

BEFORE THE  
NATIONAL LABOR RELATIONS BOARD

In the Matter of:

THE TRUSTEES OF THE UNIVERSITY  
OF PENNSYLVANIA,

Employer,

and

GRADUATE EMPLOYEES TOGETHER,  
UNIVERSITY OF PENNSYLVANIA  
(GET-UP) A/W AMERICAN  
FEDERATION OF TEACHERS,

Petitioner.

Case No. 04-RC-199609

The above-entitled matter came on for hearing pursuant to Notice, before THE HONORABLE MARY LEACH, Hearing Officer, at the National Labor Relations Board, Region 4, 615 Chestnut Street, 7th Floor, Courtroom 3, Philadelphia, Pennsylvania, on Monday, June 26, 2017 at 10:15 a.m.

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3	<u>WITNESS</u>	<u>DIRECT</u>	<u>CROSS</u>	<u>REDIRECT</u>	<u>RECROSS</u>	<u>VOIR DIRE</u>
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5	KEVIN TURNER					
6	by Ms. Dante	1408				
7	by Ms. Rosenberger		1438			
8	by Ms. Dante			1461		
9	by Ms. Rosenberger				1462	
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11	STACEY LOPEZ					
12	by Mr. Fryman	1464				
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15	UFUOMA PELA					
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E X H I B I T S

EXHIBITS

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Employer's:

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P R O C E E D I N G S

(Time Noted: 10:15 a.m.)

THE REPORTER: On the record.

HEARING OFFICER LEACH: Okay. The employer can call their next witness.

MS. DANTE: Thank you. Penn calls Kevin Turner.

HEARING OFFICER LEACH: Good morning.

MR. TURNER: Good morning.

HEARING OFFICER LEACH: Can you say and spell your first and last name for the record, please.

MR. TURNER: My first name is Kevin, K-e-v-i-n. My last name is Turner, T-u-r-n-e-r.

HEARING OFFICER LEACH: Okay. Can you raise your right hand?

KEVIN TURNER, WITNESS, SWORN

HEARING OFFICER LEACH: Okay. Thank you.

DIRECT EXAMINATION

BY MS. DANTE:

Q Good morning, Dr. Turner. Where are you currently employed?

A I'm currently employed at the University of Pennsylvania.

Q What is your current position at the University of Pennsylvania?

A I'm a professor of mechanical engineering applied mechanics, and I also serve as the graduate group chair of

1 mechanical engineering and applied mechanics.

2 Q Okay. How long have you held the graduate group chair  
3 position for?

4 A I became graduate group chair just under a year ago on  
5 July 1st, 2016.

6 Q Okay. What are your responsibilities as the grad group  
7 chair of -- and you said mechanical engineering and applied?

8 A Mechanics.

9 Q Mechanics.

10 A So --

11 Q Can we refer to that as MEAM for short?

12 A Yes.

13 Q Okay.

14 A I will probably naturally refer to it as MEAM, mechanical  
15 engineering and applied mechanics.

16 I, as graduate group chair, oversee the graduate program  
17 in mechanical engineering and applied mechanics, which includes  
18 the Ph.D. program, as well as the masters of the program.  
19 This includes overseeing graduate student recruitment, manager  
20 requirements and meeting with students to discuss requirements  
21 of the graduate program, and then also ensuring courses that  
22 are appropriate for graduate students offered in similar  
23 academic issues.

24 Q Okay. Can you tell me a little bit about your educational  
25 background?

1 A Sure. All my degrees are in mechanical engineering. My  
2 undergraduate degree was from Johns Hopkins University. I  
3 received my master's of science and Ph.D. in mechanical  
4 engineering from MIT, Massachusetts Institute of Technology.  
5 And then after finishing my Ph.D. at MIT I spent one additional  
6 year there as a post doctoral research associate.

7 Q Okay. You mentioned you also have a faculty appointment.  
8 In which school is your faculty appointment?

9 A My faculty appointment is in School of Engineering and  
10 Applied Science.

11 Q Okay. In both your role as the grad group chair and as a  
12 faculty member in engineering do you currently interact with  
13 graduate students?

14 A Yes, I interact with them in multiple ways. Both in my  
15 individual research group in courses that I teach, and then as  
16 I said before, in overseeing the MEAM graduate group.

17 Q Okay. How long have you been a faculty member at Penn?

18 A I've been a faculty member at Penn since 2011. So I  
19 joined in August 2011.

20 Q Okay. Can you give us a little bit of background about  
21 MEAM?

22 A Sure. So mechanical engineering and applied mechanics,  
23 MEAM, is what many other schools would just simply refer to as  
24 mechanical engineering.

25 So mechanical engineering is the study of a range of

1 topics, including things such as manufacturing, mechanics and  
2 materials, advanced dynamic systems, and fluid and energy  
3 systems. So it's a rather broad area. And today it includes  
4 topics from everything from sort of research on  
5 microelectronics to robotics to sort of advanced energy  
6 sources.

7 Q Okay. Would you consider MEAM to be interdisciplinary?

8 A Yes. I think at its core MEAM is interdisciplinary just  
9 if I look at our department and I think about the problems that  
10 people work on. You know, there's much mechanical engineering  
11 research in areas of say bioengineering today, as one example,  
12 but there are many more examples as well.

13 Q Can you provide us with some examples of collaborations  
14 with either faculty or individuals outside of the School of  
15 Engineering?

16 A Sure. Me personally or for mechanical engineering more as  
17 a whole?

18 Q Let's take mechanical engineering as a whole and then  
19 we'll go to you personally.

20 A Okay. So within -- I guess I'll first say that, you know,  
21 as you might know graduate groups at Penn are generally broader  
22 than the departments, right, and so our core mechanical  
23 engineering faculty is 18 faculty -- 17 or 18 depending on  
24 exactly how you count, and then our graduate group is closer to  
25 about 35 faculty. And so nearly half of the graduate group



1 includes faculty that are not core mechanical engineering  
2 faculty.

3 Some of these external faculty are within engineering,  
4 they're in departments such as material science and engineering  
5 and CBE, chemical and biological engineering, as well as  
6 bioengineering, but then others are outside of the School of  
7 Engineering and Applied Science.

8 So we have faculty from earth and environmental sciences,  
9 which is in the School of Arts and Sciences, I believe they  
10 have two members that are primary faculty in earth and  
11 environmental science that are members of the MEAM graduate  
12 group. And then we also have members particularly in the  
13 medical school. So we have several faculty in the department  
14 of orthopedics, which I believe is part of the School of  
15 Medicine, as well as in other departments in the medical school  
16 that are a member of the MEAM graduate group.

17 And so I think the fact that we have members from so many  
18 different departments, including departments outside of the  
19 School of Engineering and Applied Science demonstrates to some  
20 extent the interdisciplinary.

21 So I can try to give a few more specific examples if that  
22 would help. So, for example, in the medical school in the  
23 orthopedics department, you know, I know some of our faculty  
24 that recruit MEAM students also recruit bioengineering students  
25 and then also students from BGS, I don't know exactly which

1 program. And so, you know, they're working at problems that  
2 are at the intersection of mechanics, which falls into  
3 mechanical engineering, and biology, which includes, you know,  
4 various aspects of the human body.

5 Q Okay. You mentioned BGS. BGS is within the School of  
6 Medicine?

7 A That's my understanding, but I don't fully understand the  
8 structure in the School of Medicine to be completely honest.

9 Q Okay. Okay. Continue.

10 A So if I look at other interdisciplinary examples maybe  
11 going back to some examples I'm more familiar with, so I speak,  
12 for example, in a National Science Foundation funded Materials  
13 Research and Science Engineering Center, this is often referred  
14 to as the MRSEC, M-r-s-e-c, and this is a large grant from the  
15 National Science Foundation that funds work on materials. And  
16 within this group of researchers that comprises the MRSEC there  
17 are faculty from material science, mechanical engineering,  
18 physics, chemistry, and many other departments across campus.  
19 And the center is actually led by a professor in physics,  
20 Professor Arjun Yodh, but there are many engineering faculty  
21 that are involved as part of it.

22 And so I'm particularly involved with one research thrust,  
23 it's called an IRG, independent research group, and within that  
24 thrust there are faculty from chemistry, physics, mechanical  
25 engineering, and chemical and biomolecular engineering. And in

1 these cases they're typically also students involved in the  
2 research, students from physics, students from chemistry,  
3 students from mechanical engineering that work collaboratively  
4 on these interdisciplinary mechanics and materials problems.

5 Q So in your own lab do you have students performing  
6 research who are in the chemistry graduate group?

7 A I do. I have one specific example currently. One of the  
8 faculty that I closely collaborate with in the MERSEC is  
9 Professor Sahra Fakkraqi in chemistry, and she's developing new  
10 materials, these materials called molecular glasses. And one  
11 of her students who's been working on synthesizing these  
12 molecular glasses and making these molecular glasses wanted to  
13 know more about the mechanical properties and understand how  
14 these materials behave from a mechanical standpoint. And so we  
15 have some unique capabilities in our lab to understand and  
16 measure properties at very small scales, very thin films of  
17 these materials. And so over the past semester we started  
18 collaboration with Professor Fakkraqi and her graduate student  
19 to understand these materials.

20 And so Sarah, the graduate student, regularly does  
21 experiments in my lab, works with one of my students, an  
22 engineering student, to carry out these experiments, and then  
23 we meet regularly to discuss the results. We're still trying  
24 to completely understand what we're seeing, but the initial  
25 results are promising.

1 Q So this chemistry graduate student, she is a graduate  
2 student within the School of Arts and Sciences?

3 A Yes.

4 Q And you mentioned that she's also working with one of your  
5 engineering students; is that right?

6 A Yes. So my lab, as I mentioned, has unique expertise in  
7 mechanical engineering and mechanical testing of these  
8 materials, and so my student knows how to do these types of  
9 techniques, has collaborated with her to try to figure out how  
10 to do these measurements appropriately.

11 Q Okay. So they're performing research essentially side by  
12 side?

13 A Yes.

14 Q Is the research that the chemistry student that -- is the  
15 research that's she's performing in your lab being conducted in  
16 furtherance of her dissertation?

17 A Yes.

18 Q Okay. When students are engaging in this type of  
19 interdisciplinary research that you described can they conduct  
20 this research in multiple labs?

21 A Yes. I think that's often the case. So, you know, if I  
22 think about, you know, many of the students involved in the  
23 MRSEC, I'm maybe thinking about Sarah in particular, you know,  
24 she's often synthesize the materials in her own lab in  
25 chemistry or Dr. Fakkraqi's lab in chemistry, she'll work with

1 other people in chemistry as well to make some of the  
2 molecules, and then she'll do some measurements in our lab.

3 And then we also have shared facilities on campus. The  
4 Singh Center for Nanotechnology is one that we use a lot and  
5 many students use a lot where students from all across campus  
6 come in and use high-end equipment to do these experiments.

7 Q So students from the School of Arts and Sciences and from  
8 BGS and engineering, for example, can all use these shared  
9 facilities to conduct their research?

10 A Yes.

11 Q Do you have an example in particular of this in addition  
12 to the chemistry student that you mentioned?

13 A So if I think about this context to shared facilities, so  
14 I mentioned the Singh Center for Nanotechnology, there's both a  
15 facility for fabrication of structures and then also a  
16 fabrication for characterization structures, the measurement of  
17 structures. And I'm particularly familiar with the fabrication  
18 facility as we use it quite frequently, and I've been involved  
19 in the management of that facility, the overseeing of that  
20 facility to some extent. And in there, you know, we often have  
21 students and -- or sorry -- students and post docs from the  
22 School of Medicine that will come in to development new devices  
23 and use some of the instruments in there and then work  
24 collaboratively in their community to figure out solutions to  
25 how to make new types of micro nano structures.

1 Q Are there any examples involving students or faculty from  
2 the physics graduate group?

3 A So if I go back to mechanical engineering and thinking  
4 about, you know, my home department there are certain faculty  
5 in our department that, you know, are members of other graduate  
6 groups. I'm, for example, a member of the materials science  
7 graduate group. If I think about faculty that are members of  
8 external graduate groups, one of my colleagues, Professor  
9 Robert Carpick, he's the chair of the department, he's also a  
10 close collaborator of mine, does research on friction and nano  
11 scale friction of materials. And in that case he's a member of  
12 the physics graduate group, and I know of at least one student  
13 currently in his group who's a physics graduate student that  
14 works in his lab in mechanical engineering.

15 Q And is the physics graduate group housed or resides for  
16 lack of a better word within the School of Arts and Sciences?

17 A Yes, it is.

18 Q Do most Ph.D. students in MEAM receive fellowship awards  
19 upon admission into the program?

20 A Yes, most receive fellowship awards.

21 Q For those that don't receive fellowship awards are they  
22 externally funded?

23 A Yeah. So there's a small subset of students that are  
24 admitted that might have external fellowships particularly from  
25 foreign governments. So, for example, the Chinese scholarship

1 council or perhaps from their employer. These are somewhat  
2 rare cases. You know, most students that receive domestic  
3 fellowships, you know, end up receiving a fellowship award from  
4 Penn as well.

5 Q Okay. So for those that receive a fellowship award, is  
6 that typically laid out in an admissions letter?

7 A Yes. We find it's very important to make it clear at the  
8 time of admission what support we are offering.

9 Q Okay. I'm going to show you what I have marked for  
10 identification as Employer 52. Dr. Turner, do you recognize  
11 that document?

12 A Yes. This is the standard fellowship offer letter that  
13 was distributed to students that were admitted this year to the  
14 MEAM Ph.D. program.

15 Q Okay. When does the funding for a student start?  
16 Generally start.

17 A So it starts at the beginning of the academic year which  
18 they enroll. So in this case these students will arrive in  
19 late August of this year, so 2017, so the funding would start  
20 in late August of this year.

21 Q Okay. And can you walk us through the fellowship award  
22 letter and tell us what the award covers?

23 A Sure. So I guess starting with the second paragraph here  
24 is where we begin to lay out what the award covers.

25 So we provide all students that are admitted with funding

1 a fellowship of \$31,500, this is a fellowship for a 12-month  
2 year. As the letter says there's typically an increase in  
3 stipend each year. And this award -- in addition to that  
4 stipend, which is designed to cover living expenses, the award  
5 also provides full tuition and fees as well as single health  
6 insurance coverage through a Penn student health insurance  
7 plan.

8 Q Okay. So as far as the stipend goes, does this amount  
9 change depending on whether the student is engaged in teaching  
10 activities or performing research?

11 A No.

12 Q Is the amount of funding tied to the activities in which a  
13 student is engaged at all?

14 A No.

15 Q Is the funding essentially uniform throughout their time  
16 to degree?

17 A Yes. I mean there's the annual increases in stipend,  
18 but --

19 Q So the -- but the level --

20 A The level -- I mean, you know, we consider this full  
21 support, the full 12-month stipend as well as, you know, full  
22 coverage of tuition and health insurance continues throughout  
23 the duration of the degree.

24 Q Okay. All right. So if we keep going down I see a  
25 reference to a teaching practicum in the third paragraph. Can



1 you explain what that is?

2 A Sure. So one of the degree requirements for our Ph.D.  
3 students is that they participate in several semesters of  
4 teaching practicum.

5 So a teaching practicum is where students engage in some  
6 type of teaching activity in the department, they register for  
7 a course, it's MEAM 895, it's a half course unit course, and  
8 during the semester in which they're registered they  
9 participate in teaching in some manner in the department.

10 And --

11 Q Sorry, go ahead.

12 A Sorry.

13 Q No, go ahead.

14 A The goal of the teaching practicum is to really give  
15 students an opportunity to develop some experience in teaching,  
16 how to organize a course, how to structure a course, as well as  
17 really develop some confidence in presenting technical ideas  
18 and improve their technical communication skills.

19 Q Okay. Is the teaching practicum a degree requirement?

20 A Yes, they're -- it is a degree requirement.

21 Q So for the individuals who you mentioned before that may  
22 receive external funding let's say from a foreign government,  
23 are they still required to participate in this teaching  
24 practicum?

25 A Yes. Regardless of source of funding whether or not

1 they're funded through a fellowship or outside as you mentioned  
2 they all are required to do the teaching practicum.

3 Q Okay. Analysis C in that same paragraph are reference to  
4 performing research in the summer months.

5 A Uh-huh.

6 Q During the summer months are -- what kind of research are  
7 the students engaged in?

8 A So the research that they're engaged in in the summer is  
9 much like the research that they're engaged in during the  
10 academic term. The nature of engineering research is -- you  
11 know, it requires some continuity, and so students will start  
12 research in the academic year, you know, continue on whether or  
13 not they're doing theoretical or computational or experimental  
14 work, many of our students do experimental work and continue  
15 that through the summer.

16 Q And is this research their own research that'll be used in  
17 many cases toward their dissertation?

18 A Yes.

19 Q Is this fellowship award contingent upon anything?

20 A So it's contingent upon them -- it's contingent as it says  
21 in the letter on them maintaining good academic standing. You  
22 know, we have certain minimum GPA requirements, and you know,  
23 they must do well in their courses, and also performing  
24 satisfactorily in their research.

25 Q So it's contingent upon basically being a good student?

1 A Being a good student, right, and making progress towards  
2 their dissertation.

3 Q What's the purpose of this fellowship award?

4 A So it's really to allow us to attract the best students.  
5 You know, a Ph.D. is a significant commitment, it's you know,  
6 often four or five years, and engineering students often, you  
7 know, have many opportunities when they graduate, and we want  
8 to be able to attract the best students, and we feel, you know,  
9 providing tuition coverage as well as the stipend for their  
10 living expenses is essential to do that.

11 I know personally I would not have pursued a Ph.D. if I  
12 wasn't able to obtain a stipend support as well as tuition  
13 coverage.

14 Q Do you require your Ph.D. students to provide you with  
15 their summer mailing addresses?

16 A No, I don't think I actually know personally the mailing  
17 addresses of most of my students.

18 Q How do you typically communicate with your students?

19 A E-mail is probably the most common form. You know, also  
20 for our group we use various messaging apps like Slack is  
21 something. But mostly electronic communication. And obviously  
22 one-on-one meetings sometimes.

23 Q Okay. Let's talk a little bit about the expectations of  
24 Ph.D. students in MEAM. Focusing on the Ph.D. program can you  
25 explain the general Ph.D. requirements for students in MEAM?

1 A Sure. You know, the Ph.D. is ultimately a research  
2 degree, right, and the dissertation is, you know, the ultimate  
3 outcome of the Ph.D. and probably the most important aspect of  
4 it.

5 But in addition to the dissertation there are several  
6 academic requirements. There are a number of course  
7 requirements. I believe we require ten courses in our program.  
8 Some of those are mathematics courses, I believe two are high  
9 level mathematics courses, three are core mechanical  
10 engineering courses that all students must take, and then there  
11 are another five courses that are a mix between technical  
12 electives, mechanical engineering electives, and broader  
13 electives. And so there's a course requirement piece.

14 I'll note that many students often take more than the ten  
15 courses too just by choice to, you know, ensure that they have  
16 the courses they need for their technical research area and  
17 ultimate career.

18 So in addition to the course requirements they're required  
19 to pass a qualifying exam, which in our department is a  
20 research-based qualifying exam. They do an independent study  
21 on a specific research problem, develop a mastery of that  
22 material, and present that at the end of their first year,  
23 first academic year. They're required to prepare a thesis  
24 proposal or a dissertation proposal, and then they're also  
25 required to ultimately defend that dissertation.

1           In addition to that there's also this requirement that  
2 they attend MEAM seminars. This is a weekly departmental  
3 seminary. Really the goal here is to, you know, allow students  
4 and encourage students to get a very broad view of high level  
5 research in mechanical engineering, and so they attend many  
6 seminars throughout their time at Penn.

7           And then finally the aforementioned teaching practicum,  
8 which they're required to do three semesters of, to really  
9 develop their teaching skills and communication ability.

10 Q       Okay. Do you know what the average time to degree is for  
11 a Ph.D. student in MEAM?

12 A       I believe it's just over five years. We recently had a  
13 department review, and you know, it depends what time period  
14 you average over, but I think 5.4 years was what I saw.

15 Q       Okay. So let's talk a little bit about the teaching  
16 experience. You mentioned the teaching practicum. What types  
17 of activities do students engage in when taking the teaching  
18 practicum?

19 A       Yeah. So with regard to the teaching practicum the  
20 teaching practicum is limited to be ten hours or less than --  
21 or less a week, and we do this intentionally such that it's --  
22 because it's not sort of a full teaching assistantship, right,  
23 it's really designed to be an experience to development  
24 teaching and we don't want it to be burdensome on the students.

25           In terms of activities that they pursue we want them to

1 use that time wisely, and you know, use it to their utmost  
2 benefit to develop these communication skills as well as  
3 teaching ability. And so oftentimes students doing the  
4 teaching practicum will lead recitations for undergraduate  
5 courses, may conduct office hours, and this could be for both  
6 undergraduate courses as well as graduate courses. Sometimes  
7 they'll do a teaching practicum as part of a first-year Ph.D.  
8 course, for example. Help development assignments. And in  
9 some cases do some grading as well.

10 But you know, we try to de-emphasize grading and really  
11 emphasize these abilities -- or these experiences that will  
12 allow them to development this teaching ability and  
13 communication ability.

14 Q Is there a pedagogical value to the experience you just  
15 described for your Ph.D. students?

16 A Yes, I think there's a significant one. From personal  
17 experience I'll tell you that I was -- I never did any teaching  
18 as a Ph.D. student, and I showed up to teach my first class and  
19 had no idea what I was doing. I had to talk to a lot of  
20 colleagues.

21 And so I think having this teaching practicum it allows  
22 them to see firsthand, right, how a course is structured, how a  
23 course is run, how you teach and interact with students has  
24 significant pedagogical value.

25 Q Do faculty sometimes sit in on the recitations?

1 A Yes. You know, students are given feedback and evaluated  
2 throughout the teaching practicum, and so this requires that we  
3 not only meet with the students in the teaching practicum but  
4 also sit in on their activities, recitations or labs or  
5 whatever they might be running.

6 Q Okay. What's the purpose of that ongoing feedback?

7 A So the teaching practicum is a course, and a course really  
8 needs to give a student feedback to allow them to understand  
9 what they're doing well, where they need to improve, and one of  
10 those feedback is to ensure that the teaching practicum meets  
11 its need of providing the feedback in education.

12 Q So you mentioned that it's a course. So students enroll  
13 in a particular course to engage in this practicum?

14 A Yeah. They register for a half course in a course, MEAM  
15 895 I believe is the number, and at the end of the semester  
16 they receive a grade from the faculty -- a written evaluation  
17 as well as a grade, it's graded pass, fail, satisfactory,  
18 unsatisfactory at the end of each semester.

19 Q When students are engaged in these teaching activities are  
20 they doing so within their overarching field of study?

21 A Yes.

22 Q Okay. Do they sometimes participate in these activities  
23 for courses that are being taken by first year Ph.D.s?

24 A They do. We -- our departments, we have faculty that  
25 teach both the core mechanical engineering courses, the first

1 year Ph.D. students take as well some of the core math courses,  
2 and certain students will serve as a teaching practicum as part  
3 of those courses.

4 Q Do your students typically serve as the primary instructor  
5 for a course when they are taking this teaching practicum?

6 A No. I can't think of any instances where that's been the  
7 case. I think at ten hours per week it would be difficult to  
8 do such a thing.

9 Q Okay. Before they engage in these teaching activities is  
10 there any training offered to the students?

11 A Yeah. So near the end of -- before the beginning of the  
12 fall semester, near the end of the summer there's a teaching  
13 training session workshop, it's organized by the Center for  
14 Teaching and Learning, CTL, it's just a one or two day  
15 workshop, the exact format has varied a little bit over the  
16 years, and then they might also receive some individual  
17 training from the department or the individual faculty.

18 Q Is -- what is this teaching practicum designed for?

19 A So it's designed to give students the ability to develop  
20 some experience in teaching. You know, some students will go  
21 on to academic careers and having some experience in developing  
22 and understanding how to teach and organize courses is very  
23 important.

24 It's also really designed just to allow students to  
25 develop their communication skills, their presentation skills.



1 So you know, as a Ph.D. in engineering regardless of whether or  
2 not you go into academia or industry you're often presenting  
3 technical results to very diverse audiences, right, with very  
4 difficult backgrounds. And so having the experience, you know,  
5 regularly presenting some technical material to a larger group,  
6 as you might do in a recitation, really allows them to develop  
7 that experience and confidence in doing that.

8 Q Does -- do students' stipends change depending on whether  
9 or not they're enrolled in this practicum?

10 A No, they don't change at all.

11 Q Is a students' funding contingent upon how well he or she  
12 performs when engaging in the students' teaching activities?

13 A No. To the extent that they do it satisfactory to pass  
14 the course, but --

15 Q What happens if a student is struggling in the teaching  
16 practicum, how would you handle that?

17 A So I think if it happens early on in the semester there's  
18 a lot of direct feedback given to the student, right. As a  
19 faculty member say working with students in the teaching  
20 practicum I would give feedback early on and try to correct it  
21 mid course. You know, if it becomes apparent after doing one  
22 semester of teaching practicum that a student really isn't  
23 comfortable presenting say in front of 100 graduates where  
24 that's not the preferred or best course for them to do the  
25 teaching practicum, and in subsequent semesters they might do

1 the teaching practicum as part of a graduate course that  
2 involving more one-on-one instruction.

3 Q Okay. Is a the student coded in the system differently  
4 when he or she is enrolled in a teaching practicum?

5 A No, not from a funding standpoint; however, they are  
6 registered for MEAM 895 in the academic record system.

7 Q Does MEAM and admit PhD. these students based on  
8 undergraduate enrollment?

9 A No.

10 Q Let's talk a little bit about research. Are MEAM students  
11 required to engage in their own independent research as part of  
12 their academic education?

13 A Yes.

14 Q What -- and let's begin with the admissions process. Do  
15 most students tend to know their area of study within MEAM when  
16 they apply for the program?

17 A Yes. So on the application we ask the specific areas that  
18 they're interested in.

19 Q Okay. Can you walk us through how the admissions process  
20 works and how a student gets -- how students selects his or her  
21 advisor?

22 A Uh-huh. So we have an admissions committee. We have an  
23 admissions committee that is comprised of faculty sort of from  
24 three subgroups within mechanical engineering. So we have what  
25 we would call sort of a robotics in mechanical systems

1 subgroup, we have a mechanics in material subgroup, and then we  
2 have an energy and fluid systems subgroup.

3 And you know, this admissions committee, which includes at  
4 least one faculty member from each of those subgroups, reviews  
5 all applications, looks at, you know, particular interest  
6 areas, and then forwards relevant applications to faculty in  
7 specific areas to try to, you know, identify matches between  
8 students and faculty that have research opportunities in these  
9 specific areas.

10 Q Okay. So once a Ph.D. student is admitted into the  
11 program can you walk us through what research he or she will  
12 conduct over the course of their time in MEAM? And if it's  
13 easier to use your -- someone in your own lab as -- for context  
14 feel free to do so.

15 A So, you know, the exact sort of research path that each  
16 student takes is unique, and as I said before, mechanical  
17 engineering, MEAM is a broad area. And so some students might  
18 pursue a more theoretical or computational project, others  
19 might pursue a more experimental project. And so the exact  
20 research and the types of things they do day-to-day might look  
21 a little bit different. But at the end of the day, right, the  
22 path is somewhat similar.

23 So if I think about, you know, my group, and I think my  
24 group is somewhat typical of how people do it, typically in the  
25 first year a student will come into the group, become familiar

1 with the group, and start to explore different research  
2 projects that, you know, build often on things that we've done,  
3 but might often take things that we've done or sort of  
4 capabilities that exist in the group in new directions.

5 And so over the course of that first year they develop  
6 some preliminary work, it might be based on literature reading  
7 as well as understanding what's been done previously in the  
8 group.

9 And then at the end of that first academic year often when  
10 they're doing this qualifying exam they often present, you  
11 know, some focused research topic that may or may not become  
12 their ultimate topic of their dissertation but it gives them a  
13 chance to evaluate a specific area in some detail.

14 And then during the second year, you know, after the first  
15 year, the summer, and into the second year I think students  
16 begin to narrow down the direction of their research. You  
17 know, research is not a very linear thing. You know,  
18 oftentimes you might start down one path, you might find that  
19 you get discouraging results or unencouraging results and then  
20 make a decision to make an adjustment.

21 But oftentimes by the end of the second year, and you  
22 know, usually by the end of the second students have a pretty  
23 clear idea of what their dissertation topic will be, and then  
24 they devise sort of a more comprehensive plan to sort of get to  
25 the final goals of the dissertation that they then work to

1 carry out over the next several years. They discuss this with  
2 their advisor, you know, me on a regular basis, but also with  
3 their thesis committee, which they ultimately will defend their  
4 dissertation to.

5 Q How do students go about learning the skills that they  
6 need to perform their dissertation research?

7 A So it's a mix. You know, some of it comes from course  
8 work for sure, right? There are foundational engineering  
9 concepts that are taught in course work but underpin almost all  
10 research that we do. I regularly mentor students in my group.  
11 We meet at least on a weekly basis and also have group meetings  
12 where the whole group discusses their research projects to give  
13 feedback to each other and for me to give input. And then they  
14 also often work with other students in the group, right,  
15 learning from others, learning from me, learning from staff  
16 that are in the department.

17 Q And you mentioned that students will engage in exploration  
18 of various ideas that might lead to their dissertation. Do you  
19 encourage students to explore research in areas that are of  
20 interest to them?

21 A Yes. You know, I think students choose a particular group  
22 because they're generally interested in the area that that  
23 group does -- area of work that the group does, but then, you  
24 know, once they're in the group, you know, they have particular  
25 interests and they really try to explore to find something that

1 makes sense for them.

2           You know, I encourage all my students in my group to take  
3 a little bit of time to think about choosing a dissertation  
4 topic, because this is something that they're going to be doing  
5 and doing research on and spending time on for the next, you  
6 know, four years, and so if you sort of make a -- or choose a  
7 topic sort of two quickly or if you choose a topic that really  
8 you're not passionate about it's going to be a very long Ph.D.  
9 And so I think, you know, matching a project with students'  
10 interests is absolutely essential for success in the  
11 dissertation.

12 Q     Okay. So as they go through that process are they free to  
13 perform research at their own discretion?

14 A     Yes.

15 Q     And are these -- can these explorations in terms of ideas  
16 and in search of their dissertation be interdisciplinary?

17 A     Yes, and they often are.

18 Q     Like the example you gave earlier with the chemistry lab  
19 student who is working in your lab?

20 A     Yes.

21 Q     Do students receive the same funding while they're  
22 performing this type of independent research?

23 A     Yes. I mean as I said before their stipend is -- and  
24 funding level is fixed for the duration of the Ph.D.

25 Q     Okay. While they're pursuing their dissertation do

1 students pursue research to publish papers?

2 A Yes, they do.

3 Q How does that help students professionally?

4 A Yeah. So publishing papers gives students a public  
5 profile that they otherwise wouldn't have.

6 You know, the dissertation is a fantastic document, but  
7 sadly, right, the dissertation goes into the university library  
8 and very few people access it, right, except people that are  
9 particularly in that field.

10 And so by publishing papers both during their Ph.D. as  
11 well as after their Ph.D. they're able to expose their research  
12 to a much broader research community.

13 Q Okay. In the course of publishing a paper do you teach  
14 students how to become authors?

15 A Yes. You know, the process of writing a paper is truly a  
16 collaborative effort. The student may very well write the  
17 first draft but I get regular feedback, they improve the paper,  
18 and as a result they learn how to write scientific papers.

19 I try to encourage students to write a paper early on  
20 simply because it gives them this experience of learning how to  
21 put together a scientific paper.

22 Q Is the research that these students conduct throughout  
23 their time at Penn oftentimes intertwined with their  
24 dissertation?

25 A Could you repeat the question? I'm sorry.

1 Q Is the research that the students conduct throughout their  
2 time at Penn oftentimes intertwined with their dissertation?

3 A Yeah. I mean it's almost entirely related to their  
4 dissertation. You know, they may try things during their Ph.D.  
5 that don't work and obviously those don't end up in the  
6 dissertation, but all of the research that students do in the  
7 lab they're doing with the idea that it will contribute to  
8 their dissertation.

9 Q Is student funding conditioned upon a Ph.D. student  
10 performing research on a particular grant?

11 A It's not. You know, there has to be a group that can --  
12 that matches the students' interests, right, that the student  
13 chooses at Penn based on those interests, but the -- you know,  
14 as laid out in the letter, right, the funding is guaranteed for  
15 the duration of the Ph.D.

16 Q Okay. And have there been instances where you have sought  
17 a particular grant based on a student's desire to perform  
18 research in a particular area?

19 A Uh-huh. Yeah. So in mechanical engineering, right, you  
20 know, the letter provides the funding to the students for the  
21 duration of the Ph.D., but then the internal sources of  
22 funding, right, in some cases it comes from department  
23 fellowships, in some cases it comes from external research  
24 grants, and so in mechanical engineering, you know, we use  
25 internal funding sources, fellowship money for the School of



1 Engineering and Mechanical Engineering to often support  
2 students for the first year. And this is helpful because  
3 students can come in, explore, and look at different research  
4 areas.

5 And a recent student of mine graduated she came in on the  
6 fellowship from the school, she explored some different areas  
7 and chose to work on this one area of tunable adhesion, and  
8 then as a result I wrote a grant from the National Science  
9 Foundation which was funded, which then subsequently supported  
10 her research for the duration of her Ph.D.

11 Q And this was an idea or topic that she came up with?

12 A Yes. It was actually the topic of her independent study  
13 that she did for the qualifying exam.

14 Q Okay. And is this research going to form the basis for  
15 her dissertation?

16 A Yes. She actually recently graduated, so she graduated  
17 this spring, and it formed the basis of her dissertation.

18 Q Okay. Let's say the grant that a student happens to be  
19 performing research on experience either ends or there's a loss  
20 in funding for whatever reason, a faculty member leaves --

21 A Uh-huh.

22 Q -- what happens to the student's funding?

23 A Yeah. So the student continues to be funded, right, we're  
24 very clear from the beginning that students are funded for the  
25 duration of the Ph.D.

1           If a faculty member loses funding the faculty may  
2 eventually secure other funding sources, the faculty may get  
3 funds internally from the School of Engineering, but regardless  
4 of where that funding is coming from the student is still  
5 funded at the same level and does not realize that change in  
6 funding typically.

7   Q     Okay. Does MEAM track the hours Ph.D. students spend  
8 performing research?

9   A     Not that I know of.

10  Q     Are you aware of any students ever being disciplined for  
11 insufficient progress as a researcher?

12  A     No.

13  Q     What would you say the overall purpose of a doctoral  
14 student -- of doctoral student research is?

15  A     Yeah. So doctoral research is -- you know, the doctoral  
16 research that they do during their degree is really aimed at  
17 allowing them to become an independent researcher. Like so  
18 they want to make a meaningful contribution to their field,  
19 right, whether it be robotics or materials or whatever, and you  
20 know, the doctoral research they do is aimed to get them to  
21 that level, it allows them to go in a field in depth, it allows  
22 them to make advances in that field, and then ultimately  
23 contribute something new to the field that is sort of their  
24 signature accomplishment.

25  Q     Does it help prepare them to become researchers on their

1 own upon graduation?

2 A Yes, absolutely, that's the goal, right?

3 MS. DANTE: I have no further questions. I would just ask  
4 that Employer 52 be moved into evidence.

5 MS. ROSENBERGER: No objection.

6 HEARING OFFICER LEACH: Okay. Employer 52 is received.

7 (Employer's Exhibit No. 52 received)

8 CROSS-EXAMINATION

9 BY MS. ROSENBERGER:

10 Q Good morning, Dr. Turn.

11 A Good morning.

12 Q My name is Amy Rosenberger and I'm one of the lawyers  
13 representing the union in this case, and I have some questions  
14 for your to follow up.

15 You have -- we've heard some testimony from folks in  
16 chemistry or some other departments that have a -- where the  
17 faculty member has a group that they work with that may be  
18 named for the faculty member, the Muller (ph) group or the  
19 Bomguard (ph) group, do you have the Turner group?

20 A I call it the Turner research group, yeah.

21 Q Okay. And the students in your group they're -- they --  
22 let me start that over again.

23 The chemistry that you talked about who works with one of  
24 the students in your group. That chemistry student is not in  
25 your group officially, right?

1 A She is not -- she would not be listed on the web page of  
2 my group.

3 Q Okay. She works -- she does work in the lab where your  
4 group works, right?

5 A That's part of my interaction with her, yes.

6 Q Right. But she's getting her Ph.D. -- and she's a Ph.D.  
7 student?

8 A She is.

9 Q She's getting her Ph.D. in chemistry, right?

10 A Yes.

11 Q So her supervision comes from the chemistry graduate  
12 group; isn't that right?

13 A Her supervision of -- yeah, would come from the chemistry  
14 graduate group. Although I do meet with her regularly to  
15 discuss the specifics of the research she's doing in my lab.

16 Q And presumably she's doing a good job, but if there were  
17 an issue to arise with regard to her research that's something  
18 that would be addressed to the chemistry graduate group not the  
19 MEAM graduate group, right?

20 A Correct.

21 Q And similarly with regard to the individuals who are  
22 listed on your website as part of the Turner research group,  
23 those are all engineering students, right?

24 A Currently, yes.

25 Q And they're not all MEAM students, some are from I think

1 MSE, right?

2 A They could be from MSE. There are currently no Ph.D.  
3 students from MSE in my group.

4 Q Okay. And if -- and are the masters level students  
5 funded?

6 A Generally not.

7 Q Okay.

8 A They often do research for credit as an independent study  
9 or most typically something like that.

10 Q But they're paying tuition?

11 A They're paying tuition and they are -- yeah, the master  
12 students that are in my group currently are not paid.

13 Q And -- yeah, they don't get a stipend?

14 A They don't get a stipend for sure.

15 Q Okay. So the doctoral students, they all do get a  
16 stipend, right?

17 A Yes.

18 Q They all get a package like what's addressed on Employer  
19 Exhibit 52?

20 A Exactly.

21 Q And those students, if an issue were to arise regarding  
22 their performance in your group, would be addressed through the  
23 -- they're all MEAM students, so it would be addressed through  
24 the MEAM graduate group, right?

25 A Yeah. It would generally be addressed first through their

1 primary advisor, so me, and then if needed through the graduate  
2 group.

3 Q So you are their advisor within the graduate group, right?

4 A Yeah. Both their thesis advisor --

5 Q Uh-huh.

6 A -- dissertation advisor, as well as academic advisor.

7 Q And are you the thesis advisor for the chemistry student  
8 who's doing work in your lab?

9 A No.

10 Q Are you the academic advisor for that student?

11 A No.

12 Q That would be someone in the chemistry department, right?

13 A Yes.

14 Q Okay. We've heard some discussion about what you've  
15 described as MRSEC, it's acronym, M-r-s-e-c, right?

16 A Right. M-r-s-e-c, yeah.

17 Q And I confess I'm still not entirely clear on what it is.  
18 It's not a physical location, right?

19 A It's not, although there are some shared facilities,  
20 shared labs that are supported by MRSEC.

21 So MRSEC is a research grant from the National Science  
22 Foundation, they have this MRSEC program, and that primary --  
23 the support from the MRSEC goes to primarily student support,  
24 right, but also it does support some shared facilities.

25 Q Okay. So it's a funding source for a number of different

1 research projects, I'm going use the term sort of generally?

2 A Yeah. So the way it's organized, because it is confusing,  
3 is they're trying to fund larger interdisciplinary efforts, the  
4 MRSEC, and so it's organized into these IRGs, these independent  
5 research groups, which typically have anywhere between five and  
6 ten faculty involved in each IRG working on a very focused  
7 topic.

8 Q And your -- you are one of the -- you are a faculty member  
9 in one IRG if I understand correctly?

10 A I participate in one IRG, yeah.

11 Q And does the work that you are focused on in that IRG  
12 happen in your lab where the Turner research group works?

13 A It happens in multiple places.

14 Q All right.

15 A So some of it will happen in my lab.

16 Q Uh-huh.

17 A Some of it will happen in other faculty's labs. Because  
18 you know, the nice thing about the MRSEC is if you think about  
19 materials, right, you have to make them and then you have to  
20 measure them, right, it's a simple scale, and then you might  
21 try to understand them. And so there's sort of this, you know,  
22 synthesis characterization and theory component, right? And  
23 it's very rare for one person, one PI, one faculty member to do  
24 all those. And so, you know, the materials that are involved  
25 in that research are often made in one lab, right, and then

1 they might come to my lab, right, to measure them, and then we  
2 share is results and talk about them, you know, in weekly  
3 meetings and stuff, to understand the theory and develop an  
4 explanation for what we're seeing.

5 Q And in these various locations where the MRSEC funded  
6 research is going on there are students from, as I understand  
7 your testimony, from different graduate groups, right?

8 A Yes.

9 Q And generally either from engineering or the School of  
10 Arts and Sciences, right?

11 A Those are the most common ones, yeah.

12 Q And those students from whatever program they are in are  
13 -- their supervisory structure goes up through their graduate  
14 groups, right?

15 A In most cases. You know, I mentioned earlier in my  
16 testimony, but there are some faculty in mechanical  
17 engineering, for example, who have physic students where  
18 they're the primary thesis advisor.

19 So, for example, my -- again my chair of my department,  
20 Robert Carpick, he is a member of the physic's graduate group,  
21 he knows primary pointness in mechanical engineering, and so  
22 that physics student in his group that I'm aware of would  
23 report to him as primary advisor, be mentored by him, but then  
24 also, you know, go to the physics graduate group for academic  
25 issues.



1 Q And he is able to be that person's primary advisor by  
2 virtue of the fact that he has an appointment in the physics  
3 department in addition to an appointment in engineering, right?

4 A Not in the physics department, but in the physics graduate  
5 group.

6 Q Sorry.

7 A Penn has this unique graduate group structure which --

8 Q I understand they do, and you weren't here for the whole  
9 hearing --

10 A Yeah.

11 Q -- but I will represent to you that people in School of  
12 Arts and Sciences talk about the physics department --

13 A Okay.

14 Q -- to what departments and graduate groups. And so in any  
15 event, I understand what you're taking about.

16 A Okay.

17 Q He's a member of the -- he's has a secondary appointment  
18 in physics in the graduate group?

19 A In the graduate group, right.

20 Q And so he's able to be this person's -- this physics Ph.D.  
21 student's primary advisor by virtue of his whole in the physics  
22 graduate group?

23 A Yes.

24 Q And if an issue were to arise, as you understand how the  
25 -- how things work within the Ph.D. programs, if I understand

1 you correctly, the -- if an issue were to arise with regard to  
2 this physics student's performance under his advisorship that  
3 needed to go above his head --

4 A Yeah.

5 Q -- essentially it would go to the physics graduate  
6 group --

7 A Correct.

8 Q -- not whatever graduate group he's in in engineering?

9 A That's correct.

10 Q Right?

11 A Yeah.

12 Q He's in MEAM. You said he's your graduate chair in MEAM?

13 A No, he's the department chair.

14 Q I'm sorry, department chair. Okay. Because in MEAM it's  
15 different, you have a different graduate chair than department  
16 chair.

17 A We the graduate group chair and the department chair.

18 Q Right. Okay.

19 On direct examination Ms. Swartez Dante asked you if  
20 funding was tied to participation in any activities at all and  
21 you said no. So my -- I want to just make sure that I'm  
22 understanding you correctly.

23 If a student stopped performing research they're not going  
24 to continue in the MEAM program, right?

25 A I don't think I said whether or not it's any funding at

1 all.

2 Q Okay.

3 A I'm not sure which question you're referring to. You  
4 know, as the letter states there's an expectation that they  
5 maintain good academic standing and also maintain satisfactory  
6 academic progress.

7 Q And good academic standing --

8 A Or sorry. Satisfactory research progress. I'm sorry.

9 Q And good academic standing requires them to be engaged in  
10 satisfactory research work, right?

11 A Yes, they registered for thesis credits, dissertation  
12 credits.

13 Q And good academic standing, does that also require that  
14 they receive passing grades on the teaching practicum?

15 A So you could get an unsatisfactory on one course and still  
16 maintain good academic standing if you look at the minimum.  
17 But if you failed multiple courses, right, including the  
18 teaching practicum, right, that could potentially jeopardize  
19 your academic standing.

20 Q And how many teaching practicum -- how terms of teaching  
21 practicum are required from these students?

22 A We require three semesters.

23 Q And if a student fails one semester do they have to make  
24 it up?

25 A You know, I don't know, because you know, in my time at

1 Penn I've never heard of a student not passing the teaching  
2 practicum.

3 Q Okay.

4 A But I imagine they would likely have to make it up,  
5 because they would need to have the credit for three semesters  
6 before graduating.

7 (Pause)

8 Q The chemistry student who's doing the work in your lab  
9 doesn't have to do the teaching practicum, right?

10 A No.

11 Q That's because she's getting a degree in chemistry, not  
12 MEAM, right?

13 A The teaching practicum is a requirement of the MEAM  
14 department.

15 Q Okay. You described the process sort of in general terms  
16 of your way of sort of helping students to get publications  
17 published -- get articles published. When you do what you --  
18 you described it as a collaborative effort, so when you're  
19 engaged in that collaborative effort are you also listed as an  
20 author on those publications?

21 A Yes.

22 Q And is that because you're the principle investigator for  
23 the work that they're working on?

24 A It's because I contributed something intellectually to the  
25 work in the paper. I also contributed to the writing of the

1 paper.

2 You know, in some cases papers may have just two authors,  
3 right, the Ph.D. student and myself, and you know, in no cases  
4 has a paper simply gone out where the student has written it  
5 and I just attached my name, right? I mean --

6 Q Right.

7 A -- it softens co-writing thing.

8 In many cases though you'll see papers that have many  
9 author, right? And it's because a lot of the things that  
10 actually form a paper in the end involve experiments and  
11 intellectual contributions from multiple people, multiple  
12 students, Ph.D. students, post docs should be multiple Ph.D.  
13 students, as well as sometimes multiple faculty. With  
14 collaborative research there are often many people involved in  
15 a final paper.

16 Q And everyone who's listed as an author is helped by that,  
17 it goes onto their CV; isn't that right?

18 A It's a order of the accomplishment that they made a  
19 contribution to this research work, yes.

20 Q With regard to the student -- you said -- you gave the  
21 example of a student who had an idea for research and who  
22 applied for an NSF grant I think you said to nunned research.  
23 Do you remember that testimony?

24 A Uh-huh.

25 Q So why did you write the grant rather than the student?

1 A Because the way that the funding mechanisms work is the  
2 faculty need to write the research grant, right? So NSF does  
3 have some directive student funding in the form of student  
4 fellowships, and that's one opportunity for funding. But the  
5 more typical grant mechanism is faculty writing.

6 And so, you know, the student chose to work in this area,  
7 right, you know, we did work together on developing the idea,  
8 right, but ultimately, right, you know, the way that the  
9 funding mechanisms work requires that I write the proposal,  
10 right?

11 Q And as part of that proposal do you provide information  
12 about your own record in the field, including your educational  
13 background, your publication background, et cetera?

14 A Yes.

15 Q And that's part of what's used in the NSF's scoring of  
16 your grant application, right?

17 A Yes. There's a panel review process where they evaluate  
18 the technical idea, right, and then they look at whether or not  
19 the investigator is likely to be able to carry it out, which  
20 depends on my individual record.

21 Q And is that grant still ongoing now?

22 A Yes, that grant is ongoing.

23 Q So even though that student has now graduated,  
24 successfully defended her Ph.D., it's -- the research under  
25 that grant is still happening in your group?

1 A Uh-huh. So her work, you know, was funded by the grant,  
2 right, but when I write a research grant it includes ideas of  
3 her work but it also includes a broader set of ideas that  
4 expand beyond, right?

5 So it wasn't that I, you know, took exactly what was going  
6 to be in her dissertation and put it in the grant, but her --  
7 when she chose this research direction, right, I had an  
8 obligation to go seek funding and be able to support her for  
9 the duration of her Ph.D.. And so I use aspects of her work in  
10 it but there can possibly be additional aspects for the grant.

11 Q And is that sort of typical that a grant would be sort of  
12 a broad umbrella that could cover a number of specific things  
13 so that different students could be -- in part so that  
14 different students could be funded by it?

15 A Yeah. I mean in general when I write research grants I  
16 write them in a general area such that as students find  
17 directions that work for them that they have the ability to  
18 pursue the directions they would like, right?

19 So, you know, most of my funding comes from the National  
20 Science Foundation, which allows very broad grants. There's  
21 some other types of funding that are much more specific, right,  
22 but the National Science Foundation is fortunate in that, you  
23 know, it's funding fundamental research and so you can write  
24 them broad enough to, you know, perhaps include multiple  
25 students, right?

1 (Pause)

2 MS. ROSENBERGER: That's all I have for now any way.

3 HEARING OFFICER LEACH: Okay.

4 MS. ROSENBERGER: Thank you.

5 HEARING OFFICER LEACH: Does the employer have any follow  
6 up?

7 MS. DANTE: Nothing further.

8 HEARING OFFICER LEACH: Okay. I have a few questions.

9 THE WITNESS: Oh, sure.

10 HEARING OFFICER LEACH: Let me just look at the beginning  
11 of my notes.

12 Okay. How many Ph.D. program -- I mean students are in --  
13 I guess that would -- how many would be in your prom?

14 THE WITNESS: In the MEAM program --

15 HEARING OFFICER LEACH: Yes.

16 THE WITNESS: -- specifically?

17 HEARING OFFICER LEACH: Uh-huh.

18 THE WITNESS: This year there are about 60.

19 HEARING OFFICER LEACH: Okay.

20 THE WITNESS: Students graduate at various times  
21 throughout the year, so that number could change. But about 60  
22 right now.

23 HEARING OFFICER LEACH: And then you said there are master  
24 students as well?

25 THE WITNESS: Yeah. So in the department we have master



1 students that come from two sources.

2 HEARING OFFICER LEACH: Uh-huh.

3 THE WITNESS: We have students that apply -- they've done  
4 their education elsewhere and they apply into a two-year  
5 master's degree, and then we also have a number of  
6 undergraduates who do this process of submatriculation in the  
7 master program which is just an additional one year on their  
8 degree.

9 HEARING OFFICER LEACH: Okay. How many MEAM master  
10 students would you say you have in either group?

11 THE WITNESS: Yeah. It's --

12 HEARING OFFICER LEACH: You can estimate.

13 THE WITNESS: Yeah. Let me just -- just give me one  
14 minute to --

15 HEARING OFFICER LEACH: Okay.

16 THE WITNESS: -- think about it. I think there are  
17 probably -- if you sum both groups together I think there are  
18 probably roughly 140, but please have a large error bar on  
19 that.

20 HEARING OFFICER LEACH: No problem.

21 Okay. And then you have students that work in your group.  
22 How many students work in your group?

23 THE WITNESS: So the students that are in my group,  
24 there's some Ph.D. students that I mentor. On average, I  
25 mentor four to five Ph.D. students at a time.

1 HEARING OFFICER LEACH: Okay.

2 THE WITNESS: So currently there are only three that's  
3 because I had three Ph.D. students graduate this year. And so  
4 it's really a transition time.

5 In addition to those four or five Ph.D. students, there  
6 are often other students in the group that are doing research  
7 in some form, and therefore would be listed on the website of  
8 the Turner Research Group and it's going to include  
9 undergraduates, right, as well as some master students. And  
10 these might just be students doing research for credit,  
11 volunteering, or in some cases, undergraduates are paid through  
12 these undergraduate research supplements, hourly students.

13 HEARING OFFICER LEACH: Okay.

14 THE WITNESS: So there are about two master students and  
15 maybe three or four undergraduates. They're often more  
16 undergraduates in the lab during the summer than during the  
17 academic year.

18 HEARING OFFICER LEACH: And master students, are they  
19 required to do -- are they TAs?

20 THE WITNESS: They're not required to do teaching.

21 HEARING OFFICER LEACH: Okay.

22 THE WITNESS: They can -- there are hourly positions that  
23 both senior undergraduates, as well as master students can do  
24 grading for example.

25 HEARING OFFICER LEACH: Okay. So a master student can

1 grade but not necessarily be in a -- engage in a teaching  
2 assignment.

3 THE WITNESS: It's rare for them to do things other than  
4 grading, although you know, we have a lot of lab courses and  
5 there can be one-on-one instruction, in lab, supervising a lab  
6 course or something.

7 HEARING OFFICER LEACH: A master student may do that?

8 THE WITNESS: A master student could do that. An under --  
9 a senior undergraduate could do that as well.

10 HEARING OFFICER LEACH: Okay. You -- I know there was  
11 some talk about the research that students are going, and for  
12 me, your program I understand students have to engage in the  
13 teaching, I'm just going to use the term TA, but I know you  
14 call it something else.

15 THE WITNESS: Okay.

16 HEARING OFFICER LEACH: They do that for three semesters.  
17 Is there an equivalent like research assistantship that they do  
18 or are they just doing their research as part of getting their  
19 degree?

20 THE WITNESS: So they're doing research throughout their  
21 degree.

22 HEARING OFFICER LEACH: Uh-huh.

23 THE WITNESS: And just in the case of the teaching where  
24 they register for this course MM85 is the course for the  
25 teaching practical. They also register for research or

1 dissertation credits throughout their degree and this has a  
2 different course number, E999.

3 And so there is this registration on the course record,  
4 the academic record that represents the research as well as a  
5 separate one that represents the teaching.

6 HEARING OFFICER LEACH: But with teaching you said they  
7 are in the, you know, they are in the classroom and they're  
8 doing various duties, and then there's an evaluation. The  
9 research is not along that same track, right, the research is  
10 just what they're doing to move forward and get their degree.

11 THE WITNESS: Yes. I mean, there's constant mentoring and  
12 feedback given over the course of it, but yeah, still research.

13 HEARING OFFICER LEACH: All right.

14 THE WITNESS: Goes for the duration of the --

15 HEARING OFFICER LEACH: Okay. There's -- you've talked  
16 about the fact that you have the chemistry student that works  
17 in your lab, your MEAM lab, right?

18 THE WITNESS: Performs research in my lab.

19 HEARING OFFICER LEACH: Okay. That's a Ph.D. student.

20 THE WITNESS: Yes.

21 HEARING OFFICER LEACH: And how is that person funded?

22 THE WITNESS: I don't know her exact sources of funding.

23 HEARING OFFICER LEACH: Okay.

24 THE WITNESS: She's funded, you know, and supervised by a  
25 professor in chemistry.

1 HEARING OFFICER LEACH: Okay. Do you ever offer the  
2 student any supervision or oversight while she's working in  
3 your lab?

4 THE WITNESS: Yeah, so she just started doing experiments  
5 in the lab over the past -- over this past semester.

6 HEARING OFFICER LEACH: Uh-huh.

7 THE WITNESS: And since she started doing that, I've met  
8 regularly weekly with her, as well as her advisor. The three  
9 of us meet assuming we're all in town to discuss her results  
10 and to discuss next steps.

11 HEARING OFFICER LEACH: And just so I'm clear, she's  
12 working in your lab with one of your students in MEAM?

13 THE WITNESS: She does both independent research in my  
14 labs, like she'll come in and use equipment, but she'll also  
15 consult with another student to understand best how to design  
16 the experiments and perform the measurements that she wants to  
17 do.

18 HEARING OFFICER LEACH: The work that she's doing, I'm not  
19 -- I hope I ask this correctly, is this something  
20 collaborative? Like will she come up with some sort of  
21 project, like a collaboration of her chemistry work and MEAM  
22 work or is it just her chemistry work? I'm trying to figure  
23 out how is the end product combined with your group.

24 THE WITNESS: Yeah.

25 HEARING OFFICER LEACH: Or your specialty.

1 THE WITNESS: So her dissertation, you know, will include  
2 probably a wide range of work related to her topic, right, this  
3 particular set of materials that she's working on. And if you  
4 think of a dissertation in terms of chapters, where you have  
5 six or seven chapters, I wouldn't be surprised if the work  
6 she's doing with me ends up being one or two chapters in her  
7 thesis, right, and they'd be one publication that she writes,  
8 will be one or two publications she writes will be based on the  
9 work that she does with me.

10 HEARING OFFICER LEACH: MEAM work?

11 THE WITNESS: Yeah, Mechanical Engineering Measurements of  
12 her materials, right. And so --

13 HEARING OFFICER LEACH: Okay.

14 THE WITNESS: -- it'll be a fix is what I'm saying that  
15 she'll --

16 HEARING OFFICER LEACH: Okay.

17 THE WITNESS: You know, she has work that she does that  
18 I'm not aware of, right.

19 HEARING OFFICER LEACH: Uh-huh.

20 THE WITNESS: And then there's this collaborate aspect to  
21 one part of her work that we work closely on.

22 HEARING OFFICER LEACH: Okay. When the students are doing  
23 their teaching practicum, right, that's what it's called.

24 Okay. I'm sorry, I've heard so many different terms, I'm just  
25 trying to keep it all straight. Are they -- you said they can

1 -- I know you said they're not the primary instructor but you  
2 said they do recitation sections for undergrads. Are they  
3 doing that alone?

4 THE WITNESS: The recitation they do it alone. So maybe I  
5 can just explain the course I teach.

6 HEARING OFFICER LEACH: Sure.

7 THE WITNESS: I teach sophomore level mechanics materials  
8 course. I lecture, give the lecture and manage the overall  
9 course, and so I lecture just under three hours a week. And  
10 then there's an additional recitation section where students  
11 are divided into smaller groups that is led by a Ph.D. TA,  
12 Ph.D. students.

13 But, you know, what they're doing in that recitation is  
14 basically presenting problems and not necessarily presenting  
15 new material, right, it's more sort of practicing problems,  
16 concepts they've seen in lecture.

17 HEARING OFFICER LEACH: And how many students are usually  
18 in their classes?

19 THE WITNESS: So a typical recitation will be between 20  
20 and 30 students.

21 HEARING OFFICER LEACH: Okay. And then you talked about  
22 evaluations. You said that faculty will sit in on these to I  
23 guess evaluate the TA.

24 THE WITNESS: Yeah. That's one means of evaluation.

25 HEARING OFFICER LEACH: Uh-huh.

1 THE WITNESS: We also seek input from students in the  
2 recitation to evaluate a student, evaluations and also just a  
3 lot of individual interaction, right, generally weekly with any  
4 students that are involved in teaching the course, get feedback  
5 from them and also offer them feedback.

6 HEARING OFFICER LEACH: Okay. And I think you gave an  
7 example. I think you mentioned along the same testimony if a  
8 student -- a Ph.D. student is struggling, you give direct  
9 feedback from a faculty member and at the end of the class if  
10 they're not doing well with I guess teaching undergrads, they  
11 can move on to maybe teaching grads.

12 What if they continue to struggle, have you ever had that  
13 situation occur?

14 THE WITNESS: I haven't experienced it since I've been  
15 here.

16 HEARING OFFICER LEACH: Okay.

17 THE WITNESS: In general, students are excellent.

18 HEARING OFFICER LEACH: Okay.

19 THE WITNESS: And the teaching practicums go very  
20 smoothly.

21 HEARING OFFICER LEACH: Okay. What would -- if you can  
22 answer this, what would you say the difference is between the  
23 teaching practicum versus a TA shift? Can you answer that?

24 THE WITNESS: Yeah. So the teaching practicum is much  
25 less onerous, I would say than a full teaching assistantship,



1 right. There's sort of expectation in terms of time  
2 commitment. We specifically say it should be ten hours or  
3 less.

4 HEARING OFFICER LEACH: Uh-huh.

5 THE WITNESS: It's rather minimal, right, and so students  
6 can continue to do research and take courses.

7 I've seen at other institutions, including when I did my  
8 Ph.D., that if you were a TA you would get very little research  
9 done because it'd be almost a full time thing. And so you want  
10 the students to have this teaching experience, but we want to  
11 minimize the impact, right, or we want it to be, you know,  
12 equivalent to a course or less than a course such that they  
13 continue to, you know, be able to complete their dissertation  
14 research, and also can take courses at the same time. But I'm  
15 comparing to teaching assistantships to other universities and  
16 engineering departments, right. We don't have a formal  
17 teaching assistantship in mechanical engineering.

18 HEARING OFFICER LEACH: Okay. So no TAs in mechanical.  
19 Just the teaching.

20 THE WITNESS: Teaching practicum and then students that  
21 are paid hourly to help with grading that I mentioned --

22 HEARING OFFICER LEACH: Okay.

23 THE WITNESS: -- masters or undergraduates.

24 HEARING OFFICER LEACH: Okay.

25 THE WITNESS: I mean just -- the final, I guess, comment

1 is that again there's this educational or pedagogical aspect to  
2 the teaching practicum that isn't necessarily there in a  
3 teaching assistantship, right.

4 HEARING OFFICER LEACH: Okay.

5 THE WITNESS: So, you know, the goal is very different  
6 than traditional teaching assistantship.

7 HEARING OFFICER LEACH: When a student is doing the  
8 teaching practicum, who oversees their work?

9 THE WITNESS: The instructor of the course that they are  
10 doing the teaching practicum in.

11 HEARING OFFICER LEACH: Okay. I don't have any other  
12 questions. Does the employer?

13 MS. DANTE: One minute please.

14 HEARING OFFICER LEACH: Okay. No problem.

15 Oh, let me ask one more question. When someone is  
16 involved in the teaching practicum, is there ever any  
17 discipline involved if they don't do a good job?

18 THE WITNESS: Not that I'm aware of.

19 HEARING OFFICER LEACH: Okay.

20 THE WITNESS: I think we provide feedback to try to have  
21 them improve their performance.

22 HEARING OFFICER LEACH: Okay.

23 REDIRECT EXAMINATION

24 BY MS. DANTE:

25 Q Just one question. When you were describing the teaching

1 practicum for the Hearing Officer, I think there was some  
2 suggestion that it was somehow separate from the research which  
3 is part of the degree.

4 Is the teaching practicum similarly part of the academic  
5 degree requirement for Ph.D's in MEAM?

6 A Yes. I mean I think as I said originally in my testimony  
7 that there's, you know, course requirements for the degree, the  
8 teaching practicum and then the dissertation research, and all  
9 of those are requirements for the degree.

10 MS. DANTE: I have no further questions.

11 HEARING OFFICER LEACH: Does the union?

12 MS. ROSENBERGER: Just one.

13 RECROSS-EXAMINATION

14 BY MS. ROSENBERGER:

15 Q You talked about the varieties of types of people who are  
16 working in your lab. As you said that includes other graduates  
17 more in the summer. So are there undergraduates in your lab  
18 right now?

19 A Correct.

20 Q Are they being paid?

21 A Yep. So there are specific summer programs, you know,  
22 designed to offer something equivalent, something like a summer  
23 internship, right, where students get a stipend or an hourly  
24 wage, depending on where the source comes from. If there are  
25 specific programs in the NSF that will only fund undergraduate

1 research, large center grants have support for undergraduate  
2 researchers and things like that.

3 MS. ROSENBERGER: Okay.

4 HEARING OFFICER LEACH: Anything else?

5 MS. DANTE: Nothing further.

6 HEARING OFFICER LEACH: Okay. Thank you very much today,  
7 I appreciate it. We can go off the record.

8 (Recessed at 11:32 a.m.)

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A F T E R N O O N   S E S S I O N

(Time Noted: 12:40 p.m.)

HEARING OFFICER LEACH: Back on the record. The employer  
can call their next witness.

MR. FRYMAN: Stacey Lopez.

HEARING OFFICER LEACH: Good afternoon.

MS. LOPEZ: Good afternoon.

HEARING OFFICER LEACH: Can you say and spell your first  
and last name for the record, please?

MS. LOPEZ: Yes, my name is Stacey Lopez, S-t-a-c-e-y,  
last name L-o-p-e-z.

HEARING OFFICER LEACH: Okay. Can you raise your right  
hand.

STACEY LOPEZ, WITNESS, SWORN

HEARING OFFICER LEACH: Okay.

DIRECT EXAMINATION

BY MR. FRYMAN:

Q Good afternoon, Ms. Lopez.

A Good afternoon.

Q Where are you currently employed?

A I'm employed by the University of Pennsylvania.

Q And in what position?

A I am the Associate Vice-President for Institutional  
Research and Analysis.

Q And when the air comes on here, it can sometimes be

1 difficult to hear, so if you could do your best to try and keep  
2 your voice up.

3 A Sure.

4 Q Thank you. And how long have you held that position?

5 A It'll be ten years in December.

6 Q And what is the Institute for Research and Analysis at  
7 University of Pennsylvania?

8 A So we provide basic decision support for the offices of  
9 the president and the provost. We are responsible for creating  
10 a quantitative portrait of the university that goes out to the  
11 federal government, the state government, local. We do ranking  
12 and guidebook publications and we publish a variety of  
13 statistics about the institution internally.

14 Q And with respect to the reporting that your office does  
15 with respect to university -- to the university, can you  
16 provide some examples of the type of information or data that  
17 the university reports?

18 A Sure. We compile information from across the institution.  
19 The things that we have primary responsibility for would be  
20 looking at things like enrollment levels, degrees conferred,  
21 counts of populations that are campus, student, faculty, staff.  
22 We report to like I said federal, state, local governments, and  
23 we also -- you do all kinds of internal.

24 Q So based on your answer, is it fair to presume some of the  
25 data you report on has to do with university students.

1 A Absolutely.

2 Q And both its undergraduate and its graduate student  
3 populations.

4 A Absolutely.

5 Q And can you tell us a little bit about the types of  
6 student information that your office reports on?

7 A So we report on a wide variety of student information.  
8 Again enrollments, degrees, much of this will be reported to  
9 the federal government through IPEDS.

10 Q What is IPEDS?

11 A It's the Integrated Post-Secondary Data System. Any  
12 institution that receives Title IV funding is required to  
13 report to the federal government on enrollment levels, degrees,  
14 financial aid, finance, et cetera.

15 Q All right. And with respect to the information that you  
16 report out on and you analyze, is your office actually  
17 collecting that data from the source?

18 A Depends on the data. So finance, for example, we would  
19 only coordinate that information, we would go to the finance  
20 office to get information, but anything that has to do with  
21 students we would go to the source of data and do the analysis  
22 ourselves.

23 Q And where would you go with respect to this student data  
24 that you mentioned that you report out on, where would you go  
25 to find that, some central location?

1 A The primary data source is the student record system, SRS,  
2 it flows into the warehouse and we pull it from the warehouse.

3 Q And who inputs the data into the student record system?

4 A That would be a large variety of people across the campus  
5 depending on the type of information it is that you're talking  
6 about.

7 Q Is it centralized in any way?

8 A No.

9 Q With respect to graduate students, what's your  
10 understanding of who would be collecting or inputting that  
11 data?

12 A Some of it would come from the students themselves, some  
13 of it would come from graduate coordinators. Some of it would  
14 come -- and it would vary actually depending on the school and  
15 the program who inputs the data.

16 Q Now, I want to talk about graduate students for a moment,  
17 do you understand that certain graduate students are funded?

18 A Yes.

19 Q And that funding can take the form of stipends?

20 A Uh-huh. Yes.

21 Q And when students receive funding in the form of stipends  
22 or other compensation, is that reflected in the student record  
23 system?

24 A No. That is actually held in another system, payroll  
25 system.



1 Q And why is that placed in the payroll system?

2 A I think that is the means by which they can -- the task  
3 can be carried out.

4 Q Now, you mentioned reports on student data that go to  
5 IPEDS --

6 A Uh-huh.

7 Q -- and that's -- we need a yes instead of an uh-huh --

8 A Yes.

9 Q -- for purposes of the record if you would, thank you.

10 And can you tell us again what it is that your office is  
11 reporting to IPEDS with respect to student information?

12 A Sure. So it would be the enrollment level of our  
13 students, it would be the degrees conferred to students. It  
14 would be financial aid received, which is different than --  
15 this is the gift aid from the institution. We report on  
16 finances, we report on human resources in general.

17 Q Is that federally mandated, these reports?

18 A Yes.

19 Q And when do you provide this student report to IPEDS?

20 A So the surveys will lag behind the timing of what it is  
21 that we would report. Say, for instance, we wanted to provide  
22 the number of students that are enrolled at the University of  
23 Pennsylvania, it would depend on what time it was that you were  
24 to look at the data.

25 The federal government mandates that we report at October

1 15th or thereabout, a census state, and so for all of our  
2 enrollment, head counts, those would occur on October 15th.

3 For information that's coming out of payroll we tend to  
4 leave a little bit later and do that on November 30th, just so  
5 that we can make sure that the data has settled down.

6 Q Now, let's take you to those intern, the enrollment data,  
7 that is October 15th.

8 A About then. It's the end of the fifth week of classes.

9 Q And if you wanted to provide a report earlier, would you  
10 be able to do so any earlier than October 15th?

11 A No, I'm actually asked for that data on a regular basis  
12 prior to that and we won't release it until October 15th. The  
13 data has not settled down until that point.

14 Q And you used that phrase a couple of times "the data has  
15 not settled down," what do you mean by that?

16 A So students are changing their courses quite a bit at the  
17 beginning of the semester, they're adding, dropping, they're  
18 making decisions on what it is that they're going to complete  
19 finally.

20 Specifically graduate students often will register late  
21 for classes. People will be leaving classes, so we want to  
22 wait until we have a pretty good sense of who's going to be  
23 enrolled in that class for the entire semester.

24 Q And then you provided a different date, was it November  
25 30th for what you call payroll data?

1 A Yes, November 30th.

2 Q Can you explain that?

3 A So again, these are appointments that are being put in by  
4 a variety of individuals across the institution, and so we want  
5 to make sure that all of the appointments are in place when we  
6 take a snapshot so we late in the semester for that.

7 Q And that would include appointments, such as things like a  
8 teaching assistant or a research assistant?

9 A Absolutely.

10 Q And could you, if asked, pull that information any earlier  
11 than November?

12 A We could pull it, I would worry about the accuracy of it.

13 Q Why is that?

14 A Again because it's so decentralized. The -- what  
15 motivates the entry of the data is getting individuals paid.  
16 And so you could do that later in some months and it wouldn't  
17 cause someone not to get paid, but I might not see them to  
18 count them if that was the case.

19 Q What's your understanding of when payments are made in the  
20 form of these stipends or other compensation to students?

21 A On a monthly basis.

22 Q And a particular time each month?

23 A I think it's towards the beginning of the month paid for  
24 the last month.

25 Q Are you familiar with the term census report?

1 A Oh, yes.

2 Q Is that -- well, what is that?

3 A Those are actually the two dates that I've just been  
4 discussing, right, so the census, the fall census occurs  
5 October 15th for students and data that comes out of the  
6 students record system. The census date on the payroll side is  
7 November 30th.

8 Q Does the university or let me start -- does your office  
9 produce a census report for students in the summer?

10 A No.

11 Q Why not?

12 A I think the summer is a very complicated time. Our three  
13 separate sessions, it's a very contracted period of time. Any  
14 data snapshot that we would take in the summer time would not  
15 be indicative of what the campus looks like during the academic  
16 year.

17 Q Why is that?

18 A Well, for one thing very few students are enrolled. So  
19 probably -- somewhere in the neighborhood of 24,000 students  
20 are enrolled during an academic year, like perhaps 6,000, maybe  
21 6,500 are enrolled in the summer time.

22 Q Going back for a moment to the -- what you referenced as  
23 the payroll data. So does your office have the ability or does  
24 it track that data with respect to graduate students?

25 A Yes.

1 Q And that would include graduate students serving as  
2 teaching assistant, teaching fellows, research assistants,  
3 research fellows.

4 A Yes.

5 Q And are those types of graduate students, those serving as  
6 TA, TF, RA, RF, are they included in any type of employee  
7 reporting that your office does?

8 A They are students, they wouldn't be included as employees.

9 Q Now, are you familiar with the petition for representation  
10 that was filed by the union in this matter?

11 A Yes.

12 Q And were you asked to gather information about these  
13 student classifications I just mentioned and some others in  
14 connection with that petition for representation?

15 A Yes.

16 Q And that information or that particular compilation that  
17 you were requested to put together, was that something that you  
18 had ever compiled in one place before?

19 A No, it is not.

20 Q And to your knowledge, had anyone else in the university?

21 A Certainly not at this center of the organization.

22 Q And did you oversee putting together a list of students  
23 from the spring 2017 semester who held the classifications  
24 identified in the petition?

25 A Yes.

1 Q And how did you go about doing that?

2 A So based on what was requested in the petition, we came up  
3 with an algorithm where we looked at the spring census file,  
4 this is not the official count that we would use for the  
5 organization, but it is the best thing that we could use at the  
6 time that this was requested. So it would have been from  
7 April.

8 We pulled all students who -- all graduate students who  
9 were enrolled at the time of census. We removed students who  
10 had subsequently graduated. We bumped that data up against  
11 what was in payroll for April 30th, so that would've been the  
12 end of the month snapshot for April and got all of the  
13 appointment information from the payroll system.

14 Q And did we ask you to use April 30 payroll date?

15 A Yes. I would add that it's the best date that you could  
16 use, however, because it would be within the academic year, so  
17 you're most likely to capture the best information about the  
18 individuals that are being studied.

19 Q And did that enable you to capture the students holding  
20 these classifications in the spring 2017?

21 A To the best of my knowledge, yes.

22 Q And did you also attempt to compile a list of graduate  
23 students engaged in research activities or providing  
24 instructional services over the summer months?

25 A We did compile a list.

1 Q And did you encounter any difficulties with putting that  
2 list together?

3 A It appeared to be incomplete. It was roughly -- contained  
4 roughly 40 percent fewer individuals.

5 Q What were some of the -- were there any difficulties with  
6 collecting that data?

7 A The difficulties come from the fact that in terms of  
8 trying to capture individuals, they all have different end  
9 points to their appointments. So if you looked at it in April  
10 it would look different than it would look in May than it would  
11 look in June, et cetera. And so trying to capture everybody  
12 would be difficult.

13 Q Would looking at the data in the summer, would that  
14 reflect students who were still in the system but who had  
15 subsequently -- who had previously graduated?

16 A It could. Not all degrees would be posted.

17 Q You mentioned with respect to the fall semester, the data  
18 settling down to use your phrase. Would that phenomenon occur  
19 with respect to any types of appointments or activities in  
20 which students were engaged over the summer?

21 A One would assume so. We would never use the summer to try  
22 to describe again what the campus looks like, because it is an  
23 exceptional period of time.

24 Q To your knowledge, are there multiple sessions when  
25 classes are conducted over the summer?

1 A There are.

2 Q Do you know how many?

3 A Three. So there's one that goes across the course of the  
4 summer and then there's Summer 1 that happens on the first  
5 half, and there's Summer 2 that happens in the second half.

6 Q And with respect to graduate students who are engaged in  
7 teaching activities over the summer, do you know whether it's  
8 the same group of students who teach in Summer 1 versus Summer  
9 2 versus all summer?

10 A I do not.

11 Q Does the fact that there are these multiple sessions over  
12 the summer complicate the task of creating a summer list?

13 A Yes.

14 Q How so?

15 A I think that it's just difficult to know when, again  
16 because it's so decentralized when somebody will put in a begin  
17 point and end point and knowing whether or not you're  
18 accurately capturing the individuals who are actually doing  
19 that work in the summer time.

20 Q And on that point, if a student, a graduate student is  
21 engaged in teaching or assisting in a class in the summer,  
22 let's say Summer 1, will they be reflected in the --  
23 necessarily be reflected in the payroll system, the first week  
24 of class?

25 A They may or may not be. It depends completely on what is



1 happening within the administrative unit for the student.

2 Q Based on the -- what you've done in getting to with this  
3 case to look at, is the potential for a summer list and putting  
4 together a summer list, do you think you could put together a  
5 summer list with a high degree of confidence?

6 A I wouldn't be comfortable with putting together a list  
7 using summer data.

8 Q And why is that?

9 A I just don't feel like it would be accurate or reflective  
10 of the student body.

11 Q Now, I take it based on your testimony then you have some  
12 familiarity with the list that we requested so that we could  
13 submit to the National Labor Relations Board with respect to  
14 graduate students in the spring 2017 semester and then those  
15 engaged in these activities over the summer; is that right?

16 A Yes.

17 Q And was there a marked difference between the size of  
18 those two lists?

19 A Yes.

20 Q What was the nature of that event?

21 A So that summer list was about 40 percent fewer students.

22 Q Now, we've been talking about the -- a little about the  
23 spring 2017 and now the summer 2017, now let's talk about fall  
24 2017.

25 Let's say if you wanted to proceed to put together a

1 similar list with the fall 2017 academic term, students holding  
2 these classifications.

3 A Right.

4 Q We talked about TA, TF, RA, RF, educational fellowship.  
5 Would you be able to start putting that list together now?

6 A No.

7 Q Why not?

8 A So there will be many students who have yet to register,  
9 certainly a lot of students would not have their appointments  
10 yet entered into the payroll system.

11 Q Okay. When do you think you would be in a position to put  
12 that list together?

13 A So my preference would be always to wait until the census  
14 date, which would be October 15th. Certainly all the  
15 algorithms to create the list could be generated before that,  
16 but in terms of trying to capture the accurate population I  
17 would want to do on October 15th.

18 Q And I want to go back to the spring 2017 list and compare  
19 it to the fall, what would be the fall 2017 list, would the  
20 identities of the students who are on the spring 2017 list  
21 match up neatly identical with those on the fall 2017 list?

22 A They certainly would not be identical. You would have  
23 students who have graduated. You would have new students who  
24 are coming in, and you would have students who no longer have  
25 appointments.

1 MR. FRYMAN: Give me a moment.

2 (Pause)

3 MR. FRYMAN: That's all the questions I have, thank you.

4 HEARING OFFICER LEACH: Okay.

5 CROSS-EXAMINATION

6 BY MS. ROSENBERGER:

7 Q Good afternoon.

8 A Good afternoon.

9 Q My name is Amy Rosenberger and I'm one of the lawyers  
10 representing GET-UP in this case. I have just a few questions  
11 for you.

12 So I gather from what you're saying the payroll functions  
13 at the university are decentralized.

14 A Yes.

15 Q So they're handled at the -- are they handled at the  
16 school level, or the department level, or where does that  
17 happen?

18 A It depends on the appointment entity. So the function, by  
19 the way, there's a payroll function and there's data entry.  
20 Data entry happens in a very decentralized way, and it could  
21 happen at the school level in some cases, and it could happen  
22 all the way down to the program level in some cases.

23 Q Okay. And so in order for -- speaking specifically about  
24 graduate students --

25 A Uh-huh.

1 Q -- in order for a graduate student to get paid their  
2 stipend or whatever they're -- the stipend that is part of  
3 their funding package or whatever additional stipend or hourly  
4 rate or what have you that they're being paid, that has to, if  
5 I understand correctly, the data entry happens at the  
6 departmental or graduate group level?

7 A It could happen at the graduate group level or it could  
8 happen at the school level. It will depend on the  
9 organization.

10 Q Okay. And if it doesn't happen, does the person not get  
11 paid?

12 A Exactly right.

13 Q Okay. And part of that data entry is providing the  
14 classification that Mr. Fryman talked about, whether it's  
15 teaching fellow, teaching assistant, research fellow, research  
16 assistant, student worker, educational fellowship recipient,  
17 whatever the classification may be, right?

18 A Yes.

19 Q And those classifications have significance in the payroll  
20 system because depending on the classification the person may  
21 have payroll taxes deducted from their check or not; isn't that  
22 right?

23 A This is something that I'm not able to comment on.

24 Q I'm sorry, I can't hear you.

25 A This is not something I'm able to comment on, I don't know

1 about payroll taxes.

2 Q Okay. You just know whether someone -- your role in  
3 connection with payroll is getting information about who is  
4 getting paid.

5 A It's about who has appointments.

6 Q What do you mean by appointment?

7 A Who has an appointment as a researcher, teaching  
8 assistant, et cetera.

9 Q And am I right in understanding that your data collection,  
10 if you're looking, that you can do it as of a particular point  
11 in time.

12 A Yes.

13 Q So today if Mr. Fryman's office asked you to do -- run a  
14 report as of April the 30th payroll, you could do it as of the  
15 April 30th pay.

16 A There could be selective dates that that could occur,  
17 right, so it happens that the payroll is snapped, there's a  
18 snapshot of payroll that's taken at the 30th or at the end of  
19 every month. This is not true necessarily on the student side.  
20 There are two census files. One is taken the fifth week of  
21 classes and the fall one is taken the fifth week of classes in  
22 the spring. So it couldn't be just any day.

23 Q But you were able to use student files to generate the  
24 list that was of April 30th?

25 A No. I used the spring census date, which would've been

1 the fifth week of classes. So that's how we got the population  
2 of those who were enrolled. Those students were then joined  
3 against payroll data to pick up all of their appointments that  
4 were in payroll.

5 Q Okay. So presumably you could redo that report at any  
6 time in the future, right?

7 A Yes.

8 Q And you could do the same thing for fall of 2016, using  
9 the fifth week of class and a particular payroll snapshot,  
10 right?

11 A Yes.

12 Q And you could do something similar -- you wouldn't have a  
13 summer population census, right?

14 A Right.

15 Q Okay. But there would be payroll data for saying who's  
16 paid for working in the summer.

17 A Yes.

18 MR. FRYMAN: And, Amy, did you intend to ask fall 2016 or  
19 fall of 2017?

20 MS. ROSENBERGER: Did I say '17?

21 MR. FRYMAN: No, you said '16.

22 MS. ROSENBERGER: I said '16, I really meant '16, yeah.  
23 Because by now the data from fall of 2016 has settled, hasn't  
24 it?

25 THE WITNESS: Oh, yeah.

1 (Pause)

2 BY MS. ROSENBERGER:

3 Q Okay. How long did you say you've been at Penn?

4 A It'll be ten years in December.

5 Q Okay. So you wouldn't have been involved in extracting  
6 this sort of data in -- when there was an earlier

7 representation petition in 2002, you wouldn't have any --

8 A No, I was not there.

9 Q Okay. So when you say the information you compiled has  
10 never been compiled before, you meant within the ten years that  
11 you've worked at Penn.

12 A True.

13 Q When you said -- let's see. You -- if I under -- if I can  
14 read my notes accurately, I think you said that your office  
15 tracks payroll data for graduate students in these  
16 classifications, but they wouldn't be included in payroll  
17 reporting, because they're not employees, they're students,  
18 right?

19 A Correct.

20 Q So whose definition of employee are you using when you say  
21 they wouldn't be an employee reporting?

22 A They're not included in our human resource accounts that  
23 we publish or report out.

24 Q So it's based on whether Penn has classified the person as  
25 an employee.

1 A Yes.

2 Q When you were talking about the feasibility of a summer  
3 census report, you said -- I may have gotten the number wrong  
4 here, but you said in the sort of regular academic year, the  
5 fall and spring, did you say there were overall about 24,000  
6 students?

7 A This is enrollments, yes.

8 Q Okay. And that's all enrollments, right?

9 A Yes, yes.

10 Q So it's undergraduate, everything.

11 A Yes.

12 Q What's the graduate student enrollment during the academic  
13 year?

14 A So I'm going to estimate, I don't know all these numbers  
15 off the top of my head, but it's somewhere in the neighborhood  
16 of 13,000.

17 Q And that includes all 12 schools, right?

18 A Yes.

19 Q Do you know how many are enrolled in the seven that are  
20 petitioned for here?

21 A I don't know that number off the top of my head. I know  
22 there are very few Ph.D. students that are enrolled in the  
23 summer from any of the schools.

24 Q And enrolled meaning taking classes.

25 A Exactly.



1 Q But they are -- if someone is -- if I'm in a Ph.D. program  
2 in political science, I'm just going to pick whatever topic,  
3 and I'm in my summer between my second and third year in the  
4 program, and there's -- I'm continuing in the program. You're  
5 saying Penn doesn't consider me enrolled unless I'm taking  
6 classes?

7 A I am saying that I'm counting who's enrolled in the summer  
8 time, they have to be enrolled in a positive number of credit  
9 hours, that's how I define an enrollment for the purposes of  
10 institutional research.

11 Q Okay. So even if someone were -- if a graduate student,  
12 let's use that political science graduate student between years  
13 one and two, is getting a summer stipend to do research because  
14 they're just -- because they're not taking a class, they  
15 wouldn't show up as enrolled in your records.

16 A Absolutely.

17 Q But they would show up on payroll, right?

18 A They should.

19 Q You said that your IPEDS reporting includes financial aid  
20 received.

21 A Uh-huh.

22 Q Does that include -- I'm sorry, you said yes?

23 A Yes.

24 Q Does that include the financial aid category, does that  
25 include work like outside of a student's funding package? So

1 if I got an extra job as a grader and got paid \$1,500 to do  
2 that, would that be listed as financial aid for your reporting  
3 or just comp reporting?

4 A So some work study financial aid would appear within  
5 financial aid.

6 Q If it's federally funded work study.

7 A Federally funded work study.

8 Q But if it's simply I'm working for a professor as a grader  
9 and Penn is paying me, not part of a federal work study that  
10 wouldn't show up as --

11 A There's Penn work study as well. What I would say is, I  
12 pulled the data out of it, I couldn't tell you what the  
13 students are doing.

14 Q Okay. And you pull it out of Penn's category of financial  
15 aid.

16 A Yes.

17 MS. ROSENBERGER: That's all I have on cross, thank you.

18 HEARING OFFICER LEACH: Does the employer have any follow-  
19 up?

20 MR. FRYMAN: I don't believe so. I do not.

21 HEARING OFFICER LEACH: Okay. I have a few.

22 THE WITNESS: Oh, sure.

23 HEARING OFFICER LEACH: Can you tell me what IPEDS stands  
24 for again, I missed that?

25 THE WITNESS: Integrated Post-Secondary Data System.

1 HEARING OFFICER LEACH: Okay. And then you mentioned --  
2 when you were describing that, you say you collect data across  
3 U Penn enrollment levels, degrees conferred, counts of  
4 students, you described IPED and you mentioned something called  
5 the warehouse. I think you said you get it from the warehouse,  
6 what's that?

7 THE WITNESS: The warehouse is just a storage system. We  
8 have data that comes from disparate systems across the campus,  
9 so you have payroll, you have data from student records  
10 systems, you have facilities data, it all is just stored in one  
11 place.

12 HEARING OFFICER LEACH: Okay. When you talked about the  
13 data that I guess you were asked to collect pursuant to the  
14 petition you said I've never compiled that info before. When  
15 you say info, what info were you referring to, what  
16 information?

17 THE WITNESS: So under my leadership, we have never  
18 compiled a list of graduate students of this sort.

19 HEARING OFFICER LEACH: Okay. So the information just  
20 refers to the --

21 THE WITNESS: To the data, to the list.

22 HEARING OFFICER LEACH: Okay. So in your system, how are  
23 you -- we talked -- I think the employer attorney mentioned  
24 like teaching assistant or teaching fellow, research assistant  
25 or research fellow, how does your student -- how does your

1 system I guess classify them? What are they -- if a student is  
2 a TA, are they classified as a graduate student or are they  
3 classified as a TA, what title would they receive?

4 THE WITNESS: So as a student in the student records  
5 system there would be no information about any of that kind of  
6 activity. That would be in the payroll system.

7 HEARING OFFICER LEACH: Okay.

8 THE WITNESS: And it would be -- however it is that the  
9 department or school classified them and entered the data into  
10 the system.

11 HEARING OFFICER LEACH: So they could be classified as a  
12 research assistant, research fellow, teaching assistant or  
13 teacher fellow, yes, I'm sorry, teacher fellow.

14 THE WITNESS: Or they may have multiple.

15 HEARING OFFICER LEACH: Okay. Are you familiar -- is  
16 there a title called student worker?

17 THE WITNESS: Yes.

18 HEARING OFFICER LEACH: And what would that title refer  
19 to?

20 THE WITNESS: So again I know the title.

21 HEARING OFFICER LEACH: Okay.

22 THE WITNESS: I am not familiar with what it is what the  
23 student does in those various roles.

24 HEARING OFFICER LEACH: Okay. I'm just going to probe a  
25 little bit here, and if you don't know, you can say I don't

1 know.

2 THE WITNESS: Sure.

3 HEARING OFFICER LEACH: But do you know that a student  
4 worker is different from a teaching assistant or a teaching  
5 fellow or research assistant or research fellow?

6 THE WITNESS: So those are different classifications.

7 HEARING OFFICER LEACH: Okay.

8 THE WITNESS: And insofar that they are different  
9 classifications, one would assume that they are engaged in  
10 different types of work.

11 HEARING OFFICER LEACH: Okay. So a student worker could  
12 be doing a variety --

13 THE WITNESS: Absolutely.

14 HEARING OFFICER LEACH: Okay. When students are put into  
15 -- I just want to focus on graduate students here. When  
16 graduate students are I guess entered into the system at these  
17 various levels, school levels sometimes students do a graduate  
18 group level, that's done on a semester basis or is that a  
19 yearly basis, how does that work?

20 THE WITNESS: I think it would vary.

21 HEARING OFFICER LEACH: Okay.

22 THE WITNESS: So if you're talking about enrollment  
23 records --

24 HEARING OFFICER LEACH: Uh-huh.

25 THE WITNESS: -- students register once a semester for

1 courses. If you're talking about appointments, practices would  
2 vary across the institution and would vary for particular  
3 individuals.

4 HEARING OFFICER LEACH: So there could be -- when talking  
5 about appointments, someone could be entered in on a semester  
6 basis or even on a yearly basis then, it just depends on what  
7 their --

8 THE WITNESS: Or on a more frequent basis than that.

9 HEARING OFFICER LEACH: Okay. I don't have any other  
10 questions. Does the employer?

11 MR. FRYMAN: I do not.

12 HEARING OFFICER LEACH: Union?

13 MS. ROSENBERGER: No.

14 HEARING OFFICER LEACH: Okay. Thank you. I appreciate  
15 your time today.

16 THE WITNESS: Thank you.

17 HEARING OFFICER LEACH: Can we go off the record?

18 THE REPORTER: Sure.

19 (Recessed at 1:20 p.m.; reconvened at 1:26 p.m.)

20 HEARING OFFICER LEACH: Back on the record. Okay. You  
21 can call your next witness.

22 MS. ATKINSON: Penn calls Ufuoma Pela.

23 HEARING OFFICER LEACH: Good afternoon.

24 MR. PELA: Good afternoon.

25 HEARING OFFICER LEACH: Can you say and spell your first

1 and last name, please?

2 THE WITNESS: Ufuoma, U-f-u-o-m-a, Pela, P-e-l-a.

3 HEARING OFFICER LEACH: Okay. Can you raise your right  
4 hand please?

5 UFUOMA PELA, WITNESS, SWORN

6 HEARING OFFICER LEACH: Okay.

7 DIRECT EXAMINATION

8 BY MS. ATKINSON:

9 Q Good afternoon, Mr. Pela.

10 A Good afternoon.

11 Q Where are you currently employed?

12 A University of Penn.

13 Q And what is your position?

14 A Associate HR Director.

15 Q And how long have you held that position?

16 A Two years.

17 Q Have you held any other positions at Penn?

18 A I have not.

19 Q And what were you doing before you became to Penn?

20 A Human Resources Manager with Genesis Healthcare.

21 Q And what are your responsibilities in your current  
22 position?

23 A Generalist. I help them, my areas with compensation, with  
24 hirings, any employee issues that may come up.

25 Q And are you familiar with the acronym DRIA, D-R-I-A?

1 A I am.

2 Q And what does that stand for?

3 A Division of Intercollegiate Recreation and Athletics.

4 HEARING OFFICER LEACH: I'm sorry, say that again.

5 THE WITNESS: Division of Intercollegiate Recreation and  
6 Athletics.

7 Q And what types of Penn facilities are a part of DRIA?

8 A All athletic facilities. We have two gyms, Potrick and  
9 Fox, Franklin Field, Palestra and the buildings at  
10 (indiscernible) administrate staff.

11 Q And are Penn staff members related to athletics and  
12 recreation employed through the DRIA?

13 A They are, yes.

14 Q And does your office have responsibility over individuals  
15 who are employed through the DRIA?

16 A Yes, we do.

17 Q And so the people like the coaching staff or student  
18 athletic teams?

19 A Yes.

20 Q Are there students who work in the Division of Recreation  
21 and Intercollegiate Athletics?

22 A There are.

23 Q Are the students who work in the DRIA classified as  
24 student workers?

25 A Yes, they are.



1 Q Approximately how many students overall work in the DRIA  
2 each semester, would you say?

3 A Over a hundred.

4 Q And approximately how many of those students are graduate  
5 students?

6 A 25 to 30.

7 Q And what types of positions do the graduate students hold?

8 A They range from being lifeguards, teaching group fitness  
9 classes, they may be a ref or maybe just someone to oversee  
10 when there's an intermural game going on.

11 Q Do graduate students ever conduct research as part of  
12 their job duties when they're working at DRIA?

13 A No.

14 Q Do graduate students ever engage in academic instruction  
15 with other Penn students as part of their job in DRIA?

16 A No.

17 Q Do you have any students being classified as teaching  
18 assistants, teaching fellows, research assistants, research  
19 fellows in connection with their work in the DRIA?

20 A No, I am not.

21 Q Are student workers in the DRIA paid on an hourly basis?

22 A Yes.

23 Q Are student workers in the DRIA required to track their  
24 hours?

25 A They are.

1 Q And how do they do that?

2 A Through an on-line timekeeping system.

3 Q Does the number of graduate students work in the DRIA  
4 change during the summer compared to the academic year?

5 A It does. There's more during the academic year.

6 MS. ATKINSON: That's all the questions I have.

7 THE WITNESS: Thank you.

8 HEARING OFFICER LEACH: Okay.

9 CROSS-EXAMINATION

10 BY MS. ROSENBERGER:

11 Q My name is Amy Rosenberger and I'm one of the lawyers  
12 representing GET UP in this case.

13 So you may or may not know that we heard some similar  
14 testimony from someone in the -- who oversees HR in the  
15 libraries last week about student workers in the library system  
16 at Penn. So we've now heard about student workers in -- is it  
17 DRIA?

18 A DRIA, yes.

19 Q DRIA and the libraries. Do you know based on your role in  
20 HR, whether there are student workers employed by Penn outside  
21 of the libraries or DRIA?

22 A I don't know.

23 Q So you only know about the student workers employed at  
24 DRIA because that's within your area of oversight?

25 A Correct.

1 Q Is there any other department or program within Penn that  
2 is under your area of oversight where student workers are  
3 employed?

4 A Not that I'm aware of.

5 Q Do you have any responsibility for oversight -- I'm sorry,  
6 for oversight related to graduate students who are working as  
7 graders or tutors or research assistants outside their funding  
8 package?

9 A I don't know.

10 MS. ROSENBERGER: That's all I have.

11 HEARING OFFICER LEACH: Does the employer have anything  
12 else?

13 MS. ATKINSON: I do not.

14 HEARING OFFICER LEACH: I don't have any questions for  
15 you.

16 THE WITNESS: Thank you.

17 HEARING OFFICER LEACH: Can we go off the record?

18 THE REPORTER: Sure.

19 (Whereupon, the proceedings were recessed at 1:31 p.m.,  
20 this date.)

21 \* \* \* \* \*

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C E R T I F I C A T E

This is to certify that the attached proceedings done before  
the NATIONAL LABOR RELATIONS BOARD REGION 4

In the Matter of:

THE TRUSTEES OF THE UNIVERSITY OF PENNSYLVANIA,

Employer,

and

GRADUATE EMPLOYEES TOGETHER, UNIVERSITY OF PENNSYLVANIA  
(GET-UP) A/W AMERICAN FEDERATION OF TEACHERS,

Petitioner.

Case No.: 04-RC-199609

Date: June 26, 2017

Place: Philadelphia, PA

Were held as therein appears, and that this is the original  
transcript thereof for the files of the Board.

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Official Reporter

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