students, both in the short term during their --
 14 their training, but also in the long term as a professional
 15 scientist. So we're trying to assess the student's proficiency
 16 in those areas.
 17 Q. To whom is this document provided?
 18 A. So the document --
 19 Q. Let -- let me withdraw. To -- once completed, to -- is
 20 this document provided to anyone?
 21 A. So the -- the -- the -- the document is -- is basically
 22 transmitted from the student to the PI to the committee, and
 23 then the committee will -- will take a look at, I believe
 24 there's a section for the committee to put some commentary on
 25 as well again, as a way to provide formative feedback to the

Page 274

1 student. And then -- and then they sign off on it, and then it
 2 is -- it's transmitted to the graduate school, the Program
 3 Leadership Team who then keeps it as part of the student's
 4 record.
 5 Q. Doctor, are PhD students evaluated on how much progress
 6 they have made in connection with a PI's grant?
 7 A. No. They're not. They're not. They're assessed on the
 8 progress they make for their thesis or their dissertation work.
 9 So I -- I think one -- one point that I think is important to
 10 make at this point is that the thesis proposal is intended to
 11 be developed solely by the student.
 12 It's an academic exercise. So they will view the
 13 scope of the work being done in the lab, but the intention is
 14 that they create their independent set of experiments that
 15 they're going to perform for their dissertation work. And --
 16 and -- and clearly that work has to fit within the scope of the
 17 work that's going on in the laboratory. But the -- the student
 18 -- it's an academic exercise.
 19 The students are -- are expected to generate that
 20 thesis independently. Now, that's not to say it's not reviewed
 21 by the PI, it's not to say that the PI doesn't read it and --
 22 and make some suggestions, but the PI is not supposed to do
 23 heavy editing and heavy directing.
 24 It is the student's work and -- and should be mostly,
 25 if not solely the student's work. It has to fit within the --

Page 275

1 the expert -- area of expertise of the faculty and within the
 2 scope of work that the PI can mentor the student on but it is
 3 the student's independent work. And so the student in the
 4 committee meetings are assessed on that thesis proposal, not on
 5 -- on whether or not they're meeting the needs of the PI's
 6 grant funding.
 7 Q. Doctor, are student -- PhD students expected to do
 8 anything outside of their academic curriculum in order to
 9 maintain satisfactory academic standard?
 10 A. Absolutely not.
 11 Q. And Doctor, does the evaluation -- does the IDP evaluation
 12 form and the process you described, does that also apply to the
 13 dual degree MD-PhD students while they are enrolled in the PhD
 14 portion of the program?
 15 A. Yeah. Yes. It -- it does. I -- I believe though that
 16 the MD-PhD program, the MSTP program has a different form they
 17 use for their IDP, but it is that type of work is an important
 18 part of the assessment of those students. I -- I -- it's --
 19 it's possible they use the same form, but -- but I have in the
 20 back of my mind that they use a -- a -- a second form. I can't
 21 be certain of that.
 22 MR. LUPION: We've been going a little bit over an
 23 hour. Can we take a five-minute break and I will try to cut
 24 down on the balance of my examination?
 25 HEARING OFFICER KUMA: Yes. You can break. Off the

Page 276

1 record.
 2 (Brief Recess at 11:40 a.m./Reconvened at 11:56 a.m.)
 3 HEARING OFFICER KUMA: All right. So we're on the
 4 record.
 5 BY MR. LUPION:
 6 Q. Dr. Hanss, can a PI discipline a student for poor academic
 7 performance?
 8 MR. LUPION: Oh. Oh, Avi, he needs to be unmuted.
 9 HEARING OFFICER KUMA: Sorry. I did.
 10 BY MR. LUPION:
 11 A. All right. Great. Sorry about that. I put myself on
 12 mute during -- during the break. Can a PI -- the question was,
 13 can a PI discipline -- a student for what reasons?
 14 Q. Poor academic performance?
 15 A. So I think -- I think that the -- that the -- that the --
 16 the -- the graduate school has a process for dealing with poor
 17 academic process. And so the -- the -- the PI can't make
 18 decisions about a student's progress and fate in the program as
 19 a result of that.
 20 I think a good PI will provide feedback to his -- his
 21 or her students and -- and mentor the students in ways to make
 22 them a better scientist and a better investigator. But in --
 23 in terms of formal disciplinary action, no. That's -- the PI
 24 cannot do that.
 25 Q. Okay. Doctor, can you provide examples or describe ways

Page 277

1 in which the graduate school has provided support to students
 2 who are having difficulty maintaining academic progress?
 3 A. Yeah. So we -- we -- we -- I think that one of the
 4 guiding principles for us in student affairs is that our
 5 students deserve to be here. They're very smart, they're very
 6 accomplished. We have a top tier graduate school program, one
 7 of the best in the country, if not in the world.
 8 And our -- our -- our -- the folks that do admissions
 9 here are very careful and thoughtful in their process, and they
 10 -- they select students that are top tier students from around
 11 the world. And as such, we believe strongly in supporting
 12 those students during their time here.
 13 And it's not uncommon for everyone -- everyone,
 14 student or not, to struggle at some point during their -- their
 15 time. And graduate school is hard and graduate school is
 16 stressful. And so we have multiple tiers of support for our
 17 students. Without going into all of the details, because it
 18 would be a long list of things that we do, we -- we have -- we
 19 have academic support, scientific support at every single level
 20 in the classroom and -- and -- and beyond.
 21 All the way through the research labs and bigger
 22 picture issues about personal development and growth and
 23 stresses and strains at the personal level. We have a complete
 24 system of tutoring and -- and -- and help in that area. We
 25 will -- we will, when needed, create modified -- what we call

Page 278

1 modified academic plans for a student to allow them to
 2 remediate the work that they're -- where they're not performing
 3 well.
 4 And we will all the way through our disciplinary
 5 group, which is the Committee for Academic Review, CAR for
 6 short. CAR is a very thoughtful body that will hear kind of
 7 the end side of -- of significant problems with the students.
 8 And even at that level, CAR will help develop
 9 remediation plans, create milestones and a variety of different
 10 support mechanisms to help support the student and -- and
 11 hopefully get them on the right track. So there's a really,
 12 really broad spectrum of -- of support structures in place for
 13 our students.
 14 Q. Doctor, how did the support systems that you just
 15 described that are available for the PhD students, how does
 16 that compare to the support systems available for employees who
 17 are not performing satisfactory?
 18 A. Yeah. So -- so for employees,, any resources that they
 19 have for support come from -- from HR and are -- are -- are not
 20 entirely dissimilar for -- for -- for the -- the kind of the
 21 big picture HR systems in place. They do not have access to
 22 the -- the programs I just outlined for you. Those are
 23 separate and distinct.
 24 MR. LUPION: I have no further questions at this
 25 time.

Page 279

1 HEARING OFFICER KUMA: Okay. The Petitioner?
 2 MR. MEIKLEJOHN: Unless one of my people says
 3 otherwise, I'd like to move directly into cross examination
 4 without taking a break at this point.
 5 HEARING OFFICER KUMA: All right.
 6 MR. MEIKLEJOHN: All right. Nobody seems -- nobody's
 7 signaling me that I need to take a break. So --
 8 CROSS EXAMINATION
 9 BY MR. MEIKLEJOHN:
 10 Q. In your capacity, I guess I should do my introduction. Do
 11 you understand that I'm the attorney representing the
 12 petitioning Union in this case, Dr. Hanss?
 13 A. I do. Thank you.
 14 Q. And you understand, I'm going to ask you some questions as
 15 well.
 16 A. I do.
 17 Q. All right. And I will try to be to the point, but please
 18 bear in mind the importance of waiting till I finish the
 19 question before you answer.
 20 A. Okay.
 21 Q. And as you seem to recognize the importance of answering
 22 verbally as well.
 23 A. I do.
 24 Q. All right. So Dr. Hanss, your -- your portfolio also
 25 includes postdoctoral affairs?

Page 280

1 A. Yes, it does.
 2 Q. And in your capacity as Senior Associate Dean for
 3 Postdoctoral Affairs, do you -- are you involved in providing
 4 any support services to postdocs?
 5 A. Yeah. So there is an office of -- of postdoctoral affairs
 6 and that office I -- I do a senior associate Dean for
 7 postdoctoral and student affairs. I do oversee that office.
 8 There are some support services but -- but much less extensive
 9 than are available for students. So it's more focused on
 10 guidance and mentoring and not so much a variety of other types
 11 of supports like I -- I -- I mentioned for the students.
 12 Q. You testified that if a PI invites a student into a lab,
 13 that the student is not -- after a rotation or where he has
 14 done a -- he or she has done a rotation, the student is not
 15 obligated to accept the offer; is that right?
 16 A. Yes.
 17 Q. What if the PI does not offer the student an opportunity
 18 to work in the lab? Can the student still insist on moving
 19 into the lab?
 20 A. I've never seen that happen, no.
 21 Q. Okay. Are there any positions, employment or otherwise
 22 within Mount Sinai in which if someone is offered a job or a
 23 position, that the individual is obligated to accept that
 24 position?
 25 A. You -- you said in employment or other?

Page 281

1 Q. Any -- any position, whether it's you consider it
 2 employment or other. If someone is offered a position, are you
 3 aware of any position -- any circumstances in which that
 4 individual would be obligated to accept that job or position?
 5 A. My -- my scope of vision is -- is narrow, but no -- no.
 6 Q. You -- you testified that research is expensive, and that
 7 if the PI doesn't have funding for the expenses of the lab,
 8 then -- then the PI cannot invite a student into the lab. Are
 9 you familiar -- I think actually you were here when Dr.
 10 O'Connell testified today. Are you familiar with the
 11 distinction between the dry lab and a wet lab?
 12 A. I am. I am familiar with the distinction between a dry
 13 lab and a wet lab, yes.
 14 Q. And what are the expenses of a student conducting research
 15 in a dry lab?
 16 A. Well, I'm not a computational scientist, so I can't -- I
 17 can't answer that question with any specificity, but I would
 18 assume that there are software costs -- costs, there are access
 19 to database costs, et cetera, et cetera. I'm a -- I'm a -- a
 20 "wet -- wet bench researcher", so I could comment on that.
 21 Q. Okay. Is the principal expense -- I'll strike that. So
 22 the student, when he or she is admitted, is assigned an
 23 academic advisor, correct?
 24 A. When they're admitted, they're assigned an academic
 25 advisor. Yes.

Page 282

1 Q. And then when they declare for a particular lab and a
 2 particular -- what's the area of specialist of emphasis called
 3 MTI? No. That's -- those are the wrong letters. Do you know
 4 the phrase --
 5 A. Perhaps I'm thinking -- perhaps you're thinking MTA?
 6 Q. MTA, that's what I'm looking for.
 7 A. Okay.
 8 Q. When the student declares an MTA in a lab, then they're --
 9 they move to a -- or they're -- they get a different academic
 10 advisor; is that correct?
 11 A. Well, some of the -- some of the academic advisors are in
 12 fact MTA directors, but not all. So if they choose an MTA
 13 different than -- than, you know, if the MTA has a different
 14 academic advisor, different director, then -- then they would
 15 have a different academic advisor, yes.
 16 Q. And -- and it could -- they could keep the same academic
 17 advisor?
 18 A. Yeah. Yeah. Theoretically, yes.
 19 Q. But the Academic Advisor is not the same as the preceptor
 20 or the PI?
 21 A. No.
 22 Q. All right. That's what happens when I ask a negative
 23 question. Is it true that the Academic Advisor is not the same
 24 as the preceptor or the PI?
 25 A. It -- it can be true, but it's not always true.

Page 283

1 Q. Are you -- so you testified that there have been occasions
 2 when it's come to your -- I'll strike that. I'll just ask the
 3 question. So a student once they've declared for a particular
 4 lab, would be performing research in that lab on almost a daily
 5 basis; is that correct?
 6 A. Yes.
 7 Q. So they would have contact with that PI also on an almost
 8 daily basis; is that right?
 9 A. Yeah. Most likely.
 10 Q. In most instances.
 11 A. Mm-hmm.
 12 Q. Whereas the Academic Advisory Committee, they would meet
 13 with every six months?
 14 A. Yes. Now, I would -- I would --
 15 Q. Now, how --
 16 A. I would -- sorry. I would just go on and say that -- that
 17 we strongly encourage the students, at least I do, strongly
 18 encourage the students to form a mentorship relationship with
 19 the members of their committee. That the -- the advisory
 20 committee is selected by the student in -- in conjunction with
 21 their PI.
 22 So they do -- do that work jointly to identify folks
 23 who can provide scientific technical or intellectual guidance
 24 mentorship to the students. So we -- we -- in an ideal world,
 25 our students would have a relationship with their thesis

Page 284

1 committee that extends beyond the once every six month meeting,
 2 and they would have that same potential relationship with their
 3 Academic Advisor throughout as well.
 4 Q. Now, how important is the relationship between the student
 5 and the PI?
 6 A. How important is that? Can you --
 7 Q. To the student.
 8 A. It's -- I think it's important. That person is a primary
 9 mentor for the student. So that -- it's important that they
 10 have a -- a good, strong, healthy relationship with their
 11 mentor. Yes.
 12 Q. And if the PI is displeased with the student, does that
 13 have any potential negative consequences for the student?
 14 A. That's a -- that's a broad statement. So in a broad
 15 sense, yeah, it could. Sure.
 16 Q. And is there a strong incentive for the student to follow
 17 the guidance and directions of the PI?
 18 A. Okay. So -- so I think that from an oversight
 19 perspective, the incentive is really for the committee because
 20 the committee is the deciding body. For -- in terms of the
 21 personal relationship, it's -- is like any personal
 22 relationship and a -- and a -- particularly a mentor --
 23 mentorship relationship. I think it's safe to say that -- that
 24 -- that they would -- they would like to have a decent
 25 relationship with their PI. Yes.

Page 285

1 Q. Now, you say that you can recall a couple of instances or
 2 a -- a -- an instance every couple years, which it's come to
 3 your attention that a student has complained. I don't think
 4 you used that word about being assigned duties that did not
 5 contribute to their thesis work. Do you recall any one of
 6 those specific instances?
 7 A. Do I recall any one of those specific instances? Yeah. I
 8 can think of one in -- in particular.
 9 Q. Okay. Now, without me using the names, because that might
 10 raise --
 11 A. Yeah. That would -- we -- we call that a HIPAA -- not a
 12 HIPAA --
 13 Q. No. Not a HIPAA violation.
 14 A. A FERPA violation. So no, I won't mention anything that's
 15 identifiable.
 16 Q. Okay. Can you describe what the -- what did -- how did
 17 you become aware of the issue?
 18 A. Well, in -- in that -- in that case, a student came and
 19 talked to me and asked what I thought would be the best tactic
 20 and -- and avenue of approach for the student.
 21 Q. And that was a tactic or a avenue of approach dealing with
 22 a problem with the PI?
 23 A. Yes.
 24 Q. And what specifically was --
 25 A. Well, the -- well, the -- the student felt just -- I'm

Page 286

1 glad you asked the follow-up question. The student felt like
 2 there was a window of time where they were spending some time
 3 on some work for the grant -- for a grant, for example.
 4 Q. And how much time did the student represent he or she was
 5 being asked to work on the grant or assigned to work on the
 6 grant?
 7 A. Yeah. I don't -- I don't, I don't actually recall that
 8 detail. I don't believe it was full-time. I think it was a
 9 part of their time.
 10 Q. But it was enough so that the student felt compelled to
 11 complain about it?
 12 A. Yes.
 13 MR. LUPION: Objection, calls --
 14 BY MR. MEIKLEJOHN:
 15 Q. And you felt that it was in --
 16 A. Well, yeah.
 17 MR. LUPION: Let me get my objection on the record.
 18 Objection. Calls for speculation. He doesn't know what the
 19 student was thinking. Other than what was communicated to him.
 20 HEARING OFFICER KUMA: Objection sustained.
 21 BY MR. MEIKLEJOHN:
 22 Q. Did the student tell you that he felt that he was being
 23 asked to -- he or she was being asked to spend so much time on
 24 other projects that he or she wasn't able to work on his or her
 25 grant proposal?

Page 287

1 A. I don't -- I don't recall --
 2 Q. Is or her thesis proposal. Sorry.
 3 A. I don't recall. I do not recall that that was mentioned.
 4 Q. Now, you -- you started to give an explanation of the
 5 relationship between the Human Resources Department and the
 6 ISMMS. Is there a single Human Resource Department that covers
 7 ISMMS as well as other subdivisions of Mount Sinai Healthcare
 8 System?
 9 A. Yea., I -- I don't know the answer to that.
 10 Q. Are you -- you get paid, right?
 11 A. I do get paid.
 12 Q. All right. You get paid through the Mount Sinai payroll
 13 system?
 14 A. I get paid, I assume it's through the Mount Sinai payroll
 15 system.
 16 Q. I'm going to --
 17 A. It's direct deposit, so I don't actually see a check, so I
 18 don't know where it's coming from.
 19 Q. Well, you have to go look to get into those records. I'm
 20 going to return to Petitioner's Exhibit 5. Can you -- is that
 21 big enough for you?
 22 A. Yes. I can see that.
 23 Q. Okay.
 24 MR. LUPION: It's 35.
 25 MR. MEIKLEJOHN: What did I say?

Page 288

1 MR. LUPION: You said 5.
 2 MR. MEIKLEJOHN: Oh, I'm sorry. Yes. Let the record
 3 reflect that I'm trying to show the witness a document that's
 4 marked for identification as Petitioner's Exhibit 35.
 5 BY MR. MEIKLEJOHN:
 6 Q. That's -- is that what I -- what you see on the screen?
 7 A. I -- I see Petitioner Exhibit 35 on the screen. Yes, I
 8 do.
 9 Q. And at the top, near the middle, right next to the exhibit
 10 label is the phrase Sinai Central. Can you explain what Sinai
 11 Central is?
 12 A. From -- from my perspective, Sinai Central is a large
 13 entity where, for instance, we go to order supplies for the
 14 lab, for example, we go to Sinai Central to order supplies from
 15 the lab. There is a module of HR on there.
 16 So for instance, I need a W-2, I would sign into
 17 Sinai Central, although I think that's shifted to an -- to a
 18 different system now, I think Sinai Central is, is being phased
 19 out. So it's a multi -- it's a multi entity structure that has
 20 a variety of business -- business resources for the school. I
 21 don't really have information beyond that.
 22 Q. But it does provide a variety of resources for the school?
 23 A. Yes.
 24 Q. Now, are you familiar with Laura Huckins? I think you
 25 indicated you were. Do you know who she is?

Page 289

1 A. I know who she is.
 2 Q. Is she a member of the faculty of ISMMS?
 3 A. She -- she actually left Mount Sinai previously. I don't
 4 know when she left, and I don't know what status, if any, she
 5 continues to hold at Mount Sinai.
 6 Q. Okay. Which -- okay. Was she in the Department of
 7 Genomics?
 8 A. It indicates here that her department was the Genomics
 9 Institute, so I assume that to be correct, but I don't really
 10 know what department she was in.
 11 Q. And according to this document, Carina Seah was a -- was a
 12 -- was or is a graduate student?
 13 A. I believe she is or was a PhD student. I don't know her
 14 by name. So I don't know where she is in her training.
 15 Q. But according to the document, she is paid a salary as a
 16 grad student, correct?
 17 A. It says that she is -- it indicates that the object code
 18 description is a graduate student.
 19 Q. And a graduate salary, correct?
 20 A. That's the object code that's used.
 21 Q. That means that's how the payments to her are classified
 22 in the payroll system?
 23 A. I really -- I really have no experience with the payroll
 24 system, so I -- I can't answer that question with any
 25 authority. I can simply just read the screen.

Page 290

1 MR. MEIKLEJOHN: All right. I'm going to move the
 2 admission of Petitioner's Exhibit 35.
 3 MR. LUPION: Objection. The witness is unfamiliar
 4 with -- this document relates to student perhaps, Carina Seah.
 5 The witness doesn't have any firsthand knowledge of the
 6 contents of this document. So it is not the appropriate
 7 witness through which to get this document admitted into
 8 evidence.
 9 MR. MEIKLEJOHN: Okay. Well, I submit that he's able
 10 to recognize it as a -- from the -- from the general
 11 information contained on there, he is able to recognize it as a
 12 document prepared and maintained by Sinai Central and the
 13 parent organization, Mount Sinai Health System. I think that
 14 is sufficient to identify it. And I am also trying to find a
 15 way to avoid having to call a whole series of students to say,
 16 this is -- these are my records.
 17 HEARING OFFICER KUMA: Okay. With that
 18 understanding, does the Employer still object?
 19 MR. LUPION: Yes. We -- we object. Okay. The --
 20 the witness can call Carina -- Carina Seah -- excuse me. The
 21 Petitioner can call Carina Seah if she's -- she's going to --
 22 she's in the unit. I don't -- I don't know who his -- I don't
 23 know who his witnesses are. But the witness -- this witness --
 24 it's an inappropriate document to introduce through -- through
 25 this witness.

Page 291

1 MR. MEIKLEJOHN: I mean, I've also -- I've sent an
 2 email to Counsel. I don't really have a chance to see it. I'm
 3 -- I'm asking the Employer to agree to a series of payroll and
 4 personnel records as to their authenticity.
 5 I think that the -- but with respect to this
 6 particular one at this time, if counsel is not satisfied as to
 7 the authenticity of this, I would ask that counsel check with
 8 his client and verify that this is a record obtained from their
 9 human resources system and from Sinai Central. We've
 10 identified what Sinai Central is.
 11 MR. LUPION: Yeah. And I'm happy to do that.
 12 MR. MEIKLEJOHN: Okay.
 13 HEARING OFFICER KUMA: Then we can -- we can defer
 14 until you've verified the authenticity of this.
 15 MR. MEIKLEJOHN: Yeah. That's fair.
 16 HEARING OFFICER KUMA: Okay.
 17 MR. MEIKLEJOHN: Thanks.
 18 HEARING OFFICER KUMA: So exhibit -- so the
 19 Petitioner's Exhibit 35 is deferred until the Employer has
 20 conferred with his client. Okay.
 21 BY MR. MEIKLEJOHN:
 22 Q. Where's the doctor? Dr. Hanss?
 23 A. Yes.
 24 Q. You testified that the word salary is not used at the
 25 graduate school.

Page 292

1 A. Not to my knowledge. I've never used that term.
 2 Q. You've never used that term. Do you know whether the --
 3 A. The graduate school, no. I have to be clear, the graduate
 4 school does not use that term. We provide a stipend to our --
 5 our students.
 6 Q. Well, that's what a number of people testified to. That
 7 they're referred to as stipend. But your actual official
 8 documents refer to that as direct compensation, correct?
 9 MR. LUPION: Objection, argumentative.
 10 MR. LUPION: Withdrawn.
 11 HEARING OFFICER KUMA: Sustained.
 12 BY MR. MEIKLEJOHN:
 13 Q. Okay. Do you know whether -- so you personally do not use
 14 the term salary to refer to those payments, correct?
 15 A. That's correct.
 16 Q. You don't know whether other people use that term?
 17 MR. LUPION: Objection. Again, calls for speculation
 18 can ask what was -- what this witness has seen or heard
 19 firsthand.
 20 BY MR. MEIKLEJOHN:
 21 Q. Have you ever heard anybody refer to the payments to
 22 graduate students as salaries during your time at Mount -- at
 23 the ISMMS?
 24 A. I don't think I have, no.
 25 MR. MEIKLEJOHN: Okay. Can we have a moment in the

Page 293

1 breakout room?
 2 HEARING OFFICER KUMA: Yes. Off the record.
 3 MR. LUPION: We'd also like a breakout room, Avi?
 4 HEARING OFFICER KUMA: Go ahead.
 5 MR. LUPION: Thank you.
 6 (Brief Recess at 12:25 p.m./Reconvened at 12:32 p.m.)
 7 HEARING OFFICER KUMA: On the record.
 8 BY MR. MEIKLEJOHN:
 9 Q. Dr. Hanss, do you have occasions to evaluate any
 10 employees?
 11 A. I -- I do not. Not directly.
 12 Q. Are you -- are you evaluated?
 13 A. I am.
 14 MR. LUPION: Objection, relevance.
 15 BY MR. MEIKLEJOHN:
 16 Q. I -- who's answered it. Do you -- I mean, I'm going to
 17 ask the follow-up question. You can object to this again.
 18 Yes. Are you evaluated on your effort and skills?
 19 MR. LUPION: Objection, relevance.
 20 HEARING OFFICER KUMA: Objection sustained.
 21 BY MR. MEIKLEJOHN:
 22 Q. Do you know whether in general it is common at ISMMS for
 23 employees to be evaluated on effort and skills?
 24 A. Objection, relevance.
 25 MR. MEIKLEJOHN: Counsel has introduced evidence to

Page 294

1 show that the students are evaluated on, among other things,
 2 their effort and their skills and -- I guess to show that --
 3 that they are students and not employees. And my point is, I
 4 believe, I'm almost certain that Mount Sinai evaluates -- it
 5 also evaluates its employee on -- employees on efforts and
 6 skills.
 7 MR. LUPION: Respectfully, to -- to nitpick and take
 8 one component of an evaluation process and attempt to transpose
 9 that as applicable to the entire population, we can -- it --
 10 it's really nonsensical in so far as he described the totality
 11 of the evaluation process, including, but not limited to
 12 progress towards a thesis proposal, which plainly doesn't apply
 13 to the employee population.
 14 MR. MEIKLEJOHN: I can narrow the -- I can ask more
 15 narrow and pointed questions if --
 16 HEARING OFFICER KUMA: Reframe the question and
 17 narrow it down.
 18 BY MR. MEIKLEJOHN:
 19 Q. Okay. Do you know whether employees at Mount Sinai -- at
 20 ISMMS are evaluated on effort?
 21 MR. LUPION: Objection, relevance.
 22 MR. MEIKLEJOHN: I -- that's one of the factors that
 23 students are supposed -- they're evaluated on.
 24 HEARING OFFICER KUMA: Objection overruled.
 25 MR. LUPION: Well, can I -- can I be -- can I be --

Page 295

1 just to -- if we're going to expedite this. Our position is
 2 not that they're students because they're evaluated based on --
 3 on effort among other things.
 4 The witness described the evaluation process that
 5 applies to students in describing and as it relates to the
 6 student experience. So we can ask -- you can ask every single
 7 question that -- that I asked him and does that -- does that
 8 apply to employees? And we'll be here -- we'll be here for
 9 days.
 10 MR. MEIKLEJOHN: Well, I tried to shorten it and you
 11 -- you said I was taking it out of context, and now I'm going
 12 to ask the pointed questions. I -- I -- I believe that it's
 13 relevant. The document is in the record, it shows what
 14 students are evaluated on. These are all factors that are
 15 relevant to -- most -- many of them are factors that are
 16 relevant to evaluating employees as well.
 17 HEARING OFFICER KUMA: Since -- the reason was a
 18 clear and full record, I made the ruling that the objection was
 19 overruled and allow the witness to answer the question. I ask
 20 that Dr. Hanss answer the question.
 21 BY MR. MEIKLEJOHN:
 22 Q. Dr. Hanss, do you know, are employees of IMMS -- ISMMS
 23 evaluated on effort?
 24 A. I have not been involved in the employee evaluation
 25 process, so I actually don't know the answer to that.

Page 296

1 MR. MEIKLEJOHN: All right. I'll -- I'll -- I'll
 2 remember these questions and ask another witness. Oh, I'm
 3 sorry. No further questions for this witness on cross.
 4 HEARING OFFICER KUMA: Okay. Does the Employer have
 5 a redirect?
 6 MR. LUPION: No further questions?
 7 HEARING OFFICER KUMA: Okay. Dr. Hans, you are
 8 released but you are not through with the hearing in the
 9 essence that the Region needs to call you back, to be readily
 10 accessible. We'll let the Employer know what date and time if
 11 you do need to be called back, okay?
 12 THE WITNESS: Okay. One -- can I ask one quick
 13 question?
 14 HEARING OFFICER KUMA: Sure.
 15 THE WITNESS: About how long do you expect the
 16 hearings to -- to go on for it? Because I'll have to clear my
 17 schedule, which is not a problem. But I just need to -- do you
 18 have an approximate timeframe?
 19 HEARING OFFICER KUMA: I do not.
 20 THE WITNESS: Okay. All right. Thank you.
 21 HEARING OFFICER KUMA: Okay.
 22 MR. LUPION: Thank you, Doctor.
 23 HEARING OFFICER KUMA: All right.
 24 THE WITNESS: Thank you-all.
 25 HEARING OFFICER KUMA: All right. So we'll go off

Page 297

1 the record. 12:38, I'm going to take a break. Break --
 2 (Whereupon, at 12:37:49 , a luncheon recess was taken.)
 3
 4
 5
 6
 7
 8
 9
 10
 11
 12
 13
 14
 15
 16
 17
 18
 19
 20
 21
 22
 23
 24
 25

Page 298

1 AFTERNOON SESSION
 2 (Time Noted: 3:01:44 p.m.)
 3 HEARING OFFICER KUMA: All right. While on break.
 4 The Employer was able to provide the Petitioner with subpoena
 5 records for blunt -- for the grants provided. It was my
 6 understanding that Petitioner raised that it's missing the cost
 7 breakdown; is that right?
 8 MR. MEIKLEJOHN: That's correct. The budget --
 9 budget calculations, which I understand is required for --
 10 actually, I'm -- is this -- this is an NIH grant?
 11 HEARING OFFICER KUMA: I -- I -- I don't know, Tom.
 12 I haven't -- I haven't looked at it.
 13 MR. MEIKLEJOHN: All right. I haven't looked at it
 14 close enough, but it appears to be -- I believe it's an NIH
 15 grant. It doesn't appear to include the budget breakdowns
 16 that, my understanding is, the NIH requires.
 17 HEARING OFFICER KUMA: Okay. Well, Employer --
 18 MR. MEIKLEJOHN: It's already long, and that just
 19 makes it longer. You gave me a five year grant, so what am I
 20 going to tell?
 21 HEARING OFFICER KUMA: Employer will have till
 22 tomorrow morning to try to produce that information by 9:30
 23 a.m. to do some breakdowns.
 24 MR. LUPION: I -- I don't -- I mean, we'll make
 25 inquiry. I -- I don't know where -- you're taking Tom's

Page 299

1 representation that that information is missing. I don't know
 2 that to be -- I'm not saying that's inaccurate, but I'm not
 3 saying it's accurate either. So we will inquire to see whether
 4 there -- whether there is any additional information that he's
 5 requesting regarding this grant application.
 6 HEARING OFFICER KUMA: Okay.
 7 MR. LUPION: With -- with regard to the budget
 8 breakdown. I mean, does -- he said he hasn't even reviewed it,
 9 so I don't -- closely.
 10 MR. MEIKLEJOHN: I -- I -- I might have missed it,
 11 but I don't think so.
 12 HEARING OFFICER KUMA: What I saw, there was no
 13 budget breakdowns after reviewing it myself. So hopefully the
 14 Employer can inquire with his client, find out more details
 15 about this and get back to us first thing tomorrow morning.
 16 MR. LUPION: Okay.
 17 HEARING OFFICER KUMA: Okay. And if there is,
 18 produce those documents.
 19 MR. LUPION: We will inquire right away.
 20 HEARING OFFICER KUMA: Now, also during this break,
 21 parties were able to come to a detailed stipulation regarding
 22 the Employer's offer of proof and has both agreed and will
 23 enter this on the record as evidence as Joint Exhibit 1. And
 24 during this process, the Petitioner has agreed to enter the
 25 Employer's Exhibits 10, 11, 12.

Page 300

1 No objections -- hearing no objections regarding
 2 this, based off this Joint Exhibit 1, I hereby receive the
 3 Employer's Exhibits 10, 11, and 12 into evidence, and I also
 4 hereby enter into evidence Employer's Exhibit 1. Will the
 5 Employer now call their next witness?
 6 (Joint Exhibit Number 1 identified.)
 7 (Employer's Exhibit Number 10, 11, and 12 identified.)
 8 (Joint Exhibit Number 1 admitted.)
 9 (Employer's Exhibit Number 10, 11, and 12 identified.)
 10 MR. MEIKLEJOHN: What about -- what about 6(a)?
 11 HEARING OFFICER KUMA: Thank you for reminding me.
 12 MR. MEIKLEJOHN: You're welcome.
 13 HEARING OFFICER KUMA: Okay. Also, during the break,
 14 the Employer was able to obtain the attachments from Exhibit 6
 15 that was requested by the Petitioner, and those attachments
 16 were how to log into the Sinai Cloud, which is -- which the
 17 Employer has provided and will be entering into evidence as
 18 Employer's Exhibit (a).
 19 (Employer's Exhibit Number 6(a) identified.)
 20 MR. MEIKLEJOHN: 6(a).
 21 HEARING OFFICER KUMA: Exhibit 6(a).
 22 MR. MEIKLEJOHN: Yeah.
 23 HEARING OFFICER KUMA: Excuse me. Thank you for the
 24 correction. Employer's Exhibit 6(a). Petitioner has no
 25 objections to this?

Page 301

1 MR. MEIKLEJOHN: No objections.
 2 HEARING OFFICER KUMA: Hearing no objections, based
 3 off of this I'll be accepting this into evidence. In addition,
 4 the Employer also submitted as part of the Employer Exhibit 6,
 5 Exhibit Sinai Cloud Benefits, new student enrollment part of
 6 the attachments, and has submitted that as Employer Exhibit
 7 6(b). Petitioner has no objections to this?
 8 (Employer's Exhibit Number 6(a) admitted.)
 9 (Employer's Exhibit Number 6(b) identified.)
 10 MR. MEIKLEJOHN: No objection.
 11 HEARING OFFICER KUMA: And since he has agreed with
 12 no objections, I have will be submitting this into evidence at
 13 the Employer's Exhibit 6(b). Okay. The Employer now call in
 14 the next witness. Hold on.
 15 (Employer's Exhibit Number 6(b) admitted.)
 16 MR. LUPION: Yes. And I know we had a 9:30 deadline
 17 to report on the information that Mr. Meiklejohn claimed was
 18 missing from the grant. But I can do that -- I can do that
 19 now. Two -- two points. One for an R01 grant which this is
 20 with a modular budget. No breakdown is required. In addition
 21 grants below, \$250,000 per year, no breakdown is required.
 22 HEARING OFFICER KUMA: Okay. Thank you for that.
 23 MR. MEIKLEJOHN: Well, I -- Attorney Rothgeb will be
 24 representing the Petitioner during the next witness's
 25 testimony.

Page 302

1 HEARING OFFICER KUMA: Okay.
 2 MR. MEIKLEJOHN: So I'm going to try to keep my mouth
 3 shut.
 4 HEARING OFFICER KUMA: Okay. All right. Since the
 5 Employer has clarified that no breakdown is required for the
 6 subpoena documents in Bulletin 7 for the grants provided, the
 7 Employer has sufficiently provided the all subpoena doc --
 8 subpoena documents regarding that -- regarding the grants
 9 provided. Now I'm asking Employer again to -- to call their
 10 next witness.
 11 MR. LUPION: The Icahn School of Medicine at Mount
 12 Sinai calls Dr. Talia Swartz.
 13 HEARING OFFICER KUMA: Ms. Swartz, can you raise your
 14 right hand?
 15 Whereupon,
 16 TALIA SWARTZ,
 17 was called as a witness having been previously duly sworn, was
 18 examined and testified as follows:
 19 HEARING OFFICER KUMA: Okay. Put your hand down.
 20 Can you state your first and last name for the record?
 21 THE WITNESS: Talia Swartz.
 22 HEARING OFFICER KUMA: Okay. Employer may proceed.
 23 MR. LUPION: Thank you.
 24 DIRECT EXAMINATION
 25 BY MR. LUPION:

Page 303

1 Q. Dr. Swartz, could you spell your name for the record,
 2 please?
 3 A. Yeah. T-A-L-I-A S-W-A-R-T-Z.
 4 Q. Are you currently employed?
 5 A. Yes.
 6 Q. And by whom?
 7 A. By the Icahn School of Medicine at Mount Sinai.
 8 Q. Good. What is your role at the Icahn School of Medicine
 9 at Mount Sinai?
 10 A. I'm the director of the MD-PhD Program, Senior Associate
 11 Dean for MD-PhD Education.
 12 Q. If I could just ask you to slow down just a little bit so
 13 that the court reporter can get an accurate transcription --
 14 A. Absolutely.
 15 Q. --of your testimony?
 16 A. Yes. Director of the MD-PhD program, Senior Associate
 17 Dean for MD-PhD Education and Associate Professor of Medicine.
 18 Q. Can you briefly describe your duties and responsibilities
 19 as the Senior Associate Dean for MD-PhD education?
 20 A. Sure. I oversee the MD-PhD program, which is a dual
 21 degree program where students will pursue both an MD and a PhD
 22 degree. And I'm involved in advising curricular development
 23 support, alumni affairs, and integration with the medical
 24 school and the graduate school.
 25 Q. Okay. Could you describe your educational background for

Page 304

1 us, please?

2 A. Sure. I got my bachelor's degree in biological sciences.

3 I did the MD-PhD program, in fact, at what was then called

4 Mount Sinai School of Medicine. So I'm a graduate of this

5 program.

6 I went on to pursue residency in internal medicine

7 and a fellowship in infectious diseases, and have been on

8 faculty at the Icahn School of Medicine at Mount Sinai since I

9 finished my training in 2013.

10 Q. And are you also a principal investigator?

11 A. Yes.

12 Q. And you have a lab?

13 A. Yes.

14 Q. And is what's the name of that lab?

15 A. The Swartz Lab.

16 Q. Okay. And what -- what research does your lab focus on?

17 A. We study HIV and inflammatory pathogenesis. So we're

18 interested in understanding how people with HIV experiences --

19 experience diseases as a result of chronic inflammation.

20 Q. Okay. How -- how long have you had the -- the --

21 withdrawn. How long have you been API at the Icahn School of

22 Medicine at Mount Sinai?

23 A. Since 2015.

24 Q. And how long have you served as Senior Associate Dean of

25 the MD-PhD education program?

Page 305

1 A. Since 2022.

2 Q. And overall, how long have you been affiliated with Mount

3 Sinai, either as a student or as a faculty member?

4 A. Since 2000.

5 Q. And did you have any -- did -- what roles -- other roles,

6 if any, at the Icahn School of Medicine at Mount Sinai, did you

7 hold before becoming the senior associate dean?

8 A. I was assistant director of the MD-PhD program from 2015

9 to -- 2014 maybe to 2015, and then associate director from 2015

10 to 2021. Co-director from 2021 to 2022 and director since

11 2022.

12 Q. Dr. Swartz, do you have in front of you what's been

13 identified as Joint Exhibit 1?

14 A. I believe I do.

15 Q. Okay. If you can open that up and please turn to

16 Paragraph 6 of the -- yeah, we could -- we could share. If

17 it's easier to see on the screen or -- or if you have it --

18 Doctor, can you read the first sentence of Paragraph 6, please?

19 A. Just like first year PhD students in the biomedical

20 science and neuroscience -- I'm sorry.

21 In biomedical science and neuroscience. First year

22 students in the MD-PhD program must complete, 1, their core PhD

23 course curriculum. And 2, multiple lab rotations. However,

24 given their additional --

25 Q. No. That's good. Just the first sentence. Doctor, what

Page 306

1 is the purpose of the lab rotations this -- identified in the

2 first sentence of Paragraph 6

3 A. To identify a dissertation lab.

4 Q. And whose choice is that?

5 A. The student's.

6 Q. And -- okay. Doctor, I'm going to now call your attention

7 to Paragraph 11. Do you see the sentence where it says -- if

8 you could read the -- the sentence -- the third to last

9 sentence. The sentence immediately before the word finally.

10 A. The process?

11 Q. Yes.

12 A. The process for selecting an MTA for MD-PhD students is

13 the same as that for PhD students in biomedical science and

14 neuroscience.

15 Q. Doctor, what flexibility -- how much flexibility, if any,

16 do students have in selecting a specific research topic?

17 A. The options are all the faculty and laboratories

18 available.

19 Q. Okay. And what about a -- how much flexibility does a

20 student in the MD-PhD program have to select a faculty mentor?

21 A. The same -- like I guess I misunderstood the first

22 question, but the same. The same flexibility. All available

23 faculty mentors.

24 Q. Okay. Are -- students aren't assigned research topic, are

25 they?

Page 307

1 A. No. Students select their research mentor.

2 Q. And -- and same is true with respect to their mentor?

3 A. Yes.

4 Q. In Paragraph 12, do you see where it says specifically,

5 just like second year PhD students in biomedical science or

6 neuroscience, third year MD-PhD students join their chosen lab

7 full-time and begin to conduct research? Doctor, my question

8 is this. The research that is conducted in that lab, what

9 proportion of that research is towards their own dissertation

10 topic?

11 A. All of it.

12 Q. You said all of it? Okay.

13 A. Yeah.

14 Q. Doctor, what responsibilities does a PI have towards the

15 MD-PhD student when that student is in that PI's lab?

16 A. A lot of responsibilities.

17 Q. Can you describe them?

18 A. Yeah. This -- this person is a -- is a guide for the

19 student in a -- in a really important mentoring relationship.

20 That mentor will -- will help, you know, sort of partner with

21 the student to develop a dissertation project and support them

22 through the process in helping them to -- to learn to be an

23 independent scientist.

24 Offer feedback, provide opportunities for

25 disseminating work through publications and presentations and

Page 308

1 help navigate the -- the challenges that arise inevitably
 2 during the scientific process.
 3 Q. Doctor, are MD-PhD students expected to fulfill any
 4 requirements of their PI's grant?
 5 A. No.
 6 Q. Do -- can MD-PhD students -- how much flexibility, if any,
 7 do the PhD students have in determining when they can perform
 8 research in a lab?
 9 A. Can you --
 10 Q. Sure. In terms of hours -- in terms of hours and time
 11 spent in a lab, how much flexibility do MD-PhD students have?
 12 A. It's -- there's flexibility in that. It's an arrangement
 13 between the mentor and the mentee. There's not a set schedule
 14 or a set number of hours and depending on the relationship
 15 between the mentor and the mentee, it's not -- it's not fixed.
 16 Q. Are -- can -- can a MD-PhD student change labs?
 17 A. Yes.
 18 Q. Okay. And would the MD-PhD student lose his or her
 19 funding if they decided to change labs?
 20 A. No.
 21 Q. Doctor, you previously testified that all -- all of -- I
 22 think you said all of the research performed in the lab was in
 23 furtherance of their own dissertation?
 24 A. Yes.
 25 Q. Is the dissertation considered an academic requirement?

Page 309

1 A. The dissertation is an academic requirement, yes.
 2 Q. And the time is -- withdrawn. Is the time a student
 3 spends in the research lab conducting research towards their
 4 dissertation, is that also an academic requirement?
 5 A. It's -- it's part of a -- a course for which they
 6 register. Am I understanding the question?
 7 Q. You are indeed. And -- and, Doctor, I apologize if these
 8 questions lack a narrative form. But based on the stipulation
 9 that's in front of you, the parties have really narrowed the
 10 issues on which we need your testimony. So this is a -- a -- a
 11 little bit less of a -- of a give and take, if you will.
 12 But it will get you hopefully on and off the stand
 13 quicker. Doctor, if I could call your attention to Paragraph
 14 26 where it says, during their third year, when MD-PhD students
 15 join a lab full time, they receive 75% of their funding from
 16 their PI and the remaining 25% of funding from the graduate
 17 school. Doctor, when -- the reference to joining a lab full-
 18 time in Paragraph 26, is that in pursuit of the student's PhD
 19 degree?
 20 A. Yes.
 21 Q. Doctor, do you -- can you read Paragraph 30, please?
 22 A. When MD-PhD students?
 23 Q. Yes. Yes.
 24 A. When MD-PhD students are pursuing their PhD degree, I --
 25 Year -- Years 3 to 6 and receiving funding similar to that of a

Page 310

1 PhD student in biomedical science and neuroscience, MD-PhD
 2 students are subject to the exact same funding conditions and
 3 procedures as PhD students in biomedical science and
 4 neuroscience.
 5 Q. Doctor, is the funding for MD-PhD students conditioned on
 6 any service requirements?
 7 A. No.
 8 Q. Will an MD-PhD student lose funding if their PI leaves the
 9 graduate school?
 10 A. No.
 11 Q. Is the funding of an MD-PhD student conditioned on the MD
 12 -- on that student's performance in a lab?
 13 A. No.
 14 Q. Doctor, what is the only condition placed on an MD-PhD
 15 student's funding during the PhD portion of their studies?
 16 A. Meeting academic milestones and expectations.
 17 Q. Is a -- the development of a thesis proposal one such
 18 requirement?
 19 A. Yes.
 20 Q. What about a -- a dissertation? Is that -- is that
 21 another requirement?
 22 A. Yes.
 23 Q. Doctor, how would you describe the relationship between
 24 the research performed in the lab and the student's
 25 dissertation subject?

Page 311

1 A. They are the same.
 2 Q. Doctor, when MD-PhD students -- withdrawn. Doctor, four
 3 MD-PhD students who are funded in whole or in part by any
 4 grant, does the school require those students to perform any
 5 services outside of their academic program?
 6 A. No.
 7 Q. Doctor, you mentioned that you currently are a -- are a
 8 PI?
 9 A. Yes.
 10 Q. And you've had a lab, I think you said, since 2015?
 11 A. Yes.
 12 Q. Okay. Have you historically had PhD or MD-PhD students in
 13 your lab?
 14 A. Not historically.
 15 Q. Okay. Do you currently have one?
 16 A. Yes.
 17 Q. Okay. Is that student allowed to take vacation time?
 18 A. Yes.
 19 Q. How much?
 20 A. The graduate school says two weeks a year. And for
 21 specifics, like the mentor-mentee can decide individually on
 22 more depending on the relationship.
 23 Q. Okay. Have you ever denied a request to take the --
 24 request for a student to take additional vacation?
 25 A. Definitely not.

Page 312

1 Q. Have you ever identified a PhD student on any of your
2 grant applications?
3 A. No.
4 Q. Why not?
5 A. They -- the projects are conceived with key personnel who
6 include co-investigators not -- not -- not graduate students.
7 Q. All right. Can you describe the differences between a
8 postdoc and a -- and a PhD or MD-PhD student in -- in a lab?
9 A. Yeah. Post-doctoral fellows generally are hired with the
10 specific goal of accomplishing work proposed on a grant. So
11 they -- they would be included in -- in the budget. So they --
12 they have been included in -- in budgets on my grants. They're
13 -- they're hired with the express goal of contributing to work
14 on the grant based on the training that they -- they have --
15 they bring to -- the expertise that they're bringing based on
16 their prior training.
17 Q. Okay. And the PhD student who's currently in your lab, is
18 -- is that student required to complete any of the requirements
19 associated with your grant?
20 A. No.
21 HEARING OFFICER KUMA: Okay. How much time do you
22 think you need?
23 MS. ROTHGEB: Adding a break in there 15 minutes.
24 Would that work?
25 HEARING OFFICER KUMA: All right. So it's 3:33. So

Page 313

1 come back 3:50.
2 MS. ROTHGEB: Right
3 HEARING OFFICER KUMA: Right. Off record.
4 (Brief Recess at 3:33 p.m./Reconvened at 3:50 p.m.)
5 MS. ROTHGEB: Did Adrian give us a thumbs up?
6 HEARING OFFICER KUMA: Yes. All right.
7 CROSS EXAMINATION
8 BY MS. ROTHGEB:
9 Q. Good afternoon, Dr. Swartz. My name's Nicole Rothgeb. As
10 -- as it may be clear, I'm one of the attorneys for the Union
11 in this matter, do you understand that?
12 A. Mm-hmm.
13 Q. Okay. And just to make sure we're -- we're clear on the
14 record I know Attorney Lupion asked you to slow down at one
15 point, but also if you can remember to keep your answers verbal
16 so the Court Reporter can get those also.
17 A. Yes.
18 Q. Thank you. Dr. Swartz, a document was admitted, Employer
19 Exhibit 10 that I'm going to pull up, which is -- is a template
20 of a -- an admission letter to the MD-PhD program, correct?
21 A. Yes.
22 Q. And this is for the upcoming 23/24 year; is that right?
23 A. Yes.
24 Q. This template generally the same for prior year admission
25 -- matriculating classes?

Page 314

1 A. Generally.
2 Q. The -- the -- the -- what's listed as the annual stipend or
3 tuition, those numbers might change, right?
4 A. Yes.
5 Q. And is -- what's referred to here as annual stipend, is
6 that also sometimes referred to as direct compensation?
7 A. No.
8 Q. It --
9 A. I mean, we call it a stipend. It's -- that's how we --
10 that's how we refer to it. This is the language that we --
11 that we use.
12 Q. Have you seen language in the student handbook that refers
13 to it as direct compensation?
14 A. I'm not familiar with that language, it -- it may be. The
15 -- the language that we use is this.
16 Q. Is the graduate student handbook that's applicable to PhD
17 students also applicable to students in the dual degree program
18 when they're at -- at any point during their time in the dual
19 degree program?
20 A. Yes.
21 Q. During what period of time is it applicable to them?
22 A. During the time that they're in their PhD phase. Let me -
23 - sorry. It's -- it's -- I mean, with respect to the stipend,
24 it's for the duration of their training. Let me say that.
25 Q. The handbook itself, I was asking though. The -- the

Page 315

1 policies in the graduate student handbook, are those applicable
2 to students in the dual degree program as long as -- for the
3 duration of the program?
4 A. Generally, yes.
5 Q. In Employer -- or Sinai Exhibit 5, this -- this template
6 letter, can you see this last sentence that talks about
7 housing, financial aid, and student health requirements?
8 A. Yes.
9 Q. Do those student health requirements refer to among any
10 other things requirement that entering students take -- submit
11 to a drug screening test?
12 A. I believe so.
13 Q. The -- you -- you were asked some questions on direct Dr.
14 Swartz about the proportion of research conducted by the dual
15 degree students during their PhD portion and -- and the
16 relation to the research they do for their own dissertation.
17 And you -- you testified that all of it is -- is the same
18 research, right?
19 MR. LUPION: Objection, mischaracterizes.
20 MS. ROTHGEB: All right.
21 MR. LUPION: I -- I believe she said all of the
22 research is in furtherance of the dissertation and not -- well,
23 I'll -- I'll let her testify.
24 BY MS. ROTHGEB:
25 Q. I -- I think you testified that all of the research is in

Page 316

1 the -- all of -- in proportional terms, all of it is in
 2 relation to their dissertation. And with respect to the
 3 dissertation research and its relation to research in the lab,
 4 they're one and the same, right? Was that your testimony on
 5 direct?
 6 A. I don't know that I understand exactly the question.
 7 Q. Well, let me ask it this way, Dr. Swartz. In your various
 8 roles because I know the -- the -- the director of the -- or
 9 the senior associate position, you've only held since 2022, but
 10 you said as -- prior to that you were associate director and --
 11 and assistant director. So in those positions, do dual degree
 12 program students come to you with concerns they may have about
 13 issues in their labs?
 14 A. They may. Sure.
 15 Q. And in any of your time in -- in those director type
 16 positions at various levels of the dual degree program, have PH
 17 -- have the dual degree programs ever -- a student in the dual
 18 degree program ever come to you and raised concern that they
 19 were being asked to do resource -- research beyond the scope of
 20 their own dissertation?
 21 A. It shouldn't -- it shouldn't be the case that a student is
 22 doing research beyond the scope of their dissertation. The --
 23 the idea is that the research that they're doing is -- is like
 24 part of -- is their -- is their dissertation. So that -- that
 25 shouldn't -- that shouldn't be happening. I'm not -- I'm not

Page 317

1 recalling like specific incidents where that has happened, but
 2 that shouldn't be happening.
 3 Q. If it was happening, would those -- would PhD students
 4 come to you or would there -- is there some other outlet for
 5 them to go to with such concerns?
 6 A. It would go through student affairs in the -- in the PhD -
 7 - through the PhD program, through a similar process.
 8 Q. And when you testified that the research that dual degree
 9 students are doing in the lab is generally the same as the
 10 research they're doing for the dissertation, is that your -- is
 11 that your opinion as to what should be happening?
 12 MR. LUPION: Objection. I don't -- I don't think she
 13 -- I'll object to the extent that it characterizes her
 14 testimony as opinion.
 15 MS. ROTHGEB: Well, I'm asking her opinion, I guess.
 16 Let me rephrase it.
 17 HEARING OFFICER KUMA: Rephrase the question.
 18 BY MS. ROTHGEB:
 19 Q. Dr. Schwartz, is -- is -- in your -- in your capacity as -
 20 - in your various capacities and different levels of director
 21 of the -- the dual program, do you visit every lab? Are you
 22 aware of what's going on in every lab?
 23 A. I -- I don't visit every lab. I -- I am -- I do my best
 24 to support all of our students, and I hope that they know that
 25 they can come to me and our team for anything that they need.

Page 318

1 But no, I don't -- I don't -- I -- I'm not -- I'm not been
 2 physically present in every lab and I'm not in every lab.
 3 Q. And is it fair to say you personally don't know what every
 4 -- what research every -- every dual degree student is working
 5 on at any given moment?
 6 A. At any given moment? That's correct. We have, you know,
 7 regular check-ins and there are annual mechanisms for students
 8 to describe the work that they're doing. And the -- the goal
 9 of the PhD, the academic requirements, the research that
 10 they're doing is in pursuit of their dissertation work. So all
 11 of the graduate activities are in furtherance of that academic
 12 program.
 13 Q. You were asked some questions on direct about dual degree
 14 students potentially changing labs. Does that occur?
 15 A. Mm-Hmm.
 16 Q. I'm sorry. Just --
 17 A. I'm sorry. Yes. Yes.
 18 Q. And does that occur after their -- after their lab
 19 rotations are completed when they're -- they may change
 20 permanent labs or full-time labs?
 21 A. Right. If they hadn't -- if they hadn't yet completed
 22 their rotations, then wouldn't be called changing labs.
 23 Q. Is -- for the dual degree program, is it the same
 24 requirement that a lab must have two years of funding in order
 25 to agree to take on a PhD student who's part of the dual degree

Page 319

1 program?
 2 A. Yes. Same as the -- for the PhD program.
 3 Q. So for some reason, a dual degree student in the PhD
 4 portion once they were -- had already joined a lab for some
 5 reason did change a lab, they could only do so if that new lab
 6 had funding for them, correct?
 7 A. Yes. Same -- same expectations as for any mentor.
 8 Q. Dr. Schwartz, does the research conducted by the -- the
 9 dual degree students who are doing their PhD portion does the
 10 research itself that they conduct contribute to the overall
 11 research objectives of the lab they're -- they're part of?
 12 A. It's part of a -- a scientific program. So everyone is
 13 doing -- is contributing new knowledge that is in pursuit of
 14 these general large sweeping scientific questions.
 15 Q. And does it also -- the research conducted by the PhDs
 16 including in the dual degree program, does that research
 17 contribute to published works that come out of the labs?
 18 A. Usually the -- yes. The publications are -- are those of
 19 the student that come out as part of their -- their
 20 dissertation body of work.
 21 Q. But even outside of their own dissertation, does work that
 22 they -- strike that. Does research that they do in the lab
 23 ever contribute to publications by, say, the PI or others
 24 working in the lab?
 25 A. Sure. That's part -- that's part of the -- the process

Page 320

1 but the student should be author on that paper. It's not --
 2 it's not that the student would be contributing to a work
 3 that's not their own paper.
 4 Q. A paper may have more than one author, right?
 5 A. Of course. Yes.
 6 Q. Do the students in the dual degree program have the same
 7 opportunities to serve as TAs or tutors?
 8 A. The opportunities would be the same generally as for the
 9 PhD students and they're not required for the program. They're
 10 all optional things that students might seek to pursue
 11 independent of their dissertation work.
 12 Q. And students who do pursue those instructional
 13 opportunities they're -- they're paid for that -- for those
 14 instructional services they provide?
 15 A. When you say instructional, what do you mean?
 16 Q. When a -- a student in the dual degree program serves as a
 17 TA, is she -- is he or she paid?
 18 A. Yes.
 19 Q. How about as a tutor, is he or she paid?
 20 A. Yes.
 21 MS. ROTHGEB: If I could just have a quick moment.
 22 We don't need to leave, but just a moment off the record.
 23 HEARING OFFICER KUMA: Okay. Off the record.
 24 (Brief Recess at 4:05 p.m./Reconvened at 4:08 p.m.)
 25 COURT REPORTER: On the record.

Page 321

1 MS. ROTHGEB: I have no further questions for Dr.
 2 Swartz.
 3 HEARING OFFICER KUMA: Hold on. Are we on the
 4 record?
 5 MS. ROTHGEB: Oh, sorry.
 6 HEARING OFFICER KUMA: Okay.
 7 MS. ROTHGEB: Did you get that Adrian? No further
 8 questions for Dr. Swartz.
 9 HEARING OFFICER KUMA: Does the Employer have any
 10 follow up?
 11 MR. LUPION: No redirect.
 12 HEARING OFFICER KUMA: Okay. All right. Dr. Swartz,
 13 you've been released and there's no further questions for you
 14 at this current time. I ask that you state be readily
 15 available, readily available, just in case we need to call you
 16 back. If you are called back, we'll provide the Employer with
 17 a date and time to have you available, okay? Right. Have a
 18 good day.
 19 MR. LUPION: Thank you, Talia.
 20 THE WITNESS: Thank you.
 21 MR. LUPION: Thank you.
 22 HEARING OFFICER KUMA: All right. Are you ready to
 23 call your next witness?
 24 MR. LUPION: We are. I don't -- I don't know if --
 25 if he's available or if he's online or available. I didn't

Page 322

1 anticipate that we'd get this far but -- but we have.
 2 MS. ROTHGEB: I also don't know if Tom's raising his
 3 hand because there's something here. If -- he's just unmute.
 4 MR. MEIKLEJOHN: No. I -- I just wanted -- I just
 5 wanted to be unmuted now that the witness was -- was done. I
 6 know that Avi would like me to shut up.
 7 MS. ROTHGEB: Do we want to go off the record for a
 8 moment?
 9 HEARING OFFICER KUMA: Do you want to check on your
 10 witness?
 11 MR. LUPION: Yeah. Well, go off the record and --
 12 HEARING OFFICER KUMA: Right. So go off the record
 13 and we'll find out about your witness.
 14 (Brief Recess at 4:10 p.m./Reconvened at 4:22 p.m.)
 15 HEARING OFFICER KUMA: All right. Mr. Russo, can you
 16 raise your right hand?
 17 Whereupon,
 18 SCOTT RUSSO,
 19 was called as a witness having been previously duly sworn, was
 20 examined and testified as follows:
 21 HEARING OFFICER KUMA: Right. Please put your hand
 22 down and state your name and spell it for the record.
 23 THE WITNESS: Scott Russo, S-C-O-T-T R-U-S-S-O.
 24 HEARING OFFICER KUMA: Okay. Employer, you may
 25 proceed.

Page 323

1 MR. LUPION: Thank you.
 2 DIRECT EXAMINATION
 3 BY MR. LUPION:
 4 Q. Good afternoon, Dr. Russo. Are you currently employed?
 5 A. Yes.
 6 Q. And by whom?
 7 A. Mount Sinai.
 8 Q. And specifically what entity at Mount Sinai?
 9 A. The school of Medicine -- the Icahn School of Medicine at
 10 Mount Sinai.
 11 Q. Okay. And can you tell us about your educational
 12 background, Doctor?
 13 A. Sure. I have a PhD in psychology. I did postdoctoral
 14 training at UT Southwestern Medical Center and then joined here
 15 in 2008.
 16 Q. And what did -- what is your current role?
 17 A. I'm -- several roles with respect to the medical/graduate
 18 school. I'm a professor of neuroscience. I also lead the
 19 Brain and Body Research Center and the Affective Neuroscience
 20 Center.
 21 Q. Okay. Can you briefly describe your duties as a professor
 22 in the Department of Neuroscience?
 23 A. Sure. I'm expected to mentor students. I'm expected to
 24 teach and the -- the large percentage of my effort goes towards
 25 maintaining and conducting a research portfolio.

Page 324

1 Q. Okay. And how long have you been a professor at the Icahn
2 School of Medicine?
3 A. I started in 2008, but my independent laboratory did not
4 open until the summer of 2009.
5 Q. Okay. And are you a PI of that --
6 A. Yeah.
7 Q. -- of -- of the lab?
8 A. So in 2008, I started as an assistant professor, but then
9 in 2009 I became principal and investigator of -- of the
10 laboratory. Yeah.
11 Q. Okay. And what type of research is performed in your lab?
12 A. We largely do research on stress and its impacts on the
13 body, on the brain, and the body mostly in the context of -- of
14 -- of psychiatric disorders.
15 Q. Okay. Do you currently have any PhD students in your lab?
16 A. I have two.
17 Q. Okay. Do you have any post-docs?
18 A. Yes.
19 Q. How many?
20 A. Seven.
21 Q. Okay. Now, prior to joining your lab, did those PhD
22 students rotate through your lab?
23 A. Yes. They both did.
24 Q. And how long did those students spend in -- in the lab
25 rotation?

Page 325

1 A. It was about six weeks, six to eight weeks total each.
2 Q. Doctor, why did the PhD students rotate through your labs
3 prior -- prior to joining?
4 A. You know --
5 MR. MEIKLEJOHN: Objection. Question calls for
6 conclusion regarding the mindset or motivation of people other
7 than the witness.
8 MR. LUPION: Let me reframe to address Counsel's
9 concern.
10 BY MR. LUPION:
11 Q. Doctor, what's the purpose of the lab rotation process?
12 A. So the -- the program requires that students do at least
13 one rotation through a lab, but recommend two to three
14 rotations so that they can get a sense of what the expertise
15 are of the -- of the laboratories here, and decide whether or
16 not it's the right fit, both personally, professionally,
17 intellectually for them to conduct their PhD thesis studies.
18 Q. And what -- why is -- why is it -- why does it matter that
19 the student have interest in the subject matter of the research
20 that's conducted in the lab?
21 A. You know, I -- I mean, we like to provide our students
22 with the opportunity to really mold their -- their education.
23 And part of that requires that they have a good understanding
24 of the landscape, of the types of works that -- work that, for
25 example, we are expert in. You know, you -- you wouldn't join

Page 326

1 my lab to study cancer biology because that's not our area of
2 specialty. And I think the rotations give the student an under
3 -- an -- an opportunity to learn about those different types of
4 situations in labs.
5 Q. As a -- as a PI, do you also assess whether a PhD student
6 would be a good fit in your lab?
7 A. I do. Yeah.
8 Q. And what -- what things do you look at in making that
9 determination?
10 A. You know, we have a very close-knit group. Everybody
11 works very closely with one another. They help each other out.
12 And I look for people that are, you know, good -- good
13 citizens, people that are going to carry that mentality on,
14 that are going to be kind to others, work well with others.
15 You know, all of our students are very smart coming in. So I'm
16 -- I'm -- I'm less inclined or worried about their level of
17 intellect. I'm much more worried about more personal cultural
18 things and how they fit and integrate well within the larger
19 group.
20 Q. Do you consider the student's areas of interest in
21 determining whether they would be a fit in your lab?
22 A. Not so much. I mean, and -- and the reason I say that is
23 that, you know, students oftentimes apply to Mount Sinai
24 because they want to work with a -- a particular investigator.
25 And so all of the students that are rotating in my lab have a

Page 327

1 general interest in stress, brain, body health, et cetera, all
2 the things that we're known for and experts in. And so the --
3 the scientific synergy is not always as big of a concern.
4 Q. Okay. During the rotations, what type of research
5 activities are PhD students engaging in?
6 A. Not a whole lot, to be honest with you. You know, the --
7 the six-week rotation is not a long time. And -- and again,
8 it's partly why what I'm looking for during that six weeks is -
9 - is synergy from a personal perspective. You know, looking
10 for signs that the -- that -- that the individual -- that the
11 student will -- will flourish in this environment because they
12 -- they -- they align well with the kind of culture of the lab.
13 But six weeks, you know, the students are not coming
14 in with skill sets that they can go off and do research. And
15 so a six-week training period, there's not a whole lot we can
16 have them do. So what I suggest and recommend is that they
17 spend time interacting with and observing the research of all
18 of the members of my lab to get a general sense of what type of
19 research projects they enjoy and what types of research
20 projects they might like to pursue were they to join my lab.
21 But otherwise, there's not much actual research that
22 can be done in six weeks. Most of our experiments take a lot
23 longer than six weeks to complete.
24 Q. So are students expected to generate data during the
25 rotation?

Page 328

1 A. No.

2 Q. Now, at some point after -- during or after the rotation,

3 if there is mutual interest do you offer a -- a spot in your

4 lab?

5 A. Yes.

6 Q. And can the PhD student decline -- decline your offer?

7 A. Oh, yes. And they have.

8 Q. And -- and why? What are -- under what circumstances

9 would a -- would a PhD student decline an offer that you're

10 aware of?

11 A. So in all the cases that I'm aware of within my own

12 purview, they felt that there was another lab that was either

13 scientifically or intellectually or personally more aligned

14 with them and -- and they joined those groups instead.

15 Q. Would Mount Sinai ever assign a PhD student to your lab?

16 A. No.

17 Q. Have you ever had a PhD student in your lab who was not

18 interested in the research performed in the lab?

19 A. No. They don't rotate if they're not -- you know, they

20 kind of generally know what the labs do and what they do well

21 and -- and if they weren't interested in the kind of work that

22 they do, they -- they typically won't rotate in my lab.

23 Q. Have -- do you know whether PhD students can switch labs?

24 A. Yes. They can.

25 Q. Okay. And have you ever taken a PhD student -- well, let

Page 329

1 me ask the question. Are -- do you have personal experience

2 with a PhD student switching a lab, either out of your lab or

3 into your lab?

4 A. So I've never had a PhD student switch out of my lab or

5 into my lab technically. But I have been part of thesis

6 committees of students that have had to change labs and was

7 there as -- as you know, support and -- and -- and help them

8 along that process. But never technically had a student leave

9 my lab until they graduated.

10 Q. For what reasons would a -- would a student change labs?

11 A. You know, sometimes the -- the relationship's hours and

12 they -- they aren't getting along well enough with their labs

13 and feel that they could do better in another environment.

14 Sometimes, the lab PI leaves.

15 We've had that happen several times, and if the PI

16 leaves and moves, for example, to China and we have to find an

17 -- you know, and the student has to find a new placement,

18 oftentimes they will switch labs at that point. Or sometimes

19 the faculty member will come in and serve as a mentor for that

20 student to help them.

21 That's more often the case, is that the -- a mentor

22 steps in to help them complete the project that they had

23 already started with the previous mentor if they moved.

24 Q. When -- when a -- a student changes labs and is no longer

25 paired with their PI, who's responsible for the students'

Page 330

1 funding?

2 A. So the -- the graduate school typically jumps in with --

3 with bridge funding, so to speak, to get them through that

4 period. But the -- but if they were to formally join another

5 lab, the PI in that other lab would be responsible for their

6 tuition fees and -- and stipend. Excuse me.

7 Q. Okay. So Doctor, you -- you just described the selection

8 or the -- the -- the process by which a student selects his or

9 her -- a PhD student selects his or her lab. Can you compare

10 that process to the process for how postdocs come to serve in a

11 laboratory?

12 A. Sure. I've hired postdocs in two ways, and I think this

13 is probably reflective of the broader community of PIs and how

14 they hire. More -- more often than not, I don't advertise for

15 postdoctoral positions. Based on reputation, somebody that's

16 nearing the completion of their PhD will reach out to me,

17 typically via email or LinkedIn to see if I have any positions

18 open for postdoctoral fellows.

19 If I do, I -- I will set up an -- an interview and --

20 to decide whether or not the person's scientific expertise is a

21 good fit for my group. And if the -- and if the answer is yes,

22 and if they're approved by my other lab mates from a personal

23 perspective, I will make them an offer. The second way that

24 I've hired, and this is less frequent, is to actively

25 advertise.

Page 331

1 I advertise in several venues from scientific

2 publishing journals like Nature and Science to societies like

3 the Society for Neuroscience. And I've hired a couple of

4 candidates through that. That's through you know, the more

5 traditional route of advertising for a position, and then

6 having them come in and interview. But once they've reached

7 out to me from the advertisement, the process afterwards is

8 identical.

9 Q. Doctor, what's the purpose of a PhD student declaring a

10 lab?

11 A. So they declare a lab to complete their doctoral

12 dissertation. So they need a you know, you -- they essentially

13 once they've chosen a laboratory fit and they join that lab,

14 the goal is then to mentor the student to allow them to learn

15 how to, for example, ask a scientific question, formulate

16 specific aims, formulate a project, a goal.

17 And then go through the process of completing the

18 research, learning how to do the techniques writing scientific

19 manuscripts, learning how to do statistical analysis. All of

20 these are really critical functions of the laboratory PI and

21 any participating mentors within the group that help the

22 student to become an independent scientist.

23 Q. Doctor, can you explain and I'm using this word,

24 unscientifically, the evolution of a PhD student from the time

25 that they declare your -- your lab -- select your lab to the

Page 332

1 time that they complete their dissertation?
 2 A. Yeah. So in our program, we have about a year's worth of
 3 coursework that during that time is when the -- the -- the
 4 rotations occur. By the summer of that first year, most of our
 5 students have -- have declared a lab that they're going to
 6 join.
 7 And so if they're formally joining my lab, I think in
 8 July of that first year, I will take over a percentage of their
 9 stipend. I think it's 75%, where the graduate school continues
 10 to cover the additional 25%. During the preceding year, the
 11 student will complete any additional coursework, you know,
 12 formal or otherwise.
 13 They continue to do training in -- in journal clubs
 14 and other work-in-progress related things that they don't
 15 necessarily get credit for, but that are part of their
 16 intellectual development and training where they're expected to
 17 present and -- and -- and -- and -- and -- and interact with other
 18 scientists. During that year is also the time in which I work
 19 very closely with them to help them formulate a thesis project.
 20 Usually the way that that works is that following the
 21 rotation, they've -- they've had a chance to really see all of
 22 what we can do in the lab. And it's usually during that post-
 23 rotation second-year phase where they're thinking about the
 24 types of scientific questions that they want to ask and address
 25 in their thesis work. And so that process occurs during the

Page 333

1 entire second year of their training.
 2 And it culminates in a -- a document and a thesis
 3 proposal examination in which the student submits a draft of a
 4 research grant, which is the proposal itself which I edit and
 5 help to -- to prepare it for the -- the committee. They then
 6 present that work and the committee that they present it to,
 7 which is made up of other faculty -- I'm on the committee, but
 8 not as a voting member. I'm -- I'm on as a -- as a mentor, so
 9 I have to just keep my mouth shut and sit in the corner.
 10 I'm there more for emotional support than anything.
 11 And they present their -- their dissertation proposal. If --
 12 if it's accepted by the committee, then they move on to
 13 candidacy. And from that point on they're working in large
 14 part on their -- their dissertation work. There -- there may
 15 be a few remaining course credits that they're taking. For
 16 example, I think they have to take a journal club each year.
 17 So that goes through the remainder of their PhD
 18 thesis. You know, and -- and -- and other kind of non-academic
 19 related things. We have several -- we have a lot of students
 20 that are very much interested in community engagement. And so
 21 they -- they also are involved in -- in -- in those, you know,
 22 several types of community engagement programs. But in large
 23 part, they're doing their dissertation work in my laboratory
 24 from the end of their second year all the way through until the
 25 time that they graduate.

Page 334

1 Q. Doctor, how does the role of a PhD student in your lab
 2 differ from that of a research assistant?
 3 A. So research assistants are -- first of all, they're --
 4 they're -- they're not obtaining a degree. I think that's the
 5 biggest distinction. A research assistant or a research
 6 associate or, you know, there's -- there's several different
 7 titles that I think all kind of align within the same sphere.
 8 They're being hired to do a job, you know, and it's not a
 9 terminal degree-granting position.
 10 And they get placed on projects. There is no
 11 formulation of a dissertation, of a thesis project. They don't
 12 work towards finalizing a thesis goal, but rather they are a
 13 set of -- I -- I view them as -- as supporting actors in
 14 several large-scale projects, typically run by postdocs or
 15 junior faculty that work -- that are within my group, for
 16 example.
 17 Q. And how would you compare the role of a PhD student in
 18 your lab with a postdoc?
 19 A. I mean, I would say it's similar to what I just described
 20 in the sense that, you know, they're -- well, I mean, I -- I've
 21 oftentimes had research assistants work closely with a PhD
 22 student and with a postdoc as well.
 23 But in terms of the differences between a PhD student
 24 and a postdoc, either they're not taking course credit.
 25 They're not getting a terminal degree again. But the major

Page 335

1 distinction is when I hire a postdoc, I usually hire them for a
 2 skillset and a technique that they learned as a PhD student.
 3 And so the expectation is -- is that those individuals will
 4 come in and bring those skillsets to my group with the hope
 5 that they will also allow me to bring in additional grant
 6 money, and that they will work on specific projects both for
 7 their own independent careers.
 8 So these are projects that they may formulate
 9 themselves, but I also assign projects to postdocs,
 10 particularly around several large-scale programs that the --
 11 that the group is interested in, that no single individual
 12 owns. But I put postdocs on those grants to keep them moving.
 13 Q. Doctor, how would you say the presence of PhD students in
 14 your lab affects the productivity of the work that you are
 15 tasked with doing by your various grants?
 16 A. You know, that's an interesting question. I mean,
 17 typically -- so when I write a grant, for example, the way that
 18 I write a grant is to formulate a series of ideas. And then I
 19 add personnel -- the personnel that I add to the grant -- to
 20 the budget that they support are postdocs. I don't typically
 21 assign graduate students to that work with the -- with the
 22 rationale that, you know, the -- the work is really being led
 23 by the postdoc and the instructor for the grant.
 24 And that they're the people that when I submit to an
 25 NIH study section, they have a defined skill set that I need in

Page 336

1 order for that grant to get submitted. So, you know, there's
 2 been times where I have had zero PhD students in my lab, and we
 3 fully function as an autonomous unit with only postdocs. I
 4 like training students. I think it's an important part of the
 5 research infrastructure. But I could function fully on a non-
 6 PhD student structure with only postdocs if -- if need be.
 7 Q. Doctor --
 8 A. And I've never had a period where I did -- I've -- I've --
 9 I've had periods where I didn't have PhD trainees for years in
 10 the lab. I've never had the converse where I didn't have
 11 postdoctoral fellows in the lab.
 12 Q. Doctor, can you describe personally your role as a mentor
 13 for the PhD students in your lab?
 14 A. Yeah. So I -- first and foremost, I think, you know, our
 15 job is to train the best of the best. So, you know, that means
 16 that it's -- it's my responsibility to make sure that there is
 17 a good learning environment, that there's an appropriate
 18 research infrastructure, that there are intellectual resources
 19 largely in the form of postdoctoral fellows that can help in
 20 day-to-day training, and techniques, and mentorship.
 21 And then from a more direct perspective, I mean, it's
 22 really my responsibility to help guide the student through the
 23 whole process. From, you know, learning how to formulate their
 24 -- their question and writing, developing specific aims to
 25 address that, and then helping them work through the design of

Page 337

1 experiments that will allow them to answer those questions.
 2 On the back end of things, when the research is done,
 3 it needs to be published. And so it's really my role to train
 4 students on the art of scientific writing and publishing. I
 5 serve as the correspondence on all research manuscripts that
 6 come out of the lab. And so at the end of the day the validity
 7 of the research is completely under -- is -- is completely my
 8 responsibility and so that's in large part the -- the -- the
 9 roles that I have.
 10 But also too, there's -- you know, I think it's
 11 really important that students know how to obtain funding on
 12 their own. So I also am responsible for helping them to write
 13 their own individual grants that comes in the form of a -- of a
 14 -- of an individual NIH funded fellowship. And it's kind of a
 15 prequel to -- to the type of grant writing that they would
 16 experience as a PI. It's a great training opportunity.
 17 Q. Doctor, do you impose any -- withdrawn. Do you have any -
 18 - any requirements with regard to the amount of time PhD
 19 students are required to spend in your lab?
 20 A. You mean during the day or in terms of the -- the -- the
 21 length of time in the program in total?
 22 Q. No. During -- during the day, the week, the month.
 23 A. Okay.
 24 Q. Yeah.
 25 A. Like, you got to be here for six years, otherwise you

Page 338

1 can't get a PhD. That's not my way. No, I don't. I never
 2 have. I -- I've never had to. People are self-motivated.
 3 They do what they want to do. I don't have hours. They don't
 4 clock in. They take time off when they need to. And that's --
 5 it's a very loose, flexible strategy. But I've found over the
 6 years that I don't have to.
 7 People -- PhD students are highly motivated
 8 individuals. They want to do -- they -- they want to do the
 9 science, and they're here doing it without that rule.
 10 Q. Do -- do your students have to request time off before
 11 they take vacation?
 12 A. In the 15 years that I've been running a lab, I don't
 13 think anybody's ever asked me to -- to take a weekend off.
 14 Like they've never -- they've never approached me with that
 15 question. I'm not sure.
 16 I can't speak for all faculty, I think, but my -- my
 17 strategy has always been to give people room so that they can
 18 kind of be independent and -- and -- and develop into
 19 independent self-motivated researchers. Like now, at this
 20 point in my career, if I didn't -- if I wasn't self-motivated,
 21 I just would fail, right?
 22 Q. Have you ever limited the amount of vacation that a
 23 student can take?
 24 A. No.
 25 Q. And do your -- in your experience do your students take

Page 339

1 more than two weeks of vacation?
 2 A. Oh, definitely. Yeah.
 3 Q. So let me -- do -- in your experience, do students take
 4 more than two weeks of vacation each year?
 5 A. In my lab, I can say that without a doubt.
 6 Q. Okay. Doctor, are you familiar with the process for PhD
 7 students to develop their thesis lab proposals?
 8 A. I am.
 9 Q. And can you describe your role in that -- in that process?
 10 A. Yeah. I'm -- what's the word that I'm looking for? I
 11 help guide the process. You know, typically the -- the -- the
 12 way that it works in my lab, I mean, in fact, I just went
 13 through this with both of my students because they're both in
 14 the second year and we -- one has finished their proposal and
 15 the other one is just getting ready to submit it.
 16 But we -- we meet several times over the course of --
 17 of the -- the past 12 months based on -- on the student's
 18 interest. And I'm talking about the question that they want to
 19 answer. We discuss how that might happen and what types of
 20 research techniques they'll need to learn in order to do it. I
 21 usually help in formulating those relationships with folks. So
 22 if somebody needs -- if a student needs to learn a specific
 23 technique to do their research, I'll usually help them to find
 24 access to an expert in the area, whether if it's someone in my
 25 lab or outside of my lab.

Page 340

1 I then have the student write up a specific -- a
 2 specific AIMS page. And it's really just like a basic
 3 introduction of what their question is with specific types of
 4 experiments that they would do. I -- I -- then I edit
 5 everything with word track changes so that they can accept or
 6 reject it with whether they agree with me or not. And then
 7 once we have that document, we send it to their thesis
 8 committee for their final review. And the thesis committee is
 9 really the committee that approves or rejects the proposal.
 10 Q. Doctor, you testified earlier that the -- you perform
 11 research in your lab related to how stress impacts our bodies
 12 and brains. Is that correct?
 13 A. Yeah.
 14 Q. Do the PhD students in your lab have to develop their
 15 thesis around -- around that topic?
 16 A. No, definitely not. You know, like I said before,
 17 students' kind of know what we're good -- what we're good at,
 18 and so the students that come to rotate through my lab
 19 oftentimes have an interest in something that's aligned with
 20 what we're good at. But there's been several times over the
 21 years where I've had just, you know, I've had a student --
 22 really curious student that had a really cool question about
 23 something that we were just not studying at all.
 24 And they developed it and -- and finished the work.
 25 And we were -- luckily, I -- I was able to support their

Page 341

1 research with -- with some philanthropy money that I had
 2 available to me. So it was -- it was a nice -- you know, it
 3 doesn't always happen like that. But there are definitely
 4 cases where the student is allowed to -- to build a program or
 5 that they -- they want to build a program that's something
 6 completely out of our wheelhouse.
 7 Q. Doctor, how beholden are the student's research topic to
 8 any terms and conditions of grants that you receive?
 9 A. They're really not, I mean, in law -- like -- so the way
 10 that -- and so first and foremost, I don't list graduate
 11 students on my grant line items for personnel, for example,
 12 because, you know, you never know at what level they're going
 13 to be involved. You know, you really have to give them the
 14 space to do their doctoral thesis dissertations rather than
 15 swamping them on your -- your -- your grants. I -- I -- now, I
 16 can't speak for all faculty, you know, and -- and -- and -- and
 17 I'm sure that there are faculty that do list their students on
 18 as line items.
 19 But in large part the way that I would, for example,
 20 fund a PhD student coming through the lab is, I have -- I have
 21 an existing NIH grant. And if I -- if I need to apply funds
 22 for that onto a PhD student thesis exam, there's two or three --
 23 - there's several different ways that I can do that. One is
 24 that I can reach out to my program and say, hey, you know, we --
 25 - we want to -- we want to get a supplement onto this grant for

Page 342

1 X, Y, or Z salary.
 2 They're called diversity supplements. And so I've
 3 gotten several of those where, you know, NIH is flexible in
 4 allowing me to write a diversity supplement for a PhD
 5 candidate. Or, you know, there's ways of kind of saying that
 6 we are going to -- the research has taken us into this new
 7 direction and we would like to support this student on this
 8 particular grant.
 9 But I -- I tend to -- I write grants without the
 10 student because I think that it's hard to expect a student to
 11 be there all the time to complete the work like that. So I --
 12 I've found over the years that it's better to put instructors,
 13 junior faculty, and postdocs on my -- on my ROIs and my related
 14 grants.
 15 Q. Doctor, how much of a PhD student's research is self-
 16 directed versus you assigning them tasks as -- as their PI?
 17 A. All of it. I don't assign tasks unless it relates to
 18 their thesis and I give them feedback on what they should be
 19 doing. It's more of the -- you know, it -- it's -- it's weird.
 20 And you mentioned this as well, the difference between a
 21 research assistant, for example, and a PhD student. That is
 22 one of the key differences, right?
 23 I mean, you know, with a PhD student, you're really
 24 working towards answering a question that they're interested
 25 in, a research assistant, you're assigning tasks to, you know,

Page 343

1 you're -- you're -- you're having them -- judiciary, you're
 2 having them, you know, stock items on your cabinetry. That is
 3 not the job of a PhD student.
 4 Q. What is the -- withdrawn. How much time in -- when --
 5 when the -- PhD student is in the lab?
 6 A. Yes.
 7 Q. How much -- how much of that research time is spent
 8 towards their own dissertation?
 9 A. I would say 100 percent apart from some of the
 10 extracurriculars that I mentioned on the front end. And I
 11 can't really put a number of value on that, because I think
 12 different students engage in different types of extracurricular
 13 activities.
 14 Q. Doctor, are you familiar with the publication process for
 15 PhD students?
 16 A. I am.
 17 Q. And what does it mean -- what's the significance of a PhD
 18 student publishing their research?
 19 A. It's -- you know, for everybody that's in the scientific
 20 enterprise, our currency -- because we're nonprofit and we're
 21 not making money, our currency is our research publications.
 22 So our value is our research publications. Just like if I were
 23 to try to leverage my position at Mount Sinai to get a new
 24 position elsewhere, people would be looking at my research
 25 publications and as a way to evaluate me as a scientist.

Page 344

1 It's the same for a PhD student. Depending upon what
 2 they want to do after they get a degree, their -- their
 3 research publications are a way for their potential future
 4 employers to evaluate how successful they were as a PhD
 5 student.
 6 Q. Are PhD students required to publish as a condition for
 7 obtaining PhD degree?
 8 A. No.
 9 Q. And -- and do you know why that is?
 10 A. So there's several, you know, there's several conditions,
 11 there's several reasons why a student would -- would not
 12 publish prior to their defense. I think part of it is that,
 13 you know, these things take a long time.
 14 They're not predictable. I've had papers that did
 15 the work. It took three or four years to do the work, and then
 16 it took two more years to get reviewers to sign off on it and
 17 to get the journal to publish it. And so it just wouldn't be
 18 fair for me to hold a student back because a journal reviewer
 19 is -- is being challenging. So the -- what we've done, and
 20 this is a graduate school requirement, I believe, is that we
 21 state that they should have a body of work that is publishable,
 22 but it doesn't necessarily have to be published for them to
 23 defend.
 24 I -- I, you know, a lot of times -- so in order for --
 25 -- for PhD students to get positions after their -- their

Page 345

1 graduation, they usually go on the job market in the last year.
 2 And so during that last year of their PhD while they're
 3 finishing up, they're maybe writing up their dissertation.
 4 They're also traveling around quite a bit, interviewing for
 5 potential postdocs or other related jobs. And, you know, there
 6 might be a time-sensitive restriction on it. Your paper's in
 7 review.
 8 It might be in review for another year. Your postdoc
 9 -- your potential boss just hired you a new postdoc or just
 10 offered you a postdoctoral position. They want you to start
 11 January, 1. So under -- under those circumstances, it wouldn't
 12 be fair to hold back a PhD student from getting a position.
 13 And we -- we let them go under those, you know, they get their
 14 PhD and we're done.
 15 MR. MEIKLEJOHN: Can I just -- can we just verify
 16 that we still have the court reporter here? I -- I just
 17 noticed that he clicked off.
 18 MR. LUPION: And set the screen off.
 19 MR. MEIKLEJOHN: Well, he's not -- he's not showing
 20 up at -- okay. I'm sorry, Adrian. I just -- I -- I -- I -- I
 21 would hate for you to miss any of this.
 22 HEARING OFFICER KUMA: All right. Can we go off the
 23 record for a sec?
 24 MR. LUPION: Yes.
 25 HEARING OFFICER KUMA: Off the record.

Page 346

1 (Brief Recess at 5:00 p.m./Reconvened at 5:01 p.m.)
 2 HEARING OFFICER KUMA: Adrian, we're back on the
 3 record.
 4 BY MR. LUPION:
 5 Q. Doctor, can a student lose funding if they -- if he or she
 6 doesn't -- doesn't publish?
 7 A. No.
 8 Q. Can a student be placed on -- can a student be disciplined
 9 for not -- for not publishing?
 10 A. Not that I know of. I mean, I can speak for myself. I've
 11 never -- I've never seen a student disciplined for not
 12 publishing.
 13 Q. Other -- other than the adverse potential career
 14 opportunities that you mentioned a few minutes ago, are there
 15 any other consequences for not -- for not publishing?
 16 A. No.
 17 Q. Doctor, if a student did publish, would you be -- would
 18 you be a co-author on -- on their publication?
 19 A. Yes.
 20 Q. And why is that?
 21 A. So the -- the journal actually sets a -- first of all, I'm
 22 -- I'm a co-author on everything. It comes out of my lab.
 23 Because I -- I have both an intellectual and -- and scientific
 24 contribution to all the projects. But there are very specific
 25 requirements for each journal that we publish in as to what are

Page 347

1 the contributions that would warrant authorship on a paper.
 2 So, for example, you know, if you've -- if you helped in
 3 writing conceiving the idea, if you helped in writing the
 4 manuscript, if you helped doing the statistical analysis, all
 5 of these are part of the mentee mentorship relationship. And
 6 so for each trainee by journal standards, all PIs have -- have
 7 hit that metric of being, you know, okay for authorship.
 8 Q. Doctor, I think you mentioned earlier that students'
 9 dissertation must be based on -- on new knowledge. Is that --
 10 is that right?
 11 A. Yes.
 12 Q. Okay. And that's a requirement for a PhD degree?
 13 A. You know, it's -- I mean, I -- I don't know if we have a
 14 specific formal policy in our handbook. But yeah, that's a
 15 general idea is, you know, that a PhD thesis is -- is more than
 16 digesting what's already out there in the literature. It's
 17 actually developing an idea and testing it and -- and -- and --
 18 and proving something that -- that isn't already known.
 19 Q. Yeah. How -- how, if at all, is that -- that type of new
 20 knowledge distinguished from knowledge that's done in
 21 furtherance of -- of your grants?
 22 A. Say that again Adam?
 23 Q. Sure. It -- you know, I'm going to withdraw that --
 24 withdraw that question. Doctor, you're familiar with the
 25 sources of funding for PhD students in the various years of --

Page 348

1 of the program?

2 A. Uh-huh.

3 Q. And can you describe that briefly for us?

4 A. Yeah. So in the -- in the first year, the graduate school

5 pays 100 percent of their stipend tuition and fees and health

6 insurance, anything related to -- to their fees. In year 2, I

7 am -- if -- once a student has joined my lab, I take over 75

8 percent of that stipend to allow them to perform their

9 research. In year 3 and beyond I take on 100 percent of the

10 stipend. And that's the period where, you know, they're --

11 they're not really taking coursework, and if they are, it's in

12 a more limited capacity, and they're almost exclusively working

13 on their PhD thesis.

14 Q. Doctor, where do you get the money to fund the PhD

15 students?

16 A. Most of the money comes from the NIH through the -- in the

17 form of a grant application. But I also have several grants

18 from foundations, so private money and then some philanthropy,

19 which is a less restricted form of -- of my budget. So

20 oftentimes if -- if, you know, if we -- if we want to take

21 something in a completely new direction, we -- we're lucky

22 enough to be able to use that philanthropy and money.

23 Q. So do those different sources of revenue that you just

24 described have different restrictions on how you can use the

25 fund -- those funds?

Page 349

1 A. Yeah. And even within it, so, you know, the -- the -- the

2 biggest pool of money for all of us is the NIH. That's where

3 most of the grant money that comes in to do all of the work or

4 to do a large percentage of the work is. Even within NIH

5 there's different levels of -- of restriction. For example,

6 the bread-and-butter grant that most PIs operate on is called

7 an NIH R01.

8 And the NIH R01 is probably the most flexible of the

9 grants, meaning that, you know, you -- you can -- you can

10 shift, and you can pivot, and you can do things that you -- you

11 didn't explicitly lay out in the grant, because that's where

12 the science kind of has taken you versus other forms. And we

13 do have other grants that are more like this which I would

14 describe as contract work.

15 You say you're going to collect 100 samples from a

16 patient and you're going to do a bioanalysis of their blood,

17 and that's what you do when you don't deviate from that. The

18 majority of my funding from NIH operates on the -- more on the

19 R01 side. So it's a bit more of a flexible pool where -- where

20 we're able to adapt and make changes to facilitate changing

21 research questions.

22 With philanthropy, it's completely -- well, I

23 shouldn't say completely, but it's much less restricted. You -

24 - you really don't have restrictions apart from some very kind

25 of "Basic restrictions." And then the foundation awards fall

Page 350

1 somewhere in between. So they're -- they're not as -- they're

2 not as restrictive as NIH and related grants and contract, but

3 they're also a little bit more restrictive than the

4 philanthropy mechanism.

5 Q. And do you personally mix and match from these various

6 streams in order to -- in order to be able to fund the PhD

7 student's research?

8 A. I do. Yeah. I mean, you have to, and, you know, I -- I -

9 - I always pay tuition and fees with philanthropy money. I --

10 it's really not something that is -- I put on my NIH grants

11 typically. If -- I don't think I do it all, in fact.

12 Q. And, Doctor, other than the student's stipend tuition and

13 insurance, are there other costs associated with the PhD

14 performing research in your lab?

15 A. So -- so the -- the costs -- yeah. I mean, you know, the

16 -- the -- the -- the stipend, the -- the tuition and the health

17 insurance, and fees are -- are -- are -- are one part of the

18 financial pop, but they're definitely the smallest in many

19 ways. The cost of the research itself is the -- the largest

20 overhead that I carry. You know, for example, we work really

21 quite extensively with -- with rodent models of disease. So we

22 use rats and mice.

23 It costs me \$25 per mouse and a dollar a day for them

24 to reside in the penthouse suite on the 26th floor of my animal

25 facility. So the -- actually, the cost of animals in many ways

Page 351

1 can -- for my entire group can reach \$50,000 a month. To give

2 you a sense of the difference in cost of -- of, you know, the -

3 - the different layers of costs that there are in training a

4 graduate student.

5 Q. So -- and -- and, Doctor, when a PhD student is performing

6 research in your lab towards their -- performing research in

7 the lab, do you cover the cost of -- of these experiments?

8 A. Oh, 100 percent, yeah.

9 Q. Doctor, is there any way that a PhD student could complete

10 the research necessary for their thesis without using your

11 funding?

12 A. No.

13 Q. Is a PhD student's -- withdrawn. Doctor, when -- when PhD

14 students receive funding from you pursuant to a grant, are they

15 required to carry out the conditions specified in the grant?

16 A. No.

17 Q. But what if you lost a funding, would the -- the PhD

18 student remain -- remain funded?

19 A. Yeah.

20 Q. And -- and who would be responsible for the funding in

21 that -- in that case?

22 A. Specifically picked up by a combination of the department

23 and/or the graduate school themselves and/or if it gets really

24 severe, for example, if -- if -- well, let me step back one

25 second. The -- you know, we -- we had discussed this about how

Page 352

1 students would've to transfer to another lab, that could be
 2 another cause of it.
 3 If the PI lost all of their funding and couldn't
 4 support maintaining their lab and had to fold their lab, that
 5 student would then have to join another lab to complete their
 6 PhD work. And the stipend and -- and -- and fees would --
 7 would then be covered by the new PI.
 8 But if it's a situation where, say, the -- the -- say
 9 the PI has several grants, if I had several R01s and I lost
 10 one, you know, I have to get rid of staff and -- first and
 11 maintain as much of my balance to cover the PhD student. And
 12 if I can't, then that's usually picked up by the department
 13 first and then the school second.
 14 Q. What would happen to your postdocs if -- if you -- if your
 15 lab lost funding?
 16 A. I would give them a notice that they had six weeks to find
 17 a new job.
 18 Q. Doctor, as -- when -- when you are funding PhD students in
 19 your lab, do you require them to do anything that is outside of
 20 their academic program?
 21 A. No.
 22 Q. Doctor, under what circumstances would a graduate student
 23 lose -- lose funding?
 24 A. I honestly -- I mean, the -- the only circumstance where
 25 I've seen a student lose funding is if they've had to take a

Page 353

1 leave of absence for personal or otherwise reasons.
 2 Q. Doctor, have you -- have you heard the phrase satisfactory
 3 academic progress?
 4 A. I guess so. Not -- not -- I mean, not necessarily in the
 5 context of our program, but yeah.
 6 Q. Doctor, you mentioned earlier in your testimony that you
 7 have a number of roles in addition to being a PI, including
 8 serving on a thesis advisory committee. Are -- are you aware
 9 of students who were having difficulty making progress towards
 10 their dissertation?
 11 A. Mm-hmm.
 12 Q. And is that something that you have personal experience
 13 with mentoring, coaching those -- those students?
 14 A. I have.
 15 Q. Can you -- can you give us some examples of the type of
 16 support provided by the graduate school for students who are
 17 struggling to make progress towards their degree without
 18 divulging identities of students or other -- other identifying
 19 information?
 20 A. Yeah. No, absolutely. I mean, the -- the, you know, this
 21 -- this is another key difference between students and
 22 postdocs. I mean, the -- the thesis committee is really a
 23 unique thing to graduate students. It -- it's -- it's made up
 24 of, you know, typically three or four internal tenure track
 25 faculty members.

Page 354

1 So I -- I -- I serve -- gosh, I don't even know, but
 2 probably 20 or more current thesis committees. You can imagine
 3 how time consuming that is. We -- we meet with them annually,
 4 if not bi-annually, depending upon concerns about the student's
 5 progress. We meet with them off -- you know, offline as well.
 6 So with any given committee me -- student thesis
 7 committee that I serve on, I probably have two formal meetings
 8 with them, with the rest of the committee each year where they
 9 show us what they've done. We give them our feedback in terms
 10 of what we think they should do.
 11 They -- they have the opportunity to -- to confide in
 12 us if they're having issues both either personally or
 13 professionally within the lab. And so the -- the committee's
 14 really in place as a stop gap for -- as -- as a -- as a level
 15 of support for that student throughout the entirety of the
 16 program. We don't have that for postdocs and other staff.
 17 If -- if -- if -- if the relationship between a
 18 student and a -- and a PI sours, it's really the committee that
 19 is expected to pull that student through. I've even served in
 20 a capacity where the -- the committee, you know, was -- was
 21 kind of put in charge of -- of -- of a student completing the
 22 entirety of their dissertation.
 23 So, you know, the -- the committee is a unique entity
 24 that is meant to help the student along and to prevent issues
 25 from amplifying if the student is -- is struggling and -- and

Page 355

1 having a hard time making progress in their dissertation.
 2 Q. Doctor, have you ever -- have you ever fired a postdoc?
 3 A. I have not, actually.
 4 Q. Have you ever had a student in your lab who was not making
 5 his or her academic milestones?
 6 A. I have not. I've had a lot of variation in student
 7 talent, but, you know, in general they've all met their
 8 milestones. And every student that have -- that I've taken on
 9 to mentor has graduated with a PhD and got a job afterwards.
 10 MR. LUPION: If we can take five minutes off the
 11 record.
 12 MR. MEIKLEJOHN: I'm sorry, I'm still here. I just -
 13 - I'm supposed to get up and walk around once in a while when
 14 Mike --
 15 HEARING OFFICER KUMA: Not a problem. All right.
 16 Take five minutes. We'll go off the record.
 17 (Brief Recess at 5:18 p.m./Reconvened at 5:40 p.m.)
 18 MR. LUPION: We have no further questions at this
 19 time.
 20 HEARING OFFICER KUMA: Okay.
 21 MR. MEIKLEJOHN: Okay. So we're starting again at
 22 9:30?
 23 HEARING OFFICER KUMA: Yes. So hearing that there's
 24 nothing further, hearing will be adjourned till tomorrow, until
 25 9:30 in the morning, in which the Petitioner will begin their

1 cross examination on Mr. Russo. Dr. Russo, to advise you that
2 you're under oath and that you should refrain from talking
3 about your testimony with the Employer or with anybody else.
4 Okay?

5 THE WITNESS: Yes.

6 MR. MEIKLEJOHN: All right. You -- you can tell your
7 spouse or significant other how much fun it was and what a
8 great time you had today. I -- I don't think the Hearing
9 Officer would mind that. Adam, just a couple quick things.

10 MR. LUPION: We could let the Doctor --

11 MR. MEIKLEJOHN: Oh, yeah.

12 MR. LUPION: -- the Doctor go. Scott, thank you very
13 much.

14 THE WITNESS: Thank you. I'll see you tomorrow at
15 9:30.

16 MR. LUPION: All right. Off the record.

17 HEARING OFFICER KUMA: Oh, I thought we did. Okay.
18 (Whereupon, at 5:41 p.m., the hearing in the above-entitled
19 matter was recessed to reconvene on Tuesday, July 11, 2023, at
20 9:30 a.m.)

21
22
23
24
25

CERTIFICATION

1 This is to certify that the attached proceedings before
2 the National Labor Relations Board, Region 2, in the matter of
3 Icahn School of Medicine at Mount Sinai and International
4 Union, United Automobile, Aerospace, and Agricultural
5 Implement Workers of America, Case No. 02-RC-319437, at New
6 York, New York, on July 10, 2023, was held according to the
7 record, and that this is the original, complete, and true and
8 accurate transcript that has been compared to the recording
9 from the hearing, that the exhibits are complete, and no
10 exhibits received in evidence or in the rejected file are
11 missing.
12

13
14
15
16
17
18
19
20
21
22
23
24
25

Adrian Morris

	accomplished (1) 277:6	administrative (1) 266:12	335:14	227:16;236:21; 261:9;283:4,7;294:4; 348:12
\$	accomplishing (1) 312:10	admission (5) 216:13;255:20; 290:2;313:20,24	affiliate (1) 247:7	along (4) 271:25;329:8,12; 354:24
\$2,000 (3) 227:15,17;236:4	according (2) 289:11,15	admissions (1) 277:8	affiliated (1) 305:2	although (3) 268:12;272:2;288:17
\$25 (1) 350:23	accurate (2) 299:3;303:13	admit (1) 232:25	affinity (1) 243:18	alumni (1) 303:23
\$250,000 (1) 301:21	acquiring (1) 226:2	admitted (13) 216:18;221:3,6; 249:9;257:18;270:21; 281:22,24;290:7; 300:8;301:8,15;313:18	afternoon (2) 313:9;323:4	always (6) 227:16;282:25; 327:3;338:17;341:3; 350:9
\$50,000 (1) 351:1	action (1) 276:23	Adrian (6) 220:19;255:23; 313:5;321:7;345:20; 346:2	afterwards (2) 331:7;355:9	am/Reconvened (4) 234:16;239:8; 255:25;276:2
A	actively (1) 330:24	advanced (1) 230:8	Again (17) 219:25;220:3; 221:10;223:20;232:20; 233:17;248:12;265:24; 273:11,25;292:17; 293:17;302:9;327:7; 334:25;347:22;355:21	AMERICA (1) 212:10
abilities (5) 230:4,4;231:8,9; 250:11	activities (5) 246:25;272:25; 318:11;327:5;343:13	advice (1) 258:11	against (1) 260:21	among (5) 224:23;228:8;294:1; 295:3;315:9
able (15) 217:1;219:23; 235:11;255:18;263:14; 286:24;290:9,11; 298:4;299:21;300:14; 340:25;348:22;349:20; 350:6	actors (1) 334:13	adverse (1) 346:13	agency (1) 229:19	amount (4) 244:23;264:4; 337:18;338:22
above-entitled (2) 212:13;356:18	actual (4) 222:3;272:4;292:7; 327:21	advertise (3) 330:14,25;331:1	agencies (1) 228:25	amplifying (1) 354:25
absence (14) 266:3,6,8,9,10,12,17, 18,19,24;267:1,3,5; 353:1	Actually (12) 218:4;251:5;281:9; 286:7;287:17;289:3; 295:25;298:10;346:21; 347:17;350:25;355:3	advertisement (1) 331:7	ago (6) 235:23;241:23; 269:15;272:17;273:11; 346:14	analysis (2) 331:19;347:4
absent (1) 260:6	acumen (1) 250:14	advertising (1) 331:5	agree (4) 258:1;291:3;318:25; 340:6	and/or (3) 225:10;351:23,23
Absolutely (7) 247:8;264:25,25; 267:1;275:10;303:14; 353:20	Adam (3) 222:22;347:22;356:9	advise (1) 356:1	agreed (3) 299:22,24;301:11	animal (1) 350:24
academic (52) 226:4;231:13,13; 236:9,20;244:6;252:5, 8,15,16,18,19;253:1,6; 254:12,20;263:9,17,19; 269:21;274:12,18; 275:8,9;276:6,14,17; 277:2,19;278:1,5; 281:23,24;282:9,11,14, 15,16,19,23;283:12; 284:3;308:25;309:1,4; 310:16;311:5;318:9, 11;352:20;353:3;355:5	adapt (1) 349:20	advising (5) 252:5,9,22;256:25; 303:22	agreement (1) 222:12	animals (1) 350:25
academically (2) 244:10;272:19	add (4) 226:24;247:9; 335:19,19	advisor (26) 245:1;252:15,16,16, 18,19,23;253:1,6; 257:9,20,21,24;258:1, 5,7,12;281:23,25; 282:10,14,15,17,19,23; 284:3	AGRICULTURAL (1) 212:9	annual (4) 227:13;314:2,5; 318:7
accept (6) 224:11,15;280:15, 23;281:4;340:5	added (2) 241:23,25	advisors (1) 282:11	ahead (2) 220:21;293:4	annually (1) 354:3
accepted (1) 333:12	Adding (1) 312:23	advisory (14) 225:23;245:2;253:8, 11;256:19,22,24; 260:22,23;269:15,19; 283:12,19;353:8	aid (4) 268:15,16,17;315:7	answered (3) 226:9,17;293:16
accepting (1) 301:3	addition (4) 238:10;301:3,20; 353:7	advisors (1) 282:11	aims (5) 272:6,7;331:16; 336:24;340:2	anticipate (2) 217:1;322:1
access (4) 262:7;278:21; 281:18;339:24	additional (9) 226:3;227:17; 228:20;299:4;305:24; 311:24;332:10,11; 335:5	advisory (14) 225:23;245:2;253:8, 11;256:19,22,24; 260:22,23;269:15,19; 283:12,19;353:8	align (2) 327:12;334:7	anticipating (1) 272:11
accessible (2) 238:15;296:10	address (5) 216:7,9;325:8; 332:24;336:25	AEROSPACE (1) 212:9	aligned (2) 328:13;340:19	apart (2) 343:9;349:24
	addressing (1) 261:14	Affairs (27) 240:21;241:5,7,20, 22,25,25;242:19,22,25; 243:12;244:7,25; 245:5;249:2;257:12; 260:18;261:7;267:6; 270:12;277:4;279:25; 280:3,5,7;303:23; 317:6	alignment (3) 259:9,12,19	API (1) 304:21
	adequate (1) 233:11	Affairs (27) 240:21;241:5,7,20, 22,25,25;242:19,22,25; 243:12;244:7,25; 245:5;249:2;257:12; 260:18;261:7;267:6; 270:12;277:4;279:25; 280:3,5,7;303:23; 317:6	allow (8) 265:3;266:2;278:1; 295:19;331:14;335:5; 337:1;348:8	apologize (2) 268:2;309:7
	adequately (1) 227:4	Affective (1) 323:19	allowed (3) 226:16;311:17;341:4	apparently (1) 226:15
	adhere (1) 261:12	affects (1)	allowing (1) 342:4	appear (4) 222:18,20;238:19; 298:15
	adjourned (2) 216:22;355:24		allows (2) 248:5;264:18	appears (3) 218:2;269:7;298:14
	administer (1) 239:24		alluded (1) 252:5	applicable (6) 266:25;294:9; 314:16,17,21;315:1
			almost (7)	application (2)

<p>299:5;348:17 applications (2) 217:18;312:2 applies (3) 228:20;234:10;295:5 apply (13) 222:8;233:18;234:7; 251:12,13,14,18; 262:14;275:12;294:12; 295:8;326:23;341:21 appointment (2) 247:12;268:23 approach (4) 238:3;261:14; 285:20,21 approached (1) 338:14 appropriate (4) 222:8;233:18;290:6; 336:17 approved (2) 258:24;330:22 approves (1) 340:9 approximate (1) 296:18 area (13) 225:7;242:13; 243:10;250:19;253:4; 259:13,18,19;275:1; 277:24;282:2;326:1; 339:24 areas (10) 241:11,12,18;243:4; 250:1;270:6;273:3,12, 16;326:20 argument (2) 254:7;255:16 argumentative (1) 292:9 arise (1) 308:1 around (12) 241:11;243:7,10,12, 16;252:23;277:10; 335:10;340:15,15; 345:4;355:13 arrangement (1) 308:12 art (1) 337:4 articles (2) 228:11,16 aside (1) 255:18 assess (4) 217:14;272:18; 273:15;326:5 assessed (2) 274:7;275:4 assessment (2) 250:7;275:18 assign (5)</p>	<p>258:12;328:15; 335:9,21;342:17 assigned (6) 252:18;281:22,24; 285:4;286:5;306:24 assigning (2) 342:16,25 assist (2) 231:4,6 assistant (13) 230:16;231:9,11; 251:16,17;264:2; 305:8;316:11;324:8; 334:2,5;342:21,25 assistants (6) 218:1,6;230:12,25; 334:3,21 associate (20) 240:18,20,21;241:4, 20,22;242:3;245:4; 280:2,6;303:10,16,17, 19;304:24;305:7,9; 316:9,10;334:6 associated (4) 248:1;266:5;312:19; 350:13 assume (4) 219:10;281:18; 287:14;289:9 attachments (16) 216:20,24;219:22; 220:8,9,10;221:8; 222:1,4,13;231:18,22; 232:10;300:14,15; 301:6 attempt (2) 225:20;294:8 attended (1) 271:19 Attending (1) 271:20 attention (12) 224:2,6;225:12; 260:17,23;261:4,5,6; 273:1;285:3;306:6; 309:13 A-T-T-H-E-W (1) 223:23 attorney (3) 279:11;301:23; 313:14 attorneys (1) 313:10 August (1) 216:21 Autenrieth (1) 232:7 authentication (1) 233:11 authentication (1) 233:11 authenticity (3) 291:4,7,14</p>	<p>author (2) 320:1,4 authority (1) 289:25 authorship (2) 347:1,7 AUTOMOBILE (1) 212:8 autonomous (1) 336:3 available (17) 217:7;225:3,11; 246:12;252:5;262:12; 278:15,16;280:9; 306:18,22;321:15,15, 17,25,25;341:2 avenue (2) 285:20,21 Avi (9) 219:6;222:22,25; 234:14;254:6;255:10; 276:8;293:3;322:6 AVINISH (1) 212:14 avoid (2) 255:2;290:15 awards (2) 271:20;349:25 aware (9) 227:18;260:3,17; 281:3;285:17;317:22; 328:10,11;353:8 away (3) 218:9;219:9;299:19</p>	<p>218:21;242:9; 266:21;273:21 BASIL (2) 239:15,20 B-A-S-I-L (1) 239:21 basis (4) 218:8;269:24;283:5, 8 Bates (1) 218:19 bear (1) 279:18 became (2) 260:3;324:9 become (2) 285:17;331:22 becoming (1) 305:7 begin (2) 307:7;355:25 beginning (1) 252:19 beholden (1) 341:7 below (2) 272:2;301:21 bench (1) 281:20 benefit (2) 228:10,16 benefits (7) 228:19;254:20; 261:24;262:4,13; 264:15;301:5 best (9) 232:22;248:11; 249:20,21;277:7; 285:19;317:23;336:15, 15 Bethesda (1) 240:15 better (4) 276:22,22;329:13; 342:12 beyond (12) 246:9,13;251:21; 254:11;264:21;272:21; 277:20;284:1;288:21; 316:19,22;348:9 bi-annually (1) 354:4 big (3) 278:21;287:21;327:3 bigger (1) 277:21 biggest (2) 334:5;349:2 bioanalysis (1) 349:16 biological (1) 304:2 biology (3)</p>	<p>229:23;240:10;326:1 biomedical (10) 230:1;245:6;261:19; 262:20;305:19,21; 306:13;307:5;310:1,3 bit (6) 275:22;303:12; 309:11;345:4;349:19; 350:3 blood (1) 349:16 blunt (1) 298:5 BOARD (2) 212:2,15 bodies (1) 340:11 body (8) 278:6;284:20; 319:20;323:19;324:13, 13;327:1;344:21 bonus (5) 227:13,20;228:2; 236:4,8 boss (1) 345:9 both (17) 226:3;238:2;250:15; 252:13;270:4;272:12, 19;273:13;299:22; 303:21;324:23;325:16; 335:6;339:13,13; 346:23;354:12 bottom (1) 273:1 Brain (3) 323:19;324:13;327:1 brains (1) 340:12 bread-and-butter (1) 349:6 break (12) 239:6;275:23,25; 276:12;279:4,7;297:1, 1;298:3;299:20; 300:13;312:23 breakdown (5) 298:7;299:8;301:20, 21;302:5 breakdowns (3) 298:15,23;299:13 breakout (3) 234:14;293:1,3 bridge (1) 330:3 Brief (12) 234:16,19;239:6,8; 255:25;276:2;293:6; 313:4;320:24;322:14; 346:1;355:17 briefly (11) 217:5;241:3;242:2; 243:5;245:16;254:6;</p>
		B		
		<p>Bachelor's (2) 240:10;304:2 back (17) 220:2;238:14,18; 256:14;261:1;275:20; 296:9,11;299:15; 313:1;321:16,16; 337:2;344:18;345:12; 346:2;351:24 background (3) 240:9;303:25;323:12 balance (2) 275:24;352:11 barriers (3) 242:5,8;244:10 base (1) 244:14 based (14) 222:8,9,11;233:19; 238:12;295:2;300:2; 301:2;309:8;312:14, 15;330:15;339:17; 347:9 basic (3) 256:5;340:2;349:25 basically (4)</p>		

<p>268:24;269:15;303:18; 323:21;348:3 bring (10) 222:6;229:9;241:13; 243:17,19;267:7; 270:7;312:15;335:4,5 bringing (2) 222:6;312:15 broad (4) 245:7;278:12; 284:14,14 broader (1) 330:13 budget (11) 268:13,14;298:8,9, 15;299:7,13;301:20; 312:11;335:20;348:19 budgets (1) 312:12 build (3) 254:23;341:4,5 Building (4) 212:16;241:13; 243:16;254:10 Bulletin (1) 302:6 business (6) 216:23;234:6;268:2; 269:11;288:20,20 button (1) 218:14 buy (1) 235:8</p>	<p>223:20,24;232:2; 234:3;235:1,1,4,4; 239:3,12,19;240:8; 241:3,16;242:2,22; 245:16;246:15;247:18; 248:7;249:17;250:12, 18;252:8;253:11; 254:6,25;255:1,2; 256:7,9,13;257:7; 258:4,4,14;264:9,10; 266:1,5,8,9,23;267:22; 268:7;269:14,16; 270:7;271:8;273:8; 275:2,23,25;276:6,12, 13,25;280:18;282:25; 283:23;284:6;285:1,8, 16;287:20,22;288:10; 289:25;290:20,21; 291:13,13;292:18,25; 293:17;294:9,14,14,25, 25,25;295:6,6;296:12; 299:14;301:18,18; 302:13,20;303:13,18; 305:15,18;307:17; 308:6,7,9,16,16; 309:21;311:21;312:7; 313:15,16;315:6; 317:25;322:15;323:11, 21;325:14;327:14,15, 22;328:6,23,24;330:9; 331:23;332:22;336:12, 19;338:17,23;339:5,9; 340:5;341:23,24; 345:15,15,22;346:5,8, 8,10;348:3,24;349:9,9, 10,10;351:1,1;353:15, 15;354:2;355:10;356:6</p>	<p>230:18;326:13; 350:20;351:15 Case (12) 212:4;216:5,6; 238:14;253:21;254:23; 279:12;285:18;316:21; 321:15;329:21;351:21 cases (3) 225:10;328:11;341:4 categories (6) 230:13;249:18,19, 22;273:8,11 category (2) 230:13;266:13 cause (2) 265:25;352:2 caveat (1) 247:9 caveats (1) 248:13 cell (1) 235:9 cells (1) 238:2 Center (3) 323:14,19,20 Central (9) 288:10,11,12,14,17, 18;290:12;291:9,10 certain (6) 232:12;268:12; 270:6;272:6;275:21; 294:4 certainly (1) 261:9 cetera (4) 238:2;281:19,19; 327:1 chair (1) 260:24 challenges (1) 308:1 challenging (1) 344:19 chance (2) 291:2;332:21 change (8) 264:7;308:16,19; 314:3;318:19;319:5; 329:6,10 changes (3) 329:24;340:5;349:20 changing (3) 318:14,22;349:20 characterization (1) 231:25 characterized (1) 254:21 characterizes (1) 317:13 charge (1) 354:21 Charney (1)</p>	<p>228:1 Charney's (3) 227:24;232:7;240:23 chat (1) 222:19 check (4) 219:2;287:17;291:7; 322:9 checkbox (2) 250:19;270:3 check-ins (1) 318:7 checks (2) 269:10,12 chemicals (1) 235:9 China (1) 329:16 choice (1) 306:4 choose (4) 247:3,6,16;282:12 chosen (2) 307:6;331:13 chronic (1) 304:19 circumstance (2) 227:18;352:24 circumstances (5) 263:1;281:3;328:8; 345:11;352:22 citizens (1) 326:13 citizenship (1) 259:7 claimed (1) 301:17 clarified (1) 302:5 Clark (1) 240:11 classes (1) 313:25 classified (2) 218:2;289:21 classroom (4) 241:10,18;243:3; 277:20 clear (10) 218:2;221:23;233:1; 251:3;255:5;292:3; 295:18;296:16;313:10, 13 clearly (1) 274:16 clicked (1) 345:17 client (3) 291:8,20;299:14 clinical (2) 242:14,15 clock (1) 338:4</p>	<p>close (1) 298:14 close-knit (1) 326:10 closely (4) 299:9;326:11; 332:19;334:21 Cloud (6) 232:15,18,19; 269:11;300:16;301:5 club (1) 333:16 clubs (2) 236:25;332:13 coaching (1) 353:13 co-author (2) 346:18,22 code (2) 289:17,20 Co-director (1) 305:10 coffee (1) 219:15 co-investigators (1) 312:6 collect (1) 349:15 College (1) 240:11 combination (2) 228:4;351:22 coming (4) 287:18;326:15; 327:13;341:20 commence (1) 218:8 comment (1) 281:20 commentary (2) 270:2;273:24 committee (47) 225:23;244:17,17, 22;245:2;253:9,12; 256:19,23,24;260:22, 23,24,24;269:15,17,19; 270:2;271:23;272:8, 23;273:22,23,24; 275:4;278:5;283:12, 19,20;284:1,19,20; 333:5,6,7,12;340:8,8,9; 353:8,22;354:6,7,8,18, 20,23 committees (3) 253:18;329:6;354:2 committee's (1) 354:13 common (3) 263:15,15;293:22 communicated (1) 286:19 communication (1) 232:8</p>
C				
<p>cabinetry (1) 343:2 calculations (1) 298:9 call (19) 238:14;239:1;243:6, 18;257:21;277:25; 285:11;290:15,20,21; 296:9;300:5;301:13; 302:9;306:6;309:13; 314:9;321:15,23 called (14) 238:18;239:16; 242:13;266:11;269:11; 282:2;296:11;302:17; 304:3;318:22;321:16; 322:19;342:2;349:6 calling (1) 273:1 calls (6) 235:25;286:13,18; 292:17;302:12;325:5 came (2) 212:13;285:18 Can (156) 217:5;218:8,17,19, 20,25;220:25;222:25;</p>	<p>cancer (1) 326:1 candidacy (1) 333:13 candidate (1) 342:5 candidates (2) 232:22;331:4 capacities (1) 317:20 capacity (6) 245:4;279:10;280:2; 317:19;348:12;354:20 CAR (3) 278:5,6,8 Career (5) 243:13,13,15; 338:20;346:13 careers (1) 335:7 careful (1) 277:9 Carina (9) 268:10,10,10,11; 289:11;290:4,20,20,21 carry (4)</p>	<p>Case (12) 212:4;216:5,6; 238:14;253:21;254:23; 279:12;285:18;316:21; 321:15;329:21;351:21 cases (3) 225:10;328:11;341:4 categories (6) 230:13;249:18,19, 22;273:8,11 category (2) 230:13;266:13 cause (2) 265:25;352:2 caveat (1) 247:9 caveats (1) 248:13 cell (1) 235:9 cells (1) 238:2 Center (3) 323:14,19,20 Central (9) 288:10,11,12,14,17, 18;290:12;291:9,10 certain (6) 232:12;268:12; 270:6;272:6;275:21; 294:4 certainly (1) 261:9 cetera (4) 238:2;281:19,19; 327:1 chair (1) 260:24 challenges (1) 308:1 challenging (1) 344:19 chance (2) 291:2;332:21 change (8) 264:7;308:16,19; 314:3;318:19;319:5; 329:6,10 changes (3) 329:24;340:5;349:20 changing (3) 318:14,22;349:20 characterization (1) 231:25 characterized (1) 254:21 characterizes (1) 317:13 charge (1) 354:21 Charney (1)</p>	<p>228:1 Charney's (3) 227:24;232:7;240:23 chat (1) 222:19 check (4) 219:2;287:17;291:7; 322:9 checkbox (2) 250:19;270:3 check-ins (1) 318:7 checks (2) 269:10,12 chemicals (1) 235:9 China (1) 329:16 choice (1) 306:4 choose (4) 247:3,6,16;282:12 chosen (2) 307:6;331:13 chronic (1) 304:19 circumstance (2) 227:18;352:24 circumstances (5) 263:1;281:3;328:8; 345:11;352:22 citizens (1) 326:13 citizenship (1) 259:7 claimed (1) 301:17 clarified (1) 302:5 Clark (1) 240:11 classes (1) 313:25 classified (2) 218:2;289:21 classroom (4) 241:10,18;243:3; 277:20 clear (10) 218:2;221:23;233:1; 251:3;255:5;292:3; 295:18;296:16;313:10, 13 clearly (1) 274:16 clicked (1) 345:17 client (3) 291:8,20;299:14 clinical (2) 242:14,15 clock (1) 338:4</p>	<p>close (1) 298:14 close-knit (1) 326:10 closely (4) 299:9;326:11; 332:19;334:21 Cloud (6) 232:15,18,19; 269:11;300:16;301:5 club (1) 333:16 clubs (2) 236:25;332:13 coaching (1) 353:13 co-author (2) 346:18,22 code (2) 289:17,20 Co-director (1) 305:10 coffee (1) 219:15 co-investigators (1) 312:6 collect (1) 349:15 College (1) 240:11 combination (2) 228:4;351:22 coming (4) 287:18;326:15; 327:13;341:20 commence (1) 218:8 comment (1) 281:20 commentary (2) 270:2;273:24 committee (47) 225:23;244:17,17, 22;245:2;253:9,12; 256:19,23,24;260:22, 23,24,24;269:15,17,19; 270:2;271:23;272:8, 23;273:22,23,24; 275:4;278:5;283:12, 19,20;284:1,19,20; 333:5,6,7,12;340:8,8,9; 353:8,22;354:6,7,8,18, 20,23 committees (3) 253:18;329:6;354:2 committee's (1) 354:13 common (3) 263:15,15;293:22 communicated (1) 286:19 communication (1) 232:8</p>

<p>communities (1) 243:19</p> <p>community (8) 241:13;242:6; 243:16;259:4,4; 330:13;333:20,22</p> <p>compare (5) 230:3;231:8;278:16; 330:9;334:17</p> <p>compelled (1) 286:10</p> <p>compensation (9) 224:21;227:22; 235:12;237:9,12,15; 292:8;314:6,13</p> <p>compensation's (1) 237:9</p> <p>complain (1) 286:11</p> <p>complained (1) 285:3</p> <p>complete (20) 226:16;227:9;233:4, 6,7;248:12;259:8; 263:14;265:4;277:23; 305:22;312:18;327:23; 329:22;331:11;332:1, 11;342:11;351:9;352:5</p> <p>completed (6) 249:12,14;273:7,19; 318:19,21</p> <p>completely (8) 247:15;267:4;337:7, 7;341:6;348:21; 349:22,23</p> <p>completes (3) 249:11;257:8;273:5</p> <p>completing (3) 263:18;331:17; 354:21</p> <p>completion (2) 264:1;330:16</p> <p>component (2) 252:1;294:8</p> <p>composition (1) 253:18</p> <p>Comprehensive (2) 237:8;244:4</p> <p>comprises (1) 242:14</p> <p>computational (2) 238:1;281:16</p> <p>conceived (1) 312:5</p> <p>conceiving (1) 347:3</p> <p>concern (3) 316:18;325:9;327:3</p> <p>concerned (2) 216:11,19</p> <p>concerning (4) 216:5;222:13;256:4, 7</p>	<p>concerns (4) 253:25;316:12; 317:5;354:4</p> <p>conclusion (2) 227:4;325:6</p> <p>condition (4) 235:19;254:19; 310:14;344:6</p> <p>conditioned (5) 246:25;263:25; 264:4;310:5,11</p> <p>conditions (7) 224:14;261:17; 267:3;310:2;341:8; 344:10;351:15</p> <p>conduct (8) 228:6;230:2;235:6; 258:20,25;307:7; 319:10;325:17</p> <p>conducted (7) 228:12,17;307:8; 315:14;319:8,15; 325:20</p> <p>conducting (4) 236:20;281:14; 309:3;323:25</p> <p>conferred (1) 291:20</p> <p>confide (1) 354:11</p> <p>conflicts (1) 234:6</p> <p>confusion (2) 221:13,21</p> <p>conjunction (1) 283:20</p> <p>connection (1) 274:6</p> <p>consequences (3) 266:20;284:13; 346:15</p> <p>consider (4) 252:22;268:4;281:1; 326:20</p> <p>considerable (1) 253:19</p> <p>considered (2) 251:15;308:25</p> <p>consists (3) 236:20;262:1,2</p> <p>consultation (1) 267:6</p> <p>consuming (1) 354:3</p> <p>contact (1) 283:7</p> <p>contained (2) 259:14;290:11</p> <p>content (1) 222:3</p> <p>contention (1) 255:12</p> <p>contents (4)</p>	<p>221:5;222:7;268:7; 290:6</p> <p>context (3) 295:11;324:13;353:5</p> <p>continue (9) 216:4;223:7,24; 226:22;233:20;251:20; 254:10;256:11;332:13</p> <p>continues (2) 289:5;332:9</p> <p>continuing (1) 251:23</p> <p>contract (2) 349:14;350:2</p> <p>contribute (4) 285:5;319:10,17,23</p> <p>contributing (3) 312:13;319:13;320:2</p> <p>contribution (1) 346:24</p> <p>contributions (1) 347:1</p> <p>control (2) 248:12,13</p> <p>conversation (1) 260:25</p> <p>converse (1) 336:10</p> <p>cool (1) 340:22</p> <p>copied (1) 232:7</p> <p>core (2) 247:25;305:22</p> <p>corner (2) 267:9;333:9</p> <p>correction (1) 300:24</p> <p>correctly (1) 255:6</p> <p>correspondence (1) 337:5</p> <p>cost (11) 235:1,5;238:3;248:5; 262:12;265:1;298:6; 350:19,25;351:2,7</p> <p>costs (8) 248:1;281:18,18,19; 350:13,15,23;351:3</p> <p>Counsel (9) 221:17;233:25; 234:23;235:10;245:2; 291:2,6,7;293:25</p> <p>counseling (3) 244:5,8,11</p> <p>counsel's (2) 231:25;325:8</p> <p>country (1) 277:7</p> <p>couple (7) 244:18;260:18; 270:1;285:1,2;331:3; 356:9</p>	<p>course (12) 249:2;251:25;252:3; 257:11;270:12;272:11; 305:23;309:5;320:5; 333:15;334:24;339:16</p> <p>coursework (5) 252:11,22;332:3,11; 348:11</p> <p>court (5) 256:13;303:13; 313:16;320:25;345:16</p> <p>cover (6) 233:3;265:1,19; 332:10;351:7;352:11</p> <p>covered (1) 352:7</p> <p>covering (2) 248:3;254:3</p> <p>covers (1) 287:6</p> <p>create (3) 274:14;277:25;278:9</p> <p>creates (1) 221:20</p> <p>creating (1) 242:6</p> <p>credit (2) 332:15;334:24</p> <p>credits (1) 333:15</p> <p>criteria (2) 247:15;249:17</p> <p>critical (2) 273:12;331:20</p> <p>cross (9) 223:7,9,25;233:20; 279:3,8;296:3;313:7; 356:1</p> <p>culminates (1) 333:2</p> <p>cultural (1) 326:17</p> <p>culture (2) 246:10;327:12</p> <p>cumulative (3) 255:8,9,13</p> <p>cup (1) 219:15</p> <p>curious (1) 340:22</p> <p>currency (2) 343:20,21</p> <p>current (4) 240:16;321:14; 323:16;354:2</p> <p>currently (9) 240:4;250:9;268:25; 303:4;311:7,15; 312:17;323:4;324:15</p> <p>curricular (1) 303:22</p> <p>curriculum (8) 236:9;245:5,8,10;</p>	<p>252:10;254:12;275:8; 305:23</p> <p>cut (3) 223:16;226:15; 275:23</p> <hr/> <p style="text-align: center;">D</p> <hr/> <p>daily (2) 283:4,8</p> <p>data (2) 246:19;327:24</p> <p>database (1) 281:19</p> <p>date (3) 238:18;296:10; 321:17</p> <p>day (9) 238:6,22;244:10,10; 321:18;337:6,20,22; 350:23</p> <p>days (1) 295:9</p> <p>day-to-day (2) 258:10;336:20</p> <p>deadline (2) 219:4;301:16</p> <p>dealing (2) 276:16;285:21</p> <p>Dean (21) 227:24,25;228:1,1; 232:7;240:20,22,23; 241:4,20,22;242:3; 245:4;261:10;280:2,6; 303:11,17,19;304:24; 305:7</p> <p>Dean's (1) 227:24</p> <p>decent (1) 284:24</p> <p>decide (3) 311:21;325:15; 330:20</p> <p>decided (2) 225:7;308:19</p> <p>deciding (1) 284:20</p> <p>decision (4) 232:25;247:8,9; 264:11</p> <p>decisions (1) 276:18</p> <p>declare (5) 257:9,10;282:1; 331:11,25</p> <p>declared (2) 283:3;332:5</p> <p>declares (1) 282:8</p> <p>declaring (1) 331:9</p> <p>decline (4) 248:7;328:6,6,9</p>
---	---	---	--	---

dedicated (1) 250:4	294:10;295:4;330:7; 334:19;348:24	277:2;353:9	disseminating (2) 271:21;307:25	330:7;331:9,23;334:1; 335:13;336:7,12;
defend (2) 227:10;344:23	describing (2) 270:8;295:5	digesting (1) 347:16	dissertation (62) 224:12,19;225:5,6; 227:1,10;228:6; 244:13,17;245:1; 247:17;252:1;257:9, 20,21,22,24;258:1,5,7, 8,12,20,23;259:23; 260:4;272:14;274:8, 15;306:3;307:9,21; 308:23,25;309:1,4; 310:20,25;315:16,22; 316:2,3,20,22,24; 317:10;318:10;319:20, 21;320:11;331:12; 332:1;333:11,14,23; 334:11;343:8;345:3; 347:9;353:10;354:22; 355:1	337:17;339:6;340:10; 341:7;342:15;343:14; 346:5,17;347:8,24; 348:14;350:12;351:5, 9,13;352:18,22;353:2, 6;355:2;356:10,12
defense (2) 260:21;344:12	description (3) 269:1;271:24;289:18	direct (17) 237:8,9,11,15;240:2; 243:2,3;287:17;292:8; 302:24;314:6,13; 315:13;316:5;318:13; 323:2;336:21	distinct (1) 278:20	348:14;350:12;351:5, 9,13;352:18,22;353:2, 6;355:2;356:10,12
defer (2) 220:25;291:13	deserve (1) 277:5	directed (1) 342:16	distinction (5) 268:6;281:11,12; 334:5;335:1	doctoral (7) 230:4,20;231:1,9; 236:22;331:11;341:14
deferred (1) 291:19	design (1) 336:25	directing (1) 274:23	distinguished (1) 347:20	document (43) 217:15;220:13; 224:3,4;227:11; 231:23,25;233:2,7,9, 12;248:20,24;249:1, 16;257:4,11;267:15, 20;268:8,9,9;269:8; 270:3,11;271:5; 272:10;273:17,18,20, 21;288:3;289:11,15; 290:4,6,7,12,24; 295:13;313:18;333:2; 340:7
define (1) 255:16	designed (1) 253:21	direction (2) 342:7;348:21	distinct (1) 278:23	documents (14) 216:7,20;217:6,16; 219:1,19;220:1,2; 221:1;231:23;292:8; 299:18;302:6,8
defined (2) 264:16;335:25	detail (3) 253:19;266:15;286:8	directions (1) 284:17	diversity (2) 342:2,4	dollar (1) 350:23
Definitely (5) 311:25;339:2; 340:16;341:3;350:18	detailed (3) 256:4,7;299:21	directions (1) 284:17	divisions (1) 242:10	done (13) 237:25;267:16; 272:4;274:13;280:14, 14;322:5;327:22; 337:2;344:19;345:14; 347:20;354:9
degree (35) 262:15,21;263:12, 14;265:4;275:13; 303:21,22;304:2; 309:19,24;314:17,19; 315:2,15;316:11,16,17, 18;317:8;318:4,13,23, 25;319:3,9,16;320:6, 16;334:4,25;344:2,7; 347:12;353:17	details (4) 222:7;227:22; 277:17;299:14	directly (6) 227:23;243:22; 244:25;251:18;279:3; 293:11	divulging (1) 353:18	doubt (1) 339:5
degree-granting (1) 334:9	determination (2) 248:11;326:9	Director (15) 238:9;253:5,7;261:6; 282:14;303:10,16; 305:8,9,10;316:8,10, 11,15;317:20	doable (1) 219:6	down (12) 218:12;225:14; 239:19;251:6;269:14; 271:2;275:24;294:17; 302:19;303:12;313:14; 322:22
demonstrate (2) 234:24;235:11	determining (2) 308:7;326:21	directors (1) 282:12	Doctor (95) 235:23;238:23; 241:3;244:5;245:4; 247:18;248:6,15,20; 249:11;250:15,22; 251:2,9,19;252:4; 257:3,20;259:9,22; 260:2,9;261:16; 262:13,17;263:18; 265:5,13;266:2,23; 267:8,19;269:3,14; 270:8;271:4;272:15; 273:1;274:5;275:7,11; 276:25;278:14;291:22; 296:22;305:18,25; 306:6,15;307:7,14; 308:3,21;309:7,13,17, 21;310:5,14,23;311:2, 2,7;323:12;325:2,11;	do (1) 302:7
denied (1) 311:23	develop (8) 243:14;246:16; 250:13;278:8;307:21; 338:18;339:7;340:14	Disability (1) 243:25		Dr (33) 222:19;223:3,11; 234:23;237:20;239:9; 240:4;256:22;268:23; 269:1;276:6;279:12, 24;281:9;291:22; 293:9;295:20,22; 296:7;302:12;303:1; 305:12;313:9,18; 315:13;316:7;317:19; 319:8;321:1,8,12; 323:4;356:1
develop (8) 243:14;246:16; 250:13;278:8;307:21; 338:18;339:7;340:14	developed (3) 230:9;274:11;340:24	disagrees (1) 232:2		draft (1) 333:3
developing (4) 243:7;249:23; 336:24;347:17	developing (4) 243:7;249:23; 336:24;347:17	disappeared (1) 265:6		draw (1) 224:2
development (17) 230:19;231:13; 237:1;241:11;243:6, 11;244:19,24;269:21; 271:14;272:13,16; 273:12;277:22;303:22; 310:17;332:16	development (17) 230:19;231:13; 237:1;241:11;243:6, 11;244:19,24;269:21; 271:14;272:13,16; 273:12;277:22;303:22; 310:17;332:16	disciplines (1) 265:7		drawing (2) 224:5;225:12
developments (1) 252:11	developments (1) 252:11	disciplinary (3) 263:8;276:23;278:4		
deviate (1) 349:17	deviate (1) 349:17	discipline (2) 276:6,13		
devoted (1) 236:22	devoted (1) 236:22	disciplined (2) 346:8,11		
differ (2) 266:24;334:2	differ (2) 266:24;334:2	discuss (1) 339:19		
difference (3) 342:20;351:2;353:21	difference (3) 342:20;351:2;353:21	discussed (5) 221:4,9;236:24; 238:12;351:25		
differences (3) 312:7;334:23;342:22	differences (3) 312:7;334:23;342:22	discussion (1) 237:10		
different (35) 230:13,14;241:17; 242:9;243:4;244:18; 249:17,18,19,22;252:8; 258:17;266:7,20,20; 267:4;270:1;275:16; 278:9;282:9,13,13,14, 15;288:18;317:20; 326:3;334:6;341:23; 343:12,12;348:23,24; 349:5;351:3	different (35) 230:13,14;241:17; 242:9;243:4;244:18; 249:17,18,19,22;252:8; 258:17;266:7,20,20; 267:4;270:1;275:16; 278:9;282:9,13,13,14, 15;288:18;317:20; 326:3;334:6;341:23; 343:12,12;348:23,24; 349:5;351:3	disease (1) 350:21		
difficulty (2)	difficulty (2)	diseases (2) 304:7,19		
		dismissal (1) 238:11		
		dismissed (3) 263:4,6,8		
		disorders (1) 324:14		
		displeased (1) 284:12		
		dispute (2) 253:22;255:1		

<p>drug (1) 315:11</p> <p>dry (5) 237:24;238:1; 281:11,12,15</p> <p>dual (23) 262:15,21;275:13; 303:20;314:17,18; 315:2,14;316:11,16,17, 17;317:8,21;318:4,13, 23,25;319:3,9,16; 320:6,16</p> <p>due (1) 238:14</p> <p>duly (3) 239:16;302:17; 322:19</p> <p>duration (4) 261:24;262:24; 314:24;315:3</p> <p>during (42) 225:5,21,21;246:3,8, 19,22;247:1,14;250:6; 253:2;265:20;273:13; 276:12,12;277:12,14; 292:22;299:20,24; 300:13;301:24;308:2; 309:14;310:15;314:18, 21,22;315:15;327:4,8, 24;328:2;332:3,10,18, 22,25;337:20,22,22; 345:2</p> <p>duties (7) 230:24,25;241:3; 242:2;285:4;303:18; 323:21</p>	<p>323:24</p> <p>efforts (2) 264:20;294:5</p> <p>eight (1) 325:1</p> <p>either (7) 243:22;299:3;305:3; 328:12;329:2;334:24; 354:12</p> <p>elaborate (5) 235:2;247:18; 267:22;268:19;269:2</p> <p>elements (4) 237:4,7;243:1;246:7</p> <p>elevation (1) 254:24</p> <p>eligible (1) 236:4</p> <p>else (3) 226:12;260:24;356:3</p> <p>elsewhere (2) 230:7;343:24</p> <p>email (10) 216:21;221:6;222:3, 7;231:15,20;232:6; 233:4;291:2;330:17</p> <p>emails (1) 232:20</p> <p>emotional (1) 333:10</p> <p>emphasis (1) 282:2</p> <p>employed (3) 240:4;303:4;323:4</p> <p>employee (4) 267:1;294:5,13; 295:24</p> <p>employees (14) 230:22;253:23; 254:5;266:25;278:16, 18;293:10,23;294:3,5, 19;295:8,16,22</p> <p>Employer (47) 212:6;216:6;218:25; 219:18,25;221:14; 222:2,5,13;224:4; 231:14;232:25;233:21; 234:17;237:17;238:14; 239:1;254:3;255:19; 256:2,10;290:18; 291:3,19;296:4,10; 298:4,17,21;299:14; 300:5,14,17;301:4,4,6, 13;302:5,7,9,22; 313:18;315:5;321:9, 16;322:24;356:3</p> <p>employers (1) 344:4</p> <p>Employer's (42) 217:4;219:23,24; 220:7;221:16,23; 222:10;224:7;225:13; 233:16,18,19,23;237:3,</p>	<p>21;248:21;249:8,9; 253:21;255:7,19; 256:4,8;257:5,17,18; 270:9,20,21;299:22,25; 300:3,4,7,9,18,19,24; 301:8,9,13,15</p> <p>employment (5) 240:25;241:1; 280:21,25;281:2</p> <p>encourage (2) 283:17,18</p> <p>encouragement (1) 228:5</p> <p>end (8) 219:7;222:12; 258:21;278:7;333:24; 337:2,6;343:10</p> <p>endeavors (1) 243:20</p> <p>engage (2) 245:10;343:12</p> <p>engagement (3) 265:9;333:20,22</p> <p>engaging (1) 327:5</p> <p>enjoy (1) 327:19</p> <p>enough (6) 246:5;286:10; 287:21;298:14;329:12; 348:22</p> <p>enroll (1) 251:25</p> <p>enrolled (3) 250:16;262:14; 275:13</p> <p>enrollment (7) 231:15,17;232:9,21; 233:3;253:25;301:5</p> <p>enrolls (1) 232:14</p> <p>ensure (1) 241:14</p> <p>entails (1) 243:4</p> <p>enter (3) 299:23,24;300:4</p> <p>entered (4) 216:16;249:8; 257:17;270:20</p> <p>entering (2) 300:17;315:10</p> <p>enterprise (5) 229:15,21,21;243:8; 343:20</p> <p>entire (6) 242:6;253:20,21; 294:9;333:1;351:1</p> <p>entirely (2) 254:7;278:20</p> <p>entirety (2) 354:15,22</p> <p>entities (3)</p>	<p>243:23;244:11;268:7</p> <p>entity (10) 267:25;268:4; 269:10,12,13,20; 288:13,19;323:8; 354:23</p> <p>entry (1) 233:19</p> <p>environment (6) 241:15;245:25,25; 327:11;329:13;336:17</p> <p>essence (1) 296:9</p> <p>essentially (1) 331:12</p> <p>establish (3) 253:21;254:8,10</p> <p>established (1) 254:10</p> <p>et (4) 238:2;281:19,19; 327:1</p> <p>evaluate (4) 225:20;293:9; 343:25;344:4</p> <p>evaluated (10) 274:5;293:12,18,23; 294:1,20,23;295:2,14, 23</p> <p>evaluates (2) 294:4,5</p> <p>evaluating (1) 295:16</p> <p>evaluation (11) 248:22;249:18; 269:16,25;270:1; 275:11,11;294:8,11; 295:4,24</p> <p>evaluations (1) 251:24</p> <p>even (7) 278:8;299:8;319:21; 349:1,4;354:1,19</p> <p>eventually (1) 227:7</p> <p>everybody (4) 228:18;238:24; 326:10;343:19</p> <p>everyone (4) 216:4;277:13,13; 319:12</p> <p>evidence (25) 216:13,17;221:3,7; 222:11;233:20;249:4, 8;253:24;255:8,13; 256:11;257:14,17; 260:6;270:15,20; 290:8;293:25;299:23; 300:3,4,17;301:3,12</p> <p>evidentiary (1) 255:3</p> <p>evolution (1) 331:24</p>	<p>exact (1) 310:2</p> <p>exactly (2) 237:22;316:6</p> <p>exam (3) 225:24;236:21; 341:22</p> <p>examination (13) 223:8,9;234:21; 236:17;240:2;275:24; 279:3,8;302:24;313:7; 323:2;333:3;356:1</p> <p>examined (3) 239:17;302:18; 322:20</p> <p>examining (1) 254:7</p> <p>example (17) 247:25;264:2;286:3; 288:14;325:25;329:16; 331:15;333:16;334:16; 335:17;341:11,19; 342:21;347:2;349:5; 350:20;351:24</p> <p>examples (3) 265:2;276:25;353:15</p> <p>exchange (1) 235:20</p> <p>exclusively (1) 348:12</p> <p>excuse (6) 219:24;223:13; 256:5;290:20;300:23; 330:6</p> <p>executing (1) 243:15</p> <p>exercise (2) 274:12,18</p> <p>exhibit (73) 216:7,12,13,14,16, 18,22;217:4;219:22; 220:7;221:2,14,16,23; 222:6;224:5,7;225:13; 231:14;233:1,17,18,21, 23;237:3;248:19,21; 249:4,8,9;257:3,5,14, 17,18;267:7,10;270:7, 9,14,20,21,22,23; 287:20;288:4,7,9; 290:2;291:18,19; 299:23;300:2,4,6,7,8,9, 14,18,19,21,24;301:4, 5,6,8,9,13,15;305:13; 313:19;315:5</p> <p>exhibits (3) 255:20;299:25;300:3</p> <p>existence (1) 232:11</p> <p>existing (1) 341:21</p> <p>exists (1) 259:9</p> <p>expand (1)</p>
--	--	---	--	---

E

<p>258:14 expect (2) 296:15;342:10 expectation (7) 246:4,18,21;247:2; 259:2,7;335:3 expectations (8) 246:8,13,14;258:17, 19,25;310:16;319:7 expected (9) 246:3;274:19;275:7; 308:3;323:23,23; 327:24;332:16;354:19 expedite (1) 295:1 expense (1) 281:21 expenses (2) 281:7,14 expensive (3) 247:22,22;281:6 experience (9) 225:15;289:23; 295:6;304:19;329:1; 337:16;338:25;339:3; 353:12 experienced (1) 230:8 experiences (1) 304:18 experimental (2) 238:1;247:24 experiments (16) 224:19;226:4,7,25; 227:3;235:4,5;246:11; 247:22;258:22,25; 274:14;327:22;337:1; 340:4;351:7 expert (3) 275:1;325:25;339:24 expertise (5) 259:15;275:1; 312:15;325:14;330:20 experts (1) 327:2 explain (6) 242:22;249:21; 269:16;273:8;288:10; 331:23 explanation (2) 238:6;287:4 explanatory (1) 250:3 explicitly (1) 349:11 express (1) 312:13 expressions (1) 237:25 extend (1) 264:21 extends (1) 284:1</p>	<p>extensions (1) 264:19 extensive (1) 280:8 extensively (1) 350:21 extent (1) 317:13 external (1) 235:24 extracurricular (1) 343:12 extracurriculars (1) 343:10</p> <p style="text-align: center;">F</p> <p>facilitate (1) 349:20 facilities (1) 229:16 facility (2) 247:25;350:25 facing (1) 244:9 fact (8) 231:20;251:25; 253:20;254:18;282:12; 304:3;339:12;350:11 factor (1) 263:24 factors (4) 238:12;294:22; 295:14,15 facts (3) 222:2;254:8;255:1 faculty (24) 242:12;245:21; 247:11,13;250:10; 253:5;256:25;267:6; 268:23;275:1;289:2; 304:8;305:3;306:17, 20,23;329:19;333:7; 334:15;338:16;341:16, 17;342:13;353:25 fail (2) 263:16;338:21 failure (1) 263:9 fair (4) 291:15;318:3; 344:18;345:12 faith (1) 264:20 fall (1) 349:25 falls (1) 244:6 familiar (13) 245:5,13;252:6; 253:8;261:18;281:9, 10,12;288:24;314:14; 339:6;343:14;347:24</p>	<p>family (1) 266:14 far (5) 253:21;255:9,21; 294:10;322:1 fate (1) 276:18 Federal (2) 212:16,16 fee (1) 253:11 feedback (7) 250:12;270:4; 273:25;276:20;307:24; 342:18;354:9 feel (2) 260:13;329:13 fees (6) 330:6;348:5,6;350:9, 17;352:6 fellow (1) 240:15 fellows (9) 230:6;241:23; 242:14,16;251:13; 312:9;330:18;336:11, 19 fellowship (4) 235:25;236:7;304:7; 337:14 fellowships (2) 227:12;228:3 felt (6) 285:25;286:1,10,15, 22;328:12 FERPA (1) 285:14 few (5) 220:5;235:23; 269:15;333:15;346:14 Filizola (1) 261:10 fill (3) 266:16;269:25;271:9 filled (1) 271:7 fills (1) 271:5 final (3) 242:15;248:10;340:8 finalizing (1) 334:12 finally (3) 224:20;243:20;306:9 financial (11) 224:20;227:22; 247:13,19;264:15; 268:15,16,17,17;315:7; 350:18 find (12) 234:4;264:17,19,21; 265:18;290:14;299:14; 322:13;329:16,17;</p>	<p>339:23;352:16 findings (1) 271:21 fine (3) 219:13,17;223:15 finish (2) 272:23;279:18 finished (6) 220:22;226:13; 272:13;304:9;339:14; 340:24 finishing (1) 345:3 fired (1) 355:2 first (30) 216:11;220:10; 222:15;225:12;239:20; 245:11;247:21;248:6; 252:17;253:17;260:21, 21;271:4;299:15; 302:20;305:18,19,21, 25;306:2,21;332:4,8; 334:3;336:14;341:10; 346:21;348:4;352:10, 13 firsthand (2) 290:5;292:19 fit (10) 246:7;248:11; 274:16,25;325:16; 326:6,18,21;330:21; 331:13 five (3) 298:19;355:10,16 five-minute (1) 275:23 fixed (1) 308:15 flexibility (7) 306:15,15,19,22; 308:6,11,12 flexible (4) 338:5;342:3;349:8, 19 floor (1) 350:24 flourish (1) 327:11 focus (3) 241:9;261:1;304:16 focused (1) 280:9 focuses (4) 242:5,11,12,13 fold (1) 352:4 folks (4) 252:25;277:8; 283:22;339:21 follow (6) 217:6;236:14; 238:10,15;284:16;</p>	<p>321:10 following (2) 273:3;332:20 follows (3) 239:17;302:18; 322:20 follow-up (2) 286:1;293:17 foremost (3) 247:21;336:14; 341:10 forgot (1) 262:5 form (23) 243:19;248:22; 249:11,12,14;250:15; 254:24;257:8;269:25; 270:1,2,8;272:2; 275:12,16,19,20; 283:18;309:8;336:19; 337:13;348:17,19 formal (4) 276:23;332:12; 347:14;354:7 formally (4) 241:24;269:20; 330:4;332:7 formative (2) 250:11;273:25 forming (1) 243:8 forms (1) 349:12 formulate (7) 252:24;331:15,16; 332:19;335:8,18; 336:23 formulating (1) 339:21 formulation (1) 334:11 forward (3) 226:7;260:13;272:10 foster (1) 246:16 found (2) 338:5;342:12 foundation (1) 349:25 foundations (1) 348:18 four (4) 242:9;311:2;344:15; 353:24 fourth (2) 251:6;266:13 framing (1) 247:20 frankly (2) 265:1;267:2 frequent (1) 330:24 Friday (10)</p>
---	--	---	--	--

<p>216:8,23,25;221:4; 222:13;223:19;224:20; 225:22;229:3;236:24 front (4) 272:2;305:12;309:9; 343:10 fulfill (1) 308:3 full (6) 223:20;226:5; 239:19;261:23;295:18; 309:15 full- (1) 309:17 full-time (3) 286:8;307:7;318:20 fully (2) 336:3,5 fun (1) 356:7 function (2) 336:3,5 functions (1) 331:20 fund (7) 268:20,21;269:1; 341:20;348:14,25; 350:6 fundamental (1) 249:23 funded (3) 311:3;337:14;351:18 funding (59) 224:25;225:8;228:7, 22,24;229:20;234:24; 235:11,24;237:4,8; 246:25;248:4;261:17, 18;262:13,18,22,23; 263:25;264:4,8,23,24; 265:5,7,13,15,17; 268:25;269:1;275:6; 281:7;308:19;309:15, 16,25;310:2,5,8,11,15; 318:24;319:6;330:1,3; 337:11;346:5;347:25; 349:18;351:11,14,17, 20;352:3,15,18,23,25 funds (5) 224:18;225:9; 229:16;341:21;348:25 further (16) 229:14,20;234:11, 13;236:11;237:15,19; 255:3;278:24;296:3,6; 321:1,7,13;355:18,24 furtherance (6) 246:22;259:23; 308:23;315:22;318:11; 347:21 future (1) 344:3</p>	<p style="text-align: center;">G</p> <p>gap (1) 354:14 gave (1) 298:19 gears (1) 261:16 general (18) 229:5;230:14; 236:25;259:6,10,12,13, 19;261:17,20,21; 290:10;293:22;319:14; 327:1,18;347:15;355:7 generally (18) 241:9;242:22,25; 244:9;252:6;258:4; 259:24;261:11;269:16; 271:8,13;312:9; 313:24;314:1;315:4; 317:9;320:8;328:20 generate (3) 246:19;274:19; 327:24 Genetics (1) 268:21 Genomics (4) 268:22,22;289:7,8 Gentlemen (3) 226:19,21,21 gets (2) 252:17;351:23 given (12) 221:4,5;222:2; 230:14;232:15;265:8, 11,17;305:24;318:5,6; 354:6 gives (2) 256:5,5 glad (1) 286:1 global (1) 229:22 goal (6) 312:10,13;318:8; 331:14,16;334:12 goals (1) 272:25 goes (3) 222:21;323:24; 333:17 good (28) 216:4;223:6,11,12; 234:1;240:4;241:14; 246:6,7,10;259:7; 264:20;276:20;284:10; 303:8;305:25;313:9; 321:18;323:4;325:23; 326:6,12,12;330:21; 336:17;340:17,17,20 gosh (1) 354:1</p>	<p>governed (1) 238:4 grab (1) 219:15 grad (3) 218:5;242:23;289:16 grade (5) 248:15,17;251:4,20; 252:3 grading (1) 251:7 graduate (72) 218:1,3,6;225:11,15; 227:15,23;229:11; 232:8;234:7;235:25; 236:8,19;237:5; 240:21,22;242:13,16, 17,21;246:5;247:11, 13;249:2;250:10; 257:12,12;260:1,2; 264:14,18;265:1,2,19; 266:2;268:11;269:4; 270:11;274:2;276:16; 277:1,6,15,15;289:12, 18,19;291:25;292:3,3, 22;303:24;304:4; 309:16;310:9;311:20; 312:6;314:16;315:1; 318:11;330:2;332:9; 333:25;335:21;341:10; 344:20;348:4;351:4, 23;352:22;353:16,23 graduated (2) 329:9;355:9 graduation (1) 345:1 grander (1) 236:23 grant (42) 217:18,25;246:22; 263:19,22;274:6; 275:6;286:3,3,5,6,25; 298:10,15,19;299:5; 301:18,19;308:4; 311:4;312:2,10,14,19; 333:4;335:5,17,18,19, 23;336:1;337:15; 341:11,21,25;342:8; 348:17;349:3,6,11; 351:14,15 granted (1) 266:18 grants (23) 217:20;218:7; 228:20;229:9;298:5; 301:21;302:6,8; 312:12;335:12,15; 337:13;341:8,15; 342:9,14;347:21; 348:17;349:9,13; 350:2,10;352:9 Great (3) 276:11;337:16;356:8</p>	<p>ground (1) 220:7 grounds (1) 253:15 group (13) 244:18,19,22; 256:24;278:5;326:10, 19;330:21;331:21; 334:15;335:4,11;351:1 groups (2) 243:18;328:14 growth (1) 277:22 guaranteed (4) 261:22,23,25;262:23 guess (5) 279:10;294:2; 306:21;317:15;353:4 guidance (4) 259:16;280:10; 283:23;284:17 guide (5) 258:7,9;307:18; 336:22;339:11 guiding (1) 277:4</p> <p style="text-align: center;">H</p> <p>half (1) 241:23 H-A-N (1) 239:22 hand (7) 239:13,18;302:14, 19;322:3,16,21 handbook (7) 233:22;234:9; 314:12,16,25;315:1; 347:14 hands (2) 223:1,2 Hans (1) 296:7 Hanss (13) 239:10,15,21;240:4; 256:12,22;276:6; 279:12,24;291:22; 293:9;295:20,22 happen (10) 260:2,15;264:13; 265:5,21;280:20; 329:15;339:19;341:3; 352:14 happened (3) 260:6,9;317:1 happening (4) 316:25;317:2,3,11 happens (2) 264:10;282:22 happy (1) 291:11 hard (5)</p>	<p>219:4;250:4;277:15; 342:10;355:1 hate (1) 345:21 head (3) 244:12;249:14; 266:13 health (13) 237:11;244:1,1; 248:4;254:22;262:2; 268:17;290:13;315:7, 9;327:1;348:5;350:16 Healthcare (1) 287:7 healthy (1) 284:10 hear (3) 216:16;219:23;278:6 heard (3) 292:18,21;353:2 hearing (148) 212:13,14;216:3,5, 15,22;218:15,21,24; 219:3,8,13,17;220:11, 14,17,19,24;221:10,12, 15,22;222:24;223:3,6, 13,16,18,24;226:19,21; 232:3;233:15;234:12, 15,17,20;236:13,16; 237:17,20;238:5,7,9, 11,17,21,25;239:5,7,9, 12,18,23,25;249:5,7,7; 254:14;255:4,5,11,14, 22;256:1,15,18;257:16, 16;270:16,19,19,24; 275:25;276:3,9;279:1, 5;286:20;290:17; 291:13,16,18;292:11; 293:2,4,7,20;294:16, 24;295:17;296:4,7,8, 14,19,21,23,25;298:3, 11,17,21;299:6,12,17, 20;300:1,11,13,21,23; 301:2,2,11,22;302:1,4, 13,19,22;312:21,25; 313:3,6;317:17; 320:23;321:3,6,9,12, 22;322:9,12,15,21,24; 345:22,25;346:2; 355:15,20,23,23,24; 356:8,17,18 hearings (1) 296:16 heavy (2) 274:23,23 held (2) 241:19;316:9 help (26) 241:14;242:7; 243:19;250:13;252:20, 24;267:25;272:23; 277:24;278:8,10; 307:20;308:1;326:11;</p>
---	--	--	---	--

<p>329:7,20,22;331:21; 332:19;333:5;336:19, 22;339:11,21,23; 354:24 helped (3) 347:2,3,4 helping (5) 242:25;252:22; 307:22;336:25;337:12 helps (1) 243:14 herb (1) 239:21 hereby (2) 300:2,4 hey (1) 341:24 high (1) 227:10 highlighted (1) 237:6 highly (1) 338:7 HIPAA (3) 285:11,12,13 hire (3) 330:14;335:1,1 hired (11) 230:18;251:18; 254:16,17;312:9,13; 330:12,24;331:3; 334:8;345:9 hiring (1) 251:15 historically (3) 265:2;311:12,14 hit (1) 347:7 HIV (2) 304:17,18 Hold (10) 220:11,14;226:19; 266:21;289:5;301:14; 305:7;321:3;344:18; 345:12 home (1) 244:14 honest (3) 234:8;268:11;327:6 honestly (1) 352:24 hope (2) 317:24;335:4 hopefully (3) 278:11;299:13; 309:12 hour (2) 217:2;275:23 hours (7) 216:23;264:4; 308:10,10,14;329:11; 338:3 housing (3)</p>	<p>262:4,7;315:7 HR (5) 267:2,4;278:19,21; 288:15 Huckins (2) 268:20;288:24 Huckins' (1) 268:23 Huckins' (1) 269:1 human (7) 229:23;232:18,23; 253:25;287:5,6;291:9 hypotheses (1) 227:3 hypothetical (1) 260:5</p> <p style="text-align: center;">I</p> <p>ICAHN (16) 212:5;216:5;228:15; 229:10;240:7,16; 268:1,4;302:11;303:7, 8;304:8,21;305:6; 323:9;324:1 idea (6) 243:5;245:19; 316:23;347:3,15,17 ideal (1) 283:24 ideas (1) 335:18 identical (1) 331:8 identifiable (1) 285:15 identification (2) 267:7;288:4 identified (19) 216:14;217:4,20; 224:7;233:23;234:25; 248:21;257:5;267:10; 270:9;291:10;300:6,7, 9,19;301:9;305:13; 306:1;312:1 identify (4) 245:21;283:22; 290:14;306:3 identifying (2) 242:5;353:18 identities (1) 353:18 IDP (6) 272:15,16;273:5,6; 275:11,17 imagine (1) 354:2 immediately (2) 266:1;306:9 immerse (1) 246:9 IMMS (1)</p>	<p>295:22 impacts (2) 324:12;340:11 IMPLEMENT (1) 212:9 importance (2) 279:18,21 important (15) 244:15,16;253:2; 262:6;271:22,22; 274:9;275:17;284:4,6, 8,9;307:19;336:4; 337:11 impose (1) 337:17 IMSSM (1) 229:24 inaccurate (2) 268:3;299:2 inappropriate (2) 254:8;290:24 incentive (2) 284:16,19 incidents (1) 317:1 inclined (1) 326:16 include (3) 229:6;298:15;312:6 included (3) 233:9;312:11,12 includes (4) 229:16;231:18; 237:8;279:25 including (3) 294:11;319:16;353:7 incoming (2) 232:9,21 incomplete (2) 220:8;233:1 incorporated (1) 266:14 increase (1) 229:23 indeed (1) 309:7 independent (9) 274:14;275:3; 307:23;320:11;324:3; 331:22;335:7;338:18, 19 independently (1) 274:20 indicate (1) 250:20 indicated (1) 288:25 indicates (3) 251:7;289:8,17 indiscernible (1) 238:20 individual (9) 230:20;257:22;</p>	<p>272:16;280:23;281:4; 327:10;335:11;337:13, 14 individually (1) 311:21 individuals (3) 253:22;335:3;338:8 inevitably (1) 308:1 infectious (1) 304:7 inflammation (1) 304:19 inflammatory (1) 304:17 informally (1) 237:12 information (13) 232:15;249:25; 260:23;271:8,10; 272:3;288:21;290:11; 298:22;299:1,4; 301:17;353:19 infrastructure (3) 224:18;336:5,18 inquire (3) 299:3,14,19 inquiry (6) 216:22;217:3;221:8; 254:22;263:19;298:25 insight (1) 250:9 insist (1) 280:18 insisting (1) 220:9 instance (5) 244:11;271:17; 285:2;288:13,16 instances (5) 260:12;283:10; 285:1,6,7 instead (1) 328:14 institute (3) 225:10;268:22;289:9 institution (2) 230:1;269:12 instructional (3) 320:12,14,15 instructor (1) 335:23 instructors (1) 342:12 insurance (9) 237:11;248:4;262:2, 9,12;268:17;348:6; 350:13,17 integrate (1) 326:18 integration (1) 303:23 intellect (1)</p>	<p>326:17 intellectual (6) 237:1;258:10; 283:23;332:16;336:18; 346:23 intellectually (2) 325:17;328:13 intended (2) 271:11;274:10 intention (1) 274:13 interact (2) 245:3;332:17 interacting (1) 327:17 interaction (1) 269:17 interest (7) 234:7;325:19; 326:20;327:1;328:3; 339:18;340:19 interested (8) 217:20;259:18; 304:18;328:18,21; 333:20;335:11;342:24 interesting (1) 335:16 interests (1) 245:22 internal (2) 304:6;353:24 INTERNATIONAL (1) 212:8 interview (2) 330:19;331:6 interviewing (1) 345:4 into (39) 216:13,17,17;221:3, 8;222:11;226:25; 227:5;232:15;233:19; 237:4;245:18;249:4,8; 252:20;255:16;257:14, 17;266:14;270:14,20; 277:17;279:3;280:12, 19;281:8;287:19; 288:16;290:7;300:3,4, 16,17;301:3,12;329:3, 5;338:18;342:6 introduce (1) 290:24 introduced (1) 293:25 introduction (2) 279:10;340:3 investigator (4) 276:22;304:10; 324:9;326:24 invite (1) 281:8 invites (1) 280:12 involved (8)</p>
---	--	--	---	--

245:20;246:14; 267:6;280:3;295:24; 303:22;333:21;341:13 irrelevant (2) 254:4,22 ISMMS (9) 229:25;234:6;287:6, 7;289:2;292:23; 293:22;294:20;295:22 issue (1) 285:17 issues (9) 216:7;254:4;269:10, 12;277:22;309:10; 316:13;354:12,24 item (4) 216:19;217:3,17; 227:12 items (5) 216:11;271:6; 341:11,18;343:2	343:1 July (3) 212:17;332:8;356:19 jumps (1) 330:2 junior (2) 334:15;342:13	356:17	labs (22) 230:12;251:9; 252:23;264:7;277:21; 308:16,19;316:13; 318:14,20,20,22; 319:17;325:2;326:4; 328:20,23;329:6,10,12, 18,24 lack (1) 309:8 landscape (1) 325:24 language (4) 314:10,12,14,15 large (9) 267:24;288:12; 319:14;323:24;333:13, 22;337:8;341:19;349:4 largely (2) 324:12;336:19 larger (2) 269:13;326:18 large-scale (2) 334:14;335:10 largest (1) 350:19 last (15) 216:8,23,23,25; 221:4;227:11;239:21; 256:14;270:22;271:15; 302:20;306:8;315:6; 345:1,2 later (3) 221:13;238:13;256:7 Laura (2) 268:19;288:24 law (1) 341:9 Lawyer (1) 239:23 lay (1) 349:11 layers (1) 351:3 lead (3) 224:19;235:4;323:18 leadership (2) 261:5;274:3 leading (3) 230:20;236:22;243:9 leads (1) 237:1 learn (5) 307:22;326:3; 331:14;339:20,22 learned (1) 335:2 learning (5) 245:25;331:18,19; 336:17,23 least (6) 229:24;230:12; 244:21;253:5;283:17;	325:12 leave (21) 222:20;263:5; 264:12,13;265:16; 266:3,6,9,10,12,14,15, 16,17,17,19,21;267:1; 320:22;329:8;353:1 leaves (9) 263:16;266:7,8,24; 267:3,4;310:8;329:14, 16 leaving (1) 255:17 led (1) 335:22 left (4) 216:8;267:8;289:3,4 legal (1) 254:6 length (1) 337:21 less (6) 280:8;309:11; 326:16;330:24;348:19; 349:23 letter (2) 313:20;315:6 letters (1) 282:3 Level (8) 250:7;273:2;277:19, 23;278:8;326:16; 341:12;354:14 levels (3) 316:16;317:20;349:5 leverage (1) 343:23 Lewis (1) 240:10 likely (1) 283:9 limit (1) 263:11 limited (3) 294:11;338:22; 348:12 line (5) 217:16;253:20; 260:21;341:11,18 lines (2) 225:14;235:9 LinkedIn (1) 330:17 list (4) 252:25;277:18; 341:10,17 listed (4) 232:10;273:9,9; 314:2 lists (1) 237:7 literature (1) 347:16
J	K	L		
Jacob (1) 212:15 January (1) 345:11 Javits (1) 212:15 job (9) 265:11;280:22; 281:4;334:8;336:15; 343:3;345:1;352:17; 355:9 jobs (2) 241:2;345:5 join (13) 248:7,14;251:19; 253:4;257:10;307:6; 309:15;325:25;327:20; 330:4;331:13;332:6; 352:5 joined (7) 251:24;253:7; 269:22;319:4;323:14; 328:14;348:7 joining (6) 251:10;259:3; 309:17;324:21;325:3; 332:7 Joint (5) 299:23;300:2,6,8; 305:13 jointly (1) 283:22 journal (7) 332:13;333:16; 344:17,18;346:21,25; 347:6 journals (3) 228:11,17;331:2 judiciary (1)	240:14 kind (17) 243:10;259:7;278:6, 20;326:14;327:12; 328:20,21;333:18; 334:7;337:14;338:18; 340:17;342:5;349:12, 24;354:21 knowledge (9) 229:23;232:14,22; 290:5;292:1;319:13; 347:9,20,20 known (2) 327:2;347:18 KUMA (131) 212:14;216:3,15; 218:15,21,24;219:3,8, 13,17;220:11,14,17,19, 24;221:10,12,15,22; 222:24;223:3,6,13,16, 18,24;226:19,21; 232:3;233:15;234:12, 15,17,20;236:13,16; 237:17,20;238:5,9,17, 21,25;239:5,7,9,12,18, 23,25;249:5,7;255:5, 11,14,22;256:1,15,18; 257:16;270:16,19,24; 275:25;276:3,9;279:1, 5;286:20;290:17; 291:13,16,18;292:11; 293:2,4,7,20;294:16, 24;295:17;296:4,7,14, 19,21,23,25;298:3,11, 17,21;299:6,12,17,20; 300:11,13,21,23;301:2, 11,22;302:1,4,13,19, 22;312:21,25;313:3,6; 317:17;320:23;321:3, 6,9,12,22;322:9,12,15, 21,24;345:22,25; 346:2;355:15,20,23;	225:3;229:5;230:17; 231:6;235:8;237:22, 22,24,24;241:18; 243:2;244:12;245:10, 13,16;246:1,3,7,10,15, 17,19,22;247:1,3,7,15; 248:7,14,16,22;250:8; 251:10,12,14,15,18,18, 19,22,24;253:3,7; 254:16,17;258:13,18; 259:11;264:5,12,14,14, 17,19,21;265:14,16,18, 22;269:22;274:13; 280:12,18,19;281:7,8, 11,11,13,13,15;282:1, 8;283:4,4;288:14,15; 304:12,14,15,16; 305:23;306:1,3;307:6, 8,15;308:8,11,22; 309:3,15,17;310:12,24; 311:10,13;312:8,17; 316:3;317:9,21,22,23; 318:2,2,18,24;319:4,5, 5,11,22,24;324:7,11, 15,21,22,24;325:11,13, 20;326:1,6,21,25; 327:12,18,20;328:4,12, 15,17,18,22;329:2,2,3, 4,5,9,14;330:5,5,9,22; 331:10,11,13,25,25; 332:5,7,22;334:1,18; 335:14;336:2,10,11,13; 337:6,19;338:12; 339:5,7,12,25,25; 340:11,14,18;341:20; 343:5;346:22;348:7; 350:14;351:6,7;352:1, 4,4,5,15,19;354:13; 355:4 label (1) 288:10 LABOR (2) 212:2,15 laboratories (6) 224:11;228:12,17; 230:3;306:17;325:15 laboratory (29) 224:14,25;225:8,23; 241:10;244:12;245:23; 246:6,12;247:10,16; 248:11;249:15;250:2, 3,7;251:15;252:12; 258:9;259:3,13,20; 274:17;324:3,10; 330:11;331:13,20; 333:23 laboratory's (1) 224:14		

<p>little (5) 240:14;275:22; 303:12;309:11;350:3</p> <p>log (2) 232:15;300:16</p> <p>logo (3) 267:8,11,23</p> <p>long (14) 241:19;273:14; 277:18;296:15;298:18; 304:20,21,24;305:2; 315:2;324:1,24;327:7; 344:13</p> <p>long- (1) 243:14</p> <p>longer (5) 262:22;263:1; 298:19;327:23;329:24</p> <p>look (8) 228:25;249:16,20; 259:17;273:23;287:19; 326:8,12</p> <p>looked (2) 298:12,13</p> <p>looking (9) 218:21;250:25; 271:4;272:18;282:6; 327:8,9;339:10;343:24</p> <p>looks (3) 222:22;248:22;268:9</p> <p>loose (1) 338:5</p> <p>lose (12) 262:17,22;264:23; 265:13,15,17;308:18; 310:8;346:5;352:23, 23,25</p> <p>lost (5) 264:23;351:17; 352:3,9,15</p> <p>lot (9) 243:16;260:16; 307:16;327:6,15,22; 333:19;344:24;355:6</p> <p>luckily (1) 340:25</p> <p>lucky (1) 348:21</p> <p>lump (1) 227:21</p> <p>luncheon (1) 297:2</p> <p>lunchtime (1) 218:22</p> <p>LUPION (103) 216:10,19;217:9,14, 23;218:4,12,17,23; 219:2,6,12,15;221:2, 18;223:1;226:10,13; 228:13;229:11;231:23; 233:13;234:2,4,14,19, 22;236:11;237:19; 238:23;239:3,6,24;</p>	<p>240:1,3;249:4,10; 250:23;251:1;254:6; 255:10;256:13,16,20, 21;257:19;260:8; 270:14,25;271:3; 275:22;276:5,8,10; 278:24;286:13,17; 287:24;288:1;290:3, 19;291:11;292:9,10, 17;293:3,5,14,19; 294:7,21,25;296:6,22; 298:24;299:7,16,19; 301:16;302:11,23,25; 313:14;315:19,21; 317:12;321:11,19,21, 24;322:11;323:1,3; 325:8,10;345:18,24; 346:4;355:10,18; 356:10,12,16</p>	<p>324:19;350:18,25</p> <p>marked (2) 255:21;288:4</p> <p>market (1) 345:1</p> <p>Maryland (1) 240:15</p> <p>match (1) 350:5</p> <p>material (1) 243:16</p> <p>materials (1) 233:2</p> <p>mates (1) 330:22</p> <p>matriculating (1) 313:25</p> <p>Matter (8) 212:4,13;218:13; 259:10;313:11;325:18, 19;356:19</p> <p>matters (1) 253:25</p> <p>Matthew (1) 223:22</p> <p>maximize (1) 225:17</p> <p>maximum (1) 263:11</p> <p>may (19) 217:19;229:6,8; 231:5,6;238:10; 246:14;255:18;266:14; 302:22;313:10;314:14; 316:12,14;318:19; 320:4;322:24;333:14; 335:8</p> <p>maybe (7) 222:22;227:7; 241:23;254:14;260:18; 305:9;345:3</p> <p>MD (2) 303:21;310:11</p> <p>MD-PhD (37) 250:16,20;262:15; 275:13,16;303:10,11, 16,17,19,20;304:3,25; 305:8,22;306:12,20; 307:6,15;308:3,6,11, 16,18;309:14,22,24; 310:1,5,8,11,14;311:2, 3,12;312:8;313:20</p> <p>mean (34) 223:16;229:21; 237:6;253:17;255:12, 15,15;268:16;291:1; 293:16;298:24;299:8; 314:9,23;320:15; 325:21;326:22;334:19, 20;335:16;336:21; 337:20;339:12;341:9; 342:23;343:17;346:10; 347:13;350:8,15;</p>	<p>352:24;353:4,20,22</p> <p>meaning (2) 235:5;349:9</p> <p>means (2) 289:21;336:15</p> <p>meant (1) 354:24</p> <p>measure (5) 225:20,25;226:2,6; 227:2</p> <p>measuring (1) 227:5</p> <p>mechanism (3) 266:11;267:4;350:4</p> <p>mechanisms (5) 227:23;231:7; 264:25;278:10;318:7</p> <p>Med (1) 242:13</p> <p>media (1) 235:9</p> <p>medical (6) 242:11,14;266:9,14; 303:23;323:14</p> <p>medical/graduate (1) 323:17</p> <p>MEDICINE (21) 212:5;216:5;228:15; 229:13;240:7,17,19; 268:1,4;302:11;303:7, 8,17;304:4,6,8,22; 305:6;323:9,9;324:2</p> <p>meet (10) 224:15;244:20,21, 22;252:24;269:22; 283:12;339:16;354:3,5</p> <p>meeting (4) 271:15;275:5;284:1; 310:16</p> <p>meetings (5) 225:22;271:20,21; 275:4;354:7</p> <p>MEIKLEJOHN (86) 217:5,11,22;218:1, 10;220:4,12,16,18,22, 25;221:11,13,17,19; 226:11,17,20;232:1,24; 233:25;234:3,5,11; 236:12,15,18;237:14; 249:6;253:14;255:12, 15;257:15;260:5; 270:18,22;271:1; 279:2,6,9;286:14,21; 287:25;288:2,5;290:1, 9;291:1,12,15,17,21; 292:12,20,25;293:8,15, 21,25;294:14,18,22; 295:10,21;296:1; 298:8,13,18;299:10; 300:10,12,20,22;301:1, 10,17,23;302:2;322:4; 325:5;345:15,19; 355:12,21;356:6,11</p>	<p>member (6) 247:11;250:10; 289:2;305:3;329:19; 333:8</p> <p>members (4) 245:21;283:19; 327:18;353:25</p> <p>mental (1) 244:1</p> <p>mentality (1) 326:13</p> <p>mentee (3) 308:13,15;347:5</p> <p>mention (1) 285:14</p> <p>mentioned (16) 225:22;242:24; 243:5,21;248:13; 251:2;261:23;273:10; 280:11;287:3;311:7; 342:20;343:10;346:14; 347:8;353:6</p> <p>mentor (23) 258:9;259:17; 272:24;275:2;276:21; 284:9,11,22;306:20; 307:1,2,20;308:13,15; 319:7;323:23;329:19, 21,23;331:14;333:8; 336:12;355:9</p> <p>mentoring (5) 230:19;245:24; 280:10;307:19;353:13</p> <p>mentor-mentee (1) 311:21</p> <p>mentors (2) 306:23;331:21</p> <p>mentorship (7) 244:15;259:16; 283:18,24;284:23; 336:20;347:5</p> <p>met (2) 247:15;355:7</p> <p>metric (1) 347:7</p> <p>mice (2) 235:9;350:22</p> <p>middle (1) 288:9</p> <p>MIKLEJOHN (6) 223:10;224:1; 226:23;228:14;229:12; 232:5</p> <p>might (17) 245:1,2;250:5;259:4; 261:4,6;263:7;264:13; 265:16;285:9;299:10; 314:3;320:10;327:20; 339:19;345:6,8</p> <p>Mike (1) 355:14</p> <p>milestones (4) 278:9;310:16;355:5,</p>
	M			
	<p>M- (1) 223:22</p> <p>maintain (2) 275:9;352:11</p> <p>maintained (1) 290:12</p> <p>maintaining (4) 264:7;277:2;323:25; 352:4</p> <p>maintains (1) 264:16</p> <p>maintenance (1) 254:20</p> <p>major (3) 255:18;259:6;334:25</p> <p>majority (1) 349:18</p> <p>makes (3) 248:6;261:11;298:19</p> <p>making (9) 224:3;248:10; 263:21;271:12;326:8; 343:21;353:9;355:1,4</p> <p>managed (2) 267:2,5</p> <p>management (2) 232:23;243:8</p> <p>managing (2) 243:9,9</p> <p>manipulate (1) 238:2</p> <p>manipulation (1) 226:4</p> <p>manner (1) 254:1</p> <p>manuscript (1) 347:4</p> <p>manuscripts (2) 331:19;337:5</p> <p>many (5) 220:6;295:15;</p>			

<p>8 mind (4) 268:3;275:20; 279:18;356:9 mindset (1) 325:6 minimal (1) 255:1 minute (2) 233:25;239:6 minutes (7) 220:5;235:23; 269:15;312:23;346:14; 355:10,16 mischaracterizes (1) 315:19 miss (1) 345:21 missed (1) 299:10 missing (3) 298:6;299:1;301:18 mission (2) 229:24;271:22 misspoke (1) 221:18 mistaken (1) 267:23 misunderstood (1) 306:21 mix (1) 350:5 Mm-hmm (12) 224:13;225:1,16,19; 227:14;228:21;233:24; 273:4;283:11;313:12; 318:15;353:11 models (1) 350:21 modified (2) 277:25;278:1 modular (1) 301:20 module (1) 288:15 mold (1) 325:22 moment (11) 217:2;266:15; 267:15;272:17;273:11; 292:25;318:5,6; 320:21,22;322:8 Monday (1) 212:17 money (16) 224:21;229:9,14,16; 235:5;238:3;335:6; 341:1;343:21;348:14, 16,18,22;349:2,3;350:9 monitoring (2) 257:1;269:21 month (5) 265:9,25;284:1;</p>	<p>337:22;351:1 months (6) 264:18,22;269:24; 272:11;283:13;339:17 months' (1) 265:12 more (39) 229:22;230:7,8,8; 231:11,11,12;236:25; 244:22;253:18;254:9; 256:7;271:13;272:4; 280:9;294:14;299:14; 311:22;320:4;326:17, 17;328:13;329:21; 330:14,14;331:4; 333:10;336:21;339:1, 4;342:19;344:16; 347:15;348:12;349:13, 18,19;350:3;354:2 morning (9) 216:4;218:18;223:6, 11,12;240:4;298:22; 299:15;355:25 most (13) 244:16;249:23; 263:15,15;283:9,10; 295:15;327:22;332:4; 348:16;349:3,6,8 mostly (2) 274:24;324:13 motivated (1) 338:7 motivation (1) 325:6 MOUNT (45) 212:5;216:6;228:1, 15;229:13;240:7,25; 241:1,9;243:2;248:19; 254:21;257:3;262:7; 267:11,19,23,25;268:1, 4;270:7;280:22;287:7, 12,14;289:3,5;290:13; 292:22;294:4,19; 302:11;303:7,9;304:4, 8,22;305:2,6;323:7,8, 10;326:23;328:15; 343:23 mouse (1) 350:23 mouth (2) 302:2;333:9 move (4) 279:3;282:9;290:1; 333:12 moved (1) 329:23 moves (1) 329:16 moving (4) 226:7,11;280:18; 335:12 MSTP (2) 262:21;275:16</p>	<p>MTA (13) 253:4,5,7,7;257:10; 261:5;282:5,6,8,12,12, 13;306:12 MTI (1) 282:3 much (23) 274:5;280:8,10; 286:4,23;306:15,19; 308:6,11;311:19; 312:21;326:17,22; 327:21;333:20;342:15; 343:4,7,7;349:23; 352:11;356:7,13 multi (3) 261:13;288:19,19 multidisciplinary (1) 253:4 multiple (3) 265:3;277:16;305:23 multi-tiered (1) 261:14 must (4) 224:14;305:22; 318:24;347:9 mute (4) 222:23,23,25;276:12 mutual (1) 328:3 myself (3) 276:11;299:13; 346:10</p>	<p>necessary (2) 233:7;351:10 need (33) 217:14,14;224:17, 17,18,23;234:24; 235:8;238:18;239:1; 241:8,17;247:19; 254:14;255:3;258:1; 259:15;269:2;279:7; 288:16;296:11,17; 309:10;312:22;317:25; 320:22;321:15;331:12; 335:25;336:6;338:4; 339:20;341:21 needed (4) 235:11;249:23; 265:18;277:25 needs (15) 238:12,14;247:23, 23,24;259:15;261:15; 266:6,16;275:5;276:8; 296:9;337:3;339:22,22 negative (2) 282:22;284:13 Nephrology (1) 240:20 Neuroscience (13) 245:6;261:19; 262:20;305:20,21; 306:14;307:6;310:1,4; 323:18,19,22;331:3 New (20) 212:16,16;216:19; 240:12;264:14,17,19; 265:18;301:5;319:5, 13;329:17;342:6; 343:23;345:9;347:9, 19;348:21;352:7,17 next (13) 239:1;267:9;272:11, 13,19,22,22;288:9; 300:5;301:14,24; 302:10;321:23 nice (1) 341:2 Nicole (2) 222:24;313:9 NIH (17) 228:24;240:15; 298:10,14,16;335:25; 337:14;341:21;342:3; 348:16;349:2,4,7,8,18; 350:2,10 nitpick (1) 294:7 Nobody (1) 279:6 nobody's (1) 279:6 nomenclature (1) 269:13 non- (1) 336:5</p>	<p>non-academic (1) 333:18 Nonetheless (1) 221:7 nonprofit (1) 343:20 nonsensical (1) 294:10 note (3) 222:9;233:15;237:11 Noted (4) 216:2;222:1;233:16; 298:2 Notice (5) 212:14;265:8,11,25; 352:16 noticed (1) 345:17 notification (1) 265:9 Number (31) 216:6,14,18;217:4; 224:7;233:1,23;243:4; 248:21;249:9,17; 257:5,18;267:10; 268:20,21;270:9,21; 272:6;292:6;300:6,7,8, 9,19;301:8,9,15; 308:14;343:11;353:7 numbers (2) 218:19;314:3</p>
		<p>N</p>		
		<p>name (13) 217:22;223:20,20, 22;239:19,20,21; 268:13;289:14;302:20; 303:1;304:14;322:22 names (2) 230:14;285:9 name's (1) 313:9 narrative (2) 272:8;309:8 narrow (4) 281:5;294:14,15,17 narrowed (1) 309:9 NATIONAL (2) 212:2,15 nature (3) 235:7;263:9;331:2 navigate (1) 308:1 near (1) 288:9 nearing (1) 330:16 necessarily (6) 226:8;229:2;246:15; 332:15;344:22;353:4</p>		
		<p>O</p>		
		<p>oath (3) 223:4;239:24;356:2 object (8) 249:5;253:14; 289:17,20;290:18,19; 293:17;317:13 objection (32) 216:12,15;220:6; 228:13;231:23;232:24; 233:13;249:6;255:4; 256:2;257:15,16; 260:5;270:18;286:13, 17,18,20;290:3;292:9, 17;293:14,19,20,24; 294:21,24;295:18; 301:10;315:19;317:12; 325:5 Objections (16) 221:24,25;222:1,2, 10,14;238:11;249:7; 270:19;300:1,1,25; 301:1,2,7,12 objective (2) 227:8,9 objectives (1) 319:11 obligated (3) 280:15,23;281:4 observation (1)</p>		

<p>217:6 observing (1) 327:17 obtain (2) 300:14;337:11 obtained (1) 291:8 obtaining (2) 334:4;344:7 occasions (3) 263:13;283:1;293:9 occur (5) 225:4,9;318:14,18; 332:4 occurred (1) 227:19 occurs (1) 332:25 O'Connell (11) 217:7,12;219:25; 221:5;222:19;223:3, 11,22;234:23;237:20; 281:10 O'-C-O-N-N-E-L-L (1) 223:23 off (42) 216:11;220:14,19; 222:8,9,9,11;223:16; 226:15;234:15;238:12; 239:7;255:23,23,24; 266:12;274:1;275:25; 293:2;296:25;300:2; 301:3;309:12;313:3; 320:22,23;322:7,11,12; 327:14;338:4,10,13; 344:16;345:17,18,22, 25;354:5;355:10,16; 356:16 offer (20) 222:11;248:6,7; 249:4;255:2,7,19; 256:4,4,8;257:14; 270:14;280:15,17; 299:22;307:24;328:3, 6,9;330:23 offered (5) 221:3,24;280:22; 281:2;345:10 office (17) 227:24,25;232:8; 240:22,23,24;242:4,5, 8;243:13,22,25;261:7; 267:5;280:5,6,7 Officer (132) 212:14;216:3,15; 218:15,21,24;219:3,8, 13,17;220:11,14,17,19, 24;221:10,12,15,22; 222:24;223:3,6,13,16, 18,24;226:19,21; 232:3;233:15;234:12, 15,17,20;236:13,16; 237:17,20;238:5,9,17,</p>	<p>21,25;239:5,7,9,12,18, 23,25;249:5,7;255:5, 11,14,22;256:1,15,18; 257:16;270:16,19,24; 275:25;276:3,9;279:1, 5;286:20;290:17; 291:13,16,18;292:11; 293:2,4,7,20;294:16, 24;295:17;296:4,7,14, 19,21,23,25;298:3,11, 17,21;299:6,12,17,20, 300:11,13,21,23;301:2, 11,22;302:1,4,13,19, 22;312:21,25;313:3,6; 317:17;320:23;321:3, 6,9,12,22;322:9,12,15, 21,24;345:22,25; 346:2;355:15,20,23; 356:9,17 official (1) 292:7 offline (1) 354:5 often (4) 243:18;260:15; 329:21;330:14 oftentimes (7) 247:23;260:25; 326:23;329:18;334:21; 340:19;348:20 Once (24) 216:25;220:2; 222:23;251:19,19,24; 253:3,7,17,18;260:18; 267:16,16;269:22,24; 273:19;283:3;284:1; 319:4;331:6,13;340:7; 348:7;355:13 one (39) 217:6;228:24; 231:20;234:25;237:21; 244:15;247:9;253:5; 262:6;270:2;274:9,9; 277:3,6;279:2;285:5,7, 8;291:6;294:8,22; 296:12,12;301:19; 310:17;311:15;313:10, 14;316:4;320:4; 325:13;326:11;339:14, 15;341:23;342:22; 350:17;351:24;352:10 online (1) 321:25 only (16) 217:20;219:21; 221:5;222:5;224:10; 254:19;262:19,19,22; 267:8;310:14;316:9; 319:5;336:3,6;352:24 onto (2) 341:22,25 open (5) 251:13,14;305:15;</p>	<p>324:4;330:18 operate (1) 349:6 operates (2) 246:17;349:18 opinion (3) 317:11,14,15 opportunities (5) 307:24;320:7,8,13; 346:14 opportunity (9) 216:25;217:13; 262:8;265:17;280:17; 325:22;326:3;337:16; 354:11 optional (1) 320:10 options (2) 262:11;306:17 order (12) 216:11;224:15; 264:21;275:8;288:13, 14;318:24;336:1; 339:20;344:24;350:6,6 ordinary (1) 270:12 Oregon (1) 240:11 organization (4) 267:24;268:5; 269:10;290:13 organizations (1) 244:2 Orleans (1) 240:12 others (4) 261:4;319:23; 326:14,14 otherwise (6) 279:3;280:21; 327:21;332:12;337:25; 353:1 out (29) 218:20;230:18; 232:20;263:10;266:16, 16,17;269:25;271:5,7, 9;288:19;295:11; 299:14;319:17,19; 322:13;326:11;329:2, 4;330:16;331:7;337:6; 341:6,24;346:22; 347:16;349:11;351:15 outcome (1) 227:5 outcomes (2) 225:18;227:2 outlet (1) 317:4 outlined (2) 229:3;278:22 outlines (1) 258:22 outside (12)</p>	<p>225:23;236:9; 241:10,11,18,18;243:2; 275:8;311:5;319:21; 339:25;352:19 outstanding (2) 216:7;219:21 over (15) 218:10;220:2; 240:14;248:13;253:7, 17;254:24;272:11; 275:22;332:8;338:5; 339:16;340:20;342:12; 348:7 overall (4) 235:18;246:4;305:2; 319:10 overcome (1) 242:7 overhead (2) 229:16;350:20 overlap (1) 230:24 overruled (5) 222:1;232:3;256:2; 294:24;295:19 oversee (2) 280:7;303:20 overseeing (1) 241:25 oversees (1) 244:19 oversight (3) 244:23;258:10; 284:18 overview (1) 245:7 own (13) 231:25;262:12; 307:9;308:23;315:16; 316:20;319:21;320:3; 328:11;335:7;337:12, 13;343:8 owned (1) 262:7 owns (2) 268:20;335:12</p>	<p>287:10,11,12,14; 289:15;320:13,17,19 paired (1) 329:25 paper (4) 320:1,3,4;347:1 papers (1) 344:14 paper's (1) 345:6 Paragraph (11) 224:6,9;227:11; 305:16,18;306:2,7; 307:4;309:13,18,21 parent (3) 267:24;268:5;290:13 part (37) 228:18;229:24; 230:21;235:10,17; 244:15;245:9,20; 249:12;262:10;271:22, 23;274:3;275:18; 286:9;301:4,5;309:5; 311:3;316:24;318:25; 319:11,12,19,25,25; 325:23;329:5;332:15; 333:14,23;336:4; 337:8;341:19;344:12; 347:5;350:17 participate (1) 243:11 participated (1) 229:7 participating (1) 331:21 particular (7) 282:1,2;283:3;285:8; 291:6;326:24;342:8 particularly (3) 235:8;284:22;335:10 parties (2) 299:21;309:9 partly (1) 327:8 partner (1) 307:20 partnership (3) 225:17;243:24,25 partnerships (1) 243:23 parts (1) 270:1 passed (1) 236:21 pass-fail (4) 248:17;251:5,7; 252:2 past (2) 229:1;339:17 path (2) 227:1;231:13 pathogenesis (1) 304:17</p>
		P		
		<p>package (12) 224:20;235:18; 237:4,8;261:18,24; 262:1,10,13;264:15; 265:19;268:17 packet (1) 268:15 page (11) 224:5;225:12; 227:11;233:21;237:3; 249:16;251:6,7;271:4; 273:1;340:2 paid (12) 227:13,20,21;265:3;</p>		

<p>patient (1) 349:16</p> <p>pay (5) 224:18,21;227:16; 235:11;350:9</p> <p>paying (1) 228:2</p> <p>payment (1) 227:21</p> <p>payments (5) 254:1,2;289:21; 292:14,21</p> <p>payroll (7) 227:21;232:18; 287:12,14;289:22,23; 291:3</p> <p>pays (1) 348:5</p> <p>penthouse (1) 350:24</p> <p>people (15) 228:3;231:4,6;279:2; 292:6,16;304:18; 325:6;326:12,13; 335:24;338:2,7,17; 343:24</p> <p>per (2) 301:21;350:23</p> <p>percent (5) 343:9;348:5,8,9; 351:8</p> <p>percentage (5) 236:19;259:22; 323:24;332:8;349:4</p> <p>perfectly (1) 268:11</p> <p>perform (12) 224:10;246:3; 254:16,16;257:22; 258:13;260:3;274:15; 308:7;311:4;340:10; 348:8</p> <p>performance (6) 235:19,21;250:1; 276:7,14;310:12</p> <p>performed (9) 230:24;231:1;235:4; 247:1,22;308:22; 310:24;324:11;328:18</p> <p>performing (15) 246:21;250:5; 258:18;259:20;260:13; 265:14,21,23;270:6; 278:2,17;283:4; 350:14;351:5,6</p> <p>perhaps (5) 247:24;250:13; 282:5,5;290:4</p> <p>period (15) 225:5,21;245:22; 264:16,16,20;265:20, 25;271:15;272:19; 314:21;327:15;330:4;</p>	<p>336:8;348:10</p> <p>periods (1) 336:9</p> <p>permanent (1) 318:20</p> <p>persistent (1) 261:7</p> <p>person (3) 268:20;284:8;307:18</p> <p>personal (11) 266:9;277:22,23; 284:21,21;326:17; 327:9;329:1;330:22; 353:1,12</p> <p>personally (7) 292:13;318:3; 325:16;328:13;336:12; 350:5;354:12</p> <p>personnel (6) 230:2;291:4;312:5; 335:19,19;341:11</p> <p>person's (1) 330:20</p> <p>perspective (6) 244:16;284:19; 288:12;327:9;330:23; 336:21</p> <p>pertained (1) 217:18</p> <p>Petitioner (32) 212:11;216:16; 219:1,19,21;220:6; 221:24;223:8,24; 233:20;234:12,23; 236:13;249:5;255:6, 11;256:3,6;270:16,23, 25;279:1;288:7; 290:21;298:4,6; 299:24;300:15,24; 301:7,24;355:25</p> <p>Petitioner's (15) 216:12,14,18; 219:24;221:2,17; 233:16;255:20;256:1; 267:7,10;287:20; 288:4;290:2;291:19</p> <p>petitioning (1) 279:12</p> <p>PH (1) 316:16</p> <p>phase (3) 272:13;314:22; 332:23</p> <p>phased (1) 288:18</p> <p>PhD (138) 217:20,23,24; 225:15,21;229:2,6; 230:7;235:12,15; 240:12;245:6,18; 246:2;248:6,15; 250:15,16,20;252:9,16; 258:6,12,17;261:17,18;</p>	<p>262:17,19;263:25; 264:7,23;265:13; 269:5,17;272:14,20,23; 274:5;275:7,13; 278:15;289:13;303:21; 305:19,22;306:13; 307:5;308:7;309:18, 24;310:1,3,15;311:12; 312:1,8,17;314:16,22; 315:15;317:3,6,7; 318:9,25;319:2,3,9; 320:9;323:13;324:15, 21;325:2,17;326:5; 327:5;328:6,9,15,17, 23,25;329:2,4;330:9, 16;331:9,24;333:17; 334:1,17,21,23;335:2, 13;336:2,6,9,13; 337:18;338:1,7;339:6; 340:14;341:20,22; 342:4,15,21,23;343:3, 5,15,17;344:1,4,6,7,25; 345:2,12,14;347:12,15, 25;348:13,14;350:6, 13;351:5,9,13,13,17; 352:6,11,18;355:9</p> <p>PhDs (1) 319:15</p> <p>philanthropy (6) 341:1;348:18,22; 349:22;350:4,9</p> <p>phrase (4) 255:17;282:4; 288:10;353:2</p> <p>physical (1) 226:3</p> <p>physically (1) 318:2</p> <p>physiology (3) 240:13,13,13</p> <p>PI (65) 224:14;225:25; 228:20;234:24;235:11, 21;236:5;244:12; 245:24;247:11,18; 248:2,6;249:15; 257:21;258:1;260:3, 25;264:23;268:19; 270:4;273:7,22; 274:21,21,22;275:2; 276:6,12,13,17,20,23; 280:12,17;281:7,8; 282:20,24;283:7,21; 284:5,12,17,25;285:22; 307:14;309:16;310:8; 311:8;319:23;324:5; 326:5;329:14,15,25; 330:5;331:20;337:16; 342:16;352:3,7,9; 353:7;354:18</p> <p>picked (2) 351:22;352:12</p> <p>picks (1)</p>	<p>264:14</p> <p>picture (3) 244:4;277:22;278:21</p> <p>PIs (4) 261:12;330:13; 347:6;349:6</p> <p>PI's (9) 246:22;263:18,22; 265:5,7;274:6;275:5; 307:15;308:4</p> <p>pivot (1) 349:10</p> <p>place (5) 217:24;265:1; 278:12,21;354:14</p> <p>placed (3) 310:14;334:10;346:8</p> <p>placement (1) 329:17</p> <p>plainly (1) 294:12</p> <p>plan (6) 218:15;237:11; 243:15,15;258:22; 272:16</p> <p>planning (2) 243:13;272:18</p> <p>plans (2) 278:1,9</p> <p>play (2) 229:22;244:2</p> <p>Plaza (1) 212:16</p> <p>please (18) 223:20;234:19; 236:15;240:9;248:19; 256:14;257:7;258:15; 267:22;270:7;273:2; 279:17;303:2;304:1; 305:15,18;309:21; 322:21</p> <p>pm (11) 218:25;219:1,18; 293:6;298:2;313:4; 320:24;322:14;346:1; 355:17;356:18</p> <p>pm/Reconvened (6) 293:6;313:4;320:24; 322:14;346:1;355:17</p> <p>point (18) 220:4,5;241:16; 245:3;253:15,16; 274:9,10;277:14; 279:4,17;294:3; 313:15;314:18;328:2; 329:18;333:13;338:20</p> <p>pointed (2) 294:15;295:12</p> <p>pointing (1) 268:13</p> <p>points (1) 301:19</p> <p>police (1)</p>	<p>222:25</p> <p>policies (2) 242:7;315:1</p> <p>policy (2) 234:6;347:14</p> <p>pool (2) 349:2,19</p> <p>poor (3) 276:6,14,16</p> <p>pop (1) 350:18</p> <p>population (2) 294:9,13</p> <p>portfolio (3) 241:24;279:24; 323:25</p> <p>portion (8) 250:16;255:18; 273:5;275:14;310:15; 315:15;319:4,9</p> <p>Portland (1) 240:11</p> <p>position (17) 230:15;251:14; 265:7;280:23,24; 281:1,2,3,4;295:1; 316:9;331:5;334:9; 343:23,24;345:10,12</p> <p>positions (6) 280:21;316:11,16; 330:15,17;344:25</p> <p>possession (1) 217:3</p> <p>possibility (2) 263:10;264:19</p> <p>possible (3) 246:12;265:18; 275:19</p> <p>post (1) 251:13</p> <p>post- (1) 332:22</p> <p>Postdoc (17) 241:6,25;265:5,7,8, 10,21,23;312:8;334:18, 22,24;335:1,2,3;345:8, 9;355:2</p> <p>postdocs (19) 230:4;241:8,15; 251:9;265:9;280:4; 330:10,12;334:14; 335:9,12,20;336:3,6; 342:13;345:5;352:14; 353:22;354:16</p> <p>post-docs (1) 324:17</p> <p>postdoctoral (18) 230:6;240:15,20; 241:5,20,23;242:16; 251:13;279:25;280:3, 5,7;323:13;330:15,18; 336:11,19;345:10</p> <p>Post-doctoral (1)</p>
--	---	--	--	---

<p>312:9 potential (12) 224:11,15;225:18, 21;226:5;252:23; 284:2,13;344:3;345:5, 9;346:13 potentially (1) 318:14 preceding (1) 332:10 preceptor (2) 282:19,24 preceptors (1) 227:16 preceptor's (1) 225:10 predictable (1) 344:14 prepare (1) 333:5 prepared (4) 218:7,18;255:19; 290:12 prequel (1) 337:15 presence (1) 335:13 present (6) 238:13;318:2; 332:17;333:6,6,11 presentations (1) 307:25 presenting (1) 256:11 pressing (1) 218:13 pretty (2) 244:4;250:2 prevent (1) 354:24 previous (3) 253:19;271:15; 329:23 previously (5) 239:16;289:3; 302:17;308:21;322:19 primarily (2) 247:9;271:13 primary (5) 231:21,24;259:2,7; 284:8 principal (3) 281:21;304:10;324:9 principle (1) 231:24 principles (1) 277:4 prior (10) 234:24;240:25; 241:1;312:16;313:24; 316:10;324:21;325:3, 3;344:12 private (1)</p>	<p>348:18 prizes (1) 271:20 probably (6) 225:13;260:16; 330:13;349:8;354:2,7 problem (4) 261:7;285:22; 296:17;355:15 problems (2) 244:9;278:7 procedures (1) 310:3 proceed (6) 221:9;239:2,3; 256:10;302:22;322:25 process (34) 228:18;233:10; 245:17;265:10;266:5; 269:16;275:12;276:16, 17;277:9;294:8,11; 295:4,25;299:24; 306:10,12;307:22; 308:2;317:7;319:25; 325:11;329:8;330:8, 10,10;331:7,17; 332:25;336:23;339:6, 9,11;343:14 processes (1) 266:23 produce (5) 217:1;219:1,18; 298:22;299:18 produced (1) 221:1 production (4) 218:7,9,18;220:9 productivity (5) 225:18;226:6,8,20; 335:14 professional (4) 241:11;271:23; 272:12;273:14 professionally (2) 325:16;354:13 professor (6) 240:19;303:17; 323:18,21;324:1,8 proficiency (2) 250:8;273:15 program (66) 245:19;250:17; 252:17,21;253:2; 258:11;261:5,6;262:1, 15,20,23,24,25;263:2, 3,5,8,11,16;274:2; 275:14,16,16;276:18; 277:6;303:10,16,20,21; 304:3,5,25;305:8,22; 306:20;311:5;313:20; 314:17,19;315:2,3; 316:12,16,18;317:7,21; 318:12,23;319:1,2,12,</p>	<p>16;320:6,9,16;325:12; 332:2;337:21;341:4,5, 24;348:1;352:20; 353:5;354:16 programs (7) 244:1;261:23;262:7; 278:22;316:17;333:22; 335:10 progress (24) 236:24;244:6,10; 254:21;257:1;263:9, 17,20,21;269:21; 270:5;271:12;272:3,7; 274:5,8;276:18;277:2; 294:12;353:3,9,17; 354:5;355:1 project (10) 230:20;243:8; 246:14;271:25;272:6; 307:21;329:22;331:16; 332:19;334:11 projection (1) 272:10 projects (10) 286:24;312:5; 327:19,20;334:10,14; 335:6,8,9;346:24 promise (1) 253:16 proof (6) 255:2,7,19;256:5,8; 299:22 proportion (2) 307:9;315:14 proportional (1) 316:1 proposal (17) 258:21;259:1,10,14, 21;271:18;274:10; 275:4;286:25;287:2; 294:12;310:17;333:3, 4,11;339:14;340:9 proposal/qualifying (1) 225:24 proposals (1) 339:7 proposed (1) 312:10 provide (26) 231:21;238:17,18; 241:7,7,10,13;243:12, 15,21;244:2,8;250:9, 11;258:21;273:25; 276:20,25;283:23; 288:22;292:4;298:4; 307:24;320:14;321:16; 325:21 provided (18) 217:7;221:24;233:2, 5,6;237:5;252:9;255:9, 21;273:17,20;277:1; 298:5;300:17;302:6,7, 9;353:16</p>	<p>provides (3) 227:12;244:23;270:4 providing (2) 222:14;280:3 proving (1) 347:18 psychiatric (1) 324:14 psychology (1) 323:13 publication (5) 227:5;228:10,16; 343:14;346:18 publications (8) 229:6;307:25; 319:18,23;343:21,22, 25;344:3 publish (6) 344:6,12,17;346:6, 17,25 publishable (1) 344:21 published (4) 228:25;319:17; 337:3;344:22 publishing (6) 331:2;337:4;343:18; 346:9,12,15 pull (4) 248:19;257:3; 313:19;354:19 purchase (1) 262:9 purpose (7) 221:6;231:21,24,25; 306:1;325:11;331:9 purposes (1) 231:20 Pursuant (3) 212:13;221:3;351:14 pursue (7) 224:24;225:7; 303:21;304:6;320:10, 12;327:20 pursuing (1) 309:24 pursuit (4) 272:19;309:18; 318:10;319:13 purview (1) 328:12 Put (10) 239:18;273:24; 276:11;302:19;322:21; 335:12;342:12;343:11; 350:10;354:21 putting (1) 226:25</p>	<p>quality (1) 227:10 quick (4) 249:20;296:12; 320:21;356:9 quicker (1) 309:13 quintessential (1) 254:24 quite (2) 345:4;350:21</p>
R				
<p>R01 (4) 301:19;349:7,8,19 R01s (2) 342:13;352:9 raise (6) 223:1,2;239:12; 285:10;302:13;322:16 raised (2) 298:6;316:18 raising (2) 222:6;322:2 rare (1) 263:13 rate (1) 273:2 rather (4) 265:10;268:22; 334:12;341:14 rationale (1) 335:22 rats (1) 350:22 reach (4) 226:5;330:16; 341:24;351:1 reached (2) 264:11;331:6 read (7) 237:4;256:13; 274:21;289:25;305:18; 306:8;309:21 reader (2) 222:7;233:17 readily (3) 296:9;321:14,15 ready (7) 223:17;234:3;239:1, 3;266:22;321:22; 339:15 reagents (1) 247:23 really (42) 223:17;233:8;241:7; 243:6;246:9,10,13; 259:6;278:11,12; 284:19;288:21;289:9, 23,23;291:2;294:10; 307:19;309:9;325:22; 331:20;332:21;335:22;</p>				
Q				
<p>qualifying (1) 236:21</p>				

<p>336:22;337:3,11; 340:2,9,22,22;341:9, 13;342:23;343:11; 348:11;349:24;350:10, 20;351:23;353:22; 354:14,18 reason (7) 228:2;235:10; 263:16;295:17;319:3, 5;326:22 reasoning (2) 222:11;233:19 reasons (9) 221:25;234:24,25; 263:7;264:13;276:13; 329:10;344:11;353:1 recall (11) 235:12;236:2,5; 266:15;285:1,5,7; 286:7;287:1,3,3 recalling (1) 317:1 receipt (1) 254:19 receive (15) 218:15;227:12; 228:3;235:24;236:7; 248:15,17;251:3,4,20; 252:2;300:2;309:15; 341:8;351:14 received (6) 216:16,24;220:13; 222:10;240:12;271:20 receiving (1) 309:25 recently (1) 242:1 Recess (11) 234:16;239:8; 255:25;276:2;293:6; 297:2;313:4;320:24; 322:14;346:1;355:17 recessed (1) 356:19 recognize (5) 248:20;257:4; 279:21;290:10,11 recognizing (1) 228:5 recommend (2) 325:13;327:16 reconsideration (1) 232:25 reconvene (1) 356:19 record (54) 216:4,24;220:15,19, 20;221:4,23;222:8; 223:21;233:15,18; 234:15;237:4;239:7, 19;251:3;254:9,25; 255:3,23,23,24;256:3, 10;274:4;276:1,4;</p>	<p>286:17;288:2;291:8; 293:2,7;295:13,18; 297:1;299:23;302:20; 303:1;313:3,14; 320:22,23,25;321:4; 322:7,11,12,22;345:23, 25;346:3;355:11,16; 356:16 records (4) 287:19;290:16; 291:4;298:5 RECROSS (1) 236:17 redirect (6) 234:19,21;237:22; 261:1;296:5;321:11 redone (1) 231:2 redundancy (1) 231:7 refer (9) 218:6;244:18;245:2; 267:24;292:8,14,21; 314:10;315:9 reference (1) 309:17 referenced (2) 216:20;221:17 referred (5) 237:10,13;292:7; 314:5,6 referring (5) 221:14;225:15; 236:24;267:11;272:17 refers (4) 237:14;238:3; 267:24;314:12 reflect (1) 288:3 reflective (1) 330:13 refrain (1) 356:2 Reframe (2) 294:16;325:8 regard (3) 244:5;299:7;337:18 regarding (7) 272:9;299:5,21; 300:1;302:8,8;325:6 Region (2) 212:15;296:9 Regional (1) 238:9 register (1) 309:6 regular (3) 225:22;249:1;318:7 regularly (3) 244:20;249:1;257:11 reject (1) 340:6 rejects (1)</p>	<p>340:9 related (8) 216:8;332:14; 333:19;340:11;342:13; 345:5;348:6;350:2 relates (4) 258:5;290:4;295:5; 342:17 relation (3) 315:16;316:2,3 RELATIONS (2) 212:2,15 relationship (16) 283:18,25;284:2,4, 10,21,22,23,25;287:5; 307:19;308:14;310:23; 311:22;347:5;354:17 relationships (1) 339:21 relationship's (1) 329:11 release (1) 219:25 released (6) 217:12;238:6,7,22; 296:8;321:13 relevance (6) 217:15;253:15; 293:14,19,24;294:21 relevant (8) 220:12;253:24; 260:7,14;263:19; 295:13,15,16 rely (1) 248:10 remain (2) 351:18,18 remainder (2) 238:6;333:17 remaining (2) 309:16;333:15 mediate (2) 265:18;278:2 remediation (1) 278:9 remember (2) 296:2;313:15 reminding (1) 300:11 remission (1) 237:9 Renal (2) 240:13,13 renew (2) 220:6;232:24 renewal (1) 233:16 repeatedly (1) 254:3 repeating (1) 253:16 repetition (1) 253:15</p>	<p>rephrase (2) 317:16,17 report (2) 251:7;301:17 reporter (5) 256:13;303:13; 313:16;320:25;345:16 reporting (2) 228:11,17 reports (1) 232:7 represent (1) 286:4 representation (1) 299:1 represented (1) 216:24 representing (2) 279:11;301:24 reputation (1) 330:15 request (9) 216:19;219:24; 232:25;261:12,12; 266:17;311:23,24; 338:10 requested (2) 227:16;300:15 requesting (1) 299:5 require (3) 236:8;311:4;352:19 required (16) 228:6,7;244:21; 245:10;254:11,15; 271:9;298:9;301:20, 21;302:5;312:18; 320:9;337:19;344:6; 351:15 requirement (12) 254:15,18;264:1; 308:25;309:1,4; 310:18,21;315:10; 318:24;344:20;347:12 requirements (11) 245:14;255:17; 263:18;308:4;310:6; 312:18;315:7,9;318:9; 337:18;346:25 requires (3) 298:16;325:12,23 research (147) 224:12,19,24,25; 225:7,8,17,21,24; 227:1,2,10;228:6,8,11, 17,25;229:15,20,21; 230:1,3,11,16,25; 231:9,11;235:1,7,8; 236:20,22;237:22,23; 238:4;244:13,14; 245:19,23,24;246:22; 247:21;249:23;250:5; 251:16,17;252:1,1,25;</p>	<p>257:1,23;258:8,18,20; 259:8,10,13,19,22; 260:4;271:13,24; 272:4,12;277:21; 281:6,14;283:4; 304:16;306:16,24; 307:1,7,8,9;308:8,22; 309:3,3;310:24; 315:14,16,18,22,25; 316:3,3,19,22,23; 317:8,10,318:4,9; 319:8,10,11,15,16,22; 323:19,25;324:11,12; 325:19;327:4,14,17,19, 19,21;328:18;331:18; 333:4;334:2,3,5,5,21; 336:5,18;337:2,5,7; 339:20,23;340:11; 341:1,7;342:6,15,21, 25;343:7,18,21,22,24; 344:3;348:9;349:21; 350:7,14,19;351:6,6,10 researcher (1) 281:20 researchers (1) 338:19 researching (1) 264:5 reserves (1) 219:25 reside (1) 350:24 residency (1) 304:6 residents (1) 242:15 resides (1) 268:24 Resilience (3) 240:23;242:4,9 resolution (1) 261:9 resource (4) 241:16;243:21; 287:6;316:19 resources (20) 232:19,23;235:3; 241:17;242:7;243:21; 247:13,19,24,25;252:5, 6,9;254:1;278:18; 287:5;288:20,22; 291:9;336:18 respect (7) 268:7;269:5;291:5; 307:2;314:23;316:2; 323:17 Respectfully (1) 294:7 respond (1) 254:6 Respondent (2) 216:12,21 response (2)</p>
---	---	--	---	---

<p>255:4;260:20 responsibilities (5) 241:4;242:3;303:18; 307:14,16 responsibility (3) 336:16,22;337:8 responsible (7) 248:2;256:25; 269:20;329:25;330:5; 337:12;351:20 responsive (1) 218:7 rest (2) 238:7;354:8 restricted (2) 348:19;349:23 restriction (2) 345:6;349:5 restrictions (3) 348:24;349:24,25 restrictive (2) 350:2,3 result (3) 230:7;276:19;304:19 results (1) 229:1 resume (1) 217:17 return (2) 266:22;287:20 revenue (1) 348:23 review (11) 216:25;219:19,23; 220:3;222:15,15; 267:15;278:5;340:8; 345:7,8 reviewed (2) 274:20;299:8 reviewer (1) 344:18 reviewers (1) 344:16 reviewing (1) 299:13 reviews (1) 220:1 revise (1) 220:1 revisit (1) 256:9 rid (1) 352:10 right (82) 216:3;218:23;220:4, 18,20;221:15;222:16; 224:3,4,4;227:17; 229:4;231:15;232:16; 234:17;238:9,21,21,25; 239:9,9,12,13,18; 248:11;252:4;256:6; 268:2,24;269:3; 270:14;276:3,11;</p>	<p>278:11;279:5,6,17,24; 280:15;282:22;283:8; 287:10,12;288:9; 290:1;296:1,20,23,25; 298:3,7,13;299:19; 302:4,14;312:7,25; 313:2,3,6,22;314:3; 315:18,20;316:4; 318:21;320:4;321:12, 17,22;322:12,15,16,21; 325:16;338:21;342:22; 345:22;347:10;355:15; 356:6,16 rights (1) 219:25 robust (1) 241:15 rodent (1) 350:21 role (16) 229:22;240:16; 241:6;242:18,22; 252:19;253:1,6;258:5; 303:8;323:16;334:1, 17;336:12;337:3;339:9 roles (7) 259:7;305:5,5;316:8; 323:17;337:9;353:7 rolling (1) 218:8 Room (5) 212:16;234:14; 293:1,3;338:17 rotate (8) 247:3;251:9;252:23; 324:22;325:2;328:19, 22;340:18 rotating (1) 326:25 rotation (24) 225:4;245:10,13,17; 246:3,19,23;247:1,7; 248:16,18,22;249:13; 250:6;280:13,14; 324:25;325:11,13; 327:7,25;328:2; 332:21,23 rotations (9) 224:10;305:23; 306:1;318:19,22; 325:14;326:2;327:4; 332:4 ROTHGEB (18) 219:10;222:22; 301:23;312:23;313:2, 5,8,9;315:20,24; 317:15,18;320:21; 321:1,5,7;322:2,7 route (1) 331:5 rule (1) 338:9 ruled (2)</p>	<p>233:13,17 rules (1) 265:8 ruling (3) 220:25;222:9;295:18 run (1) 334:14 running (1) 338:12 Russo (6) 322:15,18,23;323:4; 356:1,1 R-U-S-S-O (1) 322:23</p>	<p>268:1,4;269:4;270:11; 274:2;276:16;277:1,6, 15,15;288:20,22; 291:25;292:3,4; 302:11;303:7,8,24,24; 304:4,8,21;305:6; 309:17;310:9;311:4, 20;323:9,9,18;324:2; 330:2;332:9;344:20; 348:4;351:23;352:13; 353:16 schooling (1) 241:2 school's (2) 249:2;257:12 Schwartz (2) 317:19;319:8 Science (14) 240:10;243:8;245:6; 261:19;262:20;305:20, 21;306:13;307:5; 310:1,3;331:2;338:9; 349:12 Sciences (2) 268:22;304:2 scientific (28) 228:11,16,18;241:1; 244:19,23,24;250:13, 14;258:10;269:21; 271:14,21,22;277:19; 283:23;308:2;319:12, 14;327:3;330:20; 331:1,15,18;332:24; 337:4;343:19;346:23 scientifically (1) 328:13 scientist (8) 249:24;271:23; 273:15;276:22;281:16; 307:23;331:22;343:25 scientists (1) 332:18 scope (7) 245:24;274:13,16; 275:2;281:5;316:19,22 SCOTT (3) 322:18,23;356:12 S-C-O-T-T (1) 322:23 screen (8) 250:19;267:9; 268:25;288:6,7; 289:25;305:17;345:18 screening (1) 315:11 scrolled (1) 251:6 scrolling (1) 271:6 Seah (5) 268:10;289:11; 290:4,20,21 search (1)</p>	<p>264:14 sec (1) 345:23 second (18) 216:19;224:5,9; 233:8;236:19;249:16; 251:21;253:20;258:21; 267:25;275:20;307:5; 330:23;333:1,24; 339:14;351:25;352:13 second-year (1) 332:23 Section (7) 224:10;249:14; 272:10,20;273:6,24; 335:25 sections (1) 272:1 seed (1) 269:1 seek (3) 245:2;249:25;320:10 seem (1) 279:21 seems (3) 253:21;254:3;279:6 select (5) 257:24;277:10; 306:20;307:1;331:25 selected (1) 283:20 selecting (2) 306:12,16 selection (1) 330:7 selects (3) 253:3;330:8,9 self- (2) 250:2;342:15 self-motivated (3) 338:2,19,20 semester (1) 269:24 send (1) 340:7 sending (2) 231:20;233:9 Senior (13) 240:20;241:4,19,21; 245:4;280:2,6;303:10, 16,19;304:24;305:7; 316:9 sense (7) 245:23;246:6; 284:15;325:14;327:18; 334:20;351:2 sent (3) 231:15,17;291:1 sentence (9) 225:14;305:18,25; 306:2,7,8,9,9;315:6 separate (2) 237:25;278:23</p>
--	--	--	---	---

<p>series (3) 290:15;291:3;335:18</p> <p>serve (7) 258:2;320:7;329:19; 330:10;337:5;354:1,7</p> <p>served (2) 304:24;354:19</p> <p>serves (1) 320:16</p> <p>service (5) 254:15,18;255:17; 264:1;310:6</p> <p>services (10) 232:9,21;235:20,21; 243:13,25;280:4,8; 311:5;320:14</p> <p>serving (1) 353:8</p> <p>set (10) 218:25;219:4,4; 274:14;308:13,14; 330:19;334:13;335:25; 345:18</p> <p>sets (2) 327:14;346:21</p> <p>Seven (1) 324:20</p> <p>several (18) 323:17;329:15; 331:1;333:19,22; 334:6,14;335:10; 339:16;340:20;341:23; 342:3;344:10,10,11; 348:17;352:9,9</p> <p>severe (1) 351:24</p> <p>share (1) 305:16</p> <p>shared (1) 247:25</p> <p>shift (1) 349:10</p> <p>shifted (1) 288:17</p> <p>short (3) 253:5;273:13;278:6</p> <p>shorten (1) 295:10</p> <p>Show (8) 224:4;231:14;237:3; 264:20;288:3;294:1,2; 354:9</p> <p>showed (2) 270:4,23</p> <p>showing (3) 233:21;271:17; 345:19</p> <p>shows (1) 295:13</p> <p>shut (3) 302:3;322:6;333:9</p> <p>side (2) 278:7;349:19</p>	<p>sign (3) 274:1;288:16;344:16</p> <p>signaling (1) 279:7</p> <p>significance (4) 267:14,20;273:8; 343:17</p> <p>significant (2) 278:7;356:7</p> <p>signs (1) 327:10</p> <p>similar (5) 245:22;270:3; 309:25;317:7;334:19</p> <p>simply (2) 254:4;289:25</p> <p>simultaneously (1) 257:10</p> <p>SINAI (62) 212:5;216:6;228:1, 15;229:13;232:15,18, 19;240:7,18,25;241:1, 9;242:6;243:2;248:19; 254:21;257:3;262:7; 267:11,19,23,25;268:1, 5;269:11;270:7; 280:22;287:7,12,14; 288:10,10,12,14,17,18; 289:3,5;290:12,13; 291:9,10;294:4,19; 300:16;301:5;302:12; 303:7,9;304:4,8,22; 305:3,6;315:5;323:7,8, 10;326:23;328:15; 343:23</p> <p>single (4) 277:19;287:6;295:6; 335:11</p> <p>sit (1) 333:9</p> <p>situation (3) 238:1;260:17;352:8</p> <p>situations (2) 218:3;326:4</p> <p>six (12) 225:14;269:23; 283:13;284:1;325:1,1; 327:8,13,22,23;337:25; 352:16</p> <p>six-month (1) 269:23</p> <p>six-week (2) 327:7,15</p> <p>skill (2) 327:14;335:25</p> <p>skills (16) 226:3,4;230:3,4; 231:8,9,12;243:6,7,10; 249:23;250:7;293:18, 23;294:2,6</p> <p>skillset (2) 230:8;335:2</p> <p>skillsets (1)</p>	<p>335:4</p> <p>slightly (1) 266:20</p> <p>slow (2) 303:12;313:14</p> <p>small (1) 246:14</p> <p>smallest (1) 350:18</p> <p>smart (2) 277:5;326:15</p> <p>societies (1) 331:2</p> <p>Society (1) 331:3</p> <p>soft (2) 243:6,10</p> <p>software (1) 281:18</p> <p>solely (5) 222:3,5;251:15; 274:11,25</p> <p>solid (1) 246:6</p> <p>somebody (2) 330:15;339:22</p> <p>someone (6) 252:18;258:7; 260:24;280:22;281:2; 339:24</p> <p>Sometimes (9) 221:19,20;244:25; 263:3;267:24;314:6; 329:11,14,18</p> <p>somewhere (1) 350:1</p> <p>soon (1) 216:22</p> <p>sorry (21) 219:12;223:14; 226:19;234:2;250:23; 262:5;263:21;268:16; 276:9,11;283:16; 287:2;288:2;296:3; 305:20;314:23;318:16, 17;321:5;345:20; 355:12</p> <p>sort (3) 243:9;244:3;307:20</p> <p>sorts (1) 221:20</p> <p>sought (1) 225:9</p> <p>source (5) 248:5;268:9,13,14, 25</p> <p>sources (3) 264:24;347:25; 348:23</p> <p>sours (1) 354:18</p> <p>Southwestern (1) 323:14</p>	<p>space (3) 224:17;238:1;341:14</p> <p>speak (6) 217:5;226:22;330:3; 338:16;341:16;346:10</p> <p>speaking (3) 242:25;259:25; 261:11</p> <p>speaks (1) 231:24</p> <p>specialist (1) 282:2</p> <p>specialized (1) 231:12</p> <p>specialty (1) 326:2</p> <p>specific (25) 230:18;251:12,14; 254:16,17,23;258:13, 14;272:5,6,7;285:6,7; 306:16;312:10;317:1; 331:16;335:6;336:24; 339:22;340:1,2,3; 346:24;347:14</p> <p>specifically (10) 240:13;252:10; 258:6;263:21;269:5; 272:5;285:24;307:4; 323:8;351:22</p> <p>specificity (1) 281:17</p> <p>specifics (2) 268:19;311:21</p> <p>specified (1) 351:15</p> <p>spectrum (1) 278:12</p> <p>speculation (2) 286:18;292:17</p> <p>spell (3) 223:20;303:1;322:22</p> <p>spelled (2) 239:20,21</p> <p>spend (6) 245:22;246:5; 286:23;324:24;327:17; 337:19</p> <p>spending (1) 286:2</p> <p>spends (2) 264:5;309:3</p> <p>spent (5) 224:2;248:15; 251:21;308:11;343:7</p> <p>sphere (1) 334:7</p> <p>spoke (2) 224:20;269:14</p> <p>spot (1) 328:3</p> <p>spouse (1) 356:7</p> <p>S's (1)</p>	<p>239:22</p> <p>staff (2) 352:10;354:16</p> <p>stand (2) 272:15;309:12</p> <p>standard (2) 251:8;275:9</p> <p>standards (1) 347:6</p> <p>standing (1) 233:4</p> <p>stands (1) 272:16</p> <p>start (3) 223:2;252:13;345:10</p> <p>started (4) 287:4;324:3,8; 329:23</p> <p>starting (2) 241:21;355:21</p> <p>starts (1) 225:14</p> <p>state (7) 222:13;223:19; 239:19;302:20;321:14; 322:22;344:21</p> <p>stated (1) 223:19</p> <p>statement (3) 233:4,6;284:14</p> <p>statements (1) 222:2</p> <p>states (2) 224:10;225:17</p> <p>statistical (2) 331:19;347:4</p> <p>status (2) 266:21;289:4</p> <p>stay (1) 238:13</p> <p>step (1) 351:24</p> <p>Stephanie (1) 232:7</p> <p>stepped (1) 219:9</p> <p>steps (2) 272:22;329:22</p> <p>stick (1) 218:19</p> <p>still (9) 218:12;219:10; 220:20;223:4;232:10; 280:18;290:18;345:16; 355:12</p> <p>stipend (28) 235:15,19,20; 237:10,12,13;248:3; 254:19;261:23;262:2; 264:15;265:3,19; 268:14;292:4,7;314:2, 5,9,23;330:6;332:9; 348:5,8,10;350:12,16;</p>
---	--	--	--	--

<p>352:6 stipulate (7) 254:13,25;255:2,7,8,18,20 stipulation (6) 256:4,6,7,9;299:21;309:8 stock (1) 343:2 stop (1) 354:14 straight (2) 218:9;226:25 strains (1) 277:23 Strategies (1) 243:14 strategy (2) 338:5,17 streams (1) 350:6 stress (3) 324:12;327:1;340:11 stresses (1) 277:23 stressful (1) 277:16 Strike (4) 237:15;281:21;283:2;319:22 strong (2) 284:10,16 strongly (3) 277:11;283:17,17 structure (3) 272:24;288:19;336:6 structures (3) 242:7;244:16;278:12 struggle (1) 277:14 struggling (2) 353:17;354:25 stuck (2) 222:23,23 student (261) 217:24,24;224:12,16,22,24;225:2,6;226:2,25;231:10;232:9,14;233:22;234:25;235:12,16;237:11;240:21;241:4,6,20,22,25;242:19,22,25;243:12,25;244:1,5,7,12,24,25;245:5;246:2;247:3,6,9,16,23,23,24;248:7,7,10,12,13;249:12;250:12,20,21;251:24;252:17;253:3;256:25;257:8,22;258:8,12,17,19;259:15,20;260:3,12,18;261:1,7,15;262:11,11,17,19;263:1,3,6,7,13,</p>	<p>16;264:4,7,11,12,13,18,23;265:3,13,15;266:6,16,22;267:6;268:11;269:18,22,23;270:5;271:7,12,19;272:24;273:3,22;274:1,11,17;275:2,3,7;276:6,13;277:4,14;278:1,10;280:7,12,13,14,17,18;281:8,14,22;282:8;283:3,20;284:4,7,9,12,13,16;285:3,18,20,25;286:1,4,10,19,22;289:12,13,16,18;290:4;295:6;301:5;305:3;306:20;307:15,15,19,21;308:16,18;309:2;310:1,8,11;311:17,24;312:1,8,17,18;314:12,16;315:1,7,9;316:17,21;317:6;318:4,25;319:3,19;320:1,2,16;325:19;326:2,5;327:11;328:6,9,15,17,25;329:2,4,8,10,17,20,24;330:8,9;331:9,14,22,24;332:11;333:3;334:1,17,22,23;335:2;336:6,22;338:23;339:22;340:1,21,22;341:4,20,22;342:7,10,10,21,23;343:3,5,18;344:1,5,11,18;345:12;346:5,8,8,11,17;348:7;351:4,5,9,18;352:5,11,22,25;354:6,15,18,19,21,24,25;355:4,6,8 student's (2) 326:20;350:12 students (208) 217:21;218:2;224:10;227:12,20;229:3,7;230:5,22;231:1,15,17,21;232:21;233:2,5,7;234:7;235:24;236:4,7,8;237:5;241:7,14,15,16;242:11,17;243:1,14,17,19,22;244:9,20,22,25;245:6,9,10,18,18;246:19,21;248:15;250:15,16;251:3,4,19;252:6,9,24;253:22,23;254:5,8,9,11,15,21;257:1,12,24;258:6,20;261:17,18,22,22;262:6,8,14,21,21;263:4;265:10;266:2,21;268:13;269:5,10;270:5;272:9;273:13;274:5,19;275:7,13,18;276:21,21;277:1,5,10,</p>	<p>10,12,17;278:7,13,15;280:9,11;283:17,18,24,25;290:15;292:5,22;294:1,3,23;295:2,5,14;303:21;305:19,22;306:12,13,16,24;307:1,5,6;308:3,6,7,11;309:14,22,24;310:2,3,5;311:2,3,4,12;312:6;314:17,17;315:2,10,15;316:12;317:3,9,24;318:7,14;319:9;320:6,9,10,12;323:23;324:15,22,24;325:2,12,21;326:15,23,25;327:5,13,24;328:23;329:6;332:5;333:19;335:13,21;336:2,4,13;337:4,11,19;338:7,10,25;339:3,7,13;340:14,18;341:11,17;343:12,15;344:6,25;347:25;348:15;351:14;352:1,18;353:9,13,16,18,21,23 students' (3) 226:6;329:25;347:8 student's (34) 236:20;246:25;247:14,20;248:3,4;250:1,11;258:5;259:9,14,22;263:25;264:1;268:14;272:18,24;273:15;274:3,24,25;275:3;276:18;306:5;309:18;310:12,15,24;339:17;341:7;342:15;350:7;351:13;354:4 students' (1) 340:17 studied (2) 310:15;325:17 study (4) 240:14;304:17;326:1;335:25 studying (1) 340:23 style (1) 245:24 subdivisions (1) 287:7 subgroups (1) 243:18 subject (4) 259:10;310:2,25;325:19 submit (5) 253:24;290:9;315:10;335:24;339:15 submits (1) 333:3 submitted (3) 301:4,6;336:1</p>	<p>submitting (1) 301:12 subpoena (5) 216:7;298:4;302:6,7,8 subsidized (1) 262:7 substance (1) 254:24 succeed (1) 241:8 success (1) 273:13 successes (1) 228:5 successful (2) 261:3;344:4 successfully (1) 228:25 sufficient (3) 219:20;247:19;290:14 sufficiently (1) 302:7 suggest (1) 327:16 suggestions (1) 274:22 suite (1) 350:24 sum (1) 227:21 summarize (1) 222:17 summary (1) 271:11 summer (2) 324:4;332:4 supplement (2) 341:25;342:4 supplements (1) 342:2 supplies (3) 247:24;288:13,14 support (34) 224:11,15;241:8,11,18;242:25;243:12,19;244:3;247:14,19;277:1,16,19,19;278:10,10,12,14,16,19;280:4,8;303:23;307:21;317:24;329:7;333:10;335:20;340:25;342:7;352:4;353:16;354:15 supporting (2) 277:11;334:13 supports (1) 280:11 supposed (5) 222:19;261:2;274:22;294:23;355:13 sure (23) 219:3;224:3;238:19;</p>	<p>250:22;251:2;258:16;266:13;268:10;284:15;296:14;303:20;304:2;308:10;313:13;316:14;319:25;323:13,23;330:12;336:16;338:15;341:17;347:23 sustained (3) 286:20;292:11;293:20 swamping (1) 341:15 Swartz (14) 302:12,13,16,21;303:1;304:15;305:12;313:9,18;315:14;316:7;321:2,8,12 S-W-A-R-T-Z (1) 303:3 sweeping (1) 319:14 switch (4) 261:16;328:23;329:4,18 switching (1) 329:2 sworn (3) 239:16;302:17;322:19 synergy (2) 327:3,9 system (12) 227:21;232:23;254:1;277:24;287:8,13,15;288:18;289:22,24;290:13;291:9 Systems (4) 254:22;278:14,16,21</p> <hr/> <p style="text-align: center;">T</p> <hr/> <p>TA (1) 320:17 tactic (2) 285:19,21 talent (1) 355:7 Talia (4) 302:12,16,21;321:19 T-A-L-I-A (1) 303:3 talked (1) 285:19 talking (3) 252:11;339:18;356:2 talks (1) 315:6 TAs (1) 320:7 task (1) 258:14 tasked (1) 335:15</p>
---	--	--	--	---

<p>tasks (9) 230:18;246:2; 254:16,17;258:13; 259:4;342:16,17,25</p> <p>teach (2) 254:17;323:24</p> <p>teaching (1) 264:2</p> <p>team (3) 219:2;274:3;317:25</p> <p>teams (3) 243:8,9,9</p> <p>technical (3) 226:3;231:12;283:23</p> <p>technically (2) 329:5,8</p> <p>technician (2) 230:17;251:17</p> <p>technicians (2) 230:11,25</p> <p>technique (3) 247:25;335:2;339:23</p> <p>techniques (4) 250:8;331:18; 336:20;339:20</p> <p>technological (1) 258:11</p> <p>template (3) 313:19,24;315:5</p> <p>tend (1) 342:9</p> <p>tenure (1) 353:24</p> <p>term (10) 243:7,15;253:8; 273:13,14;292:1,2,4, 14,16</p> <p>termed (1) 235:12</p> <p>terminal (2) 334:9,25</p> <p>terminate (1) 265:11</p> <p>terminated (2) 265:24;266:1</p> <p>terminology (2) 268:2,3</p> <p>terms (19) 221:4;226:3;244:18; 246:8;259:12;261:20, 21;267:3;270:5; 271:12;276:23;284:20; 308:10,10;316:1; 334:23;337:20;341:8; 354:9</p> <p>test (1) 315:11</p> <p>tested (1) 227:3</p> <p>testified (20) 227:15;230:2,10,11; 233:8;237:21;239:17; 280:12;281:6,10;</p>	<p>283:1;291:24;292:6; 302:18;308:21;315:17, 25;317:8;322:20; 340:10</p> <p>testify (1) 315:23</p> <p>testifying (2) 217:12;221:5</p> <p>testimony (8) 252:4;301:25; 303:15;309:10;316:4; 317:14;353:6;356:3</p> <p>testing (1) 347:17</p> <p>texts (1) 237:6</p> <p>Thanks (1) 291:17</p> <p>that'll (1) 219:20</p> <p>Theoretically (1) 282:18</p> <p>thesis (53) 227:10;230:20; 235:4;236:23;237:2; 244:17;253:8,11; 256:18,22,24;258:21; 259:1,8,10,14,21; 260:14,22;269:15; 271:18,25;274:8,10,20; 275:4;283:25;285:5; 287:2;294:12;310:17; 325:17;329:5;332:19, 25;333:2,18;334:11, 12;339:7;340:7,8,15; 341:14,22;342:18; 347:15;348:13;351:10; 353:8,22;354:2,6</p> <p>thinking (4) 282:5,5;286:19; 332:23</p> <p>third (7) 217:3,17;225:14; 263:10;306:8;307:6; 309:14</p> <p>though (2) 275:15;314:25</p> <p>thought (3) 219:16;285:19; 356:17</p> <p>thoughtful (2) 277:9;278:6</p> <p>three (13) 216:10;221:20; 233:14;264:18,21; 265:9,11,25;266:7; 325:13;341:22;344:15; 353:24</p> <p>throughout (5) 261:24;262:23; 264:16;284:3;354:15</p> <p>thumbs (1) 313:5</p>	<p>tick (1) 216:11</p> <p>tier (2) 277:6,10</p> <p>tiers (1) 277:16</p> <p>till (3) 279:18;298:21; 355:24</p> <p>timed (1) 263:10</p> <p>timeframe (2) 263:15;296:18</p> <p>times (8) 233:14;259:3;263:4; 329:15;336:2;339:16; 340:20;344:24</p> <p>time-sensitive (1) 345:6</p> <p>tissues (1) 238:2</p> <p>title (3) 232:13;241:19; 271:17</p> <p>titles (2) 240:18;334:7</p> <p>today (5) 216:5;219:19;223:7; 281:10;356:8</p> <p>together (3) 241:14;243:17,19</p> <p>told (1) 219:20</p> <p>Tom (6) 217:18;218:13; 220:21;226:13;254:13; 298:11</p> <p>tomorrow (4) 298:22;299:15; 355:24;356:14</p> <p>Tom's (2) 298:25;322:2</p> <p>took (2) 344:15,16</p> <p>top (7) 250:19;266:13; 267:8,8;277:6,10; 288:9</p> <p>topic (6) 259:23;306:16,24; 307:10;340:15;341:7</p> <p>total (2) 325:1;337:21</p> <p>totality (2) 243:17;294:10</p> <p>toward (1) 228:25</p> <p>towards (20) 222:12;227:1; 230:20;235:4;236:22; 237:1;241:16;258:20; 261:1;294:12;307:9, 14;309:3;323:24;</p>	<p>334:12;342:24;343:8; 351:6;353:9,17</p> <p>track (3) 278:11;340:5;353:24</p> <p>tracking (1) 218:12</p> <p>traditional (1) 331:5</p> <p>train (2) 336:15;337:3</p> <p>trainee (1) 347:6</p> <p>trainees (3) 241:7;245:8;336:9</p> <p>training (34) 225:18;226:1;230:7, 19;241:9;243:2,3; 244:2;245:20;246:8; 247:14,21;248:3; 252:2,21;253:4;257:2; 261:25;272:14;273:14; 289:14;304:9;312:14, 16;314:24;323:14; 327:15;332:13,16; 333:1;336:4,20; 337:16;351:3</p> <p>transcription (1) 303:13</p> <p>transfer (1) 352:1</p> <p>transition (2) 252:20;253:2</p> <p>transmitted (2) 273:22;274:2</p> <p>transpose (1) 294:8</p> <p>traveling (1) 345:4</p> <p>tremendous (1) 244:23</p> <p>tried (1) 295:10</p> <p>true (5) 251:16;282:23,25, 25;307:2</p> <p>try (7) 222:24;252:24; 275:23;279:17;298:22; 302:2;343:23</p> <p>trying (5) 256:3;264:21; 273:15;288:3;290:14</p> <p>Tuesday (1) 356:19</p> <p>tuition (9) 237:9;248:5;262:2; 314:3;330:6;348:5; 350:9,12,16</p> <p>Tulane (1) 240:12</p> <p>turn (2) 237:1;305:15</p> <p>turned (1)</p>	<p>220:2</p> <p>Turning (1) 227:11</p> <p>tutor (1) 320:19</p> <p>tutoring (1) 277:24</p> <p>tutors (1) 320:7</p> <p>twice (1) 244:21</p> <p>two (21) 216:20;220:10; 230:12;239:22;241:12, 23;247:15;248:12; 261:23;301:19,19; 311:20;318:24;324:16; 325:13;330:12;339:1, 4;341:22;344:16;354:7</p> <p>type (13) 230:14;245:19; 246:2;251:4;266:19; 275:17;316:15;324:11; 327:4,18;337:15; 347:19;353:15</p> <p>types (12) 246:11;266:7,20; 280:10;325:24;326:3; 327:19;332:24;333:22; 339:19;340:3;343:12</p> <p>typically (9) 328:22;330:2,17; 334:14;335:17,20; 339:11;350:11;353:24</p>
U				
				<p>ultimate (3) 227:8,9;247:6</p> <p>umbrella (1) 244:7</p> <p>uncommon (1) 277:13</p> <p>under (11) 223:4;244:6;262:25; 326:2;328:8;337:7; 345:11,11,13;352:22; 356:2</p> <p>undergone (1) 230:6</p> <p>understood (1) 256:2</p> <p>unfamiliar (1) 290:3</p> <p>UNION (3) 212:8;279:12;313:10</p> <p>unique (2) 353:23;354:23</p> <p>unit (2) 290:22;336:3</p> <p>UNITED (1) 212:8</p> <p>university (3)</p>

<p>228:10,13;240:12 unless (4) 220:13;265:25; 279:2;342:17 unmute (1) 322:3 unmuted (2) 276:8;322:5 unrelated (1) 260:4 unsatisfactorily (2) 265:22,24 unscientifically (1) 331:24 up (25) 217:6;222:6;236:14; 238:10;247:16;248:19; 257:3;264:14;267:7; 270:7;305:15;313:5, 19;321:10;322:6; 330:19;333:7;340:1; 345:3,3,20;351:22; 352:12;353:23;355:13 upcoming (1) 313:22 upon (9) 220:9;229:19; 231:15,17;233:3,19; 235:7;344:1;354:4 ups (1) 238:15 use (14) 244:17;254:23; 269:13;275:17,19,20; 292:4,13,16;314:11,15; 348:22,24;350:22 used (8) 237:25;250:15; 269:4;285:4;289:20; 291:24;292:1,2 using (4) 250:9;285:9;331:23; 351:10 Usually (8) 319:18;332:20,22; 335:1;339:21,23; 345:1;352:12 UT (1) 323:14</p>	<p>variety (9) 241:2,17;244:1; 263:7;264:12;278:9; 280:10;288:20,22 various (8) 230:2;231:6;316:7, 16;317:20;335:15; 347:25;350:5 venues (1) 331:1 verbal (1) 313:15 verbally (1) 279:22 verified (1) 291:14 verify (2) 291:8;345:15 versus (2) 342:16;349:12 via (2) 212:17;330:17 view (3) 246:11;274:12; 334:13 violation (2) 285:13,14 virtual (1) 238:14 visible (1) 268:25 vision (3) 262:9,11;281:5 visit (2) 317:21,23 voting (1) 333:8</p>	<p>332:20;333:24;335:17; 338:1;339:12;341:9, 19;343:25;344:3;351:9 ways (7) 276:21,25;330:12; 341:23;342:5;350:19, 25 week (1) 337:22 weekend (2) 218:11;338:13 weeks (11) 221:20;311:20; 325:1,1;327:8,13,22, 23;339:1,4;352:16 weight (2) 222:8;233:18 weird (1) 342:19 welcome (1) 300:12 Wellbeing (5) 240:22,22;242:4,6,8 Wellness (3) 242:3;244:2,3 weren't (2) 262:25;328:21 wet (8) 235:8;237:22,22,24; 281:11,13,20,20 whatnot (1) 268:18 what's (17) 233:6,9;246:11; 257:20;267:9;268:24; 282:2;304:14;305:12; 314:2,5;317:22; 325:11;331:9;339:10; 343:17;347:16 wheelhouse (1) 341:6 Whereas (1) 283:12 where's (3) 250:23,23;291:22 Whereupon (5) 239:14;297:2; 302:15;322:17;356:18 whole (7) 243:5,10;290:15; 311:3;327:6,15;336:23 who's (7) 249:13,13;255:10; 293:16;312:17;318:25; 329:25 whose (2) 227:25;306:4 willing (3) 221:7;254:13;255:8 window (1) 286:2 withdraw (5) 222:10;256:16;</p>	<p>273:19;347:23,24 withdrawn (8) 235:20;292:10; 304:21;309:2;311:2; 337:17;343:4;351:13 withdraws (1) 263:3 within (20) 219:10;240:23; 242:8;247:16;259:14; 263:14;268:4,21; 274:16,25;275:1; 280:22;326:18;328:11; 331:21;334:7,15; 349:1,4;354:13 without (9) 220:7;277:17;279:4; 285:9;338:9;339:5; 342:9;351:10;353:17 witness (56) 222:18;223:5,15,17, 22;226:13,16,17,22; 232:1,4;233:8;237:24; 238:8,16,20,24;239:1, 11,16,20;253:19; 254:7;270:23;288:3; 290:3,5,7,20,23,23,25; 292:18;295:4,19; 296:2,3,12,15,20,24; 300:5;301:14;302:10, 17,21;321:20,23;322:5, 10,13,19,23;325:7; 356:5,14 witnesses (1) 290:23 witness's (1) 301:24 word (10) 269:3,4,4,7;285:4; 291:24;306:9;331:23; 339:10;340:5 words (2) 254:23;267:19 work (65) 236:20;237:25; 247:17;252:20;258:23; 259:2,17,21;260:14; 261:2;274:8,13,15,16, 17,24,25;275:2,3,17; 278:2;280:18;283:22; 285:5;286:3,5,5,24; 307:25;312:10,13,24; 318:8,10;319:20,21; 320:2,11;325:24; 326:14,24;328:21; 332:18,25;333:6,14,23; 334:12,15,21;335:6,14, 21,22;336:25;340:24; 342:11;344:15,15,21; 349:3,4,14;350:20; 352:6 WORKERS (1) 212:10</p>	<p>working (9) 225:6;244:12;250:4; 259:18;318:4;319:24; 333:13;342:24;348:12 work-in-progress (1) 332:14 works (6) 236:24;319:17; 325:24;326:11;332:20; 339:12 world (3) 277:7,11;283:24 worried (2) 326:16,17 worth (1) 332:2 write (7) 232:6;335:17,18; 337:12;340:1;342:4,9 writer (1) 222:7 writing (7) 331:18;336:24; 337:4,15;345:3;347:3, 3 written (1) 267:9 wrong (2) 271:2;282:3 wrote (1) 271:1</p>
Y				
<p>Yea (1) 287:9 year (35) 236:19;240:15; 241:22;244:21;245:11; 248:6;251:21;258:21; 298:19;301:21;305:19, 21;307:5,6;309:14,25; 311:20;313:22,24; 332:4,8,10,18;333:1, 16,24;339:4,14;345:1, 2,8;348:4,6,9;354:8 years (17) 241:23;260:18; 262:1;265:3;272:12; 285:2;309:25;318:24; 336:9;337:25;338:6, 12;340:21;342:12; 344:15,16;347:25 year's (1) 332:2 York (2) 212:16,17 you-all (1) 296:24</p>				
Z				
<p>zero (1)</p>				

336:2 Zoom (1) 212:17			
0	2	4	9
02-RC-319437 (2) 212:5;216:6	2 (10) 212:15;216:12,14, 16,18;233:21,23; 237:3;305:23;348:6	4 (1) 227:11 4:05 (1) 320:24 4:08 (1) 320:24 4:10 (1) 322:14 4:22 (1) 322:14	9 (5) 227:12;270:7,9,14, 21 9:22 (1) 216:2 9:30 (8) 212:17;222:20; 298:22;301:16;355:22, 25;356:15,20
1	20 (1) 354:2 2000 (1) 305:4 2008 (3) 323:15;324:3,8 2009 (2) 324:4,9 2013 (1) 304:9 2014 (1) 305:9 2015 (5) 304:23;305:8,9,9; 311:10 2016 (2) 241:21,24 2021 (2) 305:10,10 2022 (5) 216:21;305:1,10,11; 316:9 2023 (2) 212:17;356:19	5	
1 (9) 233:1;299:23;300:2, 4,6,8;305:13,22;345:11	2016 (2) 241:21,24 2021 (2) 305:10,10 2022 (5) 216:21;305:1,10,11; 316:9 2023 (2) 212:17;356:19	5 (6) 224:5,7;225:13; 287:20;288:1;315:5 5:00 (1) 346:1 5:01 (1) 346:1 5:18 (1) 355:17 5:40 (1) 355:17 5:41 (1) 356:18	
10 (7) 212:17;239:6; 299:25;300:3,7,9; 313:19	2016 (2) 241:21,24 2021 (2) 305:10,10 2022 (5) 216:21;305:1,10,11; 316:9 2023 (2) 212:17;356:19	6	
10:00 (1) 234:16	2016 (2) 241:21,24 2021 (2) 305:10,10 2022 (5) 216:21;305:1,10,11; 316:9 2023 (2) 212:17;356:19	6 (19) 216:22;217:4; 219:22;220:7;221:2, 14,16,17,23;231:14; 233:1,17,19;300:14; 301:4;305:16,18; 306:2;309:25 6a (6) 300:10,19,20,21,24; 301:8 6b (4) 301:7,9,13,15	
10:08 (1) 234:16	2016 (2) 241:21,24 2021 (2) 305:10,10 2022 (5) 216:21;305:1,10,11; 316:9 2023 (2) 212:17;356:19	7	
10:18 (1) 239:8	2016 (2) 241:21,24 2021 (2) 305:10,10 2022 (5) 216:21;305:1,10,11; 316:9 2023 (2) 212:17;356:19	7 (6) 248:19,21;249:4,8,9; 302:6 75 (1) 348:7 75% (2) 309:15;332:9	
10:30 (1) 239:4	2016 (2) 241:21,24 2021 (2) 305:10,10 2022 (5) 216:21;305:1,10,11; 316:9 2023 (2) 212:17;356:19	8	
10:37 (1) 239:8	2016 (2) 241:21,24 2021 (2) 305:10,10 2022 (5) 216:21;305:1,10,11; 316:9 2023 (2) 212:17;356:19	8 (5) 257:3,5,14,17,18 8th (1) 216:21	
10:45 (1) 222:20	2016 (2) 241:21,24 2021 (2) 305:10,10 2022 (5) 216:21;305:1,10,11; 316:9 2023 (2) 212:17;356:19		
100 (5) 343:9;348:5,9; 349:15;351:8	2016 (2) 241:21,24 2021 (2) 305:10,10 2022 (5) 216:21;305:1,10,11; 316:9 2023 (2) 212:17;356:19		
100% (2) 236:23;268:12	2016 (2) 241:21,24 2021 (2) 305:10,10 2022 (5) 216:21;305:1,10,11; 316:9 2023 (2) 212:17;356:19		
11 (6) 299:25;300:3,7,9; 306:7;356:19	2016 (2) 241:21,24 2021 (2) 305:10,10 2022 (5) 216:21;305:1,10,11; 316:9 2023 (2) 212:17;356:19		
11:03 (1) 255:25	2016 (2) 241:21,24 2021 (2) 305:10,10 2022 (5) 216:21;305:1,10,11; 316:9 2023 (2) 212:17;356:19		
11:07 (1) 255:25	2016 (2) 241:21,24 2021 (2) 305:10,10 2022 (5) 216:21;305:1,10,11; 316:9 2023 (2) 212:17;356:19		
11:40 (1) 276:2	2016 (2) 241:21,24 2021 (2) 305:10,10 2022 (5) 216:21;305:1,10,11; 316:9 2023 (2) 212:17;356:19		
11:56 (1) 276:2	2016 (2) 241:21,24 2021 (2) 305:10,10 2022 (5) 216:21;305:1,10,11; 316:9 2023 (2) 212:17;356:19		
12 (6) 299:25;300:3,7,9; 307:4;339:17	2016 (2) 241:21,24 2021 (2) 305:10,10 2022 (5) 216:21;305:1,10,11; 316:9 2023 (2) 212:17;356:19		
12:25 (1) 293:6	2016 (2) 241:21,24 2021 (2) 305:10,10 2022 (5) 216:21;305:1,10,11; 316:9 2023 (2) 212:17;356:19		
12:32 (1) 293:6	2016 (2) 241:21,24 2021 (2) 305:10,10 2022 (5) 216:21;305:1,10,11; 316:9 2023 (2) 212:17;356:19		
12:37:49 (1) 297:2	2016 (2) 241:21,24 2021 (2) 305:10,10 2022 (5) 216:21;305:1,10,11; 316:9 2023 (2) 212:17;356:19		
12:38 (1) 297:1	2016 (2) 241:21,24 2021 (2) 305:10,10 2022 (5) 216:21;305:1,10,11; 316:9 2023 (2) 212:17;356:19		
127 (1) 233:21	2016 (2) 241:21,24 2021 (2) 305:10,10 2022 (5) 216:21;305:1,10,11; 316:9 2023 (2) 212:17;356:19		
15 (2) 312:23;338:12	2016 (2) 241:21,24 2021 (2) 305:10,10 2022 (5) 216:21;305:1,10,11; 316:9 2023 (2) 212:17;356:19		
	3		
	3 (5) 224:6,10;273:1; 309:25;348:9 3:01:44 (1) 298:2 3:33 (2) 312:25;313:4 3:50 (2) 313:1,4 30 (1) 309:21 35 (9) 267:7,10;270:25; 271:1;287:24;288:4,7; 290:2;291:19 36-130 (1) 212:16		

In The Matter Of:
ICAHN SCHOOL of MEDICINE at MOUNT SINAI

Vol. 4
July 11, 2023

Burke Court Reporting, LLC
64 Magnolia Place
Wayne, NJ 0747
(973) 692-0660



Min-U-Script® with Word Index
BURKE
**COURT REPORTING
& TRANSCRIPTION**

Page 358

1 BEFORE THE
2 NATIONAL LABOR RELATIONS BOARD, REGION 02
3 -----:
4 In the Matter of: : Case No.:
5 ICAHN SCHOOL of MEDICINE at MOUNT SINAI, :
6 Employer, :
7 and :
8 INTERNATIONAL UNION, UNITED AUTOMOBILE, :
9 AEROSPACE, and AGRICULTURAL IMPLEMENT :
10 WORKERS of AMERICA, :
11 Petitioner. :
12 -----:
13 The above-entitled matter came on for hearing Pursuant to
14 Notice, before AVI KUMAR, Hearing Officer, at the National
15 Labor Relations Board, Region 2, Jacob K. Javits Federal
16 Building, 26 Federal Plaza, Suite 36-130, New York, New York,
17 via Zoom, on Tuesday, July 11, 2023, at 9:35 a.m.
18
19
20
21
22
23
24
25
26

Page 359

1 A P P E A R A N C E S
2 On Behalf of the Employer:
3 ADAM M. LUPION, ESQ.
4 MELISSA FELCHER, ESQ.
5 RAYMOND ARROYO, ESQ.
6 JOSHUA FOX, ESQ.
7 YONATAN GROSSMAN-BODER, ESQ.
8 Proskauer Rose LLP
9 Eleven Times Square, 19th Floor
10 New York, New York 10036-8299
11 (212) 969-3558
12 alupion@proskauer.com
13 mfelcher@proskauer.com
14 rarroyo@proskauer.com
15 jfox@proskauer.com
16 ygrossman-boder@proskauer.com
17
18 ANDREW E. RICE, ESQ.
19 MARINA O. LOWY, ESQ.
20 Mount Sinai General Counsel
21 150 East 42nd Street, 2nd Floor
22 New York, New York 10017-5612
23 (212) 659-8105
24 andrew.rice@mountsinai.org
25 marina.lowy@mountsinai.org
26

Page 360

1 A P P E A R A N C E S (continued)
2 On Behalf of the Petitioner:
3 THOMAS W. MEIKLEJOHN, ESQ.
4 NICOLE M. ROTHGEB, ESQ.
5 LOGAN J. PLACE, ESQ.
6 Livingston Adler Pulda Meiklejohn & Kelly PC
7 557 Prospect Avenue
8 Hartford, Connecticut 06105-2922
9 (860) 214-9676
10 twmeiklejohn@lapm.org
11 nmrothgeb@lapm.org
12 jkplace@lapm.org
13
14 Also in Attendance
15 On behalf of Sinai Student Workers - UAW:
16 Corin Coetzee, International Representative
17 Sebastian Vivancos, International Representative
18 Ken Lang, International Representative
19 Minah Kim, International Representative
20
21
22
23
24
25
26

Page 361

1 I N D E X
2 WITNESS DIRECT CROSS REDIRECT RECROSS VOIR DIRE
3 Dr. Scott Russo -- 363 -- -- --
4 (recalled)
5 Dr. Daniel Wacker 383 -- -- -- --
6 Hamel Vyas 405 417 -- -- --
7 Matthew Cipriano 419 440 -- -- 426
8 427
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26

Page 362

EXHIBITS	EXHIBITS IDENTIFIED	RECEIVED
EMPLOYER'S		
E-15	422	422
E-13	427	427
E-14	408	408
PETITIONER'S		
P-52	443	443

Page 364

1 Q. Okay. I believe you, but why in particular is that
 2 something you look for in grad students as opposed to other
 3 people in the lab?
 4 A. Oh, I apologize. I didn't mean -- it's a broad statement.
 5 Everybody that -- whether it be a student I'm looking to take
 6 on to train or whether it be a postdoc who I'm hiring, I look
 7 for those qualities in everybody.
 8 Q. Now, what -- I apologize. When I did hearings in person,
 9 people would see me fumbling with papers constantly.
 10 A. It's like teaching a class traditionally.
 11 Q. Well, I've done that and you should see. I did a lot of
 12 fumbling with papers then too. Do you have any grants under
 13 which stipends are paid to the graduate students -- stipends
 14 paid to graduate students are treated as direct costs under the
 15 grants?
 16 A. Yes. That's how all -- all -- all costs associated with
 17 stipends are -- are considered direct cost by NIH or other
 18 granting agencies.
 19 Q. And can you explain what it means to list a cost as a
 20 direct cost?
 21 A. It's just the money that my lab uses to operate -- to do
 22 research so that's students' cost.
 23 Q. And under what circumstances may stipends be treated as
 24 direct costs?
 25 A. If you are covering as, you know, if the -- for -- for

Page 363

P R O C E E D I N G S
 (Time Noted: 9:35 a.m.)

HEARING OFFICER KUMA: All right. Dr. Russo, I'm
 going to let you know that you are still underneath the oath.
 Will the Petitioner continue with cross-examination?
 (Whereupon,
 DR. SCOTT RUSSO
 Having been previously duly sworn was recalled and testified as
 herein follows:)

C R O S S E X A M I N A T I O N

BY MR. MEIKLEJOHN:
 Q. Good morning, Dr. Russo? You understand that I'm
 representing the Petitioning Union in this case?
 A. Yeah.
 Q. And I think I just have some brief questions. We'll see
 how it goes.
 A. Okay.
 Q. You testified that when selecting graduate students for
 positions in your lab, you look for students who will be kind
 to the other people in the lab. Why is that important to you
 in selecting grad students to work in the lab?
 A. I find that people that work in a healthy, you know,
 supportive -- emotionally supportive environment tend to be
 happier. And I think a happier work environment is the kind of
 environment that I want to lead.

Page 365

example, on one of my NIHR ones I have what's called the
 diversity supplement for one of my students, which is a
 training supplement, specifically earmarked for
 underrepresented groups in science.
 And it's -- it's -- it's an add-on to the grant to support
 the salary of that individual as a direct cost. It's for --
 it's meant for training purposes. The entirety of the
 supplement itself is focused more on the training potential of
 a student than it is on the specific research details, for
 example.
 Q. I know if one of the other witnesses to these as overhead
 costs, but at least under some grants the university receives
 money to offset costs not directly related to the lab. Do you
 know the correct term for those payments?
 A. They're called indirect costs. So indirect -- there's --
 there's two parts of a -- a budget for NIH grant, for example -
 - one is direct, which is the -- the -- the cost that I use to
 run and operate my group, including cost of the actual -- most
 of it is cost of research reagents like my assistant had
 described yesterday. Indirect is everything else. So it's --
 it's -- it's a part of money that is used to pay for the
 infrastructure to support research here.
 A. And is that calculated as a percentage of the direct
 costs?
 Q. It's a separate budget. So what I would do is, I would

Page 366

1 come up with a budget that I think it's going to cost me -- you
 2 know, if it's going to cost me a \$100,000 worth of mice, for
 3 example, I will come up with a budget based on that. And then
 4 there's a separate pool of money reflecting a percentage not of
 5 that, but it's a percentage that's reflective of what I'm
 6 getting. So there's two separate parts, but it is a percentage
 7 of the direct in that way, if that makes sense. I don't know
 8 if that was super clear.
 9 Q. Well --
 10 A. But in actuality it takes 69 percent of my direct budget,
 11 for example. It's a totally separate part of money that
 12 doesn't come to my lab.
 13 Q. But the way you calculate it is, you take the direct cost,
 14 you multiply it by that 69 and a half percent figure and that
 15 is paid as indirect cost in addition to the direct cost,
 16 correct?
 17 A. Yep.
 18 Q. Okay. Are you familiar with time and effort reporting?
 19 A. I am, yes.
 20 Q. Can you explain what time and effort reports are?
 21 A. It's basically the amount of hours I've worked on a given
 22 project. So that's tallied and that's accounted for each year.
 23 Q. Do graduate students in your lab also have to prepare time
 24 and effort reports?
 25 A. I only approve them, and -- and I approve them for my

Page 367

1 postdocs and my research staff.
 2 Q. The graduate students in your lab don't have to fill out
 3 time and effort reports?
 4 A. I'm not 100 percent sure. As far as I know, no.
 5 Q. Okay.
 6 A. They don't clock in. They don't -- I think that's what
 7 you're referring to, but yeah, as far as I know the answer is
 8 no to all of them.
 9 Q. Do the postdocs clock in?
 10 A. No. Bless you.
 11 Q. Thank you. I felt that coming. Well, I think you just
 12 mentioned that if a student in your lab is interested in
 13 studying something that isn't directly related or covered by
 14 one of your grants, that you'll get or seek an additional grant
 15 or modify a grant to cover their research?
 16 MR. LUPION: Objection. Mischaracterized assessment.
 17 BY MR. MEIKLEJOHN:
 18 Q. Well, strike that. Under what circumstances would you
 19 seek to modify or obtain an additional grant based upon the
 20 interest of a graduate student in your lab?
 21 A. So I can -- I can describe the situation, you know, I had
 22 a -- I have a student, a wonderful student, she's quite
 23 talented, and African-American descent. She came into the lab
 24 and wanted to study a particular model that we're not funded to
 25 study. And there was the opportunity to write a supplement

Page 368

1 onto the grant to cover her training and her -- her stipend
 2 basically. And so that -- that's kind of what the diversity
 3 supplements are.
 4 They're very similar to other training grants that our --
 5 our students apply for and they're really focused -- they cover
 6 a percentage of the individual stipend, tuition and fees. And
 7 it's really meant to give the applicant the flexibility of -- of
 8 conducting their independent research in a -- in a more
 9 meaningful way while covering their stipend and not -- you
 10 know, them not having to worry about where the money was going
 11 to come from for them to live, for example.
 12 Q. Why couldn't you just use one of your other grants to
 13 cover that particular student's work?
 14 A. You know, if there's -- if -- if -- if the student comes
 15 to me -- there's several different ways, we talked a lot about
 16 this yesterday, there's several different ways that the student
 17 thesis proposal and -- develops, you know? And sometimes the
 18 student develops their thesis and it aligns with ongoing work
 19 in the group.
 20 There's other times where it doesn't and, you know,
 21 there's -- there's a -- there's a need to seek out funding for
 22 that student to be able to do their -- their independent
 23 flexible work. So that would be a situation in which I would
 24 write in a supplement, if -- if possible, only if, you know,
 25 obviously the candidate was eligible.

Page 369

1 Q. What do you have to do in order to obtain that supplement?
 2 A. So I -- we write up a detailed plan on -- on what the
 3 student is going to do in terms of performing their
 4 dissertation research as well as training aspects. So we have
 5 to list, for example, all the coursework that they're going to
 6 be taking. If the student is, and I'm going to make up
 7 something, you know, specific to the student, but if the
 8 student interested in computational neuroscience, that might
 9 not mean anything to you, but, you know, we -- we need to make
 10 sure that student has access to coursework in computational
 11 neuroscience.
 12 That they have other mentors because I'm not a
 13 computational neuroscientist, that they have other mentors in
 14 their sphere that will help to train them in computational
 15 neuroscience. It describes the networking opportunities that
 16 we will help to make available to them.
 17 For example, will we allow them to present their work at a
 18 -- at a meeting if they would like to, you know -- you know,
 19 opportunities to meet potential workplace employees in the
 20 future where they might want to end up, that kind of stuff.
 21 It's a -- it's really about the -- the -- the trained potential
 22 of the applicant as are all of the kind of salary, other sort
 23 of the stipend, training grants that our graduate students
 24 write for -- for that kind of support.
 25 Q. And if you're successful in winning that grant then the

Page 370

1 NIH -- winning might not be the right word, but if you're
 2 successful in obtaining that grant, then the funding would be
 3 sent from or transmitted from the NIH to Mount Sinai, correct?
 4 A. Yes.
 5 Q. And then Mount Sinai would use that to pay the graduate
 6 student?
 7 A. Stipend, yeah.
 8 Q. Just a couple of quick questions about that postdoc, you
 9 testified that -- well, have you ever actually given a postdoc
 10 this six weeks' notice that you testified you would give if
 11 they lost their funding?
 12 A. I have been lucky and I haven't lost my funding.
 13 Q. So in your experience that hasn't happened?
 14 A. No. Well, I've -- I've been lucky in that way.
 15 Q. And now --
 16 A. Has it happened at Mount Sinai yet? Yes.
 17 Q. -- now, your postdocs contribute to your research; is that
 18 right?
 19 A. Yes.
 20 Q. And are there contributions reflected as authors of
 21 publications?
 22 A. They are -- all contributions in the lab are reflected as
 23 authorship on papers. There's -- there's various kind of
 24 specific rules set by journals in order for you to be able to
 25 publish in them about what a contribution is.

Page 371

1 Q. And, basically, what kind of contribution does someone
 2 have to make in order to be listed as an author on a
 3 publication?
 4 A. It can be a conceptual intellectual contribution. Maybe
 5 you had an idea and you -- and you suggested it to individual.
 6 It can be help with writing a manuscript or writing a
 7 manuscript themselves. It can be actually engaging in the --
 8 in the research effort, broad -- broad categories of -- of
 9 contribution.
 10 Q. So I've actually looked into, or I've had people help me
 11 with this, but I've tried to look into some of your
 12 publications. You have a lot it appears. Last year, boy, I
 13 bet I'm going to butcher this, do you recall -- well, strike
 14 that.
 15 We've had other people testify this, I don't know whether
 16 you did. The head of the lab or the PI is by custom or
 17 practice or some kind of requirement consistently listed as the
 18 final author on articles published in most, if not all
 19 scientific journals, correct?
 20 A. Yes.
 21 MR. LUPION: Objection. Compound question. I'll
 22 just note my objection for the record.
 23 BY MR. MEIKLEJOHN:
 24 Q. Did you understand my question?
 25 A. Yes.

Page 372

1 Q. Okay. Now, do you recall last year that your lab
 2 published an article in the Journal of Neuropsychology
 3 regarding sexist differences in appetites and reactive
 4 aggression? Does that article sound familiar?
 5 A. I think so, but it's the wrong journal, I think --
 6 Q. Well, I --
 7 A. -- but the title sounded familiar, I think.
 8 Q. Okay. So you're going to look at something, right?
 9 A. I'm just looking so I --
 10 MR. LUPION: Stop. No, Doctor, don't do any
 11 independent research here. If there's a document that Counsel
 12 would like to use to refresh your recollection, that's
 13 Counsel's responsibility. So you're not permitted to do any
 14 independent research.
 15 THE WITNESS: Got you.
 16 MR. MEIKLEJOHN: Right.
 17 MR. LUPION: I know that's slightly counterintuitive
 18 for a --
 19 THE WITNESS: Yeah.
 20 BY MR. MEIKLEJOHN:
 21 Q. Okay. Was it the, I can't even read my own notes on these
 22 names they are so long, was it the Journal of Neuro -- I can't
 23 say it, the Journal of Neuropsychopharmacology?
 24 A. Yes, that one I recognize.
 25 Q. Okay. And what is the Journal of Neuropsychopharmacology?

Page 373

1 A. What is it? It's a peer-reviewed journal that publishes
 2 research in psychiatry and neuroscience.
 3 Q. Now, the lead author on the -- the lead article on that --
 4 lead author on that publication was Antonio Aubrey; is that
 5 correct?
 6 A. Yes.
 7 Q. And who is or was at that -- well, who is Antonio Aubrey?
 8 A. At the time of publication?
 9 Q. Yes.
 10 A. He was a postdoc and he's currently an instructor in my
 11 group, which is a junior faculty position.
 12 Q. And was that or how was that article related to your lab
 13 research?
 14 MR. LUPION: I'm just going to object to relevance.
 15 Right now, we're talking about the publication where the lead
 16 author was a postdoc who is outside of the petition for a unit
 17 and I'm not seeing a nexus to what the issues in this case are
 18 about.
 19 HEARING OFFICER KUMA: Objection sustained.
 20 BY MR. MEIKLEJOHN:
 21 Q. Do you know Samuel Golden?
 22 A. Yes.
 23 Q. Who is Samuel Golden?
 24 A. He was a former PhD student in my lab. But as the -- in -
 25 - in -- with respect to this publication that you're referring

Page 374

1 to, he's an assistant professor at the University of Washington
 2 in Seattle.
 3 Q. So the research that he's listed on that article for
 4 conducting was conducted after he left your lab?
 5 A. Well, after, yes. He graduated many, many years ago.
 6 Q. Okay. In 2020, did your lab publish an article in the
 7 Journal of Neuroscience called Depression and Social Defeat
 8 Stress are Associated with Inhibitory Synaptic Changes in the
 9 Nucleus Accumbens?
 10 A. Yes.
 11 Q. And the lead author -- well strike that.
 12 Was that article related to the research of your lab?
 13 A. Indirectly.
 14 Q. Well, your lab studies, as I recall your direct testimony,
 15 you study the stress and the results of stress on the body?
 16 A. Brain and body.
 17 Q. Pardon?
 18 A. The brain and the body, yeah.
 19 Q. Brain and the body, right. And synaptic changes in this
 20 article that I just referred to, those synaptic changes, are
 21 those in the brain or in the body?
 22 A. They're in the brain.
 23 Q. Okay. And this article -- okay, so does title of the
 24 article intended to explain what the article is about?
 25 A. Yep. Yes.

Page 375

1 Q. Did I ask you whether the lead author on this article was
 2 Mitra Hesmati?
 3 A. Yes.
 4 Q. And who was Mitra Hesmati at the time she authored this
 5 article?
 6 A. At the time she authored this article, she was a resident
 7 at the University of Washington & Anesthesia -- anesthesiology,
 8 sorry.
 9 Q. Dr. Hesmati, so she's a graduate of your lab?
 10 A. She was graduate of my lab, yes.
 11 Q. Did Dr. Hesmati contribute to any publications while she
 12 was working in your lab?
 13 A. Yes.
 14 Q. And did those publications relate to the work of your lab?
 15 A. Again, I'm going to say indirectly, but I'm going to
 16 specify that I did not have grants that -- that covered that
 17 research. I didn't have grants on those research projects.
 18 That's what I mean by indirectly.
 19 Q. You've had graduate students do rotations in your labs on
 20 numerous occasions over the years?
 21 A. Yes.
 22 Q. That was a, yes?
 23 A. Yes. Sorry.
 24 Q. Okay. Well, you have to answer verbally, and I wasn't
 25 quite sure whether that came out loud enough. But nodding the

Page 376

1 head doesn't come out on the transcript very clearly. Do
 2 postdocs personnel in your lab examine tissue samples,
 3 particularly neurological tissue samples under microscopes?
 4 MR. LUPION: Tom, can you repeat the -- you cut out
 5 for a sec. Can you repeat that question?
 6 MR. MEIKLEJOHN: I can try.
 7 BY MR. MEIKLEJOHN:
 8 Q. Is one of the -- personnel in your lab perform the
 9 examination of tissue samples including neural tissue samples
 10 under microscopes?
 11 A. Yes. Yes.
 12 Q. And how does that relate to the work at your lab?
 13 A. It -- it -- it really depends. I mean, just looking at a
 14 -- a piece of brain tissue under microscope is -- is very
 15 general. I -- there's -- you'd have to be more specific about
 16 your question. What would they be doing with the tissue?
 17 Q. That's sort of my question. Why are they looking at the
 18 tissue under microscope?
 19 A. For many reasons. To look at a protein in the brain, to
 20 visualize the architecture of the brain, to look at the number
 21 of neuronal synapses.
 22 Q. Are there certain preparatory steps that have to be taken
 23 before the tissue sample can be examined under the microscope?
 24 A. Yes.
 25 Q. And what preparation is necessary?

Page 377

1 A. It -- it -- it really depends on the application. And
 2 there's -- there's, you know, hundreds of applications that you
 3 might use to look at brain tissue. You know, I -- it's a hard
 4 question to answer, but at the very least, I guess they
 5 would've to slice the brain up in -- in a way that would allow
 6 them to put it onto a slide so they can mount it under
 7 microscope.
 8 Q. Is that a function that you've had graduate students on
 9 rotation perform in your labs?
 10 A. Not typically. You know, as I testified yesterday,
 11 there's a six-week period and it's really a period of
 12 observation. It's not a period where they're actively
 13 participating in -- in -- in the research project.
 14 MR. MEIKLEJOHN: Can we have some time in the
 15 breakout room?
 16 HEARING OFFICER KUMA: Yes. Off the record.
 17 (Off the record from 10:04 a.m. to 10:20 a.m.)
 18 HEARING OFFICER KUMA: All right. So back on the
 19 record.
 20 BY MR. MEIKLEJOHN:
 21 Q. All right, just a couple more questions. I'm going to try
 22 this again, probably won't work any better but -- in 2020, did
 23 your lab publish an article in the Journal of Neuroscience
 24 Research regarding sex specific peripheral and central
 25 responses to stress induced depression and treatment in a mouse

Page 378

1 model?

2 A. Technically, we were co-authors on that manuscript, but I

3 believe the senior corresponding author was Dr. Jun Wang in

4 neurology. And I believe the first author of that paper was

5 Kristina Deonaraines and she was a master student with Dr. Wang

6 at the time.

7 Q. And where is Dr. Wang located?

8 A. She is a faculty at —

9 MR. LUPION: Objection.

10 THE WITNESS: Oh, sorry.

11 MR. LUPION: We won't be taking any testimony of

12 master students, so prohibit any discussions of Dr. Wang at

13 this point.

14 MR. MEIKLEJOHN: Okay. Well, all right, I'll ask

15 about another one.

16 BY MR. MEIKLEJOHN:

17 Q. In, also, 2020 did your lab publish another article in the

18 same journal, the journal -- no, this one is the Journal of

19 Neuroscience. That's different from the Journal of

20 Neuroscience Research; is that right?

21 A. Yes, it's different.

22 Q. An article captioned or titled Depression and Social

23 Defeat Stress are Associated with Inhibitory Synaptic Changes

24 in the Nucleus Accumbens?

25 A. Yeah, close. Yeah, we -- we had discussed this before you

Page 379

1 went to the breakout room. That was authored by Mitra Hesmati

2 who's now at, I always get this mixed up, Washington University

3 in Seattle.

4 Q. And was Katherine LeClair listed as the second author on

5 that article?

6 A. Let's see.

7 MR. LUPION: Doctor, if you don't know --

8 THE WITNESS: I'll take your -- I'll take your word

9 for it. I don't remember.

10 MR. LUPION: So Doctor, I'm just going to -- if you

11 don't know, say you don't know. Please don't do any

12 independent investigation. If Counsel wants to show you a

13 document, he certainly can, but just answer the questions as

14 asked, please.

15 THE WITNESS: Yep. I was -- I was just going to say,

16 I'll take your word for it, but I can't recall. I don't know

17 the author list.

18 BY MR. MEIKLEJOHN:

19 Q. Okay. So what Counsel said is that if I want to show you

20 article or a document, I can. What he should've said is that

21 if I want to document, I can try, but I'm going to try.

22 MR. LUPION: I have faith in you though.

23 MR. MEIKLEJOHN: Yeah. All right.

24 BY MR. MEIKLEJOHN:

25 Q. So I'm going to show you a document, and I'm just going to

Page 380

1 ask you for purpose of refreshing your recollection. So I'm

2 not actually even -- I don't think I have to ask you what this

3 is. I'm just going to ask you whether the document that I'm

4 showing you refreshes your recollection that Katherine LeClair

5 was listed as the second author on that article?

6 MR. LUPION: And can we just scroll up or something

7 to give the witness context for the document?

8 BY MR. MEIKLEJOHN:

9 Q. How's that?

10 A. Perfect. I can see it.

11 Q. Okay.

12 (Whereupon, the witness reviewed the document.)

13 A. Katherine LeClair is listed as third author on that

14 manuscript.

15 Q. I'm sorry. Yes. Okay. Who is Christoffe?

16 A. Also, he's a currently an assistant professor at UNC, was

17 a former grad student a long, long time ago, long before this

18 paper was published.

19 Q. What was he at the time the paper was published?

20 A. He was a postdoctoral fellow at Stanford.

21 Q. And who was Katherine LeClair at the time?

22 A. She was a PhD student.

23 Q. Where?

24 A. Sorry. In my lab.

25 Q. Okay. And just one final question, is the correct term

Page 381

1 for what you refer to as indirect costs, are they technically

2 referred to as facilities and administrative costs?

3 MR. LUPION: Objection. Technically, by whom?

4 MR. MEIKLEJOHN: By the NIH.

5 THE WITNESS: They're -- they're called indirect

6 costs by the NIH.

7 BY MR. MEIKLEJOHN:

8 Q. Okay. All right. And is there also a term facilities and

9 administrative costs that you're familiar with?

10 A. Not -- not specifically in that way, no.

11 Q. Okay.

12 MR. MEIKLEJOHN: All right. I have no further

13 questions for this witness.

14 MR. LUPION: Can we go into a breakout room quickly,

15 please?

16 HEARING OFFICER KUMA: Yes. Off the record.

17 (Off the record from 10:26 a.m. to 10:35 a.m.)

18 HEARING OFFICER KUMA: All right. At least we're on

19 the record we can restate this. All right. The Employer have

20 any redirect questions for the witness?

21 MR. LUPION: We do not.

22 HEARING OFFICER KUMA: Okay. Dr. Russo, since

23 there's nothing further you are released. However, I ask that

24 since you were released that you stay available just in case

25 that the regional director may need your assistance in the near

Page 382

1 future for any additional follow-up questions, okay?
 2 THE WITNESS: Okay.
 3 HEARING OFFICER KUMA: And if your assistance is
 4 needed, regional director will provide you with a date and time
 5 to appear, okay?
 6 THE WITNESS: Yes.
 7 HEARING OFFICER KUMA: That information will be
 8 passed along the Employer's Counsel so you can have enough time
 9 to be ready.
 10 THE WITNESS: Thank you.
 11 HEARING OFFICER KUMA: All right.
 12 MR. LUPION: Thank you, Dr.
 13 MR. MEIKLEJOHN: Thank you.
 14 THE WITNESS: Thank you.
 15 HEARING OFFICER KUMA: All right, Employer, who will
 16 you be calling next?
 17 MR. LUPION: We're going to call Dr. Daniel Wacker.
 18 My colleague, Josh Fox, is going to be handling that witness.
 19 So yeah, can we go off the record for a minute while we fix him
 20 on the box?
 21 HEARING OFFICER KUMA: Yes. Off the record.
 22 (Off the record from 10:37 a.m. to 10:39 a.m.)
 23 HEARING OFFICER KUMA: So Employer, will you call
 24 your next witness?
 25 MR. LUPION: Our next witness is Dr. Daniel Wacker.

Page 383

1 HEARING OFFICER KUMA: Okay. Dr. Wacker, can you
 2 raise your right hand.
 3 Whereupon,
 4 DANIEL WACKER,
 5 was called as a witness by and on behalf of the General
 6 Counsel, and having been first duly sworn, was examined and
 7 testified on his oath, via Zoom, as follows:
 8 HEARING OFFICER KUMA: Okay. Put your hand down.
 9 Can you say and spell your first and last name for the record?
 10 THE WITNESS: My first name is Daniel, D-a-n-i-e-l.
 11 My last name is pronounced Wacker, which is spelled, W-a-c-k-e-
 12 r.
 13 HEARING OFFICER KUMA: Okay. Well, you may proceed.
 14 MR. FOX: Thank you.
 15 DIRECT EXAMINATION
 16 BY MR. FOX:
 17 Q. Dr. Wacker, are you currently employed?
 18 A. Yes.
 19 Q. And by whom are you employed?
 20 A. By the Icahn School of Medicine at Mount Sinai.
 21 Q. Can you tell us about your educational background, please?
 22 A. I attained my bachelor's degree in bachelor of science
 23 from the University of Munich. And following that I attained a
 24 master's of science degree also by the University of Munich.
 25 And then I did my PhD at the Scripps Research Institute in La

Page 384

1 Jolla, California. I did a postdoctoral training at the
 2 University of North Carolina in Chapel Hill. And in 2018, I
 3 began my faculty or I started my faculty position here at the
 4 Icahn School of Medicine at Mount Sinai, New York.
 5 Q. And what is your current role at the Icahn School of
 6 Medicine at Mount Sinai?
 7 A. I'm an assistant professor in the department of
 8 pharmacological sciences and I'm a principal investigator.
 9 Q. Can you briefly describe your duties as an assistant
 10 professor?
 11 A. I conduct research and I'm also an educator. So I do
 12 teaching, I mentor students, both master and PhD students. But
 13 a large part -- portion of my -- of my time is spent on
 14 conducting research or training people in research.
 15 Q. And how long have you been at Icahn School of Medicine at
 16 Mount Sinai?
 17 A. I started in February 2018 so that makes it about five and
 18 a half years give or take.
 19 Q. And have you served as an assistant professor during that
 20 entire time?
 21 A. Yes, I have.
 22 Q. And have you served as a PI during that entire time as
 23 well?
 24 A. Yes, I have.
 25 Q. Have you held any other roles at Mount Sinai before your

Page 385

1 current roles that you've just described?
 2 A. No. I have not.
 3 Q. As a PI, do you run your own lab at Mount Sinai?
 4 A. I do, yes.
 5 Q. Do you currently have any graduate students performing
 6 research in your lab?
 7 A. Yes, I do.
 8 Q. And how many graduate students are currently in your lab?
 9 A. I have currently two PhD students.
 10 Q. Do you currently have any postdocs in your lab?
 11 A. Yes, I do.
 12 Q. How many?
 13 A. I have two postdocs.
 14 Q. Are the PhD students in your lab in biomedical science or
 15 neuroscience?
 16 A. Yes, that's correct.
 17 Q. In which discipline?
 18 A. I have one student that's in the neuroscience program and
 19 I have one student that's in biomedical sciences, more
 20 specifically in the pharmacological sciences training area.
 21 Q. Do you currently have any joint degree MD-PhD students in
 22 your lab?
 23 A. No, I do not.
 24 Q. Can you please explain, generally, what the two PhD
 25 students do in your lab?

Page 386

1 A. Yes. They currently receive training, generally speaking,
 2 in the training areas of pharmacology, structural biology and
 3 the serotonin and neurotransmitter biology.
 4 Q. What's your role in relation to the PhD students in your
 5 lab?
 6 A. I'm their faculty mentor and advisor, and I basically
 7 guide them towards their dissertation and successful completion
 8 of a PhD.
 9 Q. And you mentioned there also postdocs in your lab,
 10 correct?
 11 A. Correct, yes.
 12 Q. How, if at all, does the research that the PhD students do
 13 in your lab differ from the duties that the postdocs perform in
 14 your lab?
 15 A. They're fundamentally different. The postdocs in my lab
 16 effectively conduct research towards fulfillment of foundation
 17 aims, not foundation aims, to funding aims, whereas the PhD
 18 students pick their training projects and their time spent on
 19 conducting research towards completion of their PhD
 20 requirements.
 21 Q. And sorry, just for the record, so you said the postdocs
 22 perform work with respect to funding aims; is that right?
 23 A. That's correct. Yes, that's correct. Yeah.
 24 Q. Funding aims are what?
 25 A. Of different -- different types of grants I've received

Page 387

1 from foundation agencies, federal agencies and so forth.
 2 Q. Can you provide us with an example of something that a
 3 postdoc has done in your lab that a PhD student has not or
 4 cannot do?
 5 A. Yes, I can. The first postdocs -- the first postdoc that
 6 I hired, I hired him specifically to set up a new research
 7 direction of the lab. I worked on one specific research
 8 direction pretty much all my career. Certainly, during my
 9 postdoc tenure and my PhD time, and so I've developed expertise
 10 there, but I wanted to acquire new expertise, a new research
 11 area that I wanted to develop.
 12 And I specifically hired a postdoc with extensive research
 13 experience in methodologies that -- that -- that were
 14 applicable to that research direction. PhD students in my lab,
 15 their training is entirely on projects that I have extensive
 16 experience in so I can provide better mentorship.
 17 A. Thank you. What role, if any, do postdocs play in
 18 assisting you in terms of carrying out the specific aims your
 19 research in your lab?
 20 A. They're the fundamental pillars of -- of that process.
 21 Typically, I -- I hire postdocs when I have certain funds that
 22 require fulfillment of aims and then I hire them to conduct
 23 towards these aims.
 24 Q. And the same question, what role, if any, do the PhD
 25 students in your lab play in assisting you with respect to

Page 388

1 carrying out the specific aims of your research in your lab?
 2 A. They do not work on such aims. They do not work towards
 3 the goals of a specific type of proposal.
 4 Q. What do they do?
 5 A. They receive training in the specific area and their
 6 research can overlap and should overlap with the general
 7 research direction of the lab. But there is no direct pursuit
 8 of a specific research aim that I've proposed and that I've
 9 been funded for.
 10 Q. How much time Dr. Wacker, do PhD students in your lab
 11 spend conducting research towards their thesis and
 12 dissertation?
 13 A. Virtually 100 percent of their time is dedicated towards
 14 that goal.
 15 Q. How, if at all, does the presence of PhD students in your
 16 lab affect the productivity of your lab?
 17 A. That is technically a complex question. I would say that
 18 initially there is a considerable reduction in productivity by
 19 taking on PhD students simply because more of my time is
 20 dedicated towards training. Sometimes I engage other lab
 21 members in training them in specific methodologies and that
 22 obviously takes time away -- significant time away from
 23 productivity. And so overall, I would say they have probably
 24 more of a negative impact than positive impact on productivity.
 25 Q. Are PhD students in your lab required to spend either a

Page 389

1 minimum or maximum number of researching time in the lab?
 2 A. No, they do not. I don't require them spend a specific
 3 amount of time.
 4 Q. Can PhD students choose their own schedule in your lab?
 5 A. Yes, they can.
 6 Q. Can you please describe how scheduling works with the PhD
 7 students in your lab?
 8 A. Yes, I can. So usually when we establish a mentor-mentee
 9 relationship, I -- I'll find what -- what is to be expected
 10 from them pursuant to getting their PhD in expectation or, you
 11 know, what -- what the grad school requires. And we typically
 12 outline a plan of what they would have to accomplish --
 13 accomplish if they wanted graduate in a -- in a timely fashion.
 14 And then around these basically cornerstones, I -- I
 15 typically check in with them once a week. We discuss progress
 16 towards these goals but I don't set specific times where I
 17 would say, you have to come in at 9:00 a.m. or you have stay
 18 late until 10:00 p.m. to conduct a specific experiment, that's
 19 -- that's not something that has been done.
 20 Q. Dr. Wacker in your answer, you mentioned what the grad
 21 school requires. And what does the grad school -- what are you
 22 referring to in terms of what the grad school requires?
 23 A. The grad school requires that the PhD students remain in
 24 good academic standing and perform or -- like, a training in a
 25 certain area so they can write a dissertation. That's --

Page 390

1 that's to my understanding the requirements of the grad school.
 2 That was what it was for me. That -- that's what -- what I've
 3 communicated to my PhD students.
 4 Q. Thank you. Have you ever had to require a PhD student to
 5 spend more time in your lab?
 6 A. I have not had to do that, no.
 7 Q. Do you assign students a thesis proposal topic?
 8 A. No. They do get to pick their own topics. They do get to
 9 pick their own research project. The only thing I ask is that
 10 they pick a topic in a -- you know, that's overall aligned with
 11 the general research direction of the lab.
 12 Q. And why is that?
 13 A. That's because I'm an expert in this particular, well,
 14 area, and so I can provide efficient training so they can
 15 actually successfully complete their PhD studies. If I were to
 16 allow them to pursue a project that's completely outside of my
 17 purview, that would not be conducive to them completing their
 18 PhD in a very -- you know, in a timely and effective fashion.
 19 Q. Does the student thesis proposal have to fall within the
 20 scope of one of your grants?
 21 A. It does not.
 22 Q. Do you ever ask PhD students in your lab to assist you
 23 with respect to your own research projects?
 24 A. I have not.
 25 Q. And why not?

Page 391

1 A. Because it would obviously slow down their progress
 2 towards their dissertation goals, which is their entire, well,
 3 reason for being in my lab, to receive mentorship and guidance
 4 towards conducting studies that are in fulfillment of their PhD
 5 requirements.
 6 Q. Do you ever tell PhD students how to conduct research
 7 related to their thesis and dissertation in your lab?
 8 A. I advise them on specific experiments or methodologies
 9 that I'm an expert in, but overall, they -- they effectively,
 10 like, receive training in this area, but I don't give specifics
 11 like that, no.
 12 Q. If a PhD student in your lab decided to change their thesis
 13 topics or thesis topic, would that student need your approval
 14 before doing so?
 15 A. They would not.
 16 Q. Is a student's funding condition -- is a student's funding
 17 conditioned on the student performing any tasks that you assign
 18 to them?
 19 A. No, there's no specific requirements I have.
 20 Q. And why not?
 21 A. Because their -- their time has to be spent on tasks
 22 associated with pursuing their research and training goals and
 23 completing their PhD thesis, and anything that I would put on
 24 them outside of that would (audio interruption) what a PhD
 25 student has to do or should be doing.

Page 392

1 Q. So PhD students then are not expected to carry out the
 2 tasks and assignments of your funding grants?
 3 A. No.
 4 MR. MEIKLEJOHN: Objection. Leading.
 5 BY MR. FOX:
 6 Q. Are PhD students expected to carry out the tasks and
 7 assignments of your funding grants?
 8 A. No, they're not.
 9 Q. Have you ever received complaints from a PhD student in
 10 biomedical science or neuroscience that they're spending time
 11 performing research other than their own?
 12 A. No, I have not received that complaint.
 13 Q. Do you serve as the faculty or research mentor for all PhD
 14 students in your lab?
 15 A. Yes, I do.
 16 Q. And can you describe your role as the faculty mentor to
 17 the PhD students in your lab?
 18 A. How much time do you have? I -- I can, it's a very
 19 complex process and there's -- there's a lot of aspects to it.
 20 I, as I've outlined, I -- I advise and guide them in terms of
 21 research and what needs to or -- or could be done to
 22 effectively increase the speed or the efficiency with which
 23 they can obtain their PhDs.
 24 I obviously serve as -- as a guide in other, or mentor in
 25 other domains, such as helping them effectively become better

Page 393

1 scientific communicators for scientific conferences, for
 2 retreats, even, you know, for smaller gatherings in that sense
 3 for poster presentations, things of that sort. I also advise
 4 them on what most likely would be necessary to obtain a job
 5 after completion of their PhD thesis. And so, these are
 6 probably the big -- the three big pillars but there's many --
 7 many smaller aspects to that as well.
 8 Q. Do you ever provide PhD students with training
 9 opportunities?
 10 A. Yes, I do. Yeah.
 11 Q. Can you give some examples of training opportunities that
 12 you've provided to PhD students in your lab?
 13 A. Yeah. Effectively related to what -- what I just said,
 14 one of my PhD students recently attended the -- the conference,
 15 and effectively he presented a poster there and we -- we spent
 16 extensive amounts of time going through how to put together a
 17 poster, how to effectively communicate when you stand next to a
 18 poster. And we went through multiple iterations.
 19 And another -- another directly related training
 20 opportunity this is effectively the same thing for
 21 presentations, where the other PhD student has given a talk
 22 during, I think, the neuroscience retreat a couple of years
 23 ago. And I had her give a practice talk in -- in -- in
 24 basically what we call group meeting where the entire -- where
 25 my entire lab meets and then we -- we basically worked on -- on

Page 394

1 her -- on her presentation skills. So those are -- those are
 2 like two fundamental aspects of training opportunities that --
 3 that are provided here.
 4 Q. With respect to the training opportunities that you just
 5 described, were the PhD students in your lab required to
 6 participate in these training opportunities?
 7 A. No, absolutely not. I advise them to take them, but it is
 8 entirely up to them if they -- if they decide to do so.
 9 Q. And is the same true with respect to other training
 10 opportunities that you may have provided to PhD students in
 11 your lab?
 12 A. Yes -- Yes it is. Yeah.
 13 Q. If a PhD student was not performing well in your lab,
 14 could you discipline the student?
 15 A. I cannot to my understanding. I haven't had to do that
 16 but it's -- it's my understanding that I cannot.
 17 Q. And what forms the basis of that understanding that you
 18 have?
 19 A. They're not my employees, they're students at the school
 20 who respond more to the grad school and the grad school
 21 requirements. But typically, obviously, they're here to
 22 effectively conduct research towards dissertation goals. So
 23 they are hopefully self-motivated.
 24 Q. What would you do, Dr. Wacker, if a student was not
 25 performing well in your lab?

Page 395

1 A. I would -- first, I of course maintain close mentorship
 2 with my students and I would check in with them and I -- the
 3 first step would obviously be to advise them to, you know, to
 4 carry out a certain action to address that, whatever the
 5 problem may be. If that -- if that fails, most likely I would
 6 go to the MTA directors who are the program directors and then
 7 would go to the grad school but I personally cannot intervene
 8 and -- and -- and discipline them.
 9 Q. Is there a time -- in the past have you undertaken any of
 10 these actions with respect to any students at your lab?
 11 A. No. I haven't had to luckily.
 12 Q. In comparison, if a postdoc was not performing well in
 13 your lab, could you discipline the postdoc?
 14 A. Yes, I can and I have or I had to, I have to say.
 15 Q. And can you give us an example of prior discipline that
 16 you've imposed on a postdoc in your lab?
 17 A. Yes. In -- a few years ago, I -- I -- I had a postdoc who
 18 would not show up for work. She was also not very productive,
 19 which was directly related to her frequent absence. And after
 20 communicating my issues with -- with human resources, I've
 21 issued several warnings and then I had to terminate her
 22 contract.
 23 Q. We are going to switch gears now to talk about funding for
 24 PhD students in your lab. Are you familiar with the funding
 25 package for PhD students in biomedical science or neuroscience?

Page 396

1 A. I am, yes.
 2 Q. Are you familiar with the sources of funding for PhD
 3 students in biomedical science and neuroscience in each year of
 4 the program?
 5 A. Yes, I am.
 6 Q. Are you familiar with the funding for postdocs at Mount
 7 Sinai?
 8 A. Yes, I am.
 9 Q. Does the funding for postdocs differ in any respect from
 10 the funding for PhD students in biomedical science and
 11 neuroscience?
 12 A. Yes, it does in multiple ways.
 13 Q. Can you please describe those ways for us?
 14 A. The first way is that, obviously, postdocs that I hire as
 15 employees their -- their payment is conditioned on them
 16 fulfilling specific tax -- tasks. And we already talked about
 17 that I had to terminate someone because they wouldn't fulfill
 18 the tasks that I gave them. Postdoc salaries have a certain
 19 minimum that I need to pay them but there is to some extent not
 20 really a direct limit on what I can pay them if they perform
 21 really well.
 22 For PhD students, it's very different. Number one, their
 23 -- their stipend isn't conditioned on fulfilling specific types
 24 of research goals in my lab and to my understanding, the only
 25 requirement is that they remain in good academic standing with

Page 397

1 the school. There's also a limit and it's an upper and lower
 2 limit so there's a certain number that I basically -- that --
 3 that the stipend of them is -- is -- is limited. There's very
 4 little flexibility as to what -- what they're being, you know,
 5 given.
 6 Q. As a PI, where does the funding for your lab come from?
 7 A. There's essentially three sources of funding. There are
 8 federal grants, there's foundation or philanthropic grants, and
 9 then I still have a startup package that Mount Sinai gave me to
 10 start my lab. And there -- part of that will be replenished
 11 every now and then with additional funds that basically come
 12 from teaching engagements that I have or indirect costs.
 13 Q. Can you describe the general application process for
 14 funding from a federal agency like NIH or NSF?
 15 A. Yes, I can. Typically, I come with a project, and I write
 16 a proposal. As part of that, I stipulate certain scientific
 17 goals that I would like to accomplish. And then for each of
 18 these goals, I typically already propose employees that would
 19 carry out these tasks. In these cases, it's usually postdocs,
 20 and then I submit such a proposal to the NIH. It goes through
 21 a bureaucratic process in house, and then effectively gets
 22 reviewed at NIH and the decision is being made whether or not
 23 my project will be funded based on multiple criteria.
 24 Q. When you apply for funding grants from federal agencies as
 25 you just described, do you include PhD students on your grant

Page 398

1 applications?
 2 A. I do not.
 3 Q. And why not?
 4 A. In my experience, it does not – it’s not conducive to the
 5 chances of the proposal succeeding with a review committee that
 6 typically regard PhD students as trainees that don't lack
 7 sufficient expertise to carry out these goals. So instead, I
 8 typically propose postdocs, sometimes I have RAs in there to
 9 support certain tasks. But overall, because postdocs are
 10 regarded as experts, they -- they significantly increase the
 11 chances of funding being obtained.
 12 Q. Any other reasons?
 13 A. I would not like to distract PhD students from, you know,
 14 working towards their dissertation, because if I were to
 15 propose certain goals and I put PhD student on that certain
 16 goal, it would tie to that goal and limit the flexibility of
 17 pivoting their -- their thesis project if need be.
 18 Q. And so you mentioned that you do include postdocs on your
 19 grant applications; is that right?
 20 A. That is correct.
 21 Q. What is the difference, if any, between a postdoc and a
 22 PhD student from your perspective approaches of a grant
 23 application that you’ve just described?
 24 A. Postdocs, obviously, as the name implies are post PhD so
 25 they have obtained expertise in a specific domain. So if I

Page 399

1 were to propose a research project and -- and I offer specific
 2 goals that I would like to accomplish, attaching an expert in
 3 that particular domain significantly increases the chances of
 4 getting funding for that. It also obviously helps me in the
 5 lab directly to get faster and more efficiently to -- to that
 6 specific goal as postdocs are experts in their domain.
 7 Q. And compared to PhD students?
 8 A. PhD students still receives training, so again, both on
 9 the -- on the, you know, like following both -- both of these
 10 lines. I would not like to propose them for that since they
 11 don't appear and they're in fact not experts. And in -- in
 12 reality, they also are much less efficient in getting from A to
 13 B simply because they receive training and they need to retain
 14 the flexibility to switch their research project and not be
 15 tied to a specific goal.
 16 Q. Is a PhD student’s funding package conditioned on the
 17 student conducting research towards the objectives of your
 18 federal grants?
 19 A. No, it is not.
 20 Q. And you said you receive funding from philanthropic
 21 organizations as well; is that right?
 22 A. Yes. That's correct.
 23 Q. Is the application process for philanthropic grants
 24 similar to that for federal agency grants?
 25 A. Yes, it is very similar.

Page 400

1 Q. Do PhD students receive some of their funding from your
 2 philanthropic grants?
 3 A. They do receive some of their funding from philanthropic
 4 grants, yes.
 5 Q. Is the PhD student’s funding package conditioned on the
 6 student conducting research towards the objectives of your
 7 philanthropic grants?
 8 A. No, it is not.
 9 Q. Would a PhD student's funding package ever be supported by
 10 a mix of different grants for funding sources?
 11 A. Yes. Yes, it would and it has.
 12 Q. Are there limits on the amount of funding you can provide
 13 to PhD students in your lab in biomedical science or
 14 neuroscience?
 15 A. Yes, there's limits that are being given by the grad
 16 school.
 17 Q. And I believe you testified before that on this point, but
 18 just to ask again, are there limits to the funds that you can
 19 provide to postdocs in your lab?
 20 A. No, there's not. There's a lower limit, yes, but there's
 21 no limits to the upsides to my understanding. I can -- I can
 22 pay them more if I want to.
 23 Q. So there's a minimum but no maximum?
 24 A. Correct.
 25 Q. As a PI, do you put any conditions on the funding

Page 401

1 distributed to PhD students in biomedical science or
 2 neuroscience in your lab?
 3 A. No, I do not.
 4 Q. What must a PhD student in your lab do in order to
 5 continue receiving funding?
 6 A. The PhD student must remain in good academic standing.
 7 That effectively is their only requirement. But again, I -- I
 8 have very little control over, you know, how they're being
 9 paid.
 10 Q. So does a PhD student have to complete any service
 11 obligations to your lab to maintain funding?
 12 A. No, they do not.
 13 Q. Does a PhD student have to complete any service
 14 obligations to the graduate school to maintain funding?
 15 A. Not to my understanding, no.
 16 Q. Does a PhD student have to complete any work obligations
 17 to maintain funding?
 18 A. No, not that I know of.
 19 Q. As a PI, Dr. Wacker, do you have the ability to take away
 20 funding for PhD student in biomedical science or neuroscience
 21 in your lab?
 22 A. No, I have not.
 23 Q. Do any of your PhD students receive external funding?
 24 A. Yes, they do. One PhD student receives external funding.
 25 Q. And what type of funding does that student receive?

Page 402

1 A. That's an NIH F31 fellowship. It's a training fellowship
 2 offered by the NIH in a specific research training area.
 3 Q. So for this student who receives external funding, how, if
 4 at all, does that impact the funding that you provide to the
 5 student?
 6 A. Obviously, it offsets the cost that I provide to the
 7 student. So it -- it -- that's --that's the impact it has.
 8 Q. Does the student receive any additional payment from the
 9 graduate school for receiving an external fellowship?
 10 A. Yes. Every institution in my experience handles this
 11 differently, but here the student receives a onetime bonus
 12 check.
 13 Q. And do you know how much that bonus is?
 14 A. Overall to my understanding it is \$2000 of which I -- I
 15 carry half.
 16 Q. Do you do anything to ensure that the student adheres to
 17 any requirements of the external grant?
 18 A. No, I do not.
 19 Q. Are you aware of anyone else at the graduate school that
 20 does anything to ensure that a student who receives external
 21 fellowship adheres to the terms of that grant?
 22 A. No, I'm not aware of anyone monitoring whether or not the
 23 PhD student adheres to the requirements of the F31.
 24 Q. And so for students on external fellowships, does the
 25 graduate school subject them to any different funding

Page 403

1 conditions than all other PhD students?
 2 A. No, not to my knowledge.
 3 Q. Does the graduate school subject students on external
 4 fellowship to any service requirements?
 5 A. Not to my knowledge, no.
 6 Q. So the students on external fellowship who receives the
 7 \$2000 bonus that you just described, do they need to abide any
 8 additional condition or requirements to obtain that money?
 9 A. No, not to my knowledge.
 10 Q. So would you say that PhD students on external fellowships
 11 operate similarly to all other PhD students in the graduate
 12 school?
 13 A. Yes, I would. They -- they are for -- in terms of purposes
 14 indistinguishable, yeah.
 15 MR. FOX: Hearing Officer, if I can get just five
 16 minutes in a breakout room just to --
 17 HEARING OFFICER KUMA: Off the record.
 18 MR. FOX: Thank you.
 19 (Off the record from 11:08 a.m. to 11:20 a.m.)
 20 HEARING OFFICER KUMA: Okay.
 21 MR. FOX: I have nothing further for Dr. Wacker.
 22 Thank you.
 23 MR. MEIKLEJOHN: We have no questions for Dr. Wacker.
 24 HEARING OFFICER KUMA: Okay. Hearing that there's
 25 nothing further for Dr. Wacker, Dr. Wacker, you're released for

Page 404

1 the day. Please be reminded that you are now released from the
 2 hearing. I mean, just in case the region director will call
 3 you, you will be given a date and time to appear just in case
 4 we have additional questions, okay?
 5 THE WITNESS: Understood.
 6 HEARING OFFICER KUMA: The Employer will be given
 7 advance notification if additional questions are needed here,
 8 all right? Enjoy the rest of your day.
 9 THE WITNESS: Thank you everyone.
 10 MR. FOX: Thank you, Dr. Wacker.
 11 HEARING OFFICER KUMA: Employer, who will you be
 12 calling next?
 13 MR. FOX: So our next witness is Hamel Vyas. To be
 14 frank, we expected that she could go after the break. I don't
 15 know if we can go into a breakout room off the record and check
 16 in with her to see if she's available.
 17 MR. MEIKLEJOHN: I mean, you have two witnesses
 18 left; is that correct?
 19 MR. FOX: That's correct.
 20 HEARING OFFICER KUMA: And we're off the record.
 21 MR. MEIKLEJOHN: I'm sorry, yes, off the record.
 22 (Whereupon, at 11:22 a.m. to 1:33 p.m. a luncheon recess was
 23 taken.)
 24
 25

Page 405

1 AFTERN OON SESSION
 2 (Time Noted: 1:33 p.m.)
 3 MR. FOX: -- is Hamel Vyas.
 4 HEARING OFFICER KUMA: Ms. Vyas, can you raise your
 5 right hand.
 6 Whereupon,
 7 HAMEL VYAS,
 8 was called as a witness by and on behalf of the General
 9 Counsel, and having been first duly sworn, was examined and
 10 testified on his oath, via Zoom, as follows:
 11 HEARING OFFICER KUMA: Okay. You can put your down.
 12 Can you state your name for the record and spell it?
 13 THE WITNESS: Sure. Hamel Vyas. H-a-m-e-l, V-y-a-s.
 14 HEARING OFFICER KUMA: Okay. Employer, you may
 15 proceed.
 16 MR. FOX: Thank you.
 17 DIRECT EXAMINATION.
 18 BY MR. FOX:
 19 Q. And thank you, Ms. Vyas. Are you employed?
 20 A. Yes, I am.
 21 Q. And by whom are you employed?
 22 A. By the Mount Sinai Health System.
 23 Q. And can you please tell us about your educational
 24 background?
 25 A. I have a law degree.

Page 406

1 Q. Okay. Anything else?
 2 A. I'm in under -- my undergraduate is political science.
 3 Q. Great. Thank you. And what's your role at Mount Sinai?
 4 A. I'm a senior associate dean for international personnel.
 5 Q. And can you please describe your duties and
 6 responsibilities in that role?
 7 A. Sure. So I oversee all of the employment based
 8 immigration matters along with the student visa matters and
 9 research matters. I'm the principal -- principal designated
 10 school official for our F1 student visas and responsible
 11 officer for J1 visas.
 12 Q. And Ms. Vyas, if you can just please slow down a little
 13 bit just to ensure that the Court Reporter gets everything that
 14 you say.
 15 A. Sure.
 16 Q. Thank you. How long have you been at Mount Sinai?
 17 A. Since January 2005.
 18 Q. And how long have you served as the senior associate dean
 19 of international personnel?
 20 A. I was promoted to this position about six years ago.
 21 Q. And have you held any prior roles at Mount Sinai before
 22 your current role?
 23 A. Yes. I initially started as a director, then I was senior
 24 director, then I was associate dean, and then senior associate
 25 dean.

Page 407

1 Q. So are there international students in the graduate
 2 school?
 3 A. Yes, there are.
 4 Q. And are you familiar with the general administrative
 5 processes for international students in the graduate school?
 6 A. Generally, yes.
 7 Q. How many current international students are enrolled in
 8 the graduate school's PhD program in biomedical science or
 9 neuroscience?
 10 A. There's 70.
 11 Q. And how many international students, if any, are enrolled
 12 in the MD-PhD program?
 13 A. Zero.
 14 Q. Do international students who are enrolled in the PhD
 15 programs in biomedical science or neuroscience need to secure a
 16 visa to participate in the program?
 17 A. Yes, they do.
 18 Q. And what is the type of visa that international PhD
 19 students enrolled in the graduate school's biomedical science
 20 or neuroscience programs generally need to obtain?
 21 A. An F1 visa.
 22 MR. FOX: Can you please put up Respondent's Exhibit
 23 15?
 24 BY MR. FOX:
 25 Q. Ms. Vyas, we've just put up on the screen what's been pre-

Page 408

1 marked as Respondent's Exhibit 15. Do you recognize this
 2 document?
 3 (Whereupon, the witness reviewed the document.)
 4 A. Yes, I do.
 5 Q. And what is this document?
 6 A. It's Information in PowerPoint slide.
 7 Q. And what information is included in this copy?
 8 A. It's related F1 visas.
 9 Q. Have you reviewed this document before?
 10 A. Yes, I have.
 11 Q. Is this the document that is routinely kept in the course
 12 of business for the graduate school?
 13 A. Yes.
 14 MR. FOX: At this time, we'd like to admit
 15 Respondent's Exhibit 15 into the record.
 16 MR. MEIKLEJOHN: No objection.
 17 MR. FOX: Melissa, can you please turn to Page 12 of
 18 Respondent's Exhibit 15?
 19 HEARING OFFICER KUMA: Hold on. Hearing no
 20 objections, Employer's Exhibit 15 moved into evidence it's
 21 received.
 22 (Employer's Exhibit 15 identified and received.)
 23 MR. FOX: Thank you.
 24 BY MR. FOX:
 25 Q. Turning to Page 12 of Respondent's Exhibit 15, do you see

Page 409

1 that on the screen, Ms. Vyas?
 2 A. Yes, I do.
 3 Q. What is an F1 visa?
 4 A. An F1 visa is issued for -- specifically for students to
 5 come and study in the United States.
 6 Q. What is required for a student to obtain an F1 visa?
 7 A. You have to have an offer of acceptance. Once you are
 8 accepted, you'll have to have obtained a certificate of
 9 eligibility called a Form I-20. And to get the Form I-20 you
 10 have to provide substantial financial documentations, your
 11 ability to pay tuition. And then you can apply for that visa
 12 at a US consulate abroad to facilitate your entry into the
 13 United States as a student visa holder.
 14 Q. Thank you. Do international postdocs at Mount Sinai also
 15 receive F1 visas?
 16 A. No, they do not.
 17 Q. Do they receive any visa for their appointment as a
 18 postdoc?
 19 A. Sure. They receive either a J1 or an H1 visa, mostly J1s.
 20 Q. And is that a J1 research visa?
 21 A. Yes.
 22 Q. And what is the difference, if any, between a J1 research
 23 visa and an F1 visa?
 24 MR. MEIKLEJOHN: I object at this point to the
 25 relevance of this line of questioning.

Page 410

1 HEARING OFFICER KUMA: What's the relevance?
 2 MR. FOX: We're listening to testimony demonstrating
 3 the distinction between the types of visas attained by postdocs
 4 and PhD students bear on, you know, the central question in
 5 this case, and the allegations that the PhD students are
 6 employees and their important distinctions between the visa
 7 categories that bear on that.
 8 HEARING OFFICER KUMA: Objection is overruled --
 9 BY MR. FOX:
 10 Q. What's the difference between a J1 research visa and F1
 11 visa?
 12 A. Sure. So the F1 visa is issued to students who have the
 13 intention to study in the United States solely for the purpose
 14 for engaging a full course of study. The J1 visa is provided
 15 to people that will come here to engage in specific research
 16 activities.
 17 MR. FOX: Can you turn to page 23 of the PowerPoint,
 18 please?
 19 BY MR. FOX:
 20 Q. We've turned to Page 23 of Respondent's Exhibit 15. Do
 21 you see that on the screen MS Vyas?
 22 (Whereupon, the witness reviewed the document.)
 23 A. Yes, I do.
 24 Q. Can students on the F1 visa engage in employment
 25 opportunities?

Page 411

1 A. There are -- yes, they may in certain conditions apply.
 2 Q. And what are those conditions?
 3 A. So the -- once you complete your -- your course of the
 4 study, your F1 course of study, you are eligible for practical
 5 training, it's called optional practical training. So once
 6 you've completed your studies, you can apply for an employment
 7 authorization document pursuant to your graduation. So it's
 8 optional practical training, and that's available for one year.
 9 And if you've graduated from a STEM degree, you can get STEM
 10 OPT, which gives you an additional 24 months of employment upon
 11 graduation. And --
 12 Q. Okay. I'm sorry. Go ahead.
 13 A. -- now, while you're engaged in your studies, there are
 14 options to -- for on-campus employment or curricular practical
 15 training, which is connected to your course of study.
 16 Q. Are there any restrictions that you're aware of with
 17 respect to employment opportunities for students on F1 visas
 18 during their studies that you just described?
 19 A. Yes. So there's limitation. You can only work for 20
 20 hours, there's a cap. So you can only work for 20 hours for
 21 on-campus employment during -- while school is in session.
 22 Well, you can work full-time during school breaks. That's it
 23 for on-campus employment.
 24 Q. Yeah. Ms. Vyas you mentioned 20 hours, is that 20 hours
 25 per week or another frequency of time?

Page 412

1 A. Sure. It's 20 hours per week.
 2 Q. Okay. So there's an employment cap of 20 hours per week
 3 for students who have an F1 visa? Is that what you just
 4 testified to?
 5 A. That's correct.
 6 Q. Okay.
 7 MR. FOX: Melissa, can you please turn to Page 24 of
 8 Respondent's Exhibit 15.
 9 BY MR. FOX:
 10 Q. Okay. And do you see page 24 on screen?
 11 A. Yes.
 12 Q. And generally what does this slide describe?
 13 (Whereupon, the witness reviewed the document.)
 14 A. So this is on-campus employment, which F1 students are
 15 eligible for. They -- they cannot displace a US citizen or a
 16 green card holder. They have to be in good academic standing.
 17 They can -- again, its only limited to 20 hours per week, and
 18 then you can work full-time during holiday breaks. You have to
 19 obtain permission from the designated school official. And you
 20 can't start 30 days prior to the start of your classes.
 21 Q. And so there's a reference at the of Page 24 of
 22 Respondent's Exhibit 15, 8 CFR 214.2(9)(i), do you see that?
 23 A. Yes.
 24 Q. So is that reference for a federal regulation that covers
 25 F1 student visas?

Page 413

1 A. Yes, it is.
 2 Q. Does the federal government, to your knowledge, place the
 3 same on-campus employment limits on international students who
 4 are in the United States on a J1 research visa like postdocs?
 5 A. So -- so postdocs are -- they're -- they're not subject to
 6 a cap of hours.
 7 Q. Do you know why there's a limit of 20 hours per week for
 8 students on an F1 visa for on-campus employment?
 9 A. Their -- their primary purpose is to be a student and is to
 10 study. So it's to -- there's a cap, they want people to study
 11 when they're here on the student visa not to work.
 12 Q. Does Mount Sinai provide on-campus employment
 13 opportunities to foreign students on an F1 visa in the form of
 14 teaching assistant or TA positions?
 15 A. Yes, we do.
 16 Q. And if an international student takes on a role as a
 17 teaching assistant, how much time could that student spend per
 18 week in that role?
 19 A. 20 hours.
 20 Q. 20 hours per week?
 21 A. 20 hours per week.
 22 Q. Are international students on an F1 visa limited in the
 23 amount of time they can spend towards completing their degree?
 24 A. It -- it -- it -- when they're here, they're here for the
 25 duration of status, so depending upon their program of how long

Page 414

1 it takes to complete their course credits.
 2 Q. I should have asked that question better. Are they
 3 limited in the amount of time in a given week with respect to
 4 the studies that they engage in towards completion of their
 5 degree?
 6 A. They've -- they're expected to study as much as possible.
 7 Q. So there's no --
 8 A. There's no Limit.
 9 Q. Thank you. Do you know why that is?
 10 A. Because their primary purpose here is to study.
 11 Q. So with international PhD students in the graduate schools
 12 programs of biomedical science or neuroscience or performing
 13 research in the lab, does the graduate school treat that
 14 activity as counting towards the 20 hour per week employment
 15 cap?
 16 A. Research that's associated with their -- their studies is
 17 not subject to a cap it's -- it's part of their studies.
 18 Q. So, no?
 19 A. No. Correct.
 20 Q. So the research in a lab in furtherance of the PhD
 21 student's dissertation does not count as on-campus employment
 22 from the graduate school's perspective that you just described,
 23 and that's reflected on the screen on Page 24 of Respondent's
 24 Exhibit 15; is that right?
 25 A. Yes. Sure.

Page 415

1 MR. MEIKLEJOHN: Objection. Leading. Also asked and
 2 answered already.
 3 HEARING OFFICER KUMA: Sustained.
 4 MR. FOX: Okay. She already answered it.
 5 BY MR. FOX:
 6 Q. When PhD students in biomedical science or neuroscience
 7 are onboarded as students and start to receive their stipends,
 8 are they required to complete I-9 Forms?
 9 A. No, they're not.
 10 Q. When a PhD student in biomedical science or neuroscience
 11 serves as a TA, are they required to complete I-9 Forms?
 12 A. If they're -- if they're going to be working, they would
 13 be.
 14 Q. So my question was, if they're going to be working as TA,
 15 do they complete I-9 Forms prior to doing so?
 16 A. Yes.
 17 Q. And they in fact do complete I-9 Forms before serving as
 18 TAs?
 19 A. Yes.
 20 Q. Okay. So I want to ask a hypothetical, if we had just
 21 been talking about, and you can take down the exhibit, you
 22 know, we've just been talking about how the research a PhD
 23 student undertakes in furtherance for their dissertation is
 24 treated with respect to a 20-hour employment cap for an F1
 25 visa. Do you recall that?

Page 416

1 A. Yes.
 2 Q. So my question is, if there is a finding that the research
 3 in furtherance of the PhD student's dissertation is considered
 4 employment, would time spent conducting such research be
 5 subjected to the 20-hour employment cap under the F1 visa?
 6 MR. MEIKLEJOHN: Objection. Finding by whom?
 7 MR. FOX: Finding in this proceeding.
 8 MR. MEIKLEJOHN: There's no foundation that this
 9 witness has any expertise in the relationship between findings
 10 of the National Labor Relations Board and interpretation of the
 11 National Labor Relations Act, and the definition of employee
 12 under the visa statute.
 13 She's able to set forth the grad students and the grad
 14 schools' position regarding employment status of F1 visa
 15 holders under Immigration Law because that's her area of
 16 specialty. But unless she has some experience with the
 17 National Labor Relations Act, she's not qualified to testify
 18 about the impact of a finding under the NLRA on employment
 19 status under entirely different statute, which may or may not
 20 have the same standards.
 21 HEARING OFFICER KUMA: Objection. Sustained.
 22 MR. FOX: Okay.
 23 HEARING OFFICER KUMA: And Counsel should ask the
 24 witness about her questioning concerning her expertise on the
 25 NLRA and then if there is or her current expertise alligns with

Page 417

1 the NLRA then he can move into that question.
 2 MR. FOX: Thank you. Understood. I've withdrawn
 3 the question. Nothing further.
 4 MR. MEIKLEJOHN: Could we have five minutes in the
 5 break out room? I don't think I'll be long.
 6 HEARING OFFICER KUMA: Off the record.
 7 (Off the from 1:51 p.m. to 2:00 p.m.)
 8 MR. MEIKLEJOHN: The Employer did say, no further
 9 questions.
 10 CROSS EXAMINATION
 11 BY MR. MEIKLEJOHN:
 12 Q. There's one very short area, Ms. Vyas. Am I pronouncing
 13 that right?
 14 A. Vyas.
 15 Q. Vyas, I'm sorry. I don't think I'm the only one who made
 16 that mistake.
 17 A. No.
 18 Q. Do international students receive the same letter
 19 congratulating them and offering admissions as other students
 20 or other applicants offered admission to the grad school?
 21 A. As far as I'm aware, they all get an offer of admission.
 22 Q. Do they use the same form for international students as
 23 for other students?
 24 A. I'm -- I'm -- I'm not sure.
 25 Q. Okay. Are they offered admission under the same terms as

Page 418

1 other students?
 2 MR. FOX: Object to form, vague, and lack of
 3 foundation.
 4 BY MR. MEIKLEJOHN:
 5 Q. Okay. Are they offered the same benefits including
 6 stipend, tuition coverage and health insurance?
 7 A. Yes. They're treated like students. All students are
 8 treated the same in that regard.
 9 Q. Okay.
 10 MR. MEIKLEJOHN: No further questions.
 11 MR. FOX: Nothing further from the Respondent.
 12 HEARING OFFICER KUMA: Ms. Vyas, you're being
 13 released from the hearing for today. Regional director is now
 14 releasing you from the hearing. If there's additional
 15 questions that may come up we will need to recall you. You
 16 will be recalled, but we will not do sporadically, we will let
 17 the counsel of the Employer know so that you'll have adequate
 18 time to be called back, okay?
 19 THE WITNESS: Okay.
 20 HEARING OFFICER KUMA: All right. Thank you for your
 21 time.
 22 THE WITNESS: Thank you.
 23 HEARING OFFICER KUMA: All right.
 24 MR. FOX: Thank you. Our next witness is Matthew
 25 Cipriano.

Page 419

1 HEARING OFFICER KUMA: Okay.
 2 MR. MEIKLEJOHN: And if I'm not -- yeah. Okay. Ms.
 3 Rothgeb will be handling this.
 4 HEARING OFFICER KUMA: Right.
 5 MS. ROTHGEB: Thank you.
 6 HEARING OFFICER KUMA: All right. Okay.
 7 MS. ROTHGEB: Good timing I have.
 8 HEARING OFFICER KUMA: All right. Mr. Cipriano, can
 9 you raise your right hand?
 10 Whereupon,
 11 MATTHEW CIPRIANO,
 12 was called as a witness by and on behalf of the General
 13 Counsel, and having been first duly sworn, was examined and
 14 testified on his oath, via Zoom, as follows:
 15 HEARING OFFICER KUMA: Put your hand down, and state
 16 your full name and spell it for the record.
 17 Matthew Cipriano, M-a-t-t-h-e-w. My last name Cipriano is
 18 spelled C as in Charles-i-p as in Peter-r-i-a-n as in Noah-o.
 19 HEARING OFFICER KUMA: Proceed.
 20 DIRECT EXAMINATION
 21 BY MR. FOX:
 22 Q. Good afternoon, Mr. Cipriano, are you currently employed?
 23 A. Yes, I am.
 24 Q. And by whom are you employed?
 25 A. Mount Sinai is my employer.

Page 420

1 Q. And can you please tell us your educational background?
 2 A. Yes. Excuse me. I have a bachelor's degree from
 3 Connecticut College in religious studies. I have a master's
 4 degree from NYU in media ecology. And I have a master degree
 5 from NYU in higher education administration.
 6 Q. What's your current role at the Icahn School of Medicine
 7 at Mount Sinai?
 8 A. I am the associate dean for operations and administration.
 9 Q. And can you please describe your duties and
 10 responsibilities in that role?
 11 A. Yes. I work with the operations team to make sure that
 12 the graduate school is able continue to run and operate. And I
 13 also oversee the student affairs team and marketing teams
 14 within the grad school.
 15 Q. How long have you been at the Icahn School of Medicine?
 16 A. I began January of 2021.
 17 Q. And have you served as the associate dean for operations
 18 and administration during that entire time?
 19 A. I have not. I started in this position December of 2022.
 20 Q. And what role did you previously hold at the Icahn School
 21 of Medicine at Mount Sinai?
 22 A. I was the Director of Student and Postdoc Affairs.
 23 Q. And so you held that role from January 2021 through
 24 December 2021?
 25 A. Excuse me, I believe I began in January 2020 through

Page 421

1 December of 2021, if I remember correctly.
 2 Q. Okay. So you held the director of student affairs role
 3 from January 2020 through December 2021; is that correct?
 4 A. '22 -- December '22 is when I was promoted into my
 5 current position.
 6 Q. Okay. Are you familiar with the graduate school's
 7 teaching assistantship program?
 8 A. I am.
 9 Q. Do some students enrolled in the graduate school's PhD
 10 program in biomedical science, or neuroscience hold teaching
 11 assistantships?
 12 A. Yes, they do.
 13 Q. And approximately how many current students hold teaching
 14 assistantships who are enrolled in the graduate school's PhD
 15 program in biomedical science for neuroscience?
 16 A. 40.
 17 Q. Do some students who are enrolled in the PhD portion of
 18 the MD-PhD program at the Icahn School of Medicine hold
 19 teaching assistantships?
 20 A. Yes, they do.
 21 Q. And approximately how many students hold teaching
 22 assistantships who are enrolled in the PhD portion of the MD-
 23 PhD program?
 24 A. 16, or so.
 25 Q. Okay.

Page 422

1 MR. FOX: Melissa, if you can please put up
2 Respondent's Exhibit 13.
3 BY MR. FOX:
4 Q. Do you recognize this document, Mr. Cipriano?
5 (Whereupon, the witness reviewed the document.)
6 A. Yes, I do.
7 Q. And what is this document?
8 A. This is the policy and procedure for requesting a teaching
9 assistant and for being a teaching assistant.
10 Q. Have you reviewed this document before?
11 A. Yes, I have.
12 Q. Is this a document regularly kept in a course of business?
13 A. Yes, it is.
14 MR. FOX: At this time we move to admit Respondent's
15 Exhibit 13 into the record.
16 MS. ROTHGEB: Sorry, can you just scroll down? Yes,
17 there. Okay. I just wanted to see if it had a date on it
18 before I asked, Josh. Thank you, and no objection.
19 HEARING OFFICER KUMA: Okay. Hearing no objections,
20 the Employer's Exhibit 13 is entered into evidence.
21 (Employer's Exhibit 13 identified and received.)
22 MR. FOX: Thank you.
23 BY MR. FOX:
24 Q. To whom does this policy apply, Mr. Cipriano?
25 A. This -- excuse me. This policy applies to the course

Page 423

1 directors who oversee courses and request TAs as well as to the
2 TAs who serve within the course.
3 Q. I'd like to refer you to the top of the document that's
4 entitled, "Appropriate duties for a TA." Do you see that?
5 (Whereupon, the witness reviewed the document.)
6 A. Yes, I do.
7 Q. Can you briefly explain the typical duties of a teaching
8 assistant at Mount Sinai?
9 A. Yes. A teaching assistant for a class may be asked to
10 help set up the classroom or the room that's being utilized.
11 They may lead in-class discussions. They will help set up the
12 learning management system for the course. They will hold
13 office hours for additional support or provide some tutoring
14 for students who are in need. They'll assist the course
15 director with assignment rating and also creating problem sets.
16 They'll oversee review sessions as well that largely follows
17 most of the responsibilities of a TA.
18 Q. Thank you. I'd like to direct your attention further down
19 where the document reads, "Training of the TA." Do you see
20 that?
21 A. Yes, I do.
22 Q. Who trains teaching assistants at Mount Sinai?
23 A. The course director for an individual course will provide
24 the TA with the training that they need.
25 Q. Okay. Looking at where the document reads "Time

Page 424

1 commitments." Do you see that?
2 (Whereupon, the witness reviewed the document.)
3 A. Yes, I do.
4 Q. What are the time commitments in a term for PhD students
5 who serve as TAs?
6 A. For PhD students who serve as TAs as well as those in the
7 MD-PhD program, they're allowed no more than 30 hours during
8 one term.
9 Q. And so just to be clear, so PhD students, are you talking
10 about students who receive stipends or students who do not
11 receive stipends?
12 A. Sorry. Yes, specifically stipended students within the
13 PhD program have a 30-hour limit.
14 Q. Is there a limit for students who do not receive stipends?
15 A. The limit for students not receiving stipends is 50 hours.
16 Q. Why does Mount Sinai place these hour restrictions on
17 teaching assistants?
18 A. The students are here to pursue their education and we
19 want the students to be able to focus on their studies and
20 academic research.
21 Q. I'd like to turn to the following page of Respondent's
22 Exhibit 13, where the document reads, "Requesting a TA." Do
23 you see that, Mr. Cipriano?
24 A. Yes, I do.
25 Q. Can you explain the teaching assistant selection process?

Page 425

1 A. Yes. When course directors feels they have the need for a
2 TA, they'll fill out the TA request form. With the TA request
3 form, there's the opportunity to list a TA that they would
4 like, but also state their needs depending on the size of the
5 class and the duration of the class. Course directors will
6 work with the student bodies to select a TA for the course who
7 they feel is appropriate. That will be reviewed by the
8 directors on the academic side who will then sign off on the
9 approval of the TAs.
10 Q. So do teaching assistants pick what class they assist?
11 A. They don't get to -- they don't get hired as teaching
12 assistants and then get to select, but if they want to teach --
13 assist for a class, they may speak to the course director.
14 Q. And who ultimately makes the determination of which --
15 A. The course director will ultimately make the determination
16 on that.
17 Q. Sorry, Mr. Cipriano, if I could just finish my question
18 just so the record -- you know?
19 A. Sorry.
20 Q. No, that's okay. So the question was, who ultimately
21 makes the determination of which teaching assistant is selected
22 for the course?
23 A. Got it. It is the course director and signed off by the
24 director of curriculum.
25 Q. Okay.

Page 426

1 MR. FOX: Melissa, can you please put up Respondent's
 2 Exhibit 14.
 3 BY MR. FOX:
 4 Q. Mr. Cipriano, do you recognize this document?
 5 (Whereupon, the witness reviewed the document.)
 6 A. Yes, I do.
 7 Q. And what is this document?
 8 A. This is our teaching assistant request form that is filled
 9 out to request a TA for a course.
 10 Q. Have you reviewed this document before?
 11 A. Yes, I have.
 12 Q. Is this a document regularly kept in a normal course of
 13 business?
 14 A. Yes. It is.
 15 MR. FOX: We'd like to move to admit Respondent's
 16 Exhibit 14 into the record.
 17 MS. ROTHGEB: Can I just ask one or two voir dire
 18 questions?
 19 VOIR DIRE EXAMINATION
 20 BY MS. ROTHGEB:
 21 Q. Mr. Cipriano, I believe in the last exhibit there was a
 22 link to something that said TA request form. Is Exhibit 14
 23 that document that was linked?
 24 A. I believe so.
 25 Q. And Exhibit 14 it doesn't have a date on it, correct?

Page 427

1 A. That is correct, I believe.
 2 Q. But do you recognize Exhibit 14 as the form that's
 3 currently in use at Sinai?
 4 A. Yes, this is a pdf version of the online form that's
 5 currently in use.
 6 MS. ROTHGEB: I have no objection.
 7 HEARING OFFICER KUMA: Okay. Hearing no objections,
 8 Employer's Exhibit 14 is offered and received.
 9 (Employer's Exhibit 14 identified and received.)
 10 DIRECT EXAMINATION CONTINUED
 11 BY MR. FOX:
 12 Q. Who receives this form?
 13 A. This form once submitted by the course director goes to
 14 the, excuse me, goes to the curricular directors for review and
 15 sign off, the administrative curricular directors.
 16 Q. Can teaching assistants at Mount Sinai receive payment for
 17 their time spent as a teaching assistant?
 18 A. I'm sorry. Could you repeat the question?
 19 Q. Can teaching assistants at Mount Sinai receive payment for
 20 their time spent as a teaching assistant?
 21 A. Yes, they can.
 22 Q. Can teaching assistants receive course credit in lieu of
 23 compensation for being a TA?
 24 A. We formerly allowed course credit but we no longer accept
 25 course credit as payment.

Page 428

1 Q. Sorry. Did you say you formally?
 2 A. In the past the policy did allow for course credit to be
 3 assigned for TA credits, but it no longer does.
 4 Q. Okay. Do you know when that changed?
 5 A. I'm not positive. I believe in the 2022 update that was
 6 removed.
 7 Q. Okay. Can you describe the type of payment that's issued
 8 to a TA?
 9 A. Yes. At the end of the semester a -- the TA submits the
 10 hours that they worked for the semester. This is reviewed by
 11 the course director, and then paid out as a lump sum payment
 12 for the work that they did as TA at the post -- the completion
 13 of the semester.
 14 Q. So the lump sum payment is at the end of semester?
 15 A. That's correct. The end of the course, excuse me. The
 16 end of the course is when it is paid.
 17 Q. Okay. Could a course span than one semester?
 18 A. It's not typical for course to span multiple semesters but
 19 a course may wrap before the end of the semester.
 20 Q. Understood. Thank you. Does the amount of money that a
 21 teaching assistant receives depend on the number of hours they
 22 spend teaching?
 23 A. Yes.
 24 Q. Are PhD students in biomedical science or neuroscience
 25 required to be teaching assistants in order to complete their

Page 429

1 degrees?
 2 A. No.
 3 Q. And why not?
 4 A. Because the students are here to pursue their education
 5 and we want the students to focus on their studies and academic
 6 research not on additional work outside of that.
 7 Q. Are MD-PhD students required to be teaching assistants in
 8 order to complete their degrees?
 9 A. No, they're not.
 10 Q. And same question, why not?
 11 A. For the same reason, the students are here to pursue their
 12 education and we want them focused on their academic research
 13 and studies.
 14 Q. And same question, are PhD students in clinical science
 15 required to serve as teaching assistants?
 16 A. No, they're not.
 17 Q. And same question, why not?
 18 A. Because they're here to study and work on their academic
 19 research.
 20 Q. If a MD-PhD or a PhD student decides to take on a teaching
 21 assistantship role, does their teaching assistantship become
 22 part of their stipend?
 23 A. No, it does not. It is independent.
 24 Q. Is there a mechanism for course directors to evaluate TAs?
 25 A. Yes. After the TA has submitted their time sheet, the

Page 430

1 course director has an opportunity to comment on the TA's
 2 performance throughout the semester.
 3 Q. Can you explain what information is provided to the TA in
 4 the evaluation by the course director?
 5 A. It depends on the evaluation, often these are not done, so
 6 no information is provided. If the TA has done well in the
 7 course, they'll receive feedback along those lines.
 8 Q. Do teaching assistants receive a grade based on this
 9 evaluation?
 10 A. No, they do not.
 11 Q. Is this evaluation reflected on the PhD's transcript in
 12 any way?
 13 A. No, it is not.
 14 Q. If a teaching assistant is not performing well, could the
 15 course director unilaterally discipline the TA?
 16 A. Could you define discipline?
 17 Q. Could a course director dismiss a TA who's not performing
 18 well during the course of the semester?
 19 A. Yes, they could.
 20 Q. If a PhD student in biomedical science or neuroscience
 21 served as a teaching assistant, would the student performance
 22 as a teaching assistant affect the student's funding in any
 23 respect?
 24 A. No, it would not.
 25 Q. Is the same true for an MD-PhD student?

Page 431

1 A. Yes, the same holds true.
 2 Q. If a PhD student in biomedical science or neuroscience
 3 serves as a teaching assistant, would the student's performance
 4 as a teaching assistant affect his or her academic standing?
 5 A. No, it would not.
 6 Q. Is the same true for an MD-PhD student?
 7 A. Yes, the same holds true.
 8 Q. Are you aware of whether any PhD students at Mount Sinai
 9 receive funding from an external foreign government source?
 10 A. Yes, we have one student who receives funding from an
 11 external government source.
 12 Q. Can you please explain for us how that student receives
 13 funding from the foreign government source?
 14 A. The funding that, that student receives is paid to the
 15 student directly via check, I believe. The student deposits
 16 those funds directly into their own accounts, and the funds do
 17 not come through Mount Sinai systems.
 18 Q. Are you familiar with whether PhD students may take leaves
 19 of absence?
 20 A. Yes.
 21 Q. How long typically are leaves of absence that PhD students
 22 take?
 23 A. Three months.
 24 Q. Are leaves of absence limited to three months for PhD
 25 students?

Page 432

1 A. No, they're not. They may be extended beyond that as
 2 well.
 3 Q. Over the last year, how many PhD students or PhD students
 4 in the MD-PhD program have taken a leave of absence from the
 5 graduate school?
 6 A. In the last year, the PhD students who've taken a leave of
 7 absence is -- I'm sorry, my note on this is lost right now.
 8 Q. That's okay. Yeah. Can you provide an estimate? Is it -
 9 -
 10 A. Yes, that is 15, I believe.
 11 Q. So you're estimating about 15 have gone on a leave of
 12 absence since over the last year?
 13 A. Excuse me, seven in the PhD program have.
 14 Q. Seven in the PhD program, okay. Do you recall
 15 approximately how many students in the MD-PhD program have gone
 16 on a leave of absence in the last year?
 17 A. Four.
 18 Q. Four. So 11 total, in terms of MD-PhD students or PhD
 19 students in biomedical science or neuroscience have gone on a
 20 leave of absence in the last year; is that it?
 21 A. Yes, that is correct.
 22 Q. Of those 11 students, as of the current date, do you know
 23 how many of those students have returned to studies at the
 24 graduate school?
 25 A. Three have returned to study.

Page 433

1 Q. Okay. Are you familiar with Sinai Cloud?
 2 A. Yes, I am.
 3 Q. And what is Sinai Cloud?
 4 A. Sinai Cloud is a, excuse me, is our system here for --
 5 it's our HR system here for processing paperwork, for getting
 6 access to other systems. It's our system for accessing the
 7 systems within Mount Sinai.
 8 Q. And who has access to Sinai Cloud?
 9 A. All members of the Mount Sinai community, I believe have
 10 access to Sinai Cloud.
 11 Q. And does that include PhD students?
 12 A. Yes, it does.
 13 Q. And why do PhD students have access to Sinai Cloud?
 14 A. PhD students have access to Sinai Cloud to pull up
 15 relevant documents to them, to access other systems within the
 16 Mount Sinai network and -- and to view pertinent material to --
 17 to their placement within the system.
 18 Q. Do self-funded students have access to Sinai Cloud?
 19 A. Yes. All students have access to Sinai Cloud.
 20 Q. Does Sinai Cloud use different nomenclature than the
 21 graduate school does with respect to graduate students?
 22 A. Yes it does.
 23 Q. And why is that?
 24 A. Sinai Cloud is a full system -- wide system that works
 25 with everyone inside the institution. So it often -- it's our

Page 434

1 payroll system, or excuse me, our HR system. So it often
 2 defaults to terminology used there, where within the graduate
 3 school, our students are receiving stipends, they're not paid.
 4 Our students are not employees of the institution in the same
 5 way that --
 6 MS. ROTHGEB: Objection. I'm going to object to Mr.
 7 Cipriano' characterization of an issue for the regional
 8 director to determine whether they're employees.
 9 MR. FOX: He's providing testimony based on how the
 10 students are treated, that's --
 11 HEARING OFFICER KUMA: What's the objection? State
 12 it again.
 13 MS. ROTHGEB: I think Mr. Cipriano's testimony went
 14 beyond that. He was asked about the nomenclature in Sinai
 15 Cloud and he just testified that PhD students are not
 16 employees, and I think that's a determination for the regional
 17 director in this case. So to the extent his testimony's
 18 offering a legal conclusion we're objecting.
 19 MR. FOX: It's unclear what you're moving to strike.
 20 I mean, he wasn't asked any question that led to a legal
 21 conclusion. He's providing testimony about why Sinai Cloud has
 22 used different nomenclature than the graduate school. And, you
 23 know, it's perfectly within the balance to talk about the
 24 matter in which the graduate students have been treated. And
 25 that's what he's testifying about. He's not providing any

Page 435

1 legal conclusions.
 2 HEARING OFFICER KUMA: Okay. Off the record.
 3 (Off the record from 2:25 p.m. to 2:26 p.m.)
 4 HEARING OFFICER KUMA: On the record. After
 5 reviewing the minutes and listening to Mr. Cipriano's
 6 testimony, the objection is sustained. The witness will
 7 refrain from stating that the students are not employees or are
 8 employees. That will be a decision that will be made by the
 9 regional director and the writer of the record. Mr. Cipriano,
 10 should just limit the testimony to his knowledge of Sinai Cloud
 11 and the usage of it, the current sound being -- and address the
 12 question.
 13 MR. FOX: So Hearing Officer, can I just ask what
 14 portion of the response is being struck?
 15 HEARING OFFICER KUMA: I'm not striking any testimony
 16 from the record, I'm just asking that the witness limit the
 17 testimony. The regional director will actually listen to Mr.
 18 Cipriano's testimony and apply the appropriate way as
 19 necessary. But again, I'm just asking that the witness limit
 20 his testimony and do not use that verbiage as he just did.
 21 MS. ROTHGEB: And I just want to be clear, our only
 22 objection was, I think, where the last sentence was about
 23 students as employees. There was no objection prior to that in
 24 relation to the answer.
 25 HEARING OFFICER KUMA: Correct. That is correct.

Page 436

1 MR. FOX: Okay. Thank you very much.
 2 BY MR. FOX:
 3 Q. So my last question, Mr. Cipriano, before that, the
 4 colloquy we all just had, you had testified that Sinai Cloud
 5 uses different nomenclature than the graduate school for
 6 graduate students. Do you recall that testimony?
 7 A. Yes, I do.
 8 Q. Okay. Can you give us any examples of where that
 9 nomenclature that Sinai Cloud uses differs from the
 10 nomenclature used by the graduate school?
 11 A. Yes. Sinai Cloud would use salary to represent what
 12 employee -- excuse me, what some would receiving as funds from
 13 Sinai Cloud through the Mount Sinai systems, where we would use
 14 stipend within the graduate school to refer to the payments
 15 that are going out to the students who are conducting research
 16 in the lab.
 17 Q. Okay. Any other examples?
 18 A. That's the primary one off the top of my head.
 19 Q. Okay.
 20 MR. FOX: Okay. Can you give us one moment?
 21 HEARING OFFICER KUMA: Yes. Off record.
 22 (Off the record from 2:29 p.m. to 2:30 p.m.)
 23 HEARING OFFICER KUMA: On the record.
 24 BY MR. FOX:
 25 Q. Does Sinai Cloud use the term employee with respect to

Page 437

1 graduate students?
 2 A. Yes, I believe it does.
 3 Q. And do you know whether that same term employee is used by
 4 the graduate school with respect to graduate students?
 5 A. It is not.
 6 Q. Okay.
 7 MR. FOX: No further questions.
 8 MS. ROTHGEB: I -- I do have some cross, but as an
 9 initial matter and before we start cross, I believe Mr.
 10 Cipriano made mention of notes that he had. So to the extent
 11 Mr. Cipriano has any notes in front of him, we'd ask that we're
 12 provided those before we begin our cross examination.
 13 HEARING OFFICER KUMA: Mr. Cipriano, do you have
 14 notes in front of you?
 15 THE WITNESS: Yes, I have one piece of paper in front
 16 of me.
 17 HEARING OFFICER KUMA: Okay. Were those notes
 18 provided to you by Counsel?
 19 THE WITNESS: No, they were not.
 20 HEARING OFFICER KUMA: Okay. And those notes, were
 21 you jotting them down while you were giving testimony or did
 22 you come in with those notes?
 23 THE WITNESS: No, I arrived with these notes.
 24 HEARING OFFICER KUMA: Okay. All right.
 25 MS. ROTHGEB: Given such, it does appear he referred

Page 438

1 to his notes during his testimony we'd ask for a copy he sent
 2 to us before we begin our cross-examination in a few minutes.
 3 MR. FOX: Yeah, I don't -- oh, I'm sorry. No, sorry.
 4 Were you done?
 5 MS. ROTHGEB: Sure.
 6 MR. FOX: Yeah. I mean, look, it seems that the only
 7 mention of notes was with respect to a number, the number of
 8 students in one respect, and that's all. And it seems like to
 9 the extent there aren't notes there that he showed they were
 10 from prep and with Counsel so we'd object to that.
 11 MS. ROTHGEB: All right. I mean, Mr. Hearing
 12 Officer, I think you just questioned the witness that he does
 13 have notes that he came in with that he prepared. He made at
 14 least one reference to notes and had them in front of him
 15 during his testimony. We don't know whether it's one number he
 16 testified or otherwise, but he's made clear he did testify and
 17 he did refer to them on the record and he just acknowledged.
 18 So we renew the request that those be provided to us.
 19 HEARING OFFICER KUMA: All right. Give me one
 20 second.
 21 MS. ROTHGEB: Thank you.
 22 HEARING OFFICER KUMA: All right. Go off the record.
 23 (Off the record from 2:33 p.m. to 2:36 p.m.)
 24 HEARING OFFICER KUMA: On the record.
 25 MS. ROTHGEB: Oh, Josh is on mute still.

Page 439

1 HEARING OFFICER KUMA: After discussing the facts
 2 with the regional director and regional management, it has come
 3 to termination that the witness will share his notes with the
 4 Petitioner since the witness did use his notes during his
 5 testimony. So I'll ask that the witness take a picture of it
 6 and share it with Counsel, and Counsel will deliver it to the
 7 Attorney. We'll take a break and go off the record while the
 8 witness does this.
 9 MR. FOX: Before we go off record, would it be
 10 possible for us to just ask the witness whether he referred to
 11 the notes in any other respect besides what he mentioned here
 12 on the record about looking at the numbers?
 13 MS. ROTHGEB: I mean, our objection would stand.
 14 Federal Rule of Evidence is pretty clear, 612, that, "If a
 15 writing is used to refresh a witness, whether he referred to it
 16 once or whether he used it 15 times, we should be provided it"
 17 And I think the regional director has made a ruling and we'd
 18 ask that that ruling not be reconsidered.
 19 HEARING OFFICER KUMA: Ruling will not be
 20 reconsidered, and that's the regional director's termination.
 21 We can ask the witness if he did refer to it more than once,
 22 that's fine to oblige for the Employer. Mr. Cipriano, can you
 23 address if you used your notes more than once when speaking
 24 with the Employer?
 25 THE WITNESS: No, the only time I was directly

Page 440

1 looking at my notes was to cite the number of LOA students.
 2 HEARING OFFICER KUMA: We'll go off the record.
 3 MR. FOX: Wait, I mean, I'm sorry, before we go off
 4 the record, I mean, I understand that the ruling is been made,
 5 but we would submit that -- we would provide the portion of the
 6 notes, obviously, we haven't seen them, that relates to the
 7 number of LOA students as he just testified.
 8 HEARING OFFICER KUMA: Again, the regional director
 9 made his ruling and that's not going to change, okay?
 10 MR. FOX: Okay.
 11 HEARING OFFICER KUMA: All right. Adrian, we'll go
 12 off the record.
 13 (Off the record from 2:38 p.m. to 3:09 p.m.)
 14 HEARING OFFICER KUMA: Petitioner, have any questions
 15 to commence the cross?
 16 MS. ROTHGEB: Yes. Thank you.
 17 CROSS EXAMINATION
 18 BY MS. ROTHGEB:
 19 Q. Mr. Cipriano, I'm one of the attorneys representing the
 20 Petitioning Union in this case, do you understand that?
 21 A. Yes.
 22 Q. Okay. And let me start by showing you, sorry, let me make
 23 sure I have it up, a document that we've -- and I know it comes
 24 up big, but showing you what's been marked as Petitioner
 25 Exhibit 52. It's a one-page handwritten document. Do you

Page 441

1 recognize this document?
 2 (Whereupon, the witness reviewed the document.)
 3 A. Yes, I do.
 4 Q. And there were some exchange about some notes that you had
 5 in front of you during your testimony on direct. Is this the
 6 piece of paper that you had in front of you that's marked now
 7 as --
 8 A. Yes, it is. Sorry. Yes, it is.
 9 Q. And is all of this your handwriting on the document?
 10 A. Yes, it is.
 11 Q. And am I correct that the document you had in front of you
 12 was only one sided there was no writing on the backside of this
 13 document?
 14 A. That is correct.
 15 MS. ROTHGEB: The Petitioner would move Exhibit 52.
 16 MR. FOX: We object for the same reasons as I stated
 17 earlier, he testified that he referred to the notes in a very
 18 limited capacity. We iterate the objections that we had
 19 before.
 20 HEARING OFFICER KUMA: Then the objections were off
 21 the record so I would like for you to state what the objections
 22 were.
 23 MR. FOX: Were they off the record? Okay --
 24 MS. ROTHGEB: I'm sorry, Petitioner's objection and
 25 reason for the request for the document first or which order,

Page 442

1 Avi?

2 HEARING OFFICER KUMA: The Employer's objections.

3 MR. FOX: Well, yeah, I guess the way we stated it

4 before was in response to the Petitioner's request for the

5 production of the document. So the nature of our objection,

6 which we'll reiterate is that the witness testified that he may

7 have referred to notes in only one narrow capacity with respect

8 to looking at the number of TAs.

9 And that only in that respect is the notes at issue, which

10 is Petitioner's Exhibit 52, could potentially be relevant and

11 the remainder of the document should not be. And that was the

12 nature of objection to the request for production. And we

13 reiterate that in respect to the Petitioner's request that the

14 document be admitted into evidence.

15 MS. ROTHGEB: May I respond briefly, Mr. Hearing

16 Officer?

17 HEARING OFFICER KUMA: Yes.

18 MS. ROTHGEB: In requesting the document, first of

19 all Petitioner, according to Federal Rule of Evidence 612, the

20 witness had indicated that there were some notes in front of

21 him that he was using to refresh his recollection. I believe

22 the Mount Sinai's objection is on relevance grounds. The

23 document is what it is.

24 They can certainly question the witness further about the

25 extent to which he used the document to refresh his

Page 443

1 recollection or not, but it was in front of him during his

2 testimony. He testified, at least, to using it in part.

3 Whether in whole or in part, it's relevant as what was in front

4 of him during his testimony. And he did state that he did have

5 this document and prepared it and did have it in front of him

6 while he testified. So it's certainly relevant to his

7 testimony.

8 HEARING OFFICER KUMA: Objection is overruled. The

9 document is relevant and the reader of the record will record

10 whatever way is appropriate.

11 MS. ROTHGEB: Thank you.

12 BY MS. ROTHGEB:

13 Q. Mr. Cipriano, with respect to --

14 HEARING OFFICER KUMA: Petitioner, hold on.

15 MS. ROTHGEB: Oh, sorry.

16 HEARING OFFICER KUMA: Hearing that the objection is

17 overruled, I am addressing that the Petitioner's Exhibit 52 has

18 been offered and received and noting the Employer's objection.

19 Now, you can continue.

20 (Petitioner's Exhibit 52 identified and received.)

21 MS. ROTHGEB: Thank you.

22 BY MS. ROTHGEB:

23 Q. Mr. Cipriano, on Petitioner's Exhibit 52, I'm sorry, there

24 are some numbers here, PhD-40, MD/PhD16, and I think you

25 offered testimony that those are currently the numbers of PhD

Page 444

1 students in each of those who are currently TAing; is that

2 right?

3 A. Those are the numbers of PhD and MD-PhD students who TA'd

4 during this previous year -- previous academic year within the

5 PhD program.

6 Q. Okay. That's what I was going to ask about currently, so

7 these are for the '22, '23 academic year?

8 A. Yes, that is correct.

9 Q. And did you just say they TA'd only in the PhD program, so

10 courses taught to other PhDs; is that right?

11 A. Excuse me. Only courses within the graduate school, yes.

12 Q. Are there PhD students in the graduate school who TA in

13 the med school?

14 A. There are MD-PhD students who TA for the medical school.

15 Q. Do those students you're referring to TA at the medical

16 school while they're in the PhD portion of their dual degree

17 program?

18 A. I'm not certain.

19 Q. Would those students that you're referring to be included

20 in the 16?

21 A. No.

22 Q. So there may be -- I'm sorry.

23 A. Some of them -- sorry. Some of them may have TA'd both MD

24 as well as PhD courses in that 16, none of that 16 would've

25 solely done MD courses.

Page 445

1 Q. Do PhD students enrolled in the clinical PhD program ever

2 TA?

3 A. Yes, they do.

4 Q. Do you know for the same period of time that you provided

5 numbers, the '22, '23 academic year, do you know how many PhDs

6 in that program TA'd?

7 A. Not off the top of my head. I would have to refer back to

8 the system to review.

9 Q. Could you give us an estimate or?

10 A. I'm not certain on the number of clinical research

11 students in the PhD portion who TA right now.

12 Q. Do those students, PhD, in the clinical research program

13 who TA, do they also TA in the graduate school?

14 A. The clinical research program is part of the graduate

15 school.

16 Q. Oh, when they're serving as TAs those students, are the

17 classes they're serving as a TA for a class in the graduate

18 school?

19 A. Yes, they are.

20 Q. And when PhDs in the clinical research program serve as

21 TAs, do they perform the same duties and responsibilities you

22 testified as PhDs who TA perform?

23 A. Yes, they do.

24 Q. You indicated that those serving in these TA capacities

25 are paid by Mount Sinai, correct?

Page 446

1 A. That is correct.
 2 Q. And that's payment for performing the TA shift duties?
 3 A. Yes, that is correct.
 4 Q. And their payment comes as a lump sum, correct?
 5 A. Yes, that is correct.
 6 Q. And that lump sum payment is provided as direct
 7 compensation to those serving as TAs?
 8 MR. FOX: Objection. Characterization. Vague,
 9 direct compensation. That isn't a term that's used in
 10 documents. I'm not sure, are you referring to a specific use
 11 in a specific document or just how you're characterizing that
 12 term.
 13 MS. ROTHGEB: I'm not characterizing it at all right
 14 now.
 15 BY MS. ROTHGEB:
 16 Q. Mr. Cipriano, do you understand the question?
 17 A. No. I don't fully understand the question. Could you
 18 clarify and reiterate?
 19 Q. Sure. Is the payment that is made for PhDs who serve as
 20 TAs compensation paid directly to them?
 21 A. I'm -- I'm not sure of the exact, excuse me, I'm not sure
 22 of the exact mechanism for how it's paid out.
 23 Q. But is it compensation paid to them --
 24 A. Yes.
 25 Q. -- I'm not asking the mechanism? I'm sorry.

Page 447

1 A. So, yes, they receive compensation for the work they do as
 2 TAs.
 3 Q. And I think you testified on direct that the amount of the
 4 TA -- the payment to TAs is somehow dependent on the number of
 5 hours served by the TA; is that correct?
 6 A. Yes, for most courses it is a \$40, excuse me, \$40 per hour
 7 payment.
 8 Q. Isn't it correct that the payments are just a lump sum
 9 payment and don't get calculated --
 10 A. Yeah --
 11 Q. I'm sorry, Mr. Cipriano, you have to wait until I ask a
 12 full question.
 13 A. Okay.
 14 Q. Isn't it correct that the lump sum payments that --
 15 withdraw that.
 16 Isn't it correct that the compensation paid to the TAs is
 17 paid as a single lump sum not tied to the hours they perform?
 18 A. That depends on the course. There are a handful of
 19 courses that have a set lump sum payment. The majority of
 20 courses have an hourly payment.
 21 Q. Is the hourly payment for PhD students who TA?
 22 A. No, it's not specific. It is determined course by course.
 23 Q. Is it your understanding that any of the courses that PhD
 24 students or dual degree or clinical research program PhDs in
 25 their PhD portion who serve as TAs are paid on an hourly basis?

Page 448

1 A. Could you repeat that question? I'm sorry.
 2 Q. Are any of those PhD students when they serve as a TA paid
 3 on a purely hourly basis?
 4 MR. FOX: Objection. Can you just clarify what,
 5 Nicole, what you're referring to? You said those PhD students.
 6 BY MS. ROTHGEB:
 7 Q. The PhD students in biomedical sciences and neuroscience,
 8 the PhD students in the dual degree program when they're in
 9 their PhD portion or the PhD students in the clinical research
 10 program, when any of those groups serve as TAs are they paid on
 11 an hourly basis for their TAing?
 12 A. Yes, but it is done course by course so I would have to
 13 review for the specifics on that. But the majority of courses
 14 are paid out on an hourly basis.
 15 Q. And is there some -- you said it was \$40 an hour, was that
 16 pay rate?
 17 A. Yes.
 18 Q. Is that currently or for last academic year?
 19 A. That is the current pay rate as it currently stands.
 20 Q. Am I correct that the payment made to TAs is not paid on a
 21 intermittent schedule throughout the course, but rather after
 22 the course is completed?
 23 A. That is correct. One payment is provided at the end of
 24 the course.
 25 Q. And you indicated, I think, that at the end of the course

Page 449

1 a TA is required to submit some documentation of their hours
 2 spent; is that accurate?
 3 A. Yes, that is correct.
 4 Q. How do they submit that? Is that through Sinai Cloud?
 5 A. No, that is not through Sinai Cloud. There is an
 6 independent form that they fill out and they submit.
 7 Q. Is that the form that also is the evaluation form?
 8 A. The payment form is -- it is part of the same system. If
 9 there's a workflow process and the evaluation form is later in
 10 the workflow process for them.
 11 Q. I think you referred to Sinai Cloud as an HR system, is
 12 that separate? Does Sinai Cloud also constitute the payroll
 13 system or encompass the payroll system?
 14 MR. FOX: Objection. Can you just rephrase the
 15 question?
 16 MS. ROTHGEB: Sure.
 17 BY MS. ROTHGEB:
 18 Q. Does Sinai Cloud also encompass the payroll system?
 19 A. You can check your pay stubs and such on Sinai Cloud.
 20 Q. When you say, you can, does that include PhD students?
 21 A. PhD students I believe are able to download their pay stub
 22 through Sinai Cloud.
 23 Q. And the pay stubs for PhD students, those are -- other
 24 than TAs, so PhD students who are doing research, they receive
 25 pay stubs on a more frequent basis, right? A biweekly

Page 450

1 schedule; is that right?
 2 MR. FOX: Objection. Vague.
 3 BY MS. ROTHGEB:
 4 Q. Do they receive a payroll? Is there a payroll processed
 5 on a biweekly basis PhD students who are conducting research?
 6 A. PhD students in our biomedical and neuroscience program
 7 receive pay stubs on, excuse me, receive their stipends on a
 8 biweekly basis, yes.
 9 Q. And they're what you refer to as checking their payroll
 10 stubs, they can check the payment of that stipend on a biweekly
 11 basis; is that right?
 12 MR. FOX: Objection. It mischaracterizes.
 13 BY MS. ROTHGEB:
 14 Q. Do you understand my question, Mr. Cipriano?
 15 A. I thought there was an objection. I'm sorry.
 16 Q. Do you understand --
 17 HEARING OFFICER KUMA: Nicole, reframe the question.
 18 MS. ROTHGEB: I'm sorry?
 19 HEARING OFFICER KUMA: Can you reframe the question
 20 for Mr. Cipriano.
 21 MS. ROTHGEB: Sure.
 22 BY MS. ROTHGEB:
 23 Q. If a PhD student who is receiving the stipend that's part
 24 of their funding package, a researching PhD student, wants to
 25 check their -- the issuance of that stipend, would they go into

Page 451

1 the Sinai Cloud and look at that payroll record you just
 2 referred to?
 3 A. I believe they can, yes.
 4 Q. And they could look at that on a biweekly basis?
 5 A. I believe so.
 6 Q. Are there other records that PhD students in the graduate
 7 school who are performing research, are there other financial
 8 records that are available for them to access in relation to
 9 their funding package through Sinai Cloud?
 10 A. I'm not familiar. I'm sorry.
 11 Q. Do you know if they can access their W2s?
 12 A. I believe they can.
 13 Q. Through Sinai Cloud?
 14 A. I believe so.
 15 Q. You testified a bit about nomenclature differences between
 16 Sinai Cloud and at the graduate school. At the graduate school
 17 the payments to TAs what are those referred to according to the
 18 graduate school?
 19 A. They're referred to as TA payments.
 20 Q. And showing you Mr. Cipriano a document that's been marked
 21 for identification as Petitioner Exhibit 19A as in apple,
 22 leaving aside the content, do you recognize the general format
 23 of this document? Do you recognize what this document is?
 24 (Whereupon, the witness reviewed the document.)
 25 A. I recognize it as a payroll documentation.

Page 452

1 Q. From the graduate school?
 2 A. I can't speak to that.
 3 Q. Okay.
 4 A. To the documentation on this, yeah.
 5 HEARING OFFICER KUMA: Wait, I'm sorry, Mr. Cipriano,
 6 what was the last thing you just said?
 7 THE WITNESS: There's nothing on here to indicate
 8 that, and I'm not familiar with the -- the pay stubs that are
 9 received.
 10 BY MS. ROTHGEB:
 11 Q. Do you see this line, "Domestic stipend," here?
 12 A. I do.
 13 Q. Do you recognize domestic stipends, zero hours, \$1,200
 14 payment as being reflective of payment for having served as a
 15 TA?
 16 A. I'm not certain.
 17 Q. Do you know if Sinai Cloud uses the nomenclature of
 18 domestic stipend instead of TA payments?
 19 A. I'm not certain.
 20 Q. Mr. Cipriano, you testified about hours limitations for
 21 PhD students serving as TAs, do you recall that testimony
 22 generally?
 23 A. I do.
 24 Q. And I think you said for the PhDs in the biomedical and
 25 neurosciences, the limitation is 30 hours to serve as a TA; is

Page 453

1 that right?
 2 A. That is correct.
 3 Q. That's 30 hours per course that they TA?
 4 A. Per semester that they TA.
 5 Q. Per semester, and does that 30-hour limitation also apply
 6 to PhDs in the clinical research program who TA?
 7 A. No, it does not.
 8 Q. What limitation, if any, do PhDs in the clinical research
 9 program, what hours limitation do they have if they serve as
 10 TAs?
 11 A. There's a 50 hour cap on their TA work.
 12 Q. Why is that cap higher for those PhD students than for PhD
 13 students in the biomedical and neurosciences?
 14 A. I'm not familiar with the reason that went into the
 15 development of the policy.
 16 Q. You testified that the limitation of 30 hours for
 17 stipended PhDs and -- well, let me back up, by stipended PhDs
 18 in your direct testimony about this, did you mean PhDs who
 19 receive stipends as part of their funding package?
 20 A. Yes, specifically the biomedical science and neuroscience
 21 PhDs.
 22 Q. Would it also encompass the dual degree students during
 23 the PhD portion?
 24 A. Yes, it would.
 25 Q. I believe you testified that those stipended PhDs, the

Page 454

1 reason for the 30-hour limitation for TAing is because the
 2 graduate school wants them to be able to devote time and focus
 3 on their studies, correct?
 4 A. That is correct.
 5 MR. FOX: I will object to – sorry. I just want to
 6 object to the characterization. I believe the question was
 7 about hours restrictions generally as to the 30-hour cap and
 8 50-hour cap that was my recollection of this testimony, so I
 9 object to the extent that this mischaracterizes his testimony.
 10 MS. ROTHGEB: I don't think that's accurate, so I
 11 would claim the question, Mr. Hearing Officer.
 12 HEARING OFFICER KUMA: Off the record.
 13 (Off the record from 03:34 p.m. to 03:40 p.m.)
 14 HEARING OFFICER KUMA: On the record. After
 15 considering the objection and the reason for the objection, the
 16 Employer's objection is sustained. I ask the Petitioner to
 17 reframe the question and narrow it down and make it more
 18 precise.
 19 BY MS. ROTHGEB:
 20 Q. Mr. Cipriano, the goal you described in or -- strike that.
 21 The reason you identified as a rationale for limiting the
 22 hours a PhD student can serve as a TA per semester being
 23 related to focusing on their education, that applies equally to
 24 PhD students in non-stipend – non-stipended PhD students,
 25 correct?

Page 455

1 A. It does.
 2 Q. The graduate school wants those students to focus on their
 3 degree requirements as well?
 4 A. Yes.
 5 MR. FOX: Objection. Sorry, just to be clear, those
 6 students, are you referring to the non-stipended students?
 7 MS. ROTHGEB: Yes.
 8 MR. FOX: Okay.
 9 BY MS. ROTHGEB:
 10 Q. Mr. Cipriano, you answered, yes?
 11 A. Yes, that's correct.
 12 Q. Does the graduate school have -- strike that.
 13 Mr. Cipriano, are there self-funded PhD students at the
 14 graduate school?
 15 A. Could you define self-funded?
 16 Q. PhD students who do not receive the funding package but
 17 have funding off their own resources, they don't get a funding
 18 package.
 19 A. The only student I'm aware of who didn't receive the
 20 standard funding package was the student referenced earlier,
 21 who received their own independent grant directly from -- from
 22 the government organization.
 23 Q. And is that student eligible to serve as a TA?
 24 A. Yes.
 25 Q. Would PhD students who similarly do not have funding

Page 456

1 packages but are in biomedical sciences and neuroscience would
 2 they likewise be able to serve as a TA, not just that one
 3 individual student?
 4 A. I'm sorry. Can you repeat --
 5 Q. Sure.
 6 MR. FOX: I'm sorry. Can you repeat that question?
 7 MS. ROTHGEB: Sure.
 8 BY MS. ROTHGEB:
 9 Q. Other than that one student, if a student is in similar
 10 circumstances and has their own source of funding, a PhD
 11 student in biomedical sciences and neuroscience would he or she
 12 still be able to TA?
 13 A. Yes, they would still be eligible to serve as a TA.
 14 Q. Would they still be paid to TA?
 15 A. They would still be paid to TA.
 16 Q. Would they be able to access payroll-type records through
 17 Sinai Cloud?
 18 A. Yes, they would.
 19 Q. Are students like you described -- I'm sorry, did --
 20 A. I -- I'm sorry. On my last answer, I'm actually not --
 21 I'm not sure if they would be able to or not to access a pay
 22 stub through Sinai Cloud.
 23 Q. Well, if a PhD student of any sort is paid as a TA, are
 24 they able to access their records in Sinai Cloud?
 25 A. I'm not familiar with how the TA payments are recorded, so

Page 457

1 I'm not sure if the payments come recorded in Sinai Clouds.
 2 Q. Are students who have their own PhDs in biomedical
 3 sciences and neuroscience, who are not funded through the
 4 package from the school, do they have accounts in Sinai Cloud
 5 that are accessible payroll or otherwise?
 6 MR. FOX: Objection. Form. Are you talking about
 7 the one student, again, its just confusing with --
 8 MS. ROTHGEB: I asked a general -- I didn't ask about
 9 that student, no.
 10 MR. FOX: Okay.
 11 HEARING OFFICER KUMA: What's the Employer's
 12 objection?
 13 MR. FOX: It was just vague and unclear of a
 14 question, and I was unclear whether she was asking about the
 15 one current student who falls in this category, or she was
 16 asking generally. And the way she framed the question seems in
 17 fact that there were more than one student in this category
 18 where the testimony is that there is only one such student.
 19 HEARING OFFICER KUMA: Objection sustained.
 20 Petitioner, please, narrow it down, make it a bit more
 21 specific.
 22 MS. ROTHGEB: It's all right.
 23 BY MS. ROTHGEB:
 24 Q. If a PhD student in biomedical science and neuroscience
 25 does not receive the funding package from the graduate school,

Page 458

1 are they still listed or maintained within Sinai Cloud?
 2 A. Yes.
 3 Q. Would an example of that be the one student you mentioned
 4 who has funding from a foreign government?
 5 A. Yes.
 6 Q. Would that student -- strike that.
 7 During your direct testimony, I just want to make sure I
 8 understand, Mr. Cipriano, you were asked about or provided
 9 testimony about evaluation being given by a course instructor
 10 to a TA, and I think you indicated that often that evaluation
 11 is not done. Was that your testimony?
 12 A. Often they do not fill out an evaluative section.
 13 Q. They, being the course instructor?
 14 A. That's correct.
 15 Q. On direct you were asked about a course instructor being
 16 able to potentially dismiss a TA during the term of a course.
 17 If that occurred the TA would not get paid for having taught
 18 the full course, correct?
 19 A. That is correct. The TA would be paid for the hours that
 20 they had worked.
 21 Q. So if they were dismissed it would impact their TA
 22 payment?
 23 A. That is correct. Can I actually clarify on that? I'm
 24 sorry. Can you --
 25 Q. If there's a follow-up on redirect, but I think you've

Page 459

1 answered my question.
 2 MR. FOX: No. Please, let the witness clarify his
 3 response to you.
 4 HEARING OFFICER KUMA: I agree.
 5 MS. ROTHGEB: Okay.
 6 HEARING OFFICER KUMA: Go ahead.
 7 THE WITNESS: TA payments are hourly throughout the
 8 semester, so if a TA was dismissed mid-semester, they would be
 9 paid out for the hours that they worked.
 10 BY MS. ROTHGEB:
 11 Q. Didn't you also say some courses are not based on an
 12 hourly performance, but have a flat rate per course?
 13 A. Yes, there are some courses that do have a flat rate.
 14 Q. And what would happen if a TA was dismissed who was TAing
 15 a course that had a flat rate?
 16 A. I'm not sure I can comment on that. We haven't had a case
 17 of that occurring so I -- I don't have a policy in place that I
 18 can reference.
 19 MS. ROTHGEB: Could we take a few minutes Mr. Hearing
 20 Officer in a conference room?
 21 HEARING OFFICER KUMA: Yes. Off the record.
 22 MS. ROTHGEB: Thank you.
 23 (Off the record from 03:50 p.m. to 04:01 p.m.)
 24 MS. ROTHGEB: No further questions from Petitioner at
 25 this time.

Page 460

1 HEARING OFFICER KUMA: Okay.
 2 MR. FOX: We have no redirect either.
 3 HEARING OFFICER KUMA: All right. Considering
 4 there's nothing further, Mr. Cipriano, you are released for the
 5 day. However, you are not released from the hearing. If
 6 you're needed, we'll call you back for any additional follow-up
 7 questions. Note that, if you are called back we will let
 8 Employer's Counsel know in advance so that you'll have enough
 9 time to be ready and adjust your schedule, okay?
 10 THE WITNESS: Okay. Thank you.
 11 HEARING OFFICER KUMA: All right. Thank you for your
 12 time. Enjoy your afternoon.
 13 MR. FOX: Thank you, Mr. Cipriano.
 14 THE WITNESS: Thank you.
 15 MS. ROTHGEB: Mr. Fox might be stuck on mute.
 16 HEARING OFFICER KUMA: This concludes all of the
 17 Employer's witnesses. So we will go off the record.
 18 (Off the record from 4:03 p.m. to 4:18 p.m.)
 19 HEARING OFFICER KUMA: All right. Before we close
 20 for the day, adjourn and resume tomorrow at 9:30 a.m. with the
 21 Petitioner's first witness. Just want to reiterate what was
 22 received today for the exhibits. So we received today
 23 Employer's Exhibit 13, Employer's Exhibit 14, Petitioner's
 24 Exhibit 52.
 25 MR. MEIKLEJOHN: I mean, not to be able to -- but I

Page 461

1 think Employer's 15 was also received today.
 2 MS. ROTHGEB: It was.
 3 HEARING OFFICER KUMA: Petitioner's Exhibit 15 --
 4 MR. MEIKLEJOHN: Mount Sinai 15.
 5 HEARING OFFICER KUMA: Yes, you are right. Thank
 6 you. Employer's Exhibit 15 was received today as well. So
 7 Employer's Exhibits 13, 14, 15 also received today and
 8 Petitioner's Exhibit 52.
 9 MS. ROTHGEB: In addition, Petitioner 19A was
 10 identified but not moved.
 11 HEARING OFFICER KUMA: Correct. All right. See
 12 everybody first thing 9:30 a.m. Off the record.
 13 (Whereupon, at 4:21 p.m. the hearing in the above-entitled
 14 matter was recessed to reconvene on Wednesday, July 12, 2023 at
 15 9:30 a.m.)
 16
 17
 18
 19
 20
 21
 22
 23
 24
 25

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

CERTIFICATION

This is to certify that the attached proceedings before the National Labor Relations Board, Region 2, in the matter of Icahn School of Medicine at Mount Sinai and International Union, United Automobile, Aerospace, and Agricultural Implement Workers of America, Case Nos. 02-RC-319437, at New York, New York, on Tuesday, July 11, 2023, was held according to the record, and that this is the original, complete, and true and accurate transcript that has been compared to the recording from the hearing, that the exhibits are complete, and no exhibits received in evidence or in the rejected file are missing.

Adrian Morris, CER

	accessible (1) 457:5	administration (3) 420:5,8,18	allegations (1) 410:5	423:4;425:7;435:18; 443:10
— (8) 366:9;369:24; 370:15;372:18;378:8; 392:20;399:9;456:4	accessing (1) 433:6	administrative (4) 381:2,9;407:4; 427:15	alligns (1) 416:25	approval (2) 391:13;425:9
\$	accomplish (4) 389:12,13;397:17; 399:2	admission (3) 417:20,21,25	allow (4) 369:17;377:5; 390:16;428:2	approve (2) 366:25,25
\$1,200 (1) 452:13	according (2) 442:19;451:17	admissions (1) 417:19	allowed (2) 424:7;427:24	approximately (3) 421:13,21;432:15
\$100,000 (1) 366:2	accounted (1) 366:22	admit (3) 408:14;422:14; 426:15	along (3) 382:8;406:8;430:7	architecture (1) 376:20
\$2000 (2) 402:14;403:7	accounts (2) 431:16;457:4	admitted (1) 442:14	always (1) 379:2	area (9) 385:20;387:11; 388:5;389:25;390:14; 391:10;402:2;416:15; 417:12
\$40 (3) 447:6,6;448:15	Accumbens (2) 374:9;378:24	Adrian (1) 440:11	AMERICA (1) 358:10	areas (1) 386:2
‘	accurate (2) 449:2;454:10	advance (2) 404:7;460:8	amount (7) 366:21;389:3; 400:12;413:23;414:3; 428:20;447:3	around (1) 389:14
‘22 (4) 421:4,4;444:7;445:5	acknowledged (1) 438:17	advise (5) 391:8;392:20;393:3; 394:7;395:3	amounts (1) 393:16	arrived (1) 437:23
‘23 (2) 444:7;445:5	acquire (1) 387:10	advisor (1) 386:6	Anesthesia (1) 375:7	article (20) 372:2,4;373:3,12; 374:3,6,12,20,23,24, 24;375:1,5,6;377:23; 378:17,22;379:5,20; 380:5
A	Act (2) 416:11,17	AEROSPACE (1) 358:9	anesthesiology (1) 375:7	articles (1) 371:18
abide (1) 403:7	action (1) 395:4	affairs (3) 420:13,22;421:2	answered (4) 415:2,4;455:10; 459:1	aside (1) 451:22
ability (2) 401:19;409:11	actions (1) 395:10	affect (3) 388:16;430:22;431:4	Antonio (2) 373:4,7	aspects (4) 369:4;392:19;393:7; 394:2
able (14) 368:22;370:24; 416:13;420:12;424:19; 449:21;454:2;456:2, 12,16,21,24;458:16; 460:25	actively (1) 377:12	African-American (1) 367:23	apologize (2) 364:4,8	assessment (1) 367:16
above-entitled (2) 358:13;461:13	activities (1) 410:16	afternoon (2) 419:22;460:12	appear (4) 382:5;399:11;404:3; 437:25	assign (2) 390:7;391:17
abroad (1) 409:12	activity (1) 414:14	Again (10) 375:15;377:22; 399:8;400:18;401:7; 412:17;434:12;435:19; 440:8;457:7	appears (1) 371:12	assigned (1) 428:3
absence (9) 395:19;431:19,21, 24;432:4,7,12,16,20	actual (1) 365:18	agencies (4) 364:18;387:1,1; 397:24	appetites (1) 372:3	assignment (1) 423:15
absolutely (1) 394:7	actuality (1) 366:10	agency (2) 397:14;399:24	apple (1) 451:21	assignments (2) 392:2,7
academic (14) 389:24;396:25; 401:6;412:16;424:20; 425:8;429:5,12,18; 431:4;444:4,7;445:5; 448:18	actually (8) 370:9;371:7,10; 380:2;390:15;435:17; 456:20;458:23	aggression (1) 372:4	applicant (2) 387:14	assist (4) 390:22;423:14; 425:10,13
accept (1) 427:24	addition (2) 366:15;461:9	ago (5) 374:5;380:17; 393:23;395:17;406:20	applicant (2) 368:7;369:22	assistance (2) 381:25;382:3
acceptance (1) 409:7	additional (13) 367:14,19;382:1; 397:11;402:8;403:8; 404:4,7;411:10; 418:14;423:13;429:6; 460:6	agree (1) 459:4	applicants (1) 417:20	assistant (23) 365:19;374:1; 380:16;384:7,9,19; 413:14,17;422:9,9; 423:8,9;424:25; 425:21;426:8;427:17, 20;428:21;430:14,21, 22;431:3,4
accepted (1) 409:8	add-on (1) 365:5	AGRICULTURAL (1) 358:9	application (4) 377:1;397:13; 398:23;399:23	assistants (11) 423:22;424:17; 425:10,12;427:16,19, 22;428:25;429:7,15; 430:8
access (14) 369:10;433:6,8,10, 13,14,15,18,19;451:8, 11;456:16,21,24	address (3) 395:4;435:11;439:23	ahead (2) 411:12;459:6	applicant (2) 368:7;369:22	assistantship (3)
	addressing (1) 443:17	aim (1) 388:8	applicant (2) 368:7;369:22	
	adequate (1) 418:17	aims (10) 386:17,17,17,22,24; 387:18,22,23;388:1,2	applicant (2) 368:7;369:22	
	adheres (3) 402:16,21,23	aligned (1) 390:10	applicant (2) 368:7;369:22	
	adjourn (1) 460:20	aligns (1) 368:18	applicant (2) 368:7;369:22	
	adjust (1) 460:9		applicant (2) 368:7;369:22	

<p>421:7;429:21,21 assistantships (4) 421:11,14,19,22 assisting (2) 387:18,25 associate (6) 406:4,18,24,24; 420:8,17 associated (5) 364:16;374:8; 378:23;391:22;414:16 attaching (1) 399:2 attained (3) 383:22,23;410:3 attended (1) 393:14 attention (1) 423:18 Attorney (1) 439:7 attorneys (1) 440:19 Aubrey (2) 373:4,7 audio (1) 391:24 author (13) 371:2,18;373:3,4,16; 374:11;375:1;378:3,4; 379:4,17;380:5,13 authored (3) 375:4,6;379:1 authorization (1) 411:7 authors (1) 370:20 authorship (1) 370:23 AUTOMOBILE (1) 358:8 available (5) 369:16;381:24; 404:16;411:8;451:8 AVI (2) 358:14;442:1 aware (6) 402:19,22;411:16; 417:21;431:8;455:19 away (3) 388:22,22;401:19</p>	<p>backside (1) 441:12 balance (1) 434:23 based (7) 366:3;367:19; 397:23;406:7;430:8; 434:9;459:11 basically (9) 366:21;368:2;371:1; 386:6;389:14;393:24, 25;397:2,11 basis (10) 394:17;447:25; 448:3,11,14;449:25; 450:5,8,11;451:4 bear (2) 410:4,7 become (2) 392:25;429:21 began (3) 384:3;420:16,25 begin (2) 437:12;438:2 behalf (3) 383:5;405:8;419:12 benefits (1) 418:5 besides (1) 439:11 bet (1) 371:13 better (4) 377:22;387:16; 392:25;414:2 beyond (2) 432:1;434:14 big (3) 393:6,6;440:24 biology (2) 386:2,3 biomedical (30) 385:14,19;392:10; 395:25;396:3,10; 400:13;401:1,20; 407:8,15,19;414:12; 415:6,10;421:10,15; 428:24;430:20;431:2; 432:19;448:7;450:6; 452:24;453:13,20; 456:1,11;457:2,24 bit (3) 406:13;451:15; 457:20 biweekly (5) 449:25;450:5,8,10; 451:4 Bless (1) 367:10 BOARD (3) 358:2,15;416:10 bodies (1) 425:6</p>	<p>body (5) 374:15,16,18,19,21 bonus (3) 402:11,13;403:7 both (5) 384:12;399:8,9,9; 444:23 box (1) 382:20 boy (1) 371:12 Brain (10) 374:16,18,19,21,22; 376:14,19,20;377:3,5 break (3) 404:14;417:5;439:7 breakout (5) 377:15;379:1; 381:14;403:16;404:15 breaks (2) 411:22;412:18 brief (1) 363:15 briefly (3) 384:9;423:7;442:15 broad (3) 364:4;371:8,8 budget (5) 365:16,25;366:1,3, 10 Building (1) 358:16 bureaucratic (1) 397:21 business (3) 408:12;422:12; 426:13 butcher (1) 371:13</p>	<p>367:21,21;371:4,6,7; 376:4,5,6,23;377:6,14; 379:13,20,21;380:6,10; 381:14,19;382:8,19; 383:1,9,21;384:9; 385:24;387:2,5,16; 388:6;389:4,5,6,8,25; 390:14,14;392:16,18, 23;393:11;395:14,15; 396:13,20;397:13,15; 400:12,18,21,21; 403:15;404:15;405:4, 11,12,23;406:5,12; 407:22;408:17;409:11; 410:17,24;411:6,9,19, 20,22;412:7,17,18; 413:23;415:21;417:1; 419:8;420:1,9;422:1, 16;423:7;424:25; 426:1,17;427:16,19,21, 22;428:7;430:3; 431:12;432:8;435:13; 436:8,20;439:21,22; 442:24;443:19;448:4; 449:14,19,20;450:10, 19;451:3,11,12; 454:22;456:4,6; 458:23,24;459:16,18 can't (1) 372:22 candidate (1) 368:25 cap (12) 411:20;412:2;413:6, 10;414:15,17;415:24; 416:5;453:11,12; 454:7,8 capacities (1) 445:24 capacity (2) 441:18;442:7 captioned (1) 378:22 card (1) 412:16 career (1) 387:8 Carolina (1) 384:2 carry (6) 392:1,6;395:4; 397:19;398:7;402:15 carrying (2) 387:18;388:1 Case (10) 358:4;363:13; 373:17;381:24;404:2, 3;410:5;434:17; 440:20;459:16 cases (1) 397:19 categories (2) 371:8;410:7</p>	<p>category (2) 457:15,17 central (2) 377:24;410:4 certain (15) 376:22;387:21; 389:25;395:4;396:18; 397:2,16;398:9,15,15; 411:1;444:18;445:10; 452:16,19 certainly (4) 379:13;387:8; 442:24;443:6 certificate (1) 409:8 CFR (1) 412:22 chances (3) 398:5,11;399:3 change (2) 391:12;440:9 changed (1) 428:4 Changes (4) 374:8,19,20;378:23 Chapel (1) 384:2 characterization (3) 434:7;446:8;454:6 characterizing (2) 446:11,13 Charles-i-p (1) 419:18 check (8) 389:15;395:2; 402:12;404:15;431:15; 449:19;450:10,25 checking (1) 450:9 choose (1) 389:4 Christoffe (1) 380:15 Cipriano (34) 418:25;419:8,11,17, 17,22;422:4,24; 424:23;425:17;426:4, 21;435:9;436:3; 437:10,11,13;439:22; 440:19;443:13,23; 446:16;447:11;450:14, 20;451:20;452:5,20; 454:20;455:10,13; 458:8;460:4,13 Cipriano' (1) 434:7 Cipriano's (3) 434:13;435:5,18 circumstances (3) 364:23;367:18; 456:10 cite (1) 440:1</p>
<p>B</p> <p>bachelor (1) 383:22 bachelor's (2) 383:22;420:2 back (6) 377:18;418:18; 445:7;453:17;460:6,7 background (3) 383:21;405:24;420:1</p>	<p>calculate (1) 366:13 calculated (2) 365:23;447:9 California (1) 384:1 call (5) 382:17,23;393:24; 404:2;460:6 called (11) 365:1,15;374:7; 381:5;383:5;405:8; 409:9;411:5;418:18; 419:12;460:7 calling (2) 382:16;404:12 came (4) 358:13;367:23; 375:25;438:13 can (116) 364:19;366:20;</p>	<p>C</p>		

citizen (1) 412:15	community (1) 433:9	436:15;450:5	372:11;379:12,19; 382:8;383:6;405:9;	435:11;448:19;457:15
claim (1) 454:11	compared (1) 399:7	conference (2) 393:14;459:20	416:23;418:17;419:13;	currently (17) 373:10;380:16;
clarify (4) 446:18;448:4; 458:23;459:2	comparison (1) 395:12	conferences (1) 393:1	437:18;438:10;439:6, 6;460:8	383:17;385:5,8,9,10, 21;386:1;419:22;
class (7) 364:10;423:9;425:5, 5,10,13;445:17	compensation (7) 427:23;446:7,9,20, 23;447:1,16	confusing (1) 457:7	Counsel's (1) 372:13	427:3,5;443:25;444:1, 6;448:18,19
classes (2) 412:20;445:17	complaint (1) 392:12	congratulating (1) 417:19	count (1) 414:21	curricular (3) 411:14;427:14,15
classroom (1) 423:10	complaints (1) 392:9	connected (1) 411:15	counterintuitive (1) 372:17	curriculum (1) 425:24
clear (6) 366:8;424:9;435:21; 438:16;439:14;455:5	complete (12) 390:15;401:10,13, 16;411:3;414:1;415:8, 11,15,17;428:25;429:8	Connecticut (1) 420:3	counting (1) 414:14	custom (1) 371:16
clearly (1) 376:1	completed (2) 411:6;448:22	considerable (1) 388:18	couple (3) 370:8;377:21;393:22	cut (1) 376:4
clinical (10) 429:14;445:1,10,12, 14,20;447:24;448:9; 453:6,8	completely (1) 390:16	considered (2) 364:17;416:3	course (58) 395:1;408:11;	D
clock (2) 367:6,9	completing (3) 390:17;391:23; 413:23	considering (2) 454:15;460:3	410:14;411:3,4,15;	Daniel (4) 382:17,25;383:4,10
close (3) 378:25;395:1;460:19	completion (5) 386:7,19;393:5; 414:4;428:12	consistently (1) 371:17	414:1;422:12,25;	D-a-n-i-e-l (1) 383:10
Cloud (36) 433:1,3,4,8,10,13,14, 18,19,20,24;434:15,21; 435:10;436:4,9,11,13, 25;449:4,5,11,12,18, 19,22;451:1,9,13,16; 452:17;456:17,22,24; 457:4;458:1	Compound (1) 371:21	constantly (1) 364:9	423:2,12,14,23,23;	date (5) 382:4;404:3;422:17;
Clouds (1) 457:1	computational (4) 369:8,10,13,14	constitute (1) 449:12	425:1,5,6,13,15,22,23;	426:25;432:22
co-authors (1) 378:2	conceptual (1) 371:4	consulate (1) 409:12	426:9,12;427:13,22,24, 25;428:2,11,15,16,17, 18,19;429:24;430:1,4, 7,15,17,18;447:18,22, 22;448:12,12,21,22,24, 25;453:3;458:9,13,15, 16,18;459:12,15	day (4) 404:1,8;460:5,20
colleague (1) 382:18	concerning (1) 416:24	content (1) 451:22	courses (12) 423:1;444:10,11,24, 25;447:6,19,20,23; 448:13;459:11,13	days (1) 412:20
College (1) 420:3	concludes (1) 460:16	context (1) 380:7	coursework (2) 369:5,10	dean (6) 406:4,18,24,25; 420:8,17
colloquy (1) 436:4	conclusion (2) 434:18,21	continue (4) 363:5;401:5;420:12; 443:19	Court (1) 406:13	December (5) 420:19,24;421:1,3,4
coming (1) 367:11	conclusions (1) 435:1	CONTINUED (1) 427:10	cover (4) 367:15;368:1,5,13	decide (1) 394:8
commence (1) 440:15	condition (2) 391:16;403:8	contract (1) 395:22	coverage (1) 418:6	decided (1) 391:12
comment (2) 430:1;459:16	conditioned (5) 391:17;396:15,23; 399:16;400:5	contribute (2) 370:17;375:11	covered (2) 367:13;375:16	decides (1) 429:20
commitments (2) 424:1,4	conditions (4) 400:25;403:1;411:1, 2	contribution (4) 370:25;371:1,4,9	covering (2) 364:25;368:9	decision (2) 397:22;435:8
committee (1) 398:5	conductive (2) 390:17;398:4	contributions (2) 370:20,22	covers (1) 412:24	dedicated (2) 388:13,20
communicate (1) 393:17	conduct (6) 384:11;386:16; 387:22;389:18;391:6; 394:22	control (1) 401:8	creating (1) 423:15	defaults (1) 434:2
communicated (1) 390:3	conducted (1) 374:4	copy (2) 408:7;438:1	credit (4) 427:22,24,25;428:2	Defeat (2) 374:7;378:23
communicating (1) 395:20	conducting (11) 368:8;374:4;384:14; 386:19;388:11;391:4; 399:17;400:6;416:4;	cornerstones (1) 389:14	credits (2) 414:1;428:3	define (2) 430:16;455:15
communicators (1) 393:1		correctly (1) 421:1	criteria (1) 397:23	definition (1) 416:11
		corresponding (1) 378:3	CROSS (7) 363:10;417:10;	degree (15) 383:22,24;385:21; 405:25;411:9;413:23; 414:5;420:2,4,4; 444:16;447:24;448:8; 453:22;455:3
		cost (14) 364:17,19,20,22; 365:6,17,18,19;366:1, 2,13,15,15;402:6	437:8,9,12;440:15,17	degrees (2) 429:1,8
		costs (12) 364:14,16,24; 365:12,13,15,24;381:1, 2,6,9;397:12	cross-examination (2) 363:5;438:2	deliver (1) 439:6
		Counsel (14)	current (12) 384:5;385:1;406:22; 407:7;416:25;420:6; 421:5,13;432:22;	demonstrating (1)

<p>410:2 Deonaraines (1) 378:5 department (1) 384:7 depend (1) 428:21 dependent (1) 447:4 depending (2) 413:25;425:4 depends (4) 376:13;377:1;430:5; 447:18 deposits (1) 431:15 Depression (3) 374:7;377:25;378:22 descent (1) 367:23 describe (10) 367:21;384:9;389:6; 392:16;396:13;397:13; 406:5;412:12;420:9; 428:7 described (10) 365:20;385:1;394:5; 397:25;398:23;403:7; 411:18;414:22;454:20; 456:19 describes (1) 369:15 designated (2) 406:9;412:19 detailed (1) 369:2 details (1) 365:9 determination (4) 425:14,15,21;434:16 determine (1) 434:8 determined (1) 447:22 develop (1) 387:11 developed (1) 387:9 development (1) 453:15 develops (2) 368:17,18 devote (1) 454:2 differ (2) 386:13;396:9 difference (3) 398:21;409:22; 410:10 differences (2) 372:3;451:15 different (14) 368:15,16;378:19,</p>	<p>21;386:15,25,25; 396:22;400:10;402:25; 416:19;433:20;434:22; 436:5 differently (1) 402:11 differs (1) 436:9 dire (2) 426:17,19 direct (26) 364:14,17,20,24; 365:6,17,23;366:7,10, 13,15;374:14;383:15; 388:7;396:20;405:17; 419:20;423:18;427:10; 441:5;446:6,9;447:3; 453:18;458:7,15 direction (5) 387:7,8,14;388:7; 390:11 directly (10) 365:13;367:13; 393:19;395:19;399:5; 431:15,16;439:25; 446:20;455:21 director (27) 381:25;382:4;404:2; 406:23,24;418:13; 420:22;421:2;423:15, 23;425:13,15,23,24; 427:13;428:11;430:1, 4,15,17;434:8,17; 435:9,17;439:2,17; 440:8 directors (9) 395:6,6;423:1;425:1, 5,8;427:14,15;429:24 director's (1) 439:20 discipline (7) 385:17;394:14; 395:8,13,15;430:15,16 discuss (1) 389:15 discussed (1) 378:25 discussing (1) 439:1 discussions (2) 378:12;423:11 dismiss (2) 430:17;458:16 dismissed (3) 458:21;459:8,14 displace (1) 412:15 dissertation (11) 369:4;386:7;388:12; 389:25;391:2,7; 394:22;398:14;414:21; 415:23;416:3 distinction (1)</p>	<p>410:3 distinctions (1) 410:6 distract (1) 398:13 distributed (1) 401:1 diversity (2) 365:2;368:2 Doctor (3) 372:10;379:7,10 document (54) 372:11;379:13,20, 21,25;380:3,7,12; 408:2,3,5,9,11;410:22; 411:7;412:13;422:4,5, 7,10,12;423:3,5,19,25; 424:2,22;426:4,5,7,10, 12,23;440:23,25;441:1, 2,9,11,13,25;442:5,11, 14,18,23,25;443:5,9; 446:11;451:20,23,23, 24 documentation (3) 449:1;451:25;452:4 documentations (1) 409:10 documents (2) 433:15;446:10 domain (3) 398:25;399:3,6 domains (1) 392:25 Domestic (3) 452:11,13,18 don't (2) 404:14;417:5 done (10) 364:11;387:3; 389:19;392:21;430:5, 6;438:4;444:25; 448:12;458:11 down (11) 383:8;391:1;405:11; 406:12;415:21;419:15; 422:16;423:18;437:21; 454:17;457:20 download (1) 449:21 Dr (24) 363:3,7,12;375:9,11; 378:3,5,7,12;381:22; 382:12,17,25;383:1,17; 388:10;389:20;394:24; 401:19;403:21,23,25, 25;404:10 dual (4) 444:16;447:24; 448:8;453:22 duly (4) 363:8;383:6;405:9; 419:13 duration (2)</p>	<p>413:25;425:5 during (21) 384:19,22;387:8; 393:22;411:18,21,22; 412:18;420:18;424:7; 430:18;438:1,15; 439:4;441:5;443:1,4; 444:4;453:22;458:7,16 duties (8) 384:9;386:13;406:5; 420:9;423:4,7;445:21; 446:2</p>	<p>396:15;397:18;410:6; 434:4,8,16;435:7,8,23 Employer (12) 358:6;381:19; 382:15,23;404:6,11; 405:14;417:8;418:17; 419:25;439:22,24 Employer's (2) 461:1,7 Employer's (16) 382:8;408:20,22; 422:20,21;427:8,9; 442:2;443:18;454:16; 457:11;460:8,17,23,23; 461:6 employment (20) 406:7;410:24;411:6, 10,14,17,21,23;412:2, 14;413:3,8,12;414:14, 21;415:24;416:4,5,14, 18 encompass (3) 449:13,18;453:22 end (8) 369:20;428:9,14,15, 16,19;448:23,25 engage (4) 388:20;410:15,24; 414:4 engaged (1) 411:13 engagements (1) 397:12 engaging (2) 371:7;410:14 Enjoy (2) 404:8;460:12 enough (3) 375:25;382:8;460:8 enrolled (9) 407:7,11,14,19; 421:9,14,17,22;445:1 ensure (3) 402:16,20;406:13 entered (1) 422:20 entire (6) 384:20,22;391:2; 393:24,25;420:18 entirely (3) 387:15;394:8;416:19 entirety (1) 365:7 entitled (1) 423:4 entry (1) 409:12 environment (3) 363:23,24,25 equally (1) 454:23 essentially (1) 397:7</p>
E				
<p>earlier (2) 441:17;455:20 earmarked (1) 365:3 ecology (1) 420:4 education (5) 420:5;424:18;429:4, 12;454:23 educational (3) 383:21;405:23;420:1 educator (1) 384:11 effective (1) 390:18 effectively (11) 386:16;391:9; 392:22,25;393:13,15, 17,20;394:22;397:21; 401:7 efficiency (1) 392:22 efficient (2) 390:14;399:12 efficiently (1) 399:5 effort (5) 366:18,20,24;367:3; 371:8 either (3) 388:25;409:19;460:2 eligibility (1) 409:9 eligible (5) 368:25;411:4; 412:15;455:23;456:13 else (3) 365:20;402:19;406:1 emotionally (1) 363:23 employed (6) 383:17,19;405:19, 21;419:22,24 employee (4) 416:11;436:12,25; 437:3 employees (11) 369:19;394:19;</p>	<p>employment (20) 406:7;410:24;411:6, 10,14,17,21,23;412:2, 14;413:3,8,12;414:14, 21;415:24;416:4,5,14, 18 encompass (3) 449:13,18;453:22 end (8) 369:20;428:9,14,15, 16,19;448:23,25 engage (4) 388:20;410:15,24; 414:4 engaged (1) 411:13 engagements (1) 397:12 engaging (2) 371:7;410:14 Enjoy (2) 404:8;460:12 enough (3) 375:25;382:8;460:8 enrolled (9) 407:7,11,14,19; 421:9,14,17,22;445:1 ensure (3) 402:16,20;406:13 entered (1) 422:20 entire (6) 384:20,22;391:2; 393:24,25;420:18 entirely (3) 387:15;394:8;416:19 entirety (1) 365:7 entitled (1) 423:4 entry (1) 409:12 environment (3) 363:23,24,25 equally (1) 454:23 essentially (1) 397:7</p>			

<p>establish (1) 389:8</p> <p>estimate (2) 432:8;445:9</p> <p>estimating (1) 432:11</p> <p>evaluate (1) 429:24</p> <p>evaluation (8) 430:4,5,9,11;449:7,9;458:9,10</p> <p>evaluative (1) 458:12</p> <p>even (3) 372:21;380:2;393:2</p> <p>Everybody (3) 364:5,7;461:12</p> <p>everyone (2) 404:9;433:25</p> <p>evidence (5) 408:20;422:20; 439:14;442:14,19</p> <p>exact (2) 446:21,22</p> <p>EXAMINATION (10) 363:10;376:9; 383:15;405:17;417:10; 419:20;426:19;427:10; 437:12;440:17</p> <p>examine (1) 376:2</p> <p>examined (4) 376:23;383:6;405:9; 419:13</p> <p>example (11) 365:1,10,16;366:3, 11;368:11;369:5,17; 387:2;395:15;458:3</p> <p>examples (3) 393:11;436:8,17</p> <p>exchange (1) 441:4</p> <p>Excuse (13) 420:2,25;422:25; 427:14;428:15;432:13; 433:4;434:1;436:12; 444:11;446:21;447:6; 450:7</p> <p>Exhibit (38) 407:22;408:1,15,18, 20,22,25;410:20;412:8, 22;414:24;415:21; 422:2,15,20,21;424:22; 426:2,16,21,22,25; 427:2,8,9;440:25; 441:15;442:10;443:17, 20,23;451:21;460:23, 23,24;461:3,6,8</p> <p>exhibits (2) 460:22;461:7</p> <p>expectation (1) 389:10</p> <p>expected (5)</p>	<p>389:9;392:1,6; 404:14;414:6</p> <p>experience (6) 370:13;387:13,16; 398:4;402:10;416:16</p> <p>experiment (1) 389:18</p> <p>experiments (1) 391:8</p> <p>expert (3) 390:13;391:9;399:2</p> <p>expertise (7) 387:9,10;398:7,25; 416:9,24,25</p> <p>experts (3) 398:10;399:6,11</p> <p>explain (8) 364:19;366:20; 374:24;385:24;423:7; 424:25;430:3;431:12</p> <p>extended (1) 432:1</p> <p>extensive (3) 387:12,15;393:16</p> <p>extent (6) 396:19;434:17; 437:10;438:9;442:25; 454:9</p> <p>external (12) 401:23,24;402:3,9, 17,20,24;403:3,6,10; 431:9,11</p>	<p>familiar (15) 366:18;372:4,7; 381:9;395:24;396:2,6; 407:4;421:6;431:18; 433:1;451:10;452:8; 453:14;456:25</p> <p>far (3) 367:4,7;417:21</p> <p>fashion (2) 389:13;390:18</p> <p>faster (1) 399:5</p> <p>February (1) 384:17</p> <p>Federal (12) 358:15,16;387:1; 397:8,14,24;399:18,24; 412:24;413:2;439:14; 442:19</p> <p>feedback (1) 430:7</p> <p>feel (1) 425:7</p> <p>feels (1) 425:1</p> <p>fees (1) 368:6</p> <p>fellow (1) 380:20</p> <p>fellowship (6) 402:1,1,9,21;403:4,6</p> <p>fellowships (2) 402:24;403:10</p> <p>felt (1) 367:11</p> <p>few (3) 395:17;438:2;459:19</p> <p>figure (1) 366:14</p> <p>fill (4) 367:2;425:2;449:6; 458:12</p> <p>filled (1) 426:8</p> <p>final (2) 371:18;380:25</p> <p>financial (2) 409:10;451:7</p> <p>find (2) 363:22;389:9</p> <p>finding (4) 416:2,6,7,18</p> <p>findings (1) 416:9</p> <p>fine (1) 439:22</p> <p>finish (1) 425:17</p> <p>first (15) 378:4;383:6,9,10; 387:5,5;395:1,3; 396:14;405:9;419:13; 441:25;442:18;460:21;</p>	<p>461:12</p> <p>five (3) 384:17;403:15;417:4</p> <p>fix (1) 382:19</p> <p>flat (3) 459:12,13,15</p> <p>flexibility (4) 368:7;397:4;398:16; 399:14</p> <p>flexible (1) 368:23</p> <p>focus (4) 424:19;429:5;454:2; 455:2</p> <p>focused (3) 365:8;368:5;429:12</p> <p>focusing (1) 454:23</p> <p>following (3) 383:23;399:9;424:21</p> <p>follows (5) 363:9;383:7;405:10; 419:14;423:16</p> <p>follow-up (3) 382:1;458:25;460:6</p> <p>foreign (4) 413:13;431:9,13; 458:4</p> <p>Form (19) 409:9,9;413:13; 417:22;418:2;425:2,3; 426:8,22;427:2,4,12, 13;449:6,7,7,8,9;457:6</p> <p>formally (1) 428:1</p> <p>format (1) 451:22</p> <p>former (2) 373:24;380:17</p> <p>formerly (1) 427:24</p> <p>forms (5) 394:17;415:8,11,15, 17</p> <p>forth (2) 387:1;416:13</p> <p>foundation (6) 386:16,17;387:1; 397:8;416:8;418:3</p> <p>Four (2) 432:17,18</p> <p>Fox (75) 382:18;383:14,16; 392:5;403:15,18,21; 404:10,13,19;405:3,16, 18;407:22,24;408:14, 17,23,24;410:2,9,17, 19;412:7,9;415:4,5; 416:7,22;417:2;418:2, 11,24;419:21;422:1,3, 14,22,23;426:1,3,15; 427:11;434:9,19;</p>	<p>435:13;436:1,2,20,24; 437:7;438:3,6;439:9; 440:3,10;441:16,23; 442:3;446:8;448:4; 449:14;450:2,12; 454:5;455:5,8;456:6; 457:6,10,13;459:2; 460:2,13,15</p> <p>framed (1) 457:16</p> <p>frank (1) 404:14</p> <p>frequency (1) 411:25</p> <p>frequent (2) 395:19;449:25</p> <p>front (11) 437:11,14,15; 438:14;441:5,6,11; 442:20;443:1,3,5</p> <p>fulfill (1) 396:17</p> <p>fulfilling (2) 396:16,23</p> <p>fulfillment (3) 386:16;387:22;391:4</p> <p>full (5) 410:14;419:16; 433:24;447:12;458:18</p> <p>full-time (2) 411:22;412:18</p> <p>fully (1) 446:17</p> <p>fumbling (2) 364:9,12</p> <p>function (1) 377:8</p> <p>fundamental (2) 387:20;394:2</p> <p>fundamentally (1) 386:15</p> <p>funded (4) 367:24;388:9; 397:23;457:3</p> <p>funding (59) 368:21;370:2,11,12; 386:17,22,24;391:16, 16;392:2,7;395:23,24; 396:2,6,9,10;397:6,7, 14,24;398:11;399:4,16, 20;400:1,3,5,9,10,12, 25;401:5,11,14,17,20, 23,24,25;402:3,4,25; 430:22;431:9,10,13,14; 450:24;451:9;453:19; 455:16,17,17,20,25; 456:10;457:25;458:4</p> <p>funds (6) 387:21;397:11; 400:18;431:16,16; 436:12</p> <p>further (13) 381:12,23;403:21,</p>
--	--	---	--	---

<p>25;417:3,8;418:10,11; 423:18;437:7;442:24; 459:24;460:4 furtherance (3) 414:20;415:23;416:3 future (2) 369:20;382:1</p>	<p>grade (1) 430:8 graduate (62) 363:18;364:13,14; 366:23;367:2,20; 369:23;370:5;375:9, 10,19;377:8;385:5,8; 389:13;401:14;402:9, 19,25;403:3,11;407:1, 5,8,19;408:12;414:11, 13,22;420:12;421:6,9, 14;432:5,24;433:21, 21;434:2,22,24;436:5, 6,10,14;437:1,4,4; 444:11,12;445:13,14, 17;451:6,16,16,18; 452:1;454:2;455:2,12, 14;457:25 graduated (2) 374:5;411:9 graduation (2) 411:7,11 grant (14) 365:5,16;367:14,15, 19;368:1;369:25; 370:2;397:25;398:19, 22;402:17,21;455:21 granting (1) 364:18 grants (23) 364:12,15;365:12; 367:14;368:4,12; 369:23;375:16,17; 386:25;390:20;392:2, 7;397:8,8,24;399:18, 23,24;400:2,4,7,10 Great (1) 406:3 green (1) 412:16 grounds (1) 442:22 group (4) 365:18;368:19; 373:11;393:24 groups (2) 365:4;448:10 guess (2) 377:4;442:3 guidance (1) 391:3 guide (3) 386:7;392:20,24</p>	<p>H-a-m-e-l (1) 405:13 hand (5) 383:2,8;405:5;419:9, 15 handful (1) 447:18 handles (1) 402:10 handling (2) 382:18;419:3 handwriting (1) 441:9 handwritten (1) 440:25 happen (1) 459:14 happened (2) 370:13,16 happier (2) 363:24,24 hard (1) 377:3 he's (1) 434:25 head (4) 371:16;376:1; 436:18;445:7 Health (2) 405:22;418:6 healthy (1) 363:22 hearing (105) 358:13,14;363:3; 373:19;377:16,18; 381:16,18,22;382:3,7, 11,15,21,23;383:1,8, 13;403:15,17,20,24,24; 404:2,6,11,20;405:4, 11,14;408:19,19;410:1, 8;415:3;416:21,23; 417:6;418:12,13,14,20, 23;419:1,4,6,8,15,19; 422:19,19;427:7,7; 434:11;435:2,4,13,15, 25;436:21,23;437:13, 17,20,24;438:11,19,22, 24;439:1,19;440:2,8, 11,14;441:20;442:2,15, 17;443:8,14,16,16; 450:17,19;452:5; 454:11,12,14;457:11, 19;459:4,6,19,21; 460:1,3,5,11,16,19; 461:3,5,11,13 hearings (1) 364:8 held (4) 384:25;406:21; 420:23;421:2 help (6) 369:14,16;371:6,10; 423:10,11</p>	<p>helping (1) 392:25 helps (1) 399:4 herein (1) 363:9 Hesmati (5) 375:2,4,9,11;379:1 higher (2) 420:5;453:12 Hill (1) 384:2 hire (3) 387:21,22;396:14 hired (4) 387:6,6,12;425:11 hiring (1) 364:6 Hold (8) 408:19;420:20; 421:10,13,18,21; 423:12;443:14 holder (2) 409:13;412:16 holders (1) 416:15 holds (2) 431:1,7 holiday (1) 412:18 hopefully (1) 394:23 hour (5) 414:14;424:16; 447:6;448:15;453:11 hourly (8) 447:20,21,25;448:3, 11,14;459:7,12 hours (31) 366:21;411:20,20, 24,24;412:1,2,17; 413:6,7,19,20,21; 423:13;424:7,15; 428:10,21;447:5,17; 449:1;452:13,20,25; 453:3,9,16;454:7,22; 458:19;459:9 house (1) 397:21 How's (1) 380:9 HR (3) 433:5;434:1;449:11 human (1) 395:20 hundreds (1) 377:2 hypothetical (1) 415:20</p>	<p>424:21 I'll (1) 417:5 I'm (3) 364:6;404:21;417:24 I-20 (2) 409:9,9 I-9 (4) 415:8,11,15,17 ICAHN (9) 358:5;383:20;384:4, 5,15;420:6,15,20; 421:18 idea (1) 371:5 identification (1) 451:21 identified (6) 408:22;422:21; 427:9;443:20;454:21; 461:10 immigration (2) 406:8;416:15 impact (6) 388:24,24;402:4,7; 416:18;458:21 IMPLEMENT (1) 358:9 implies (1) 398:24 important (2) 363:20;410:6 imposed (1) 395:16 in-class (1) 423:11 include (4) 397:25;398:18; 433:11;449:20 included (2) 408:7;444:19 including (3) 365:18;376:9;418:5 increase (2) 392:22;398:10 increases (1) 399:3 independent (8) 368:8,22;372:11,14; 379:12;429:23;449:6; 455:21 indicate (1) 452:7 indicated (4) 442:20;445:24; 448:25;458:10 indirect (7) 365:15,15,20; 366:15;381:1,5;397:12 Indirectly (3) 374:13;375:15,18 indistinguishable (1) 403:14</p>
<p style="text-align: center;">G</p> <p>gatherings (1) 393:2 gave (2) 396:18;397:9 gears (1) 395:23 general (10) 376:15;383:5;388:6; 390:11;397:13;405:8; 407:4;419:12;451:22; 457:8 generally (8) 385:24;386:1;407:6, 20;412:12;452:22; 454:7;457:16 gets (2) 397:21;406:13 given (10) 366:21;370:9; 393:21;397:5;400:15; 404:3,6;414:3;437:25; 458:9 gives (1) 411:10 giving (1) 437:21 goal (6) 388:14;398:16,16; 399:6,15;454:20 goals (11) 388:3;389:16;391:2, 22;394:22;396:24; 397:17,18;398:7,15; 399:2 goes (4) 363:16;397:20; 427:13,14 Golden (2) 373:21,23 Good (7) 363:12;389:24; 396:25;401:6;412:16; 419:7,22 government (6) 413:2;431:9,11,13; 455:22;458:4 grad (17) 363:21;364:2; 380:17;389:11,20,21, 22,23;390:1;394:20, 20;395:7;400:15; 416:13,13;417:20; 420:14</p>	<p style="text-align: center;">H</p> <p>H1 (1) 409:19 half (3) 366:14;384:18; 402:15 Hamel (4) 404:13;405:3,7,13</p>	<p style="text-align: center;">I</p> <p>I'd (1)</p>	<p style="text-align: center;">I</p>	<p style="text-align: center;">I</p>

<p>individual (5) 365:6;368:6;371:5; 423:23;456:3</p> <p>induced (1) 377:25</p> <p>information (5) 382:7;408:6,7;430:3, 6</p> <p>infrastructure (1) 365:22</p> <p>Inhibitory (2) 374:8;378:23</p> <p>initial (1) 437:9</p> <p>initially (2) 388:18;406:23</p> <p>inside (1) 433:25</p> <p>instead (2) 398:7;452:18</p> <p>Institute (1) 383:25</p> <p>institution (3) 402:10;433:25;434:4</p> <p>instructor (4) 373:10;458:9,13,15</p> <p>insurance (1) 418:6</p> <p>intellectual (1) 371:4</p> <p>intended (1) 374:24</p> <p>intention (1) 410:13</p> <p>interest (1) 367:20</p> <p>interested (2) 367:12;369:8</p> <p>intermittent (1) 448:21</p> <p>INTERNATIONAL (16) 358:8;406:4,19; 407:1,5,7,11,14,18; 409:14;413:3,16,22; 414:11;417:18,22</p> <p>interpretation (1) 416:10</p> <p>interruption (1) 391:24</p> <p>intervene (1) 395:7</p> <p>into (17) 367:23;371:10,11; 381:14;404:15;408:15, 20;409:12;417:1; 421:4;422:15,20; 426:16;431:16;442:14; 450:25;453:14</p> <p>investigation (1) 379:12</p> <p>investigator (1) 384:8</p> <p>issuance (1)</p>	<p>450:25</p> <p>issue (2) 434:7;442:9</p> <p>issued (4) 395:21;409:4; 410:12;428:7</p> <p>issues (2) 373:17;395:20</p> <p>It's (9) 373:1;394:16;398:4; 408:8,20;411:5; 414:17,17;457:22</p> <p>iterate (1) 441:18</p> <p>iterations (1) 393:18</p>	<p>363:19,24;368:2; 369:20,22,24;370:23; 371:1,17</p> <p>knowledge (5) 403:2,5,9;413:2; 435:10</p> <p>Kristina (1) 378:5</p> <p>KUMA (87) 363:3;373:19; 377:16,18;381:16,18, 22;382:3,7,11,15,21, 23;383:1,8,13;403:17, 20,24;404:6,11,20; 405:4,11,14;408:19; 410:1,8;415:3;416:21, 23;417:6;418:12,20, 23;419:1,4,6,8,15,19; 422:19;427:7;434:11; 435:2,4,15,25;436:21, 23;437:13,17,20,24; 438:19,22,24;439:1,19; 440:2,8,11,14;441:20; 442:2,17;443:8,14,16; 450:17,19;452:5; 454:12,14;457:11,19; 459:4,6,21;460:1,3,11, 16,19;461:3,5,11</p> <p>KUMAR (1) 358:14</p>	<p>384:13</p> <p>largely (1) 423:16</p> <p>Last (16) 371:12;372:1;383:9, 11;419:17;426:21; 432:3,6,12,16,20; 435:22;436:3;448:18; 452:6;456:20</p> <p>late (1) 389:18</p> <p>later (1) 449:9</p> <p>law (2) 405:25;416:15</p> <p>lead (8) 363:25;373:3,3,4,15; 374:11;375:1;423:11</p> <p>Leading (2) 392:4;415:1</p> <p>learning (1) 423:12</p> <p>least (5) 365:12;377:4; 381:18;438:14;443:2</p> <p>leave (5) 432:4,6,11,16,20</p> <p>leaves (3) 431:18,21,24</p> <p>leaving (1) 451:22</p> <p>LeClair (4) 379:4;380:4,13,21</p> <p>led (1) 434:20</p> <p>left (2) 374:4;404:18</p> <p>legal (3) 434:18,20;435:1</p> <p>less (1) 399:12</p> <p>letter (1) 417:18</p> <p>lieu (1) 427:22</p> <p>likely (2) 393:4;395:5</p> <p>likewise (1) 456:2</p> <p>limit (13) 396:20;397:1,2; 398:16;400:20;413:7; 414:8;424:13,14,15; 435:10,16,19</p> <p>limitation (7) 411:19;452:25; 453:5,8,9,16;454:1</p> <p>limitations (1) 452:20</p> <p>limited (6) 397:3;412:17; 413:22;414:3;431:24; 441:18</p>	<p>limiting (1) 454:21</p> <p>limits (5) 400:12,15,18,21; 413:3</p> <p>line (2) 409:25;452:11</p> <p>lines (2) 399:10;430:7</p> <p>link (1) 426:22</p> <p>linked (1) 426:23</p> <p>list (4) 364:19;369:5; 379:17;425:3</p> <p>listed (7) 371:2,17;374:3; 379:4;380:5,13;458:1</p> <p>listen (1) 435:17</p> <p>listening (2) 410:2;435:5</p> <p>little (3) 397:4;401:8;406:12</p> <p>live (1) 368:11</p> <p>LOA (2) 440:1,7</p> <p>located (1) 378:7</p> <p>long (11) 372:22;380:17,17, 17;384:15;406:16,18; 413:25;417:5;420:15; 431:21</p> <p>longer (2) 427:24;428:3</p> <p>look (11) 363:19;364:2,6; 371:11;372:8;376:19, 20;377:3;438:6;451:1, 4</p> <p>looked (1) 371:10</p> <p>looking (8) 364:5;372:9;376:13, 17;423:25;439:12; 440:1;442:8</p> <p>lost (3) 370:11,12;432:7</p> <p>lot (4) 364:11;368:15; 371:12;392:19</p> <p>loud (1) 375:25</p> <p>lower (2) 397:1;400:20</p> <p>luckily (1) 395:11</p> <p>lucky (2) 370:12,14</p> <p>lump (8)</p>
	J			
	<p>J1 (7) 406:11;409:19,20, 22;410:10,14;413:4</p> <p>JIs (1) 409:19</p> <p>Jacob (1) 358:15</p> <p>January (5) 406:17;420:16,23, 25;421:3</p> <p>Javits (1) 358:15</p> <p>job (1) 393:4</p> <p>joint (1) 385:21</p> <p>Jolla (1) 384:1</p> <p>Josh (3) 382:18;422:18; 438:25</p> <p>jotting (1) 437:21</p> <p>Journal (12) 372:2,5,22,23,25; 373:1;374:7;377:23; 378:18,18,18,19</p> <p>journals (2) 370:24;371:19</p> <p>July (2) 358:17;461:14</p> <p>Jun (1) 378:3</p> <p>junior (1) 373:11</p>			
	K			
	<p>Katherine (4) 379:4;380:4,13,21</p> <p>kept (3) 408:11;422:12; 426:12</p> <p>kind (9)</p>	<p>LABOR (5) 358:2,15;416:10,11, 17</p> <p>labs (2) 375:19;377:9</p> <p>lack (2) 398:6;418:2</p> <p>large (1)</p>	L	

<p>428:11,14;446:4,6; 447:8,14,17,19 luncheon (1) 404:22 LUPION (18) 367:16;371:21; 372:10,17;373:14; 376:4;378:9,11;379:7, 10,22;380:6;381:3,14, 21;382:12,17,25</p>	<p>432:1;442:6,15; 444:22,23 Maybe (1) 371:4 MD (2) 444:23,25 MD- (1) 421:22 MD/PhD16 (1) 443:24 MD-PhD (13) 385:21;407:12; 421:18;424:7;429:7, 20;430:25;431:6; 432:4,15,18;444:3,14 mean (14) 364:4;369:9;375:18; 376:13;404:2,17; 434:20;438:6,11; 439:13;440:3,4; 453:18;460:25 meaningful (1) 368:9 means (1) 364:19 meant (2) 365:7;368:7 mechanism (3) 429:24;446:22,25 med (1) 444:13 media (1) 420:4 medical (2) 444:14,15 MEDICINE (9) 358:5;383:20;384:4, 6,15;420:6,15,21; 421:18 meet (1) 369:19 meeting (2) 369:18;393:24 meets (1) 393:25 MEIKLEJOHN (37) 363:11;367:17; 371:23;372:16,20; 373:20;376:6,7; 377:14,20;378:14,16; 379:18,23,24;380:8; 381:4,7,12;382:13; 392:4;403:23;404:17, 21;408:16;409:24; 415:1;416:6,8;417:4,8, 11;418:4,10;419:2; 460:25;461:4 Melissa (4) 408:17;412:7;422:1; 426:1 members (2) 388:21;433:9 mention (2)</p>	<p>437:10;438:7 mentioned (7) 367:12;386:9; 389:20;398:18;411:24; 439:11;458:3 mentor (5) 384:12;386:6; 392:13,16,24 mentor-mentee (1) 389:8 mentors (2) 369:12,13 mentorship (3) 387:16;391:3;395:1 methodologies (3) 387:13;388:21;391:8 mice (1) 366:2 microscope (4) 376:14,18,23;377:7 microscopes (2) 376:3,10 mid-semester (1) 459:8 might (5) 369:8,20;370:1; 377:3;460:15 minimum (3) 389:1;396:19;400:23 minute (1) 382:19 minutes (5) 403:16;417:4;435:5; 438:2;459:19 Mischaracterized (1) 367:16 mischaracterizes (2) 450:12;454:9 mistake (1) 417:16 Mitra (3) 375:2,4;379:1 mix (1) 400:10 mixed (1) 379:2 model (2) 367:24;378:1 modify (2) 367:15,19 moment (1) 436:20 money (8) 364:21;365:13,21; 366:4,11;368:10; 403:8;428:20 monitoring (1) 402:22 months (3) 411:10;431:23,24 more (18) 365:8;368:8;376:15; 377:21;385:19;388:19,</p>	<p>24;390:5;394:20; 399:5;400:22;424:7; 439:21,23;449:25; 454:17;457:17,20 morning (1) 363:12 most (6) 365:18;371:18; 393:4;395:5;423:17; 447:6 mostly (1) 409:19 MOUNT (36) 358:5;370:3,5,16; 377:6;383:20;384:4,6, 16,25;385:3;396:6; 397:9;405:22;406:3, 16,21;409:14;413:12; 419:25;420:7,21; 423:8,22;424:16; 427:16,19;431:8,17; 433:7,9,16;436:13; 442:22;445:25;461:4 mouse (1) 377:25 move (4) 417:1;422:14; 426:15;441:15 moved (2) 408:20;461:10 moving (1) 434:19 MTA (1) 395:6 much (8) 387:8;388:10; 392:18;399:12;402:13; 413:17;414:6;436:1 multiple (4) 393:18;396:12; 397:23;428:18 multiply (1) 366:14 Munich (2) 383:23,24 must (2) 401:4,6 mute (2) 438:25;460:15</p>	<p>442:5,12 near (1) 381:25 necessary (3) 376:25;393:4;435:19 need (14) 368:21;369:9; 381:25;391:13;396:19; 398:17;399:13;403:7; 407:15,20;418:15; 423:14,24;425:1 needed (3) 382:4;404:7;460:6 needs (2) 392:21;425:4 negative (1) 388:24 network (1) 433:16 networking (1) 369:15 neural (1) 376:9 Neuro (1) 372:22 neurological (1) 376:3 neurology (1) 378:4 neuronal (1) 376:21 Neuropsychology (1) 372:2 Neuropsychopharmacology (2) 372:23,25 neuroscience (37) 369:8,11,15;373:2; 374:7;377:23;378:19, 20;385:15,18;392:10; 393:22;395:25;396:3, 11;400:14;401:2,20; 407:9,15,20;414:12; 415:6,10;421:10,15; 428:24;430:20;431:2; 432:19;448:7;450:6; 453:20;456:1,11; 457:3,24 neurosciences (2) 452:25;453:13 neuroscientist (1) 369:13 neurotransmitter (1) 386:3 New (6) 358:16,16;384:4; 387:6,10,10 next (7) 382:16,24,25; 393:17;404:12,13; 418:24 nexus (1) 373:17 Nicole (2)</p>
M				
<p>maintain (4) 395:1;401:11,14,17 maintained (1) 458:1 majority (2) 447:19;448:13 makes (4) 366:7;384:17; 425:14,21 management (2) 423:12;439:2 manuscript (4) 371:6,7;378:2; 380:14 many (15) 374:5,5;376:19; 385:8,12;393:6,7; 407:7,11;421:13,21; 432:3,15,23;445:5 marked (4) 408:1;440:24;441:6; 451:20 marketing (1) 420:13 master (4) 378:5,12;384:12; 420:4 master's (1) 383:24 master's (1) 420:3 material (1) 433:16 Matter (5) 358:4,13;434:24; 437:9;461:14 matters (3) 406:8,8,9 Matthew (3) 418:24;419:11,17 M-a-t-t-h-e-w (1) 419:17 maximum (2) 389:1;400:23 may (20) 364:23;381:25; 383:13;394:10;395:5; 405:14;411:1;416:19, 19;418:15;423:9,11; 425:13;428:19;431:18;</p>				
N				

<p>448:5;450:17 NIH (11) 364:17;365:16; 370:1,3;381:4,6; 397:14,20,22;402:1,2 NIHR (1) 365:1 NLRA (3) 416:18,25;417:1 Noah-o (1) 419:18 nodding (1) 375:25 nomenclature (8) 433:20;434:14,22; 436:5,9,10;451:15; 452:17 none (1) 444:24 non-stipend (1) 454:24 non-stipended (2) 454:24;455:6 normal (1) 426:12 North (1) 384:2 note (3) 371:22;432:7;460:7 Noted (2) 363:2;405:2 notes (24) 372:21;437:10,11, 14,17,20,22,23;438:1, 7,9,13,14;439:3,4,11, 23;440:1,6;441:4,17; 442:7,9,20 Notice (2) 358:14;370:10 notification (1) 404:7 noting (1) 443:18 NSF (1) 397:14 Nucleus (2) 374:9;378:24 number (13) 376:20;389:1; 396:22;397:2;428:21; 438:7,7,15;440:1,7; 442:8;445:10;447:4 numbers (5) 439:12;443:24,25; 444:3;445:5 numerous (1) 375:20 NYU (2) 420:4,5</p>	<p>363:4;383:7;405:10; 419:14 object (9) 373:14;409:24; 418:2;434:6;438:10; 441:16;454:5,6,9 objecting (1) 434:18 Objection (40) 367:16;371:21,22; 373:19;378:9;381:3; 392:4;408:16;410:8; 415:1;416:6,21; 422:18;427:6;434:6, 11;435:6,22,23; 439:13;441:24;442:5, 12,22;443:8,16,18; 446:8;448:4;449:14; 450:2,12,15;454:15,15, 16;455:5;457:6,12,19 objections (7) 408:20;422:19; 427:7;441:18,20,21; 442:2 objectives (2) 399:17;400:6 obligations (3) 401:11,14,16 oblige (1) 439:22 observation (1) 377:12 obtain (8) 367:19;369:1; 392:23;393:4;403:8; 407:20;409:6;412:19 obtained (3) 398:11,25;409:8 obtaining (1) 370:2 obviously (11) 368:25;388:22; 391:1;392:24;394:21; 395:3;396:14;398:24; 399:4;402:6;440:6 occasions (1) 375:20 occurred (1) 458:17 occurring (1) 459:17 Off (41) 377:16,17;381:16, 17;382:19,21,22; 403:17,19;404:15,20, 21;417:6,7;425:8,23; 427:15;435:2,3; 436:18,21,22;438:22, 23;439:7,9;440:2,3,12, 13;441:20,23;445:7; 454:12,13;455:17; 459:21,23;460:17,18; 461:12</p>	<p>offer (3) 399:1;409:7;417:21 offered (7) 402:2;417:20,25; 418:5;427:8;443:18,25 offering (2) 417:19;434:18 office (1) 423:13 Officer (95) 358:14;363:3; 373:19;377:16,18; 381:16,18,22;382:3,7, 11,15,21,23;383:1,8, 13;403:15,17,20,24; 404:6,11,20;405:4,11, 14;406:11;408:19; 410:1,8;415:3;416:21, 23;417:6;418:12,20, 23;419:1,4,6,8,15,19; 422:19;427:7;434:11; 435:2,4,13,15,25; 436:21,23;437:13,17, 20,24;438:12,19,22,24; 439:1,19;440:2,8,11, 14;441:20;442:2,16, 17;443:8,14,16;450:17, 19;452:5;454:11,12, 14;457:11,19;459:4,6, 20,21;460:1,3,11,16, 19;461:3,5,11 official (2) 406:10;412:19 offset (1) 365:13 offsets (1) 402:6 often (5) 430:5;433:25;434:1; 458:10,12 ohave (1) 416:20 onboarded (1) 415:7 on-campus (8) 411:14,21,23; 412:14;413:3,8,12; 414:21 once (8) 389:15;409:7;411:3, 5;427:13;439:16,21,23 one (47) 365:1,2,11,17; 367:14;368:12;372:24; 376:8;378:15,18; 380:25;385:18,19; 387:7;390:20;393:14; 396:22;401:24;411:8; 417:12,15;424:8; 426:17;428:17;431:10; 436:18,20;437:15; 438:8,14,15,19;440:19; 441:12;442:7;448:23;</p>	<p>456:2,9;457:7,15,17, 18;458:3 one-page (1) 440:25 ones (1) 365:1 onetime (1) 402:11 ongoing (1) 368:18 online (1) 427:4 only (19) 366:25;368:24; 390:9;396:24;401:7; 411:19,20;412:17; 417:15;435:21;438:6; 439:25;441:12;442:7, 9;444:9,11;455:19; 457:18 onto (2) 368:1;377:6 operate (4) 364:21;365:18; 403:11;420:12 operations (3) 420:8,11,17 opportunities (11) 369:15,19;393:9,11; 394:2,4,6,10;410:25; 411:17;413:13 opportunity (4) 367:25;393:20; 425:3;430:1 opposed (1) 364:2 OPT (1) 411:10 optional (2) 411:5,8 options (1) 411:14 order (7) 369:1;370:24;371:2; 401:4;428:25;429:8; 441:25 organization (1) 455:22 organizations (1) 399:21 otherwise (2) 438:16;457:5 out (22) 367:2;368:21; 375:25;376:1,4; 387:18;388:1;392:1,6; 395:4;397:19;398:7; 417:5;425:2;426:9; 428:11;436:15;446:22; 448:14;449:6;458:12; 459:9 outline (1) 389:12</p>	<p>outlined (1) 392:20 outside (4) 373:16;390:16; 391:24;429:6 over (4) 375:20;401:8;432:3, 12 overall (5) 388:23;390:10; 391:9;398:9;402:14 overhead (1) 365:11 overlap (2) 388:6,6 overruled (3) 410:8;443:8,17 oversee (4) 406:7;420:13;423:1, 16 own (12) 372:21;385:3;389:4; 390:8,9,23;392:11; 431:16;455:17,21; 456:10;457:2</p>
P				
<p>package (13) 395:25;397:9; 399:16;400:5,9; 450:24;451:9;453:19; 455:16,18,20;457:4,25 packages (1) 456:1 Page (9) 408:17,25;410:17, 20;412:7,10,21; 414:23;424:21 paid (25) 364:13,14;366:15; 401:9;428:11,16; 431:14;434:3;445:25; 446:20,22,23;447:16, 17,25;448:2,10,14,20; 456:14,15,23;458:17, 19;459:9 paper (5) 378:4;380:18,19; 437:15;441:6 papers (3) 364:9,12;370:23 paperwork (1) 433:5 Pardon (1) 374:17 part (13) 365:21;366:11; 384:13;397:10,16; 414:17;429:22;443:2, 3;445:14;449:8; 450:23;453:19 participate (2)</p>				
O				
<p>oath (4)</p>				

<p>394:6;407:16 participating (1) 377:13 particular (5) 364:1;367:24; 368:13;390:13;399:3 particularly (1) 376:3 parts (2) 365:16;366:6 passed (1) 382:8 past (2) 395:9;428:2 pay (15) 365:21;370:5; 396:19,20;400:22; 409:11;448:16,19; 449:19,21,23,25;450:7; 452:8;456:21 payment (25) 396:15;402:8; 427:16,19,25;428:7,11, 14;446:2,4,6,19;447:4, 7,9,19,20,21;448:20, 23;449:8;450:10; 452:14,14;458:22 payments (10) 365:14;436:14; 447:8,14;451:17,19; 452:18;456:25;457:1; 459:7 payroll (10) 434:1;449:12,13,18; 450:4,4,9;451:1,25; 457:5 payroll-type (1) 456:16 pdf (1) 427:4 peer-reviewed (1) 373:1 people (9) 363:20,22;364:3,9; 371:10,15;384:14; 410:15;413:10 per (15) 411:25;412:1,2,17; 413:7,17,20,21;414:14; 447:6;453:3,4,5; 454:22;459:12 percent (4) 366:10,14;367:4; 388:13 percentage (5) 365:23;366:4,5,6; 368:6 Perfect (1) 380:10 perfectly (1) 434:23 perform (9) 376:8;377:9;386:13,</p>	<p>22;389:24;396:20; 445:21,22;447:17 performance (4) 430:2,21;431:3; 459:12 performing (12) 369:3;385:5;391:17; 392:11;394:13,25; 395:12;414:12;430:14, 17;446:2;451:7 period (4) 377:11,11,12;445:4 peripheral (1) 377:24 permission (1) 412:19 permitted (1) 372:13 person (1) 364:8 personally (1) 395:7 personnel (4) 376:2,8;406:4,19 perspective (2) 398:22;414:22 pertinent (1) 433:16 Peter-r-i-a-n (1) 419:18 petition (1) 373:16 Petitioner's (1) 461:8 Petitioner (13) 358:11;363:5;439:4; 440:14,24;441:15; 442:19;443:14;451:21; 454:16;457:20;459:24; 461:9 Petitioner's (2) 460:23;461:3 Petitioner's (8) 441:24;442:4,10,13; 443:17,20,23;460:21 Petitioning (2) 363:13;440:20 pharmacological (2) 384:8;385:20 pharmacology (1) 386:2 PhD (159) 373:24;380:22; 383:25;384:12;385:9, 14,24;386:4,8,12,17, 19;387:3,9,14,24; 388:10,15,19,25;389:4, 6,10,23;390:3,4,15,18, 22;391:4,6,12,23,24; 392:1,6,9,13,17;393:5, 8,12,14,21;394:5,10, 13;395:24,25;396:2,10, 22;397:25;398:6,13,15,</p>	<p>22,24;399:7,8,16; 400:1,5,9,13;401:1,4,6, 10,13,16,20,23,24; 402:23;403:1,10,11; 407:8,14,18;410:4,5; 414:11,20;415:6,10,22; 416:3;421:9,14,17,22, 23;424:4,6,9,13; 428:24;429:14,20; 430:20;431:2,8,18,21, 24;432:3,3,6,13,14,18; 433:11,13,14;434:15; 443:25;444:3,5,9,12, 16,24;445:1,1,11,12; 447:21,23,25;448:2,5, 7,8,9,9;449:20,21,23, 24;450:5,6,23,24; 451:6;452:21;453:12, 12,23;454:22,24,24; 455:13,16,25;456:10, 23;457:24 PhD-40 (1) 443:24 PhDs (16) 392:23;444:10; 445:5,20,22;446:19; 447:24;452:24;453:6, 8,17,17,18,21,25;457:2 PhD's (1) 430:11 philanthropic (6) 397:8;399:20,23; 400:2,3,7 PI (6) 371:16;384:22; 385:3;397:6;400:25; 401:19 pick (5) 386:18;390:8,9,10; 425:10 picture (1) 439:5 piece (3) 376:14;437:15;441:6 pillars (2) 387:20;393:6 pivoting (1) 398:17 place (3) 413:2;424:16;459:17 placement (1) 433:17 plan (2) 369:2;389:12 play (2) 387:17,25 Plaza (1) 358:16 Please (22) 379:11,14;381:15; 383:21;385:24;389:6; 396:13;404:1,405:23; 406:5,12;407:22;</p>	<p>408:17;410:18;412:7; 420:1,9;422:1;426:1; 431:12;457:20;459:2 pm (20) 389:18;404:22; 405:2;417:7,7;435:3,3; 436:22,22;438:23,23; 440:13,13;454:13,13; 459:23,23;460:18,18; 461:13 point (3) 378:13;400:17; 409:24 policy (6) 422:8,24,25;428:2; 453:15;459:17 political (1) 406:2 pool (1) 366:4 portion (10) 384:13;421:17,22; 435:14;440:5;444:16; 445:11;447:25;448:9; 453:23 position (6) 373:11;384:3; 406:20;416:14;420:19; 421:5 positions (2) 363:19;413:14 positive (2) 388:24;428:5 possible (3) 368:24;414:6;439:10 post (2) 398:24;428:12 postdoc (17) 364:6;370:8,9; 373:10,16;387:3,5,9, 12;395:12,13,16,17; 396:18;398:21;409:18; 420:22 postdocs (27) 367:1,9;370:17; 376:2;385:10,13; 386:9,13,15,21;387:5, 17,21;396:6,9,14; 397:19;398:8,9,18,24; 399:6;400:19;409:14; 410:3;413:4,5 postdoctoral (2) 380:20;384:1 poster (4) 393:3,15,17,18 potential (3) 365:8;369:19,21 potentially (2) 442:10;458:16 PowerPoint (2) 408:6;410:17 practical (4) 411:4,5,8,14</p>	<p>practice (2) 371:17;393:23 pre- (1) 407:25 precise (1) 454:18 prep (1) 438:10 preparation (1) 376:25 preparatory (1) 376:22 prepare (1) 366:23 prepared (2) 438:13;443:5 presence (1) 388:15 present (1) 369:17 presentation (1) 394:1 presentations (2) 393:3,21 presented (1) 393:15 pretty (2) 387:8;439:14 previous (2) 444:4,4 previously (2) 363:8;420:20 primary (3) 413:9;414:10;436:18 principal (3) 384:8;406:9,9 prior (5) 395:15;406:21; 412:20;415:15;435:23 probably (3) 377:22;388:23;393:6 problem (2) 395:5;423:15 procedure (1) 422:8 proceed (3) 383:13;405:15; 419:19 proceeding (1) 416:7 process (8) 387:20;392:19; 397:13,21;399:23; 424:25;449:9,10 processed (1) 450:4 processes (1) 407:5 processing (1) 433:5 production (2) 442:5,12 productive (1)</p>
--	--	--	--	--

<p>395:18 productivity (4) 388:16,18,23,24 professor (5) 374:1;380:16;384:7,10,19 program (32) 385:18;395:6;396:4;407:8,12,16;413:25;421:7,10,15,18,23;424:7,13;432:4,13,14,15;444:5,9,17;445:1,6,12,14,20;447:24;448:8,10;450:6;453:6,9 programs (3) 407:15,20;414:12 progress (2) 389:15;391:1 prohibit (1) 378:12 project (9) 366:22;377:13;390:9,16;397:15,23;398:17;399:1,14 projects (4) 375:17;386:18;387:15;390:23 promoted (2) 406:20;421:4 pronounced (1) 383:11 pronouncing (1) 417:12 proposal (7) 368:17;388:3;390:7,19;397:16,20;398:5 propose (5) 397:18;398:8,15;399:1,10 proposed (1) 388:8 protein (1) 376:19 provide (15) 382:4;387:2,16;390:14;393:8;400:12,19;402:4,6;409:10;413:12;423:13,23;432:8;440:5 provided (14) 393:12;394:3,10;410:14;430:3,6;437:12,18;438:18;439:16;445:4;446:6;448:23;458:8 providing (3) 434:9,21,25 psychiatry (1) 373:2 publication (5) 371:3;373:4,8,15,25 publications (4) 370:21;371:12;</p>	<p>375:11,14 publish (4) 370:25;374:6;377:23;378:17 published (4) 371:18;372:2;380:18,19 publishes (1) 373:1 pull (1) 433:14 purely (1) 448:3 purpose (4) 380:1;410:13;413:9;414:10 purposes (2) 365:7;403:13 Pursuant (3) 358:13;389:10;411:7 pursue (4) 390:16;424:18;429:4,11 pursuing (1) 391:22 pursuit (1) 388:7 purview (1) 390:17 put (12) 377:6;383:8;391:23;393:16;398:15;400:25;405:11;407:22,25;419:15;422:1;426:1</p>	<p>reactive (1) 372:3 read (1) 372:21 reader (1) 443:9 reads (3) 423:19,25;424:22 ready (2) 382:9;460:9 reagents (1) 365:19 reality (1) 399:12 really (8) 368:5,7;369:21;376:13;377:1,11;396:20,21 reason (7) 391:3;429:11;441:25;453:14;454:1,15,21 reasons (3) 376:19;398:12;441:16 recall (9) 371:13;372:1;374:14;379:16;415:25;418:15;432:14;436:6;452:21 recalled (2) 363:8;418:16 receive (34) 386:1;388:5;391:3,10;399:13,20;400:1,3;401:23,25;402:8;409:15,17,19;415:7;417:18;424:10,11,14;427:16,19,22;430:7,8;431:9;447:1;449:24;450:4,7,7;453:19;455:16,19;457:25 received (17) 386:25;392:9,12;408:21,22;422:21;427:8,9;443:18,20;452:9;455:21;460:22,22;461:1,6,7 receives (12) 365:12;399:8;401:24;402:3,11,20;403:6;427:12;428:21;431:10,12,14 receiving (6) 401:5;402:9;424:15;434:3;436:12;450:23 recently (1) 393:14 recess (1) 404:22 recessed (1) 461:14 recognize (10)</p>	<p>372:24;408:1;422:4;426:4;427:2;441:1;451:22,23,25;452:13 recollection (6) 372:12;380:1,4;442:21;443:1;454:8 reconsidered (2) 439:18,20 reconvene (1) 461:14 record (56) 371:22;377:16,17,19;381:16,17,19;382:19,21,22;383:9;386:21;403:17,19;404:15,20,21;405:12;408:15;417:6;419:16;422:15;425:18;426:16;435:2,3,4,9,16;436:21,22,23;438:17,22,23,24;439:7,9,12;440:2,4,12,13;441:21,23;443:9,9;451:1;454:12,13,14;459:21,23;460:17,18;461:12 recorded (2) 456:25;457:1 records (4) 451:6,8;456:16,24 redirect (3) 381:20;458:25;460:2 reduction (1) 388:18 refer (7) 381:1;423:3;436:14;438:17;439:21;445:7;450:9 reference (4) 412:21,24;438:14;459:18 referenced (1) 455:20 referred (11) 374:20;381:2;437:25;439:10,15;441:17;442:7;449:11;451:2,17,19 referring (8) 367:7;373:25;389:22;444:15,19;446:10;448:5;455:6 reflected (4) 370:20,22;414:23;430:11 reflecting (1) 366:4 reflective (2) 366:5;452:14 refrain (1) 435:7 reframe (3) 450:17,19;454:17 refresh (4)</p>	<p>372:12;439:15;442:21,25 refreshes (1) 380:4 refreshing (1) 380:1 regard (2) 398:6;418:8 regarded (1) 398:10 regarding (3) 372:3;377:24;416:14 REGION (3) 358:2,15;404:2 regional (12) 381:25;382:4;418:13;434:7,16;435:9,17;439:2,2,17,20;440:8 regularly (2) 422:12;426:12 regulation (1) 412:24 reiterate (4) 442:6,13;446:18;460:21 relate (2) 375:14;376:12 related (10) 365:13;367:13;373:12;374:12;391:7;393:13,19;395:19;408:8;454:23 relates (1) 440:6 relation (3) 386:4;435:24;451:8 RELATIONS (5) 358:2,15;416:10,11,17 relationship (2) 389:9;416:9 released (7) 381:23,24;403:25;404:1;418:13;460:4,5 releasing (1) 418:14 relevance (4) 373:14;409:25;410:1;442:22 relevant (5) 433:15;442:10;443:3,6,9 religious (1) 420:3 remain (3) 389:23;396:25;401:6 remainder (1) 442:11 remember (2) 379:9;421:1 reminded (1) 404:1</p>
	Q			
	<p>qualified (1) 416:17 qualities (1) 364:7 quick (1) 370:8 quickly (1) 381:14 quite (2) 367:22;375:25</p>			
	R			
	<p>raise (3) 383:2;405:4;419:9 RAs (1) 398:8 rate (5) 448:16,19;459:12,13,15 rather (1) 448:21 rating (1) 423:15 rationale (1) 454:21</p>			

<p>removed (1) 428:6</p> <p>renew (1) 438:18</p> <p>repeat (6) 376:4,5;427:18; 448:1;456:4,6</p> <p>rephrase (1) 449:14</p> <p>replenished (1) 397:10</p> <p>Reporter (1) 406:13</p> <p>reporting (1) 366:18</p> <p>reports (3) 366:20,24;367:3</p> <p>represent (1) 436:11</p> <p>representing (2) 363:13;440:19</p> <p>request (11) 423:1;425:2,2;426:8, 9,22;438:18;441:25; 442:4,12,13</p> <p>requesting (3) 422:8;424:22;442:18</p> <p>require (3) 387:22;389:2;390:4</p> <p>required (9) 388:25;394:5;409:6; 415:8,11;428:25; 429:7,15;449:1</p> <p>requirement (3) 371:17;396:25;401:7</p> <p>requirements (10) 386:20;390:1;391:5, 19;394:21;402:17,23; 403:4,8;455:3</p> <p>requires (4) 389:11,21,22,23</p> <p>research (83) 364:22;365:9,19,22; 367:1,15;368:8;369:4; 370:17;371:8;372:11, 14;373:2,13;374:3,12; 375:17,17;377:13,24; 378:20;383:25;384:11, 14,14;385:6;386:12,16, 19;387:6,7,10,12,14, 19;388:1,6,7,8,11; 390:9,11,23;391:6,22; 392:11,13,21;394:22; 396:24;399:1,14,17; 400:6;402:2;406:9; 409:20,22;410:10,15; 413:4;414:13,16,20; 415:22;416:2,4; 424:20;429:6,12,19; 436:15;445:10,12,14, 20;447:24;448:9; 449:24;450:5;451:7; 453:6,8</p>	<p>researching (2) 389:1;450:24</p> <p>resident (1) 375:6</p> <p>resources (2) 395:20;455:17</p> <p>respect (22) 373:25;386:22; 387:25;390:23;394:4, 9;395:10;396:9; 411:17;414:3;415:24; 430:23;433:21;436:25; 437:4;438:7,8;439:11; 442:7,9,13;443:13</p> <p>respond (2) 394:20;442:15</p> <p>Respondent (1) 418:11</p> <p>Respondent's (3) 407:22;408:1;412:8</p> <p>Respondent's (11) 408:15,18,25; 410:20;412:22;414:23; 422:2,14;424:21; 426:1,15</p> <p>response (3) 435:14;442:4;459:3</p> <p>responses (1) 377:25</p> <p>responsibilities (4) 406:6;420:10; 423:17;445:21</p> <p>responsibility (1) 372:13</p> <p>responsible (1) 406:10</p> <p>rest (1) 404:8</p> <p>restate (1) 381:19</p> <p>restrictions (3) 411:16;424:16;454:7</p> <p>results (1) 374:15</p> <p>resume (1) 460:20</p> <p>retain (1) 399:13</p> <p>retreat (1) 393:22</p> <p>retreats (1) 393:2</p> <p>returned (2) 432:23,25</p> <p>review (5) 398:5;423:16; 427:14;445:8;448:13</p> <p>reviewed (16) 380:12;397:22; 408:3,9;410:22; 412:13;422:5,10; 423:5;424:2;425:7; 426:5,10;428:10;</p>	<p>441:2;451:24</p> <p>reviewing (1) 435:5</p> <p>right (52) 363:3;370:1,18; 372:8,16;373:15; 374:19;377:18,21; 378:14,20;379:23; 381:8,12,18,19;382:11, 15;383:2;386:22; 398:19;399:21;404:8; 405:5;414:24;417:13; 418:20,23;419:4,6,8,9; 432:7;437:24;438:11, 19,22;440:11;444:2, 10;445:11;446:13; 449:25;450:1,11; 453:1;457:22;460:3, 11,19;461:5,11</p> <p>role (16) 384:5;386:4;387:17, 24;392:16;406:3,6,22; 413:16,18;420:6,10,20, 23;421:2;429:21</p> <p>roles (3) 384:25;385:1;406:21</p> <p>room (8) 377:15;379:1; 381:14;403:16;404:15; 417:5;423:10;459:20</p> <p>rotation (1) 377:9</p> <p>rotations (1) 375:19</p> <p>Rothgeb (56) 419:3,5,7;422:16; 426:17,20;427:6; 434:6,13;435:21; 437:8,25;438:5,11,21, 25;439:13;440:16,18; 441:15,24;442:15,18; 443:11,12,15,21,22; 446:13,15;448:6; 449:16,17;450:3,13,18, 21,22;452:10;454:10, 19;455:7,9;456:7,8; 457:8,22,23;459:5,10, 19,22,24;460:15;461:2, 9</p> <p>routinely (1) 408:11</p> <p>Rule (2) 439:14;442:19</p> <p>rules (1) 370:24</p> <p>ruling (5) 439:17,18,19;440:4, 9</p> <p>run (3) 365:18;385:3;420:12</p> <p>Russo (4) 363:3,7,12;381:22</p>	<p style="text-align: center;">S</p> <p>salaries (1) 396:18</p> <p>salary (3) 365:6;369:22;436:11</p> <p>same (25) 378:18;387:24; 393:20;394:9;413:3; 416:20;417:18,22,25; 418:5,8;429:10,11,14, 17;430:25;431:1,6,7; 434:4;437:3;441:16; 445:4,21;449:8</p> <p>sample (1) 376:23</p> <p>samples (4) 376:2,3,9,9</p> <p>Samuel (2) 373:21,23</p> <p>schedule (4) 389:4;448:21;450:1; 460:9</p> <p>scheduling (1) 389:6</p> <p>SCHOOL (66) 358:5;383:20;384:4, 5,15;389:11,21,21,22, 23;390:1;394:19,20, 20;395:7;397:1; 400:16;401:14;402:9, 19,25;403:3,12; 406:10;407:2,5; 408:12;411:21,22; 412:19;414:13;417:20; 420:6,12,14,15,20; 421:18;432:5,24; 433:21;434:3,22; 436:5,10,14;437:4; 444:11,12,13,14,16; 445:13,15,18;451:7,16, 16,18;452:1;454:2; 455:2,12,14;457:4,25</p> <p>school's (1) 407:8</p> <p>schools (1) 414:11</p> <p>schools' (1) 416:14</p> <p>school's (5) 407:19;414:22; 421:6,9,14</p> <p>science (27) 365:4;383:22,24; 385:14;392:10;395:25; 396:3,10;400:13; 401:1,20;406:2;407:8, 15,19;414:12;415:6, 10;421:10,15;428:24; 429:14;430:20;431:2; 432:19;453:20;457:24</p> <p>sciences (7)</p>	<p>384:8;385:19,20; 448:7;456:1,11;457:3</p> <p>scientific (4) 371:19;393:1,1; 397:16</p> <p>scope (1) 390:20</p> <p>SCOTT (1) 363:7</p> <p>screen (5) 407:25;409:1; 410:21;412:10;414:23</p> <p>Scripps (1) 383:25</p> <p>scroll (2) 380:6;422:16</p> <p>Seattle (2) 374:2;379:3</p> <p>sec (1) 376:5</p> <p>second (3) 379:4;380:5;438:20</p> <p>section (1) 458:12</p> <p>secure (1) 407:15</p> <p>seeing (1) 373:17</p> <p>seek (3) 367:14,19;368:21</p> <p>seems (3) 438:6,8;457:16</p> <p>select (2) 425:6,12</p> <p>selected (1) 425:21</p> <p>selecting (2) 363:18,21</p> <p>selection (1) 424:25</p> <p>self-funded (3) 433:18;455:13,15</p> <p>self-motivated (1) 394:23</p> <p>semester (12) 428:9,10,13,14,17, 19;430:2,18;453:4,5; 454:22;459:8</p> <p>semesters (1) 428:18</p> <p>senior (5) 378:3;406:4,18,23, 24</p> <p>sense (2) 366:7;393:2</p> <p>sent (2) 370:3;438:1</p> <p>sentence (1) 435:22</p> <p>separate (5) 365:25;366:4,6,11; 449:12</p> <p>serotonin (1)</p>
--	--	--	---	---

<p>386:3 serve (17) 392:13,24;423:2; 424:5,6;429:15; 445:20;446:19;447:25; 448:2,10;452:25; 453:9;454:22;455:23; 456:2,13 served (7) 384:19,22;406:18; 420:17;430:21;447:5; 452:14 serves (2) 415:11;431:3 service (3) 401:10,13;403:4 serving (6) 415:17;445:16,17, 24;446:7;452:21 session (1) 411:21 sessions (1) 423:16 set (7) 370:24;387:6; 389:16;416:13;423:10, 11;447:19 sets (1) 423:15 seven (2) 432:13,14 several (3) 368:15,16;395:21 sex (1) 377:24 sexist (1) 372:3 share (2) 439:3,6 sheet (1) 429:25 shift (1) 446:2 short (1) 417:12 show (4) 379:12,19,25;395:18 showed (1) 438:9 showing (4) 380:4;440:22,24; 451:20 side (1) 425:8 sided (1) 441:12 sign (2) 425:8;427:15 signed (1) 425:23 significant (1) 388:22 significantly (2)</p>	<p>398:10;399:3 similar (4) 368:4;399:24,25; 456:9 similarly (2) 403:11;455:25 simply (2) 388:19;399:13 SINAI (72) 358:5;370:3,5,16; 383:20;384:4,6,16,25; 385:3;396:7;397:9; 405:22;406:3,16,21; 409:14;413:12;419:25; 420:7,21;423:8,22; 424:16;427:3,16,19; 431:8,17;433:1,3,4,7,8, 9,10,13,14,16,18,19,20, 24;434:14,21;435:10; 436:4,9,11,13,13,25; 445:25;449:4,5,11,12, 18,19,22;451:1,9,13, 16;452:17;456:17,22, 24;457:1,4;458:1; 461:4 Sinai's (1) 442:22 single (1) 447:17 situation (2) 367:21;368:23 six (2) 370:10;406:20 six-week (1) 377:11 size (1) 425:4 skills (1) 394:1 slice (1) 377:5 slide (3) 377:6;408:6;412:12 slightly (1) 372:17 slow (2) 391:1;406:12 smaller (2) 393:2,7 Social (2) 374:7;378:22 solely (2) 410:13;444:25 somehow (1) 447:4 someone (2) 371:1;396:17 sometimes (3) 368:17;388:20;398:8 sorry (40) 375:8,23;378:10; 380:15,24;386:21; 404:21;411:12;417:15;</p>	<p>422:16;424:12;425:17, 19;427:18;428:1; 432:7;438:3,3;440:3, 22;441:8,24;443:15, 23;444:22,23;446:25; 447:11;448:1;450:15, 18;451:10;452:5; 454:5;455:5;456:4,6, 19,20;458:24 sort (4) 369:22;376:17; 393:3;456:23 sound (2) 372:4;435:11 sounded (1) 372:7 source (4) 431:9,11,13;456:10 sources (3) 396:2;397:7;400:10 span (2) 428:17,18 speak (2) 425:13;452:2 speaking (2) 386:1;439:23 specialty (1) 416:16 specific (29) 365:9;369:7;370:24; 376:15;377:24;387:7, 18;388:1,3,5,8,21; 389:2,16,18;391:8,19; 396:16,23;398:25; 399:1,6,15;402:2; 410:15;446:10,11; 447:22;457:21 specifically (8) 365:3;381:10; 385:20;387:6,12; 409:4;424:12;453:20 specifics (2) 391:10;448:13 specify (1) 375:16 speed (1) 392:22 spell (3) 383:9;405:12;419:16 spelled (2) 383:11;419:18 spend (7) 388:11,25;389:2; 390:5;413:17,23; 428:22 spending (1) 392:10 spent (8) 384:13;386:18; 391:21;393:15;416:4; 427:17,20;449:2 sphere (1) 369:14</p>	<p>sporadically (1) 418:16 staff (1) 367:1 stand (2) 393:17;439:13 standard (1) 455:20 standards (1) 416:20 standing (5) 389:24;396:25; 401:6;412:16;431:4 stands (1) 448:19 Stanford (1) 380:20 start (6) 397:10;412:20,20; 415:7;437:9;440:22 started (4) 384:3,17;406:23; 420:19 startup (1) 397:9 state (6) 405:12;419:15; 425:4;434:11;441:21; 443:4 stated (2) 441:16;442:3 statement (1) 364:4 States (4) 409:5,13;410:13; 413:4 stating (1) 435:7 status (3) 413:25;416:14,19 statute (2) 416:12,19 stay (2) 381:24;389:17 STEM (2) 411:9,9 step (1) 395:3 steps (1) 376:22 still (9) 363:4;397:9;399:8; 438:25;456:12,13,14, 15;458:1 stipend (15) 368:1,6,9;369:23; 370:7;396:23;397:3; 418:6;429:22;436:14; 450:10,23,25;452:11, 18 stipended (4) 424:12;453:17,17,25 stipends (13)</p>	<p>364:13,13,17,23; 415:7;424:10,11,14,15; 434:3;450:7;452:13; 453:19 stipulate (1) 397:16 Stop (1) 372:10 Stress (5) 374:8,15,15;377:25; 378:23 strike (7) 367:18;371:13; 374:11;434:19;454:20; 455:12;458:6 striking (1) 435:15 struck (1) 435:14 structural (1) 386:2 stub (2) 449:21;456:22 stubs (6) 449:19,23,25;450:7, 10;452:8 stuck (1) 460:15 student (99) 364:5;365:9;367:12, 20,22,22;368:14,16,18, 22;369:3,6,7,8,10; 370:6;373:24;378:5; 380:17,22;385:18,19; 387:3;390:4,19; 391:12,13,17,25;392:9; 393:21;394:13,14,24; 398:15,22;399:17; 400:6;401:4,6,10,13, 16,20,24,25;402:3,5,7, 8,11,16,20,23;406:8, 10;409:6,13;412:25; 413:9,11,16,17;415:10, 23;420:13,22;421:2; 425:6;429:20;430:20, 21,25;431:2,6,10,12, 14,15,15;450:23,24; 454:22;455:19,20,23; 456:3,9,9,11,23;457:7, 9,15,17,18,24;458:3,6 student's (3) 399:16;400:5;416:3 students (190) 363:18,19,21;364:2, 13,14;365:2;366:23; 367:2;368:5;369:23; 375:19;377:8;378:12; 384:12,12;385:5,8,9, 14,21,25;386:4,12,18; 387:14,25;388:10,15, 19,25;389:4,7,23; 390:3,7,22;391:6; 392:1,6,14,17;393:8,</p>
---	--	--	--	--

12,14;394:5,10,19; 395:2,10,24,25;396:3, 10,22;397:25;398:6, 13;399:7,8;400:1,13; 401:1,23;402:24; 403:1,3,6,10,11;407:1, 5,7,11,14,19;409:4; 410:4,5,12,24;411:17; 412:3,14;413:3,8,13, 22;414:11;415:6,7; 416:13;417:18,19,22, 23;418:1,7,7,421:9,13, 17,21;423:14;424:4,6, 9,10,10,12,14,15,18,19; 428:24;429:4,5,7,11, 14;431:8,18,21,25; 432:3,3,6,15,18,19,22, 23;433:11,13,14,18,19, 21;434:3,4,10,15,24; 435:7,23;436:6,15; 437:1,4;438:8;440:1,7; 444:1,3,12,14,15,19; 445:1,11,12,16;447:21, 24;448:2,5,7,8,9; 449:20,21,23,24;450:5, 6;451:6;452:21; 453:12,13,22;454:24, 24;455:2,6,6,13,16,25; 456:19;457:2	substantial (1) 409:10 succeeding (1) 398:5 successful (3) 369:25;370:2;386:7 successfully (1) 390:15 sufficient (1) 398:7 suggested (1) 371:5 Suite (1) 358:16 sum (8) 428:11,14;446:4,6; 447:8,14,17,19 super (1) 366:8 supplement (6) 365:2,3,8;367:25; 368:24;369:1 supplements (1) 368:3 support (5) 365:5,22;369:24; 398:9;423:13 supported (1) 400:9 supportive (2) 363:23,23 sure (26) 367:4;369:10; 375:25;405:13;406:7, 15;409:19;410:12; 412:1;414:25;417:24; 420:11;438:5;440:23; 446:10,19,21,21; 449:16;450:21;456:5, 7,21;457:1;458:7; 459:16 sustained (6) 373:19;415:3; 416:21;435:6;454:16; 457:19 switch (2) 395:23;399:14 sworn (4) 363:8;383:6;405:9; 419:13 synopsis (1) 376:21 Synaptic (4) 374:8,19,20;378:23 System (16) 405:22;423:12; 433:4,5,6,17,24,24; 434:1,1;445:8;449:8, 11,13,13,18 systems (5) 431:17;433:6,7,15; 436:13	T TA (66) 413:14;415:11,14; 423:4,17,19,24;424:22; 425:2,2,2,3,6;426:9,22; 427:23;428:3,8,9,12; 429:25;430:3,6,15,17; 444:12,14,15;445:2,11, 13,13,17,22,24;446:2; 447:4,5,21;448:2; 449:1;451:19;452:15, 18,25;453:3,4,6,11; 454:22;455:23;456:2, 12,13,14,15,23,25; 458:10,16,17,19,21; 459:7,8,14 TA'd (4) 444:3,9,23;445:6 TAing (4) 444:1;448:11;454:1; 459:14 talented (1) 367:23 talk (4) 393:21,23;395:23; 434:23 talked (2) 368:15;396:16 talking (5) 373:15;415:21,22; 424:9;457:6 tallied (1) 366:22 TAs (22) 415:18;423:1,2; 424:5,6;425:9;429:24; 442:8;445:16,21; 446:7,20;447:2,4,16, 25;448:10,20;449:24; 451:17;452:21;453:10 TA's (1) 430:1 tasks (8) 391:17,21;392:2,6; 396:16,18;397:19; 398:9 taught (2) 444:10;458:17 tax (1) 396:16 teach (1) 425:12 teaching (39) 364:10;384:12; 397:12;413:14,17; 421:7,10,13,19,21; 422:8,9;423:7,9,22; 424:17,25;425:10,11, 21;426:8;427:16,17,19, 20,22;428:21,22,25; 429:7,15,20,21;430:8,	14,21,22;431:3,4 team (2) 420:11,13 teams (1) 420:13 Technically (4) 378:2;381:1,3; 388:17 tend (1) 363:23 tenure (1) 387:9 term (10) 365:14;380:25; 381:8;424:4,8;436:25; 437:3;446:9,12;458:16 terminate (2) 395:21;396:17 termination (2) 439:3,20 terminology (1) 434:2 terms (8) 369:3;387:18; 389:22;392:20;402:21; 403:13;417:25;432:18 testified (24) 363:8,18;370:9,10; 377:10;383:7;400:17; 405:10;412:4;419:14; 434:15;436:4;438:16; 440:7;441:17;442:6; 443:2,6;445:22;447:3; 451:15;452:20;453:16, 25 testify (3) 371:15;416:17; 438:16 testifying (1) 434:25 testimony (30) 374:14;378:11; 410:2;434:9,13,21; 435:6,10,15,17,18,20; 436:6;437:21;438:1, 15;439:5;441:5;443:2, 4,7,25;452:21;453:18; 454:8,9;457:18;458:7, 9,11 testimony's (1) 434:17 that's (3) 364:22;434:10; 439:20 there's (3) 372:11;417:12;460:4 thesis (11) 368:17,18;388:11; 390:7,19;391:7,12,13, 23;393:5;398:17 they're (1) 414:6 third (1)	380:13 though (1) 379:22 thought (1) 450:15 three (5) 393:6;397:7;431:23, 24;432:25 throughout (3) 430:2;448:21;459:7 tie (1) 398:16 tied (2) 399:15;447:17 timely (2) 389:13;390:18 times (3) 368:20;389:16; 439:16 timing (1) 419:7 tissue (9) 376:2,3,9,9,14,16,18, 23;377:3 title (2) 372:7;374:23 titled (1) 378:22 today (6) 418:13;460:22,22; 461:1,6,7 together (1) 393:16 Tom (1) 376:4 tomorrow (1) 460:20 top (3) 423:3;436:18;445:7 topic (3) 390:7,10;391:13 topics (2) 390:8;391:13 total (1) 432:18 totally (1) 366:11 towards (18) 386:7,16,19;387:23; 388:2,11,13,20;389:16; 391:2,4;394:22; 398:14;399:17;400:6; 413:23;414:4,14 traditionally (1) 364:10 train (2) 364:6;369:14 trained (1) 369:21 trainees (1) 398:6 training (38) 365:3,7,8;368:1,4;
--	--	---	--	--

<p>369:4,23;384:1,14; 385:20;386:1,2,18; 387:15;388:5,20,21; 389:24;390:14;391:10, 22;393:8,11,19;394:2, 4,6,9;399:8,13;402:1,2; 411:5,5,8,15;423:19,24</p> <p>trains (1) 423:22</p> <p>transcript (2) 376:1;430:11</p> <p>transmitted (1) 370:3</p> <p>treat (1) 414:13</p> <p>treated (7) 364:14,23;415:24; 418:7,8;434:10,24</p> <p>treatment (1) 377:25</p> <p>tried (1) 371:11</p> <p>true (5) 394:9;430:25;431:1, 6,7</p> <p>try (4) 376:6;377:21; 379:21,21</p> <p>Tuesday (1) 358:17</p> <p>tuition (3) 368:6;409:11;418:6</p> <p>turn (4) 408:17;410:17; 412:7;424:21</p> <p>turned (1) 410:20</p> <p>Turning (1) 408:25</p> <p>tutoring (1) 423:13</p> <p>two (8) 365:16;366:6;385:9, 13,24;394:2;404:17; 426:17</p> <p>type (4) 388:3;401:25; 407:18;428:7</p> <p>types (3) 386:25;396:23;410:3</p> <p>typical (2) 423:7;428:18</p> <p>typically (10) 377:10;387:21; 389:11,15;394:21; 397:15,18;398:6,8; 431:21</p>	<p>380:16</p> <p>unclear (3) 434:19;457:13,14</p> <p>under (18) 364:12,14,23; 365:12;367:18;376:3, 10,14,18,23;377:6; 406:2;416:5,12,15,18, 19;417:25</p> <p>undergraduate (1) 406:2</p> <p>underneath (1) 363:4</p> <p>underrepresented (1) 365:4</p> <p>Understood (3) 404:5;417:2;428:20</p> <p>undertaken (1) 395:9</p> <p>undertakes (1) 415:23</p> <p>unilaterally (1) 430:15</p> <p>UNION (3) 358:8;363:13;440:20</p> <p>unit (1) 373:16</p> <p>UNITED (5) 358:8;409:5,13; 410:13;413:4</p> <p>university (7) 365:12;374:1;375:7; 379:2;383:23,24;384:2</p> <p>unless (1) 416:16</p> <p>up (22) 366:1,3;369:2,6,20; 377:5;379:2;380:6; 387:6;394:8;395:18; 407:22,25;418:15; 422:1;423:10,11; 426:1;433:14;440:23, 24;453:17</p> <p>update (1) 428:5</p> <p>upon (3) 367:19;411:10; 413:25</p> <p>upper (1) 397:1</p> <p>upsides (1) 400:21</p> <p>usage (1) 435:11</p> <p>use (15) 365:17;368:12; 370:5;372:12;377:3; 417:22;427:3,5; 433:20;435:20;436:11, 13,25;439:4;446:10</p> <p>used (10) 365:21;434:2,22; 436:10;437:3;439:15,</p>	<p>16,23;442:25;446:9</p> <p>uses (4) 364:21;436:5,9; 452:17</p> <p>using (2) 442:21;443:2</p> <p>usually (2) 389:8;397:19</p> <p>utilized (1) 423:10</p>	<p>394:24;401:19;403:21, 23,25,25;404:10</p> <p>Wait (3) 440:3;447:11;452:5</p> <p>Wang (4) 378:3,5,7,12</p> <p>wants (4) 379:12;450:24; 454:2;455:2</p> <p>warnings (1) 395:21</p> <p>Washington (3) 374:1;375:7;379:2</p> <p>way (13) 366:7,13;368:9; 370:14;377:5;381:10; 396:14;430:12;434:5; 435:18;442:3;443:10; 457:16</p> <p>ways (4) 368:15,16;396:12,13</p> <p>We'll (2) 440:2,11</p> <p>we're (1) 404:20</p> <p>We've (1) 410:20</p> <p>Wednesday (1) 461:14</p> <p>week (11) 389:15;411:25; 412:1,2,17;413:7,18, 20,21;414:3,14</p> <p>weeks' (1) 370:10</p> <p>what's (1) 407:25</p> <p>what's (9) 365:1;386:4;406:3; 410:1,10;420:6; 434:11;440:24;457:11</p> <p>whereas (1) 386:17</p> <p>Whereupon (16) 363:6;380:12;383:3; 404:22;405:6;408:3; 410:22;412:13;419:10; 422:5;423:5;424:2; 426:5;441:2;451:24; 461:13</p> <p>who've (1) 432:6</p> <p>whole (1) 443:3</p> <p>who's (2) 379:2;430:17</p> <p>wide (1) 433:24</p> <p>winning (2) 369:25;370:1</p> <p>withdraw (1) 447:15</p> <p>withdrawn (1)</p>	<p>417:2</p> <p>within (13) 390:19;420:14; 423:2;424:12;433:7, 15,17;434:2,23; 436:14;444:4,11;458:1</p> <p>WITNESS (63) 372:15,19;378:10; 379:8,15;380:7,12; 381:5,13,20;382:2,6, 10,14,18,24,25;383:5, 10;404:5,9,13;405:8, 13;408:3;410:22; 412:13;416:9,24; 418:19,22,24;419:12; 422:5;423:5;424:2; 426:5;435:6,16,19; 437:15,19,23;438:12; 439:3,4,5,8,10,15,21, 25;441:2;442:6,20,24; 451:24;452:7;459:2,7; 460:10,14,21</p> <p>witnesses (3) 365:11;404:17; 460:17</p> <p>wonderful (1) 367:22</p> <p>word (3) 370:1;379:8,16</p> <p>work (27) 363:21,22,24; 368:13,18,23;369:17; 375:14;376:12;377:22; 386:22;388:2,2; 395:18;401:16;411:19, 20,22;412:18;413:11; 420:11;425:6;428:12; 429:6,18;447:1;453:11</p> <p>worked (6) 366:21;387:7; 393:25;428:10;458:20; 459:9</p> <p>WORKERS (1) 358:10</p> <p>workflow (2) 449:9,10</p> <p>working (4) 375:12;398:14; 415:12,14</p> <p>workplace (1) 369:19</p> <p>works (2) 389:6;433:24</p> <p>worry (1) 368:10</p> <p>worth (1) 366:2</p> <p>wrap (1) 428:19</p> <p>write (6) 367:25;368:24; 369:2,24;389:25; 397:15</p>	
U		V		W	
<p>ultimately (3) 425:14,15,20</p> <p>UNC (1)</p>	<p>used (10) 365:21;434:2,22; 436:10;437:3;439:15,</p>	<p>vague (4) 418:2;446:8;450:2; 457:13</p> <p>various (1) 370:23</p> <p>verbally (1) 375:24</p> <p>verbiage (1) 435:20</p> <p>version (1) 427:4</p> <p>via (5) 358:17;383:7; 405:10;419:14;431:15</p> <p>view (1) 433:16</p> <p>Virtually (1) 388:13</p> <p>visa (30) 406:8;407:16,18,21; 409:3,4,6,11,13,17,19, 20,23,23;410:6,10,11, 12,14,24;412:3;413:4, 8,11,13,22;415:25; 416:5,12,14</p> <p>visas (7) 406:10,11;408:8; 409:15;410:3;411:17; 412:25</p> <p>visualize (1) 376:20</p> <p>voir (2) 426:17,19</p> <p>Vyas (15) 404:13;405:3,4,7,13, 19;406:12;407:25; 409:1;410:21;411:24; 417:12,14,15;418:12</p> <p>V-y-a-s (1) 405:13</p>	<p>W2s (1) 451:11</p> <p>W-a-c-k-e- (1) 383:11</p> <p>Wacker (15) 382:17,25;383:1,4, 11,17;388:10;389:20;</p>	<p>wide (1) 433:24</p> <p>winning (2) 369:25;370:1</p> <p>withdraw (1) 447:15</p> <p>withdrawn (1)</p>	

writer (1) 435:9	389:18	411:19,20,24,24;	
writing (4) 371:6,6;439:15;	10:04 (1) 377:17	412:1,2,17;413:7,19, 20,21;414:14	6
441:12	10:20 (1) 377:17	2005 (1) 406:17	612 (2) 439:14;442:19
wrong (1) 372:5	10:26 (1) 381:17	2018 (2) 384:2,17	69 (2) 366:10,14
Y	10:35 (1) 381:17	2020 (5) 374:6;377:22; 378:17;420:25;421:3	7
year (15) 366:22;371:12;	10:37 (1) 382:22	2021 (5) 420:16,23,24;421:1, 3	70 (1) 407:10
372:1;396:3;411:8;	10:39 (1) 382:22	2022 (2) 420:19;428:5	8
432:3,6,12,16,20;	100 (2) 367:4;388:13	2023 (2) 358:17;461:14	8 (1) 412:22
444:4,4,7;445:5;	11 (3) 358:17;432:18,22	20-hour (2) 415:24;416:5	9
448:18	11:08 (1) 403:19	214.29i (1) 412:22	9:00 (1) 389:17
years (6) 374:5;375:20;	11:20 (1) 403:19	23 (2) 410:17,20	9:30 (3) 460:20;461:12,15
384:18;393:22;395:17;	11:22 (1) 404:22	24 (5) 411:10;412:7,10,21;	9:35 (2) 358:17;363:2
406:20	12 (3) 408:17,25;461:14	414:23	
Yep (3) 366:17;374:25;	13 (7) 422:2,15,20,21;	26 (1) 358:16	
379:15	424:22;460:23;461:7	3	
yesterday (3) 365:20;368:16;	14 (9) 426:2,16,22,25;	3:09 (1) 440:13	
377:10	427:2,8,9;460:23;	30 (5) 412:20;424:7;	
York (3) 358:16,16;384:4	461:7	452:25;453:3,16	
you're (2) 403:25;418:12	15 (19) 407:23;408:1,15,18, 20,22,25;410:20;412:8, 22;414:24;432:10,11;	30-hour (4) 424:13;453:5;454:1, 7	
you've (1) 398:23	439:16;461:1,3,4,6,7	36-130 (1) 358:16	
Z	16 (4) 421:24;444:20,24,24		
Zero (2) 407:13;452:13	19A (2) 451:21;461:9	2	4
Zoom (4) 358:17;383:7;			
405:10;419:14			
0	2	4	
02 (1) 358:2	2 (1) 358:15	4:03 (1) 460:18	
02-RC-319437 (1) 358:5	2:00 (1) 417:7	4:18 (1) 460:18	
03:34 (1) 454:13	2:25 (1) 435:3	4:21 (1) 461:13	
03:40 (1) 454:13	2:26 (1) 435:3	40 (1) 421:16	
03:50 (1) 459:23	2:29 (1) 436:22	5	
04:01 (1) 459:23	2:30 (1) 436:22	50 (2) 424:15;453:11	
1	2:33 (1) 438:23	50-hour (1) 454:8	
1:33 (2) 404:22;405:2	2:36 (1) 438:23	52 (8) 440:25;441:15;	
1:51 (1) 417:7	2:38 (1) 440:13	442:10;443:17,20,23;	
10:00 (1)	20 (12)	460:24;461:8	

In The Matter Of:
ICAHN SCHOOL of MEDICINE at MOUNT SINAI

Vol. 5
July 12, 2023

Burke Court Reporting, LLC
64 Magnolia Place
Wayne, NJ 0747
(973) 692-0660



Min-U-Script® with Word Index
BURKE
**COURT REPORTING
& TRANSCRIPTION**

Page 436

1 BEFORE THE
2 NATIONAL LABOR RELATIONS BOARD
3 -----:
4 In the Matter of: : Case No.:
5 ICAHN SCHOOL of MEDICINE at MOUNT SINAI, :
6 Employer, :
7 and :
8 INTERNATIONAL UNION, UNITED AUTOMOBILE, :
9 AEROSPACE, and AGRICULTURAL IMPLEMENT :
10 WORKERS of AMERICA, :
11 Petitioner. :
12 -----:
13 The above-entitled matter came on for hearing Pursuant to
14 Notice, before AVI KUMAR, Hearing Officer, at the National
15 Labor Relations Board, Region 2, Jacob K. Javits Federal
16 Building, 26 Federal Plaza, Suite 36-130, New York, New York,
17 via Zoom on Wednesday, July 12, 2023, at 9:30 a.m.
18
19
20
21
22
23
24
25
26

Page 437

1 A P P E A R A N C E S
2 On Behalf of the Employer:
3 ADAM M. LUPION, ESQ.
4 MELISSA FELCHER, ESQ.
5 Proskauer Rose LLP
6 Eleven Times Square, 19th Floor
7 New York, New York 10036-8299
8 (212) 969-3558
9 alupion@proskauer.com
10 mfelcher@prokauer.com
11
12 ANDREW E. RICE, ESQ.
13 Mount Sinai General Counsel
14 150 East 42nd Street, 2nd Floor
15 New York, New York 10017-5612
16 (212) 659-8105
17 andrew.rice@mountsinai.org
18
19
20
21
22
23
24
25
26

Page 438

1 A P P E A R A N C E S (continued)
2
3 On Behalf of the Petitioner:
4 THOMAS W. MEIKLEJOHN, ESQ.
5 NICOLE M. ROTHGEB, ESQ.
6 Livingston Adler Pulda Meiklejohn & Kelly PC
7 557 Prospect Avenue
8 Hartford, Connecticut 06105-2922
9 (860) 214-9676
10 twmeiklejohn@lapm.org
11 nmrothgeb@lapm.org
12
13 Also in Attendance
14 Melissa Felcher: Associate at Proskauer
15 Jillian Stead, NLRB field examiner, observing
16 Corin Coetzee, Mt Sinai post doctoral researcher,
17 Union representative
18 Sebastian Vivancos, Union Representative
19 Minah Kim, Union Representative
20

Page 439

1 I N D E X
2 WITNESS DIRECT CROSS REDIRECT RECROSS VOIR DIRE
3 Brey Alburquerque 442 470 494 -- 456
4 Matthew O'Connell -- 498 517 522 --
5 -- -- 522 522 --
6 Sam McConnell 530 547 -- -- --
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26

Page 440

E X H I B I T S		
EXHIBITS	IDENTIFIED	RECEIVED
EMPLOYER'S		
E-18	478	480
E-19	498	--
E-20	494	--
PETITIONER'S		
P-4	525	529
P-5	525	529
P-6	525	529
P-8	525	529
P-9	525	529
P-10	525	529
P-11	525	529
P-13	525	529
P-14	525	529
P-15	525	529
P-16	525	529
P-17(a)	525	529
P-17(e)	525	529
P-18	525	529
P-19	525	529
P-19(a)-(h)	525	529
P-20	525	529

Page 442

PROCEEDINGS

(Time Noted: 9:35 a.m.)

COURT REPORTER: We are on the record at 9:35 a.m. Eastern Time.

MR. MEIKLEJOHN: Hey. Are you ready for me to call my first witness?

HEARING OFFICER KUMA: Yes, please.

MR. MEIKLEJOHN: All right. Petitioner calls Bremy Albuquerque.

HEARING OFFICER KUMA: Mr. Albuquerque, can you raise your right hand?

Whereupon,

BREMY ALBURQUERQUE,

was called as a witness having been previously duly sworn, was examined and testified as follows:

HEARING OFFICER KUMA: Okay. Put your hand down.

Can you state your for -- your first and last name for the record and spell it?

THE WITNESS: Yes. My first name, my full name is Bremy Albuquerque. My first name is spelled B-R-E-M-Y and my last name Albuquerque, is spelled A-L-B--U-R-Q-U-E-R-Q-U-E.

HEARING OFFICER KUMA: Petitioner may proceed.

DIRECT EXAMINATION

BY MR. MEIKLEJOHN:

Q. Good morning, Mr. Albuquerque.

Page 441

E X H I B I T S (continued)		
EXHIBITS	IDENTIFIED	RECEIVED
P-21	525	529
P-22	525	529
P-23	525	529
P-24	525	529
P-25	448	450
P-26	449	450
P-27	458	460
P-28	454	458
P-30	451	452
P-31	494	--
P-32	465	466
P-33	461	464
P-34	525	529
P-35	525	529
P-37	525	529
P-44	469	495
P-45	526	529
P-47	525	529
P-48	525	529
P-50	525	529
P-51	501	513

Page 443

A. Good morning.

Q. Before we -- before I -- we -- we get into your testimony, just want to confirm, do -- do you have -- other than the exhibits which I sent to you and which have been marked, do you have any other notes or documents with you as you're preparing to testify at this time?

A. I do not.

Q. Okay. Are you enrolled as a student at Mount Sinai?

A. Yes, I am.

Q. And in what degree and program are you enrolled?

A. I am seeking a PhD degree, and I'm in the Biomedical Science program here at the Icahn School of Medicine at Mount Sinai.

Q. And when did you enroll as a student in the PhD program in Biomedical Sciences at Mount Sinai?

A. In 2018.

Q. In what month?

A. August of 2018.

Q. And so you have just finished your fifth year, have I calculated that right?

A. Yes. That's correct.

Q. And what is your -- what MTA have you selected?

A. I selected the Genetics and Data Science MTA.

Q. What degree did you obtain before enrolling as a PhD student at Mount Sinai?

Page 444

1 A. I obtained a -- a Bachelor of Science in Biological
 2 Engineering from the Massachusetts Institute of Technology.
 3 Q. And when did you obtain that?
 4 A. I obtained that in 2018 as well.
 5 Q. So I -- I'm going -- I was going to ask some questions
 6 about the educational program, but I don't know if there's a
 7 lot of dispute. So I'm going to jump right into asking about
 8 your rotations. We've had past testimony that all PhD or all -
 9 - or almost all PhD students are expected to and encouraged to
 10 engage in rotations before selecting the lab to do their
 11 research. How many rotations did you participate in?
 12 A. I participated in three rotations.
 13 Q. And was that during your first year as a PhD student?
 14 A. Yes, it was.
 15 Q. You -- you also took classes during that time?
 16 A. Yes, I did.
 17 Q. Now, during the rotations, did you make contributions to
 18 the work of the labs in which you rotated?
 19 MR. LUPION: Objection, vague.
 20 HEARING OFFICER KUMA: Sustained.
 21 BY MR. MEIKLEJOHN:
 22 Q. During the rotations, did you do -- during the rotations,
 23 did you perform tasks in the laboratories in which you rotated?
 24 A. Yes, I did.
 25 Q. And did the -- do you know, did those tasks contribute to

Page 445

1 the works of those laboratories?
 2 MR. LUPION: Objection. It calls for his opinion.
 3 HEARING OFFICER KUMA: Sustained.
 4 BY MR. MEIKLEJOHN:
 5 Q. All right. I'll -- I'll -- Mr. Albuquerque, during your
 6 rotations, did the work that you performed -- do you have
 7 evidence from which to conclude that the work that you
 8 performed contributed to the functioning of the lab?
 9 MR. LUPION: Same -- same objection. It calls -- it
 10 calls for his opinion.
 11 HEARING OFFICER KUMA: Do you want to ask him what he
 12 did?
 13 MR. LUPION: Ask him what he did.
 14 BY MR. MEIKLEJOHN:
 15 Q. I -- no. I have something in specific -- do you have a
 16 basis for concluding that your work contributed to the work of
 17 the lab? I -- I don't -- I think that's --
 18 MR. LUPION: That -- that's his -- it's his opinion,
 19 whether --
 20 MR. MEIKLEJOHN: This is not his opinion.
 21 MR. LUPION: -- it's -- it's his opinion. What he
 22 did had a contribution.
 23 MR. MEIKLEJOHN: No. It's not his opinion.
 24 MR. LUPION: And it's your -- and it's your
 25 characterization. It -- he can't testify. He can't testify to

Page 446

1 that. The objection --
 2 MR. MEIKLEJOHN: I mean, okay. I will. I mean, are
 3 you going to allow him to answer that question or do I -- do I
 4 have to explain the basis for it?
 5 HEARING OFFICER KUMA: Explain the basis for the
 6 question.
 7 MR. MEIKLEJOHN: All right. We have testimony from
 8 more than one of the Employer's witnesses that publication in a
 9 journal scientific journal, a peer reviewed scientific journal
 10 and the inclusion of someone as an author in the publication of
 11 the Scientific journal is -- reflects that the individual has
 12 made a contribution to the research contained in that journal
 13 article.
 14 During his very first rotation, Mr. -- Mr.
 15 Albuquerque made a contribution to -- so conducted research in
 16 the lab of Dr. Lior Zangi, and he was subsequently listed as an
 17 author in an article published by Dr. Zangi's lab.
 18 MR. LUPION: So -- so Tom ask him if he was listed as
 19 an author and you could --
 20 HEARING OFFICER KUMA: Right.
 21 MR. LUPION: -- you're asking this witness to make
 22 legal argument. I have no --
 23 MR. MEIKLEJOHN: That -- that isn't --
 24 MR. LUPION: I -- I have no objection --
 25 HEARING OFFICER KUMA: Rephrase -- rephrase the

Page 447

1 question to -- as I don't just stated, to -- to address if he
 2 was ever listed in an article and reframe the question to ask
 3 the witness if he ever performed the works that made for
 4 publications.
 5 BY MR. MEIKLEJOHN:
 6 Q. Now, where did you perform your first rotation?
 7 A. I performed my first rotation, the lab of Dr. Lior Zangi.
 8 Q. And what did your work in Dr. Zangi's lab -- were you
 9 listed as an author in a publication based upon your work in
 10 Dr. Zangi's lab during your rotation?
 11 MR. LUPION: Object to the use of the term work, but
 12 otherwise, okay.
 13 HEARING OFFICER KUMA: Sustained. Go ahead.
 14 MR. MEIKLEJOHN: Sustained?
 15 HEARING OFFICER KUMA: All right. Put objection on
 16 the word --
 17 BY MR. MEIKLEJOHN:
 18 Q. Were you listed as an author on an article published --
 19 were you listed as an author in a published article resulting
 20 from the research that you conducted during your rotation in
 21 Dr. Zangi's lab?
 22 A. Yes, I was.
 23 Q. Okay. And show you a document that's been marked as
 24 Petitioner's Exhibit 25. Can you tell me what this is?
 25 A. Yes. This is the article that I was a -- a co-author in

Page 448

1 from my first rotation in Dr. Lior Zangi's lab.
 2 (Petitioner's Exhibit Number 25 identified.)
 3 Q. And Dr. Zangi's name appears as the the last name on the
 4 list of authors?
 5 A. Correct.
 6 Q. And what work did you do -- strike that. What functions
 7 did you perform that are reflected in this article?
 8 A. Yes. I helped to run experiments in mice in which we
 9 injected different variations of a modified mRNA therapeutic in
 10 order to see which one expressed more efficiently the -- the
 11 genes of interest. And -- sorry. In addition to that, I also
 12 helped to write a small program, a small script to analyze some
 13 of that data.
 14 Q. And I moved down to Page 10 of the article where it lists
 15 author contributions and the initials BA appear on the fourth
 16 right -- line from the bottom of the paragraph labeled author
 17 contributions. Are you the BA referred to there?
 18 A. Yes. That is me.
 19 Q. And it states there you performed experiments. Those are
 20 the experiments that you described?
 21 A. Yes. That is correct.
 22 Q. And the -- the program that you wrote, was that used to
 23 analyze the data?
 24 A. Yes, it was.
 25 MR. MEIKLEJOHN: I move the introduction of

Page 449

1 Petitioner's Exhibit 25.
 2 MR. LUPION: No objection.
 3 HEARING OFFICER KUMA: Hearing no objections,
 4 Petitioner's Exhibit 25 is offered as received into evidence.
 5 (Petitioner's Exhibit Number 25 admitted.)
 6 BY MR. MEIKLEJOHN:
 7 Q. I show you this document. Do you recognize what I marked
 8 as Petitioner's Exhibit 26 I think?
 9 (Petitioner's Exhibit Number 26 identified.)
 10 A. Yes.
 11 Q. Do you recognize Petitioner's Exhibit 26?
 12 A. Yes. This is a description of the -- the work that is
 13 conducting Dr. -- Dr. Lior Zangi's lab and from his lab
 14 website.
 15 Q. And during the time that you were in Dr. Zangi's lab, did
 16 the experiments and the program that you wrote relate to
 17 modified mRNA?
 18 A. Yes, it did.
 19 MR. MEIKLEJOHN: I move the admission of Petitioner's
 20 26.
 21 HEARING OFFICER KUMA: Does the Employer have any
 22 objections to Petitioner's --
 23 MR. LUPION: I'm -- I'm -- I'm reviewing the
 24 document.
 25 HEARING OFFICER KUMA: Okay.

Page 450

1 MR. LUPION: No objection.
 2 HEARING OFFICER KUMA: Hearing no objections,
 3 Petitioner's Exhibit 26 is moved into evidence and received.
 4 (Petitioner's Exhibit Number 26 admitted.)
 5 BY MR. MEIKLEJOHN:
 6 Q. What was your second rotation?
 7 A. My second rotation was in the lab of Dr. Benjamin
 8 tenOever.
 9 Q. And what does Dr. tenOever's lab study?
 10 A. Their -- their research focuses on viruses and
 11 specifically the interplay between how viruses infect their
 12 hosts and how hosts such as ourselves, such as humans, have
 13 systems to try to counteract that infection. So that's broadly
 14 their -- their area of research is virus host interaction.
 15 Q. And what did you do during your time in Dr. tenOever's
 16 Lab?
 17 A. During my time there, I helped to grow a virus, a polio
 18 virus, under different selection pressures in order to
 19 understand how the virus might change over time.
 20 Q. And then where was your third rotation?
 21 A. My third rotation is in the lab of Dr. Harm van Bakel.
 22 Q. And what does Dr. van Bakel lab study?
 23 A. Dr. van Bakel's lab studies the bacteria and viruses
 24 primarily derived from patients who were infected by those
 25 bacteria and viruses. And we mostly study the -- the DNA RNAs,

Page 451

1 the genomic information from those pathogens in order to
 2 understand what -- what is circulating in the hospital and the
 3 environment, and also to understand how those pathogens evolve
 4 over time during infection.
 5 Q. So you would -- show you a document that's been marked as
 6 Petitioner's Exhibit 30. Do you recognize Petitioner's 30?
 7 (Petitioner's Exhibit Number 30 identified.)
 8 A. Yes. This is a description of the -- the research that
 9 Dr. van Bakel's lab does from the Bakel Lab website.
 10 MR. MEIKLEJOHN: And I'll move the admission of
 11 Petitioner's Exhibit 30. I'm just stepping away from the
 12 computer for a minute. I won't be gone -- while -- while
 13 counsels looking at that exhibit. Be right back.
 14 MR. LUPION: Appears to be a printout of one page or
 15 one tab of a website page. With that -- with that
 16 understanding, I -- I have no objection to the contents of
 17 Exhibit 30.
 18 MR. MEIKLEJOHN: Thank you. And yes, we can agree
 19 that this is just one page or one tab or, I -- I don't -- I
 20 probably don't know the correct terminology, but yes, this is
 21 just one portion of Dr. van Bakel's lab webpage.
 22 HEARING OFFICER KUMA: Okay.
 23 BY MR. MEIKLEJOHN:
 24 Q. What -- during your rotation, what did --
 25 HEARING OFFICER KUMA: Hold on, Petitioner.

Page 452

1 MR. MEIKLEJOHN: Oh, sorry.
 2 HEARING OFFICER KUMA: Hearing no objections to
 3 Petitioner Exhibit 30, Petitioner's exhibit is offer -- is
 4 moved and received into evidence.
 5 (Petitioner's Exhibit Number 30 admitted.)
 6 BY MR. MEIKLEJOHN:
 7 Q. I'm sorry, I'm getting pop-up ads all of a sudden. Okay.
 8 What did you do during your rotation in Dr. van Bakel's lab?
 9 A. During my rotation, I analyzed the -- the DNA from a
 10 bacterial called serratia marcescens, it's just a bacteria
 11 that's found in -- in the hospital and for example, can cause
 12 urinary tract infections.
 13 And for the rotation, I was trying to find changes in
 14 the DNA of the bacteria that may have been associated with the
 15 changes in antibiotic resistance during the patient treatment.
 16 Q. And does that analysis that you were conducting relate to
 17 one of the specific listed areas of research for Dr. van
 18 Bakel's lab?
 19 A. Yes. That would correspond to the bacterial pathogens
 20 research section.
 21 Q. Were you paid during your rotations?
 22 A. Yes.
 23 Q. And with what frequency were you paid?
 24 A. I was paid biweekly or every two weeks.
 25 Q. And what -- after you completed your three rotations,

Page 453

1 which lab did you select?
 2 A. I selected the lab of Dr. Harm van Bakel to the same lab
 3 as the third rotation.
 4 Q. What -- could you describe the research you have been that
 5 you began after selecting Dr. van Bakel's lab?
 6 A. Yes. So I -- I continued to study mostly bacteria for my
 7 thesis and I was interested in phenomenon known as hetero
 8 resistance, which just describes a scenario where a small
 9 portion of the bacterial population has resistance against an
 10 antibiotic while the majority of the population does not.
 11 And sometimes those that small portion of bacteria
 12 can go undetected doing clinical testing which could lead to
 13 problems like treatment failure later on. And so we -- I was
 14 interested to -- and -- and -- in trying to understand what was
 15 the genomic basis for hetero resistance and bacteria that -- in
 16 specific bacteria that -- that we were working with.
 17 And in addition to that, another part of my work
 18 involved carbapenemases, which are a type of enzyme that can
 19 also contribute to antibiotic -- another type of antibiotic
 20 resistance.
 21 Q. Was your research interrupted or modified in some way in
 22 the early spring of 2020?
 23 A. Yes. It was interrupted by the -- the start of the
 24 pandemic here in New York City.
 25 Q. And what -- how did that affect -- or what work -- did

Page 454

1 that affect the work that you performed and how?
 2 A. Yes. That -- well, pretty much all of our -- all the
 3 members of the lab dropped whatever they were working on in
 4 order to instead work on trying to sequence the SARS COVID-II,
 5 the causative agent of COVID in patients from New York City as
 6 we were trying to understand what was circulating here, how was
 7 the bug changing and -- and so forth.
 8 Q. Did -- did your work in sequencing COVID-19 result in any
 9 publications?
 10 A. Yes, it did.
 11 Q. How many publications were you included on as a result of
 12 sequencing COVID-19 genes?
 13 A. To date, four publications.
 14 Q. Now, you testified that you have been -- I think I had --
 15 you -- you testified that you continued to be paid. Well start
 16 -- maybe I didn't ask. So you testified that you were paid
 17 biweekly during your rotations. Have you continued to be paid
 18 biweekly since completing your rotations?
 19 A. Yes, I have.
 20 Q. And I will show you a document that's been marked as
 21 Petitioner's Exhibit 28, and ask you if you recognize this as
 22 one of your pay stubs?
 23 (Petitioner's Exhibit Number 28 identified.)
 24 A. Yes, I do. This is -- yes. This is one of my pay stubs.
 25 Q. Do you know what period it covers?

Page 455

1 A. It should cover like May 21st through June 3rd of 2023.
 2 Q. Now there's something blanked out under employee number.
 3 Is that a unique personal number used by Mount Sinai to
 4 identify you evidently as an employee?
 5 MR. LUPION: Objection.
 6 HEARING OFFICER KUMA: Basis?
 7 MR. LUPION: The document -- the document speaks for
 8 itself. He's asking the witness to characterize why this field
 9 is there. The question says --
 10 BY MR. MEIKLEJOHN:
 11 Q. I'll withdraw -- I'll withdraw the question. The blank
 12 out number is a personal number related to you, correct?
 13 A. Correct.
 14 Q. And -- and as Counsel pointed out, it's identified on the
 15 form as your EMP number. Your -- under earnings, there's two
 16 listings. One is -- is EMP reimbursement. Do you know what
 17 that -- for which there was no money this period, but a year to
 18 date total of \$1,206.17 do you know what that money was for?
 19 A. Yes. I -- I was reimbursed for paying out of pocket for -
 20 - initially for expenses related to a conference, a research
 21 conference and then that was reimbursed to me. So that was --
 22 yeah. So that was reimbursed like after the fact. So was a
 23 bit of -- there was a bit of a delay, but it was -- ended up
 24 seems on this year's earnings or reimbursement.
 25 Q. Okay. And the next line is marked regular salary. Is

Page 456

1 that -- was that the amount of money that you received every
 2 two weeks in the -- in the last academic year?
 3 A. Correct.
 4 Q. And do you know, are you receiving an increase this month?
 5 A. Sorry, I'm not -- I don't recall, but we have received --
 6 if we received this month, but we have received raises
 7 throughout our stay here. Sorry, by stay, I mean, as I've been
 8 a student here throughout the years, we have received increases
 9 as I've been a student here
 10 Q. There are three categories of deductions, federal, state,
 11 and city tax withholding. Have those deductions been taken
 12 from your pay throughout the time that you've been a student at
 13 Mount Sinai?
 14 A. Yes.
 15 Q. Move the introduction of Petitioners 28.
 16 MR. LUPION: Just a couple of voir dire questions,
 17 please.
 18 VOIR DIRE
 19 BY MR. LUPION:
 20 Q. The redacted part on the top row under EMPNUM do you know,
 21 is that a social security number?
 22 A. It is for me, right? This question?
 23 Q. Yes. Yeah.
 24 A. This -- it is not a social security number, it is given to
 25 us as an identifier. When we -- at -- when -- when anyone I

Page 457

1 believe starts here at Mount Sinai, they get this number. So
 2 it should also be on our -- on everyone's IDs. Our
 3 identifications also contain this number.
 4 Q. Okay. And deposited for in the bottom third of the page,
 5 underneath your name there appear to be two lines that were
 6 redacted. Do you know what those redactions are?
 7 A. I'm sorry, could you repeat the location of the redaction?
 8 Is this in the -- in current exhibit?
 9 Q. Yeah. In Petitioner's Exhibit 28, a little more than two-
 10 thirds down the document. There's a notation that says
 11 deposited for.
 12 HEARING OFFICER KUMA: Scroll down.
 13 MR. MEIKLEJOHN: Am I not far enough down the
 14 document?
 15 HEARING OFFICER KUMA: No. You have to --
 16 MR. LUPION: Yeah. I'm looking at a hard copy.
 17 MR. MEIKLEJOHN: I'm sorry. Yeah, I'm sorry. It's -
 18 -
 19 MR. LUPION: Yea. Okay.
 20 BY MR. LUPION:
 21 A. Yes. Oh, my -- I'm sorry, I'm not 100% sure, but I
 22 believe that would be an address.
 23 Q. Okay.
 24 A. Like a -- a home address.
 25 Q. And the -- if you could -- Tom, if you could scroll all

Page 458

1 the way down to the bottom, more. Yeah. Same question with
 2 respect to the redactions at the very bottom of the page.
 3 A. Yeah. I'm not -- I'm not 100% sure, but I believe as well
 4 that this is the address that would be blocked right below my
 5 name, similar to below the Mount Sinai Hospital. There is an
 6 address for there as well.
 7 MR. LUPION: Okay. No objection.
 8 HEARING OFFICER KUMA: Okay. Hearing no objection,
 9 Petitioner's Exhibit 28 has been moved and received into
 10 evidence.
 11 (Petitioner's Exhibit Number 28 admitted.)
 12 MR. LUPION: Avi, we -- we have somebody in the
 13 waiting room. It doesn't need to interrupt the testimony, but
 14 if we could call your attention to please let him in.
 15 MS. ROTHGEB: Petitioner also. Thank you.
 16 HEARING OFFICER KUMA: Sorry about that. All right.
 17 BY MR. MEIKLEJOHN:
 18 Q. Mr. Albuquerque show you a document marked for
 19 identification as Petitioner's Exhibit 27. Do you recognize
 20 this?
 21 (Petitioner's Exhibit Number 27 identified.)
 22 A. Yes. This is this document is from the -- from the Sinai
 23 Cloud website that we all have access to as -- as students or -
 24 - or as employees. But this section here is the employment
 25 info section from the -- from the Sinai Cloud website.

Page 459

1 Q. And did you personally go into the Sinai Cloud website,
 2 locate this document and obtain -- and produce a copy?
 3 A. Yes. Correct.
 4 Q. Now, the business title, Graduate Assistant, was that on
 5 there when you obtained the document?
 6 A. Yes. There -- this was -- this is on the website.
 7 Q. And after that, there is a blacked out portion. Is that
 8 your personal identifying number?
 9 A. Correct.
 10 Q. And that same number is blacked out under person number,
 11 lower down on the page?
 12 A. Correct.
 13 Q. And everything else on this -- on this document appears as
 14 it did -- let me make sure we didn't redact anything else.
 15 Okay. Does everything else on this document appear as it
 16 appeared on the website?
 17 A. Yes.
 18 Q. Including legal Employer, business title, and job?
 19 A. Yes.
 20 Q. In the -- it lists Kathleen Dilks as your line manager.
 21 Do you know why she's listed as your line manager?
 22 A. No. I --
 23 Q. Okay.
 24 A. I do not.
 25 Q. Under employment history -- well, strike that. At the

Page 460

1 very bottom, the last entry for employment history on the
 2 second page of the document, just checking this time to make
 3 sure I got -- actually got to the bottom.
 4 It states the last -- the second to last line says
 5 hire, and opposite that, it says start date 8/1/2018. Is that
 6 the year when you enrolled as a student?
 7 A. Yes. This is the -- this is the -- the year and month in
 8 which I enrolled as a student.
 9 Q. Do you understand what the rest of the information under
 10 employment history indicates?
 11 A. Not precisely, no. I see manager change. I -- I don't
 12 know what they -- what they all exactly refer to.
 13 MR. MEIKLEJOHN: Move the introduction of
 14 Petitioner's Exhibit 27.
 15 MR. LUPION: No objection.
 16 HEARING OFFICER KUMA: Since not -- hearing no
 17 objection, Petition Exhibit 27 is moved and received into
 18 evidence.
 19 (Petitioner's Exhibit Number 27 admitted.)
 20 BY MR. MEIKLEJOHN:
 21 Q. There's been testimony that after the first year students
 22 are funded in large or -- or -- well, strike that. Do you have
 23 any grants of your own?
 24 A. I -- do I have grants of my own? I -- I do not have
 25 grants of my own.

Page 461

1 Q. So how is your -- whose grants are, is your research
 2 funded through?
 3 MR. LUPION: Objection. Assumes facts not in
 4 evidence.
 5 BY MR. MEIKLEJOHN:
 6 Q. Do you know how your -- your research is funded?
 7 A. Yes. It's -- it's funded through a grant from my PI, the
 8 Principal Investigator on my project.
 9 Q. And do you every year have to fill out time and effort
 10 reports with respect to your research?
 11 A. I am asked, yes. Every year to fill out -- to sign off on
 12 a time and effort report.
 13 Q. Now, bear with me. Even when we used to do these hearings
 14 in person, I used to spend a lot of time fumbling with paper,
 15 so I'm doing that again. You testified that you've been
 16 published on -- or listed as an author on four publications
 17 regarding COVID.
 18 Have you been listed on -- as an author on other
 19 articles published by the van Bakel Lab while you've been --
 20 based upon research you've done while you're in that lab?
 21 A. Yes.
 22 Q. And I'm going to show you -- oops. I'm going to show you
 23 a document that's been marked for identification as
 24 Petitioner's Exhibit 33. Can you tell me what this is?
 25 (Petitioner's Exhibit Number 33 identified.)

Page 462

1 A. Yes. This is a list of selection of publications that
 2 have -- has been published by Harm van Bakel's Lab and this is
 3 from the -- part of the lab website.
 4 Q. This is another page of the -- of his or tab on his lab
 5 website?
 6 A. Yes, correct.
 7 Q. And where the name Albuquerque appears, does that
 8 indicate that you are an author on all of those articles where
 9 your name appears?
 10 A. Correct, yes. Where my name appears, correct.
 11 Q. So I'm going to draw your attention to the -- the article
 12 that begins at the bottom of the first page and continues onto
 13 Page 2 with the caption. Everybody knows, and I'm not going to
 14 read the rest of it since it's on the page. Where was that --
 15 if you know, where was that article published?
 16 A. So it's as the author -- sorry, the journal name is
 17 actually listed as a BMC Infectious Disease. So this is the
 18 name of the journal.
 19 Q. That is the -- and is that a -- do you know -- okay. And
 20 you are listed near the end amongst the other four -- four
 21 names? No. 1, 2, 3, 5 names from the end on the listing of
 22 the articles?
 23 A. That is correct.
 24 Q. And the names that are highlighted, those are the names of
 25 people in Dr. van Bakel's lab?

Page 463

1 A. That is correct, yes.
 2 Q. Now, what research did you conduct that contributed to
 3 this article?
 4 A. Yes. In this article, we were trying to compare the
 5 bacteria that were infecting patients in their blood. So they
 6 had a bacteremia this is called.
 7 And they -- and also to check if they had similar
 8 bacteria in the nose, the nasal colonization. And so I just --
 9 I helped to compare how similar some of the strains were
 10 between the nose and -- and the blood as that was one of the
 11 aims of the -- of the article.
 12 Q. And so, physically -- maybe that's not the right word.
 13 But mechanically, what is involved in comparing the bugs found
 14 in the nose with the bugs found in the -- in the blood? What
 15 are you looking at?
 16 A. Yes. I'm sorry. More specifically, I also had access to
 17 -- basically had sequencing results or the -- the DNA of -- of
 18 -- of those bacteria. And basically, we can based on the
 19 specific pattern of the DNA molecules, what the sequence is, we
 20 can determine what strain they belong to and -- and -- and with
 21 more granularity, we could also do that with a specific
 22 repetitive region of the genomes that are -- differ between the
 23 bacteria, between the different -- sometimes between members of
 24 the same strain.
 25 So computationally, we -- I can check and assign a

Page 464

1 specific what's known as a spa type, which is a kind of a
 2 subdivision of the strain in order -- and then compare what the
 3 spa type was for -- and also or strain type for some of these
 4 bacteria in the nose compared to the one in the blood. So this
 5 all was done. My -- my contribution was checking this
 6 computationally.
 7 Q. And is this research going to be part of your thesis?
 8 A. This will not be part of my thesis.
 9 MR. MEIKLEJOHN: Move the introduction of
 10 Petitioner's Exhibit 33.
 11 MR. LUPION: No objection
 12 HEARING OFFICER KUMA: Hearing no objection,
 13 Petitioner Exhibit 33 is moved and received into evidence.
 14 (Petitioner's Exhibit Number 33 admitted.)
 15 BY MR. MEIKLEJOHN:
 16 Q. I'd like to show you -- well strike that. Do -- are you
 17 familiar with the ways in which Dr. van Bakel recruits people
 18 to conduct research in his lab?
 19 MR. LUPION: Objection. Assumes facts not in
 20 evidence.
 21 MR. MEIKLEJOHN: Well, what fact?
 22 HEARING OFFICER KUMA: Sustained.
 23 MR. MEIKLEJOHN: That he actually recruits people?
 24 MR. LUPION: Yeah.
 25 BY MR. MEIKLEJOHN:

Page 465

1 Q. All right. Does Dr. van Bakel recruit people to work in
 2 his lab?
 3 A. Yes.
 4 Q. Do you know -- are you familiar with one of the ways in
 5 which he does that?
 6 A. One of the ways he does that is by just posting on -- so
 7 it's on the lab website and post like that positions are
 8 available, and so he so can list in that part of the website.
 9 There's a part of the website where he can list that there are
 10 positions available in the lab.
 11 MR. LUPION: Tom, can I ask you to clarify what --
 12 recruit for what?
 13 MR. MEIKLEJOHN: For positions in the lab.
 14 BY MR. MEIKLEJOHN:
 15 A. Oh, sorry.
 16 Q. I -- I -- that's okay.
 17 A. The question was --
 18 Q. I think -- I think the answer -- your answer was clear.
 19 A. Okay.
 20 Q. I'll show you a document that's been marked for
 21 identification as Petitioner's Exhibit 32. Is this also a page
 22 from Dr. van Bakel's webpage?
 23 (Petitioner's Exhibit Number 32 identified.)
 24 A. Yes, it is.
 25 Q. And this lists positions for a postdoctoral position,

Page 466

1 staff positions, and graduate student positions?
 2 A. Correct.
 3 Q. Move the admission of Petitioners -- whatever number that
 4 was. Is that 32?
 5 MR. LUPION: With the understanding that this is
 6 another printout of a tab from Dr. van Bakel's lab, no
 7 objection.
 8 MR. MEIKLEJOHN: Okay. Just to clarify, that was
 9 Petitioner's 32 I was moving.
 10 HEARING OFFICER KUMA: Hearing no objection to
 11 Petitioner Exhibit 32, Petitioner Exhibit 32 offer is received
 12 and moved into evidence.
 13 (Petitioner's Exhibit Number 32 admitted.)
 14 MR. MEIKLEJOHN: Okay. Can I have a few minutes to
 15 consult? I don't think we need to go to the room to do that.
 16 So if I can just have a moment to --
 17 HEARING OFFICER KUMA: Off the record.
 18 MR. MEIKLEJOHN: Off the record. Thank you.
 19 COURT REPORTER: Off the record at 10:19 a.m.
 20 (Brief Recess at 10:19 a.m./Reconvened at 10:24 a.m.)
 21 HEARING OFFICER KUMA: On the record.
 22 MR. MEIKLEJOHN: Back on the record?
 23 COURT REPORTER: On the record at 10:24 a.m.
 24 BY MR. MEIKLEJOHN:
 25 Q. All right. Mr. Alburquerque, you'll have to unmute

Page 467

1 yourself as well, or somebody has to, I can't. Thank you. All
 2 right. So I -- I apologize. I'm going to show you something
 3 that we didn't -- that you -- that we didn't look at
 4 previously. So I'm going to ask you to take your time to
 5 review this document.
 6 A. Okay. Thank you. Yes. Yeah. If you can scroll a little
 7 further. Thank you. Thank you. If you could scroll a little
 8 more to the next bit. Thank you so much.
 9 Q. No. You don't have to thank me.
 10 A. If you could scroll further. Thank you.
 11 Q. Okay. Although I was -- I do not have any questions for
 12 you about the course label -- about the Mount Sinai Health
 13 System, although you can learn about it if you want.
 14 A. Thank you.
 15 Q. All right. My question for you so this document is taken
 16 from the public press webpage of Mount Sinai. My question for
 17 you is, were you part of the team that conducted the research
 18 and contributed to the publication that's described in this
 19 press release?
 20 A. Yes. This was the first paper that we got out early on in
 21 the pandemic. And this is a science paper that I was a co-
 22 author of that I -- yeah. So I -- I worked on the research --
 23 on -- on the research that contributed to the publication and
 24 to this press release about the publication.
 25 MR. MEIKLEJOHN: So I would move the introduction of

Page 468

1 Petitioner's 44. It comes from the Employer's public press
 2 webpage, and it's relevant to the witness's testimony.
 3 MR. LUPION: Subject to our confirming authenticity.
 4 I don't know if this was one of the documents that we've
 5 already reported back on, if it's -- I don't think it, it has.
 6 If it's not, we will. So subject to our confirmation of
 7 authenticity.
 8 MR. MEIKLEJOHN: And I have no further questions for
 9 the witness.
 10 HEARING OFFICER KUMA: But to be clear, Petitioner's
 11 exhibit is deferred at the current moment due to the Employer's
 12 need to verify the document; is that correct?
 13 MR. LUPION: That is correct, Hearing Officer.
 14 MR. MEIKLEJOHN: I don't mind waiting a bit. I would
 15 note that -- I think, Nicole, correct me if I'm wrong. This
 16 document has been provided to the Employer for several -- in
 17 the Employer's possession for several days, we did not ask them
 18 to stipulate to it, but it is something that they've had in
 19 their possession for a while, but I -- I have no problem with
 20 waiting a bit.
 21 MR. LUPION: Yeah. I -- I mean, we don't dispute
 22 that we've had it, but you didn't ask us to stipulate to it, so
 23 we didn't attempt.
 24 MR. MEIKLEJOHN: I wasn't asking you to stipulate to
 25 it. We -- we did this one through a witness.

Page 469

1 HEARING OFFICER KUMA: All right, let's --
 2 MR. MEIKLEJOHN: Nicole -- can you unmute Nicole to
 3 clarify something?
 4 HEARING OFFICER KUMA: I guess.
 5 MS. ROTHGEB: I'd also just point out for ease of
 6 verification, Adam, the, there's a website address on the
 7 bottom of the pages.
 8 MR. LUPION: Yeah. We'll -- we'll take a look.
 9 Thank you.
 10 HEARING OFFICER KUMA: All right. And this is
 11 Petitioner's Exhibit?
 12 MS. ROTHGEB: 44.
 13 (Petitioner's Exhibit Number 44 identified.)
 14 HEARING OFFICER KUMA: 44 has been introduced. All
 15 right. Does the Employer want to cross examine the witness?
 16 MR. LUPION: Yes, please. Can we have a 15-minute --
 17 HEARING OFFICER KUMA: Okay.
 18 MR. LUPION: -- breakout room, please?
 19 HEARING OFFICER KUMA: Off the record
 20 COURT REPORTER: We are off the record at 10:31 a.m.
 21 (Brief Recess at 10:31 a.m./Reconvened at 10:48 a.m.)
 22 HEARING OFFICER KUMA: On the record.
 23 COURT REPORTER: On the record at 10:48 a.m.
 24 HEARING OFFICER KUMA: Okay. Employer, we'll
 25 continue with current -- cross examination.

Page 470

1 CROSS EXAMINATION
 2 BY MR. LUPION:
 3 Q. Good morning, Mr. Albuquerque. My name is Adam Lupion,
 4 and I am representing the Icahn School of Management at Mount
 5 Sinai in this -- in this proceeding. And I'm going to ask you
 6 some questions this morning. Just a couple of brief and
 7 hopefully easy ground rules. Let's try not to talk over one
 8 another.
 9 Please let me finish my question and I will let you
 10 finish your response. And if you don't understand a question,
 11 please ask me to clarify. If you answer a question without
 12 asking for a clarification, the assumption is that you
 13 understood the question. Do you understand what I have just
 14 said?
 15 A. Yes, I do. Thank you.
 16 Q. Thank you. Mr. Albuquerque, you understand that the
 17 purpose of rotating in a lab during your first year of studies
 18 is to see if there's a -- a -- a fit with respect to subject
 19 matter of the lab, right?
 20 A. Yes, I agree. We're trying to find a good fit, a lab that
 21 we would feel comfortable working in the rest of our --
 22 Q. And also -- and also interpersonal fit, that there's a --
 23 that there's a good rapport with both the PI and other -- other
 24 members of the lab, right?
 25 A. Correct, exactly.

Page 471

1 Q. Okay. And you mentioned -- you testified on direct
 2 examination that you rotated to -- rotated in three different
 3 labs during your first year?
 4 A. That is correct. Yeah.
 5 Q. How long was your rotation in Dr. Zangi's lab about?
 6 A. About two months. About eight weeks.
 7 Q. Okay. And how long was your rotation in Dr. tenOever's
 8 lab?
 9 A. Yeah. They were each about the same time. So then, yeah.
 10 That was November and December -- about two months.
 11 Q. Ok. And also about two months in Dr. van Bakel's lab?
 12 A. Correct. January to March of that, yes. That's about two
 13 months, two and a half, yeah.
 14 Q. Okay. And you'd agree with me that there's a relatedness
 15 in subject matter as between all three labs, right?
 16 A. By subject matter you're referring to the -- the research
 17 that is conducted in each lab?
 18 Q. Yes, sir.
 19 A. Well, the -- yeah. The -- the first lab, there's some
 20 differences. For example, the first lab, instead of studying
 21 the bacteria and viruses that are -- instead of studying
 22 bacteria and viruses just to stay general, they -- they're --
 23 they're trying to instead optimize like mRNA as a therapeutic
 24 technology to express genes that could regenerate heart cells.
 25 And so broadly, that lab, for example, stands out in

Page 472

1 that they -- they don't conduct research on bacteria and
 2 viruses. They -- it's a -- so the subject matter in that lab
 3 differs more than the other two.
 4 Q. Okay. And -- and you'd agree with me, right? That you
 5 had at least a preliminary interest in all three labs in which
 6 you chose to rotate through, correct?
 7 A. Correct.
 8 Q. And were -- were any of those labs assigned to you by the
 9 -- by the graduate school?
 10 A. No. I -- I -- I reached out to -- to try to -- to ask if
 11 I could rotate.
 12 Q. Okay. And you testified that you were paid your stipend
 13 during these lab rotations?
 14 MR. MEIKLEJOHN: Objection. I don't believe the
 15 witness referred to the payments as a stipend. That's a term
 16 colloquially used, but not the official terminology according
 17 to Employer Exhibit 2.
 18 (Employer's Exhibit Number 2 identified.)
 19 HEARING OFFICER KUMA: Objection sustained.
 20 BY MR. LUPION:
 21 Q. Mr. Albuquerque, are you familiar with the term stipend?
 22 A. I know what it -- a stipend, yes. I know what a stipend
 23 is.
 24 Q. Okay. And throughout your enrollment in the PhD program,
 25 have you received a stipend?

Page 473

1 A. Well, I've -- yeah. It's part of a -- it -- it's
 2 colloquial also referred to, yes, as a stipend. Like I -- I
 3 receive a fixed amount of -- of pay every two weeks.
 4 Q. Okay. And that -- that amount that you receive, what is -
 5 - well, you know what? Let me do it this way. If you have
 6 Petitioner Exhibit 28 in front of you.
 7 A. I can pull that out. Sorry.
 8 Q. We could share it if it -- if it's -- if it's easier.
 9 A. Perhaps. Is this --
 10 Q. Yeah. It'll be quicker this way.
 11 A. Oh, yes, yes, yes. The pay stub, yes.
 12 Q. Okay. Okay. Is the amount that is reflected year to
 13 date, \$20,252.4, is, is that -- is that the stipend?
 14 A. Yes. This is the amount that we've been paid to date,
 15 yes. So this is from --
 16 Q. Okay.
 17 A. Yeah.
 18 Q. Thank you. And when you received your stipend during your
 19 first year of studies, including when you were rotating through
 20 labs, it was the graduate school that was responsible for
 21 providing the funds to pay your stipend? That's correct,
 22 right?
 23 A. Correct. That's my understanding, yes.
 24 Q. Okay. And -- and in Year 2, is it your understanding that
 25 the PI in the lab that you select was responsible for 75% of

Page 474

1 the stipend?
 2 A. Yeah. I -- I don't recall the exact proportion, I'm
 3 sorry. But I know that after -- yes. After I joined the lab,
 4 then the PI would then take over the -- the -- the paying from
 5 his own grant sources.
 6 Q. Okay. And -- and other funding sources as well, right?
 7 It doesn't have to be a grant? For example, it could be seed
 8 money?
 9 A. I'll be honest, I'm not very real familiar with the
 10 specifics. I know it's a funding source from the PI. And so -
 11 - but yeah.
 12 Q. Fair enough.
 13 A. -- some funding source from the PI. Yeah.
 14 Q. Fair enough. And if you don't -- and if you don't know
 15 the answer to a question, it -- it's fine if you don't know,
 16 and I don't want you to speculate. Mr. Albuquerque, and it's
 17 -- and it's true in -- from Year 3 on, that the PI is
 18 responsible for funding 100% of -- of the student's stipend,
 19 correct?
 20 A. Well, I -- yes. Again, I was in -- I was honest -- to be
 21 honest, I wasn't sure about specifics, but I know that they
 22 would take over. So that -- that may be correct, that then
 23 it's a fully him only, so that -- that -- that -- that sounds
 24 correct to me. Yes.
 25 Q. Thank you. So during the time that you were in the lab

Page 475

1 rotations that were in your first year, none of the three PIs
 2 in the labs you worked were responsible for providing funding
 3 to you, correct?
 4 A. While I rotated, correct. Yeah.
 5 Q. Okay. And you testified that you performed experiments in
 6 Dr. Zangi's lab, correct?
 7 A. Correct.
 8 Q. And you also testified that you performed experiments in
 9 Dr. van Bakel's lab, correct?
 10 A. Correct.
 11 Q. Okay. If you performed -- if you didn't perform those
 12 experiments, you wouldn't have lost your funding, correct?
 13 A. Correct. Yeah. I -- I had to still do my rotation, you
 14 know, as to fulfill my, like, what I should have been doing.
 15 So -- so I had to be working in those -- I had to be doing
 16 research in those labs, is my understanding, instead of, for
 17 example, not complying with the lab rotation requirement. But
 18 the -- otherwise, yeah. The specific experiment that I did, I
 19 guess, was not necessarily changing my pay.
 20 Q. Okay. I'd like to call your attention to Petitioner's
 21 Exhibit 25, please.
 22 A. Yes. Yes.
 23 Q. Okay. And you testified that you're familiar with this
 24 article, correct?
 25 A. Correct.

Page 476

1 Q. And you're familiar with the research that is described in
2 this article, right?
3 A. Correct.
4 Q. Can you tell me, Mr. Albuquerque, how long this -- the
5 research results and the publication that's reflected in
6 Petitioner 25, how long that took from start to finish?
7 A. So the full -- this full project, I -- honestly, I'm not
8 fully familiar and the reason being that this work had already
9 started before I started rotating in the lab. And so I -- I --
10 I don't know -- have an exact date on when this -- you can say
11 that this project was initiated.
12 And there -- the -- I mean, the inbound is that the -
13 - the date in which it was published or the year, you know, so
14 it had to end by then, but as far -- I can't give you an exact
15 date of -- I only know about my involvement during the lab
16 rotation, but not when the research may have specifically
17 started.
18 When the first experiment was done, for example. But
19 the -- the PI had -- had already -- actually, I don't know the
20 exact date in which the PI also started working at Mount Sinai,
21 but it may have been -- it was definitely at least more than
22 two years because from the time I joined to when it was
23 published, it was about that timeframe.
24 Q. Okay. So you -- you'd say that -- that the research
25 reflected in this article would be at least two years from

Page 477

1 start to finish?
2 A. Yes. More -- more -- yeah. And I should say greater than
3 because, yeah, they had already started before I joined.
4 Q. Okay. So even more than two years?
5 A. Yes. I would believe at least -- yes. As -- as an
6 estimate. And I'm sorry, I can't be more specific because --
7 because I -- I wasn't there already when you started. No,
8 Q. No need to apologize. And is it fair to say that your
9 involvement with this project was confined to the roughly two
10 months that you spent on -- on rotation in this laboratory?
11 A. Yes. My role is within that time period, yes.
12 Q. Okay. And you're listed the eighth author on this on this
13 magazine publication, correct?
14 A. That's correct.
15 Q. Okay. And is it your understanding that with the
16 exception of the very last author on a publication, that the
17 authors are listed in order of magnitude of -- of contribution
18 to the project? From --
19 A. Yes. That -- yes. Oh, sorry, I interrupted you.
20 Q. No, no, no. That -- that's fine. So your answer is yes,
21 starting -- starting with the most significant contribution
22 towards -- towards the least with the exception of the last
23 author?
24 A. Yes. It gets a little -- when there's a lot of authors,
25 sometimes it's hard to really -- or -- order all of them.

Page 478

1 Like, for example, at the very beginning, always it's the case
2 that you have a first author, sometimes there's first author
3 that's shared between more than one person.
4 But that is always -- you always start trying to list
5 who has the most significant contribution. And when the list
6 gets longer, sometimes it may not be as easy to order one over
7 another. So -- but yes, it also depends on the lab. I guess
8 it's the specifics of how they will -- how the exact order will
9 end. But yes, it is true that generally the -- at the very
10 beginning we list who is -- has the most significant
11 contribution.
12 Q. Okay. Mr. Albuquerque, I -- I forgot to ask you before.
13 When you said you conducted experiments during your lab
14 rotation, did you have to pay for those? The cost of doing
15 those experiments?
16 A. Did I have to pay for the cost of my -- no. I -- this is
17 -- this is -- this work is funded by the -- presumably the
18 grants or any source that the Principal Investigator has. So I
19 -- I did not have to pay for -- for the experiments myself.
20 Yeah. They're -- they're expensive.
21 Q. Okay. I'm going to pull up what has been marked for
22 identification as Mount Sinai Exhibit 18. And we sent that --
23 (Employer's Exhibit Number 18 identified.)
24 A. I'm sorry, was there a question?
25 Q. Did we -- I -- I'd ask you --

Page 479

1 MR. MEIKLEJOHN: I'm sorry, when did we get this?
2 HEARING OFFICER KUMA: They just provided it.
3 BY MR. LUPION:
4 A. Did you ask me to describe this? I'm sorry.
5 Q. I -- I would ask you, Mr. Albuquerque, if you recognize
6 this document?
7 A. I do. This is describing -- like it's kind of like a
8 profile or biography of myself on the Icahn School of Medicine
9 website.
10 Q. Okay. And it refers to you there as a graduate student,
11 correct? On -- on this website?
12 A. Correct. As graduate student.
13 MR. LUPION: I'd offer Respondent Exhibit 18.
14 MR. MEIKLEJOHN: Well, I don't think I have any
15 issues, but I haven't even -- I don't think I've even seen the
16 whole thing yet. I -- I gather it was provided, but when --
17 when was this emailed?
18 HEARING OFFICER KUMA: About 10 to 15 minutes ago.
19 MR. MEIKLEJOHN: Okay. So are there other documents
20 along with it?
21 MR. LUPION: I think there was one other attachment.
22 MR. MEIKLEJOHN: So can I ask that we go off the
23 record for five minutes so I can review those documents before
24 the witness is questioned about them? I can't imagine I'm
25 going to have any issues, but I'd just like to.

Page 480

1 MR. LUPION: I -- I don't think we need five minutes.
 2 I'm happy to give you the courtesy of -- of going off -- going
 3 off the record.
 4 HEARING OFFICER KUMA: We can go off the record.
 5 MR. MEIKLEJOHN: Who -- okay. Melissa sent them?
 6 COURT REPORTER: Off the record at 11:04 a.m.
 7 (Brief Recess at 11:04 a.m./Reconvened at 11:09 a.m.)
 8 MR. LUPION: Are we ready to proceed on the record?
 9 HEARING OFFICER KUMA: Yes. Why don't we go back on
 10 the record?
 11 COURT REPORTER: On the record at 11:09 a.m.
 12 MR. MEIKLEJOHN: So I -- it's in my ballpark? Do --
 13 do I have an objection to Employer Exhibit 18? Is that where
 14 we are?
 15 (Employer's Exhibit Number 18 admitted.)
 16 MR. LUPION: Yes, sir.
 17 MR. MEIKLEJOHN: Okay. I was asking to hear --
 18 Hearing -- are we on the -- okay. So --
 19 HEARING OFFICER KUMA: Yes.
 20 MR. MEIKLEJOHN: With -- with the similar
 21 understanding to what we had with the documents regarding the
 22 other labs, this is just one page from something posted on the
 23 Mount Sinai website. I have no objection to Employer 18.
 24 MR. LUPION: And I -- I will represent that this is
 25 the -- the entirety of -- of the -- of Mr. Albuquerque's

Page 481

1 biography on the Icahn School of Medicine at Mount Sinai
 2 website.
 3 HEARING OFFICER KUMA: Hearing no objections
 4 concerning Employer's Exhibit 18, Employer's Exhibit 18 has
 5 been received and entered into evidence.
 6 BY MR. LUPION:
 7 Q. Okay. Thank you. I just have one more question on this
 8 document. If we can scroll down. Actually, more than one
 9 question. Mr. Albuquerque, you see that there is a -- a very
 10 impressive awards section there. Do you see that? That --
 11 that that's populated?
 12 A. Yes. I see it's populated by those two, like, coder
 13 awards. Yeah.
 14 Q. Okay. And those were awards?
 15 A. Yeah.
 16 Q. Those were awards that you received at -- at MIT?
 17 A. The 2004 -- yes. They were, because we were asked to --
 18 we kind of made this page when we started the program, like
 19 earlier when in -- in our program. It was either 2008 -- end
 20 of 2018 maybe. So this would've been my first year.
 21 If I recall correctly, we were asked to provide a
 22 biography that would be included on the lab website. So I
 23 remember this was like pretty early on. We -- we provided,
 24 like, we could write a little biography awards. So yes, this
 25 is -- I wrote this as I -- I -- I included this as part of my

Page 482

1 awards back then. Yeah.
 2 Q. Okay. And I see that there -- that the -- under
 3 publications that the area is blank. Is that because during
 4 your studies at -- at Mount Sinai, you have not been the lead
 5 author or co-lead author of -- of any publication?
 6 A. No. That is -- that would not be the case. There should
 7 have -- yeah. I think it's either that the website hasn't been
 8 updated or I know that there was a change in -- I'm going to --
 9 I'm forgetting the specifics of the systems. We had a --
 10 might've been called PlumX. We had a system before that was
 11 changed.
 12 And I guess what I mean to say is that I think that
 13 the it's -- if it's blank it may be more of an issue with the
 14 website or it not being updated. Because I, for example, one
 15 of the things you mentioned was co-first authorship, but I am a
 16 co-first author on -- on -- on a publication that is not listed
 17 here. So this doesn't reflect my actual publications.
 18 Q. Okay. Mr. Albuquerque, you understand that it's not --
 19 there is no academic requirement to publish during your time as
 20 a PhD student, right?
 21 A. I guess we -- we may only need to get something, a
 22 publication out, I guess, might be the technical term. Yes.
 23 Or like even if it's not accepted, but -- but yeah, sorry, I
 24 was not 100% sure of -- of that there because I -- I had
 25 already published and I wasn't concerned about whether I would

Page 483

1 be able to without a publication.
 2 But I -- I think that sounds correct, that you may be
 3 able to graduate if at least you get a -- have something ready
 4 that could be published, even if it's not already published.
 5 Q. Okay.
 6 A. If -- as long as your thesis committee -- yeah. Approves
 7 of that.
 8 Q. If we can bring up Petitioner 31. And we can -- we can
 9 scroll through the document. Mr. Albuquerque, does
 10 Petitioner's 31 reflect the current composition of the van
 11 Bakel laboratory?
 12 A. Yes.
 13 Q. Okay. And it -- the page is titled lab members, correct?
 14 A. Yes. This is the lab members -- yes. Lab members.
 15 Q. And no -- no first year PhD students rotating through the
 16 lab are identified as members of the lab, correct?
 17 A. And this website no, it's after the students have joined.
 18 Yeah. I can't speak about other websites or other PIs, but for
 19 this specific one, everyone here has -- is in -- has already
 20 joined the lab. For example, I -- like, I rotated and then
 21 joined the lab. And after joining, yes, I'm a member -- listed
 22 as a member here.
 23 Q. And why did you choose the van Bakel lab?
 24 A. Basically I was like interested in like the -- basically -
 25 - well, I was interested in the work that they were doing and

Page 484

1 the work that I -- the research work that I did during my
2 rotation, I found it to be very intriguing.

3 And on top of that -- so it's something that I knew
4 that I would like to work on for the rest of my time at --
5 here, sorry. Yeah. At the Icahn School of Medicine. And as
6 we discussed before about like the relationship between you and
7 those in the lab and the PI, like I also had a good experience
8 with them. And -- and ultimately the PI also offered me a
9 position in the lab and because of the good experience that I
10 had, I decided to join.

11 Q. And that choice was yours, correct?

12 A. Yes. As I said, like, it -- it should go both ways. So
13 like the -- if the PI had not offered me a position, then I
14 would not have been able to join. If he did not -- if he was
15 not satisfied with my work or with -- or with me or, you know,
16 if it wasn't a good fit. But after he offered it, yes, it was
17 my choice to join the lab.

18 Q. Okay. And you declared the lab at the end -- the van
19 Bakel lab at the end of your first year of studies?

20 A. So I think technically I declared around March of -- that
21 would've been 2019, which is the end of my rotation. And also
22 the period where I said, okay, I want to join this lab. So I
23 should have filled out a form to indicate to the administration
24 that this is also the lab that I will stay in and continue. So
25 by -- maybe by March or -- or April the latest, I had already

Page 485

1 communicated that. That I -- I was officially going to join
2 the lab.

3 Q. And you understand, Mr. Albuquerque, that if you -- after
4 you declared the lab, if you were unhappy in that lab for any
5 reason, that you could -- that you could change labs, correct?

6 A. Yes. That's correct.

7 Q. And you could change labs and still maintain the funding
8 package that we described earlier, correct?

9 A. Yes. I guess the source would change but we would still
10 be paid is my understanding.

11 Q. Ok. I'd like to pull up -- well, let me -- before we do
12 that, how do you -- how do you refer to Dr. van Bakel? And I
13 don't mean Mr. or Professor. What's his relationship to you?

14 A. Well, he's like my -- my supervisor or my -- my Principal
15 Investigator. We kind of say PI a lot just to signify
16 Principal Investigator. But yeah, otherwise he's -- he's my --
17 yeah. Those are the two ways, like, because -- so I wouldn't
18 call him -- like if I see him, I would just call him by name as
19 I said I wouldn't.

20 But yeah, those are the -- that's how I would
21 describe him. He's my -- he supervises like the research work
22 that I do, and he's my Principal Investigator.

23 Q. So he -- he's your -- he's also your mentor, right?

24 A. He's also -- yeah. He's also my -- my mentor as he, like,
25 you know, of course, yeah. Will also be there to comment on

Page 486

1 the work I do or if I have -- yeah. Any -- any issues with
2 that. He's also there to provide that, you know, that -- that
3 supervision, but also guidance

4 Q. And faculty advisor. Have you heard that term as well?

5 A. Well, I guess perhaps in relation to -- maybe if you're
6 referring to a thesis committee. We -- we have to form a -- a
7 committee of other -- other professors that will also be a part
8 of our thesis committee and will also, like, supervise the work
9 that the research as we do it, you know, not -- so it's not
10 just our -- we -- we have a direct interaction with the
11 Principal Investigator, more -- but then there's --
12 periodically we also meet with the professors that we create.
13 That are -- that we chose to be in our thesis committee. So
14 I'm not sure if you're referring to them as faculty advisors.

15 Q. Have you heard the term dissertation advisor?

16 A. Yes. I think now it's -- because it's -- yeah. The -- by
17 part thesis dissertation, but yes. These are my -- I -- I
18 guess -- I think I refer to what you're referring to as --
19 yeah, thesis committee members or dissertation advisors.

20 Q. Let me bring up Petitioner's 27. And if we can scroll
21 down, I think you -- you testified that this was a document
22 that you printed off of Sinai Cloud; is that correct?

23 A. That's correct.

24 Q. And -- and -- and Sinai Cloud is a resource that's
25 available to everyone in the Mount Sinai community, correct?

Page 487

1 A. That's my understanding, yes.

2 Q. Okay. Do you know who Kathleen Dilks is?

3 A. No, I do not.

4 Q. Has she ever had any interaction with you with respect to
5 researched that you conduct in a lab?

6 A. No, I haven't -- I haven't communicated with Kathleen
7 Dilks.

8 Q. Okay. Do you know why she's listed as your manager on --
9 on this document from Sinai Cloud?

10 A. No. I -- I do not. This is line manager, but I'm not
11 familiar with the position, so I just -- yeah.

12 Q. Okay. And when did you print this document out? I -- I
13 believe on the top left, it says June 26th, '23 at 12:24 p.m.;
14 is that right?

15 A. Yeah. I didn't recall the exact date, but it was the end
16 of June. So I think this would -- this matches the time
17 period. Yes. It was -- it was very -- it was recent. It was
18 not long ago. Yes. So I think it was end of June, I think
19 that's correct.

20 Q. Okay. And -- and at this time Dr. van Bakel was your PI,
21 correct?

22 A. Yes. He is my PI now, yes. And he was at this time too,
23 yes.

24 Q. Mr. Albuquerque, you testified that since 2018, your
25 research has been interrupted only one time by virtue of the

Page 488

1 COVID-19 pandemic; is that right?
 2 A. It was interrupted for -- in the sense that I -- and
 3 during the -- yeah. So what you're referring to, I spent a
 4 period of time where I only worked on the pandemic related
 5 research and dropped everything else.
 6 So -- so that was like the -- the largest
 7 interruption I've had in that sense. And after that, I've
 8 worked on things that weren't necessarily going to be in my
 9 thesis. So I had but -- so -- but then -- but -- but again,
 10 yes. That time period that you're referring to was the -- the
 11 only time period where I -- I worked on the COVID research for
 12 some months and -- and nothing else.
 13 Q. And you didn't, you didn't have to, right. Students were
 14 -- didn't have to come into the lab at all; isn't that correct?
 15 A. At that period, like my -- our lab essentially was one of
 16 the labs that was -- continued working through because of the
 17 role that they were playing in the pandemic response.
 18 And so the every -- like -- our -- our -- our PI
 19 basically had, you know, like had asked like those who -- who
 20 were capable to -- to also help to respond to this important
 21 need to -- for this important research. It was all hands on
 22 deck, so to speak. If -- and so, yeah. I wasn't -- I guess
 23 there was no formal, you know, like if you do not come, there
 24 will be consequences.
 25 I wasn't -- it wasn't like forced on me in that

Page 489

1 manner. But all of our lab members were, like, working towards
 2 this cause of trying to sequence the virus as -- as quickly as
 3 we could to understand what was happening.
 4 Q. And -- and it's fair to say, sir, that you yourself were
 5 intellectually curious in studying the COVID-19 virus, right?
 6 A. Yes. I was interested in -- in helping as this was
 7 affecting -- well, the whole world. But yeah. Personally and
 8 the whole world. So I -- I had an interest to also contribute
 9 to -- to this cause.
 10 Q. Okay. And you also understood that if you weren't
 11 interested, you've been -- you could have declined to work on
 12 COVID related initiatives without losing your stipend, correct?
 13 A. Correct. I don't expect to have lost my stipend if I --
 14 if I didn't contribute to this the way I had.
 15 Q. Okay. And I -- I believe you referred to public COVID
 16 related publications that emanated from your research during
 17 this time, right?
 18 A. Correct. Yeah.
 19 Q. Okay. And you'd agree with me, right? That those -- that
 20 your appearance on those publications is a good thing for you --
 21 -- for your career and prospects, right?
 22 A. Yeah. It shows that I also worked on -- on this. So like
 23 the -- the time and effort spent on this is -- is reflected as
 24 in the form of the -- the publication. So it shows that, yes,
 25 during that time period, I -- I also gained, you know, that --

Page 490

1 that experience that I -- from -- from working on -- on these -
 2 - on this research. Yeah.
 3 Q. And -- and in fact, you have -- you have promoted your
 4 appearance on these publications, right?
 5 A. I'm sorry, could you repeat? You said promoted. Like was
 6 I promoted or --
 7 Q. No. I said that you have -- you have broadcast or made
 8 known to the scientific community in some form or fashion that
 9 you were involved in these publications, right?
 10 A. Oh, I -- I did not. I mean, the only -- by publishing it,
 11 we're sharing it with the scientific community but I -- I
 12 didn't broadcast myself to say, oh, I worked on this so --
 13 myself. No, I didn't broadcast it in that sense. So --
 14 Q. Can we bring up Exhibit -- just one more document for you,
 15 sir?
 16 A. Yes.
 17 Q. Do you -- do you recognize this?
 18 A. I don't think I've visited this before. It says Sidetalk.
 19 So it looks like it describes -- yeah, so I -- I'm not very
 20 familiar with it, but it seems to be an account about the --
 21 myself as a researcher, but yeah, I'm not familiar with the
 22 Sidetalk myself.
 23 Q. You're aware that this is a social media platform?
 24 A. I -- I was not. I just haven't used it before, but it
 25 does -- from the name, it does seem like that. But I -- sorry,

Page 491

1 I -- I haven't -- I'm not familiar with that. So --
 2 Q. You -- you did -- did you -- did you personally create a
 3 profile on Sidetalk?
 4 A. No, not that I'm -- I'm aware of. Like the only time we -
 5 - we made a profile was that lab website that we brought up
 6 earlier. I'm sorry, I forgot the exhibit number, if it was 18.
 7 But that I had to write my biography and -- and so forth and
 8 the awards. But I don't -- I don't remember physically -- I
 9 didn't like create this myself.
 10 Q. Okay.
 11 A. This -- what we're seeing -- with the exhibit we're seeing
 12 now,
 13 Q. We can take this down. Can we bring up Petitioner Exhibit
 14 32? Mr. Albuquerque, you see -- you testified that you're
 15 familiar with Petitioner Exhibit 32, correct?
 16 A. Correct.
 17 Q. And a graduate student position was available because Dr.
 18 van Bakel had -- had funding to fund the research of a PhD
 19 student, correct?
 20 MR. MEIKLEJOHN: I'm going to object to questioning
 21 about a part of the document without showing him the relevant
 22 portion.
 23 MR. LUPION: Fair enough.
 24 BY MR. LUPION:
 25 A. Yes. Yes. This is the -- he offered the graduate student

Page 492

1 position, so he would have to have like funding to fund that --
 2 that student if he accepts to take them on, yes.
 3 Q. Okay. If we could scroll back up. Mr. Albuquerque, you
 4 see that there are specific tasks associated with the available
 5 postdoctoral position. Do you see that?
 6 A. Yes. I see the description, yes.
 7 Q. And -- and you'd agree that -- that there are specific
 8 tasks identified in -- in the -- in the postdoc description?
 9 MR. MEIKLEJOHN: I mean, I -- I'm going to object.
 10 The document speaks for itself.
 11 MR. LUPION: That's fine. I'll withdraw the
 12 question. If we can take a brief 10 minute break, I can
 13 attempt to conclude. If we can put into a breakout --
 14 HEARING OFFICER KUMA: Off the record.
 15 COURT REPORTER: Off the record at 11:29 a.m.
 16 (Brief Recess at 11:29 a.m./Reconvened at 11:51 a.m.)
 17 HEARING OFFICER KUMA: Okay. So back on the record.
 18 COURT REPORTER: On the record at 11:51 a.m.
 19 HEARING OFFICER KUMA: Okay.
 20 MR. LUPION: The Respondent has no further questions.
 21 Thank you, Mr. Albuquerque,
 22 HEARING OFFICER KUMA: Okay. Does the Petitioner
 23 have any redirect? My apologies.
 24 MR. MEIKLEJOHN: Thank you. I tried doing it Adam's
 25 way by waving my hands around. Now what? Oh, okay.

Page 493

1 MS. ROTHGEB: The witness needs to be unmuted too,
 2 then if there's any redirect.
 3 MR. MEIKLEJOHN: Oh, okay. You're pointing -- him,
 4 yes. You're pointing -- in my screen, he's in -- you're
 5 pointing at me. That's what was throwing me off. Okay. I
 6 just -- I -- can I have a couple -- discussion off the record
 7 about testimony? Bremy or Mr. Albuquerque, just hold on for
 8 just a second.
 9 HEARING OFFICER KUMA: Off the record.
 10 COURT REPORTER: Off the record at 11:52 a.m.
 11 (Brief Recess at 11:52 a.m./Reconvened at 11:55 a.m.)
 12 HEARING OFFICER KUMA: All right. So going back on
 13 the record.
 14 COURT REPORTER: On the record at 11:55 a.m.
 15 HEARING OFFICER KUMA: Petitioner?
 16 MR. MEIKLEJOHN: Well, just -- okay. Do you want me
 17 to ask my one question before we clarify those exhibits or that
 18 exhibit?
 19 HEARING OFFICER KUMA: Well --
 20 MR. MEIKLEJOHN: Let me take a shot at the exhibit
 21 first if you -- if -- if that's all right with you. So during
 22 the cross-examination of Mr. Albuquerque, he was asked some
 23 questions about a document, which is -- which was described
 24 during the testimony as Petitioner's Exhibit 31, which the
 25 Petitioner did not offer as an exhibit.

Page 494

1 During an off the record discussion, I understand
 2 that the -- the parties have agreed that the same document will
 3 be offered as Employer Exhibit 20. Is that the right number?
 4 And that the reader of the record should understand that the
 5 references during the cross-examination to Petitioner's Exhibit
 6 31 refer to Employer Exhibit 20, which I will not object to.
 7 (Petitioner's Exhibit Number 31 identified.)
 8 (Employer's Exhibit Number 20 identified.)
 9 HEARING OFFICER KUMA: Okay.
 10 MR. MEIKLEJOHN: Do -- do we have an agreement on
 11 that, Counsel?
 12 MR. LUPION: Yes. Yes, sir.
 13 MR. MEIKLEJOHN: Okay. I'd just like to be able to
 14 understand the record in case, you know, in case I have to read
 15 it.
 16 REDIRECT EXAMINATION
 17 BY MR. MEIKLEJOHN:
 18 Q. All right. Let me just quickly -- you were asked some
 19 questions on cross about Petitioner's Exhibit 28. And -- and
 20 particularly with respect to something called your stipend or
 21 that Counsel referred to as your stipend. What is the stipend
 22 referred to in Petitioner's Exhibit 28? What's it called in
 23 the document? Where's --
 24 A. The salary?
 25 MR. MEIKLEJOHN: That's it. Thank you. No further

Page 495

1 questions.
 2 MR. LUPION: Nothing further.
 3 MS. ROTHGEB: Just we had deferred on the admission
 4 of 34 -- 30 -- Petitioners 35, which -- I'm sorry, Petitioners
 5 44. I don't -- which was during this witness, so I don't know
 6 if we want to finish that.
 7 HEARING OFFICER KUMA: Should --
 8 MR. MEIKLEJOHN: Should we discuss that off the
 9 record or do we want this -- well, if you're ready to accept
 10 it, then we can do it on the record.
 11 MR. LUPION: Yeah. We -- we -- there's no dispute as
 12 to 44.
 13 HEARING OFFICER KUMA: Okay. Hearing no objection to
 14 Petitioner Exhibit 44, Petitioner's Exhibit 44 is received into
 15 evidence.
 16 (Petitioner's Exhibit Number 44 admitted.)
 17 MR. MEIKLEJOHN: So do --
 18 MS. ROTHGEB: Off the record.
 19 MR. MEIKLEJOHN: Can we talk off the record or --
 20 HEARING OFFICER KUMA: Yes. Off the record.
 21 COURT REPORTER: Off the record at 11:59 a.m.
 22 (Brief Recess at 11:59 a.m./Reconvened at 12:04 p.m.)
 23 COURT REPORTER: We are on the record at 12:04 p.m.
 24 HEARING OFFICER KUMA: Hey. Dr. Albuquerque -- Mr.
 25 Albuquerque, seeing that there is no further questions for you,

Page 496

1 you are released and dismissed from the hearing. Thank you for
 2 your time. If you are needed, you will be recalled if the
 3 Regional Director sees fit to have you called back for
 4 additional questioning. So I ask that to stay remotely ready,
 5 just to be -- be called back if needed, okay?
 6 MR. MEIKLEJOHN: That doesn't mean you have to be
 7 sitting at your screen waiting for a call at any time. Just
 8 that if -- if he's -- if you're needed to come back, he'll let
 9 me know and I'll give you some -- a heads up.
 10 THE WITNESS: Okay. Thank you. And it could be
 11 today, right? I should be ready?
 12 HEARING OFFICER KUMA: It'll just be within the next
 13 couple days as long as the hearing is continuing.
 14 THE WITNESS: All right. All right. Thank you very
 15 much.
 16 HEARING OFFICER KUMA: And as the Petitioner Counsel
 17 pointed out, if needed, they will be notified in advance and
 18 you'll be called back.
 19 THE WITNESS: Thank you.
 20 MR. MEIKLEJOHN: We can work around whatever you --
 21 whatever experiments you need to -- calculations you need to
 22 conduct.
 23 THE WITNESS: All right. Thank you very much and
 24 thank you too all for your time.
 25 MR. MEIKLEJOHN: All right.

Page 497

1 HEARING OFFICER KUMA: Off the record.
 2 COURT REPORTER: Off the record at 12:05 p.m.
 3 (Brief Recess at 12:05 p.m./Reconvened at 12:23 p.m.)
 4 COURT REPORTER: Okay. Then we are on the record at
 5 12:23 p.m. My question to the Hearing Officer was who present
 6 today is acting as a Union Representative, if anyone?
 7 MR. MEIKLEJOHN: Other than myself and Ms. Rothgeb,
 8 you mean, other than Counsel?
 9 COURT REPORTER: Yes
 10 MR. MEIKLEJOHN: Minah Kim and Corin Coetzee of the
 11 people who are here now, and also Sebastian --
 12 MS. ROTHGEB: He might have been left in the breakout
 13 room. He was coming over, but he's certainly been in and out.
 14 COURT REPORTER: Vivancos?
 15 MR. MEIKLEJOHN: That's the one, yes.
 16 COURT REPORTER: Thank you.
 17 MR. MEIKLEJOHN: Did I miss anybody?
 18 MS. ROTHGEB: There may have been observers who came
 19 in at various points, but those are the --
 20 MR. MEIKLEJOHN: No, those are the representatives,
 21 right?
 22 MS. ROTHGEB: Yes.
 23 HEARING OFFICER KUMA: Okay. Now, outside of that, I
 24 have a question for the Employer. The Employer introduced
 25 Exhibit 19, but did not move it or make an offer to have it put

Page 498

1 into the record. And this was the Sidetalk research profile?
 2 (Employer's Exhibit Number 19 identified.)
 3 MR. LUPION: Yeah. I did not offer that. I did not
 4 offer that.
 5 HEARING OFFICER KUMA: Just wanted to make sure that
 6 was clear for the record. And so -- okay. All right. So now
 7 we can proceed. Okay.
 8 MR. MEIKLEJOHN: So I guess I -- it's on me now?
 9 HEARING OFFICER KUMA: Yes, it is on the Petitioner.
 10 MR. MEIKLEJOHN: All right. Petitioner recalls
 11 Matthew O'Connell.
 12 CROSS EXAMINATION
 13 BY MR. MEIKLEJOHN:
 14 Q. Mr. O'Connell, you understand that you're still under
 15 oath?
 16 A. I do, sir. Yes.
 17 Q. You testified that doctoral students are rarely listed or
 18 are -- are -- excuse me, that doctoral students are not listed
 19 as key personnel on government sponsored research grants. Are
 20 doctoral students sometimes listed as personnel on those
 21 grants?
 22 A. Under budget justification, but not key.
 23 Q. Not key personnel, but they're listed. What -- what is
 24 the significance of being listed under budget justifications?
 25 A. Budget justification is a proposal. And as non-key

Page 499

1 personnel, the understanding is anyone of equivalent standing -
 2 - I -- for the -- you are referring to a graduate student,
 3 could play the same role.
 4 Q. But if -- so you -- what you're saying is with respect to
 5 non-key personnel, you could substitute one person for a
 6 similar -- for someone with in the same classification with
 7 similar skills, is that --
 8 A. If they're not -- if they're non-key
 9 Q. Right. For personnel other than key personnel, you can
 10 substitute one person in that classification for another?
 11 MR. LUPION: Objection. I don't think he testified
 12 that it had to be a classification.
 13 Q. What word would you be more comfortable with?
 14 A. Is the question directed to me or --
 15 Q. Yes. That's directed to you. Sorry.
 16 A. It would be research personnel.
 17 Q. Okay. And there are -- are there different categories of
 18 research personnel?
 19 A. There are.
 20 Q. And one category would be postdocs?
 21 A. That's one.
 22 Q. And if a postdoc was not a key personnel person --
 23 A. Mm-hmm.
 24 Q. -- then you could substitute one postdoc for another
 25 postdoc with similar skills and qualifications; is that

Page 500

1 correct?

2 A. Correct. Or -- or you could substitute a postdoc for a

3 different category.

4 Q. Okay. As long as they -- okay.

5 A. Or -- or not depending on available funds. Let's

6 remember, this is a proposal.

7 Q. Right. So it doesn't matter unless the -- the grant is

8 awarded, correct?

9 A. Well, and in its full amount, which is, in my experience,

10 never the case.

11 Q. Okay. But the -- when you apply for a grant, you submit a

12 lot of information including a description of the research that

13 you're going to conduct, correct?

14 A. In a thematic sense, yes.

15 Q. And you explain why -- or you submit something explaining

16 why the world will be a better place if this research is

17 conducted.

18 A. You -- you do. And you also submit something that says

19 what you would do first if it didn't.

20 Q. Before you're granted in it?

21 A. Be approved, yes.

22 Q. I'm not sure that came through clearly, but --

23 A. Well, there -- there is a heading under each aim that says

24 pitfalls and alternative approaches.

25 Q. So basically you not only -- one of the things you have to

Page 501

1 tell them is things that could go -- or you have to write up is

2 things that could go wrong during the research.

3 A. Obvious things. It's not go wrong. It's like you carry

4 out an experiment. But does it really give a definitive step

5 forward in testing the hypothesis?

6 Q. Yes. I -- I -- I -- I appreciate that correction. You're

7 -- I agree with you. Whatever that's worth, which is nothing.

8 You also have to submit a budget for the research, correct?

9 A. In this case, it's a modular budget. So if it's \$250,000

10 or less as in this case it is, you don't itemize every

11 expenditure.

12 Q. Okay? By this case, you're referring to Petitioner's

13 Exhibit -- you're referring to a particular grant that was

14 provided to the Petitioner in response to subpoena?

15 A. I'm --

16 Q. Strike that. I'll just show it to you. Show you a

17 document that's been marked for identification --

18 A. Yes.

19 Q. -- as Petitioner's Exhibit 51. Is this what you're

20 referring to as -- in this case?

21 (Petitioner's Exhibit Number 51 identified.)

22 A. No. Well, included, but all grants of the same

23 classification.

24 Q. And what -- what is the classification? You're talking

25 about grants here of a quarter million dollars or less?

Page 502

1 A. Yes.

2 Q. Okay. And that is listed over here?

3 A. Mm-hmm.

4 Q. -- at exactly \$250,000. And let the record reflect that

5 we're looking at the first page of Petitioner's Exhibit 51. In

6 the left hand column in the box marked subtotal, direct costs,

7 excludes consortium, F&A, and then it lists the year and the

8 dollar figure. Year 3 is -- and succeeding years is \$250,000.

9 A. In this case, because it was a renewal of a preexisting

10 grant, Years 1 and 2 had already occurred.

11 Q. Right. That was going to be my next question, so very

12 good. And do on -- under grant of this type, do direct costs

13 count -- do personnel costs count as direct costs?

14 A. It depends upon the type of personnel to my -- best of my

15 knowledge. You should check with the experts at our grants and

16 contracts office. I do not believe indirect costs are applied

17 to students.

18 Q. So I'm going to -- as -- as Counsel's been predicting for

19 some time, I'm going to turn to Page 26 of the -- well, it is.

20 So it is the -- it is the 27th page of the exhibit. But it is

21 the page marked at the bottom of the page or numbered at the

22 bottom of the page as 26. Are you looking at Page 26 of

23 Petitioner's Exhibit 51?

24 A. Yes, sir. And I believe it's because what is Page 1 in

25 your exhibit is referred to by the National Institute of Health

Page 503

1 as a face page.

2 Q. Okay. Yes. I think that's the explanation. Thank you.

3 So it -- I'm going to refer to these pages by -- or this page

4 anyway, by the number that appears at the bottom of the page,

5 which in this instance is 26 and doesn't count the face page.

6 A. Okay.

7 Q. So who listed on this document would be considered key

8 personnel?

9 A. Myself.

10 Q. Okay. And in this instance, you have listed a particular

11 individual as a -- in the role of a PhD student on the grant,

12 Rohana Ramalingam. How did I do with that?

13 A. That's correct.

14 Q. Okay. And why did you list -- is it Ms. Ramalingam?

15 A. Yes.

16 Q. Why did you list Ms. Ramalingam by name on the grant?

17 A. Because -- first of all, you have to understand it takes

18 months for this -- like nearly a year for this process to

19 filter through. And it was to demonstrate that a candidate had

20 been identified, but they did not apply to me or this grant,

21 right? They entered the school as a student of PhD, of

22 biomedical sciences.

23 Q. But you listed her because she had the skills that would

24 be required to complete a portion of research under this grant?

25 A. Basic skills. So, you know?

Page 504

1 Q. She had the skills that are listed on the document; is
2 that right?
3 MR. LUPION: No, the witness wasn't done completing
4 his answer. You interrupted him.
5 HEARING OFFICER KUMA: Oh, is that an objection?
6 MR. LUPION: Yes.
7 HEARING OFFICER KUMA: Okay. Sustained.
8 BY MR. MEIKLEJOHN:
9 A. The basic skills, meaning an understanding of some
10 technical aspects and -- primarily that were obtained during
11 her time as a master's student.
12 Q. So just -- I want to make sure I understand. You're
13 saying that because she -- based upon her previous education
14 and training as a master's student, she had the basic skills
15 needed to fulfill this function under the grant?
16 A. She had a toolkit that was a starting point at this point
17 of the proposal.
18 Q. And in the instance of the postdoctoral fellow, you did --
19 you did not have a particular named postdoc?
20 A. Correct.
21 Q. In mind?
22 A. Correct.
23 Q. And you are representing to the NIH that if the grant is
24 awarded, you would hire somebody who has the skills and
25 abilities listed on this page for the postdoctoral fellow?

Page 505

1 A. Were -- we're awarded at the requested level.
2 Q. Was it?
3 A. No.
4 Q. Okay.
5 A. Never. Like never is
6 Q. All right. How much -- how much did you end up getting?
7 A. So it was reduced from five years to four years, and from
8 250,000 to, I think -- I -- I don't have the precise number,
9 but approximately 195,000.
10 Q. Were you still able to use this grant to fund research by
11 Ms. Ramalingam?
12 MR. LUPION: Object to the form, assumes facts not in
13 evidence.
14 HEARING OFFICER KUMA: Sustained.
15 BY MR. MEIKLEJOHN:
16 Q. Were you able to -- at the reduced rate, were you able to
17 fund research by Dr. Ramalingam as described in this document?
18 A. As a starting point towards her doctoral thesis. It
19 supported Ms. Ramalingam. She did not yet have a PhD. She was
20 not a doctor.
21 Q. Did I call her Dr. Ramalingam? I thought I was careful on
22 that. All right. And by submitting this request --
23 A. Mm-hmm.
24 Q. -- listing her as one of the personnel on the grant --
25 A. Mm-hmm.

Page 506

1 Q. -- you are requesting funding from the NIH with which to
2 pay her stipend, correct? Among other costs.
3 MR. LUPION: Objection, assumes facts not in
4 evidence.
5 HEARING OFFICER KUMA: Sustained.
6 BY MR. MEIKLEJOHN:
7 Q. No. I -- I asked the question. That's the question. By
8 submitting this, are you requesting funds from the NIH, which
9 can be used to fund her stipend? Well, I guess I -- I'll leave
10 out the among other costs, but --
11 A. I think the correct expression is, could be used. But as
12 a non-key personnel, you should think of this as a graduate
13 student.
14 Q. So you could -- I'm sorry. You -- you look like you were
15 starting to say more.
16 A. There were, you know, as described in my earlier
17 testimony, students come in, they do research rotations before
18 they declare a lab. It's their choice. There were other
19 people who did rotations in this thematic area that were also
20 interested. But there's nothing in this proposal that earmarks
21 dollars for this particular individual?
22 Q. Yes. I didn't -- so you could substitute a -- another --
23 other personnel including a PhD student?
24 A. Including, but not limited to. Yes.
25 Q. And the funds -- under those circumstances, the funds from

Page 507

1 this grant would be used to fund the compensation of whomever
2 the funds, whoever was assigned to do the work; is that
3 correct?
4 MR. LUPION: Objection.
5 HEARING OFFICER KUMA: Basis? What's your basis for
6 the objection?
7 MR. LUPION: It -- it's -- it's vague and it assumes
8 -- it assumes facts. The witness -- the witness has -- has --
9 has testified that -- can I ask the court reporter to read the
10 question back?
11 COURT REPORTER: One moment, please. Hearing
12 Officer, could you please enable me to share?
13 HEARING OFFICER KUMA: Yes. Court Reporter can read
14 the minutes back.
15 MR. MEIKLEJOHN: So I'll have to stop sharing, right?
16 COURT REPORTER: Correct.
17 MR. MEIKLEJOHN: Okay.
18 MR. LUPION: Nicole's (phonetic) raising her hand.
19 MS. ROTHGEB: As -- while the court reporter is
20 looking for that, I think there are some folks in the waiting
21 room.
22 MR. MEIKLEJOHN: Well, I think what -- what's
23 happening right now with Avi is authorizing the court reporter
24 to share. So --
25 COURT REPORTER: Excuse me, did the audio just play?

Page 508

1 I apologize for the delay. One moment.
 2 MR. LUPION: Madam Court Reporter, I don't need a
 3 visual. I'll just take your -- your read back of -- of what
 4 the question was if that would expedite things.
 5 COURT REPORTER: Can you -- are you hearing it now?
 6 Everyone? Did you hear what? I was just playing back.
 7 Everyone, can you hear me? This is the court reporter.
 8 Everyone. Can you hear me?
 9 MR. LUPION: Can I -- Is anybody waiting on -- on us?
 10 What's --
 11 COURT REPORTER: Can you hear me? Can you hear me?
 12 MR. LUPION: No, no. I think the Court --
 13 HEARING OFFICER KUMA: I hear you. She's trying to -
 14 - she's asking. We couldn't hear, right?
 15 MR. MEIKLEJOHN: I was wondering.
 16 HEARING OFFICER KUMA: Okay. She's reading. Give me
 17 one sec.
 18 COURT REPORTER: Can you hear me now?
 19 HEARING OFFICER KUMA: I'll troubleshoot. Okay. Off
 20 the record.
 21 (Brief Recess at 12:47 p.m./Reconvened at 12:51 p.m.)
 22 HEARING OFFICER KUMA: Okay. We're going back on the
 23 record.
 24 COURT REPORTER: We're back on the record at 12:51
 25 p.m. One moment, please, for the playback. Everyone, I just

Page 509

1 played that back. Did you hear it? Oh, no. Can you not hear
 2 me again?
 3 HEARING OFFICER KUMA: Can't hear the playback. But
 4 since this -- there are closed captions up, I was able to read
 5 it.
 6 COURT REPORTER: Oh.
 7 HEARING OFFICER KUMA: So -- so -- and Court
 8 Reporter, can you hear us?
 9 COURT REPORTER: I can hear --
 10 HEARING OFFICER KUMA: Can you -- yeah.
 11 COURT REPORTER: Can you hear me?
 12 HEARING OFFICER KUMA: Okay. So the Court Reporter
 13 can hear us, but she can't hear -- but we can't hear us.
 14 There's apparently a glitch with the playback. So from the
 15 playback minutes. Adam, you asked for -- can you repeat the
 16 question that was asked?
 17 MR. MEIKLEJOHN: Me? I was the one that asked the
 18 question, I think.
 19 HEARING OFFICER KUMA: No, Adam asked for the -- the
 20 minutes. I wanted to know specifically what was the question
 21 he asked for the playback minutes for the Employer.
 22 MR. LUPION: Yeah. I asked for a read back of the
 23 question that Counsel for the Petitioner had asked.
 24 HEARING OFFICER KUMA: Okay. So the read back since
 25 the -- there's a glitch with the read back. I'll read you what

Page 510

1 was read off the transcript or can the Court Reporter do that?
 2 MR. LUPION: The Court Reporter can't speak with us
 3 at the moment.
 4 MR. MEIKLEJOHN: She said --
 5 HEARING OFFICER KUMA: Okay.
 6 MR. MEIKLEJOHN: So I'm having a glitch with
 7 playback. I can read it back in a few moments if we take a
 8 brief two minute break. I just need a couple of your -- a
 9 couple of moments.
 10 HEARING OFFICER KUMA: Okay. You can see your -- I
 11 don't know who -- I don't know what that last one is. Court
 12 Reporter, we'll go off the record.
 13 (Brief Recess at 12:55 p.m./Reconvened at 12:58 p.m.)
 14 HEARING OFFICER KUMA: On the record.
 15 COURT REPORTER: We are on the record at 12:58 p.m.
 16 and I am reading back the question that was asked by Mr.
 17 Meiklejohn and objected to by Mr. Lupion. READBACK
 18 MR. LUPION: Yeah. And the objection is, it assumes
 19 facts in evidence. It assumes that there were going to be
 20 people assigned to do -- to do that work. So that's -- that's
 21 the basis for my objection.
 22 MR. MEIKLEJOHN: If I may ask, Mr. Hearing Officer,
 23 your -- your objection is to the use of word assigned?
 24 MR. LUPION: As -- assigned and -- and work.
 25 MR. MEIKLEJOHN: Okay.

Page 511

1 HEARING OFFICER KUMA: Objection sustained.
 2 MR. MEIKLEJOHN: That's fine. I can rephrase the
 3 question now that I understand the objection. Now I have to
 4 remember what the context was.
 5 BY MR. MEIKLEJOHN:
 6 Q. We were -- we were looking at this page of this document,
 7 Page 26 of Petitioner's Exhibit 51. And I believe the question
 8 I was attempting to ask is if the grant application -- or to
 9 the extent that the grant application was awarded the funds
 10 from the grant could be used to defray the -- or pay the
 11 compensation to whomever performed the functions defined under
 12 Ms. Ramalingam's name to complete Aim 1. Do you understand
 13 that question?
 14 A. I do. I'm just -- do I answer now or --
 15 Q. Yes. I believe -- yes. I think that was the point of all
 16 of that. Was that get me to ask a question that -- that you
 17 would have to answer.
 18 A. Okay. The funds could be used for anyone to further the
 19 objectives of the proposal. Remember, this is a research
 20 proposal that's talking about the future. So as to how that
 21 research evolves had yet to occur.
 22 Q. I understand, but whomever -- strike that. The funds
 23 could be used to pay the compensation of whomever conducted the
 24 research under the grant; is that correct?
 25 A. So long as they're non-key personnel.

Page 512

1 Q. Which Ms. Ramalingam would be or would have been under
 2 this proposal, correct?
 3 A. Correct.
 4 Q. And I'd like to turn to Page 20 -- numbered Page 28 of the
 5 document. About two thirds, three quarters of the way down it
 6 lists Aim 1, define the regulation of DSB and resection by the
 7 XRN Rad52. And I'm not even going to try to read the rest of
 8 it. But is that the research that you proposed having Ms.
 9 Ramalingam perform?
 10 A. That's the overarching goal. It is like all aims of a
 11 proposal written in a more global sense.
 12 Q. Did -- did someone end up conducting that research?
 13 A. Yes, they did.
 14 Q. And I won't ask you by name, but what classification --
 15 what category was that person?
 16 A. It was a combination of graduate student and myself.
 17 Q. And was the graduate student compensation paid out of the
 18 grant?
 19 A. After -- as we have discussed previously, depending upon
 20 which year they were in and after declaration of the laboratory
 21 following research rotations.
 22 Q. But the person who actually worked with you in completing
 23 Aim 1, was that -- or worked with you on Aim 1, was that person
 24 paid out of the funds from the grant?
 25 A. In this case, yes.

Page 513

1 MR. MEIKLEJOHN: Okay. Move the admission of
 2 Petitioner's Exhibit 51.
 3 MR. LUPION: No objection.
 4 HEARING OFFICER KUMA: Hearing no objection,
 5 Petitioner's Exhibit 51 is received and moved into evidence.
 6 (Petitioner's Exhibit Number 51 admitted.)
 7 BY MR. MEIKLEJOHN:
 8 Q. I don't know whether you can answer this, but I -- and I
 9 might have asked it before. If I did, I apologize. I'm trying
 10 not to be repetitious, but are you familiar with time and
 11 effort reporting under NIH grants?
 12 MR. LUPION: I'm -- I'm going to -- I'm going to
 13 object. Mr. Hearing Officer, these are questions that could
 14 have been asked during his cross-examination. Mr. O'Connell
 15 was called specifically with respect to Petitioner's 51, which
 16 was produced in response to the subpoena. There's nothing
 17 about time and effort reports that are unique to this grant
 18 application. So we would object to this line of questioning.
 19 MR. MEIKLEJOHN: Well, I would respond in several
 20 ways if -- if it's necessary. First, I probably could tie it
 21 into this grant application. Second, the witness was advised
 22 upon completion of his cross-examination that he could return
 23 or could be called back.
 24 MR. LUPION: By the Regional Director.
 25 MR. MEIKLEJOHN: Okay. And third, I can make him my

Page 514

1 witness if that's your request. I can make him a, you know, I
 2 can put him on as part of my case.
 3 HEARING OFFICER KUMA: Go to -- go off the record?
 4 COURT REPORTER: Off the record at 1:06 p.m.
 5 (Brief Recess at 1:06 p.m./Reconvened at 1:07 p.m.)
 6 HEARING OFFICER KUMA: On the record.
 7 COURT REPORTER: On the record at 1:07 p.m.
 8 MR. LUPION: We'll withdraw our objection in light of
 9 the Hearing Officer's ruling that Petitioner's Counsel would be
 10 entitled to recall this witness. The basis of our withdrawal
 11 is to -- for us -- for the parties to expedite this hearing and
 12 bring it -- bring it to a close.
 13 BY MR. MEIKLEJOHN:
 14 Q. Are you familiar with time and effort reporting on NIH
 15 grants?
 16 A. Yes, sir.
 17 Q. Who is required to fill out time and effort or to -- who
 18 is required to submit time and effort reports to the NIH with
 19 respect to funded grants?
 20 A. I think it would be best if you check with the financial
 21 people because we all fill them out, but I don't believe they
 22 go to the NIH.
 23 Q. I -- I'm sorry. Where do they go?
 24 A. They're kept by the school unless they're requested.
 25 Q. Unless they're requested by who?

Page 515

1 A. That's to my knowledge, so that's why I'm saying. You
 2 know, I don't deal with that level of financial management.
 3 Q. Do you complete time and effort reports?
 4 A. Yes.
 5 Q. Do you sign off on time and effort reports for graduate
 6 students?
 7 A. No. I just sign off for myself.
 8 Q. Does someone sign off on time and effort reports for
 9 graduate students working on any grants that you're familiar
 10 with?
 11 MR. LUPION: Objection, assumes facts not in
 12 evidence. It assumes that graduate students complete time and
 13 effort reports, and it assumes graduate students in his lab
 14 prepare time and effort reports.
 15 MR. MEIKLEJOHN: No, I think that was the question.
 16 MR. LUPION: No. The question is, do you sign off on
 17 time and effort reports by the graduate students in your lab
 18 and that --
 19 MR. MEIKLEJOHN: He said no to that one. So I asked
 20 him if somebody else does it.
 21 MR. LUPION: That assume -- that assumes that
 22 graduate students prepare time and effort reports.
 23 HEARING OFFICER KUMA: Objection is sustained.
 24 BY MR. MEIKLEJOHN:
 25 Q. Do you know whether -- okay.

Page 516

1 BY MR. MEIKLEJOHN:
 2 HEARING OFFICER KUMA: I have a petition to narrow
 3 scope of the test -- of the question.
 4 Q. Do you know whether graduate students submit time and
 5 effort reports?
 6 A. I do not know that information directly because it's not a
 7 communication that I'm involved in.
 8 Q. Okay. Well, I don't believe we're limited to information
 9 you have directly. What indirect information do you have?
 10 MR. LUPION: Objection to the characterization. He
 11 can answer the question.
 12 BY MR. MEIKLEJOHN:
 13 Q. Do you know indirectly whether graduate students submit
 14 time and effort reports?
 15 A. I believe they do, but I do not -- I repeat myself. I do
 16 not play a role in that level of financial management.
 17 MR. MEIKLEJOHN: I don't think I have any further
 18 cross. Can I just pause for a minute to see if anybody tells
 19 me I -- I need to consult.
 20 HEARING OFFICER KUMA: Go off the record.
 21 MR. MEIKLEJOHN: I'm just waiting to see if I get any
 22 text messages. No.
 23 COURT REPORTER: Off the record at 1:10 p.m.
 24 (Brief Recess at 1:10 p.m./Reconvened at 1:11 p.m.)
 25 HEARING OFFICER KUMA: On the record.

Page 517

1 COURT REPORTER: On the record at 1:11 p.m.
 2 MR. MEIKLEJOHN: No further questions for the
 3 witness. But before we break, I would like to move the
 4 admission of Petitioner's Exhibit 49. It's documents produced
 5 by the Employer in response to our subpoena. And can you
 6 please remove Ms. Rothgeb from mute?
 7 (Petitioner's Exhibit Number 49 identified.)
 8 MS. ROTHGEB: That there was an email about
 9 authenticity. I don't know if Melissa is with you, Adam, but
 10 it's -- my understanding is there is no objection to the
 11 authenticity. It relates to policies from the grant office
 12 that I think the witness was --
 13 MR. LUPION: 49 is -- oh. No objection.
 14 HEARING OFFICER KUMA: Okay. Hearing No objection to
 15 Petitioner Exhibit 49, Petitioner Exhibit 49 is received and
 16 moved into evidence.
 17 (Petitioner's Exhibit Number 49 admitted.)
 18 MR. LUPION: I will be brief in my questioning. Mr.
 19 Hearing Officer, can I do that before we break?
 20 HEARING OFFICER KUMA: Yes.
 21 REDIRECT EXAMINATION
 22 BY MS. LUPION:
 23 Q. Good afternoon, Dr. O'Connell. At the time of this grant
 24 application, was Ms. Ramalingam a student in your lab?
 25 A. No. She was transitioning from Masters to the PhD

Page 518

1 program, then did rotations, et cetera.
 2 Q. Yeah. Was -- was -- was she ultimately admitted into the
 3 PhD program?
 4 A. She was.
 5 Q. Was her admission to the PhD program conditioned on her
 6 working in your lab?
 7 A. No. No. Students are admitted to a particular lab.
 8 Q. Was her admission conditioned on her working on this
 9 project?
 10 MR. MEIKLEJOHN: I'm going to object. This goes
 11 beyond the scope of direct. Other than the fact that we talked
 12 about Ms. Ramalingam, I didn't ask any questions about her
 13 admissions or the conditions under which she became a PhD
 14 student or any of these matters that we've gone over and over
 15 and over already.
 16 MR. LUPION: I'm -- first of all, I'm not limited to
 17 the scope of your examination. Secondly, there is a connection
 18 between the reasons or the circumstances why she is listed on -
 19 - on the grant and her role as a PhD student. So it is clearly
 20 -- it's clearly relevant. I will draw -- I will --
 21 MR. MEIKLEJOHN: I'll withdraw the objection if
 22 that's where you're going.
 23 BY MS. LUPION:
 24 Q. Yeah. So, Doctor, to repeat, was her admission was her
 25 admission to the PhD program condition on her working on the

Page 519

1 project contemplated by this grant application?
 2 A. On.
 3 Q. Okay. Did she in fact rotate through other labs during
 4 her first year in the PhD program?
 5 A. Yes. Two other labs.
 6 Q. Okay. And she -- could she have chose -- did she
 7 ultimately choose your lab?
 8 A. She did. But she was open to choose any lab she could
 9 join.
 10 Q. And at the time she selected your lab, how did -- was she
 11 -- withdrawn. At the time she elected to join your lab, how
 12 long after -- what was -- when was that in relation to when
 13 this grant application was written?
 14 A. Like I said, this takes several months, so -- so at least
 15 a year.
 16 Q. Okay. At the time that you wrote this grant application,
 17 were you Ms. Ramalingam's academic advisor?
 18 A. No, sir. I recused myself from any role of her
 19 onboarding.
 20 Q. And why is that?
 21 A. Because there was a conflict. I -- if she was a mass --
 22 student of mine, I wrote a letter of recommendation. I left
 23 the room whenever any aspect of her application was discussed.
 24 Q. Was Ms. Ramalingam tied in any way to this grant once she
 25 enrolled in the PhD program?

Page 520

1 MR. MEIKLEJOHN: Objection to the form of the
 2 question. The word tied is vague in this concept -- in
 3 context.
 4 BY MS. LUPION:
 5 Q. Doctor, did you understand the question?
 6 A. Yes. I interpret it to mean obligated or assigned or
 7 something like that.
 8 Q. That -- well, that's how I intended it. With that
 9 understanding in mind, can you answer the question whether Ms.
 10 Ramalingam had any -- was obligated to this grant after she had
 11 enrolled in the PhD program?
 12 A. She was not.
 13 Q. And so if she chose to perform her research in another
 14 lab, would that have jeopardized her funding in any way?
 15 A. No, sir.
 16 Q. If Ms. Ramalingam had decided to perform research in
 17 another lab, what impact, if any, would it have on the terms of
 18 your grant?
 19 A. I would've sought another -- a different graduate student.
 20 Q. And if halfway through her -- the duration of the time in
 21 your lab, she decided she wanted nothing to do with this
 22 project could she switch to another -- to a different project?
 23 MR. MEIKLEJOHN: Objection. Hypothetical question.
 24 And this really is beyond the -- anything that we covered in
 25 the --

Page 521

1 MR. LUPION: It's not a -- it's not a hypothetical.
 2 It's -- it's asking the -- the witness about the academic
 3 freedom that this student had to perform research during her
 4 PhD program. Did she have the ability to do another project?
 5 MR. MEIKLEJOHN: This has been asked and answered
 6 many, many times by many witnesses.
 7 MR. LUPION: Well, I'm asking the witness in
 8 connection with this specific grant proposal.
 9 MR. MEIKLEJOHN: I would still submit that it's
 10 cumulative beyond the scope --
 11 HEARING OFFICER KUMA: Objection overruled.
 12 BY MS. LUPION:
 13 A. Could you restate the question please, Counsel? So I have
 14 the precise wording?
 15 Q. Sure, Doctor, if at -- at some point after she began
 16 researching Aim 1 as reflected in the grant, she decided that
 17 she wanted nothing at all to do with this project and wanted to
 18 pursue something else. Would she have that freedom?
 19 A. Yes.
 20 Q. And would that impact her funding in any way?
 21 A. No.
 22 MR. LUPION: Doctor, can you describe for us the
 23 difference -- you know, withdrawn. I have no further
 24 questions.
 25 MR. MEIKLEJOHN: I have just one follow up question,

Page 522

1 I think.
 2 RE CROSS EXAMINATION
 3 BY MR. MEIKLEJOHN:
 4 Q. Did Ms. Ramalingam conduct any of the research in
 5 furtherance of Aim 1 while she was doing her rotation?
 6 A. She assisted a different person. So a minor contribution.
 7 Q. She made a minor contribution during her rotation?
 8 A. She was loading procedures.
 9 Q. Did she perform some of those procedures as well?
 10 A. In the early stages of the research.
 11 MR. MEIKLEJOHN: Nothing further.
 12 MR. LUPION: One -- one clarification.
 13 REDIRECT EXAMINATION
 14 BY MR. LUPION:
 15 Q. Dr. O'Connell, is what's reflected on Exhibit 51 a
 16 contract for services to be performed?
 17 A. No, sir. It's a research proposal.
 18 MR. LUPION: No further questions.
 19 RE CROSS EXAMINATION
 20 BY MR. MEIKLEJOHN:
 21 Q. It -- would -- is Respondent's -- Employer Exhibit 51 also
 22 referred to as a grant proposal?
 23 A. Yes. I think that's on the face page.
 24 MR. LUPION: You mean Petitioner 51?
 25 MR. MEIKLEJOHN: Oh, I'm sorry, yes. Petitioner.

Page 523

1 51. Yeah, the document we've been talking about, obviously the
 2 witness got it right, but we want it right on the record.
 3 HEARING OFFICER KUMA: So is that the Petitioner's
 4 last follow or do you have additional questions?
 5 MR. MEIKLEJOHN: Me? No, that's it.
 6 HEARING OFFICER KUMA: Okay. Does the Employer have
 7 anything else?
 8 MR. LUPION: No. If we can go off the -- off the
 9 record.
 10 HEARING OFFICER KUMA: We have any additional
 11 questions for this -- for this witness at the current time?
 12 MR. LUPION: No further questions from Respondent.
 13 HEARING OFFICER KUMA: Hearing that there's no
 14 further questions for this witness, the witness is released and
 15 dismissed.
 16 THE WITNESS: Thank you.
 17 HEARING OFFICER KUMA: For the remainder of the day.
 18 Can we go off the record?
 19 COURT REPORTER: We're off the record at 1:21 p.m.
 20 (Whereupon, at 1:21, a luncheon recess was taken.)
 21
 22
 23
 24
 25

Page 524

1 AFTERNOON SESSION
2 (Time Noted: 2:51 p.m.)
3 HEARING OFFICER KUMA: Let's go on the record.
4 COURT REPORTER: On the record at 2:51 p.m.
5 HEARING OFFICER KUMA: Well, --
6 MS. ROTHGEB: Shall I go ahead, Avi?
7 HEARING OFFICER KUMA: Yes, you can go on the record
8 and start with the stipulations.
9 MS. ROTHGEB: Okay. Based on some off the record
10 conversations and communications between Counsel, I believe the
11 -- the parties have agreed to admit a number of Petitioner of
12 Petitioner exhibits that were pre-marked. And I have that list
13 to go through now. Obviously, the Respondent will correct me
14 if I'm wrong, but Petitioner's Exhibit 4, Petitioner's Exhibit
15 5, Petitioner's Exhibit 6, Petitioner's Exhibit 8, Petitioner's
16 Exhibit 9, Petitioner's Exhibit 10, Petitioners Exhibit 15,
17 Petitioner's Exhibit 16, Petitioner's Exhibit 17, Petitioner's
18 Exhibit 17(a) Petitioner's Exhibit 18, Petitioner's Exhibit 19,
19 Petitioner's Exhibit 19(a), 19(b), 19(c), 19(d), 19(e), 19(f),
20 19(g), 19(h). Petitioner's Exhibit 20, Petitioner's Exhibit
21 21, Petitioner's Exhibit 22, Petitioner's Exhibit 23,
22 Petitioner's Exhibit 24.
23 Petitioner's Exhibit 34, Petitioner's Exhibit 35.
24 And all of those records -- there are a few more records, but
25 the -- the numbers that I just -- or the exhibits that I just

Page 525

1 read off all relate to PhD students in -- in the Petition for a
2 Unit. And so we are -- the Petitioner is offering those
3 exhibits.
4 (Petitioner's Exhibit Number 4, 5, 6, 8, 9, 10, 15, 16,
5 17(a), 17(e), 18, 19, 19(a) through (h), 20, 21, 22, 23, 24, 34
6 and 35 identified.)
7 MR. LUPION: No objection.
8 MS. ROTHGEB: In addition, the parties have reached a
9 similar stipulation regarding the admission of Petitioner's
10 Exhibit -- Petitioner's Exhibit 11, Petitioner's Exhibit 13,
11 Petitioner's Exhibit 14, Petitioner's Exhibit 36, Petitioner's
12 Exhibit 37.
13 MR. LUPION: I don't think 36. 36 may be subsumed by
14 49 -- 50, but 36 was not one that you asked us for.
15 MS. ROTHGEB: I'm sorry. I might have -- okay. So
16 let me -- I -- I'll start that series again then. Petitioner's
17 Exhibit 11, Petitioner's Exhibit 13, Petitioner's Exhibit 14,
18 Petitioner's Exhibit 37, Petitioner's Exhibit 47, Petitioner's
19 Exhibit 48, Petitioner's Exhibit 50. That series, I believe,
20 are all either Sinai, grad school, public documents, website
21 pages, and there's no objection to those, I believe
22 (Petitioner's Exhibit Number 11, 13, 14, 37, 47, 48, and
23 50 identified.)
24 MR. LUPION: That is correct.
25 MS. ROTHGEB: 49, I think was already admitted, so --

Page 526

1 MR. LUPION: Oh, okay.
2 MS. ROTHGEB: Petitioner's 49 was already admitted,
3 so I left that off.
4 MR. LUPION: And same with 51.
5 MS. ROTHGEB: 51, was already admitted also. Yes.
6 In addition, Petitioner has moved -- Petitioner requested the
7 same consideration and -- and admission of Petitioner Exhibit
8 45, which is a press release document published on public --
9 publicly available and published on Sinai's website. Press
10 release that I will -- the document obviously speaks for
11 itself, Petitioner 45. And Attorney Lupion was there a
12 response on Petitioner's 45?
13 (Petitioner's Exhibit Number 45 identified.)
14 MS. ROTHGEB: Yeah. We would just like an offer of
15 proof as -- as to -- as to relevance.
16 MS. ROTHGEB: Sure. And I can share it if it would
17 be helpful, Mr. Hearing Officer?
18 HEARING OFFICER KUMA: Yes. Please proceed with
19 offer for proof.
20 MS. ROTHGEB: With respect to Petitioner Exhibit 45
21 where Petitioner is presented, as you'll see, it's a press
22 release published on the Sinai website, similar -- as -- as was
23 Petitioner Exhibit 44, which was testified by another witness.
24 We're not offering the -- the press release for the content of
25 the article, Petitioner 45, but rather Petitioner's 45 on page

Page 527

1 -- starting at what is labeled as Petitioner Exhibit 45-Page 2.
2 And continuing to Page 3, the -- there is a paragraph
3 or several paragraphs, a section of the press release under the
4 heading about the Icahn School of Medicine at Mount Sinai with
5 a description of -- well, again, the -- the document speaks for
6 itself, but we're offering Petitioner 45 for that section under
7 that heading, which goes through the end of Page 3.
8 That -- and our representation, we could certainly
9 provide additional examples, but this language about the Icahn
10 School of Medicine at Mount Sinai and the paragraphs they're
11 under on Page 3 appearing numerous press releases have the same
12 descriptor and -- and set of paragraphs.
13 So that's -- that's the basis for offering Petitioner
14 45. And as -- as I can certainly speak to the relevance of
15 those paragraphs if need be. But it certainly talks about the
16 --
17 MR.LUPION: So, Nicole, if I understand, you're --
18 you're offering this document only with respect to the section
19 about the Icahn School of Medicine at Mount Sinai and the
20 content that follows?
21 MS. ROTHGEB: Correct. Which is the heading the --
22 about the Mount -- Icahn School of Medicine at Mount Sinai is
23 at the very bottom of Page 2. The content of what appears
24 under that title is then the majority of Page 3 down to the
25 dotted line. That's the only portion that we're offering of

Page 528

1 Petitioner Exhibit 45, other than, it appears on press releases
2 as well.
3 MR. LUPION: Just give me one second.
4 MS. ROTHGEB: Understood.
5 MS. ROTHGEB: Oh, Adam's on mute.
6 MR. LUPION: Yeah. No objection.
7 MS. ROTHGEB: So that's Petitioner 45. And I -- with
8 Attorney Lupion, feel free to -- to disagree with me, but I
9 think a brief mention about the Petitioner 47, which was
10 produced in response to the subpoena. In particular -- it --
11 Petitioner 47 --
12 MR. LUPION: Oh, yeah. We would -- yes, stipulate
13 with the condition that it was a document produced by us with
14 personal identifying information redacted.
15 MS. ROTHGEB: And it's a -- would you stipulate that
16 it's a sample of a W2 for a PhD student in the petition for a
17 unit?
18 MR. LUPION: I would stipulate that the document
19 speaks for itself and we --
20 MS. ROTHGEB: But the student is -- there's no
21 identification as to whether it's a student or --
22 MR. LUPION: Oh, yes. Yes. I -- yes. I would -- I
23 would stipulate that the document pertains to a student in the
24 petition for unit.
25 MS. ROTHGEB: And we only introduced one because a --

Page 529

1 a number of samples were produced to us, correct?
2 MR. LUPION: Yes -- yes. We endeavored to produce a
3 representative sample. But I don't have that. I -- I will
4 stipulate that it concerns a student in the petition for unit.
5 MS. ROTHGEB: Thank you. And I think that addresses
6 all of the Petitioner Exhibits we've been discussing off the
7 record. So Petitioner -- with those stipulations and -- and
8 absent objection, Petitioner would move those -- those exhibits
9 described.
10 MR. LUPION: As stated, no objection.
11 HEARING OFFICER KUMA: Since I'm not hearing no
12 objections to the stipulations, those exhibits are moved into
13 evidence and have been received.
14 (Petitioner's Exhibit Number 4, 5, 6, 8, 9, 10, 11, 13,
15 14, 15, 16, 17(a), 17(e), 18, 19, 19(a) through (h), 20, 21,
16 22, 23, 24, 34, 35, 37, 45, 47, 48 and 50 admitted.)
17 MS. ROTHGEB: Thank you.
18 MR. LUPION: Hearing Officer, I think one of our
19 observers is in the waiting room.
20 HEARING OFFICER KUMA: I'm not seeing anybody. Off
21 the record.
22 COURT REPORTER: Off the record at 3:05 p.m.
23 (Brief Recess at 3:05 p.m./Reconvened at 3:09 p.m.)
24 COURT REPORTER: On the record at 3:09 p.m.
25 HEARING OFFICER KUMA: Okay. The witness, Sam?

Page 530

1 MS. ROTHGEB: Yes. Petitioner calls Sam McConnell.
2 Whereupon,
3 SAM MCCONNELL,
4 was called as a witness having been previously duly sworn, was
5 examined and testified as follows:
6 HEARING OFFICER KUMA: Put your hand down and state
7 your full name for the record and spell it.
8 THE WITNESS: My name is Sam McConnell, S-A-M M-C-C-
9 O-N-N-E-L-L.
10 HEARING OFFICER KUMA: Thank you. Will the
11 Petitioner begin?
12 MS. ROTHGEB: Yes.
13 DIRECT EXAMINATION
14 BY MS. ROTHGEB:
15 Q. And as an initial matter, Sam, you spelled your name for
16 the record. Have you been -- have you been, or are you known
17 by any other names?
18 A. Yes. Yeah. A lot of documents in -- I like have legally
19 changed my name with New York State. And so a lot of Sinai's
20 records of me referred to me under the name Samantha.
21 Q. And could you tell us your preferred pronouns and
22 preferred way you'd -- how you'd prefer to be addressed?
23 A. Yeah. You can use he, him pronouns or Mr. Sam.
24 Q. Thank you, Mr. O'Connell -- Mr. McConnell, I'm sorry. We
25 have Dr. O'Connell. Mr. McConnell, could you please tell --

Page 531

1 are -- are you currently enrolled at Mount Sinai?
2 A. Yes, I am.
3 Q. And in what program are you enrolled?
4 A. I'm enrolled in the PhD in neuroscience.
5 Q. And I'm sorry, your area of study is which?
6 A. Neuroscience.
7 Q. And when did you begin at Mount Sinai?
8 A. 2020 -- August of 2020.
9 Q. Was that as a -- as -- in the PhD program?
10 A. Yes.
11 Q. And so how many years of the PhD program have you
12 completed at this point?
13 A. About three.
14 Q. And have you selected a -- an MTA?
15 A. Yes. Yeah. I'm in the neuroscience MTA.
16 Q. And I want to focus your testimony a bit on -- on the
17 first year of your -- the first year of your PhD program. Did
18 you -- in that first year, did you complete one or more lab
19 rotations?
20 A. Yes.
21 Q. How many total lab rotations did you complete during your
22 first year of your PhD program?
23 A. I completed four.
24 Q. And were they of different lengths of different durations
25 or similar?

Page 532

1 A. They were all of similar durations around six to eight
2 weeks.
3 Q. And where was -- in -- in what laboratory was your first
4 rotation?
5 A. My first rotation was with Dr. Scott Russo.
6 MS. ROTHGEB: Ms. Court Reporter, are you having any
7 trouble hearing?
8 COURT REPORTER: I can hear Mr. McConnell. It is
9 slightly softer than other witnesses. And I actually did not -
10 - I was going to clarify at some point the person that he was
11 with on his first rotation
12 THE WITNESS: It's Scott Russo.
13 BY MS. ROTHGEB:
14 Q. Thank you. There's already been some testimony from Dr.
15 Russo about his -- his areas of lab. But could you tell us
16 about your experience and activities during that rotation in
17 Dr. Russo's lab?
18 A. Yes. So in -- in my rotation with Dr. Russo, I was
19 introduced to the lab and shown the kinds of projects that they
20 work on and techniques that they use and given opportunities to
21 work on those projects and get a taste for what being in the
22 lab would be like.
23 Q. Were there any particular projects that you personally
24 participated in?
25 A. I helped a couple of different lab members, I mean, spoke

Page 533

1 to almost everyone, but notably helped a postdoc named Tony and
2 a PhD student named Catherine.
3 Q. And could you tell us what -- what activities or -- or
4 research you participated in with respect to the postdoc you
5 identified as Tony?
6 A. Yeah. So for Tony, he had a project where he was
7 interested in looking at a particular pattern of molecules in
8 brain slices. And so in order to do that, the brains that had
9 already been collected from mice had to be sectioned into thin
10 slices on a vibertome. And I sectioned those slices to assist
11 with that project.
12 Q. And for how long were you involved in -- in that activity?
13 What period of time during your rotation?
14 A. It was over the course of a few days. It took several
15 hours.
16 Q. And did you have an understanding as to the purpose of
17 your being in -- of sectioning those brain tissues?
18 A. Yeah. It was to help like further one of the projects
19 that the postdoc was working on to give him data to work with
20 essentially.
21 Q. Was he working with those section slices when sectioned
22 his tissue once you did that?
23 A. Yes. I like just did this one step of the process, but
24 later they were presumably stained for the marker of interest
25 and like examined under a microscope, and quantified, and

Page 534

1 analyzed somehow.
2 Q. Is that your understanding of what was to be done with the
3 sectioned tissue?
4 A. Yes.
5 Q. And how was it you became involved in that particular
6 activity?
7 A. So that was -- so when I started my rotation in the lab, I
8 had an initial meeting with Dr. Russo. And he kind of handed
9 me off to one of his postdocs, whose name was Jody, as my
10 primary point person for like, sort of organizing my rotation
11 in the lab. And so Jody was the one who introduced me to Tony.
12 Told me a little bit about like Tony's project and
13 Tony was on, like, I have this thing that needs doing -- to be
14 interested in doing it because I -- like, had done a lot of
15 tissue suctioning before, but hadn't specifically worked with a
16 vipertome. So it was good experience for me to like have that
17 and also useful for Tony to like then have the tissue placed.
18 Q. And I think you referred to a vipertome, could -- just for
19 us non-scientist, could you tell us what that is? Of course --
20 A. I mean, it's -- yeah. It's just a machine that is able to
21 slice tissue sample into very thin slices.
22 Q. And I think you also mentioned a -- an activity with a --
23 I'm sorry, did you say another postdoc or some -- Catherine,
24 did you say?
25 A. Yeah. A PhD student.

Page 535

1 Q. What was that activity you were involved in with Catherine
2 and did I get that right, that she was a postdoc?
3 A. She was a PhD student. And for her, she was showing me
4 some of her behavioral experience that she was doing with mice.
5 She was performing like behavioral tests to measure the like
6 dominance hierarchy in different cages of mice. It's called a
7 tube test.
8 So she like showed me how she does it, and then I
9 helped her do it for a few days, and then I independently did
10 it on my own for a couple days as well.
11 Q. And did you have -- what, if any, understanding did you
12 have as to what would be done with the -- did you call it tube
13 testing?
14 A. Yeah. I collected the data and the -- the results of like
15 the testing were useful for her projects and like her research.
16 Q. In your -- could you tell us a bit about your second lab
17 rotation? Who was -- where did you do your second lab
18 rotation?
19 A. Yeah. My second lab rotation was with Dr. Jessica Ables.
20 Q. And could you tell us very -- just generally and briefly
21 the -- the nature of Dr. Ables' lab?
22 A. So the work that I did in Dr. Ables' lab was in relation
23 to a project she had that I was interested in on the role of
24 nitric oxide signaling in the brain and in the development of
25 dependence on opioids.

Page 536

1 MR. LUPION: I'm sorry, I didn't -- I didn't get
 2 that, about the -- you broke up, the nature of the subject.
 3 BY MS. ROTHGEB:
 4 Q. Please, Sam.
 5 A. Oh, I can just say it again. Yeah. I was interested in a
 6 project she had that was on the role of nitric oxide signaling
 7 and the development of opioid dependence.
 8 Q. And I'm sorry, Mr. McConnell, I should have asked you at
 9 the -- at the beginning of your testimony. Do you have any
 10 notes or documents with you that you are referring to at all
 11 during your testimony?
 12 A. No.
 13 Q. And I -- I would just remind you to please make sure to
 14 answer audibly verbally the court reporter can't get nods of
 15 the head or --
 16 A. Yes. Yeah. I'll -- I'll do my best.
 17 Q. Thank you. So in your day-to-day work in Dr. Ables' lab
 18 could you tell us about your activities and experiences in that
 19 lab?
 20 A. Yeah. So in that lab, I -- yeah -- it was a new lab and I
 21 came in with a lot of experience. So I had a lot of -- like
 22 essentially was kind of thrown into this project, like with a
 23 good head start on like what I needed to do.
 24 And so I did a lot of like piloting surgeries and
 25 animals for the project, injecting virus into their brains and

Page 537

1 implanting optic fibers. And then also like processing tissue,
 2 like perfusing the animals to preserve the brain, collecting
 3 the brains, slicing the brains, like mounting them onto slides
 4 to look at them and stain them for various markers of interest.
 5 Those kinds of things.
 6 Q. And what role, if any, did Dr. Ables have in -- in
 7 initiating your involvement in those -- those particular
 8 activities?
 9 A. So she -- well, I -- I sought her out initially because I
 10 was interested in her work. And then when I was like, I'm
 11 interested in your lab, she was like, I have this project that
 12 seems like it would be really good for you and would be like,
 13 great for me to have someone working on for a while. And so
 14 like we sort of planned the rotation around that.
 15 Q. And what, if any, understanding did you have regarding
 16 whether or what would be done with -- with what -- with what
 17 you produced in -- in that work you described?
 18 A. Yeah. The lab would use it to like keep moving the
 19 project forward. So I like kind of was doing some of the like
 20 early phases of testing out like, you know, like what
 21 concentration of the virus produces good expression and like --
 22 like what coordinates, like, hit what part of the brain, like,
 23 are we getting to this like spot in the brain we're interested
 24 in. And so like getting that kind of like initial information
 25 about a project that, like, then, like, is useful to other

Page 538

1 people who continue to work on it later.
 2 Q. And when you say other people who continue to work on it
 3 later, are you in -- are you referring to folks that would --
 4 from Dr. Ables' lab?
 5 A. Yeah.
 6 Q. With respect to your third lab rotation, what -- in what
 7 laboratory did you do your third rotation?
 8 A. My third rotation was with Dr. Peter Rudebeck.
 9 Q. And generally speaking, could you tell us a bit about the
 10 general subject matter of Dr. Rudebeck's lab?
 11 A. Yeah. He does lot of research on decision making and non-
 12 human primates.
 13 Q. And could you describe for us please your -- your per --
 14 your involvement personally when -- what were you involved in
 15 in that lab rotation in Dr. Rudebeck's lab?
 16 A. In that rotation, I primarily did analysis of existing
 17 data. It was a little different from my previous ones because
 18 there -- it's difficult to get someone approved to work with
 19 non-human primates, monkeys. And so I largely did analysis of
 20 data other people had collected.
 21 Q. And what did you do to analyze that data, or what did you
 22 do to that data?
 23 A. I performed an analysis of existing behavioral data that
 24 had been previously collected and to test some hypotheses of
 25 like what kinds of models would fit best their pattern of

Page 539

1 learning behavior.
 2 Q. And during that rotation on a -- how was it -- how were
 3 you notified sort of on a day -- day-to-day basis what you
 4 would be -- what activities -- research activities you'd be
 5 involved in, if any?
 6 A. So for that rotation, I had weekly meetings with Peter,
 7 where he would assign me tasks for the week to complete, and
 8 then I would report back on how they had gone. In the interim,
 9 I could reach out for help if I needed it. But largely, it
 10 worked on the basis of him being like, okay, do these things
 11 for the next week. And then we would meet, see how they went,
 12 and he would give me a new set of things to do for the next
 13 week.
 14 Q. And with respect to the data analysis that you described
 15 having conducted in that lab, what if any, understanding do you
 16 have regarding what would be done with that data?
 17 A. Yes. So I --
 18 MR. LUPION: I'm going to -- I'm going to object that
 19 lacks foundation.
 20 MS. ROTHGEB: How -- how does it lack -- he -- he
 21 testified that he --
 22 MR. LUPION: Oh, was his understanding -- what -- did
 23 he have -- did he have an understanding of what?
 24 MS. ROTHGEB: I said, what, if any, understanding did
 25 he have, I think, but I -- I -- I can rephrase the question if

Page 540

1 you prefer.
 2 BY MS. ROTHGEB:
 3 Q. Did you have any understanding, Mr. McConnell, as to what,
 4 if anything, would be done with that data analysis that you
 5 described having been a part of?
 6 A. Yes.
 7 Q. And what was your understanding?
 8 A. My understanding was that like essentially Peter had a
 9 question where he was like, I have this hypothesis about the
 10 data. Is it true? Let's do this for us to find out. And like
 11 throughout the course of my rotation, I did the analysis.
 12 We found that it like wasn't, as he suspected, like
 13 wasn't a publishable finding, but that's like still useful
 14 information for him to have so that he knows not to like pursue
 15 that avenue of research further.
 16 Q. And Mr. McConnell, could you -- where in -- where -- in
 17 what lab did you do your fourth rotation?
 18 A. My fourth rotation was in Dr. Erin Rich's lab.
 19 Q. I'm sorry, what was that name?
 20 A. Erin Rich.
 21 Q. And generally, again, for us non-scientists, briefly, what
 22 is it -- could you tell us the general nature of Dr. Rich's
 23 lab?
 24 A. Her lab also looks, like, broadly the topic of research is
 25 decision making and non-human primates.

Page 541

1 Q. Again, is that monkeys?
 2 A. Yes. Yeah.
 3 Q. And could you describe what involvement you personally had
 4 in the activities of the lab during your -- your rotation in
 5 Dr. Rich's lab?
 6 A. During my rotation in her lab, I, again performed analysis
 7 of existing data this time and sort of behavioral data, it was
 8 of neural dataset.
 9 Q. And on a -- again, on a daily basis during that rotation,
 10 how or what in direction were you given as to what your
 11 activities should be in that lab?
 12 A. It was very similar to my rotation in the Rudebeck lab and
 13 that we had weekly meetings where she would give me a set of
 14 analyses to work on for that week, and then we would -- I would
 15 work on them and then we would meet back and like decide where
 16 to go for the next week.
 17 Q. And did you have any understanding during your fourth
 18 rotation as to whether your analysis of the neural data that
 19 you were doing what would be done with that data?
 20 A. Yeah. That is also one where it was a situation where
 21 Erin had some kind of hypothesis about the data was like, let's
 22 do this analysis to see if it, like, works out. This one was
 23 like a little bit more ambiguous and might be worth following
 24 up on. But it's still like useful information to have in
 25 relation to like the general idea and like -- like determining,

Page 542

1 like, productive avenues of research.
 2 Q. And you -- did you declare a lab to work in after your
 3 rotations?
 4 A. After I finished my fourth rotation, I decided to join
 5 Erin Rich's lab.
 6 Q. And was the data analysis that you worked on when you were
 7 in your rotation used in additional research as you -- well,
 8 strike that. You declared for Dr. Rich's lab. Did you begin -
 9 - begin conducting research there after the rotation?
 10 A. Yes. Yeah.
 11 Q. And did the analysis of the data that you had performed
 12 during your rotation, was that data utilized?
 13 A. No. My thesis work is on a different project.
 14 Q. Was the data that you used -- I'm sorry, was the data
 15 analysis that you had done during your rotation used in any way
 16 by the lab after your rotation?
 17 A. It's still something we like have around in the way I said
 18 before where it's like information we have about like possible
 19 directions to take research. Yeah.
 20 Q. Mr. McConnell, there's -- want to ask you very quickly
 21 about some documents that are already in the -- the record.
 22 Mr. McConnell, I'm showing you first a document that's in -- in
 23 evidence as Petitioner's Exhibit 19. And that -- that's a
 24 record pertaining to you, correct?
 25 A. Yes.

Page 543

1 Q. And there's already been some testimony about a similar
 2 document. So I just want to ask you one question about this.
 3 In the section of the document, under employment history, there
 4 are some entries and -- and start dates. Do you see that,
 5 spanning from Page 1 to 2?
 6 A. Yes.
 7 Q. And what, if -- and you see -- I want to ask you about the
 8 -- the initial start date, 8/1/2020. What, if any, relation
 9 does that date have to your entry into the grad school program?
 10 A. August of 2020 was when I started the PhD program at Mount
 11 Sinai.
 12 Q. And turning to petition -- document that's been entered
 13 into evidence as Petitioner Exhibit 19(g) as in girl. Is this
 14 also a record that pertains to you, Mr. McConnell?
 15 A. Yes, it's.
 16 Q. And can you tell me what -- generally what this document
 17 is?
 18 A. This is a paystub.
 19 Q. And did you obtain this document -- a copy of this
 20 document yourself?
 21 A. Yes.
 22 Q. Is this document available on Sinai cloud to you?
 23 A. Yes -- yes.
 24 Q. And asking you specifically about 19(g) can you identify
 25 from this document what period of time it is a payroll record

Page 544

1 of -- for?

2 A. It says that it is for the pay period beginning August

3 16th, 2020, and ending August 29th, 2020.

4 Q. So is this your very first payment from the graduate

5 school?

6 A. I believe it is, yes.

7 Q. And highlighting the under the -- earnings, does this

8 reflect that that's the first payment you received that year --

9 year to date?

10 A. Yes -- yes.

11 Q. And as of this period of time that's reflected in the pay

12 period ending 8/29/20, had you started in your rotations that

13 you described?

14 A. I don't recall exactly. I may have started my rotation

15 but I -- I don't remember the exact date that I started in

16 Scott Russo's lab.

17 Q. Showing you what's been entered into evidence as

18 Petitioner's Exhibit 19(a) as in apple. Do you recognize this

19 document as a similar pay -- another paystub?

20 A. Yes.

21 Q. Or pay record, you may have said? I apologize. And what

22 period of time is this for?

23 A. This is for March 13th, 2022 to March 26th, 2022.

24 Q. And first I -- I want to know -- do you know what -- under

25 the deductions there's a line here, FIT withheld. Do you see

Page 545

1 that?

2 A. Yes.

3 Q. Do you have an understanding as to what that -- what that

4 reflects?

5 A. Federal taxes.

6 Q. And I apologize for doing those folks, but let me switch

7 back to 19(g) for a moment. There is no federal income tax

8 withheld on 19(g). Do you see that?

9 A. Yes.

10 Q. Do you know why that is?

11 A. I had to log in, I believe it was to Sinai cloud at some

12 point when I first started to indicate that federal taxes

13 should be withheld. And so I think I hadn't yet done that by

14 the time the first paycheck came out. So that's why it's not

15 on the earlier paystub

16 Q. And back to Petitioner 19(a) as in apple. Under the

17 earnings section here the line that says regular salary, during

18 this period -- the period of time reflected in this payroll,

19 were you still on lab rotations?

20 A. No, I was not.

21 Q. What is your understanding of what the regular salary line

22 payment was for?

23 A. That is like -- the -- the regular salary -- salary is the

24 money I'm paid to like do research and via, like, PhD student

25 and -- at Mount Sinai.

Page 546

1 Q. And calling your attention to the next line under the

2 earnings domestic stipend and a \$1,200 payment. Do you see

3 that?

4 A. Yes.

5 Q. Do you know what that -- that payment is -- was for?

6 A. Yes. This was my pay for serving as a teaching assistant.

7 Q. When did you serve as a teaching assistant?

8 A. I was a teaching assistant in the fall of 2021.

9 Q. And were you a teaching assistant for a course in --

10 that's offered within the grad school?

11 A. Yes. It was for one of the core courses for the

12 neuroscience curriculum.

13 Q. When did that course -- your -- the -- the section of it

14 that you TAD for, when did that course finish?

15 A. I don't remember the exact date. I do know that it covers

16 roughly a quarter of the academic year, and it's the first one

17 offered, so it starts in August and then would go until, I

18 don't know, October, November-ish. I -- I don't remember

19 exactly, but around that time.

20 Q. And so was the -- the course that you TAD fit -- the

21 course that you TAD for -- finished by some time in the -- at -

22 - by the end of 2021?

23 A. Yes.

24 Q. Was this the first time you were paid for that TAD

25 position in -- in March of 2022 or April, 2022?

Page 547

1 A. Yes.

2 Q. I could have just a moment. I believe I'm done with Mr.

3 McConnell's direct.

4 HEARING OFFICER KUMA: Off the record?

5 MS. ROTHGEB: Sure. Please.

6 COURT REPORTER: Off the Record, at 3:43 p.m.

7 (Brief Recess at 3:43 p.m./Reconvened at 3:45 p.m.)

8 COURT REPORTER: We are on the record at 3:45 p.m.

9 MS. ROTHGEB: Petitioner has no further questions for

10 Mr. McConnell at this time.

11 HEARING OFFICER KUMA: Does the Employer have cross

12 examination questions?

13 MR. LUPION: Yes, we do. I'm ready -- I'm ready to

14 proceed.

15 CROSS EXAMINATION

16 BY MR. LUPION:

17 Q. Good afternoon, Mr. McConnell. My name is Adam Lupion. I

18 am one of the lawyers for the Icahn School of Medicine at Mount

19 Sinai in this case. And I -- I'm going to be asking you a few

20 questions this afternoon. Just wanted to go over a couple of

21 basic ground rules to make this go as smoothly as possible.

22 The first is let's do our best not to talk over one another so

23 the court reporter can get an accurate transcription.

24 If you let me finish my question before you begin

25 your answer. And I will do my best to refrain from

Page 548

1 interrupting any of your -- any of your answers. The second
 2 thing that I would ask is if there's a question that is unclear
 3 that you ask me to rephrase it.
 4 If you answer a question that I asked the reader of
 5 the record will assume that you understood the question. But -
 6 - and if you don't understand the question, I -- I'll do my
 7 best to rephrase in a manner such that you do understand it.
 8 Is there -- are those conditions acceptable to you?
 9 A. Yes.
 10 Q. Mr. McConnell, you testified that you participated in four
 11 different lab rotations?
 12 A. Yes.
 13 Q. And were all four rotations in the neuroscience MTA?
 14 A. Yes.
 15 Q. And neuroscience is something that you were interested in
 16 entering the -- prior to your entrance into the PhD program,
 17 right?
 18 A. Yes.
 19 Q. In fact, you had a -- did you major in neuroscience as an
 20 undergraduate?
 21 A. No. I majored in biological chemistry
 22 Q. With -- with a minor in -- in neuroscience?
 23 A. I had a concentration, not -- my college didn't have
 24 minors, but it's similar.
 25 Q. Okay. So it's -- it's fair to say that all four of -- you

Page 549

1 chose all four of these lab rotations, correct?
 2 A. Yes.
 3 Q. And you did so because the subject matter of the research
 4 in the lab was something that you were interested in, right?
 5 A. Yes.
 6 Q. You'd agree with me that one of the purposes of a lab
 7 rotation is to familiarize yourself with the research of the
 8 lab in order to see if that would be a lab in which you would
 9 perform your thesis research, right?
 10 A. Yes.
 11 Q. And another purpose is to -- is to determine whether or
 12 not there's a -- a good rapport with other constituents in the
 13 laboratory, right?
 14 A. Yes.
 15 Q. Okay. And based on your description of the tasks
 16 performed in -- during each of your lab rotations, you'd agree
 17 with me, right? That you got -- that you were provided with
 18 experiences that gave you an understanding of the types of
 19 research performed in each of those labs, right?
 20 A. Yes.
 21 Q. Okay. And that allowed you to make an informed decision
 22 about where you would like to pursue your thesis research,
 23 right?
 24 A. Yes.
 25 Q. Okay. And it's true that you received a grade from --

Page 550

1 during each of these lab rotations?
 2 A. I received feedback. I don't recall receiving a letter
 3 grade, but I did receive feedback.
 4 Q. Do you recall receiving a grade of pass, fail for the lab
 5 rotation?
 6 A. I believe I did, yes.
 7 Q. And that grade was based on your performance during the
 8 lab rotation, right?
 9 A. Yes.
 10 Q. And you also testified that you received training either
 11 from the PIs or postdocs or other PhD students during these lab
 12 rotations, right?
 13 A. Yes.
 14 Q. And I believe you testified at -- at least with respect to
 15 the first two rotations in Dr. Russo's lab and Dr. Ables' lab
 16 that you were involved in the conduct of experiments?
 17 A. Yes.
 18 Q. Okay. And you didn't have to pay anything for the cost of
 19 doing those experiments, right?
 20 A. No.
 21 Q. Okay. And you -- you received your stipend for the
 22 duration of your first year during -- during these lab
 23 rotations?
 24 A. Yes.
 25 Q. Okay. And it's true that your stipend was not dependent

Page 551

1 on your performance of any specific task during any of the lab
 2 rotations, right?
 3 MS. ROTHGEB: I'm going to object just to the extent
 4 I think stipend is counsel's word. I don't think the witness
 5 used that word.
 6 BY MR. LUPION:
 7 Q. Do you know what a stipend is?
 8 A. I assume it's referring to the money I received in
 9 compensation for the work I do as a graduate student.
 10 Q. Okay. And you're -- you're aware that you received a -- a
 11 biweekly amount, I believe Counselor -- Counsel served you pay
 12 records?
 13 A. Yeah. Like biweekly salary.
 14 Q. Have you heard the -- the -- the term stipend before, Mr.
 15 McConnell?
 16 A. Yes.
 17 MS. ROTHGEB: I'm sorry. Objection, ever.
 18 BY MR. LUPION:
 19 Q. In -- in connection with your enrollment in the PhD
 20 program?
 21 A. Yes.
 22 Q. So you're familiar with the meaning of the word stipend,
 23 right?
 24 A. Yes.
 25 MS. ROTHGEB: I'm going to object to the --

Page 552

1 MR. LUPION: He -- he said -- he said, yes. I mean,
 2 Counsel, it was you --
 3 MS. ROTHGEB: He -- I'm going to object that it was
 4 asked and answered. You asked him about his understanding of
 5 stipend, and he answered you.
 6 HEARING OFFICER KUMA: Objection sustained.
 7 BY MR. LUPION:
 8 Q. You continued to receive that -- those payments during the
 9 duration of your first year, right?
 10 A. Yes.
 11 Q. Okay. And my question, Mr. McConnell, is -- isn't it true
 12 that those payments were not conditioned on the performance of
 13 any specific tasks you were asked to carry out during your lab
 14 rotation, right?
 15 A. Any specific task, no.
 16 Q. And it's true that during the rotations, the source of
 17 funds used to make payments to you came from the graduate
 18 school, right?
 19 A. I believe so.
 20 Q. Okay. As -- as opposed to the PIs of those specific labs,
 21 right?
 22 A. Yes.
 23 Q. I want to call your attention to paragraph -- excuse me --
 24 Petitioner Exhibit 19. We could -- and specifically the third
 25 page. Could we scroll down to the bottom? Mr. McConnell, do I

Page 553

1 understand correctly that this is a document you printed off of
 2 the Sinai cloud system?
 3 A. I did not print it, no.
 4 Q. Well, did you -- were you responsible for obtaining this
 5 document?
 6 A. Yes.
 7 Q. And -- and sending it to Counsel in PDF form or some other
 8 -- or some other form?
 9 A. Yes.
 10 Q. Do you have an -- withdrawn. Sinai cloud is a -- is a
 11 data-based system that's made available to the entire Mount
 12 Sinai community, correct?
 13 MS. ROTHGEB: Objection, speculation.
 14 MR. LUPION: The witness can either answer if he
 15 knows or doesn't know. It doesn't call for speculation.
 16 MS. ROTHGEB: I -- I think it does call for
 17 speculation.
 18 HEARING OFFICER KUMA: Overruled. Witness to answer
 19 the question.
 20 BY MR. LUPION:
 21 A. I can't say whether everyone in the Mount Sinai system has
 22 access to this. That's not something I can verify. I only
 23 know that I am -- the people I know have access to it, but
 24 people I know that, like are also employed by Mount Sinai.
 25 Q. And are you referring to other PhD students in biomedical

Page 554

1 science and neuroscience?
 2 A. Yes.
 3 Q. Okay. Mr. McConnell, I'll just call your attention to the
 4 bottom of -- of the page where you testified that August 1,
 5 2020 corresponded to the date of your enrollment in the -- in
 6 the PhD program, right?
 7 A. Yes.
 8 Q. Do you know what it means when it says add non-worker?
 9 A. No.
 10 Q. So you have no understanding one way or the other why this
 11 document was referring to you as a non-worker?
 12 A. I mean, as of August 1st, I wasn't -- I mean, I -- for the
 13 first two weeks of August, I wasn't doing anything like for my
 14 PhD program at all. I was like in a quarantine apartment
 15 because I moved during the pandemic. So, I mean, I don't -- I
 16 don't know the inner workings of the system, but -- I don't
 17 know, maybe it could be something about the fact that I, like,
 18 you know, like wasn't actually doing things until later.
 19 Q. But you were getting paid, right?
 20 A. Not for the -- I -- I think I -- my first paycheck was
 21 like later in August.
 22 Q. You also testified that you served as a TA?
 23 A. Yes.
 24 Q. Okay. And that was you volunteered to serve as a TA, is
 25 that right?

Page 555

1 A. Yes.
 2 Q. Okay. And none of the -- we -- we've already covered a
 3 stipend. You also received a student health insurance?
 4 A. I do receive the student health insurance, yes.
 5 Q. And -- and access to affordable housing or -- with --
 6 withdrawn. Access to Mount Sinai's subsidized housing?
 7 A. Yes.
 8 Q. Okay. And none of those benefits were conditioned on you
 9 serving as a teaching assistant, correct?
 10 A. Correct.
 11 MR. LUPION: If I can go have five minutes in a
 12 breakout room, I'll see if I have any further questions.
 13 HEARING OFFICER KUMA: Yes. Off the record.
 14 COURT REPORTER: Off the record. At 3:58 p.m.
 15 (Brief Recess at 3:58 p.m./Reconvened at 4:13 p.m.)
 16 COURT REPORTER: On the record at 4:13 p.m.
 17 HEARING OFFICER KUMA: Any more questions for the
 18 witness?
 19 MR. LUPION: We have no further questions at this
 20 time.
 21 MS. ROTHGEB: Petitioner has no redirect for -- for
 22 Mr. McConnell.
 23 HEARING OFFICER KUMA: Okay. I think there is no
 24 further questions for Mr. McConnell. McConnell, you're
 25 released and dismissed. Now, if the Regional Director needs to

1 call you for any further additional testimony, the Regional
2 Director will let the Petitioner know, and at which point
3 you'll be given advanced notice to be called back but from now
4 on you're released.

5 MS. ROTHGEB: Thank you, Sam.

6 HEARING OFFICER KUMA: Off the record.

7 COURT REPORTER: Off the record, at 4:15 p.m.

8 (Brief Recess at 4:15 p.m./Reconvened at 4:29 p.m.) .

9 COURT REPORTER: On the record at 4:29 p.m.

10 HEARING OFFICER KUMA: Okay. Does the Petitioner
11 have anything else?

12 MR. MEIKLEJOHN: Petitioner rests.

13 HEARING OFFICER KUMA: Okay. Hearing Petitioner
14 rests, we are adjourning for the day and we'll commence
15 tomorrow at 11:00 a.m. to continue with the hearing.

16
17 (Whereupon, at 4:29 p.m. the hearing in the above-entitled
18 matter was recessed to reconvene on July 13, 2023 at 11:00
19 a.m.)
20
21
22
23
24
25

1
2 **CERTIFICATION**
3 This is to certify that the attached proceedings before
4 the National Labor Relations Board, Region 2, in the matter of
5 Icahn School of Medicine at Mount Sinai and International
6 Union, United Automobile, Aerospace, and Agricultural
7 Implement Workers of America, Case No. 02-RC-319437, at New
8 York, New York, on July 12, 2023, was held according to the
9 record, and that this is the original, complete, and true and
10 accurate transcript that has been compared to the recording
11 from the hearing, that the exhibits are complete, and no
12 exhibits received in evidence or in the rejected file are
13 missing.
14
15
16
17

18 _____
19 Jill E. Cifelli, CER
20
21
22
23
24
25

	460:3;462:17; 464:23;476:19;481:8; 512:22;532:9;554:18	517:23;547:17,20	495:22	approved (2) 500:21;538:18
\$		again (11) 461:15;474:20; 488:9;509:2;525:16; 527:5;536:5;540:21; 541:1,6,9	ambiguous (1) 541:23	Approves (1) 483:6
\$1,200 (1) 546:2	Adam (6) 469:6;470:3;509:15, 19;517:9;547:17	against (1) 453:9	AMERICA (1) 436:10	approximately (1) 505:9
\$1,206.17 (1) 455:18	Adam's (2) 492:24;528:5	agent (1) 454:5	Among (2) 506:2,10	April (2) 484:25;546:25
\$20,252.4 (1) 473:13	add (1) 554:8	ago (2) 479:18;487:18	amongst (1) 462:20	area (4) 450:14;482:3; 506:19;531:5
\$250,000 (3) 501:9;502:4,8	addition (4) 448:11;453:17; 525:8;526:6	agree (9) 451:18;470:20; 471:14;472:4;489:19; 492:7;501:7;549:6,16	amount (7) 456:1;473:3,4,12,14; 500:9;551:11	areas (2) 452:17;532:15
A	additional (6) 496:4;523:4,10; 527:9;542:7;556:1	agreed (2) 494:2;524:11	analyses (1) 541:14	argument (1) 446:22
abilities (1) 504:25	address (6) 447:1;457:22,24; 458:4,6;469:6	agreement (1) 494:10	analysis (13) 452:16;538:16,19, 23;539:14;540:4,11; 541:6,18,22;542:6,11, 15	around (7) 484:20;492:25; 496:20;532:1;537:14; 542:17;546:19
ability (1) 521:4	addressed (1) 530:22	AGRICULTURAL (1) 436:9	analyze (3) 448:12,23;538:21	article (17) 446:13,17;447:2,18, 19,25;448:7,14;462:11, 15;463:3,4,11;475:24; 476:2,25;526:25
able (9) 483:1,3;484:14; 494:13;505:10,16,16; 509:4;534:20	addresses (1) 529:5	ahead (2) 447:13;524:6	analyzed (2) 452:9;534:1	articles (3) 461:19;462:8,22
Ables (2) 535:19;537:6	adjourning (1) 556:14	aim (7) 500:23;511:12; 512:6,23,23;521:16; 522:5	animals (2) 536:25;537:2	aspect (1) 519:23
Ables' (5) 535:21,22;536:17; 538:4;550:15	administration (1) 484:23	aims (2) 463:11;512:10	answered (3) 521:5;552:4,5	aspects (1) 504:10
above-entitled (2) 436:13;556:17	admission (12) 449:19;451:10; 466:3;495:3;513:1; 517:4;518:5,8,24,25; 525:9;526:7	Albuquerque (15) 476:4;478:12;479:5; 481:9;482:18;483:9; 485:3;487:24;491:14; 492:3,21;493:7,22; 495:24,25	antibiotic (4) 452:15;453:10,19,19	assign (2) 463:25;539:7
absent (1) 529:8	admissions (1) 518:13	Albuquerque's (1) 480:25	apartment (1) 554:14	assigned (6) 472:8;507:2;510:20, 23,24;520:6
academic (5) 456:2;482:19; 519:17;521:2;546:16	admit (1) 524:11	Alburquerque (15) 442:9,10,13,20,21, 25;445:5;446:15; 458:18;462:7;466:25; 470:3,16;472:21; 474:16	apologies (1) 492:23	assist (1) 533:10
accept (1) 495:9	admitted (17) 449:5;450:4;452:5; 458:11;460:19;464:14; 466:13;480:15;495:16; 513:6;517:17;518:2,7; 525:25;526:2,5;529:16	A-L-B-U-R-Q-U-E-R-Q-U-E (1) 442:21	apologize (6) 467:2;477:8;508:1; 513:9;544:21;545:6	Assistant (6) 459:4;546:6,7,8,9; 555:9
acceptable (1) 548:8	ads (1) 452:7	allow (1) 446:3	apparently (1) 509:14	assisted (1) 522:6
accepted (1) 482:23	advance (1) 496:17	allowed (1) 549:21	appear (3) 448:15;457:5;459:15	associated (2) 452:14;492:4
accepts (1) 492:2	advanced (1) 556:3	almost (2) 444:9;533:1	appearance (2) 489:20;490:4	assume (3) 515:21;548:5;551:8
access (6) 458:23;463:16; 553:22,23;555:5,6	advised (1) 513:21	along (1) 479:20	appeared (1) 459:16	Assumes (12) 461:3;464:19; 505:12;506:3;507:7,8; 510:18,19;515:11,12, 13,21
according (1) 472:16	advisor (3) 486:4,15;519:17	alternative (1) 500:24	appearing (1) 527:11	assumption (1) 470:12
account (1) 490:20	advisors (2) 486:14,19	Although (2) 467:11,13	appears (9) 448:3;451:14; 459:13;462:7,9,10; 503:4;527:23;528:1	attachment (1) 479:21
accurate (1) 547:23	AEROSPACE (1) 436:9	always (3) 478:1,4,4	apple (2) 544:18;545:16	attempt (2) 468:23;492:13
acting (1) 497:6	affect (2) 453:25;454:1	am/Reconvened (6) 466:20;469:21; 480:7;492:16;493:11;	application (9) 511:8,9;513:18,21; 517:24;519:1,13,16,23	attempting (1) 511:8
activities (8) 532:16;533:3; 536:18;537:8;539:4,4; 541:4,11	affecting (1) 489:7		applied (1) 502:16	attention (6) 458:14;462:11; 475:20;546:1;552:23; 554:3
activity (4) 533:12;534:6,22; 535:1	affordable (1) 555:5		apply (2) 500:11;503:20	
actual (1) 482:17	afternoon (3)		appreciate (1) 501:6	
actually (8)			approaches (1) 500:24	

<p>Attorney (2) 526:11;528:8</p> <p>audibly (1) 536:14</p> <p>audio (1) 507:25</p> <p>August (10) 443:18;531:8; 543:10;544:2,3; 546:17;554:4,12,13,21</p> <p>authenticity (4) 468:3,7,517:9,11</p> <p>author (21) 446:10,17,19;447:9, 18,19;448:15,16; 461:16,18;462:8,16; 467:22;477:12,16,23; 478:2,2;482:5,5,16</p> <p>authorizing (1) 507:23</p> <p>authors (3) 448:4;477:17,24</p> <p>authorship (1) 482:15</p> <p>AUTOMOBILE (1) 436:8</p> <p>available (9) 465:8,10;486:25; 491:17;492:4;500:5; 526:9;543:22;553:11</p> <p>avenue (1) 540:15</p> <p>avenues (1) 542:1</p> <p>AVI (4) 436:14;458:12; 507:23;524:6</p> <p>awarded (4) 500:8;504:24;505:1; 511:9</p> <p>awards (7) 481:10,13,14,16,24; 482:1;491:8</p> <p>aware (3) 490:23;491:4;551:10</p> <p>away (1) 451:11</p>	<p>bacteremia (1) 463:6</p> <p>bacteria (16) 450:23,25;452:10, 14;453:6,11,15,16; 463:5,8,18,23;464:4; 471:21,22;472:1</p> <p>bacterial (3) 452:10,19;453:9</p> <p>Bakel (13) 450:21,22;451:9; 453:2;461:19;464:17; 465:1;483:11,23; 484:19;485:12;487:20; 491:18</p> <p>Bakel's (12) 450:23;451:9,21; 452:8,18;453:5;462:2, 25;465:22;466:6; 471:11;475:9</p> <p>ballpark (1) 480:12</p> <p>based (7) 447:9;461:20; 463:18;504:13;524:9; 549:15;550:7</p> <p>Basic (4) 503:25;504:9,14; 547:21</p> <p>basically (6) 463:17,18;483:24, 24;488:19;500:25</p> <p>basis (13) 445:16;446:4,5; 453:15;455:6;507:5,5; 510:21;514:10;527:13; 539:3,10;541:9</p> <p>bear (1) 461:13</p> <p>became (2) 518:13;534:5</p> <p>began (2) 453:5;521:15</p> <p>begin (5) 530:11;531:7;542:8, 9;547:24</p> <p>beginning (4) 478:1,10;536:9; 544:2</p> <p>begins (1) 462:12</p> <p>behavior (1) 539:1</p> <p>behavioral (4) 535:4,5;538:23; 541:7</p> <p>belong (1) 463:20</p> <p>below (2) 458:4,5</p> <p>benefits (1) 555:8</p> <p>Benjamin (1)</p>	<p>450:7</p> <p>best (7) 502:14;514:20; 536:16;538:25;547:22, 25;548:7</p> <p>better (1) 500:16</p> <p>beyond (3) 518:11;520:24; 521:10</p> <p>biography (5) 479:8;481:1,22,24; 491:7</p> <p>Biological (2) 444:1;548:21</p> <p>Biomedical (4) 443:11,15;503:22; 553:25</p> <p>bit (10) 455:23,23;467:8; 468:14,20;531:16; 534:12;535:16;538:9; 541:23</p> <p>biweekly (5) 452:24;454:17,18; 551:11,13</p> <p>blacked (2) 459:7,10</p> <p>blank (3) 455:11;482:3,13</p> <p>blanked (1) 455:2</p> <p>blocked (1) 458:4</p> <p>blood (4) 463:5,10,14;464:4</p> <p>BMC (1) 462:17</p> <p>BOARD (2) 436:2,15</p> <p>both (2) 470:23;484:12</p> <p>bottom (14) 448:16;457:4;458:1, 2;460:1,3;462:12; 469:7;502:21,22; 503:4;527:23;552:25; 554:4</p> <p>box (1) 502:6</p> <p>brain (6) 533:8,17;535:24; 537:2,22,23</p> <p>brains (4) 533:8;536:25;537:3, 3</p> <p>break (4) 492:12;510:8;517:3, 19</p> <p>breakout (4) 469:18;492:13; 497:12;555:12</p> <p>Bremy (4)</p>	<p>442:8,13,20;493:7</p> <p>B-R-E-M-Y (1) 442:20</p> <p>Brief (20) 466:20;469:21; 470:6;480:7;492:12, 16;493:11;495:22; 497:3;508:21;510:8, 13;514:5;516:24; 517:18;528:9;529:23; 547:7;555:15;556:8</p> <p>briefly (2) 535:20;540:21</p> <p>bring (6) 483:8;486:20; 490:14;491:13;514:12, 12</p> <p>broadcast (3) 490:7,12,13</p> <p>broadly (3) 450:13;471:25; 540:24</p> <p>broke (1) 536:2</p> <p>brought (1) 491:5</p> <p>budget (5) 498:22,24,25;501:8, 9</p> <p>bug (1) 454:7</p> <p>bugs (2) 463:13,14</p> <p>Building (1) 436:16</p> <p>business (2) 459:4,18</p>	<p>436:13;497:18; 500:22;536:21;545:14; 552:17</p> <p>can (89) 442:10,17;447:24; 451:18;452:11;453:12, 18;461:24;463:18,20, 25;465:8,9,11;466:14, 16;467:6,13;469:2,16; 473:7;476:4,10; 479:22,23;480:4; 481:8;483:8,8,8; 486:20;490:14;491:13, 13;492:12,12,13; 493:6;495:10,19; 496:20;498:7;499:9; 506:9;507:9,13;508:5, 7,8,9,11,11,18;509:1,8, 9,10,11,13,15;510:1,7, 10;511:2;513:8,25; 514:1,2;516:11,18; 517:5,19;520:9; 521:22;523:8,18; 524:7;526:16;527:14; 530:23;532:8;536:5; 539:25;543:16,24; 547:23;553:14,22; 555:11</p> <p>candidate (1) 503:19</p> <p>capable (1) 488:20</p> <p>caption (1) 462:13</p> <p>captions (1) 509:4</p> <p>carbapenemases (1) 453:18</p> <p>career (1) 489:21</p> <p>careful (1) 505:21</p> <p>carry (2) 501:3;552:13</p> <p>Case (14) 436:4;478:1;482:6; 494:14,14;500:10; 501:9,10,12,20;502:9; 512:25;514:2;547:19</p> <p>categories (2) 456:10;499:17</p> <p>category (3) 499:20;500:3;512:15</p> <p>Catherine (3) 533:2;534:23;535:1</p> <p>causative (1) 454:5</p> <p>cause (3) 452:11;489:2,9</p> <p>cells (1) 471:24</p> <p>certainly (4) 497:13;527:8,14,15</p>
C				
<p style="text-align: center;">B</p>				
<p>BA (2) 448:15,17</p> <p>Bachelor (1) 444:1</p> <p>back (30) 451:13;466:22; 468:5;480:9;482:1; 492:3,17;493:12; 496:3,5,8,18;507:10, 14;508:3,6,22,24; 509:1,22,24,25;510:7, 16;513:23;539:8; 541:15;545:7,16;556:3</p>				

cetera (1) 518:1	447:25	completion (1) 513:22	502:7	costs (7) 502:6,12,13,13,16; 506:2,10
change (6) 450:19;460:11; 482:8;485:5,7,9	coder (1) 481:12	complying (1) 475:17	constituents (1) 549:12	Counsel (12) 455:14;494:11,21; 496:16;497:8;509:23; 514:9;521:13;524:10; 551:11;552:2;553:7
changed (2) 482:11;530:19	Coetzee (1) 497:10	composition (1) 483:10	consult (2) 466:15;516:19	Counselor (1) 551:11
changes (2) 452:13,15	co-first (2) 482:15,16	computationally (2) 463:25;464:6	contain (1) 457:3	counsels (1) 451:13
changing (2) 454:7;475:19	co-lead (1) 482:5	computer (1) 451:12	contained (1) 446:12	Counsel's (2) 502:18;551:4
characterization (2) 445:25;516:10	collected (4) 533:9;535:14; 538:20,24	concentration (2) 537:21;548:23	contemplated (1) 519:1	count (3) 502:13,13;503:5
characterize (1) 455:8	collecting (1) 537:2	concept (1) 520:2	content (3) 526:24;527:20,23	counteract (1) 450:13
check (4) 463:7,25;502:15; 514:20	college (1) 548:23	concerned (1) 482:25	contents (1) 451:16	couple (9) 456:16;470:6;493:6; 496:13;510:8,9; 532:25;535:10;547:20
checking (2) 460:2;464:5	colloquial (1) 473:2	concerning (1) 481:4	context (2) 511:4;520:3	course (10) 467:12;485:25; 533:14;534:19;540:11; 546:9,13,14,20,21
chemistry (1) 548:21	colloquially (1) 472:16	concerns (1) 529:4	continue (5) 469:25;484:24; 538:1,2;556:15	courses (1) 546:11
choice (3) 484:11,17;506:18	colonization (1) 463:8	conclude (2) 445:7;492:13	continued (5) 453:6;454:15,17; 488:16;552:8	COURT (59) 442:3;466:19,23; 469:20,23;480:6,11; 492:15,18;493:10,14; 495:21,23;497:2,4,9, 14,16;507:9,11,13,16, 19,23,25;508:2,5,7,11, 12,18,24;509:6,7,9,11, 12;510:1,2,11,15; 514:4,7;516:23;517:1; 523:19;524:4;529:22, 24;532:6,8;536:14; 547:6,8,23;555:14,16; 556:7,9
choose (3) 483:23;519:7,8	column (1) 502:6	concluding (1) 445:16	continues (1) 462:12	
chose (5) 472:6;486:13;519:6; 520:13;549:1	combination (1) 512:16	condition (2) 518:25;528:13	continuing (2) 496:13;527:2	
circulating (2) 451:2;454:6	comfortable (2) 470:21;499:13	conditioned (4) 518:5,8;552:12; 555:8	contract (1) 522:16	
circumstances (2) 506:25;518:18	coming (1) 497:13	conditions (2) 518:13;548:8	contracts (1) 502:16	
City (3) 453:24;454:5;456:11	commence (1) 556:14	conduct (8) 463:2;464:18;472:1; 487:5;496:22;500:13; 522:4;550:16	contribute (4) 444:25;453:19; 489:8,14	
clarification (2) 470:12;522:12	comment (1) 485:25	conducted (8) 446:15;447:20; 467:17;471:17;478:13; 500:17;511:23;539:15	contributed (5) 445:8,16;463:2; 467:18,23	
clarify (6) 465:11;466:8;469:3; 470:11;493:17;532:10	committee (6) 483:6;486:6,7,8,13, 19	conducting (4) 449:13;452:16; 512:12;542:9	contribution (10) 445:22;446:12,15; 464:5;477:17,21; 478:5,11;522:6,7	
classes (1) 444:15	communicated (2) 485:1;487:6	conference (2) 455:20,21	contributions (3) 444:17;448:15,17	
classification (6) 499:6,10,12;501:23, 24;512:14	communication (1) 516:7	confined (1) 477:9	conversations (1) 524:10	
clear (3) 465:18;468:10;498:6	communications (1) 524:10	confirm (1) 443:3	coordinates (1) 537:22	
clearly (3) 500:22;518:19,20	community (4) 486:25;490:8,11; 553:12	confirmation (1) 468:6	copy (3) 457:16;459:2;543:19	
clinical (1) 453:12	compare (3) 463:4,9;464:2	confirming (1) 468:3	core (1) 546:11	
close (1) 514:12	compared (1) 464:4	conflict (1) 519:21	Corin (1) 497:10	
closed (1) 509:4	comparing (1) 463:13	connection (3) 518:17;521:8;551:19	correction (1) 501:6	
Cloud (10) 458:23,25;459:1; 486:22,24;487:9; 543:22;545:11;553:2, 10	compensation (5) 507:1;511:11,23; 512:17;551:9	consequences (1) 488:24	correctly (2) 481:21;553:1	
co- (1) 467:21	complete (7) 503:24;511:12; 515:3,12;531:18,21; 539:7	consideration (1) 526:7	correspond (1) 452:19	
co-author (1)	completed (3) 452:25;531:12,23	considered (1) 503:7	corresponded (1) 554:5	
	completing (3) 454:18;504:3;512:22	consortium (1)	cost (3) 478:14,16;550:18	

<p>547:11,15 cross-examination (4) 493:22;494:5; 513:14,22 cumulative (1) 521:10 curious (1) 489:5 current (5) 457:8;468:11; 469:25;483:10;523:11 currently (1) 531:1 curriculum (1) 546:12</p>	<p>506:18;542:2 declared (4) 484:18,20;485:4; 542:8 declined (1) 489:11 deductions (3) 456:10,11;544:25 deferred (2) 468:11;495:3 define (1) 512:6 defined (1) 511:11 definitely (1) 476:21 definitive (1) 501:4 defray (1) 511:10 degree (3) 443:10,11,24 delay (2) 455:23;508:1 demonstrate (1) 503:19 dependence (2) 535:25;536:7 dependent (1) 550:25 depending (2) 500:5;512:19 depends (2) 478:7;502:14 deposited (2) 457:4,11 derived (1) 450:24 describe (6) 453:4;479:4;485:21; 521:22;538:13;541:3 described (12) 448:20;467:18; 476:1;485:8;493:23; 505:17;506:16;529:9; 537:17;539:14;540:5; 544:13 describes (2) 453:8;490:19 describing (1) 479:7 description (7) 449:12;451:8;492:6, 8;500:12;527:5;549:15 descriptor (1) 527:12 determine (2) 463:20;549:11 determining (1) 541:25 development (2) 535:24;536:7 differ (1)</p>	<p>463:22 difference (1) 521:23 differences (1) 471:20 different (16) 448:9;450:18; 463:23;471:2;499:17; 500:3;520:19,22; 522:6;531:24,24; 532:25;535:6;538:17; 542:13;548:11 differs (1) 472:3 difficult (1) 538:18 Dilks (3) 459:20;487:2,7 dire (2) 456:16,18 DIRECT (9) 442:23;471:1; 486:10;502:6,12,13; 518:11;530:13;547:3 directed (2) 499:14,15 direction (1) 541:10 directions (1) 542:19 directly (2) 516:6,9 Director (4) 496:3;513:24; 555:25;556:2 disagree (1) 528:8 discuss (1) 495:8 discussed (3) 484:6;512:19;519:23 discussing (1) 529:6 discussion (2) 493:6;494:1 Disease (1) 462:17 dismissed (3) 496:1;523:15;555:25 dispute (3) 444:7;468:21;495:11 dissertation (3) 486:15,17,19 DNA (5) 450:25;452:9,14; 463:17,19 doctor (5) 505:20;518:24; 520:5;521:15,22 doctoral (4) 498:17,18,20;505:18 document (61) 447:23;449:7,24;</p>	<p>451:5;454:20;455:7,7; 457:10,14;458:18,22; 459:2,5,13,15;460:2; 461:23;465:20;467:5, 15;468:12,16;479:6; 481:8;483:9;486:21; 487:9,12;490:14; 491:21;492:10;493:23; 494:2,23;501:17; 503:7;504:1;505:17; 511:6;512:5;523:1; 526:8,10;527:5,18; 528:13,18,23;542:22; 543:2,3,12,16,19,20,22, 25;544:19;553:1,5; 554:11 documents (10) 443:5;468:4;479:19, 23;480:21;517:4; 525:20;530:18;536:10; 542:21 dollar (1) 502:8 dollars (2) 501:25;506:21 domestic (1) 546:2 dominance (1) 535:6 done (14) 461:20;464:5; 476:18;504:3;534:2, 14;535:12;537:16; 539:16;540:4;541:19; 542:15;545:13;547:2 dotted (1) 527:25 down (14) 442:16;448:14; 457:10,12,13;458:1; 459:11;481:8;486:21; 491:13;512:5;527:24; 530:6;552:25 Dr (62) 446:16,17;447:7,8, 10,21;448:1,3;449:13, 13,15;450:7,9,15,21, 22,23;451:9,21;452:8, 17;453:2,5;462:25; 464:17;465:1,22; 466:6;471:5,7,11; 475:6,9;485:12; 487:20;491:17;495:24; 505:17,21;517:23; 522:15;530:25;532:5, 14,17,18;534:8;535:19, 21,22;536:17;537:6; 538:4,8,10,15;540:18, 22;541:5;542:8; 550:15,15 draw (2) 462:11;518:20 dropped (2)</p>	<p>454:3;488:5 DSB (1) 512:6 due (1) 468:11 duly (2) 442:14;530:4 duration (3) 520:20;550:22;552:9 durations (2) 531:24;532:1 during (66) 444:13,15,17,22,22; 445:5;446:14;447:10, 20;449:15;450:15,17; 451:4,24;452:8,9,15, 21;454:17;470:17; 471:3;472:13;473:18; 474:25;476:15;478:13; 482:3,19;484:1;488:3; 489:16,25;493:21,24; 494:1,5;495:5;501:2; 504:10;513:14;519:3; 521:3;522:7;531:21; 532:16;533:13;536:11; 539:2;541:4,6,9,17; 542:12,15;545:17; 549:16;550:1,7,11,22, 22;551:1;552:8,13,16; 554:15</p>
D				
<p>daily (1) 541:9 Data (24) 443:23;448:13,23; 533:19;535:14;538:17, 20,21,22,23;539:14,16; 540:4,10;541:7,7,18, 19,21;542:6,11,12,14, 14 data-based (1) 553:11 dataset (1) 541:8 date (16) 454:13;455:18; 460:5;473:13,14; 476:10,13,15,20; 487:15;543:8,9;544:9, 15;546:15;554:5 dates (1) 543:4 day (3) 523:17;539:3;556:14 days (5) 468:17;496:13; 533:14;535:9,10 day-to-day (2) 536:17;539:3 deal (1) 515:2 December (1) 471:10 decide (1) 541:15 decided (5) 484:10;520:16,21; 521:16;542:4 decision (3) 538:11;540:25; 549:21 deck (1) 488:22 declaration (1) 512:20 declare (2)</p>	<p>E</p>	<p>earlier (5) 481:19;485:8;491:6; 506:16;545:15 early (5) 453:22;467:20; 481:23;522:10;537:20 earmarks (1) 506:20 earnings (5) 455:15,24;544:7; 545:17;546:2 ease (1) 469:5 easier (1) 473:8 Eastern (1) 442:4 easy (2) 470:7;478:6 education (1) 504:13 educational (1) 444:6 efficiently (1) 448:10 effort (17) 461:9,12;489:23; 513:11,17;514:14,17, 18;515:3,5,8,13,14,17, 22;516:5,14</p>		

<p>eight (2) 471:6;532:1</p> <p>eighth (1) 477:12</p> <p>either (5) 481:19;482:7; 525:20;550:10;553:14</p> <p>elected (1) 519:11</p> <p>else (9) 459:13,14,15;488:5, 12;515:20;521:18; 523:7;556:11</p> <p>email (1) 517:8</p> <p>emailed (1) 479:17</p> <p>emanated (1) 489:16</p> <p>EMP (2) 455:15,16</p> <p>employed (1) 553:24</p> <p>employee (2) 455:2,4</p> <p>employees (1) 458:24</p> <p>Employer (18) 436:6;449:21; 459:18;468:16;469:15, 24;472:17;480:13,23; 494:3,6;497:24,24; 509:21;517:5;522:21; 523:6;547:11</p> <p>Employer's (11) 446:8;468:1,11,17; 472:18;478:23;480:15; 481:4,4;494:8;498:2</p> <p>employment (5) 458:24;459:25; 460:1,10;543:3</p> <p>EMPNUM (1) 456:20</p> <p>enable (1) 507:12</p> <p>encouraged (1) 444:9</p> <p>end (14) 462:20,21;476:14; 478:9;481:19;484:18, 19,21;487:15,18; 505:6;512:12;527:7; 546:22</p> <p>endeavored (1) 529:2</p> <p>ended (1) 455:23</p> <p>ending (2) 544:3,12</p> <p>engage (1) 444:10</p> <p>Engineering (1) 444:2</p>	<p>enough (4) 457:13;474:12,14; 491:23</p> <p>enroll (1) 443:14</p> <p>enrolled (9) 443:8,10;460:6,8; 519:25;520:11;531:1, 3,4</p> <p>enrolling (1) 443:24</p> <p>enrollment (3) 472:24;551:19;554:5</p> <p>entered (4) 481:5;503:21; 543:12;544:17</p> <p>entering (1) 548:16</p> <p>entire (1) 553:11</p> <p>entirety (1) 480:25</p> <p>entitled (1) 514:10</p> <p>entrance (1) 548:16</p> <p>entries (1) 543:4</p> <p>entry (2) 460:1;543:9</p> <p>environment (1) 451:3</p> <p>enzyme (1) 453:18</p> <p>equivalent (1) 499:1</p> <p>Erin (4) 540:18,20;541:21; 542:5</p> <p>essentially (4) 488:15;533:20; 536:22;540:8</p> <p>estimate (1) 477:6</p> <p>et (1) 518:1</p> <p>Even (7) 461:13;477:4; 479:15,15;482:23; 483:4;512:7</p> <p>Everybody (1) 462:13</p> <p>everyone (8) 483:19;486:25; 508:6,7,8,25;533:1; 553:21</p> <p>everyone's (1) 457:2</p> <p>evidence (22) 445:7;449:4;450:3; 452:4;458:10;460:18; 461:4;464:13,20; 466:12;481:5;495:15;</p>	<p>505:13;506:4;510:19; 513:5;515:12;517:16; 529:13;542:23;543:13; 544:17</p> <p>evidently (1) 455:4</p> <p>evolve (1) 451:3</p> <p>evolves (1) 511:21</p> <p>exact (8) 474:2;476:10,14,20; 478:8;487:15;544:15; 546:15</p> <p>exactly (5) 460:12;470:25; 502:4;544:14;546:19</p> <p>EXAMINATION (14) 442:23;469:25; 470:1;471:2;494:16; 498:12;517:21;518:17; 522:2,13,19;530:13; 547:12,15</p> <p>examine (1) 469:15</p> <p>examined (3) 442:15;530:5;533:25</p> <p>example (9) 452:11;471:20,25; 474:7;475:17;476:18; 478:1;482:14;483:20</p> <p>examples (1) 527:9</p> <p>exception (2) 477:16,22</p> <p>excludes (1) 502:7</p> <p>excuse (3) 498:18;507:25; 552:23</p> <p>Exhibit (138) 447:24;448:2;449:1, 4,5,8,9,11;450:3,4; 451:6,7,11,13,17; 452:3,3,5;454:21,23; 457:8,9;458:9,11,19, 21;460:14,17,19; 461:24,25;464:10,13, 14;465:21,23;466:11, 11,13;468:11;469:11, 13;472:17,18;473:6; 475:21;478:22,23; 479:13;480:13,15; 481:4,4;490:14;491:6, 11,13,15;493:18,20,24, 25;494:3,5,6,7,8,19,22; 495:14,14,16;497:25; 498:2;501:13,19,21; 502:5,20,23,25;511:7; 513:2,5,6;517:4,7,15, 15,17;522:15,21; 524:14,14,15,15,16,16, 16,17,17,18,18,18,19,</p>	<p>20,20,21,21,22,23,23; 525:4,10,10,10,11,11, 12,17,17,17,18,18,19, 19,22;526:7,13,20,23; 527:1;528:1;529:14; 542:23;543:13;544:18; 552:24</p> <p>exhibits (8) 443:4;493:17; 524:12,25;525:3; 529:6,8,12</p> <p>existing (3) 538:16,23;541:7</p> <p>expect (1) 489:13</p> <p>expected (1) 444:9</p> <p>expedite (2) 508:4;514:11</p> <p>expenditure (1) 501:11</p> <p>expenses (1) 455:20</p> <p>expensive (1) 478:20</p> <p>experience (8) 484:7,9;490:1;500:9; 532:16;534:16;535:4; 536:21</p> <p>experiences (2) 536:18;549:18</p> <p>experiment (3) 475:18;476:18;501:4</p> <p>experiments (13) 448:8,19,20;449:16; 475:5,8,12;478:13,15, 19;496:21;550:16,19</p> <p>experts (1) 502:15</p> <p>explain (3) 446:4,5;500:15</p> <p>explaining (1) 500:15</p> <p>explanation (1) 503:2</p> <p>express (1) 471:24</p> <p>expressed (1) 448:10</p> <p>expression (2) 506:11;537:21</p> <p>extent (2) 511:9;551:3</p>	<p>548:19;554:17</p> <p>facts (7) 461:3;464:19; 505:12;506:3;507:8; 510:19;515:11</p> <p>faculty (2) 486:4,14</p> <p>fail (1) 550:4</p> <p>failure (1) 453:13</p> <p>Fair (6) 474:12,14;477:8; 489:4;491:23;548:25</p> <p>fall (1) 546:8</p> <p>familiar (16) 464:17;465:4; 472:21;474:9;475:23; 476:1,8;487:11; 490:20,21;491:1,15; 513:10;514:14;515:9; 551:22</p> <p>familiarize (1) 549:7</p> <p>far (2) 457:13;476:14</p> <p>fashion (1) 490:8</p> <p>Federal (6) 436:15,16;456:10; 545:5,7,12</p> <p>feedback (2) 550:2,3</p> <p>feel (2) 470:21;528:8</p> <p>fellow (2) 504:18,25</p> <p>few (6) 466:14;510:7; 524:24;533:14;535:9; 547:19</p> <p>fibers (1) 537:1</p> <p>field (1) 455:8</p> <p>fifth (1) 443:19</p> <p>figure (1) 502:8</p> <p>fill (4) 461:9,11;514:17,21</p> <p>filled (1) 484:23</p> <p>filter (1) 503:19</p> <p>financial (3) 514:20;515:2;516:16</p> <p>find (3) 452:13;470:20; 540:10</p> <p>finding (1) 540:13</p>
		F		
		<p>F&A (1) 502:7</p> <p>face (3) 503:1,5;522:23</p> <p>fact (7) 455:22;464:21; 490:3;518:11;519:3;</p>		

<p>fine (4) 474:15;477:20; 492:11;511:2</p> <p>finish (7) 470:9,10;476:6; 477:1;495:6;546:14; 547:24</p> <p>finished (3) 443:19;542:4;546:21</p> <p>first (52) 442:6,17,19,20; 444:13;446:14;447:6, 7;448:1;460:21; 462:12;467:20;470:17; 471:3,19,20;473:19; 475:1;476:18;478:2,2; 481:20;483:15;484:19; 493:21;500:19;502:5; 503:17;513:20;518:16; 519:4;531:17,17,18,22; 532:3,5,11;542:22; 544:4,8,24;545:12,14; 546:16,24;547:22; 550:15,22;552:9; 554:13,20</p> <p>fit (8) 470:18,20,22; 484:16;496:3;538:25; 544:25;546:20</p> <p>five (4) 479:23;480:1;505:7; 555:11</p> <p>fixed (1) 473:3</p> <p>focus (1) 531:16</p> <p>focuses (1) 450:10</p> <p>folks (3) 507:20;538:3;545:6</p> <p>follow (2) 521:25;523:4</p> <p>following (2) 512:21;541:23</p> <p>follows (3) 442:15;527:20;530:5</p> <p>forced (1) 488:25</p> <p>forgetting (1) 482:9</p> <p>forgot (2) 478:12;491:6</p> <p>form (9) 455:15;484:23; 486:6;489:24;490:8; 505:12;520:1;553:7,8</p> <p>formal (1) 488:23</p> <p>forth (2) 454:7;491:7</p> <p>forward (2) 501:5;537:19</p> <p>found (5)</p>	<p>452:11;463:13,14; 484:2;540:12</p> <p>foundation (1) 539:19</p> <p>four (10) 454:13;461:16; 462:20,20;505:7; 531:23;548:10,13,25; 549:1</p> <p>fourth (5) 448:15;540:17,18; 541:17;542:4</p> <p>free (1) 528:8</p> <p>freedom (2) 521:3,18</p> <p>frequency (1) 452:23</p> <p>front (1) 473:6</p> <p>fulfill (2) 475:14;504:15</p> <p>full (5) 442:19;476:7,7; 500:9;530:7</p> <p>fully (2) 474:23;476:8</p> <p>fumbling (1) 461:14</p> <p>function (1) 504:15</p> <p>functioning (1) 445:8</p> <p>functions (2) 448:6;511:11</p> <p>fund (6) 491:18;492:1; 505:10,17;506:9;507:1</p> <p>funded (6) 460:22;461:2,6,7; 478:17;514:19</p> <p>funding (12) 474:6,10,13,18; 475:2,12;485:7; 491:18;492:1;506:1; 520:14;521:20</p> <p>funds (11) 473:21;500:5;506:8, 25,25;507:2;511:9,18, 22;512:24;552:17</p> <p>further (22) 467:7,10;468:8; 492:20;494:25;495:2, 25;511:18;516:17; 517:2;521:23;522:11, 18;523:12,14;533:18; 540:15;547:9;555:12, 19,24;556:1</p> <p>furtherance (1) 522:5</p> <p>future (1) 511:20</p>	<p style="text-align: center;">G</p> <p>gained (1) 489:25</p> <p>gather (1) 479:16</p> <p>gave (1) 549:18</p> <p>general (4) 471:22;538:10; 540:22;541:25</p> <p>generally (5) 478:9;535:20;538:9; 540:21;543:16</p> <p>genes (3) 448:11;454:12; 471:24</p> <p>Genetics (1) 443:23</p> <p>genomes (1) 463:22</p> <p>genomic (2) 451:1;453:15</p> <p>gets (2) 477:24;478:6</p> <p>girl (1) 543:13</p> <p>given (4) 456:24;532:20; 541:10;556:3</p> <p>glitch (3) 509:14,25;510:6</p> <p>global (1) 512:11</p> <p>goal (1) 512:10</p> <p>goes (2) 518:10;527:7</p> <p>Good (17) 442:25;443:1;470:3, 20,23;484:7,9,16; 489:20;502:12;517:23; 534:16;536:23;537:12, 21;547:17;549:12</p> <p>government (1) 498:19</p> <p>grad (3) 525:20;543:9;546:10</p> <p>grade (4) 549:25;550:3,4,7</p> <p>Graduate (25) 459:4;466:1;472:9; 473:20;479:10,12; 483:3;491:17,25; 499:2;506:12;512:16, 17;515:5,9,12,13,17, 22;516:4,13;520:19; 544:4;551:9;552:17</p> <p>grant (37) 461:7;474:5,7;500:7, 11;501:13;502:10,12; 503:11,16,20,24;</p>	<p>504:15,23;505:10,24; 507:1;511:8,9,10,24; 512:18,24;513:17,21; 517:11,23;518:19; 519:1,13,16,24;520:10, 18;521:8,16;522:22</p> <p>granted (1) 500:20</p> <p>grants (14) 460:23,24,25;461:1; 478:18;498:19,21; 501:22,25;502:15; 513:11;514:15,19; 515:9</p> <p>granularity (1) 463:21</p> <p>great (1) 537:13</p> <p>greater (1) 477:2</p> <p>ground (2) 470:7;547:21</p> <p>grow (1) 450:17</p> <p>guess (12) 469:4;475:19;478:7; 482:12,21,22;485:9; 486:5,18;488:22; 498:8;506:9</p> <p>guidance (1) 486:3</p>	<p>480:17;508:6,7,8,11, 11,13,14,18;509:1,1,3, 8,9,11,13,13,13;532:8</p> <p>heard (3) 486:4,15;551:14</p> <p>hearing (152) 436:13,14;442:7,10, 16,22;444:20;445:3, 11;446:5,20,25;447:13, 15;449:3,3,21,25; 450:2,2;451:22,25; 452:2,2;455:6;457:12, 15;458:8,8,16;460:16, 16;464:12,12,22; 466:10,10,17,21; 468:10,13;469:1,4,10, 14,17,19,22,24;472:19; 479:2,18;480:4,9,18, 19;481:3,3;492:14,17, 19,22;493:9,12,15,19; 494:9;495:7,13,13,20, 24;496:1,12,13,16; 497:1,5,23;498:5,9; 504:5,7;505:14;506:5; 507:5,11,13;508:5,13, 16,19,22;509:3,7,10, 12,19,24;510:5,10,14, 22;511:1;513:4,4,13; 514:3,6,9,11;515:23; 516:2,20,25;517:14,14, 19,20;521:11;523:3,6, 10,13,13,17;524:3,5,7; 526:17,18;529:11,11, 18,20,25;530:6,10; 532:7;547:4,11;552:6; 553:18;555:13,17,23; 556:6,10,13,13,15,17</p> <p>hearings (1) 461:13</p> <p>heart (1) 471:24</p> <p>help (3) 488:20;533:18;539:9</p> <p>helped (7) 448:8,12;450:17; 463:9;532:25;533:1; 535:9</p> <p>helpful (1) 526:17</p> <p>helping (1) 489:6</p> <p>hetero (2) 453:7,15</p> <p>Hey (2) 442:5;495:24</p> <p>hierarchy (1) 535:6</p> <p>highlighted (1) 462:24</p> <p>highlighting (1) 544:7</p> <p>hire (2) 460:5;504:24</p>
		H	<p>half (1) 471:13</p> <p>halfway (1) 520:20</p> <p>hand (5) 442:11,16;502:6; 507:18;530:6</p> <p>handed (1) 534:8</p> <p>hands (2) 488:21;492:25</p> <p>happening (2) 489:3;507:23</p> <p>happy (1) 480:2</p> <p>hard (2) 457:16;477:25</p> <p>Harm (3) 450:21;453:2;462:2</p> <p>head (2) 536:15,23</p> <p>heading (4) 500:23;527:4,7,21</p> <p>heads (1) 496:9</p> <p>Health (4) 467:12;502:25; 555:3,4</p> <p>hear (19)</p>	

<p>history (4) 459:25;460:1,10; 543:3</p> <p>hit (1) 537:22</p> <p>Hold (2) 451:25;493:7</p> <p>home (1) 457:24</p> <p>honest (3) 474:9,20,21</p> <p>honestly (1) 476:7</p> <p>hopefully (1) 470:7</p> <p>hospital (3) 451:2;452:11;458:5</p> <p>host (1) 450:14</p> <p>hosts (2) 450:12,12</p> <p>hours (1) 533:15</p> <p>housing (2) 555:5,6</p> <p>human (1) 538:12</p> <p>humans (1) 450:12</p> <p>hypotheses (1) 538:24</p> <p>hypothesis (3) 501:5;540:9;541:21</p> <p>Hypothetical (2) 520:23;521:1</p>	<p>459:8;528:14</p> <p>IDs (1) 457:2</p> <p>imagine (1) 479:24</p> <p>impact (2) 520:17;521:20</p> <p>implanting (1) 537:1</p> <p>IMPLEMENT (1) 436:9</p> <p>important (2) 488:20,21</p> <p>impressive (1) 481:10</p> <p>inbound (1) 476:12</p> <p>included (4) 454:11;481:22,25; 501:22</p> <p>Including (5) 459:18;473:19; 500:12;506:23,24</p> <p>inclusion (1) 446:10</p> <p>income (1) 545:7</p> <p>increase (1) 456:4</p> <p>increases (1) 456:8</p> <p>independently (1) 535:9</p> <p>indicate (3) 462:8;484:23;545:12</p> <p>indicates (1) 460:10</p> <p>indirect (2) 502:16;516:9</p> <p>indirectly (1) 516:13</p> <p>individual (3) 446:11;503:11; 506:21</p> <p>infect (1) 450:11</p> <p>infected (1) 450:24</p> <p>infecting (1) 463:5</p> <p>infection (2) 450:13;451:4</p> <p>infections (1) 452:12</p> <p>Infectious (1) 462:17</p> <p>info (1) 458:25</p> <p>information (11) 451:1;460:9;500:12; 516:6,8,9;528:14; 537:24;540:14;541:24; 542:18</p>	<p>informed (1) 549:21</p> <p>initial (4) 530:15;534:8; 537:24;543:8</p> <p>initially (2) 455:20;537:9</p> <p>initials (1) 448:15</p> <p>initiated (1) 476:11</p> <p>initiating (1) 537:7</p> <p>initiatives (1) 489:12</p> <p>injected (1) 448:9</p> <p>injecting (1) 536:25</p> <p>inner (1) 554:16</p> <p>instance (3) 503:5,10;504:18</p> <p>instead (5) 454:4;471:20,21,23; 475:16</p> <p>Institute (2) 444:2;502:25</p> <p>insurance (2) 555:3,4</p> <p>intellectually (1) 489:5</p> <p>intended (1) 520:8</p> <p>interaction (3) 450:14;486:10;487:4</p> <p>interest (5) 448:11;472:5;489:8; 533:24;537:4</p> <p>interested (16) 453:7,14;483:24,25; 489:6,11;506:20; 533:7;534:14;535:23; 536:5;537:10,11,23; 548:15;549:4</p> <p>interim (1) 539:8</p> <p>INTERNATIONAL (1) 436:8</p> <p>interpersonal (1) 470:22</p> <p>interplay (1) 450:11</p> <p>interpret (1) 520:6</p> <p>interrupt (1) 458:13</p> <p>interrupted (6) 453:21,23;477:19; 487:25;488:2;504:4</p> <p>interrupting (1) 548:1</p> <p>interruption (1)</p>	<p>488:7</p> <p>into (28) 443:2;444:7;449:4; 450:3;452:4;458:9; 459:1;460:17;464:13; 466:12;481:5;488:14; 492:13;495:14;498:1; 513:5,21;517:16; 518:2;529:12;533:9; 534:21;536:22,25; 543:9,13;544:17; 548:16</p> <p>intriguing (1) 484:2</p> <p>introduced (5) 469:14;497:24; 528:25;532:19;534:11</p> <p>introduction (5) 448:25;456:15; 460:13;464:9;467:25</p> <p>Investigator (6) 461:8;478:18; 485:15,16,22;486:11</p> <p>involved (10) 453:18;463:13; 490:9;516:7;533:12; 534:5;535:1;538:14; 539:5;550:16</p> <p>involvement (5) 476:15;477:9;537:7; 538:14;541:3</p> <p>issue (1) 482:13</p> <p>issues (3) 479:15,25;486:1</p> <p>It's (1) 517:4</p> <p>itemize (1) 501:10</p>	<p>483:21</p> <p>journal (7) 446:9,9,11,12; 462:16,18</p> <p>July (2) 436:17;556:18</p> <p>jump (1) 444:7</p> <p>June (4) 455:1;487:13,16,18</p> <p>justification (2) 498:22,25</p> <p>justifications (1) 498:24</p>
K				
<p>Kathleen (3) 459:20;487:2,6</p> <p>keep (1) 537:18</p> <p>kept (1) 514:24</p> <p>key (6) 498:19,22,23;499:9, 22;503:7</p> <p>Kim (1) 497:10</p> <p>kind (9) 464:1;479:7;481:18; 485:15;534:8;536:22; 537:19,24;541:21</p> <p>kinds (3) 532:19;537:5;538:25</p> <p>knew (1) 484:3</p> <p>knowledge (2) 502:15;515:1</p> <p>known (4) 453:7;464:1;490:8; 530:16</p> <p>knows (3) 462:13;540:14; 553:15</p> <p>KUMA (119) 442:7,10,16,22; 444:20;445:3,11; 446:5,20,25;447:13,15; 449:3,21,25;450:2; 451:22,25;452:2; 455:6;457:12,15; 458:8,16;460:16; 464:12,22;466:10,17, 21;468:10;469:1,4,10, 14,17,19,22,24;472:19; 479:2,18;480:4,9,19; 481:3;492:14,17,19,22; 493:9,12,15,19;494:9; 495:7,13,20,24;496:12, 16;497:1,23;498:5,9; 504:5,7;505:14;506:5; 507:5,13;508:13,16,19, 22;509:3,7,10,12,19,</p>				
J				
<p>ICAHN (11) 436:5;443:12;470:4; 479:8;481:1;484:5; 527:4,9,19,22;547:18</p> <p>idea (1) 541:25</p> <p>identification (6) 458:19;461:23; 465:21;478:22;501:17; 528:21</p> <p>identifications (1) 457:3</p> <p>identified (23) 448:2;449:9;451:7; 454:23;455:14;458:21; 461:25;465:23;469:13; 472:18;478:23;483:16; 492:8;494:7,8;498:2; 501:21;503:20;517:7; 525:6,23;526:13;533:5</p> <p>identifier (1) 456:25</p> <p>identify (2) 455:4;543:24</p> <p>identifying (2)</p>	<p>informed (1) 549:21</p> <p>initial (4) 530:15;534:8; 537:24;543:8</p> <p>initially (2) 455:20;537:9</p> <p>initials (1) 448:15</p> <p>initiated (1) 476:11</p> <p>initiating (1) 537:7</p> <p>initiatives (1) 489:12</p> <p>injected (1) 448:9</p> <p>injecting (1) 536:25</p> <p>inner (1) 554:16</p> <p>instance (3) 503:5,10;504:18</p> <p>instead (5) 454:4;471:20,21,23; 475:16</p> <p>Institute (2) 444:2;502:25</p> <p>insurance (2) 555:3,4</p> <p>intellectually (1) 489:5</p> <p>intended (1) 520:8</p> <p>interaction (3) 450:14;486:10;487:4</p> <p>interest (5) 448:11;472:5;489:8; 533:24;537:4</p> <p>interested (16) 453:7,14;483:24,25; 489:6,11;506:20; 533:7;534:14;535:23; 536:5;537:10,11,23; 548:15;549:4</p> <p>interim (1) 539:8</p> <p>INTERNATIONAL (1) 436:8</p> <p>interpersonal (1) 470:22</p> <p>interplay (1) 450:11</p> <p>interpret (1) 520:6</p> <p>interrupt (1) 458:13</p> <p>interrupted (6) 453:21,23;477:19; 487:25;488:2;504:4</p> <p>interrupting (1) 548:1</p> <p>interruption (1)</p>	<p>488:7</p> <p>into (28) 443:2;444:7;449:4; 450:3;452:4;458:9; 459:1;460:17;464:13; 466:12;481:5;488:14; 492:13;495:14;498:1; 513:5,21;517:16; 518:2;529:12;533:9; 534:21;536:22,25; 543:9,13;544:17; 548:16</p> <p>intriguing (1) 484:2</p> <p>introduced (5) 469:14;497:24; 528:25;532:19;534:11</p> <p>introduction (5) 448:25;456:15; 460:13;464:9;467:25</p> <p>Investigator (6) 461:8;478:18; 485:15,16,22;486:11</p> <p>involved (10) 453:18;463:13; 490:9;516:7;533:12; 534:5;535:1;538:14; 539:5;550:16</p> <p>involvement (5) 476:15;477:9;537:7; 538:14;541:3</p> <p>issue (1) 482:13</p> <p>issues (3) 479:15,25;486:1</p> <p>It's (1) 517:4</p> <p>itemize (1) 501:10</p>	<p>483:21</p> <p>journal (7) 446:9,9,11,12; 462:16,18</p> <p>July (2) 436:17;556:18</p> <p>jump (1) 444:7</p> <p>June (4) 455:1;487:13,16,18</p> <p>justification (2) 498:22,25</p> <p>justifications (1) 498:24</p>	

24;510:5,10,14;511:1; 513:4;514:3,6;515:23; 516:2,20,25;517:14,20; 521:11;523:3,6,10,13, 17;524:3,5,7;526:18; 529:11,20,25;530:6,10; 547:4,11;552:6; 553:18;555:13,17,23; 556:6,10,13 KUMAR (1) 436:14	16;480:22;485:5,7; 488:16;519:3,5; 549:19;552:20 lack (1) 539:20 lacks (1) 539:19 language (1) 527:9 large (1) 460:22 largely (2) 538:19;539:9 largest (1) 488:6 last (11) 442:17,21;448:3; 456:2;460:1,4,4; 477:16,22;510:11; 523:4 later (6) 453:13;533:24; 538:1,3;554:18,21 latest (1) 484:25 lawyers (1) 547:18 lead (2) 453:12;482:4 learn (1) 467:13 learning (1) 539:1 least (8) 472:5;476:21,25; 477:5,22;483:3; 519:14;550:14 leave (1) 506:9 left (5) 487:13;497:12; 502:6;519:22;526:3 legal (2) 446:22;459:18 legally (1) 530:18 lengths (1) 531:24 less (2) 501:10,25 letter (2) 519:22;550:2 level (3) 505:1;515:2;516:16 light (1) 514:8 limited (3) 506:24;516:8;518:16 line (12) 448:16;455:25; 459:20,21;460:4; 487:10;513:18;527:25; 544:25;545:17,21;	546:1 lines (1) 457:5 Lior (4) 446:16;447:7;448:1; 449:13 list (10) 448:4;462:1;465:8,9; 478:4,5,10;503:14,16; 524:12 listed (29) 446:16,18;447:2,9, 18,19;452:17;459:21; 461:16,18;462:17,20; 477:12,17;482:16; 483:21;487:8;498:17, 18,20,23,24;502:2; 503:7,10,23;504:1,25; 518:18 listing (2) 462:21;505:24 listings (1) 455:16 lists (5) 448:14;459:20; 465:25;502:7;512:6 little (8) 457:9;467:6,7; 477:24;481:24;534:12; 538:17;541:23 loading (1) 522:8 locate (1) 459:2 location (1) 457:7 log (1) 545:11 long (11) 471:5,7;476:4,6; 483:6;487:18;496:13; 500:4,5,11;25;519:12; 533:12 longer (1) 478:6 look (4) 467:3;469:8;506:14; 537:4 looking (8) 451:13;457:16; 463:15;502:5,22; 507:20;511:6;533:7 looks (2) 490:19;540:24 losing (1) 489:12 lost (2) 475:12;489:13 lot (12) 444:7;461:14; 477:24;485:15;500:12; 530:18,19;534:14; 536:21,21,24;538:11	lower (1) 459:11 luncheon (1) 523:20 LUPION (125) 444:19;445:2,9,13, 18,21,24;446:18,21,24; 447:11;449:2,23; 450:1;451:14;455:5,7; 456:16,19;457:16,19, 20;458:7,12;460:15; 461:3;464:11,19,24; 465:11;466:5;468:3, 13,21;469:8,16,18; 470:2,3;472:20;479:3, 13,21;480:1,8,16,24; 481:6;491:23,24; 492:11,20;494:12; 495:2,11;498:3; 499:11;504:3,6; 505:12;506:3;507:4,7, 18;508:2,9,12;509:22; 510:2,17,18,24;513:3, 12,24;514:8;515:11,16, 21;516:10;517:13,18, 22;518:16,23;520:4; 521:1,7,12,22;522:12, 14,18,24;523:8,12; 525:7,13,24;526:1,4, 11;528:3,6,8,12,18,22; 529:2,10,18;536:1; 539:18,22;547:13,16, 17;551:6,18;552:1,7; 553:14,20;555:11,19	444:11;454:11; 521:6,6,6;531:11,21 marcescens (1) 452:10 March (6) 471:12;484:20,25; 544:23,23;546:25 marked (13) 443:4;447:23;449:7; 451:5;454:20;455:25; 458:18;461:23;465:20; 478:21;501:17;502:6, 21 marker (1) 533:24 markers (1) 537:4 mass (1) 519:21 Massachusetts (1) 444:2 Masters (1) 517:25 master's (2) 504:11,14 matches (1) 487:16 Matter (11) 436:4,13;470:19; 471:15,16;472:2; 500:7;530:15;538:10; 549:3;556:18 matters (1) 518:14 Matthew (1) 498:11 may (15) 442:22;452:14; 455:1;474:22;476:16, 21;478:6;482:13,21; 483:2;497:18;510:22; 525:13;544:14,21 maybe (6) 454:16;463:12; 481:20;484:25;486:5; 554:17 M-C-C- (1) 530:8 McConnell (22) 530:1,3,8,24,25; 532:8;536:8;540:3,16; 542:20,22;543:14; 547:10,17;548:10; 551:15;552:11,25; 554:3;555:22,24,24 McConnell's (1) 547:3 mean (19) 446:2,2;456:7; 468:21;476:12;482:12; 485:13;490:10;492:9; 496:6;497:8;520:6; 522:24;532:25;534:20;
L		M		
lab (158) 444:10;445:8,17; 446:16,17;447:7,8,10, 21;448:1;449:13,13, 15;450:7,9,16,21,22, 23;451:9,9,21;452:8, 18;453:1,2,2,5;454:3; 461:19,20;462:2,3,4, 25;464:18;465:2,7,10, 13;466:6;470:17,19,20, 24;471:5,8,11,17,19, 20,25;472:2,13; 473:25;474:3,25; 475:6,9,17;476:9,15; 478:7,13;481:22; 483:13,14,14,16,16,20, 21,23;484:7,9,17,18, 19,22,24;485:2,4,4; 487:5;488:14,15; 489:1;491:5;506:18; 515:13,17;517:24; 518:6,7;519:7,8,10,11; 520:14,17,21;531:18, 21;532:15,17,19,22,25; 534:7,11;535:16,17,19, 21,22;536:17,19,20,20; 537:11,18;538:4,6,10, 15,15;539:15;540:17, 18,23,24;541:4,5,6,11, 12;542:2,5,8,16; 544:16;545:19;548:11; 549:1,4,6,8,8,16;550:1, 4,8,11,15,15,22;551:1; 552:13 label (1) 467:12 labeled (2) 448:16;527:1 LABOR (2) 436:2,15 laboratories (2) 444:23;445:1 laboratory (6) 477:10;483:11; 512:20;532:3;538:7; 549:13 labs (16) 444:18;471:3,15; 472:5,8;473:20;475:2,	machine (1) 534:20 Madam (1) 508:2 magazine (1) 477:13 magnitude (1) 477:17 maintain (1) 485:7 major (1) 548:19 majored (1) 548:21 majority (2) 453:10;527:24 making (2) 538:11;540:25 Management (3) 470:4;515:2;516:16 manager (5) 459:20,21;460:11; 487:8,10 manner (2) 489:1;548:7 many (7)			

<p>552:1;554:12,12,15 meaning (2) 504:9;551:22 means (1) 554:8 measure (1) 535:5 mechanically (1) 463:13 media (1) 490:23 MEDICINE (10) 436:5;443:12;479:8; 481:1;484:5;527:4,10, 19,22;547:18 meet (3) 486:12;539:11; 541:15 meeting (1) 534:8 meetings (2) 539:6;541:13 MEIKLEJOHN (121) 442:5,8,24;444:21; 445:4,14,20,23;446:2, 7,23;447:5,14,17; 448:25;449:6,19; 450:5;451:10,18,23; 452:1,6;455:10; 457:13,17;458:17; 460:13,20;461:5; 464:9,15,21,23,25; 465:13,14;466:8,14,18, 22,24;467:25;468:8,14, 24;469:2;472:14; 479:1,14,19,22;480:5, 12,17,20;491:20;492:9, 24;493:3,16,20;494:10, 13,17,25;495:8,17,19; 496:6,20,25;497:7,10, 15,17,20;498:8,10,13; 504:8;505:15;506:6; 507:15,17,22;508:15; 509:17;510:4,6,17,22, 25;511:2,5;513:1,7,19, 25;514:13;515:15,19, 24;516:1,12,17,21; 517:2;518:10,21; 520:1,23;521:5,9,25; 522:3,11,20,25;523:5; 556:12 Melissa (2) 480:5;517:9 member (2) 483:21,22 members (10) 454:3;463:23; 470:24;483:13,14,14, 16;486:19;489:1; 532:25 mention (1) 528:9 mentioned (3)</p>	<p>471:1;482:15;534:22 mentor (2) 485:23,24 messages (1) 516:22 mice (4) 448:8;533:9;535:4,6 microscope (1) 533:25 might (6) 450:19;482:22; 497:12;513:9;525:15; 541:23 might've (1) 482:10 million (1) 501:25 Minah (1) 497:10 mind (3) 468:14;504:21;520:9 mine (1) 519:22 minor (3) 522:6,7;548:22 minors (1) 548:24 minute (4) 451:12;492:12; 510:8;516:18 minutes (9) 466:14;479:18,23; 480:1;507:14;509:15, 20,21;555:11 miss (1) 497:17 MIT (1) 481:16 Mm-hmm (4) 499:23;502:3; 505:23,25 models (1) 538:25 modified (3) 448:9;449:17;453:21 modular (1) 501:9 molecules (2) 463:19;533:7 moment (8) 466:16;468:11; 507:11;508:1,25; 510:3;545:7;547:2 moments (2) 510:7,9 money (6) 455:17,18;456:1; 474:8;545:24;551:8 monkeys (2) 538:19;541:1 month (4) 443:17;456:4,6; 460:7</p>	<p>months (8) 471:6,10,11,13; 477:10;488:12;503:18; 519:14 more (26) 446:8;448:10;457:9; 458:1;463:16,21; 467:8;472:3;476:21; 477:2,2,4,6;478:3; 481:7,8;482:13; 486:11;490:14;499:13; 506:15;512:11;524:24; 531:18;541:23;555:17 morning (4) 442:25;443:1;470:3, 6 most (3) 477:21;478:5,10 mostly (2) 450:25;453:6 MOUNT (32) 436:5;443:8,12,15, 25;455:3;456:13; 457:1;458:5;467:12, 16;470:4;476:20; 478:22;480:23;481:1; 482:4;486:25;527:4, 10,19,22,22;531:1,7; 543:10;545:25;547:18; 553:11,21,24;555:6 mounting (1) 537:3 move (12) 448:25;449:19; 451:10;456:15;460:13; 464:9;466:3;467:25; 497:25;513:1;517:3; 529:8 moved (12) 448:14;450:3;452:4; 458:9;460:17;464:13; 466:12;513:5;517:16; 526:6;529:12;554:15 moving (2) 466:9;537:18 MRLUPION (1) 527:17 mRNA (3) 448:9;449:17;471:23 MTA (5) 443:22,23;531:14, 15;548:13 much (6) 454:2;467:8;496:15, 23;505:6,6 mute (2) 517:6;528:5 myself (13) 478:19;479:8; 490:12,13,21,22;491:9; 497:7;503:9;512:16; 515:7;516:15;519:18</p>	<p style="text-align: center;">N</p> <p>name (28) 442:17,19,19,20,21; 448:3,3;457:5;458:5; 462:7,9,10,16,18; 470:3;485:18;490:25; 503:16;511:12;512:14; 530:7,8,15,19,20; 534:9;540:19;547:17 named (3) 504:19;533:1,2 names (5) 462:21,21,24,24; 530:17 narrow (1) 516:2 nasal (1) 463:8 NATIONAL (3) 436:2,14;502:25 nature (3) 535:21;536:2;540:22 near (1) 462:20 nearly (1) 503:18 necessarily (2) 475:19;488:8 necessary (1) 513:20 need (13) 458:13;466:15; 468:12;477:8;480:1; 482:21;488:21;496:21, 21;508:2;510:8; 516:19;527:15 needed (7) 496:2,5,8,17;504:15; 536:23;539:9 needs (3) 493:1;534:13;555:25 neural (2) 541:8,18 neuroscience (9) 531:4,6,15;546:12; 548:13,15,19,22;554:1 New (7) 436:16,16;453:24; 454:5;530:19;536:20; 539:12 next (8) 455:25;467:8; 496:12;502:11;539:11, 12;541:16;546:1 Nicole (4) 468:15;469:2,2; 527:17 Nicole's (1) 507:18 NIH (7) 504:23;506:1,8;</p>	<p>513:11;514:14,18,22 nitric (2) 535:24;536:6 nods (1) 536:14 non- (1) 538:11 none (3) 475:1;555:2,8 non-human (2) 538:19;540:25 non-key (5) 498:25;499:5,8; 506:12;511:25 non-scientist (1) 534:19 non-scientists (1) 540:21 non-worker (2) 554:8,11 nose (4) 463:8,10,14;464:4 notably (1) 533:1 notation (1) 457:10 note (1) 468:15 Noted (2) 442:2;524:2 notes (2) 443:5;536:10 Notice (2) 436:14;556:3 notified (2) 496:17;539:3 November (1) 471:10 November-ish (1) 546:18 Number (49) 448:2;449:5,9;450:4; 451:7;452:5;454:23; 455:2,3,12,12,15; 456:21,24;457:1,3; 458:11,21;459:8,10,10; 460:19;461:25;464:14; 465:23;466:3,13; 469:13;472:18;478:23; 480:15;491:6;494:3,7, 8;495:16;498:2; 501:21;503:4;505:8; 513:6;517:7,17; 524:11;525:4,22; 526:13;529:1,14 numbered (2) 502:21;512:4 numbers (1) 524:25 numerous (1) 527:11</p>
--	--	---	--	---

	19;469:19,20;479:22; 480:2,3,4,6;486:22; 492:14,15;493:5,6,9, 10;494:1;495:8,18,19, 20,21;497:1,2;508:19; 510:1,12;514:3,4; 515:5,7,8,16;516:20, 23;523:8,8,18,19; 524:9;525:1;526:3; 529:6,20,22;534:9; 547:4,6;553:1;555:13, 14;556:6,7	onboarding (1) 519:19 once (2) 519:24;533:22 one (66) 446:8;448:10; 451:14,15,19,19,21; 452:17;454:22,24; 455:16;463:10;464:4; 465:4,6;468:4,25; 470:7;478:3,6;479:21; 480:22;481:7,8; 482:14;483:19;487:25; 488:15;490:14;493:17; 497:15;499:5,10,20,21, 24;500:25;505:24; 507:11;508:1,17,25; 509:17;510:11;515:19; 521:25;522:12,12; 525:14;528:3,25; 529:18;531:18;533:18, 23;534:9,11;541:20, 22;543:2;546:11,16; 547:18,22;549:6; 554:10	534:10 otherwise (3) 447:12;475:18; 485:16 ourselves (1) 450:12 out (31) 455:2,12,14,19; 459:7,10;461:9,11; 467:20;469:5;471:25; 472:10;473:7;482:22; 484:23;487:12;496:17; 497:13;501:4;506:10; 512:17,24;514:17,21; 537:9,20;539:9; 540:10;541:22;545:14; 552:13 outside (1) 497:23 over (14) 450:19;451:4;470:7; 474:4,22;478:6; 497:13;502:2;518:14, 14,15;533:14;547:20, 22 overarching (1) 512:10 overruled (2) 521:11;553:18 own (5) 460:23,24,25;474:5; 535:10 oxide (2) 535:24;536:6	461:14;467:20,21 paragraph (3) 448:16;527:2;552:23 paragraphs (4) 527:3,10,12,15 part (16) 453:17;456:20; 462:3;464:7,8;465:8,9; 467:17;473:1;481:25; 486:7,17;491:21; 514:2;537:22;540:5 participate (1) 444:11 participated (4) 444:12;532:24; 533:4;548:10 particular (10) 501:13;503:10; 504:19;506:21;518:7; 528:10;532:23;533:7; 534:5;537:7 particularly (1) 494:20 parties (4) 494:2;514:11; 524:11;525:8 pass (1) 550:4 past (1) 444:8 pathogens (3) 451:1,3;452:19 patient (1) 452:15 patients (3) 450:24;454:5;463:5 pattern (3) 463:19;533:7;538:25 pause (1) 516:18 pay (20) 454:22,24;456:12; 473:3,11,21;475:19; 478:14,16,19;506:2; 511:10,23;544:2,11,19, 21;546:6;550:18; 551:11 paycheck (2) 545:14;554:20 paying (2) 455:19;474:4 payment (5) 544:4,8;545:22; 546:2,5 payments (4) 472:15;552:8,12,17 payroll (2) 543:25;545:18 paystub (3) 543:18;544:19; 545:15 PDF (1) 553:7
O O'Connell (2) 530:24,25 oath (1) 498:15 Object (12) 447:11;491:20; 492:9;494:6;505:12; 513:13,18;518:10; 539:18;551:3,25;552:3 objected (1) 510:17 Objection (56) 444:19;445:2,9; 446:1,24;447:15; 449:2;450:1;451:16; 455:5;458:7,8;460:15, 17;461:3;464:11,12, 19;466:7,10;472:14, 19;480:13,23;495:13; 499:11;504:5;506:3; 507:4,6;510:18,21,23; 511:1,3;513:3,4;514:8; 515:11,23;516:10; 517:10,13,14;518:21; 520:1,23;521:11; 525:7,21;528:6;529:8, 10;551:17;552:6; 553:13 objections (6) 449:3,22;450:2; 452:2;481:3;529:12 objectives (1) 511:19 obligated (2) 520:6,10 observers (2) 497:18;529:19 obtain (4) 443:24;444:3;459:2; 543:19 obtained (4) 444:1,4;459:5; 504:10 obtaining (1) 553:4 Obvious (1) 501:3 obviously (3) 523:1;524:13;526:10 occur (1) 511:21 occurred (1) 502:10 O'Connell (5) 498:11,14;513:14; 517:23;522:15 October (1) 546:18 off (55) 461:11;466:17,18,	offer (9) 452:3;466:11; 479:13;493:25;497:25; 498:3,4;526:14,19 offered (8) 449:4;484:8,13,16; 491:25;494:3;546:10, 17 offering (6) 525:2;526:24;527:6, 13,18,25 office (2) 502:16;517:11 Officer (128) 436:14;442:7,10,16, 22;444:20;445:3,11; 446:5,20,25;447:13,15; 449:3,21,25;450:2; 451:22,25;452:2; 455:6;457:12,15; 458:8,16;460:16; 464:12,22;466:10,17, 21;468:10,13;469:1,4, 10,14,17,19,22,24; 472:19;479:2,18; 480:4,9,19;481:3; 492:14,17,19,22;493:9, 12,15,19;494:9;495:7, 13,20,24;496:12,16; 497:1,5,23;498:5,9; 504:5,7;505:14;506:5; 507:5,12,13;508:13,16, 19,22;509:3,7,10,12, 19,24;510:5,10,14,22; 511:1;513:4,13;514:3, 6;515:23;516:2,20,25; 517:14,19,20;521:11; 523:3,6,10,13,17; 524:3,5,7;526:17,18; 529:11,18,20,25;530:6, 10;547:4,11;552:6; 553:18;555:13,17,23; 556:6,10,13 Officer's (1) 514:9 official (1) 472:16 officially (1) 485:1 Ok (2) 471:11;485:11	ones (1) 538:17 only (13) 474:23;476:15; 482:21;487:25;488:4, 11;490:10;491:4; 500:25;527:18,25; 528:25;553:22 O-N-N-E-L (1) 530:9 onto (2) 462:12;537:3 oops (1) 461:22 open (1) 519:8 opinion (6) 445:2,10,18,20,21,23 opioid (1) 536:7 opioids (1) 535:25 opportunities (1) 532:20 opposed (1) 552:20 opposite (1) 460:5 optic (1) 537:1 optimize (1) 471:23 order (11) 448:10;450:18; 451:1;454:4;464:2; 477:17,25;478:6,8; 533:8;549:8 organizing (1)	P package (1) 485:8 Page (43) 448:14;451:14,15, 19;457:4;458:2; 459:11;460:2;462:4, 12,13,14;465:21; 480:22;481:18;483:13; 502:5,19,20,21,21,22, 22,24;503:1,3,4,5; 504:25;511:6,7;512:4, 4;522:23;526:25; 527:2,7,11,23,24; 543:5;552:25;554:4 pages (3) 469:7;503:3;525:21 paid (14) 452:21,23,24; 454:15,16,17;472:12; 473:14;485:10;512:17, 24;545:24;546:24; 554:19 pandemic (6) 453:24;467:21; 488:1,4,17;554:15 paper (3)	

<p>peer (1) 446:9</p> <p>people (13) 462:25;464:17,23; 465:1;497:11;506:19; 510:20;514:21;538:1, 2,20;553:23,24</p> <p>per (1) 538:13</p> <p>perform (10) 444:23;447:6;448:7; 475:11;512:9;520:13, 16;521:3;522:9;549:9</p> <p>performance (3) 550:7;551:1;552:12</p> <p>performed (16) 445:6,8;447:3,7; 448:19;454:1;475:5,8, 11;511:11;522:16; 538:23;541:6;542:11; 549:16,19</p> <p>performing (1) 535:5</p> <p>perfusing (1) 537:2</p> <p>Perhaps (2) 473:9;486:5</p> <p>period (18) 454:25;455:17; 477:11;484:22;487:17; 488:4,10,11,15;489:25; 533:13;543:25;544:2, 11,12,22;545:18,18</p> <p>periodically (1) 486:12</p> <p>person (12) 459:10;461:14; 478:3;499:5,10,22; 512:15,22,23;522:6; 532:10;534:10</p> <p>personal (4) 455:3,12;459:8; 528:14</p> <p>personally (6) 459:1;489:7;491:2; 532:23;538:14;541:3</p> <p>personnel (17) 498:19,20,23;499:1, 5,9,9,16,18,22;502:13, 14;503:8;505:24; 506:12,23;511:25</p> <p>pertaining (1) 542:24</p> <p>pertains (2) 528:23;543:14</p> <p>Peter (3) 538:8;539:6;540:8</p> <p>Petition (7) 460:17;516:2;525:1; 528:16,24;529:4; 543:12</p> <p>Petitioner (59) 436:11;442:8,22;</p>	<p>451:25;452:3;458:15; 464:13;466:11,11; 473:6;476:6;483:8; 491:13,15;492:22; 493:15,25;495:14; 496:16;498:9,10; 501:14;509:23;517:15, 15;522:24,25;524:11, 12;525:2;526:6,6,7,11, 20,21,23,25;527:1,6, 13;528:1,7,9,11;529:6, 7,8;530:1,11;543:13; 545:16;547:9;552:24; 555:21;556:2,10,12,13</p> <p>Petitioners (5) 456:15;466:3;495:4, 4;524:16</p> <p>Petitioner's (104) 447:24;448:2;449:1, 4,5,8,9,11,19,22;450:3, 4;451:6,6,7,11;452:3,5; 454:21,23;457:9; 458:11,19,21;460:14, 19;461:24,25;464:10, 14;465:21,23;466:9, 13;468:1,10;469:11, 13;475:20;483:10; 486:20;493:24;494:5, 7,19,22;495:14,16; 501:12,19,21;502:5,23; 511:7;513:2,5,6,15; 514:9;517:4,7,17; 523:3;524:14,14,15,15, 15,16,17,17,17,18,18, 19,20,20,21,21,22,23, 23;525:4,9,10,10,11, 11,11,16,17,17,18,18, 18,19,22;526:2,12,13, 25;529:14;542:23; 544:18</p> <p>Petition's (1) 458:9</p> <p>phases (1) 537:20</p> <p>PhD (42) 443:11,14,24;444:8, 9,13;472:24;482:20; 483:15;491:18;503:11, 21;505:19;506:23; 517:25;518:3,5,13,19, 25;519:4,25;520:11; 521:4;525:1;528:16; 531:4,9,11,17,22; 533:2;534:25;535:3; 543:10;545:24;548:16; 550:11;551:19;553:25; 554:6,14</p> <p>phenomenon (1) 453:7</p> <p>phonetic (1) 507:18</p> <p>physically (2) 463:12;491:8</p>	<p>PI (16) 461:7;470:23; 473:25;474:4,10,13,17; 476:19,20;484:7,8,13; 485:15;487:20,22; 488:18</p> <p>piloting (1) 536:24</p> <p>PIs (4) 475:1;483:18; 550:11;552:20</p> <p>pitfalls (1) 500:24</p> <p>place (1) 500:16</p> <p>placed (1) 534:17</p> <p>planned (1) 537:14</p> <p>platform (1) 490:23</p> <p>play (3) 499:3;507:25;516:16</p> <p>playback (6) 508:25;509:3,14,15, 21;510:7</p> <p>played (1) 509:1</p> <p>playing (2) 488:17;508:6</p> <p>Plaza (1) 436:16</p> <p>please (19) 442:7;456:17; 458:14;469:16,18; 470:9,11;475:21; 507:11,12;508:25; 517:6;521:13;526:18; 530:25;536:4,13; 538:13;547:5</p> <p>PlumX (1) 482:10</p> <p>pm (32) 487:13;495:22,23; 497:2,3,5;508:21,25; 510:13,15;514:4,5,7; 516:23,24;517:1; 523:19;524:2,4; 529:22,23,24;547:6,7, 8;555:14,15,16;556:7, 8,9,17</p> <p>pm/Reconvened (9) 497:3;508:21; 510:13;514:5;516:24; 529:23;547:7;555:15; 556:8</p> <p>pocket (1) 455:19</p> <p>point (11) 469:5;504:16,16; 505:18;511:15;521:15; 531:12;532:10;534:10; 545:12;556:2</p>	<p>pointed (2) 455:14;496:17</p> <p>pointing (3) 493:3,4,5</p> <p>points (1) 497:19</p> <p>policies (1) 517:11</p> <p>polio (1) 450:17</p> <p>populated (2) 481:11,12</p> <p>population (2) 453:9,10</p> <p>pop-up (1) 452:7</p> <p>portion (7) 451:21;453:9,11; 459:7;491:22;503:24; 527:25</p> <p>position (8) 465:25;484:9,13; 487:11;491:17;492:1, 5;546:25</p> <p>positions (6) 465:7,10,13,25; 466:1,1</p> <p>possession (2) 468:17,19</p> <p>possible (2) 542:18;547:21</p> <p>post (1) 465:7</p> <p>postdoc (11) 492:8;499:22,24,25; 500:2;504:19;533:1,4, 19;534:23;535:2</p> <p>postdocs (3) 499:20;534:9;550:11</p> <p>postdoctoral (4) 465:25;492:5; 504:18,25</p> <p>posted (1) 480:22</p> <p>posting (1) 465:6</p> <p>precise (2) 505:8;521:14</p> <p>precisely (1) 460:11</p> <p>predicting (1) 502:18</p> <p>preexisting (1) 502:9</p> <p>prefer (2) 530:22;540:1</p> <p>preferred (2) 530:21,22</p> <p>preliminary (1) 472:5</p> <p>pre-marked (1) 524:12</p> <p>prepare (2)</p>	<p>515:14,22</p> <p>preparing (1) 443:5</p> <p>present (1) 497:5</p> <p>presented (1) 526:21</p> <p>preserve (1) 537:2</p> <p>press (11) 467:16,19,24;468:1; 526:8,9,21,24;527:3, 11;528:1</p> <p>pressures (1) 450:18</p> <p>presumably (2) 478:17;533:24</p> <p>pretty (2) 454:2;481:23</p> <p>previous (2) 504:13;538:17</p> <p>previously (5) 442:14;467:4; 512:19;530:4;538:24</p> <p>primarily (3) 450:24;504:10; 538:16</p> <p>primary (1) 534:10</p> <p>primates (3) 538:12,19;540:25</p> <p>Principal (6) 461:8;478:18; 485:14,16,22;486:11</p> <p>print (2) 487:12;553:3</p> <p>printed (2) 486:22;553:1</p> <p>printout (2) 451:14;466:6</p> <p>prior (1) 548:16</p> <p>probably (2) 451:20;513:20</p> <p>problem (1) 468:19</p> <p>problems (1) 453:13</p> <p>procedures (2) 522:8,9</p> <p>proceed (5) 442:22;480:8;498:7; 526:18;547:14</p> <p>proceeding (1) 470:5</p> <p>process (2) 503:18;533:23</p> <p>processing (1) 537:1</p> <p>produce (2) 459:2;529:2</p> <p>produced (6) 513:16;517:4;</p>
---	--	---	---	---

<p>528:10,13;529:1; 537:17 produces (1) 537:21 productive (1) 542:1 Professor (1) 485:13 professors (2) 486:7,12 profile (4) 479:8;491:3,5;498:1 program (29) 443:10,12,14;444:6; 448:12,22;449:16; 472:24;481:18,19; 518:1,3,5,25;519:4,25; 520:11;521:4;531:3,9, 11,17,22;543:9,10; 548:16;551:20;554:6, 14 project (22) 461:8;476:7,11; 477:9,18;518:9;519:1; 520:22,22;521:4,17; 533:6,11;534:12; 535:23;536:6,22,25; 537:11,19,25;542:13 projects (5) 532:19,21,23; 533:18;535:15 promoted (3) 490:3,5,6 pronouns (2) 530:21,23 proof (2) 526:15,19 proportion (1) 474:2 proposal (11) 498:25;500:6; 504:17;506:20;511:19, 20;512:2,11;521:8; 522:17,22 proposed (1) 512:8 prospects (1) 489:21 provide (3) 481:21;486:2;527:9 provided (6) 468:16;479:2,16; 481:23;501:14;549:17 providing (2) 473:21;475:2 public (5) 467:16;468:1; 489:15;525:20;526:8 publication (14) 446:8,10;447:9; 467:18,23,24;476:5; 477:13,16;482:5,16,22; 483:1;489:24</p>	<p>publications (12) 447:4;454:9,11,13; 461:16;462:1;482:3, 17;489:16,20;490:4,9 publicly (1) 526:9 publish (1) 482:19 publishable (1) 540:13 published (15) 446:17;447:18,19; 461:16,19;462:2,15; 476:13,23;482:25; 483:4,4;526:8,9,22 publishing (1) 490:10 pull (3) 473:7;478:21;485:11 purpose (3) 470:17;533:16; 549:11 purposes (1) 549:6 Pursuant (1) 436:13 pursue (3) 521:18;540:14; 549:22 Put (6) 442:16;447:15; 492:13;497:25;514:2; 530:6</p>	<p>505:11,17,19,21;512:1, 9;517:24;518:12; 519:24;520:10,16; 522:4 Ramalingam's (2) 511:12;519:17 rapport (2) 470:23;549:12 rarely (1) 498:17 rate (1) 505:16 rather (1) 526:25 reach (1) 539:9 reached (2) 472:10;525:8 read (14) 462:14;494:14; 507:9,13;508:3;509:4, 22,24,25,25;510:1,7; 512:7;525:1 READBACK (1) 510:17 reader (2) 494:4;548:4 reading (2) 508:16;510:16 ready (8) 442:5;480:8;483:3; 495:9;496:4,11; 547:13,13 real (1) 474:9 really (4) 477:25;501:4; 520:24;537:12 reason (2) 476:8;485:5 reasons (1) 518:18 recall (8) 456:5;474:2;481:21; 487:15;514:10;544:14; 550:2,4 recalled (1) 496:2 recalls (1) 498:10 receive (5) 473:3,4;550:3;552:8; 555:4 received (28) 449:4;450:3;452:4; 456:1,5,6,6,8;458:9; 460:17;464:13;466:11; 472:25;473:18;481:5, 16;495:14;513:5; 517:15;529:13;544:8; 549:25;550:2,10,21; 551:8,10;555:3 receiving (3)</p>	<p>456:4;550:2,4 recent (1) 487:17 Recess (16) 466:20;469:21; 480:7;492:16;493:11; 495:22;497:3;508:21; 510:13;514:5;516:24; 523:20;529:23;547:7; 555:15;556:8 recessed (1) 556:18 recognize (8) 449:7,11;451:6; 454:21;458:19;479:5; 490:17;544:18 recommendation (1) 519:22 reconvene (1) 556:18 record (87) 442:3,18;466:17,18, 19,21,22,23;469:19,20, 22,23;479:23;480:3,4, 6,8,10,11;492:14,15, 17,18;493:6,9,10,13, 14;494:1,4,14;495:9, 10,18,19,20,21,23; 497:1,2,4;498:1,6; 502:4;508:20,23,24; 510:12,14,15;514:3,4, 6,7;516:20,23,25; 517:1;523:2,9,18,19; 524:3,4,7,9;529:7,21, 22,24;530:7,16;542:21, 24;543:14,25;544:21; 547:4,6,8;548:5; 555:13,14,16;556:6,7,9 records (4) 524:24,24;530:20; 551:12 RECROSS (2) 522:2,19 recruit (2) 465:1,12 recruits (2) 464:17,23 recused (1) 519:18 redact (1) 459:14 redacted (3) 456:20;457:6;528:14 redaction (1) 457:7 redactions (2) 457:6;458:2 redirect (6) 492:23;493:2; 494:16;517:21;522:13; 555:21 reduced (2) 505:7,16</p>	<p>refer (5) 460:12;485:12; 486:18;494:6;503:3 references (1) 494:5 referred (10) 448:17;472:15; 473:2;489:15;494:21, 22;502:25;522:22; 530:20;534:18 referred (15) 471:16;486:6,14,18; 488:3,10;499:2; 501:12,13,20;536:10; 538:3;551:8;553:25; 554:11 refers (1) 479:10 reflect (4) 482:17;483:10; 502:4;544:8 reflected (9) 448:7;473:12;476:5, 25;489:23;521:16; 522:15;544:11;545:18 reflects (2) 446:11;545:4 refrain (1) 547:25 reframe (1) 447:2 regarding (5) 461:17;480:21; 525:9;537:15;539:16 regenerate (1) 471:24 Region (2) 436:15;463:22 Regional (4) 496:3;513:24; 555:25;556:1 regular (4) 455:25;545:17,21,23 regulation (1) 512:6 reimbursed (3) 455:19,21,22 reimbursement (2) 455:16,24 relate (3) 449:16;452:16;525:1 related (5) 455:12,20;488:4; 489:12,16 relatedness (1) 471:14 relates (1) 517:11 relation (5) 486:5;519:12; 535:22;541:25;543:8 RELATIONS (2) 436:2,15</p>
	Q			
	<p>qualifications (1) 499:25 quantified (1) 533:25 quarantine (1) 554:14 quarter (2) 501:25;546:16 quarters (1) 512:5 quicker (1) 473:10 quickly (3) 489:2;494:18;542:20</p>			
	R			
	<p>Rad52 (1) 512:7 raise (1) 442:11 raises (1) 456:6 raising (1) 507:18 Ramalingam (15) 503:12,14,16;</p>			

<p>relationship (2) 484:6;485:13</p> <p>release (7) 467:19,24;526:8,10, 22,24;527:3</p> <p>released (4) 496:1;523:14; 555:25;556:4</p> <p>releases (2) 527:11;528:1</p> <p>relevance (2) 526:15;527:14</p> <p>relevant (3) 468:2;491:21;518:20</p> <p>remainder (1) 523:17</p> <p>remember (8) 481:23;491:8;500:6; 511:4,19;544:15; 546:15,18</p> <p>remind (1) 536:13</p> <p>remotely (1) 496:4</p> <p>remove (1) 517:6</p> <p>renewal (1) 502:9</p> <p>repeat (5) 457:7;490:5;509:15; 516:15;518:24</p> <p>repetitious (1) 513:10</p> <p>repetitive (1) 463:22</p> <p>rephrase (6) 446:25,25;511:2; 539:25;548:3,7</p> <p>report (2) 461:12;539:8</p> <p>reported (1) 468:5</p> <p>REPORTER (58) 442:3;466:19,23; 469:20,23;480:6,11; 492:15,18;493:10,14; 495:21,23;497:2,4,9, 14,16;507:9,11,13,16, 19,23,25;508:2,5,7,11, 18,24;509:6,8,9,11,12; 510:1,2,12,15;514:4,7; 516:23;517:1;523:19; 524:4;529:22,24; 532:6,8;536:14;547:6, 8,23;555:14,16;556:7,9</p> <p>reporting (2) 513:11;514:14</p> <p>reports (12) 461:10;513:17; 514:18;515:3,5,8,13, 14,17,22;516:5,14</p> <p>represent (1) 480:24</p>	<p>representation (1) 527:8</p> <p>Representative (2) 497:6;529:3</p> <p>representatives (1) 497:20</p> <p>representing (2) 470:4;504:23</p> <p>request (2) 505:22;514:1</p> <p>requested (4) 505:1;514:24,25; 526:6</p> <p>requesting (2) 506:1,8</p> <p>required (3) 503:24;514:17,18</p> <p>requirement (2) 475:17;482:19</p> <p>research (79) 444:11;446:12,15; 447:20;450:10,14; 451:8;452:17,20; 453:4,21;455:20; 461:1,6,10,20;463:2; 464:7,18;467:17,22,23; 471:16;472:1;475:16; 476:1,5,16,24;484:1; 485:21;486:9;487:25; 488:5,11,21;489:16; 490:2;491:18;498:1, 19;499:16,18;500:12, 16;501:2,8;503:24; 505:10,17;506:17; 511:19,21,24;512:8,12, 21;520:13,16;521:3; 522:4,10,17;533:4; 535:15;538:11;539:4; 540:15,24;542:1,7,9, 19;545:24;549:3,7,9, 19,22</p> <p>researched (1) 487:5</p> <p>researcher (1) 490:21</p> <p>researching (1) 521:16</p> <p>resection (1) 512:6</p> <p>resistance (5) 452:15;453:8,9,15, 20</p> <p>resource (1) 486:24</p> <p>respect (14) 458:2;461:10; 470:18;487:4;494:20; 499:4;513:15;514:19; 526:20;527:18;533:4; 538:6;539:14;550:14</p> <p>respond (2) 488:20;513:19</p> <p>Respondent (4)</p>	<p>479:13;492:20; 523:12;524:13</p> <p>Respondent's (1) 522:21</p> <p>response (7) 470:10;488:17; 501:14;513:16;517:5; 526:12;528:10</p> <p>responsible (5) 473:20,25;474:18; 475:2,553:4</p> <p>rest (5) 460:9;462:14; 470:21;484:4;512:7</p> <p>restate (1) 521:13</p> <p>rests (2) 556:12,14</p> <p>result (2) 454:8,11</p> <p>resulting (1) 447:19</p> <p>results (3) 463:17;476:5;535:14</p> <p>return (1) 513:22</p> <p>review (2) 467:5;479:23</p> <p>reviewed (1) 446:9</p> <p>reviewing (1) 449:23</p> <p>Rich (1) 540:20</p> <p>Rich's (5) 540:18,22;541:5; 542:5,8</p> <p>right (83) 442:8,11;443:20; 444:7;445:5;446:7,20; 447:15;448:16;451:13; 456:22;458:4,16; 463:12;465:1;466:25; 467:2,15;469:1,10,15; 470:19,24;471:15; 472:4;473:22;474:6; 476:2;482:20;485:23; 487:14;488:1,13; 489:5,17,19,21;490:4, 9;493:12,21;494:3,18; 496:11,14,14,23,25; 497:21;498:6,10; 499:9;500:7;502:11; 503:21;504:2;505:6, 22;507:15,23;508:14; 523:2,2;535:2;548:17; 549:4,9,13,17,19,23; 550:8,12,19;551:2,2,3; 552:9,14,18,21;554:6, 19,25</p> <p>RNAs (1) 450:25</p> <p>Rohana (1)</p>	<p>503:12</p> <p>role (10) 477:11;488:17; 499:3;503:11;516:16; 518:19;519:18;535:23; 536:6;537:6</p> <p>room (8) 458:13;466:15; 469:18;497:13;507:21; 519:23;529:19;555:12</p> <p>rotate (3) 472:6,11;519:3</p> <p>rotated (6) 444:18,23;471:2,2; 475:4;483:20</p> <p>rotating (4) 470:17;473:19; 476:9;483:15</p> <p>rotation (64) 446:14;447:6,7,10, 20;448:1;450:6,7,20, 21;451:24;452:8,9,13; 453:3;471:5,7;475:13, 17;476:16;477:10; 478:14;484:2,21; 522:5,7;532:4,5,11,16, 18;533:13;534:7,10; 535:17,18,19;537:14; 538:6,7,8,15,16;539:2, 6;540:11,17,18;541:4, 6,9,12,18;542:4,7,9,12, 15,16;544:14;549:7; 550:5,8;552:14</p> <p>rotations (33) 444:8,10,11,12,17, 22,22;445:6;452:21, 25;454:17,18;472:13; 475:1;506:17,19; 512:21;518:1;531:19, 21;542:3;544:12; 545:19;548:11,13; 549:1,16;550:1,12,15, 23;551:2;552:16</p> <p>ROTHGEB (51) 458:15;469:5,12; 493:1;495:3,18;497:7, 12,18,22;507:19;517:6, 8;524:6,9;525:8,15,25; 526:2,5,14,16,20; 527:21;528:4,5,7,15, 20,25;529:5,17;530:1, 12,14;532:6,13;536:3; 539:20,24;540:2; 547:5,9;551:3,17,25; 552:3;553:13,16; 555:21;556:5</p> <p>roughly (2) 477:9;546:16</p> <p>row (1) 456:20</p> <p>Rudebeck (2) 538:8;541:12</p> <p>Rudebeck's (2)</p>	<p>538:10,15</p> <p>rules (2) 470:7;547:21</p> <p>ruling (1) 514:9</p> <p>run (1) 448:8</p> <p>Russo (5) 532:5,12,15,18; 534:8</p> <p>Russo's (3) 532:17;544:16; 550:15</p> <hr/> <p style="text-align: center;">S</p> <hr/> <p>salary (7) 455:25;494:24; 545:17,21,23,23; 551:13</p> <p>Sam (8) 529:25;530:1,3,8,15, 23;536:4;556:5</p> <p>S-A-M (1) 530:8</p> <p>Samantha (1) 530:20</p> <p>same (14) 445:9,9;453:2;458:1; 459:10;463:24;471:9; 494:2;499:3,6;501:22; 526:4,7;527:11</p> <p>sample (3) 528:16;529:3;534:21</p> <p>samples (1) 529:1</p> <p>SARS (1) 454:4</p> <p>satisfied (1) 484:15</p> <p>saying (3) 499:4;504:13;515:1</p> <p>scenario (1) 453:8</p> <p>SCHOOL (20) 436:5;443:12;470:4; 472:9;473:20;479:8; 481:1;484:5;503:21; 514:24;525:20;527:4, 10,19,22;543:9;544:5; 546:10;547:18;552:18</p> <p>Science (5) 443:12,23;444:1; 467:21;554:1</p> <p>Sciences (2) 443:15;503:22</p> <p>scientific (5) 446:9,9,11;490:8,11</p> <p>scope (4) 516:3;518:11,17; 521:10</p> <p>Scott (3) 532:5,12;544:16</p>
--	---	---	--	---

<p>screen (2) 493:4;496:7</p> <p>script (1) 448:12</p> <p>Scroll (10) 457:12,25;467:6,7, 10;481:8;483:9; 486:20;492:3;552:25</p> <p>Sebastian (1) 497:11</p> <p>sec (1) 508:17</p> <p>second (11) 450:6,7;460:2,4; 493:8;513:21;528:3; 535:16,17,19;548:1</p> <p>Secondly (1) 518:17</p> <p>section (11) 452:20;458:24,25; 481:10;527:3,6,18; 533:21;543:3;545:17; 546:13</p> <p>sectioned (4) 533:9,10,21;534:3</p> <p>sectioning (1) 533:17</p> <p>security (2) 456:21,24</p> <p>seed (1) 474:7</p> <p>seeing (4) 491:11,11;495:25; 529:20</p> <p>seeking (1) 443:11</p> <p>seem (1) 490:25</p> <p>seems (3) 455:24;490:20; 537:12</p> <p>sees (1) 496:3</p> <p>select (2) 453:1;473:25</p> <p>selected (5) 443:22,23;453:2; 519:10;531:14</p> <p>selecting (2) 444:10;453:5</p> <p>selection (2) 450:18;462:1</p> <p>sending (1) 553:7</p> <p>sense (5) 488:2,7;490:13; 500:14;512:11</p> <p>sent (3) 443:4;478:22;480:5</p> <p>sequence (3) 454:4;463:19;489:2</p> <p>sequencing (3) 454:8,12;463:17</p>	<p>series (2) 525:16,19</p> <p>serratia (1) 452:10</p> <p>serve (2) 546:7;554:24</p> <p>served (2) 551:11;554:22</p> <p>services (1) 522:16</p> <p>servicing (2) 546:6;555:9</p> <p>set (3) 527:12;539:12; 541:13</p> <p>several (6) 468:16,17;513:19; 519:14;527:3;533:14</p> <p>Shall (1) 524:6</p> <p>share (4) 473:8;507:12,24; 526:16</p> <p>shared (1) 478:3</p> <p>sharing (2) 490:11;507:15</p> <p>shot (1) 493:20</p> <p>show (12) 447:23;449:7;451:5; 454:20;458:18;461:22, 22;464:16;465:20; 467:2;501:16,16</p> <p>showed (1) 535:8</p> <p>showing (4) 491:21;535:3; 542:22;544:17</p> <p>shown (1) 532:19</p> <p>shows (2) 489:22,24</p> <p>Sidetalk (4) 490:18,22;491:3; 498:1</p> <p>sign (5) 461:11;515:5,7,8,16</p> <p>signaling (2) 535:24;536:6</p> <p>significance (1) 498:24</p> <p>significant (3) 477:21;478:5,10</p> <p>signify (1) 485:15</p> <p>similar (15) 458:5;463:7,9; 480:20;499:6,7,25; 525:9;526:22;531:25; 532:1;541:12;543:1; 544:19;548:24</p> <p>SINAI (42)</p>	<p>436:5;443:8,13,15, 25;455:3;456:13; 457:1;458:5,22,25; 459:1;467:12,16; 470:5;476:20;478:22; 480:23;481:1;482:4; 486:22,24,25;487:9; 525:20;526:22;527:4, 10,19,22;531:1,7; 543:11,22;545:11,25; 547:19;553:2,10,12,21, 24</p> <p>Sinai's (3) 526:9;530:19;555:6</p> <p>sitting (1) 496:7</p> <p>situation (1) 541:20</p> <p>six (1) 532:1</p> <p>skills (8) 499:7,25;503:23,25; 504:1,9,14,24</p> <p>slice (1) 534:21</p> <p>slices (5) 533:8,10,10,21; 534:21</p> <p>slicing (1) 537:3</p> <p>slides (1) 537:3</p> <p>slightly (1) 532:9</p> <p>small (4) 448:12,12;453:8,11</p> <p>smoothly (1) 547:21</p> <p>social (3) 456:21,24;490:23</p> <p>softer (1) 532:9</p> <p>somebody (4) 458:12;467:1; 504:24;515:20</p> <p>somehow (1) 534:1</p> <p>someone (6) 446:10;499:6; 512:12;515:8;537:13; 538:18</p> <p>sometimes (6) 453:11;463:23; 477:25;478:2,6;498:20</p> <p>sorry (39) 448:11;452:1,7; 456:5,7;457:7,17,17, 21;458:16;462:16; 463:16;465:15;473:7; 474:3;477:6,19; 478:24;479:1,4; 482:23;484:5;490:5, 25;491:6;495:4;</p>	<p>499:15;506:14;514:23; 522:25;525:15;530:24; 531:5;534:23;536:1,8; 540:19;542:14;551:17</p> <p>sort (4) 534:10;537:14; 539:3;541:7</p> <p>sought (2) 520:19;537:9</p> <p>sounds (2) 474:23;483:2</p> <p>source (5) 474:10,13;478:18; 485:9;552:16</p> <p>sources (2) 474:5,6</p> <p>spa (2) 464:1,3</p> <p>spanning (1) 543:5</p> <p>speak (4) 483:18;488:22; 510:2;527:14</p> <p>speaking (1) 538:9</p> <p>speaks (5) 455:7;492:10; 526:10;527:5;528:19</p> <p>specific (16) 445:15;452:17; 453:16;463:19,21; 464:1;475:18;477:6; 483:19;492:4,7;521:8; 551:1;552:13,15,20</p> <p>specifically (8) 450:11;463:16; 476:16;509:20;513:15; 534:15;543:24;552:24</p> <p>specifics (4) 474:10,21;478:8; 482:9</p> <p>speculate (1) 474:16</p> <p>speculation (3) 553:13,15,17</p> <p>spell (2) 442:18;530:7</p> <p>spelled (3) 442:20,21;530:15</p> <p>spend (1) 461:14</p> <p>spent (3) 477:10;488:3;489:23</p> <p>spoke (1) 532:25</p> <p>sponsored (1) 498:19</p> <p>spot (1) 537:23</p> <p>spring (1) 453:22</p> <p>staff (1) 466:1</p>	<p>stages (1) 522:10</p> <p>stain (1) 537:4</p> <p>stained (1) 533:24</p> <p>standing (1) 499:1</p> <p>stands (1) 471:25</p> <p>start (11) 453:23;454:15; 460:5;476:6;477:1; 478:4;524:8;525:16; 536:23;543:4,8</p> <p>started (13) 476:9,9,17,20;477:3, 7;481:18;534:7; 543:10;544:12,14,15; 545:12</p> <p>starting (6) 477:21,21;504:16; 505:18;506:15;527:1</p> <p>starts (2) 457:1;546:17</p> <p>state (4) 442:17;456:10; 530:6,19</p> <p>stated (2) 447:1;529:10</p> <p>states (2) 448:19;460:4</p> <p>stay (5) 456:7,7;471:22; 484:24;496:4</p> <p>step (2) 501:4;533:23</p> <p>stepping (1) 451:11</p> <p>still (10) 475:13;485:7,9; 498:14;505:10;521:9; 540:13;541:24;542:17; 545:19</p> <p>stipend (28) 472:12,15,21,22,22, 25;473:2,13,18,21; 474:1,18;489:12,13; 494:20,21,21;506:2,9; 546:2;550:21,25; 551:4,7,14,22;552:5; 555:3</p> <p>stipulate (8) 468:18,22,24; 528:12,15,18,23;529:4</p> <p>stipulation (1) 525:9</p> <p>stipulations (3) 524:8;529:7,12</p> <p>stop (1) 507:15</p> <p>strain (4) 463:20,24;464:2,3</p>
--	---	--	---	--

strains (1) 463:9	525:13	527:15	500:14;506:19	toolkit (1) 504:16
strike (7) 448:6;459:25; 460:22;464:16;501:16; 511:22;542:8	subtotal (1) 502:6	task (2) 551:1;552:15	therapeutic (2) 448:9;471:23	top (3) 456:20;484:3;487:13
stub (1) 473:11	succeeding (1) 502:8	tasks (7) 444:23,25;492:4,8; 539:7;549:15;552:13	thesis (14) 453:7;464:7,8;483:6; 486:6,8,13,17,19; 488:9;505:18;542:13; 549:9,22	topic (1) 540:24
stubs (2) 454:22,24	suctioning (1) 534:15	taste (1) 532:21	thin (2) 533:9;534:21	total (2) 455:18;531:21
student (44) 443:8,14,25;444:13; 456:8,9,12;460:6,8; 466:1;479:10,12; 482:20;491:17,19,25; 492:2;499:2;503:11, 21;504:11,14;506:13, 23;512:16,17;517:24; 518:14,19;519:22; 520:19;521:3;528:16, 20,21,23;529:4;533:2; 534:25;535:3;545:24; 551:9;555:3,4	sudden (1) 452:7	tax (2) 456:11;545:7	third (9) 450:20,21;453:3; 457:4;513:25;538:6,7, 8;552:24	towards (4) 477:22,22;489:1; 505:18
students (23) 444:9;458:23; 460:21;483:15,17; 488:13;498:17,18,20; 502:17;506:17;515:6, 9,12,13,17,22;516:4, 13;518:7;525:1; 550:11;553:25	Suite (1) 436:16	taxes (2) 545:5,12	thirds (2) 457:10;512:5	tract (1) 452:12
student's (1) 474:18	supervise (1) 486:8	teaching (5) 546:6,7,8,9;555:9	thought (1) 505:21	training (2) 504:14;550:10
studies (5) 450:23;470:17; 473:19;482:4;484:19	supervises (1) 485:21	team (1) 467:17	three (9) 444:12;452:25; 456:10;471:2,15; 472:5;475:1;512:5; 531:13	transcript (1) 510:1
study (5) 450:9,22,25;453:6; 531:5	supervision (1) 486:3	technical (2) 482:22;504:10	throughout (5) 456:7,8,12;472:24; 540:11	transcription (1) 547:23
studying (3) 471:20,21;489:5	supervisor (1) 485:14	technically (1) 484:20	throwing (1) 493:5	transitioning (1) 517:25
subdivision (1) 464:2	supported (1) 505:19	techniques (1) 532:20	thrown (1) 536:22	treatment (2) 452:15;453:13
Subject (9) 468:3,6;470:18; 471:15,16;472:2; 536:2;538:10;549:3	sure (14) 457:21;458:3; 459:14;460:3;474:21; 482:24;486:14;498:5; 500:22;504:12;521:15; 526:16;536:13;547:5	Technology (2) 444:2;471:24	true (7) 474:17;478:9; 540:10;549:25;550:25; 552:11,16	tried (1) 492:24
submit (8) 500:11,15,18;501:8; 514:18;516:4,13;521:9	surgeries (1) 536:24	tells (1) 516:18	try (4) 450:13;470:7; 472:10;512:7	trouble (1) 532:7
submitting (2) 505:22;506:8	suspected (1) 540:12	tenOever (1) 450:8	trying (11) 452:13;453:14; 454:4,6;463:4;470:20; 471:23;478:4;489:2; 508:13;513:9	troubleshoot (1) 508:19
subpoena (4) 501:14;513:16; 517:5;528:10	Sustained (12) 444:20;445:3; 447:13,14;464:22; 472:19;504:7;505:14; 506:5;511:1;515:23; 552:6	tenOever's (3) 450:9,15;471:7	tube (2) 535:7,12	turn (2) 502:19;512:4
subsequently (1) 446:16	switch (2) 520:22;545:6	term (7) 447:11;472:15,21; 482:22;486:4,15; 551:14	turned (1) 483:13	turning (1) 543:12
subsidized (1) 555:6	sworn (2) 442:14;530:4	terminology (2) 451:20;472:16	today (2) 496:11;497:6	two (22) 452:24;455:15; 456:2;457:5;471:6,10, 11,12,13;472:3;473:3; 476:22,25;477:4,9; 481:12;485:17;510:8; 512:5;519:5;550:15; 554:13
substitute (5) 499:5,10,24;500:2; 506:22	System (6) 467:13;482:10; 553:2,11,21;554:16	terms (1) 520:17	Told (1) 534:12	two- (1) 457:9
subsumed (1)	systems (2) 450:13;482:9	test (3) 516:3;535:7;538:24	Tom (3) 446:18;457:25; 465:11	type (7) 453:18,19;464:1,3,3; 502:12,14
	T	testified (24) 442:15;454:14,15, 16;461:15;471:1; 472:12;475:5,8,23; 486:21;487:24;491:14; 498:17;499:11;507:9; 526:23;530:5;539:21; 548:10;550:10,14; 554:4,22	titled (1) 483:13	types (1) 549:18
	TA (2) 554:22,24	testify (3) 443:6;445:25,25	tomorrow (1) 556:15	
	tab (4) 451:15,19;462:4; 466:6	testimony (15) 443:2;444:8;446:7; 458:13;460:21;468:2; 493:7,24;506:17; 531:16;532:14;536:9, 11;543:1;556:1	Tony (6) 533:1,5,6;534:11,13, 17	
	TAD (4) 546:14,20,21,24	testing (5) 453:12;501:5; 535:13,15;537:20	Tony's (1) 534:12	
	talk (3) 470:7;495:19;547:22	tests (1) 535:5	took (3) 444:15;476:6;533:14	
	talked (1) 518:11	thematic (2)		
	talking (3) 501:24;511:20;523:1			
	talks (1)			

<p style="text-align: center;">U</p>	<p>used (17) 448:22;455:3; 461:13,14;472:16; 490:24;506:9,11; 507:1;511:10,18,23; 542:7,14,15;551:5; 552:17</p> <p>useful (5) 534:17;535:15; 537:25;540:13;541:24</p> <p>utilized (1) 542:12</p>	<p>528:16</p> <p>waiting (8) 458:13;468:14,20; 496:7;507:20;508:9; 516:21;529:19</p> <p>waving (1) 492:25</p> <p>way (14) 453:21;458:1;473:5, 10;489:14;492:25; 512:5;519:24;520:14; 521:20;530:22;542:15, 17;554:10</p>	<p>withdrawn (4) 519:11;521:23; 553:10;555:6</p> <p>withheld (3) 544:25;545:8,13</p> <p>withholding (1) 456:11</p> <p>within (3) 477:11;496:12; 546:10</p> <p>without (4) 470:11;483:1; 489:12;491:21</p>	<p>workings (1) 554:16</p> <p>works (3) 445:1;447:3;541:22</p> <p>world (3) 489:7,8;500:16</p> <p>worth (2) 501:7;541:23</p> <p>write (4) 448:12;481:24; 491:7;501:1</p> <p>written (2) 512:11;519:13</p> <p>wrong (4) 468:15;501:2,3; 524:14</p> <p>wrote (5) 448:22;449:16; 481:25;519:16,22</p>
<p>ultimately (3) 484:8;518:2;519:7</p> <p>unclear (1) 548:2</p> <p>under (32) 450:18;455:2,15; 456:20;459:10,25; 460:9;482:2;498:14, 22,24;500:23;502:12; 503:24;504:15;506:25; 511:11,24;512:1; 513:11;518:13;527:3, 6,11,24;530:20; 533:25;543:3;544:7, 24;545:16;546:1</p> <p>undergraduate (1) 548:20</p> <p>underneath (1) 457:5</p> <p>understood (4) 470:13;489:10; 528:4;548:5</p> <p>undetected (1) 453:12</p> <p>unhappy (1) 485:4</p> <p>UNION (2) 436:8;497:6</p> <p>unique (2) 455:3;513:17</p> <p>Unit (4) 525:2;528:17,24; 529:4</p> <p>UNITED (1) 436:8</p> <p>unless (3) 500:7;514:24,25</p> <p>unmute (2) 466:25;469:2</p> <p>unmuted (1) 493:1</p> <p>up (17) 455:23;478:21; 483:8;485:11;486:20; 490:14;491:5,13; 492:3;496:9;501:1; 505:6;509:4;512:12; 521:25;536:2;541:24</p> <p>updated (2) 482:8,14</p> <p>upon (6) 447:9;461:20; 502:14;504:13;512:19; 513:22</p> <p>urinary (1) 452:12</p> <p>use (6) 447:11;505:10; 510:23;530:23;532:20; 537:18</p>	<p style="text-align: center;">V</p> <p>vague (3) 444:19;507:7;520:2</p> <p>van (24) 450:21,22,23;451:9, 21;452:8,17;453:2,5; 461:19;462:2,25; 464:17;465:1,22; 466:6;471:11;475:9; 483:10,23;484:18; 485:12;487:20;491:18</p> <p>variations (1) 448:9</p> <p>various (2) 497:19;537:4</p> <p>verbally (1) 536:14</p> <p>verification (1) 469:6</p> <p>verify (2) 468:12;553:22</p> <p>via (2) 436:17;545:24</p> <p>vibertome (1) 533:10</p> <p>vipertome (2) 534:16,18</p> <p>virtue (1) 487:25</p> <p>virus (8) 450:14,17,18,19; 489:2,5;536:25;537:21</p> <p>viruses (7) 450:10,11,23,25; 471:21,22;472:2</p> <p>visited (1) 490:18</p> <p>visual (1) 508:3</p> <p>Vivanco (1) 497:14</p> <p>voir (2) 456:16,18</p> <p>volunteered (1) 554:24</p>	<p>ways (6) 464:17;465:4,6; 484:12;485:17;513:20</p> <p>webpage (4) 451:21;465:22; 467:16;468:2</p> <p>website (26) 449:14;451:9,15; 458:23,25;459:1,6,16; 462:3,5;465:7,8,9; 469:6;479:9,11; 480:23;481:2,22; 482:7,14;483:17; 491:5;525:20;526:9,22</p> <p>websites (1) 483:18</p> <p>Wednesday (1) 436:17</p> <p>week (5) 539:7,11,13;541:14, 16</p> <p>weekly (2) 539:6;541:13</p> <p>weeks (6) 452:24;456:2;471:6; 473:3;532:2;554:13</p> <p>weren't (2) 488:8;489:10</p> <p>what's (8) 464:1;485:13; 494:22;507:5,22; 508:10;522:15;544:17</p> <p>whenever (1) 519:23</p> <p>Where's (1) 494:23</p> <p>Whereupon (4) 442:12;523:20; 530:2;556:17</p> <p>whole (3) 479:16;489:7,8</p> <p>whomever (4) 507:1;511:11,22,23</p> <p>whose (2) 461:1;534:9</p> <p>withdraw (5) 455:11,11;492:11; 514:8;518:21</p> <p>withdrawal (1) 514:10</p>	<p>witness (41) 442:6,14,19;446:21; 447:3;455:8;468:9,25; 469:15;472:15;479:24; 493:1;495:5;496:10, 14,19,23;504:3;507:8, 8;513:21;514:1,10; 517:3,12;521:2,7; 523:2,11,14,14,16; 526:23;529:25;530:4, 8;532:12;551:4; 553:14,18;555:18</p> <p>witnesses (3) 446:8;521:6;532:9</p> <p>witness's (1) 468:2</p> <p>wondering (1) 508:15</p> <p>word (8) 447:16;463:12; 499:13;510:23;520:2; 551:4,5,22</p> <p>wording (1) 521:14</p> <p>work (46) 444:18;445:6,7,16, 16;447:8,9,11;448:6; 449:12;453:17,25; 454:1,4,8;465:1;476:8; 478:17;483:25;484:1, 1,4,15;485:21;486:1,8; 489:11;496:20;507:2; 510:20,24;532:20,21; 533:19;535:22;536:17; 537:10,17;538:1,2,18; 541:14,15;542:2,13; 551:9</p> <p>worked (12) 467:22;475:2;488:4, 8,11;489:22;490:12; 512:22,23;534:15; 539:10;542:6</p> <p>WORKERS (1) 436:10</p> <p>working (15) 453:16;454:3; 470:21;475:15;476:20; 488:16;489:1;490:1; 515:9;518:6,8,25; 533:19,21;537:13</p>	<p style="text-align: center;">X</p> <p>XRN (1) 512:7</p> <p style="text-align: center;">Y</p> <p>Yea (1) 457:19</p> <p>year (35) 443:19;444:13; 455:17;456:2;460:6,7, 21;461:9,11;470:17; 471:3;473:12,19,24; 474:17;475:1;476:13; 481:20;483:15;484:19; 502:7,8;503:18; 512:20;519:4,15; 531:17,17,18,22;544:8, 9;546:16;550:22;552:9</p> <p>years (9) 456:8;476:22,25; 477:4;502:8,10;505:7, 7;531:11</p> <p>year's (1) 455:24</p> <p>York (5) 436:16,16;453:24; 454:5;530:19</p> <p style="text-align: center;">Z</p> <p>Zangi (2) 446:16;447:7</p> <p>Zangi's (1) 446:17</p> <p>Zangi's (9) 447:8,10,21;448:1,3; 449:13,15;471:5;475:6</p> <p>Zoom (1) 436:17</p>
<p style="text-align: center;">W</p>	<p>W2 (1)</p>			

	497:3,5	554:12	544:3	527:1
0	12:24 (1)			47 (5)
	487:13	2	3	525:18,22;528:9,11;
02-RC-319437 (1)	12:47 (1)			529:16
436:5	508:21	2 (10)	3 (7)	48 (3)
	12:51 (2)	436:15;462:13,21;	462:21;474:17;	525:19,22;529:16
1	508:21,24	472:17,18;473:24;	502:8;527:2,7,11,24	49 (9)
	12:55 (1)	502:10;527:1,23;543:5	3:05 (2)	517:4,7,13,15,15,17;
1 (11)	510:13	2:51 (2)	529:22,23	525:14,25;526:2
462:21;502:10,24;	12:58 (2)	524:2,4	3:09 (2)	
511:12;512:6,23,23;	510:13,15	20 (7)	529:23,24	5
521:16;522:5;543:5;	13 (5)	494:3,6,8;512:4;	3:43 (2)	5 (4)
554:4	525:10,17,22;	524:20;525:5;529:15	547:6,7	462:21;524:15;
1:06 (2)	529:14;556:18	2004 (1)	3:45 (2)	525:4;529:14
514:4,5	13th (1)	481:17	547:7,8	50 (4)
1:07 (2)	544:23	2008 (1)	3:58 (2)	525:14,19,23;529:16
514:5,7	14 (4)	481:19	555:14,15	51 (15)
1:10 (2)	525:11,17,22;529:15	2018 (5)	30 (8)	501:19,21;502:5,23;
516:23,24	15 (4)	443:16,18;444:4;	451:6,6,7,11,17;	511:7;513:2,5,6,15;
1:11 (2)	479:18;524:16;	481:20;487:24	452:3,5;495:4	522:15,21,24;523:1;
516:24;517:1	525:4;529:15	2019 (1)	31 (5)	526:4,5
1:21 (2)	15-minute (1)	484:21	483:8,10;493:24;	
523:19,20	469:16	2020 (7)	494:6,7	6
10 (6)	16 (3)	453:22;531:8,8;	32 (9)	
448:14;479:18;	524:17;525:4;529:15	543:10;544:3,3;554:5	465:21,23;466:4,9,	6 (3)
492:12;524:16;525:4;	16th (1)	2021 (2)	11,11,13;491:14,15	524:15;525:4;529:14
529:14	544:3	546:8,22	33 (5)	
10:19 (2)	17 (1)	2022 (4)	461:24,25;464:10,	7
466:19,20	524:17	544:23,23;546:25,25	13,14	
10:24 (2)	17a (3)	2023 (3)	34 (4)	75% (1)
466:20,23	524:18;525:5;529:15	436:17;455:1;556:18	495:4;524:23;525:5;	473:25
10:31 (2)	17e (2)	21 (3)	529:16	
469:20,21	525:5;529:15	524:21;525:5;529:15	35 (4)	8
10:48 (2)	18 (12)	21st (1)	495:4;524:23;525:6;	
469:21,23	478:22,23;479:13;	455:1	529:16	8 (3)
100% (4)	480:13,15,23;481:4,4;	22 (3)	36 (4)	524:15;525:4;529:14
457:21;458:3;	491:6;524:18;525:5;	524:21;525:5;529:16	525:11,13,13,14	8/1/2018 (1)
474:18;482:24	529:15	23 (4)	36-130 (1)	460:5
11 (4)	19 (7)	487:13;524:21;	436:16	8/1/2020 (1)
525:10,17,22;529:14	497:25;498:2;	525:5;529:16	37 (4)	543:8
11:00 (2)	524:18;525:5;529:15;	24 (3)	525:12,18,22;529:16	8/29/'20 (1)
556:15,18	542:23;552:24	524:22;525:5;529:16	3rd (1)	544:12
11:04 (2)	195,000 (1)	25 (7)	455:1	
480:6,7	505:9	447:24;448:2;449:1,	4	9
11:09 (2)	19a (5)	4,5;475:21;476:6		
480:7,11	524:19;525:5;	250,000 (1)	4 (3)	9 (3)
11:29 (2)	529:15;544:18;545:16	505:8	524:14;525:4;529:14	524:16;525:4;529:14
492:15,16	19b (1)	26 (12)	4:13 (2)	9:30 (1)
11:51 (2)	524:19	436:16;449:8,9,11,	555:15,16	436:17
492:16,18	19c (1)	20;450:3,4;502:19,22,	4:15 (2)	9:35 (2)
11:52 (2)	524:19	22;503:5;511:7	556:7,8	442:2,3
493:10,11	19d (1)	26th (2)	4:29 (3)	
11:55 (2)	524:19	487:13;544:23	556:8,9,17	
493:11,14	19e (1)	27 (6)	44 (10)	
11:59 (2)	524:19	458:19,21;460:14,	468:1;469:12,13,14;	
495:21,22	19f (1)	17,19;486:20	495:5,12,14,14,16;	
12 (1)	524:19	27th (1)	526:23	
436:17	19g (5)	502:20	45 (12)	
12:04 (2)	524:20;543:13,24;	28 (10)	526:8,11,12,13,20,	
495:22,23	545:7,8	454:21,23;456:15;	25,25;527:6,14;528:1,	
12:05 (2)	19h (1)	457:9;458:9,11;473:6;	7;529:16	
497:2,3	524:20	494:19,22;512:4	45-Page (1)	
12:23 (2)	1st (1)	29th (1)		

In The Matter Of:
ICAHN SCHOOL of MEDICINE at MOUNT SINAI

Vol. 6
July 13, 2023

Burke Court Reporting, LLC
64 Magnolia Place
Wayne, NJ 0747
(973) 692-0660



Min-U-Script® with Word Index
BURKE
**COURT REPORTING
& TRANSCRIPTION**

Page 558

1 BEFORE THE
2 NATIONAL LABOR RELATIONS BOARD
3 -----:
4 In the Matter of: : Case No.:
5 ICAHN SCHOOL of MEDICINE at MOUNT SINAI, :
6 Employer, :
7 and :
8 INTERNATIONAL UNION, UNITED AUTOMOBILE, :
9 AEROSPACE, and AGRICULTURAL IMPLEMENT :
10 WORKERS of AMERICA, :
11 Petitioner. :
12 -----:
13 The above-entitled matter came on for hearing Pursuant to
14 Notice, before AVI KUMAR, Hearing Officer, at the National
15 Labor Relations Board, Region 2, Jacob K. Javits Federal
16 Building, 26 Federal Plaza, Suite 36-130, New York, New York,
17 via Zoom, on Thursday, July 13, 2023, at 9:30 a.m.
18
19
20
21
22
23
24
25
26

Page 559

1 A P P E A R A N C E S
2 On Behalf of the Employer:
3 ADAM M. LUPION, ESQ.
4 MELISSA FELCHER, ESQ.
5 Proskauer Rose LLP
6 Eleven Times Square, 19th Floor
7 New York, New York 10036-8299
8 (212) 969-3558
9 alupion@proskauer.com
10 mfelcher@prokauer.com
11
12 ANDREW E. RICE, ESQ.
13 Mount Sinai General Counsel
14 150 East 42nd Street, 2nd Floor
15 New York, New York 10017-5612
16 (212) 659-8105
17 andrew.rice@mountsinai.org
18
19
20
21
22
23
24
25
26

Page 560

1 A P P E A R A N C E S (continued)
2 On Behalf of the Petitioner:
3 THOMAS W. MEIKLEJOHN, ESQ.
4 NICOLE M. ROTHGEB, ESQ.
5 Livingston Adler Pulda Meiklejohn & Kelly PC
6 557 Prospect Avenue
7 Hartford, Connecticut 06105-2922
8 (860) 214-9676
9 twmeiklejohn@lapm.org
10 nmrothgeb@lapm.org
11
12 Also in Attendance
13 Corin Coetzee, Mt. Sinai post-doctoral researcher, Union
14 representative
15 Sebastian Vivancos, Union Representative
16
17
18
19
20
21
22
23
24
25
26

Page 561

1 I N D E X
2 WITNESS DIRECT CROSS REDIRECT RECROSS VOIR DIRE
3 (None).
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26

Page 562

EXHIBITS	IDENTIFIED	RECEIVED
EMPLOYER'S		
E-21 (a thru F)	563	564
E-22	564	564
E-23	566	566

Page 564

1 MS. ROTHGEB: Petitioner has no objection.
 2 HEARING OFFICER KUMA: Hearing no objection,
 3 documents are received and entered evidence.
 4 (Employer's Exhibit Number 21 admitted.)
 5 MR. LUPION: In addition, we have Mount Sinai Exhibit
 6 22, which is a printout from Sinai Cloud of information
 7 pertaining to a medical student.
 8 (Employer's Exhibit Number 22 identified.)
 9 MR. MEIKLEJOHN: No objection.
 10 HEARING OFFICER KUMA: Hearing no objection, the
 11 document is received and entered into evidence.
 12 (Employer's Exhibit Number 22 admitted.)
 13 MR. LUPION: In -- in addition, we had moved to amend
 14 two attachments, Attachment (b) and (d) in our statement of
 15 position to include students in the PhD program in clinical
 16 research who had provided instructional services to note that
 17 those would be students included in the Petition for Unit and
 18 also appear on the list of students who should be excluded from
 19 the Unit.
 20 The reason for that proposed amendment which was done
 21 with the consent of the Petitioner was due to the issue that
 22 was discussed at length during Day 1 of the hearing where we
 23 were led to believe that students in the PhD program for
 24 clinical research were not to be included in the Bargaining
 25 Unit at all.

Page 563

PROCEEDINGS
 (Time Noted: 1:25 p.m.)
 COURT REPORTER: On the record at 1:25 p.m.
 HEARING OFFICER KUMA: We're going to continue with
 today's hearing in Icahn School of Medicine at Mount Sinai,
 Case Number 02-RC-319437. Hearing that the Petitioner rested
 yesterday, I ask that the Employer continue with any
 stipulations that they may have come to while we were off the
 record and address any other document they may want to present
 into evidence.
 MR. LUPION: Thank you, yes. Mount Sinai would offer
 Exhibit 21 which is an email from Stephanie Autenrieth, A-U--T-
 E-N-R-I-E-T-H, dated Monday, August 8th 2022. That was a
 communication to self-funded graduate students, meaning
 students who do not receive stipend or other financial support
 from the school including but not limited to Master's students
 and PhD students in the clinical research program, that Exhibit
 21 contains six attachments marked (a) through (f).
 And I note for the record that those attachments are
 identical to the attachments in what is currently in evidence
 as Mount Sinai Exhibit 6, and Mount Sinai Exhibit 6 contains
 only Attachments (a) and (b). So I would offer Exhibit 21
 including Attachments (a) through (f).
 (Employer's Exhibit Number 21 identified.)
 (Employer's Exhibit Number 6(a) and (b) identified.)

Page 565

After that issue was resolved on Day 1 of the
 hearing, we had submitted those lists to amend our -- the
 attachments and the only changes on both attachment B and
 attachment D were the identification of nine students in the
 PhD program for clinical research who provided instructional
 services. And as noted, Petitioner consented to that proposed
 amendment.
 HEARING OFFICER KUMA: Hearing that the Employer has
 motioned to amend its timely file, SOP to include an
 Attachments (b) and (d), nine students in the clinical research
 department will hold instructional positions, and that the
 Petitioner does not oppose the motion -- the Employer's motion
 to amend the statement of position, the Regional Director
 denies the Employer's motion to amend its statement of position
 because it's even assuming it meets the good cause standard,
 the Employer has known since the first day of the hearing that
 the Petitioner seeks to represent these nine employees.
 And the motion made on the sixth day of the hearing
 is untimely. The Regional Director does want this information
 reflected in the record, and thus the Employer should submit
 this information as an exhibit or read it on the record.
 MR. LUPION: We would submit it as an exhibit, amend
 -- amendment to Attachment (b) would be Exhibit 23 and that is
 the Employer's identification of the student in the petition
 for Unit with the information required by the Board. And

Page 566

1 Attachment (d) is the identification of students who should be
 2 excluded from the Unit -- I'm sorry, an amended Attachment (d)
 3 of students who should be excluded from any unit with the
 4 information required by the Board.
 5 And it is the Respondent's position that all students
 6 who appear on Attachment (b) should be excluded from any unit
 7 because there is no appropriate unit. However, in the event
 8 that the board finds any unit to be appropriate, the
 9 individuals identified on Attachment (d) should be excluded
 10 from that unit.
 11 (Employer's Exhibit Number 23 identified.)
 12 MR. MEIKLEJOHN: I -- I have no objection to the
 13 receipt of that document as Employer Exhibit 23.
 14 HEARING OFFICER KUMA: Hearing no objections, the
 15 document is received.
 16 (Employer's Exhibit Number 23 admitted.)
 17 MR. LUPION: Are both -- are both attach -- amended
 18 Attachment (b) and amended Attachment (d) Exhibit 23, or would
 19 you like them separate?
 20 HEARING OFFICER KUMA: They can come in as -- as
 21 Exhibit 23.
 22 MR. LUPION: Okay. And the last item of business, we
 23 would request a -- an extension of time to file our post-
 24 hearing brief. We would seek a two-week extension. We
 25 understand that that extension would amount to 15 business days

Page 567

1 from --or -- or result in the briefs being filed 15 business
 2 days from the close of the evidentiary hearing, which assuming
 3 will be today. Petitioner does not -- we -- we consulted with
 4 counsel for the Petitioner, Petitioner does not oppose that
 5 request.
 6 MR. MEIKLEJOHN: That's correct.
 7 MR. LUPION: There is certainly good cause here for
 8 an extension. The hearing has lasted for six business days.
 9 By our count, there are approximately 70 exhibits, many of
 10 which are voluminous. As of this morning, we had only received
 11 Volume 1 of 6 of, of the hearing transcript. While we were on,
 12 I believe one or two may have trickled in.
 13 But we are certainly -- would like to and are
 14 entitled to see the official -- the official transcript and
 15 record to prepare the brief. And there are a number of legal
 16 issues that should be fleshed out for the Regional Director
 17 based on what currently is a voluminous factual record. And
 18 the extension would allow the parties to do so in a seemingly
 19 fashion. Therefore, good cause exists for the two-week
 20 extension.
 21 HEARING OFFICER KUMA: In accordance with case
 22 handling manual in the following briefs Section 11244.1, I
 23 grant the party's extensions to not exceed more than 15
 24 business days. Given that the record will be closing today,
 25 Thursday, July 13th, the party's extension is granted to August

Page 568

1 3rd, 2023.
 2 MR. LUPION: Thank you.
 3 HEARING OFFICER KUMA: Off the record.
 4 COURT REPORTER: Off the record at 1:36 p.m.
 5 (Brief Recess at 1:36 p.m./Reconvened at 1:36 p.m.)
 6 COURT REPORTER: The record at 1:36 p.m.
 7 HEARING OFFICER KUMA: Before we go into closing
 8 remarks, I'd like to get the parties position on election
 9 logistics. Just going a little bit out of order here, and I
 10 apologize for that. I want to know the Employer's position as
 11 the parties stipulated and for manual election to be conducted,
 12 starting with the Employer, where will the election take place?
 13 Time of the election, and onsite representative for the
 14 Employer for manual election.
 15 MR. LUPION: Okay. So is this -- are we on the
 16 record?
 17 HEARING OFFICER KUMA: Yes.
 18 MR. LUPION: All right. It is Mount Sinai's position
 19 that no election should be held because there is no employment
 20 relationship. However, if the Regional Director issues a
 21 decision and direction of election, it's our position that that
 22 election should be a manual election. It should be scheduled
 23 for no sooner than 25 days after any decision and direction of
 24 election.
 25 The manual balloting should take place on one day

Page 569

1 from commencing at 10:00 a.m. until 2:00 p.m., and then from
 2 3:00 p.m. until 7:00 p.m. We believe that one day is
 3 appropriate given the size of the petition for Unit
 4 approximately 300 students. The -- we would propose that the
 5 election polling location be at the Patricia and Robert
 6 Levinson Student Center on Mount Sinai's campus.
 7 HEARING OFFICER KUMA: Can you spell that, please?
 8 Sorry to cut you off.
 9 MR. LUPION: Patricia, P-A-T-R-I-C-I-A and Robert
 10 Levinson. L-E-V-I-N-S-O-N Student Center.
 11 HEARING OFFICER KUMA: Thank you. And who will be
 12 the onsite representative for the Employer?
 13 MR. LUPION: That has yet to be determined?
 14 HEARING OFFICER KUMA: Can it be named? Can Counsel
 15 be named as the onsite representative?
 16 MR. LUPION: I need to confer with my client or Andy,
 17 if you want to speak up, if you -- if you have a name.
 18 MR. RICE: So typically, we would not list Counsel as
 19 the onsite representative. I'm -- I -- I'm not prepared today
 20 to name that person, but we could supplement as necessary.
 21 HEARING OFFICER KUMA: Could there be any foreign
 22 ballots -- foreign language on the ballots or foreign
 23 translators?
 24 MR. LUPION: I -- I don't believe that's necessary.
 25 HEARING OFFICER KUMA: Will the Petitioner state

Page 570

1 their position for election logistics?
 2 MR. MEIKLEJOHN: Certainly. First, we agree to the
 3 Levinson Student Center as the location for a manual election.
 4 We are in agreement with the times 10:00 to 2:00 and 3:00 to
 5 7:00. Our position is however, that many of the workers do
 6 have somewhat irregular hours and schedules, and that
 7 therefore, it should be held on two days.
 8 We will propose a Tuesday and a Wednesday as soon as
 9 reasonably practical following the issuance of the Regional
 10 Director's decision and direction of election. I would note
 11 that what is reasonably practicable in any particular
 12 situation, particularly where it's affected by the academic
 13 calendar, may be influenced by the date that the decision
 14 issues.
 15 So we would respectfully request to be consulted
 16 again regarding the schedule of the election after the issuance
 17 of a -- of a decision and direction of election. Did I cover
 18 everything?
 19 HEARING OFFICER KUMA: One thing. Will the
 20 Petitioner be willing to waive any parts of the voters list?
 21 MR. MEIKLEJOHN: Of the list or the time for -- for
 22 having the list?
 23 HEARING OFFICER KUMA: Time for having the list.
 24 MR. MEIKLEJOHN: If that would expedite the election,
 25 we would certainly be willing to -- to do that.

Page 571

1 HEARING OFFICER KUMA: Off the record.
 2 COURT REPORTER: Off the record at 1:44 p.m.
 3 (Brief Recess at 1:44 p.m./Reconvened at 1:46 p.m.)
 4 HEARING OFFICER KUMA: On the record.
 5 COURT REPORTER: On the record at 1:46 p.m.
 6 HEARING OFFICER KUMA: The Employer, do you have any
 7 additional witnesses that you want to point out?
 8 MR. LUPION: We do not. And with the admission of
 9 the exhibits discussed earlier, we rest.
 10 HEARING OFFICER KUMA: Okay. And if the Employer
 11 rest, will the Petitioner proceed with closing remarks and
 12 state what is their final position and issues?
 13 MR. MEIKLEJOHN: Our position is that all of the
 14 doctoral students in biological sciences and neuroscience who
 15 are paid direct compensation from the Employer to conduct
 16 research are statutory employees, including those in their
 17 first year.
 18 And they should be allowed the opportunity to vote in
 19 a unit together with students who provide instructional
 20 services for compensation to the Employer. Now, I'm going to
 21 try to be brief about this. I think I will succeed, but I
 22 didn't just want to say a few words to the reader of the record
 23 before he or she or they starts contemplating a decision.
 24 Because by now, you have heard hundreds of -- or you
 25 have read rather, hundreds of pages of testimony from Employer

Page 572

1 witnesses who testified that the graduate students at Icahn
 2 School at Mount Sinai are students and not employees. And I
 3 would urge you before beginning to draft your decision to
 4 compare that testimony with the Employer's own records.
 5 Because those records show that while clearly, these
 6 are students and the Employer has a whole system and structure
 7 and way of thinking that treats them as students, the Employer
 8 also has a system and structure and mechanism under which it
 9 considers and treats them as employees.
 10 To me, the most blatant example of the inconsistency
 11 between the Employer's testimony and its own records is the
 12 adamant insistence on the part of its witness says that
 13 students are paid stipends and to refuse to accept the
 14 characterization of those payments as compensation.
 15 I'm not going to point to all the places in the
 16 record where these payments are referred to as direct
 17 compensation, but I would draw the reader of the record's
 18 attention to Employer Exhibit 2, Page 21, where the -- which
 19 clearly states that the correct term for these payments is
 20 direct compensation and that -- that the term stipend is a
 21 colloquialism or an informal reference.
 22 The use of the term in the official classification --
 23 in -- in official documents as compensation leads to the
 24 question compensation for what? What are these students being
 25 compensated for? And the obvious and only answer is that they

Page 573

1 are being compensated for conducting research. That research
 2 fulfills the mission of the Icahn School to advance science and
 3 medicine.
 4 There is no question -- I don't think there will be
 5 any dispute, any question in your mind under this record that
 6 the graduate students, that the grad -- conduct this research
 7 under the direction and supervision of members of the faculty
 8 and perhaps also postdocs employed by the university.
 9 So they conduct research, which is, it benefits them.
 10 Of course, it benefits them, but it also benefits and fulfills
 11 and serves the mission of the university. They are paid for
 12 it, and they do so under the direction and supervision of the
 13 university.
 14 That is the common law definition of employee used by
 15 the Board in Columbia, and it applies to these students. Now,
 16 this interpretation that direct compensation means compensation
 17 for providing services to the university is consistent with
 18 their Employer's human resources records and payroll records.
 19 So the record establishes that upon matriculation,
 20 students, apparently unpaid students as well as paid students,
 21 are entered into a system called Sinai Cloud, which the
 22 Employer's witnesses described as the Employer's human resource
 23 system. They are also enrolled in a payroll system. The
 24 records show they're paid what is called a salary in the
 25 payroll records.

Page 574

1 They -- there is federal, state, and local income
 2 taxes withheld from those payments. They received W-2s for
 3 these payments. Now, the Employer a few minutes ago introduced
 4 a record showing that a medical student has also been enrolled
 5 into the human resources system. But that record shows that
 6 the medical student in question is entered into the system as a
 7 student.

8 A non-paid work or non -- non-work, I think was the
 9 term. The -- the individuals that the Petitioner seeks to
 10 represent are entered into the system as graduate assistants.
 11 The -- the records list them -- hold too many of them out of my
 12 folder. Now, I'm -- the -- the records list them in several
 13 details as employees, it shows their date of hire.

14 The -- there are also several records in the -- or
 15 several documents in the record submitted by the Petitioner
 16 that shows that the Employer's payroll system identifies these
 17 individuals as employees. And finally, the records show that
 18 the graduate assistants become employees their date of hire,
 19 and that's the term, hire, is the date in which they enroll as
 20 students and start getting paid to conduct research for the
 21 Employer.

22 And I want to -- don't want to go into too much
 23 detail about the first year students, but we inter -- the --
 24 the Employer's testimony is that first year students just hang
 25 around the labs and learn what other people are doing. We've

Page 575

1 provided two very concrete examples of first year students who
 2 have actually conducted experience -- experiments, have
 3 analyzed data and have contributed to the research mission of
 4 the university and of course, they got paid for this.

5 So yes, they're attending classes while they're
 6 learning and doing the research work of the university. Dr.
 7 Filizola, on the first day of testimony, I guess the second day
 8 of the hearing, testified that the graduate assistants are in
 9 the nature of apprentices. That a grad -- that graduate
 10 training is in the nature of an apprenticeship.

11 That is what you -- the -- that is one of the
 12 analogies and one of the findings made by the Board in Columbia
 13 that the graduate students in that case were in the nature are
 14 similar to apprentices. Now, the Employer seeks to rely upon
 15 the Regional Director's decision in Region 1 in the MIT case.
 16 And we would like to emphasize before I distinguish MIT, that
 17 it is the Petitioner's position that MIT is inconsistent with
 18 Columbia and should not be followed as precedent.

19 Nevertheless, even if it were relevant or controlling
 20 precedent, it would not be relevant to this case. MIT treats
 21 their graduate students much differently. Graduate students at
 22 MIT who were funded by government grants and foundation grants
 23 to con -- to -- to work under those grants are classified in
 24 the Employer's payroll system and in the Employer's records as
 25 employees.

Page 576

1 They're -- I think the classification was research
 2 assistants. They are paid semi-monthly similar to the way that
 3 these graduate assistants are paid, with tax deductions and
 4 payments through the payroll system similar to these employees.
 5 Those employees, the research assistants, MIT conceded are
 6 employees and agreed to and consented to an election amongst
 7 those employees.

8 MIT considered a separate group of people who MIT
 9 classifies as fellows who are paid, who have their -- by and
 10 large are employees or students rather, who have their own
 11 grants and who MIT pays once a semester for the amount of their
 12 stipends.

13 They treat those payments differently because it --
 14 in their accounting system, they don't treat -- or in their
 15 payroll system, they don't treat these people as employees.
 16 They draw a distinction. They don't withhold their taxes, they
 17 don't -- they don't pay them twice. Because they separated
 18 those people out and treated them differently.

19 This Employer does not draw those -- those
 20 distinctions. It treats all of the graduate assistants in
 21 these two departments as employees. It pays them direct
 22 compensation, and it pays them direct compensation in the
 23 manner of the payments to an Employer.

24 So even if MIT were correctly decided, which it's
 25 not, but if it was, it would not provide any support for the

Page 577

1 Employer's position in this case. And so our position is that
 2 all of the petition for individuals are employees under
 3 Columbia and should be allowed to have an election as soon as
 4 possible.

5 (Employer's Exhibit Number 2 identified.)

6 HEARING OFFICER KUMA: Taking that the Employer --
 7 excuse me. The Petitioner is done with their closing remarks.

8 MR. MEIKLEJOHN: Oh, sorry. Yes.

9 HEARING OFFICER KUMA: Okay. Now, the Employer, will
 10 you state your final position, your closing remarks?

11 MR. LUPION: Yes. Thank you, Mr. Hearing Officer.
 12 After a six day hearing, the record clearly establishes exactly
 13 what we set out to prove. PhD graduate students at the Icahn
 14 School of Medicine at Mount Sinai, specifically the PhD
 15 students in biomedical science and neuroscience, as well as the
 16 dual degree MD-PhD students are students, not employees, and
 17 there is no employment relationship at all with the school.

18 According to the Petitioner, whenever a student
 19 anywhere performs research towards a thesis and gets financial
 20 support from the school, he or she is an employee. But that is
 21 not the law. Indeed, even in Columbia, the Board established
 22 boundaries between student and -- and employee.

23 And the record in this case confirms that the Mount
 24 Sinai students in the petition for unit are students. Based on
 25 the factors the Board articulated in Columbia, we respectfully

Page 578

1 submit that the Regional Director decline Petitioner's
 2 invitation to extend Columbia. Because to find that these
 3 students are employees, the Regional Director would be required
 4 to ignore the Board's decision in Columbia.
 5 The Regional Director in Region 1 in a case involving
 6 students at MIT, similar to those at issue here, recognized
 7 this distinction and declined to go further than the Board in
 8 Columbia. This region should follow suit in respecting the
 9 boundaries established by Columbia.
 10 Because based on a plain reading of that case and the
 11 record evidence in this case, there is no employment
 12 relationship. To the Reader of the Record, you have now heard
 13 testimony from six professors at the graduate school, five of
 14 whom currently are principal investigators or PIs running their
 15 labs.
 16 All of these witnesses testified unequivocally that
 17 virtually all research performed in the lab was towards the
 18 student's dissertation. All of the witnesses testified
 19 unequivocally that students were never required to perform any
 20 specific tasks, whether towards their grants or otherwise in
 21 order to continue to receive funding.
 22 In fact, all of the witnesses testified that students
 23 were not required to do a single thing outside of their
 24 academic program in order to continue to receive funding. That
 25 should be, we submit, the end of the inquiry. Because those

Page 579

1 facts alone render the PhD students is -- at issue here,
 2 fundamentally different from the students at Columbia. And
 3 those differences are profound.
 4 As Dr. Matthew O'Connell testified in response to
 5 questions about Columbia, all programs are different. The only
 6 similarity between the students at Columbia and the students at
 7 issue here is that they were PhD students performing research
 8 towards their thesis who received financial support from their
 9 school.
 10 But in Columbia, students were required to serve as a
 11 teaching assistant or as a research assistant as a condition
 12 for their funding. In Columbia, the students were assigned to
 13 a specific lab or course. In Columbia, when in the lab, they
 14 were required to perform tasks in furtherance of their PI's
 15 grant.
 16 Those are service requirements in addition to their
 17 academic pursuits. The undisputed record evidence here is that
 18 the students choose their labs. The students choose their lab
 19 rotations based on their own academic interest. They are never
 20 assigned to an MTA, a multidisciplinary training area. They
 21 are never assigned to a PI, and they are never assigned to a
 22 specific lab.
 23 The choice is theirs, the students, and the students
 24 alone. Both of the students who testified in this case
 25 admitted this. The undisputed record evidence is that there

Page 580

1 are no service requirements because the student's funding is
 2 conditioned only on the maintenance of satisfactory academic
 3 progress.
 4 The Board in Columbia recognized the importance of
 5 that being the only condition on the receipt of the student's
 6 funding. The two students who testified admitted that their
 7 funding was not conditioned on what they did in the lab or how
 8 they did it. There's no dispute that students are not required
 9 to teach, and there's no dispute that students are not required
 10 to perform any research outside of the lab that they select for
 11 their thesis.
 12 Indeed, the students admitted that they could have
 13 changed labs without losing funding. In fact, as Dr. O'Connell
 14 testified, a student's PI could move to another institution.
 15 The student can follow the PI to that institution, and Mount
 16 Sinai will continue to fund that student's research while he or
 17 she is performing research at a different school.
 18 Every PI who testified in this case, Dr. Filizola,
 19 Dr. O'Connell, Dr. Swartz, Dr. Russo, and Dr. Wacker all
 20 testified that students had the academic freedom, 1, to choose
 21 their own lab, and 2, to choose their own research topic. That
 22 testimony was rebutted. In Columbia, the research
 23 assistant's aid package required fulfillment of the duties
 24 defined in the grant.
 25 Here, by sharp contrast, every PI also testified that

Page 581

1 students are never required to perform tasks in furtherance of
 2 a grant in order to maintain their funding or in order to
 3 maintain satisfactory academic progress. That testimony also
 4 was not rebutted.
 5 Also, unlike Columbia, the undisputed record evidence
 6 established that PIs lack the ability to discipline or remove
 7 PhD students from their lab, but they do have the ability to
 8 discipline postdocs and research assistants. That is because,
 9 as Dr. Hanss testified, there are many procedures and
 10 safeguards in place specifically designed to help students
 11 succeed as students.
 12 As I said, all six of the school's witnesses who
 13 testified on this subject, including the Dean, the Senior
 14 Associate Deans, Professors, and PIs, emphatically and
 15 convincingly testified that virtually all of the research time
 16 in the lab is devoted to the student's dissertation research,
 17 and those students are not required to do anything outside of
 18 their academic program.
 19 Indeed, students enroll in a course and receive a
 20 grade for their thesis research. Those facts are not disputed
 21 either. So in the face of all of this overwhelming evidence,
 22 the Petitioner called two students whose testimony on direct
 23 examination in total was less than two hours.
 24 Now, the problem for the Petitioner is that neither
 25 student contradicted the school's testimony in any meaningful

Page 582

1 way. The best evidence the Union was able to adduce --
 2 MR. LUPION: Can -- can somebody go on mute? I'm
 3 getting some background.
 4 MR. MEIKLEJOHN: He did.
 5 MR. LUPION: The best evidence the Union was able to
 6 adduce, in fact, the only evidence the Union adduced on this
 7 subject is that one student had his own research interrupted
 8 because he chose. He voluntarily chose to help his lab and to
 9 help the world when the COVID-19 pandemic hit.
 10 The Union's entire case in chief consists of one
 11 student who chose to pause his thesis research to deal with a
 12 once in a lifetime national health emergency. That experience
 13 cannot possibly be extrapolated to all students in all labs.
 14 The Regional Director and the Reader of the Record should see
 15 it for exactly what it is, an outlier.
 16 Now, in any event, this student chose to pivot his
 17 research to COVID-19 related issues. He was not forced, he was
 18 not required, and he even benefited from -- from doing so.
 19 Now, to be sure if the Union had any student who could have
 20 testified that their PI or the school required them to do any
 21 research at all that was unrelated to their thesis, they surely
 22 would have called that student.
 23 But he or she doesn't exist. The union's second
 24 witness testified about the various tasks he performed during
 25 his lab rotations. That testimony didn't move the needle for

Page 583

1 the Petitioner either because that student admitted that his
 2 funding was not conditioned on anything he did during a lab
 3 rotation.
 4 And he further admitted that the things he was doing
 5 in each lab rotation allowed him to get a good feel for each
 6 lab, precisely the purpose of a lab -- of a lab rotation. So
 7 against all of this evidence, it appears the Union's case rests
 8 entirely on how students are described at times on certain of
 9 Mount Sinai's systems.
 10 Now, remember, the graduate school is only one part
 11 of the Mount Sinai Health System. This is an enterprise with
 12 more than 43,000 employees working across eight hospitals, over
 13 400 outpatient practices, nearly 300 labs, a school of nursing
 14 and a leading school of medicine and graduate education. And
 15 what I just read from was Petitioner's Exhibit 45.
 16 The graduate school is but one piece of the Mount
 17 Sinai Health System. 43,000 employees, doctors, nurses, and
 18 other individuals who work. And you heard testimony that the
 19 entire Mount Sinai Community has access to Sinai Cloud. And
 20 that Sinai Cloud uses different nomenclature from the graduate
 21 school.
 22 Now, however graduate students are referred to in
 23 these systems is certainly not an admission, and it is
 24 completely irrelevant to the compensation and control inquiry
 25 that drives the analysis. In fact, the record establishes that

Page 584

1 self-funded students, students who do not receive any financial
 2 support from the school and who Petitioner concedes are not
 3 employees, also have privileges to access Sinai Cloud in the
 4 same way as the students in the Petition for Unit.
 5 But that doesn't make them employees and Petitioner
 6 concedes as much. Now, to find that these students are
 7 employees based on the use of words or phrases that have no
 8 application to the graduate school, would we submit elevate
 9 form over substance. The Petitioner relies extensively on the
 10 use of the word compensation in the graduate student handbook.
 11 All of the witnesses who testified in this case, that
 12 that compensation was not in exchange for services performed
 13 for the school or for the PI. With respect to W-2s, we will
 14 brief this issue, but the Board has long held that it does not
 15 give any difference to the tax classification of -- of employee
 16 -- individuals at issue in making its determination.
 17 The relevant inquiry is compensation and control, not
 18 how these students are classified for tax treatment purposes.
 19 You also heard testimony that there are 70 international
 20 students who are here in this country on an F-1 student visa.
 21 The undisputed record evidence is that those students, by
 22 federal regulation, cannot more -- cannot work more than 20
 23 hours per week on campus. So PhD students are deemed to be
 24 employees based on the research they perform in their lab
 25 towards their dissertation.

Page 585

1 (Petitioner's Exhibit Number 45 identified.)
 2 MR. MEIKLEJOHN: It's unusual -- this is just
 3 unusual, but I believe counsel is moving into reciting the
 4 testimony that was -- the witness was precluded from offering.
 5 MR. LUPION: Tom, first of all, I didn't interrupt
 6 you during your closing. I would appreciate the courtesy. And
 7 this is -- this is argument, this is not.
 8 HEARING OFFICER KUMA: So this -- I'll accept the
 9 petition to allow the Employer to finish their closing remarks.
 10 MR. LUPION: Yeah. I would app -- thank you, Mr.
 11 Hearing Officer. I gave you the courtesy, Tom, of not
 12 interrupting. I would appreciate the same.
 13 MR. MEIKLEJOHN: My -- my only point is that --
 14 MR. LUPION: May I --
 15 MR. MEIKLEJOHN: -- testimony was completed.
 16 MR. LUPION: May I proceed, Mr. Hearing Officer?
 17 HEARING OFFICER KUMA: Yes.
 18 MR. LUPION: So if PhD students are deemed to be
 19 employees based on the research they perform in the lab towards
 20 their dissertation, that would cause undue hardship on all
 21 international students, roughly 25% of the student population
 22 at issue here. Because those students, by federal mandate,
 23 could not spend more than 20 hours per week performing research
 24 in a lab towards their dissertation, placing them at a severe
 25 disadvantage vis-a-vis domestic students.

Page 586

1 Mount Sinai -- simply put, Mount Sinai's PhD graduate
 2 students are just that. Students, not employees. They don't
 3 look anything like the students in Columbia and they're much
 4 more analogous to the students at issue in -- in MIT.
 5 So after review of all the facts and the Board's
 6 decision in Columbia, the Regional Director's decision in MIT,
 7 we respectfully submit that the Regional Director find that the
 8 graduate students whom Petitioner seeks to represent are not
 9 employees and dismiss the petition.
 10 If, however, the Regional Director finds that the
 11 students in the petition for unit are employees, the -- the
 12 following students should be excluded from any unit. And to be
 13 clear, there should not be any unit.
 14 First, students in the first year of the PhD program,
 15 because they are students in the classroom as well as students
 16 rotating through labs, as stated above the undisputed evidence
 17 is that the purpose of a lab rotation is to give the students
 18 an opportunity -- opportunity to see if they like the lab.
 19 Both with respect to the nature of the research performed and
 20 to see if they -- there's a rapport with the constituents in
 21 that lab.
 22 There are no expectations or requirements whatsoever
 23 during a lab rotation. Now, in this respect, it bears
 24 significant emphasis that the Petitioner has agreed to exclude
 25 the dual degree MD-PhD students while they are in the MD

Page 587

1 portion of the program. But those students are insofar as is
 2 relevant here, indistinguishable from the first year PhD
 3 students because they too are taking courses and rotating
 4 through labs.
 5 The Petitioner's recognition that the first and
 6 second year MD-PhD students -- PhD students, the dual degree
 7 students, the Petitioner's recognition that those students
 8 should not be in the unit cannot be reconciled with its
 9 petition that first year PhD students should be. Second,
 10 teaching assistants should be excluded.
 11 And I won't spend a lot of time on this because the
 12 number of students who -- who would be in the unit solely by
 13 virtue of serving as a DA is a pretty small number. But the
 14 record clearly established that those students lack a community
 15 of interest with the remainder of any unit.
 16 They have different methods and rates of pay,
 17 different schedules, different requirements, different
 18 expectations, different skills, different punitive supervisors,
 19 and on and on. And lastly, there is one student who is funded
 20 by an external foreign government and therefore Mount Sinai has
 21 no role, whatsoever, with respect to the funds that students
 22 receives.
 23 So for all of those reasons, the Icahn School of
 24 Medicine at Mount Sinai respectfully request that the Regional
 25 Director dismiss the petition. Thank you.

Page 588

1 MR. MEIKLEJOHN: I don't wish to respond. I just
 2 want to make the observation that the portion of the argument
 3 the Counsel made regarding the impact of -- of such a finding
 4 in this case on international students appears to be based on
 5 the testimony of a witness that was attempted to be offered,
 6 and that was barred by the -- by the Hearing Officer as was not
 7 admitted.
 8 MR. LUPION: I -- I -- I understand -- I understand
 9 why you're very concerned about the testimony, because it's
 10 devastating to your case. But I would note that the argument
 11 that I made was based on facts that are admitted into -- into
 12 the record, and Counsel is entitled to make whatever argument
 13 you'd like to make based on the undisputed record evidence.
 14 MR. MEIKLEJOHN: We will address the issue, but --
 15 okay. You're muted, Mr. Hearing Officer.
 16 HEARING OFFICER KUMA: Okay. Given --
 17 MR. MEIKLEJOHN: Those (indiscernible) Board Agents
 18 in the background were disrupting his presentation.
 19 HEARING OFFICER KUMA: My apologies for the Regional
 20 Director.
 21 MR. MEIKLEJOHN: Oh, that was the Regional Director
 22 who --
 23 HEARING OFFICER KUMA: My apologies. But given the
 24 Petitioner's observations, they'll be noted and the right of the
 25 record will make the appropriate weight. Given all parties had

Page 589

1 opportunity to argue orally on the record, now we'll move in to
 2 making sure that all exhibits have been entered. So just want
 3 to clarify that Exhibit 23 was offered and there was no
 4 objections, and that has been received.
 5 MR. MEIKLEJOHN: That's Employer 23, correct?
 6 HEARING OFFICER KUMA: Yes. Employer's Exhibit 23?
 7 MR. LUPION: That's correct.
 8 HEARING OFFICER KUMA: Okay. Off the record.
 9 COURT REPORTER: Off the record at 2:22 p.m.
 10 (Brief Recess at 2:22 p.m./Reconvened at 2:42 p.m.)
 11 MR. MEIKLEJOHN: On the record.
 12 COURT REPORTER: On the record at 2:42 p.m.
 13 HEARING OFFICER KUMA: Right. After receiving all of
 14 the parties remarks, closing statements and entries into
 15 exhibits, just want to make it clear for the Reader of the
 16 Record what specific claims and issues that the Employer will
 17 be -- have been addressing throughout this hearing, which was
 18 limited by the Regional Director. And as such, the Employer
 19 will now read that into the record.
 20 MR. LUPION: Thank you, Mr. Hearing Officer. One,
 21 there is no employment relationship between the Icahn School of
 22 Medicine at Mount Sinai and graduate students, including, but
 23 not limited to PhD students in biomedical sciences and
 24 neuroscience, including joint degree MD-PhD students in the
 25 graduate school's medical scientist training program based on

Page 590

1 research performed to fulfill academic degree requirements.
 2 Two, the PhD graduate students Petitioner seeks to
 3 represent are not employees within the meaning of Section 2-3 -
 4 -2(3) of the National Labor Relations Act. Three, to the
 5 extent the petition for unit seeks to include PhD graduate
 6 students based on the performance of instructional services,
 7 including serving as a teaching assistant or tutor, such a unit
 8 is inappropriate because those students lack a community of
 9 interest with PhD graduate students performing research.
 10 Three -- or excuse me, four, is assuming arguendo
 11 that PhD graduate students whom Petitioner seeks to represent
 12 are deemed to be employees within the meaning of Section 2(3)
 13 of the National Labor Relations Act. The following employees
 14 must be excluded from any unit found appropriate by the Board.
 15 All graduate students serving in any instructional
 16 position, including as a teaching assistant or tutor, as they
 17 lack a community of interest with PhD graduate students who
 18 perform research.
 19 All first year PhD students in biomedical sciences
 20 for neuroscience and all dual degree MD-PhD students in the MD
 21 portion of -- of their education, as we understand the
 22 Petitioner is not seeking to include -- Petitioner has
 23 represented that -- that those individuals would not be in any
 24 unit and -- as well that any unit would have to exclude any
 25 individuals who do not receive any compensation from Mount

Page 591

1 Sinai.
 2 HEARING OFFICER KUMA: Right. The hearing that --
 3 I'll state this, can the Court Reporter state and let us know
 4 an approximation of papers -- the number of trans -- pages of
 5 this transcript?
 6 COURT REPORTER: Understanding from Hearing Officer
 7 Kuma and Counsel, that the first three days of testimony
 8 produced 357 pages of transcript. Estimating Day 4 at six
 9 hours of testimony and my own time estimates from yesterday and
 10 today as the Court Reporter those days, I estimate that the
 11 transcript will be approximately 800 pages in total for the
 12 entire hearing.
 13 HEARING OFFICER KUMA: Right. Parties are reminded
 14 that they should request an expedited copy of the transcript
 15 from the Court Reporter. Late receipt of the trans --
 16 transcript will not be grounds for an extension of time file
 17 briefs if they fail to do so on top of what was additionally
 18 filed and requested and approved.
 19 Also, after the closing of the hearing, one, or more
 20 parties may wish for corrections to be made in the record. All
 21 such proposed corrections, either by way of stipulation or
 22 motion should be forwarded to the Board in Washington instead
 23 of to me. I have no authority to make any rulings in this
 24 connection as the hearing is closed.
 25 In the event any of the parties wish to make an off

Page 592

1 the record remark request to make such remarks should be
 2 directed to me and not the official Court Reporter, and I will
 3 forward it to the Regional Director who will then make the
 4 necessary steps to forward it up to Washington, okay? If there
 5 is nothing further, the hearing will be closed. Absent any
 6 response, the hearing is now closed.
 7 COURT REPORTER: We're off the record at 2:48 p.m.
 8 (Whereupon, at 2:48 p.m. the hearing in the above-entitled
 9 matter was closed pending submission of briefs.)
 10
 11
 12
 13
 14
 15
 16
 17
 18
 19
 20
 21
 22
 23
 24
 25

Page 593

1 CERTIFICATION

2 This is to certify that the attached proceedings before
 3 the National Labor Relations Board, Region 2, in the matter of
 4 Icahn School of Medicine at Mount Sinai and International
 5 Union, United Automobile, Aerospace, and Agricultural
 6 Implement Workers of America, Case No. 02-RC-319437, at New
 7 York, New York, on July 13, 2023, was held according to the
 8 record, and that this is the original, complete, and true and
 9 accurate transcript that has been compared to the recording
 10 from the hearing, that the exhibits are complete, and no
 11 exhibits received in evidence or in the rejected file are
 12 missing.
 13
 14
 15
 16
 17

 18 Jill Cifelli, CER
 19
 20
 21
 22
 23
 24
 25

A	against (1) 583:7	apprentices (2) 575:9,14	AVI (1) 558:14	business (5) 566:22,25;567:1,8, 24
ability (2) 581:6,7	Agents (1) 588:17	apprenticeship (1) 575:10	B	C
able (2) 582:1,5	ago (1) 574:3	appropriate (5) 566:7,8;569:3; 588:25;590:14	background (2) 582:3;588:18	calendar (1) 570:13
above (1) 586:16	agree (1) 570:2	approved (1) 591:18	balloting (1) 568:25	called (4) 573:21,24;581:22; 582:22
above-entitled (2) 558:13;592:8	agreed (2) 576:6;586:24	approximately (3) 567:9;569:4;591:11	ballots (2) 569:22,22	came (1) 558:13
Absent (1) 592:5	agreement (1) 570:4	approximation (1) 591:4	Bargaining (1) 564:24	campus (2) 569:6;584:23
academic (9) 570:12;578:24; 579:17,19;580:2,20; 581:3,18;590:1	AGRICULTURAL (1) 558:9	area (1) 579:20	barred (1) 588:6	can (8) 566:20;569:7,14,14; 580:15;582:2,2;591:3
accept (2) 572:13;585:8	aid (1) 580:23	argue (1) 589:1	based (12) 567:17;577:24; 578:10;579:19;584:7, 24;585:19;588:4,11, 13;589:25;590:6	Case (18) 558:4;563:6;567:21; 575:13,15,20;577:1,23; 578:5,10,11;579:24; 580:18;582:10;583:7; 584:11;588:4,10
access (2) 583:19;584:3	allow (2) 567:18;585:9	arguendo (1) 590:10	bears (1) 586:23	cause (4) 565:15;567:7,19; 585:20
accordance (1) 567:21	allowed (3) 571:18;577:3;583:5	argument (4) 585:7;588:2,10,12	beginning (1) 572:3	Center (3) 569:6,10;570:3
According (1) 577:18	alone (2) 579:1,24	around (1) 574:25	benefited (1) 582:18	certain (1) 583:8
accounting (1) 576:14	amend (6) 564:13;565:2,9,13, 14,22	articulated (1) 577:25	benefits (3) 573:9,10,10	certainly (5) 567:7,13;570:2,25; 583:23
across (1) 583:12	amended (3) 566:2,17,18	assigned (4) 579:12,20,21,21	best (2) 582:1,5	changed (1) 580:13
Act (2) 590:4,13	amendment (3) 564:20;565:7,23	assistant (4) 579:11,11;590:7,16	biological (1) 571:14	changes (1) 565:3
actually (1) 575:2	AMERICA (1) 558:10	assistants (9) 574:10,18;575:8; 576:2,3,5,20;581:8; 587:10	biomedical (3) 577:15;589:23; 590:19	characterization (1) 572:14
adamant (1) 572:12	amongst (1) 576:6	assistant's (1) 580:23	bit (1) 568:9	chief (1) 582:10
addition (3) 564:5,13;579:16	amount (2) 566:25;576:11	Associate (1) 581:14	blatant (1) 572:10	choice (1) 579:23
additional (1) 571:7	analogies (1) 575:12	assuming (3) 565:15;567:2;590:10	BOARD (15) 558:2,15;565:25; 566:4,8;573:15; 575:12;577:21,25; 578:7;580:4;584:14; 588:17;590:14;591:22	choose (4) 579:18,18;580:20,21
additionally (1) 591:17	analogous (1) 586:4	attach (1) 566:17	Board's (2) 578:4;586:5	chose (4) 582:8,8,11,16
address (2) 563:9;588:14	analysis (1) 583:25	Attachment (10) 564:14;565:3,4,23; 566:1,2,6,9,18,18	both (5) 565:3;566:17,17; 579:24;586:19	claims (1) 589:16
addressing (1) 589:17	analyzed (1) 575:3	attachments (8) 563:18,19,20,22,23; 564:14;565:3,10	boundaries (2) 577:22;578:9	clarify (1) 589:3
adduce (2) 582:1,6	Andy (1) 569:16	attempted (1) 588:5	brief (7) 566:24;567:15; 568:5;571:3,21; 584:14;589:10	classes (1) 575:5
adduced (1) 582:6	apologies (2) 588:19,23	attending (1) 575:5	briefs (4) 567:1,22;591:17; 592:9	classification (3) 572:22;576:1;584:15
admission (2) 571:8;583:23	apologize (1) 568:10	attention (1) 572:18	Building (1) 558:16	classified (2) 575:23;584:18
admitted (10) 564:4,12;566:16; 579:25;580:6,12; 583:1,4,588:7,11	app (1) 585:10	August (2) 563:13;567:25		classifies (1) 576:9
advance (1) 573:2	apparently (1) 573:20	A-U-T- (1) 563:12		classroom (1) 586:15
AEROSPACE (1) 558:9	appear (2) 564:18;566:6	Autenrieth (1) 563:12		clear (2)
affected (1) 570:12	appears (2) 583:7;588:4	authority (1) 591:23		
again (1) 570:16	application (1) 584:8	AUTOMOBILE (1) 558:8		
	applies (1) 573:15			
	appreciate (2) 585:6,12			

586:13;589:15 clearly (4) 572:5,19;577:12; 587:14 client (1) 569:16 clinical (5) 563:17;564:15,24; 565:5,10 close (1) 567:2 closed (4) 591:24;592:5,6,9 closing (9) 567:24;568:7; 571:11;577:7,10; 585:6,9;589:14;591:19 Cloud (5) 564:6;573:21; 583:19,20;584:3 colloquialism (1) 572:21 Columbia (21) 573:15;575:12,18; 577:3,21,25;578:2,4,8, 9;579:2,5,6,10,12,13; 580:4,22;581:5;586:3, 6 commencing (1) 569:1 common (1) 573:14 communication (1) 563:14 Community (4) 583:19;587:14; 590:8,17 compare (1) 572:4 compensated (2) 572:25;573:1 compensation (16) 571:15,20;572:14, 17,20,23,24;573:16,16; 576:22,22;583:24; 584:10,12,17;590:25 completed (1) 585:15 completely (1) 583:24 con (1) 575:23 conceded (1) 576:5 concedes (2) 584:2,6 concerned (1) 588:9 concrete (1) 575:1 condition (2) 579:11;580:5 conditioned (3)	580:2,7;583:2 conduct (4) 571:15;573:6,9; 574:20 conducted (2) 568:11;575:2 conducting (1) 573:1 confer (1) 569:16 confirms (1) 577:23 connection (1) 591:24 consent (1) 564:21 consented (2) 565:6;576:6 considered (1) 576:8 considers (1) 572:9 consistent (1) 573:17 consists (1) 582:10 constituents (1) 586:20 consulted (2) 567:3;570:15 contains (2) 563:18,21 contemplating (1) 571:23 continue (5) 563:4,7;578:21,24; 580:16 contradicted (1) 581:25 contrast (1) 580:25 contributed (1) 575:3 control (2) 583:24;584:17 controlling (1) 575:19 convincingly (1) 581:15 copy (1) 591:14 corrections (2) 591:20,21 correctly (1) 576:24 counsel (7) 567:4;569:14,18; 585:3;588:3,12;591:7 count (1) 567:9 country (1) 584:20 course (4)	573:10;575:4; 579:13;581:19 courses (1) 587:3 COURT (13) 563:3;568:4,6;571:2, 5;589:9,12;591:3,6,10, 15;592:2,7 courtesy (2) 585:6,11 cover (1) 570:17 COVID-19 (2) 582:9,17 currently (3) 563:20;567:17; 578:14 cut (1) 569:8	577:16;586:25; 587:6;589:24;590:1,20 denies (1) 565:14 department (1) 565:11 departments (1) 576:21 described (2) 573:22;583:8 designed (1) 581:10 detail (1) 574:23 details (1) 574:13 determination (1) 584:16 determined (1) 569:13 devastating (1) 588:10 devoted (1) 581:16 difference (1) 584:15 differences (1) 579:3 different (10) 579:2,5;580:17; 583:20;587:16,17,17, 17,18,18 differently (3) 575:21;576:13,18 direct (7) 571:15;572:16,20; 573:16;576:21,22; 581:22 directed (1) 592:2 direction (6) 568:21,23;570:10, 17;573:7,12 Director (15) 565:13,19;567:16; 568:20;578:1,3,5; 582:14;586:7,10; 587:25;588:20,21; 589:18;592:3 Director's (3) 570:10;575:15;586:6 disadvantage (1) 585:25 discipline (2) 581:6,8 discussed (2) 564:22;571:9 dismiss (2) 586:9;587:25 dispute (3) 573:5;580:8,9 disputed (1) 581:20	disrupting (1) 588:18 dissertation (5) 578:18;581:16; 584:25;585:20,24 distinction (2) 576:16;578:7 distinctions (1) 576:20 distinguish (1) 575:16 doctoral (1) 571:14 doctors (1) 583:17 document (4) 563:9;564:11; 566:13,15 documents (3) 564:3;572:23;574:15 domestic (1) 585:25 done (2) 564:20;577:7 Dr (9) 575:6;579:4;580:13, 18,19,19,19,19;581:9 draft (1) 572:3 draw (3) 572:17;576:16,19 drives (1) 583:25 dual (4) 577:16;586:25; 587:6;590:20 due (1) 564:21 during (5) 564:22;582:24; 583:2;585:6;586:23 duties (1) 580:23
D				
DA (1) 587:13 data (1) 575:3 date (4) 570:13;574:13,18,19 dated (1) 563:13 Day (10) 564:22;565:1,16,18; 568:25;569:2;575:7,7; 577:12;591:8 days (8) 566:25;567:2,8,24; 568:23;570:7;591:7,10 deal (1) 582:11 Dean (1) 581:13 Deans (1) 581:14 decided (1) 576:24 decision (11) 568:21,23;570:10, 13,17;571:23;572:3; 575:15;578:4;586:6,6 decline (1) 578:1 declined (1) 578:7 deductions (1) 576:3 deemed (3) 584:23;585:18; 590:12 defined (1) 580:24 definition (1) 573:14 degree (6)				
E				
earlier (1) 571:9 education (2) 583:14;590:21 eight (1) 583:12 either (3) 581:21;583:1;591:21 election (19) 568:8,11,12,13,14, 19,21,22,22,24;569:5; 570:1,3,10,16,17,24; 576:6;577:3 elevate (1) 584:8 email (1) 563:12				

<p>emergency (1) 582:12</p> <p>emphasis (1) 586:24</p> <p>emphasize (1) 575:16</p> <p>emphatically (1) 581:14</p> <p>employed (1) 573:8</p> <p>employee (4) 573:14;577:20,22; 584:15</p> <p>employees (31) 565:17;571:16; 572:2,9;574:13,17,18; 575:25;576:4,5,6,7,10, 15,21;577:2,16;578:3; 583:12,17;584:3,5,7, 24;585:19;586:2,9,11; 590:3,12,13</p> <p>Employer (28) 558:6;563:7;565:8, 16,20;566:13;568:12, 14;569:12;571:6,10,15, 20,25;572:6,7,18; 574:3,21;575:14; 576:19,23;577:6,9; 585:9;589:5,16,18</p> <p>Employer's (23) 563:24,25;564:4,8, 12;565:12,14,24; 566:11,16;568:10; 572:4,11;573:18,22,22; 574:16,24;575:24,24; 577:1,5;589:6</p> <p>employment (4) 568:19;577:17; 578:11;589:21</p> <p>end (1) 578:25</p> <p>E-N-R-I-E-T-H (1) 563:13</p> <p>enroll (2) 574:19;581:19</p> <p>enrolled (2) 573:23;574:4</p> <p>entered (6) 564:3,11;573:21; 574:6,10;589:2</p> <p>enterprise (1) 583:11</p> <p>entire (3) 582:10;583:19; 591:12</p> <p>entirely (1) 583:8</p> <p>entitled (2) 567:14;588:12</p> <p>entries (1) 589:14</p> <p>established (4) 577:21;578:9;581:6;</p>	<p>587:14</p> <p>establishes (3) 573:19;577:12; 583:25</p> <p>estimate (1) 591:10</p> <p>estimates (1) 591:9</p> <p>Estimating (1) 591:8</p> <p>even (5) 565:15;575:19; 576:24;577:21;582:18</p> <p>event (3) 566:7;582:16;591:25</p> <p>evidence (16) 563:10,20;564:3,11; 578:11;579:17,25; 581:5,21;582:1,5,6; 583:7;584:21;586:16; 588:13</p> <p>evidentiary (1) 567:2</p> <p>exactly (2) 577:12;582:15</p> <p>examination (1) 581:23</p> <p>example (1) 572:10</p> <p>examples (1) 575:1</p> <p>exceed (1) 567:23</p> <p>exchange (1) 584:12</p> <p>exclude (2) 586:24;590:24</p> <p>excluded (8) 564:18;566:2,3,6,9; 586:12;587:10;590:14</p> <p>excuse (2) 577:7;590:10</p> <p>Exhibit (25) 563:12,17,21,21,22, 24,25;564:4,5,8,12; 565:21,22,23;566:11, 13,16,18,21;572:18; 577:5;583:15;585:1; 589:3,6</p> <p>exhibits (4) 567:9;571:9;589:2, 15</p> <p>exist (1) 582:23</p> <p>exists (1) 567:19</p> <p>expectations (2) 586:22;587:18</p> <p>expedite (1) 570:24</p> <p>expedited (1) 591:14</p> <p>experience (2)</p>	<p>575:2;582:12</p> <p>experiments (1) 575:2</p> <p>extend (1) 578:2</p> <p>extension (8) 566:23,24,25;567:8, 18,20,25;591:16</p> <p>extensions (1) 567:23</p> <p>extensively (1) 584:9</p> <p>extent (1) 590:5</p> <p>external (1) 587:20</p> <p>extrapolated (1) 582:13</p> <hr/> <p style="text-align: center;">F</p> <hr/> <p>F-1 (1) 584:20</p> <p>face (1) 581:21</p> <p>fact (4) 578:22;580:13; 582:6;583:25</p> <p>factors (1) 577:25</p> <p>facts (4) 579:1;581:20;586:5; 588:11</p> <p>factual (1) 567:17</p> <p>faculty (1) 573:7</p> <p>fail (1) 591:17</p> <p>fashion (1) 567:19</p> <p>Federal (5) 558:15,16;574:1; 584:22;585:22</p> <p>feel (1) 583:5</p> <p>fellows (1) 576:9</p> <p>few (2) 571:22;574:3</p> <p>file (3) 565:9;566:23;591:16</p> <p>filed (2) 567:1;591:18</p> <p>Filizola (2) 575:7;580:18</p> <p>final (2) 571:12;577:10</p> <p>finally (1) 574:17</p> <p>financial (4) 563:15;577:19; 579:8;584:1</p>	<p>find (3) 578:2;584:6;586:7</p> <p>finding (1) 588:3</p> <p>findings (1) 575:12</p> <p>finds (2) 566:8;586:10</p> <p>finish (1) 585:9</p> <p>first (15) 565:16;570:2; 571:17;574:23,24; 575:1,7;585:5;586:14, 14;587:2,5,9;590:19; 591:7</p> <p>five (1) 578:13</p> <p>fleshed (1) 567:16</p> <p>folder (1) 574:12</p> <p>follow (2) 578:8;580:15</p> <p>followed (1) 575:18</p> <p>following (4) 567:22;570:9; 586:12;590:13</p> <p>forced (1) 582:17</p> <p>foreign (4) 569:21,22,22;587:20</p> <p>form (1) 584:9</p> <p>forward (2) 592:3,4</p> <p>forwarded (1) 591:22</p> <p>found (1) 590:14</p> <p>foundation (1) 575:22</p> <p>four (1) 590:10</p> <p>freedom (1) 580:20</p> <p>fulfill (1) 590:1</p> <p>fulfillment (1) 580:23</p> <p>fulfills (2) 573:2,10</p> <p>fund (1) 580:16</p> <p>fundamentally (1) 579:2</p> <p>funded (2) 575:22;587:19</p> <p>funding (9) 578:21,24;579:12; 580:1,6,7,13;581:2; 583:2</p>	<p>funds (1) 587:21</p> <p>further (3) 578:7;583:4;592:5</p> <p>furtherance (2) 579:14;581:1</p> <hr/> <p style="text-align: center;">G</p> <hr/> <p>gave (1) 585:11</p> <p>gets (1) 577:19</p> <p>Given (5) 567:24;569:3; 588:16,23,25</p> <p>good (4) 565:15;567:7,19; 583:5</p> <p>government (2) 575:22;587:20</p> <p>grad (2) 573:6;575:9</p> <p>grade (1) 581:20</p> <p>graduate (31) 563:14;572:1;573:6; 574:10,18;575:8,9,13, 21,21;576:3,20; 577:13;578:13;583:10, 14,16,20,22;584:8,10; 586:1,8;589:22,25; 590:2,5,9,11,15,17</p> <p>grant (4) 567:23;579:15; 580:24;581:2</p> <p>granted (1) 567:25</p> <p>grants (5) 575:22,22,23; 576:11;578:20</p> <p>grounds (1) 591:16</p> <p>group (1) 576:8</p> <p>guess (1) 575:7</p> <hr/> <p style="text-align: center;">H</p> <hr/> <p>handbook (1) 584:10</p> <p>handling (1) 567:22</p> <p>hang (1) 574:24</p> <p>Hanss (1) 581:9</p> <p>hardship (1) 585:20</p> <p>health (3) 582:12;583:11,17</p> <p>heard (4)</p>
--	---	--	---	--

<p>571:24;578:12; 583:18;584:19 hearing (66) 558:13,14;563:4,5,6; 564:2,2,10,10,22; 565:2,8,8,16,18; 566:14,14,20,24;567:2, 8,11,21;568:3,7,17; 569:7,11,14,21,25; 570:19,23;571:1,4,6, 10;575:8;577:6,9,11, 12;585:8,11,16,17; 588:6,15,16,19,23; 589:6,8,13,17,20; 591:2,2,6,12,13,19,24; 592:5,6,8 held (3) 568:19;570:7;584:14 help (3) 581:10;582:8,9 hire (3) 574:13,18,19 hit (1) 582:9 hold (2) 565:11;574:11 hospitals (1) 583:12 hours (5) 570:6;581:23; 584:23;585:23;591:9 human (3) 573:18,22;574:5 hundreds (2) 571:24,25</p>	<p>22 included (2) 564:17,24 including (8) 563:16,23;571:16; 581:13;589:22,24; 590:7,16 income (1) 574:1 inconsistency (1) 572:10 inconsistent (1) 575:17 Indeed (3) 577:21;580:12; 581:19 indiscernible (1) 588:17 indistinguishable (1) 587:2 individuals (8) 566:9;574:9,17; 577:2;583:18;584:16; 590:23,25 influenced (1) 570:13 informal (1) 572:21 information (5) 564:6;565:19,21,25; 566:4 inquiry (3) 578:25;583:24; 584:17 insistence (1) 572:12 insofar (1) 587:1 instead (1) 591:22 institution (2) 580:14,15 instructional (6) 564:16;565:5,11; 571:19;590:6,15 inter (1) 574:23 interest (4) 579:19;587:15; 590:9,17 INTERNATIONAL (4) 558:8;584:19; 585:21;588:4 interpretation (1) 573:16 interrupt (1) 585:5 interrupted (1) 582:7 interrupting (1) 585:12 into (13) 563:10;564:11;</p>	<p>568:7;573:21;574:5,6, 10,22;585:3;588:11, 11;589:14,19 introduced (1) 574:3 investigators (1) 578:14 invitation (1) 578:2 involving (1) 578:5 irregular (1) 570:6 irrelevant (1) 583:24 issuance (2) 570:9,16 issue (10) 564:21;565:1;578:6; 579:1,7;584:14,16; 585:22;586:4;588:14 issues (6) 567:16;568:20; 570:14;571:12;582:17; 589:16 item (1) 566:22</p>	<p>21,23 LABOR (4) 558:2,15;590:4,13 labs (8) 574:25;578:15; 579:18;580:13;582:13; 583:13;586:16;587:4 lack (4) 581:6;587:14;590:8, 17 language (1) 569:22 large (1) 576:10 last (1) 566:22 lasted (1) 567:8 lastly (1) 587:19 Late (1) 591:15 law (2) 573:14;577:21 leading (1) 583:14 leads (1) 572:23 learn (1) 574:25 learning (1) 575:6 led (1) 564:23 legal (1) 567:15 length (1) 564:22 less (1) 581:23 Levinson (3) 569:6,10;570:3 L-E-V-I-N-S-O-N (1) 569:10 lifetime (1) 582:12 limited (3) 563:16;589:18,23 list (8) 564:18;569:18; 570:20,21,22,23; 574:11,12 lists (1) 565:2 little (1) 568:9 local (1) 574:1 location (2) 569:5;570:3 logistics (2) 568:9;570:1 long (1)</p>	<p>584:14 look (1) 586:3 losing (1) 580:13 lot (1) 587:11 LUPION (26) 563:11;564:5,13; 565:22;566:17,22; 567:7;568:2,15,18; 569:9,13,16,24;571:8; 577:11;582:2,5;585:5, 10,14,16,18;588:8; 589:7,20</p>	
M					
<p style="text-align: center;">I</p> <p>ICAHN (7) 558:5;563:5;572:1; 573:2;577:13;587:23; 589:21 identical (1) 563:20 identification (3) 565:4,24;566:1 identified (7) 563:24,25;564:8; 566:9,11;577:5;585:1 identifies (1) 574:16 ignore (1) 578:4 impact (1) 588:3 IMPLEMENT (1) 558:9 importance (1) 580:4 inappropriate (1) 590:8 include (4) 564:15;565:9;590:5,</p>	<p>information (5) 564:6;565:19,21,25; 566:4 inquiry (3) 578:25;583:24; 584:17 insistence (1) 572:12 insofar (1) 587:1 instead (1) 591:22 institution (2) 580:14,15 instructional (6) 564:16;565:5,11; 571:19;590:6,15 inter (1) 574:23 interest (4) 579:19;587:15; 590:9,17 INTERNATIONAL (4) 558:8;584:19; 585:21;588:4 interpretation (1) 573:16 interrupt (1) 585:5 interrupted (1) 582:7 interrupting (1) 585:12 into (13) 563:10;564:11;</p>	<p style="text-align: center;">J</p> <p>Jacob (1) 558:15 Javits (1) 558:15 joint (1) 589:24 July (2) 558:17;567:25</p>	<p style="text-align: center;">K</p> <p>known (1) 565:16 KUMA (34) 563:4;564:2,10; 565:8;566:14,20; 567:21;568:3,7,17; 569:7,11,14,21,25; 570:19,23;571:1,4,6, 10;577:6,9;585:8,17; 588:16,19,23;589:6,8, 13;591:2,7,13 KUMAR (1) 558:14</p>	<p style="text-align: center;">L</p> <p>lab (24) 578:17;579:13,13, 18,22;580:7,10,21; 581:7,16;582:8,25; 583:2,5,6,6,6;584:24; 585:19,24;586:17,18,</p>	<p>maintain (2) 581:2,3 maintenance (1) 580:2 making (2) 584:16;589:2 mandate (1) 585:22 manner (1) 576:23 manual (6) 567:22;568:11,14, 22,25;570:3 many (4) 567:9;570:5;574:11; 581:9 marked (1) 563:18 Master's (1) 563:16 matriculation (1) 573:19 Matter (3) 558:4,13;592:9 Matthew (1) 579:4 may (7) 563:8,9;567:12; 570:13;585:14,16; 591:20 MD (2) 586:25;590:20 MD-PhD (5) 577:16;586:25; 587:6;589:24;590:20 meaning (3) 563:14;590:3,12 meaningful (1) 581:25 means (1) 573:16 mechanism (1) 572:8 medical (4) 564:7;574:4,6;</p>

589:25 MEDICINE (7) 558:5;563:5;573:3; 577:14;583:14;587:24; 589:22 meets (1) 565:15 MEIKLEJOHN (18) 564:9;566:12;567:6; 570:2,21,24;571:13; 577:8;582:4;585:2,13, 15;588:1,14,17,21; 589:5,11 members (1) 573:7 methods (1) 587:16 mind (1) 573:5 minutes (1) 574:3 mission (3) 573:2,11;575:3 MIT (13) 575:15,16,17,20,22; 576:5,8,8,11,24;578:6; 586:4,6 Monday (1) 563:13 more (7) 567:23;583:12; 584:22,22;585:23; 586:4;591:19 morning (1) 567:10 most (1) 572:10 motion (5) 565:12,12,14,18; 591:22 motioned (1) 565:9 MOUNT (22) 558:5;563:5,11,21, 21;564:5;568:18; 569:6;572:2;577:14, 23;580:15;583:9,11,16, 19;586:1,1;587:20,24; 589:22;590:25 move (3) 580:14;582:25;589:1 moved (1) 564:13 moving (1) 585:3 MTA (1) 579:20 much (4) 574:22;575:21; 584:6;586:3 multidisciplinary (1) 579:20 must (1)	590:14 mute (1) 582:2 muted (1) 588:15 N name (2) 569:17,20 named (2) 569:14,15 NATIONAL (5) 558:2,14;582:12; 590:4,13 nature (4) 575:9,10,13;586:19 nearly (1) 583:13 necessary (3) 569:20,24;592:4 need (1) 569:16 needle (1) 582:25 neither (1) 581:24 neuroscience (4) 571:14;577:15; 589:24;590:20 Nevertheless (1) 575:19 New (2) 558:16,16 nine (3) 565:4,10,17 nomenclature (1) 583:20 non (1) 574:8 non-paid (1) 574:8 non-work (1) 574:8 note (4) 563:19;564:16; 570:10;588:10 Noted (3) 563:2;565:6;588:24 Notice (1) 558:14 Number (14) 563:6,24,25;564:4,8, 12;566:11,16;567:15; 577:5;585:1;587:12, 13;591:4 nurses (1) 583:17 nursing (1) 583:13 O	O'Connell (1) 580:19 objection (5) 564:1,2,9,10;566:12 objections (2) 566:14;589:4 observation (1) 588:2 observings (1) 588:24 obvious (1) 572:25 O'Connell (2) 579:4;580:13 off (10) 563:8;568:3,4;569:8; 571:1,2;589:8,9; 591:25;592:7 offer (2) 563:11,22 offered (2) 588:5;589:3 offering (1) 585:4 Officer (41) 558:14;563:4;564:2, 10;565:8;566:14,20; 567:21;568:3,7,17; 569:7,11,14,21,25; 570:19,23;571:1,4,6, 10;577:6,9,11;585:8, 11,16,17;588:6,15,16, 19,23;589:6,8,13,20; 591:2,6,13 official (5) 567:14,14;572:22, 23;592:2 once (2) 576:11;582:12 one (13) 567:12;568:25; 569:2;570:19;575:11, 12;582:7,10;583:10, 16;587:19;589:20; 591:19 only (10) 563:22;565:3; 567:10;572:25;579:5; 580:2,5;582:6;583:10; 585:13 onsite (4) 568:13;569:12,15,19 opportunity (4) 571:18;586:18,18; 589:1 oppose (2) 565:12;567:4 orally (1) 589:1 order (5) 568:9;578:21,24; 581:2,2 otherwise (1)	578:20 out (6) 567:16;568:9;571:7; 574:11;576:18;577:13 outlier (1) 582:15 outpatient (1) 583:13 outside (3) 578:23;580:10; 581:17 over (2) 583:12;584:9 overwhelming (1) 581:21 own (8) 572:4,11;576:10; 579:19;580:21,21; 582:7;591:9 P package (1) 580:23 Page (1) 572:18 pages (4) 571:25;591:4,8,11 paid (10) 571:15;572:13; 573:11,20,24;574:20; 575:4;576:2,3,9 pandemic (1) 582:9 papers (1) 591:4 part (2) 572:12;583:10 particular (1) 570:11 particularly (1) 570:12 parties (8) 567:18;568:8,11; 588:25;589:14;591:13, 20,25 parts (1) 570:20 party's (2) 567:23,25 Patricia (2) 569:5,9 P-A-T-R-I-C-I-A (1) 569:9 pause (1) 582:11 pay (2) 576:17;587:16 payments (8) 572:14,16,19;574:2, 3;576:4,13,23 payroll (7) 573:18,23,25;	574:16;575:24;576:4, 15 pays (3) 576:11,21,22 pending (1) 592:9 people (4) 574:25;576:8,15,18 per (2) 584:23;585:23 performance (7) 578:19;579:14; 580:10;581:1;584:24; 585:19;590:18 performance (1) 590:6 performed (5) 578:17;582:24; 584:12;586:19;590:1 performing (4) 579:7;580:17; 585:23;590:9 performs (1) 577:19 perhaps (1) 573:8 person (1) 569:20 pertaining (1) 564:7 Petition (12) 564:17;565:24; 569:3;577:2,24;584:4; 585:9;586:9,11;587:9, 25;590:5 Petitioner (29) 558:11;563:6;564:1, 21;565:6,12,17;567:3, 4,4;569:25;570:20; 571:11;574:9,15; 577:7,18;581:22,24; 583:1;584:2,5,9;586:8, 24;590:2,11,22,22 Petitioner's (7) 575:17;578:1; 583:15;585:1;587:5,7; 588:24 PhD (23) 563:17;564:15,23; 565:5;577:13,14; 579:1,7;581:7;584:23; 585:18;586:1,14; 587:2,6,9;589:23; 590:2,5,9,11,17,19 phrases (1) 584:7 PI (7) 579:21;580:14,15, 18,25;582:20;584:13 piece (1) 583:16 PIs (3) 578:14;581:6,14
--	--	--	--	--

<p>PI's (1) 579:14</p> <p>pivot (1) 582:16</p> <p>place (3) 568:12,25;581:10</p> <p>places (1) 572:15</p> <p>placing (1) 585:24</p> <p>plain (1) 578:10</p> <p>Plaza (1) 558:16</p> <p>please (1) 569:7</p> <p>pm (16) 563:2,3;568:4,5,6; 569:1,2,2;571:2,3,5; 589:9,10,12;592:7,8</p> <p>pm/Reconvened (3) 568:5;571:3;589:10</p> <p>point (3) 571:7;572:15;585:13</p> <p>polling (1) 569:5</p> <p>population (1) 585:21</p> <p>portion (3) 587:1;588:2;590:21</p> <p>position (17) 564:15;565:13,14; 566:5;568:8,10,18,21; 570:1,5;571:12,13; 575:17;577:1,1,10; 590:16</p> <p>positions (1) 565:11</p> <p>possible (1) 577:4</p> <p>possibly (1) 582:13</p> <p>post- (1) 566:23</p> <p>postdocs (2) 573:8;581:8</p> <p>practicable (1) 570:11</p> <p>practical (1) 570:9</p> <p>practices (1) 583:13</p> <p>precedent (2) 575:18,20</p> <p>precisely (1) 583:6</p> <p>precluded (1) 585:4</p> <p>prepare (1) 567:15</p> <p>prepared (1) 569:19</p> <p>present (1)</p>	<p>563:9</p> <p>presentation (1) 588:18</p> <p>pretty (1) 587:13</p> <p>principal (1) 578:14</p> <p>printout (1) 564:6</p> <p>privileges (1) 584:3</p> <p>problem (1) 581:24</p> <p>procedures (1) 581:9</p> <p>proceed (2) 571:11;585:16</p> <p>produced (1) 591:8</p> <p>professors (2) 578:13;581:14</p> <p>profound (1) 579:3</p> <p>program (9) 563:17;564:15,23; 565:5;578:24;581:18; 586:14;587:1;589:25</p> <p>programs (1) 579:5</p> <p>progress (2) 580:3;581:3</p> <p>propose (2) 569:4;570:8</p> <p>proposed (3) 564:20;565:6;591:21</p> <p>prove (1) 577:13</p> <p>provide (2) 571:19;576:25</p> <p>provided (3) 564:16;565:5;575:1</p> <p>providing (1) 573:17</p> <p>punitive (1) 587:18</p> <p>purpose (2) 583:6;586:17</p> <p>purposes (1) 584:18</p> <p>Pursuant (1) 558:13</p> <p>pursuits (1) 579:17</p> <p>put (1) 586:1</p>	<p>571:25;576:10</p> <p>read (4) 565:21;571:25; 583:15;589:19</p> <p>reader (5) 571:22;572:17; 578:12;582:14;589:15</p> <p>reading (1) 578:10</p> <p>reason (1) 564:20</p> <p>reasonably (2) 570:9,11</p> <p>reasons (1) 587:23</p> <p>rebutted (1) 581:4</p> <p>receipt (3) 566:13;580:5;591:15</p> <p>receive (6) 563:15;578:21,24; 581:19;584:1;590:25</p> <p>received (7) 564:3,11;566:15; 567:10;574:2;579:8; 589:4</p> <p>receives (1) 587:22</p> <p>receiving (1) 589:13</p> <p>Recess (3) 568:5;571:3;589:10</p> <p>reciting (1) 585:3</p> <p>recognition (2) 587:5,7</p> <p>recognized (2) 578:6;580:4</p> <p>reconciled (1) 587:8</p> <p>record (47) 563:3,9,19;565:20, 21;567:15,17,24;568:3, 4,6,16;571:1,2,4,5,22; 572:16;573:5,19; 574:4,5,15;577:12,23; 578:11,12;579:17,25; 581:5;582:14;583:25; 584:21;587:14;588:12, 13,25;589:1,8,9,11,12, 16,19;591:20;592:1,7</p> <p>records (12) 572:4,5,11;573:18, 18,24,25;574:11,12,14, 17;575:24</p> <p>record's (1) 572:17</p> <p>reference (1) 572:21</p> <p>referred (2) 572:16;583:22</p> <p>reflected (1) 565:20</p>	<p>refuse (1) 572:13</p> <p>regarding (2) 570:16;588:3</p> <p>Region (4) 558:15;575:15; 578:5,8</p> <p>Regional (18) 565:13,19;567:16; 568:20;570:9;575:15; 578:1,3,5;582:14; 586:6,7,10;587:24; 588:19,21;589:18; 592:3</p> <p>regulation (1) 584:22</p> <p>related (1) 582:17</p> <p>RELATIONS (4) 558:2,15;590:4,13</p> <p>relationship (4) 568:20;577:17; 578:12;589:21</p> <p>relevant (4) 575:19,20;584:17; 587:2</p> <p>relies (1) 584:9</p> <p>rely (1) 575:14</p> <p>remainder (1) 587:15</p> <p>remark (1) 592:1</p> <p>remarks (7) 568:8;571:11;577:7, 10;585:9;589:14;592:1</p> <p>remember (1) 583:10</p> <p>reminded (1) 591:13</p> <p>remove (1) 581:6</p> <p>render (1) 579:1</p> <p>REPORTER (13) 563:3;568:4,6;571:2, 5;589:9,12;591:3,6,10, 15;592:2,7</p> <p>represent (5) 565:17;574:10; 586:8;590:3,11</p> <p>representative (4) 568:13;569:12,15,19</p> <p>represented (1) 590:23</p> <p>request (6) 566:23;567:5; 570:15;587:24;591:14; 592:1</p> <p>requested (1) 591:18</p> <p>required (14)</p>	<p>565:25;566:4;578:3, 19,23;579:10,14;580:8, 9,23;581:1,17;582:18, 20</p> <p>requirements (5) 579:16;580:1; 586:22;587:17;590:1</p> <p>research (39) 563:17;564:16,24; 565:5,10;571:16; 573:1,1,6,9;574:20; 575:3,6;576:1,5; 577:19;578:17;579:7, 11;580:10,16,17,21,22; 581:8,15,16,20;582:7, 11,17,21;584:24; 585:19,23;586:19; 590:1,9,18</p> <p>resolved (1) 565:1</p> <p>resource (1) 573:22</p> <p>resources (2) 573:18;574:5</p> <p>respect (4) 584:13;586:19,23; 587:21</p> <p>respectfully (4) 570:15;577:25; 586:7;587:24</p> <p>respecting (1) 578:8</p> <p>respond (1) 588:1</p> <p>Respondent's (1) 566:5</p> <p>response (2) 579:4;592:6</p> <p>rest (2) 571:9,11</p> <p>rested (1) 563:6</p> <p>rests (1) 583:7</p> <p>result (1) 567:1</p> <p>review (1) 586:5</p> <p>RICE (1) 569:18</p> <p>right (5) 568:18;588:24; 589:13;591:2,13</p> <p>Robert (2) 569:5,9</p> <p>role (1) 587:21</p> <p>rotating (2) 586:16;587:3</p> <p>rotation (5) 583:3,5,6;586:17,23</p> <p>rotations (2) 579:19;582:25</p>
	R			
<p>rapport (1) 586:20</p> <p>rates (1) 587:16</p> <p>rather (2)</p>		<p>reference (1) 572:21</p> <p>referred (2) 572:16;583:22</p> <p>reflected (1) 565:20</p>	<p>request (6) 566:23;567:5; 570:15;587:24;591:14; 592:1</p> <p>requested (1) 591:18</p> <p>required (14)</p>	<p>rotations (2) 579:19;582:25</p>

<p>ROTHGEB (1) 564:1 roughly (1) 585:21 rulings (1) 591:23 running (1) 578:14 Russo (1) 580:19</p>	<p>576:11 semi-monthly (1) 576:2 Senior (1) 581:13 separate (2) 566:19;576:8 separated (1) 576:17 serve (1) 579:10 serves (1) 573:11 service (2) 579:16;580:1 services (6) 564:16;565:6; 571:20;573:17;584:12; 590:6 servicing (3) 587:13;590:7,15 set (1) 577:13 several (3) 574:12,14,15 severe (1) 585:24 sharp (1) 580:25 show (3) 572:5;573:24;574:17 showing (1) 574:4 shows (3) 574:5,13,16 significant (1) 586:24 similar (4) 575:14;576:2,4; 578:6 similarity (1) 579:6 simply (1) 586:1 SINAI (23) 558:5;563:5,11,21, 21;564:5,6;572:2; 573:21;577:14,24; 580:16;583:11,17,19, 19,20;584:3;586:1; 587:20,24;589:22; 591:1 Sinai's (4) 568:18;569:6;583:9; 586:1 single (1) 578:23 situation (1) 570:12 six (6) 563:18;567:8; 577:12;578:13;581:12; 591:8</p>	<p>sixth (1) 565:18 size (1) 569:3 skills (1) 587:18 small (1) 587:13 solely (1) 587:12 somebody (1) 582:2 somewhat (1) 570:6 soon (2) 570:8;577:3 sooner (1) 568:23 SOP (1) 565:9 sorry (3) 566:2;569:8;577:8 speak (1) 569:17 specific (4) 578:20;579:13,22; 589:16 specifically (2) 577:14;581:10 spell (1) 569:7 spend (2) 585:23;587:11 standard (1) 565:15 start (1) 574:20 starting (1) 568:12 starts (1) 571:23 state (6) 569:25;571:12; 574:1;577:10;591:3,3 stated (1) 586:16 statement (3) 564:14;565:13,14 statements (1) 589:14 states (1) 572:19 statutory (1) 571:16 Stephanie (1) 563:12 steps (1) 592:4 stipend (2) 563:15;572:20 stipends (2) 572:13;576:12 stipulated (1)</p>	<p>568:11 stipulation (1) 591:21 stipulations (1) 563:8 structure (2) 572:6,8 student (22) 564:7;565:24;569:6, 10;570:3;574:4,6,7; 577:18,22;580:15; 581:25;582:7,11,16,19, 22;583:1;584:10,20; 585:21;587:19 students (119) 563:14,15,16,17; 564:15,17,18,23;565:4, 10;566:1,3,5;569:4; 571:14,19;572:1,2,6,7, 13,24;573:6,15,20,20, 20;574:20,23,24;575:1, 13,21,21;576:10; 577:13,15,16,16,24,24; 578:3,6,19,22;579:1,2, 6,6,7,10,12,18,18,23, 23,24;580:6,8,9,12,20; 581:1,7,10,11,17,19, 22;582:13;583:8,22; 584:1,1,4,6,18,20,21, 23;585:18,21,22,25; 586:2,2,3,4,8,11,12,14, 15,15,17,25;587:1,3,6, 6,7,7,9,12,14,21;588:4; 589:22,23,24;590:2,6, 8,9,11,15,17,19,20 student's (6) 578:18;580:1,5,14, 16;581:16 subject (2) 581:13;582:7 submission (1) 592:9 submit (6) 565:20,22;578:1,25; 584:8;586:7 submitted (2) 565:2;574:15 substance (1) 584:9 succeed (2) 571:21;581:11 suit (1) 578:8 Suite (1) 558:16 supervision (2) 573:7,12 supervisors (1) 587:18 supplement (1) 569:20 support (5) 563:15;576:25;</p>	<p>577:20;579:8;584:2 sure (2) 582:19;589:2 surely (1) 582:21 Swartz (1) 580:19 system (15) 572:6,8;573:21,23, 23;574:5,6,10,16; 575:24;576:4,14,15; 583:11,17 systems (2) 583:9,23</p>
S		T		
<p>safeguards (1) 581:10 salary (1) 573:24 same (2) 584:4;585:12 satisfactory (2) 580:2;581:3 schedule (1) 570:16 scheduled (1) 568:22 schedules (2) 570:6;587:17 SCHOOL (22) 558:5;563:5,16; 572:2;573:2;577:14, 17,20;578:13;579:9; 580:17;582:20;583:10, 13,14,16,21;584:2,8, 13;587:23;589:21 school's (3) 581:12,25;589:25 science (2) 573:2;577:15 sciences (3) 571:14;589:23; 590:19 scientist (1) 589:25 second (4) 575:7;582:23;587:6, 9 Section (3) 567:22;590:3,12 seek (1) 566:24 seeking (1) 590:22 seeks (7) 565:17;574:9; 575:14;586:8;590:2,5, 11 seemingly (1) 567:18 select (1) 580:10 self-funded (2) 563:14;584:1 semester (1)</p>	<p>tasks (4) 578:20;579:14; 581:1;582:24 tax (3) 576:3;584:15,18 taxes (2) 574:2;576:16 teach (1) 580:9 teaching (4) 579:11;587:10; 590:7,16 term (5) 572:19,20,22;574:9, 19 testified (18) 572:1;575:8;578:16, 18,22;579:4,24;580:6, 14,18,20,25;581:9,13, 15;582:20,24;584:11 testimony (19) 571:25;572:4,11; 574:24;575:7;578:13; 580:22;581:3,22,25; 582:25;583:18;584:19; 585:4,15;588:5,9; 591:7,9 theirs (1) 579:23 Therefore (3) 567:19;570:7;587:20 thesis (6) 577:19;579:8; 580:11;581:20;582:11, 21 thinking (1) 572:7 Three (3) 590:4,10;591:7 throughout (1) 589:17 Thursday (2) 558:17;567:25 thus (1) 565:20 timely (1)</p>			

565:9 times (2) 570:4;583:8 today (4) 567:3,24;569:19; 591:10 today's (1) 563:5 together (1) 571:19 Tom (2) 585:5,11 top (1) 591:17 topic (1) 580:21 total (2) 581:23;591:11 towards (7) 577:19;578:17,20; 579:8;584:25;585:19, 24 training (3) 575:10;579:20; 589:25 trans (2) 591:4,15 transcript (7) 567:11,14;591:5,8, 11,14,16 translators (1) 569:23 treat (3) 576:13,14,15 treated (1) 576:18 treatment (1) 584:18 treats (4) 572:7,9;575:20; 576:20 trickled (1) 567:12 try (1) 571:21 Tuesday (1) 570:8 tutor (2) 590:7,16 twice (1) 576:17 two (9) 564:14;567:12; 570:7;575:1;576:21; 580:6;581:22,23;590:2 two-week (2) 566:24;567:19 typically (1) 569:18	572:8;573:5,7,12; 575:23;577:2 undisputed (6) 579:17,25;581:5; 584:21;586:16;588:13 undue (1) 585:20 unequivocally (2) 578:16,19 UNION (5) 558:8;582:1,5,6,19 Union's (3) 582:10,23;583:7 Unit (25) 564:17,19,25; 565:25;566:2,3,6,7,8, 10;569:3;571:19; 577:24;584:4;586:11, 12,13;587:8,12,15; 590:5,7,14,24,24 UNITED (1) 558:8 university (6) 573:8,11,13,17; 575:4,6 unlike (1) 581:5 unpaid (1) 573:20 unrebutted (1) 580:22 unrelated (1) 582:21 untimely (1) 565:19 unusual (2) 585:2,3 up (2) 569:17;592:4 upon (2) 573:19;575:14 urge (1) 572:3 use (3) 572:22;584:7,10 used (1) 573:14 uses (1) 583:20	585:25 Volume (1) 567:11 voluminous (2) 567:10,17 voluntarily (1) 582:8 vote (1) 571:18 voters (1) 570:20	571:22;584:7 work (5) 574:8;575:6,23; 583:18;584:22 WORKERS (2) 558:10;570:5 working (1) 583:12 world (1) 582:9	569:1;570:4 2:22 (2) 589:9,10 2:42 (2) 589:10,12 2:48 (2) 592:7,8 20 (2) 584:22;585:23 2022 (1) 563:13 2023 (2) 558:17;568:1 21 (6) 563:12,18,22,24; 564:4;572:18 22 (3) 564:6,8,12 23 (11) 565:23;566:11,13, 16,18,21;589:3,5,6; 590:4,12 2-3 (1) 590:3 25 (1) 568:23 25% (1) 585:21 26 (1) 558:16
		W	Y	
		W-2s (2) 574:2;584:13 Wacker (1) 580:19 waive (1) 570:20 Washington (2) 591:22;592:4 way (5) 572:7;576:2;582:1; 584:4;591:21 Wednesday (1) 570:8 week (2) 584:23;585:23 weight (1) 588:25 whatsoever (2) 586:22;587:21 whenever (1) 577:18 Whereupon (1) 592:8 whole (1) 572:6 whose (1) 581:22 willing (2) 570:20,25 wish (3) 588:1;591:20,25 withheld (1) 574:2 withhold (1) 576:16 within (2) 590:3,12 without (1) 580:13 witness (4) 572:12;582:24; 585:4;588:5 witnesses (8) 571:7;572:1;573:22; 578:16,18,22;581:12; 584:11 word (1) 584:10 words (2)	year (9) 571:17;574:23,24; 575:1;586:14;587:2,6, 9;590:19 yesterday (2) 563:7;591:9 York (2) 558:16,16	
			Z	
			Zoom (1) 558:17	
			0	
			02-RC-319437 (2) 558:5;563:6	
			1	
			1 (6) 564:22;565:1; 567:11;575:15;578:5; 580:20 1:25 (2) 563:2,3 1:36 (4) 568:4,5,5,6 1:44 (2) 571:2,3 1:46 (2) 571:3,5 10:00 (2) 569:1;570:4 11244.1 (1) 567:22 13 (1) 558:17 13th (1) 567:25 15 (3) 566:25;567:1,23	3
				3:00 (2) 569:2;570:4 300 (2) 569:4;583:13 357 (1) 591:8 36-130 (1) 558:16 3rd (1) 568:1
				4
				4 (1) 591:8 400 (1) 583:13 43,000 (2) 583:12,17 45 (2) 583:15;585:1
				6
			2	6 (3) 563:21,21;567:11 6a (1) 563:25
U			2 (4) 558:15;572:18; 577:5;580:21 2:00 (2)	
under (6)	V			
	various (1) 582:24 via (1) 558:17 virtually (2) 578:17;581:15 virtue (1) 587:13 visa (1) 584:20 vis-a-vis (1)			

7				
7:00 (2) 569:2;570:5 70 (2) 567:9;584:19				
8				
800 (1) 591:11 8th (1) 563:13				
9				
9:30 (1) 558:17				

6				
6 (13) 160:5;188:17;191:6, 7,12;193:21;203:17, 21;206:25;207:5,21; 209:12;210:15 61 (2) 146:12;193:10 62 (1) 102:21 69.5 (2) 122:24;123:3				
7				
7 (5) 50:17;175:6,11,13; 207:21 72 (2) 92:10;120:4 73 (1) 132:22 75 (3) 85:7;118:9;165:23 75/25 (1) 181:4				
8				
8 (1) 160:5				
9				
9:15 (2) 210:14,20 9:30 (2) 50:17;210:10 9:35 (1) 55:2 9000 (1) 172:6 98th (3) 72:21;73:4,7 99 (3) 72:21;73:4,7				