OFFICIAL REPORT OF PROCEEDINGS
BEFORE THE
NATIONAL LABOR RELATIONS BOARD

In the Matter of: UNIVERSITY OF CHICAGO
Employer

And

GRADUATE STUDENTS UNITED
Petitioner

Case No.: 13-RC-198325

Place: Chicago, IL
Date: 05/23/17
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UNITED STATES OF AMERICA
BEFORE THE NATIONAL LABOR RELATIONS BOARD
REGION 13

THE UNIVERSITY OF
CHICAGO,
Employer,
AND
GRADUATE STUDENTS UNITED,
Petitioner.

The above entitled matter came on for
hearing pursuant to notice, before CHRISTINA MOLS,
Hearing Officer, at The Dirksen Center, 219 South
Dearborn Street, Suite 808, on Tuesday, May 23,
2017, at 9:09 a.m.

REPORTED BY:  YVETTE BIJARRO-RODRIGUEZ, CSR
LICENSE NO.:  084-003734
THE HEARING OFFICER: On the record. So before we proceed with the Employer’s next witness, do the parties have any procedural matters you wish to discuss at this time?  

Okay. So Employer Counsel, proceed with your next witness.

MR. WEITZMAN: The University of Chicago calls Dr. Victoria Prince.  
(Witness sworn.) 

THE WITNESS: Yes. 

THE HEARING OFFICER: Please have a seat. 

WHEREUPON:  
VICTORIA PRINCE, PhD, called as a witness herein, having been first duly sworn, was examined and testified as follows: 

DIRECT EXAMINATION 

BY THE HEARING OFFICER: 

Q. Can you state and spell your name for the record.  

A. My name is Victoria Prince, V-I-C-T-O-R-I-A, P-R-I-N-C-E. 

Q. Thank you. 

BY MR. WEITZMAN: 

Q. Good morning, Dr. Prince. 

A. Good morning. 

Q. By whom are you employed? 

A. The University of Chicago. 

Q. When did you begin at the University of Chicago? 

A. October 1997. 

Q. What is your current job title? 

A. Professor and dean and director of the office of graduate affairs. 

Q. Have you held the position of dean and director of graduate affairs for the entire time you've been employed at the University of Chicago? 

A. No. 

Q. How long have you held the position of dean and director of graduate affairs? 

A. Since June 2010. 

Q. What other positions have you held since you began working for the University of Chicago? 

A. I began as an assistant professor, went through associate professor to full. I was also previously the chair of the committee on developmental biology, which is a graduate program. 

Q. For what years were you the chair on the committee on developmental biology?
A. From 2003 to 2010.

Q. Describe the dean’s council, please?

A. It’s a training program for graduate students. Recruited, trained, mentored and graduated students.

Q. What is your educational background?

A. I have a BSc from Imperial College London and a PhD from the University of London. I was a postdoctoral fellow at Princeton University before coming to the University of Chicago.

Q. Your degree from the Imperial College London was in?

A. Molecular biology.

Q. And your PhD from the University of London was in?

A. Biochemistry.

Q. And from Princeton?

A. I don't have a degree there, but I worked in developmental biology.

Q. Please tell us what your responsibilities are as the dean and director of the office of graduate affairs?

A. So I oversee the office, and the office is responsible for tracking and looking after all of the graduate students in the PhD programs within the division of biological sciences, and that incorporates recruitment of students, overseeing the admissions process. All office of admissions come directly from me. We organize orientation events. We track students through the academic process. We organize graduation. We provide support to various groups such as the student deans counsel and the BSD diversity committee.

In addition, we run divisional level training, including training in ethics for first-year students through the scientific integrity and responsible conduct of research course and we run the TA training program and the TA training course.

In addition, I meet with students and faculty regularly around academic issues and interact with other deans of students across the university.

Q. You mentioned the dean’s council?

A. Yes.

Q. Describe the dean’s council, please?

A. That’s a group of students who represent all of the different graduate programs within BSD.

They’re an organization of very active students who are interested in organizing cultural, professional, associate, sporting events for the group of students as a whole.

Q. You also mentioned the BSD diversity committee. What is that?

A. That is a group of students, faculty and staff whose goal is to promote retention and recruitment of minority students, and to ensure that the rural community is built, and that that group of underrepresented students feel appropriately supported within the division and the university.

Q. Do your responsibilities as the dean and director office of graduate affairs include support for the training grant administration?

A. We do have, within the office, two staff who play a key role in both pre- and post-award elements of the training grants.

Q. Is there any oversight of funding that is under your supervision?

A. The centralized organization and tracking and funding is done within my office in conjunction with the individual programs.

Q. Do you have any communication responsibilities?

A. Yes. Our office is responsible for maintaining our website which has recently gone through an overhaul and we're in the process of establishing new websites for all of the programs. We also produce a quarterly newsletter from the office, and we maintain a Facebook presence.

Q. Does the office also have responsibility for evaluations?

A. Yes. We cover the evaluation of the TAs, and also we are responsible for organizing evaluation of faculty who are teaching specifically in the graduate courses.

Q. Do you interact with the graduate program directors?

A. I do. I run a course meeting for the graduate program directors. I also run a quarterly meeting for the training grant directors, and in addition, I interact with those individuals one-on-one quite frequently.

Q. Who is the chair of the graduate education advisory committee?

A. I am.

Q. What do you do in that capacity?

A. That’s a group of senior faculty with
significant training experience who meet to discuss
issues of policy and process related to graduates
training in the BSD.
Q. How many academic departments does BSD
have?
A. I can tell you how many graduate
programs we have.
Q. Then I'll withdraw that question and ask
you a better question.
How many graduate programs does BSD
have?
A. We currently have 16 graduate programs
that we are recruiting students actively into, as
well as two programs still running but in the
process of being sunsetted, and there are two
additional programs which are joint. We share the
biophysical science program with the physical
scientists. There is also an MD-PhD
program known as the MSTP medical sciences training
program. Has students who are in PhD years for
approximately four years of their training. That
program has a separate but related administrative
structure.
Q. You gave me the names of the two joint
programs. Would you also give me the names of the
two programs that are sunsetting and explain what
setting means?
A. So those two programs, we have
determined, are no longer meeting a useful training
goal and therefore we've decided to no longer
recruit into those programs but rather to focus on
the thriving programs being the programs in
question.
One is based in the pathology
department but is known as the molecular medicine
and molecular pathology. The other one we
typically refer to as the Janelia Farm program. It
was joint with the Howard Hughes Medical Institute,
which has a research institute in Virginia.
Q. I'd like this marked as Employer Exhibit
No. 27.
( Employer No. 27 was marked.)
Dr. Prince, do you recognize
Employer Exhibit No. 27?
A. Yes.
Q. What is it?
A. This is pages from a new visional
website, the Chicago biosciences website.
Q. Please read into the record the programs
offered by BSD?
A. Biochemistry and molecular biophysics,
biophysical sciences, which as I mentioned is a
joint program, cancer biology, cell and molecular
biology, committee on evolutionary biology,
computational neuroscience, development
regeneration and stem cell biology, ecology and
evolution, genetics, genomics and systems biology,
human genetics, immunology, integrative biology,
the interdisciplinary scientist training program,
which is the graduate wing of the MD-PhD program,
medical physics, microbiology, molecular metabolism
and nutrition, neurobiology, public health
sciences.
Q. Which program is yours, Doctor?
A. All of these programs -- could you
rephrase the question?
Q. In which -- yes, I'd be happy to.
In which of these programs are you
a professor?
A. I'm appointed several of these programs.
My primary training role lies within the
development, regeneration and stem cell biology
program, but I'm appointed as a trainer in
integrative biology which belongs to my home
department. In the committee on evolutionary
biology, genetics, genomics and systems biology,
and neurobiology.
MR. WEITZMAN: We move to admit Employer
Exhibit 27.
MS. AUERBACH: No objection.
The Hearing Officer: Employer
Exhibit 27 is received.
BY MR. WEITZMAN:
Q. Approximately how many PhD students are
enrolled in BSD's PhD programs?
A. It's about 385.
Q. You mentioned the joint MD-PhD program.
Approximately how many students are in that
program?
A. In the PhD years it's around 33.
Q. Your other joint program is with PSD.
Approximately how many PhD students are in that
program?
A. It's approximately the same, 33.
Q. How many years does it typically take a
PhD student in the BSD to obtain his or her degree
from your program?
A. Average time to degree is five to
eight years.
Q. Does BSD offer any master's degrees?
A. There's one master's degree.
Q. What is it called?
A. Public health sciences.
Q. Does that master's degree program have any students at the present time?
A. Yes.
Q. How many?
A. I don't know.
Q. Do you know if any students there are TAs?
A. They are not TAs.
Q. Now, I'd like to talk to you about teaching assistantships. Does BSD have a teaching assistant requirement for its PhDs?
A. Yes.
Q. What is that requirement?
A. BSD requires all PhD students to complete two teaching assistant experiences. Although one of these may be substituted by taking the TA training course.
Q. Who establishes the requirement that you just described?
A. It's a divisional requirement.
Q. Let me direct your attention to the board that's on my right. It's a demonstrative exhibit that we prepared. The portion of the demonstrative dealing with BSD biological sciences division. I'd like you to look at it and tell me whether it accurately sets forth the divisional teaching requirements by program for the biological sciences division.
THE HEARING OFFICER: And while Dr. Prince is reviewing that, just for the record, we are looking at a representation of Employer Exhibit 15 in the section dealing with the biological sciences division.
MR. WEITZMAN: Thank you, madam Hearing Officer. That's helpful.
BY THE WITNESS:
A. Biological sciences --
MS. AUERBACH: Objection. The document is in the record.
THE HEARING OFFICER: It's not yet moved.
MS. AUERBACH: Okay.
THE HEARING OFFICER: You can go ahead, Dr. Prince.
BY THE WITNESS:
A. Biological sciences division students may enroll in a classroom based training course in lieu of one of the teaching requirements. Students may also substitute one of the teaching requirements with an equivalent activity requiring significant teaching at an off campus site (e.g. TA at the MBL) with divisional approval.
BY MR. WEITZMAN:
Q. Please describe the training course that is meant in the footnote one.
A. This is a quarter-long course that uses practical opportunities for students to practice their teaching skills. They teach to the class while being videoed and are then critiqued by themselves and others afterwards to enable them to develop and improve teaching skills.
In addition, there are multiple panels with faculty and senior students who come to the class to discuss with the students a variety of topics relevant to teaching, such as active learning approaches, how to evaluate, how to develop course plans. Also, careers in teaching are discussed in that class.
Q. So if I understand what you just told us, the PhD student in the BSD division can satisfy one of the two courses by taking a training class that has nothing whatsoever to do with undergraduates, correct?
A. That's correct. There will be a correct?
A. It does.
Q. I'd like to talk to you in a little bit more detail about what you said before. You said it could be substituted for training class and the demonstrative uses the phrase "two courses (or equivalent)" with a footnote. So the footnote, Dr. Prince, is on the demonstrative that's the last page of the exhibit that the Hearing Officer identified, and you are footnote one.
Could you please read that into the record?
A. Biological sciences --
<table>
<thead>
<tr>
<th>Page 605</th>
<th>Page 607</th>
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<tbody>
<tr>
<td>discussion of undergraduate teaching, but they</td>
<td>MR. WEITZMAN: We offer Employer</td>
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<tr>
<td>would not actively teach undergraduates in the</td>
<td>Exhibit 28.</td>
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<tr>
<td>class.</td>
<td>MS. AUERBACH: No objection.</td>
</tr>
<tr>
<td>Q. Then the footnote talks about another</td>
<td>THE HEARING OFFICER: Employer</td>
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<tr>
<td>equivalent activity. Can you be more specific as</td>
<td>Exhibit 28 is received.</td>
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<tr>
<td>to what other equivalent activity would satisfy the</td>
<td>BY MR. WEITZMAN:</td>
</tr>
<tr>
<td>BSD requirement of the courses, the two courses</td>
<td>Q. Would you point out to the Hearing</td>
</tr>
<tr>
<td>that are required to be taken?</td>
<td>Officer where one would find the description of the</td>
</tr>
<tr>
<td>A. Students in the past have petitioned to</td>
<td>equivalent options that PhD students in BSD can</td>
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<tr>
<td>complete TA-shirts at local high schools. This is</td>
<td>choose?</td>
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<tr>
<td>particularly appropriate for students who wish to</td>
<td>A. The bottom of Page 3 of 8 outlines the</td>
</tr>
<tr>
<td>move into teaching in that domain after they gain</td>
<td>different options that I previously described.</td>
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<tr>
<td>their degree, and they have petitioned the division</td>
<td>Q. For whose benefit is the TA training</td>
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<td>to be able to do that as a mentor, to experience</td>
<td>course given when a PhD student takes that</td>
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<tr>
<td>under the mentorship of Dr. Barry Aprison, who is</td>
<td>alternative in order to satisfy one of the course</td>
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<tr>
<td>the education and outreach director of the</td>
<td>requirements?</td>
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<tr>
<td>institute for genomics and systems biology. We</td>
<td>A. It's for the benefit of the graduate</td>
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<td>have allowed students to use that in lieu of the</td>
<td>student taking the course.</td>
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<td>TA-shirt because we feel it's an appropriate TA</td>
<td>Q. Whose benefit is the other alternative,</td>
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<tr>
<td>experience.</td>
<td>in the boot camp that someone might take instead of</td>
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<td>As listed there, we've recently</td>
<td>being a TA, for one of the courses?</td>
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<tr>
<td>determined that students who perform two TA-shirts</td>
<td>A. For the benefit of the graduate student</td>
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<td>for a one-week long intensive boot camp experience</td>
<td>who's doing the experience.</td>
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<tr>
<td>for graduate students of the MBL, the marine</td>
<td>Q. For students who do not opt to take the</td>
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<tr>
<td>biological labs, an affiliate of the University of</td>
<td>full course does BDS [sic] offer any other training</td>
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<table>
<thead>
<tr>
<th>Page 606</th>
<th>Page 608</th>
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</thead>
<tbody>
<tr>
<td>Chicago. You can also use those two one-week</td>
<td>to TAs before they start as TAs?</td>
</tr>
<tr>
<td>experiences in lieu of a regular TA-shirt on campus.</td>
<td>A. We recommend that students attend a</td>
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<td>Q. Again, Dr. Prince, so the record is</td>
<td>workshop offered by the Chicago Center for Teaching</td>
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<td>clear, when BSD grants approval to a PhD student to</td>
<td>that occurs during -- typically during orientation</td>
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<td>have one of the high school experiences that you</td>
<td>or early in the quarter. We recommend students</td>
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<td>described, does that student have any contact with</td>
<td>take that as they go into the year when they're</td>
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<td>undergraduate students while performing that form</td>
<td>going to begin their TA experiences, which that</td>
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<td>of a TA-shirt?</td>
<td>year varies according to the program they're</td>
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<tr>
<td>A. No.</td>
<td>registered in.</td>
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<tr>
<td>Q. Same question with respect to the boot</td>
<td>Q. Does BDS provide short workshops</td>
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<td>camp that you just described. Would the students</td>
<td>throughout the year when teaching?</td>
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<tr>
<td>who opt for the boot camp, in other words, who take</td>
<td>A. Again, the Chicago Center for Teaching</td>
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<tr>
<td>an equivalent for the TA requirement, have any</td>
<td>provides STEM specific workshops. In particular</td>
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<td>contact with undergraduate students?</td>
<td>there is one that happens in early fall quarter,</td>
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<tr>
<td>A. No.</td>
<td>but there are other workshops that occur throughout</td>
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<tr>
<td>Q. This is Employer Exhibit 28 for</td>
<td>the year.</td>
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<td>identification.</td>
<td>Q. For a PhD student in BDS who does not</td>
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<td>(Employer No. 28 was marked.)</td>
<td>take one of the equivalent options, what do they do</td>
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<td>Do you recognize Employer</td>
<td>as a TA?</td>
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<tr>
<td>Exhibit 28?</td>
<td>A. Their role as a TA typically involves</td>
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<tr>
<td>A. I do.</td>
<td>running discussion sessions for students in the</td>
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<tr>
<td>Q. What is it?</td>
<td>class, grading papers and/or exams, running office</td>
</tr>
<tr>
<td>A. It's additional pages from a UChicago</td>
<td>hours regularly. And very often the student TA</td>
</tr>
<tr>
<td>Biosciences website that describes the requirement</td>
<td>will give one or two mentored lectures to the</td>
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<td>to be a teaching assistant for divisional credit.</td>
<td>class. Some classes are lab-based in which case</td>
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6 (Pages 605 to 608)
the TA will be primarily involved with working with small groups of students to show them how to use equipment and to guide them through lab exercises under the mentorship of a lab-based instructor.

Q. Are BSD teaching assistants ever classroom instructors for an entire course?
A. No.

Q. I want to talk to you about various ways that you said that you are -- BSD's TAs function when they are TAs. Let me ask you this first. Do they go to the classes that they are assigned to your class the difficulties of teaching "you," I'm talking about you. Do you explain to the TA -- when I say and office hours.

Q. Do you explain to the TA -- when I say that they will then be using in discussion sessions from that experience. Another is to ensure that they're fully familiarized with the course content that will then be using in discussion sessions and office hours.

Q. Do you explain to the TA -- when I say "you," I'm talking about you. Do you explain to the TAs who are assigned to your classes why you lecture the way you do?
A. I try to point out to the TAs how the

A. Yes.

Q. Why do they do that?
A. For several purposes. One is to observe the course instructor's lecturing style and learn from that experience. Another is to ensure that they're fully familiarized with the course content that will then be used in discussion sessions and office hours.

A. Yes.

Q. For whose benefit do you give them this
do something that you normally wouldn't think somebody shouldn't do in a classroom?
A. Yes.

Q. For whose benefit do you give them this information and knowledge regarding how you conduct your classroom?
A. For the benefit of the TA who I'm attempting to train be a more effective teacher so they can use that in their future career.

Q. Now, let's talk about another aspect of the TA experience that you described. Tell us how you teach your TAs how to grade students?
A. That process begins with encouraging the TAs to assist in development of appropriate questions for an exam or midterm test. I would ask my TAs to provide suggested questions and discuss with them whether I feel those questions are appropriate. Often inexperienced people suggest questions that don't have a single clear answer and is therefore difficult to evaluate. So the design of the question is step one in being able to grade effectively.

In return I ask the TAs to look at the questions that I've provided and ensure that they're clear. At the point where the students have taken the test, I would have already developed an answer key with a certain number of points applied to each individual sub-question. I would walk the TAs through my grading scheme to ensure
that they understand it. Typically I would sit with the TA or TAs while they grade the first few papers answering any questions they have, looking at the grading they're doing to ensure that it fits with my expectations relative to the answer key.

When I'm comfortable that they fully understand my expectations, I would leave them to complete the grading, but at the end I would spot check the test papers to ensure that there was uniform grading throughout. And if I saw any issues, I would return that to the TA and work through the papers with them to make sure we have clear, fair grading because that's what the students expect.

I always encourage the TAs to come and ask me if they have any questions about the responses they're seeing from the students if they're uncertain how to grade them. 

Q. You told me a moment ago about how you ask your TAs for suggestions for exam questions and the importance of clarity. If you had to pick a typical mistake that PhD students make when they're formulating a question for you, what would that be?

A. There's several, but one is to ask overly detailed questions that rely on students memorizing details that are not necessarily important to their overall understanding rather than encouraging the students to think about the topic from first principles. I would prefer that we were testing the understanding of the underlying principles, not nearly learning from the students.

Q. And you teach your TAs how to avoid that problem?

A. Yes.

Q. Do you teach your TAs how to grade on a curve? And before you answer that question, for the record, what's a curve?

A. Different instructors tend to use different approaches to establishing letter grades. My philosophy is that if every student in my class gives me an A performance, they should all get an A. If every student gives me a C performance, they should all get a C. Therefore, my -- that's never happened. Students always fall into a range of qualities.

I show my TA how I'd like to take the scores from the exam and plot them in a chart and look for natural breaks between groups of students who are, for example, high A performers versus lower B performers. Where those breaks come

is not solely dependent on these natural breaks. It's also dependent on my experience to evaluate, essentially, what an A student performance looks like versus a B student performance.

Q. Well, you don't use the percentage approach to curves?

A. I do not. I found that from year to year the class as a whole can perform at variable levels. I feel it's unfair to penalize a very strong class by ensuring a certain proportion of them have a low grade. The same is true in reverse for a very weak class.

Q. For whose benefit do you teach your TAs everything you just testified to with respect to grading?

A. That is for the benefit of the TAs so they can learn from my experience in grading.

Q. You testified earlier that another one of the functions that a TA has when they are your TA is leading a small discussion. Please describe how you train your TAs and mentor them so they can conduct small discussion groups?

A. Discussion groups can fulfill different purposes. But whether the discussion group is focused on looking at a piece of primary literature or on going through course material to ensure that all the students understand it, I would discuss with the TAs precisely what domain areas I would like them to go through in a discussion session. And at the beginning of the course, I would sit in on the discussion sessions to observe how the TA was delivering the discussion, and to enable me to give them feedback on how to do a better job if they're struggling.

Q. Do you teach them about areas that the students find confusing and how to resolve that confusion?

A. Yes. There are certain self-topics that my experience tells me students are likely to find confusing. I would warn the TAs that these are areas that they will need to pay special attention to and encourage them to think about different ways to provide the same information, different analogies to use, different devices, such as schematics or even movies in my field of developmental biology, to better convey the information to the students and avoid confusion in those areas.

Q. So this is something that you taught in
the class and you know that the students aren't getting?

A. A proportion of them are unlikely to, on a first part, get the complexities of, for example, the complex movements of gas relations, which is a topic I cover in developmental biology classes.

Q. How do you teach your TAs to cover that in a discussion group?

A. First of all, I make that sure that they themselves are fully comfortable with the material. I would point them to web-based resources where they can download movies, because this is a complex set of movements. Seeing the movements from different angles, depicted in different ways, can be very helpful for students to understand that complex set of events. Essentially I provide the TAs with an array of different tools to allow them to go through the same process more slowly from different perspectives to ensure that the students fully understand it.

Q. You already mentioned that you explain to your TAs the technique that you use in lectures when somebody predominates the discussion, and you tell them that's something they can also use in the small discussion groups.

Is there anything else that you teach them in terms of how to encourage discussions?

A. Yes. I suggest to them the, kind of, more open-ended questions that they can ask to the class that are likely to get some discussion going.

Q. What's an open-ended question?

A. A question that doesn't have a yes-no answer but requires the students to think more deeply about a problem, consider it and talk essentially about the answer.

Q. Are there things that you teach them about how to interact with the students?

A. Could you clarify?

Q. Sure. Is patience a virtue in the classroom?

A. I certainly encourage them not to get impatient with students, especially if they're struggling with a concept and also if the TA is -- needs time to think about the answer to a student question, to take that time and to avoid telling the class an answer that they're not a hundred percent sure of. I encourage them to admit to the class when they have reached the limit of their own knowledge and need to go and check on an answer and bring it back to the class later.

Q. What do you tell them when they're confronted with off-topic questions by a student?

A. I would tell the TA to bring the discussion back to the topic in hand. TAs often have the advantage over the student of knowing what we view as the core course material of the particular elements likely to be examined later. So some of the topic conversations may be science related but not to the core goals, learning goals and objectives of that course. So the TAs are encouraged to make sure the students are focused on those domains.

Q. What do you caution your TAs against when one of the students in the discussion groups is not getting it?

A. Sometimes one student is really struggling and will use up a large amount of time in a discussion group. I encourage the TAs to recommend to that student that they either come to me in my office hours or to the TA in their own office hours to get clarity on that topic later rather than hold back the class.

Q. And when you sit in, what do you observe, and what do you do with your observations?

A. I would typically take notes. I'm observing how the students are responding to the TA, whether they look confused, whether their questions are being answered effectively, whether a discussion is being engendered by the TA.

Q. Do you give that feedback to the TA?

A. Yes.

Q. For whose benefit is everything you just testified to with regard to small group discussions?

A. That is to the benefit of the TA who is learning how to run such discussion groups and how to interact with the class as effectively as possible.

Q. You also said that there are office hours?

A. Yes.

Q. What are office hours?

A. These are time periods that are scheduled when a TA is available for students in the class to come and ask questions.

Q. What do you teach your TAs about all the office hours?

A. Office hours are probably the most open-ended teaching elements because one cannot
necessarily predict what questions will be asked. I encourage them to use similar approaches to discussion sessions, to not just give students answers, especially if the students are working on an assignment, but rather to guide the students through the thought process to come to the answers on their own.

Q. Do you teach your TAs how to deal with nonacademic issues that come up during office hours?

A. I do discuss that. We also discuss it in the first year ethics course. Because the undergraduate students find the TAs less intimidating than faculty, being closer to them in age, they will sometimes raise problems that are outside the classroom. I encourage the TAs to inform me or to inform college advisors if they have any concern about the well-being of the student and beyond that to use their good judgment in giving advice but not to feel that it's their role to look after the undergraduate students but rather to solicit help from more senior experienced people if they see a significant problem.

Q. For whose benefit do you teach your TAs how to handle office hours?

A. It's for the benefit of the TAs. I want them to feel empowered and capable of knowing how to deal with any problems that may arise.

Q. Lastly, Dr. Prince, you mentioned that in your courses with your TAs they lecture one or two classes?

A. Yes.

Q. Tell us how you teach them how to lecture one or two classes?

A. The primary methodology is to listen to the TA do a practice run of the lecture, having previously evaluated the presentations, the slides that they plan to show, ensuring that there's both a suitable number of slides, not too much content, not too little content and the type of content is appropriate. But during a practice I would give a great deal of feedback, typically on ensuring clarity. I would then sit in on the lecture as they deliver it to the students. By that point I would hope the TA is very well prepared based on our previous practicing, but I would still give them additional feedback at the end of the lecture on how I thought it went and how they might be able to improve in a subsequent lecture.

Q. What, if anything, do you teach them about pace?

A. Pacing is quite difficult. Often nervous people tend to speak very quickly so that will come out during practices. I try and encourage them to take the opportunity to ask the class if they're following, to give a break for the students to ask questions so they don't end up going too rapidly. The number of slides will also help determine the pace. Often the students try and show far too much information in the given time frame.

Q. What, if anything, do you tell them about detailed lecturing?

A. So, again, similar to examining the students, I encourage them to focus on the broad first principles of the topic supported by detail rather than solely focus on small details of the field.

Q. You tell them what problem results from too much detail?

A. Well, students certainly get overloaded with information and tend to get lost if the pacing and degree of detail are inappropriate.

Q. Does your mentoring of the students who will lecture one or two of your classes also cover how to engage students during the course of teaching?

A. Yes, but this is fairly similar to what they would also be doing in discussion groups. So, again, I would encourage them to break up the lecture by asking questions of the class and dependent on the nature of the group of students, which varies from class to class and year to year, to use the kind of pairing device that I described earlier if a particular class is quiet and not comfortable speaking out.

Q. What do you teach them about their demeanor in the classroom?

A. Again, similar to discussion sessions, but it's particularly important in a large lecture setting to look out at the class, to not spend your time staring at the slides, to obviously speak clearly, to point directly at the piece of data or information on the slide that you wish the student to focus on, essentially to give the impression that you are confident in the information that you are delivering to the class.

Q. Do you ever have to have awkward conversations about certain annoying habits they may have as lecturers?
A. Yes. A lot of people have a tendency to fill gaps by saying um, for example, or to have certain nervous tics, to scratch their head, to constantly drink water, things that they're completely unaware of, typically, that I can point out to them. This is also extremely useful for when they present data in a research seminar. Whatever issues they're having as they stand up and talk to a class will also be similar issues as they present their research. So this is a very important training exercise.

Q. For whose benefit do you provide all that teaching with respect to the one or two lectures that they'll handle in one of your classes?

A. This is to the benefit of the student TA who is learning not only to teach a class but to be an effective communicator in other settings.

Q. You testified earlier that BSD students do not teach an entire undergraduate course. Who teaches the undergraduate courses?

A. The undergraduate courses are primarily taught by tenure track faculty members, but the biological sciences collegiate division also has PhD-level lecturers who particularly deliver content in the core courses to non-majors and play a role in delivering the laboratory exercises to biological majors.

Q. Those are not your graduates?

A. Those are employees of the university, PhD-level lecturers.

Q. In addition to everything that you've told us about, does BSD do anything else to make their PhD students better teachers when they graduate? Any other courses or training that you can think of?

A. We offer pedagogy courses, which the students have requested, to enable them to acquire more upper level inquiry around the topic of teaching, being particularly useful classes for those students who wish to go on to careers with a high teaching load, for example, in liberal arts colleges. And those -- currently those courses are taught as a collaboration between BSD faculty and the Chicago Center for Teaching.

Q. Looking at the demonstrative, can you tell us the typical schedule for filling the TA requirement by PhD students in BSD?

A. As you can see, it varies unit by unit. Very rarely would a student be a teaching assistant in their first year.

Q. Why not?

A. Because in general the students have not gained the experience of going through graduate classes and observing the teaching methodology of University of Chicago faculty and are therefore less prepared than the more senior students.

In addition, many of the programs feel that it's very important to the student's development to focus primarily on their research in the early years in the program which is why several programs, as listed here, have determined that a student should not begin the TA experience until their third year of studies.

Q. Are PhD students in BSD compensated for completing the requirements that appear on the demonstrative?

A. No.

Q. Does BSD have a policy covering when students can get paid to be a TA?

A. Yes.

Q. When is that?

A. Only after students have met their divisional requirements can they be paid to perform additional TA duties.

Q. So let's look back at Exhibit 28, the last exhibit I gave you. Would you point out to the reader of the record where the exhibit contains a discussion about how PhD students in the BDS division can earn money for being a TA after they fulfill their requirements?

A. On Page 6 of 8 towards the bottom in the essay tiers, the question is: "May I teach your TA for pay?" And that outlines the policy that I just mentioned pointing out that it's important for TAs to -- for students to consider whether they ought to TA given the time that it may detract from their research. We recommend they consult with a faculty advisor thesis committee before deciding to TA for pay.

Q. Why do you have a policy that allows TAs to teach -- excuse me. I'm going to start that over.

Why do you have a policy that allows PhD students to TA for money after they complete their requirement?

A. A subset of our students desire decisional preparation for a career that will have a heavy teaching component or just enjoy teaching a great deal, and so we provide that opportunity for
them to gain additional experience by allowing them to TA for pay only after they've met the divisional requirements.

Q. It's purely voluntary?
A. Yes.

Q. And when a BSD PhD student teaches beyond a requirement for money, is that also just TA, or would it include full course lecturing?
A. It never includes full course lecturing. It's just a TA.

Q. Is there a difference between how you treat a PhD student who is one of your TAs as part of the requirements and how you would treat a TA who is volunteering to be a TA to get additional experience?
A. Yes.

Q. What are the differences?
A. The TA who has completed the divisional requirements will be significantly more experienced and therefore require less mentoring than a TA who is meeting the divisional requirement.

MR. WEITZMAN: May we take a short break, please?

THE HEARING OFFICER: Absolutely. Off the record.

(Whereupon, a break was taken, after which the following proceedings were had):

BY MR. WEITZMAN:
Q. Dr. Prince, I'd now like to talk to you about how BSD handles the matching of PhD students to the teaching assistant opportunity. Are you familiar with how that happens?
A. Yes.

Q. So tell us what the process is?
A. Students, on occasion, reach out to faculty asking if they may TA in their course. Faculty, on occasion, reach out to students inviting them to TA in their course. Students are also encouraged to discuss with their graduate programs, particularly the administrative staff or the first-year advisory committee the programs provide, about what classes may be available and what would be most suitable relevant to their research interest.

Q. They can also find out where the TA-ships are available on the website?
A. The Rosalind online resources. Many TA-ships are filled through word of mouth.

Q. Does a PhD student have the right to say no when the faculty says would you like to TA for me?
A. They do say no.

Q. Is it fair to say in all instances the PhD students in BSD chooses whether they want to be a TA?
A. Yes.

Q. No exception?
A. They may not be able to TA the class of their first choice because a different student was already selected, but they are not assigned to a course. They choose the course they wish to TA.

Q. So you have a TA and the question is what happens if a TA's performance is poor and it's called less than satisfactory?
A. If, as an instructor, I feel my TA is performing poorly, I would mentor them to improve.

Q. Does that happen often?
A. Not very often.

Q. Very rarely?
A. I'm the instructor of record on the TA program so I evaluate all of the evaluations through the program. I see very few poorly performing TAs across the entire division.

Q. What would happen if after additional counseling the TA's performance does not improve?
A. More counselling would continue during the duration of the course.

Q. Would he or she be removed as a TA during the course of the quarter?
A. No.

Q. Can a student lose his or her stipend based on his or her performance as a TA?
A. No.

Q. Why not?
A. A stipend is not related to the TA requirement. The stipend fellowship is support for the graduate school experience.

Q. In your experience has a TA ever failed TA?
A. I have failed one TA in the -- in my role as instructor of record on TA training experience.

Q. That one out of how many?
A. About 90 a year over the years since 2010. Nearly seven years. Maybe 60 students.

Q. One out of 600. When that student failed, did that affect his stipend?
Q. What do you have to do to fail?
A. I wouldn't say this particular student had poor performance. He really had nonperformance. The students who evaluate the class students, in their evaluation, stated that he had been of no help to them, and the instructor reported that he had largely slept through all of her lectures.

Q. So after the student failed TA, what happened next?
A. I met with the student and the course instructor to confirm that what I had read in the evaluations was accurate. The student admitted that he had not taken this TA requirement at all seriously. We decided he would take the TA training course to enable them to develop more appropriate teaching skills and then repeat the TA requirement that he had failed. He went on to do that. He performed very well. He graduated. All was well.

Q. So he failed and then completed the two-course requirement, once by the course?
A. Yes.

Q. And once by being a TA?
A. Yes. He was essentially a TA a second time to give him another opportunity to pass the requirement, which he did.

Q. You testified that you see evaluations?
A. Yes.

MR. WEITZMAN: May I?
THE HEARING OFFICER: Yes.

BY MR. WEITZMAN:
Q. So to save time I'm going to give you several. 29, 30, 31. This will be 32.

(Employer No. 29, 30, 31, and 32 were marked.)

Dr. Prince, let me direct your attention to Employer Exhibit 29. Do you recognize this document?
A. I do.

Q. What is it?
A. It's the teaching assistant student evaluation.

Q. So is that what it sounds like? This is how a student evaluates your TA?
A. This is how the students who take the class are requested to evaluate the TA.

Q. Do they fill this in at the end of the quarter?
Q. And, lastly, please, tell the reader of the record what Exhibit 32 is.
A. 32 is a form which is completed very early in the quarter, just before the TA begins the experience, that provides information on which course they are TA-ing in so that we can ensure that we keep appropriate records and evaluate appropriately.

In addition, it outlines the duties that the TA would fulfill to qualify the course for fulfilling the TA requirements, and that means a substantial element of actually interacting with the student in a meaningful way.

MR. WEITZMAN: We move the admission of Employer Exhibit 32.

MS. AUERBACH: No objection.

THE HEARING OFFICER: Employer Exhibit 32 is received.

BY MR. WEITZMAN:
Q. Dr. Prince, we're about to leave the classroom world and move into the laboratory. Are you ready?
A. Yes.

Q. BSD students do research in laboratories at the University of Chicago, correct?

A. Correct.

Q. Is every PhD student who is admitted to study at BDS required to conduct research?
A. The conducting and completion of research is a central requirement of gaining a PhD, so yes.

Q. Why is that?
A. The whole goal of gaining a PhD is to train the students to become independent research scientists.

Q. What are students who conduct research in the BSD laboratories called?
A. Students.

Q. How do the BSD students fulfill their research requirements?
A. Could you break that down?

Q. Sure. In what venues do BSD fulfill research requirements?
A. Most of our students perform their research in the lab of their research advisor, but some projects require the students to do field work off-site or to work in the laboratories of colleagues on campus, or even beyond campus through collaboration. Some of our students spend some time off-site conducting their research elsewhere.

While all of the students do research, it may not always be wet-lab based. On occasion it's more computationally-based, what we would call in silico research.

THE HEARING OFFICER: Can you explain what you mean by wet lab?

BY THE WITNESS:
A. Wet lab would involve being at a traditional laboratory bench doing the kind of experiments that involve moving physical reagents around.

THE HEARING OFFICER: Thank you.

BY MR. WEITZMAN:
Q. What is the formal title of the faculty member at a lab?
A. We typically refer to them either as the PI, the principal investigator, or the research advisor of the student.

Q. What does it mean to be one's research advisor?
A. That is the primary mentor of the student who guides the dissertation research.

Q. What role does the PI or research advisor play with respect to students in the lab to assure that they are trained and mentored to ultimately become research scientists?
A. So that role involves multiple components.

Q. So why don't you tell me what the components are and then we'll come back and talk about them in detail after you tell me what's on your mind.
A. One is to meet regularly with the student to mentor them in developing a research program.

Q. One-on-one?
A. Yes. Another is to mentor the student in written work which early in the training experience focuses on producing a written dissertation proposal, but there will be other components later culminating in the dissertation thesis.

Q. That's two. Are there more?
A. The mentorship directly in the laboratory setting training the student on how to perform experiments or how to use particular pieces of equipment in the lab.

There's also very important training in communication skills. Often this is done in the setting of group meetings where the
mentor trains the student how to present their research orally to a broad audience. A key role of the mentor is to ensure adequate resources are available in the laboratory for the student to be able to perform their research.

And, finally, a regular day-to-day role of the research advisor is to help the student develop troubleshooting skills to be able to ensure that the experiments that they're finding challenging, that they can work out how to make those work better.

Q. So I've counted six different ways that the PI trains and mentors the students in the labs so they can become research scientists. I want you to talk about them in more detail, and I'll give them to you one at a time.

A. Different faculty have different mentoring styles, but I elect to meet formally with each one of my students weekly in addition to multiple informal short interactions, but in our weekly meeting we are considering the most appropriate experimental plan and how this will reflect the hypothesis we wish to test and the overarching goals of the project.

For early stage students a great deal of this is related towards putting together an appropriate dissertation proposal which will be evaluated by the student thesis committee allowing them to admit to candidacy. But these meetings will continue throughout the student's time in training in my lab.

At later stages we will often evaluate how we can craft manuscripts for submission to a journal. Which pieces are they to include, which experiments need to be built upon, when more data has to be gathered in order to reach publication.

We will also be discussing what conferences the student should attend and which particular data they should present at those conferences. And toward the end of the student's time in my lab, we will be discussing how to craft the final dissertation document. Throughout that time I encourage my student to think about the longer term career and broader professional development.

Q. That's interesting. What do you talk to them about professional development in their career? What they need to do to enhance that?

A. I encourage students to view career preparation as a process, not something that should happen only towards the end of their thesis work.

Graduates in biological sciences have a wide range of career opportunities, not only academic careers.

One of my other roles is as co-director of a career development and professional development program that we call myChoice: Chicago Options in Career Empowerment.

Our main goal is to expose students. So I encourage students to take advantage of those opportunities and career advising as well as to use me as an opportunity to develop a broader network within academia and the research community. I like them to be thinking about the longterm goals from early in their graduate training so that I could help them realize those goals.

Q. Have you now exhausted everything that you can remember about the kinds of things that you covered on one-on-one?

A. I've covered most of it.

Q. How about developing good scientific questions?

A. So a key component of research training which happens not just in one-on-one meetings but throughout lab meetings in the lab as well is the need to develop the skill to be able to recognize appropriate testable hypothesis. These are small bite-size questions that can be experimentally addressed to build a logical argument regarding whatever the research topic at hand is. So we really feel it's key to train all our students to develop testable hypothesis and to develop experimental plans that enable that. That is also a large component of the dissertation proposal, but it continues beyond that, because although the proposal is a road map to their research given that they will be doing research for several years, there will be changes over time that require a reevaluation.

For example, new experimental techniques may become available. Other groups may publish related work, change the way we think about the research question. A research line of inquiry that we felt would be productive may prove not to be. And that's why we're constantly reevaluating precisely what direction to take a research project.
of what we call specific aims. This is usually two
or three significant questions that fall within the
overarching larger question that guides the
research proposal or fellowship proposal. Each aim
is then broken down into a series of experimental
questions with an outline of the precise
experiments that will address the questions. The
logical flow of that will be evaluated by the
review of the proposal in addition to its
creativity, innovation, impact on the field.

Q. In addition to the dissertation, are
there other written documents that PhD students are
involved with?
A. Yes.
Q. That are covered during your discussion
with them about their writing?
A. Yes. And different documents will be
written at different stages. We encourage our
students to submit fellowship proposals, so they
will be writing up documents in a similar format to
what I just suggested. We encourage our students
to present their data at conferences as part of
their professional development, and that relies
upon them submitting abstracts to the meeting which are
often used as a selection mechanism for whether

specific changes or why I have asked them to flesh
out a particular paragraph to find a different
citation to support the statement that they've
made. This is a reiterative process. In my
experience all students improve greatly in their
ability to write in the format that is expected by
professional scientists which is quite formulaic.
Q. It's a scientific one?
A. That's my shorthand, yeah.
Q. You discuss issues with clarity in their
work?
A. Absolutely. Not only is it important to
write clearly for the sake of the reader, but in
fact, a clearly stated scientific question is very
important for the individual researcher. You
cannot fully evaluate whether your experiments are
going to answer your question until your question
is 100 percent clear to you as well as the reader.
Q. You discuss organization in the written
document?
A. Right. Fellowship proposals depending
on the agency, but for the most part, follow a
similar format to grant proposals and therefore we
require dissertation proposals to follow that
format. It involves initially laying out a series

the student will be allowed to give a talk, an oral
presentation at the meeting. So a very good
abstract is more likely to be selected.

When students have sufficient data
to write up a manuscript for publication, I will be
mentoring them through that process. And writing
the first scientific manuscript is something most
students find very challenging. It's a large piece
of work with many different expectations, that is
absolutely key to be mentored through that process
in order to do an effective job, which it will
enable the work to ultimately become published and
thus build a CV of the student.
Q. It sounds intensive.
A. It is.
Q. What about chapters?
A. So in many of our programs, the
published or submitted manuscripts are similar to
the thesis chapters, so work on manuscripts often
goes hand in hand with producing a chapter of the
thesis. Every thesis also has a scholarly
introduction which is a deep dive into the
background of the field, and when the student
writes that, of course, I'm mentoring them in that
process, too. Every thesis is concluded with a
Q. For whose benefit do you train and mentor your PhD students with respect so that they can become scientists?

A. This is developing the skills of the student such that they are empowered to go on to be an independent research scientist which could be in an academic or industry setting. Although some of our students will use their scientific training in other science-related avenues post graduation.

Q. My shorthand version of what you described as feedback on oral presentations is feedback on all oral presentations?

A. Yes.

Q. Tell us in detail how you mentor and train your PhD students so that they become scientists in the future with respect to feedback on oral presentations?

A. My lab has regular group meetings weekly, every other week, with another lab working on a similar topic. We often use the group meeting as a venue to either have the -- an individual student report on an update on their research which is relatively informal but also to practice more formal talks that they're going to give at, for example, a research in progress session on campus or at a retreat off campus or, potentially, a national conference with more senior students. I, therefore, ask my students to do a practice talk in that setting. The entire group is there to give feedback to the students. The group also gets to hear the specific issues that I may critique and ask a student to change. It may be the format of the slides. It's often the organization of the talk as a whole. It can be elements on how they precisely explain a complex topic within the talk. Also, the kind of activities we've talked about earlier such as looking out to the audience, pointing directly to the piece of data they want to show.

So we go through these practices to ensure that when students go out and talk to the world at large, that they feel very prepared and, more importantly, are able to convey the research that we do and explain it effectively to the world so that it is well understood.

My belief is there's no point in doing research if we don't disseminate that research either in oral communication or through
Q. We'll talk about them a little bit more of the staff members who provide technical support.

A. Another reason that I need to bring these resources into the lab is to pay the salary of other careers.

Q. The fifth way that I heard you mention is the maintenance of the laboratory environment?

A. Yes.

Q. Tell me about that, please.

A. A lot of the experimentation we do is quite expensive. We have to purchase reagents or cover the cost of using core facilities on campus such as the high-end imaging facility or the sequencing facility. Therefore, it's my role to bring resources in the form of either external grant funding from various agencies, including NIH or NSF, or internal funding from the division into my laboratory to ensure that my students can continue to do their experiments and further their education.

THE HEARING OFFICER: Can you just state for the record what are NIH and NSF?

BY MR. WEITZMAN:

A. NIH is the National Institute of Health. It's an agency that funds biomedically-related research. NSF is the National Science Foundation. It's an agency that funds what we term basic research, research into fundamental scientific topics that are of benefit to society.

THE HEARING OFFICER: Thank you.

BY THE WITNESS:

A. We sit down and look, typically, at their laboratory notebook and the protocol that they're using and think about each individual set and look at data that is produced at those individual sets. In many cases we go through step protocols that have an output at different stages. I evaluate that output with them. We try to determine at which step in the process a problem has arisen and then, using my experience of where problems most typically arise, I can suggest to them changes to make in the protocol, in the approach, the next time they go through this experimental process to get them further through the experimentation, ideally to a satisfactory conclusion. But anybody who does research knows that there is typically a high failure rate of experiments that are completely normal.

Q. And in the Prince lab, the research you...
do is novel, correct?
A. Yes.
Q. What does doing novel research do to the degree of failures?
A. It certainly elevates the degree of failures because we're not repeating the same experimental paradigm. We may use related approaches, but we will be, by the nature of the research, changing elements of what we do and therefore, the rate of failure is elevated.
Q. And for whose benefit do you troubleshoot and help the PhD students learn how to evaluate failure?
A. This is a key component of developing the ability to be an independent researcher. My hope is that my students will take this knowledge and build upon it and both perform important research while they're in my lab but also continue to do so after they've completed their training.
Q. I want to get into some more details about how the research advisor interacts with the student in their dissertation?
A. The beginning point of that interaction may be done when the student is rotating through the lab and considering which lab they want to join or may come after the student has already selected a lab, but it's still seeking a defined research topic.

There are multiple ways that the dissertation topics are selected, but often a faculty member will have an array of ideas for topics that they present to the student. Although in some cases the student will come with their own previously defined idea.

In either case, through conversation and through doing pilot experiments to determine whether this is a direction that is likely to be productive, the details of the dissertation topic are gradually arrived at over a period of multiple months and then solidify through the writing of the dissertation proposal.

As I mentioned previously, the dissertation proposal is designed to be a road map to the research that the student will complete. However, the road map will get updates as the picture changes with new findings coming in to play over the time of the research.

Q. Dr. Prince, given your role in the development of PhD dissertation topics for students who wind up in your lab, I'd like to go back and have you describe the process by which somebody applies to the University of Chicago and ultimately winds up in your lab. Tell me how the admission process works that would get the students into your lab eventually.
A. Students apply to the biological sciences division programs and they are asked on their application form to select up to three programs in ranked order. They, of course, select the program that they feel best fits their intellectual interests. There is some overlap in the topics that our programs cover and that's part of the reason we allow them to select up to three programs.

The applications are then evaluated by groups of faculty and a subset of applicants are invited to come to campus for a several-day-long interview process as part of a group of students. Each student will interview with typically at least five individual faculty who have been selected based on the interests that they described in the personal statement on their application.

They will also have opportunities to interact with broader groups of faculty and with current students in a variety of settings such as post sessions where current students show their ongoing research, also social settings.

There are orientations given to the visiting students during their visit to explain to them the benefits of education and education philosophy, as well as details about how the programs work.

From that subset of interviewees, the faculty evaluates the interviewees and determine which ones will be given an offer of admission. That's the process that I oversee. So the formal offer is made from my office, those assigned by me and my role as dean of graduate affairs.

A subset of those students who we make offers to will then accept the offer of admission and matriculate into one our programs. The offer is made to a specific program. Almost always a program that was top of the list that the student chose during the application process. Although occasionally, when we read the personal statement, we realize that the student might fit better into a different program, perhaps one lower on the list that they provided.

Before switching the application
into a different program, we would contact the
student and confirm they're comfortable with that.
So they've always been matriculated into a single
program, but it may not necessarily be the program
they put at the top of the list when they applied.

So when they arrive on campus --

Q. Let me stop you for a second. The one
thing I didn't hear you mention in the admission
process is the lab that they wanted to be placed
in. Did you leave that out for a reason?
A. We've matched students to programs, not
to labs.

Q. Why is that?
A. Well, because we feel it's most
appropriate for students to be on campus and go
through research rotations where can get an
in-depth experience of the mentoring style of the
potential PI and the culture of the lab before a
final selection is made.

Q. What would you tell a PhD student
applying to BSD who says, well, I want to work with
a particular professor?
A. I would explain to them that that may
happen but that there are various reasons why it
may not. For example, the lab may be full. The PI

may not want to take on an additional students.
They may be coming up for retirement. There are a
myriad of reasons why they may not take on a
student.

In addition, the student may go to
that lab thinking they'll find it appealing, but
when they get there, the interests have changed or
they find that the style of the PI doesn't fit with
their goal. And so I strongly encourage students
to accept offers from a school where they can see
at least three people that they could imagine being
happy working with even if that means they don't
come to us.

Q. So you got them on campus?
A. Yes.
Q. What's next?
A. They meet with their graduate program
and the graduate programs typically have first-year
advisory committees who discuss with the student
what courses they should be taking, which,
depending on the program may fit with a very
defined curriculum or, in some cases, be quite
open-ended and the advisory committee will help the
student select appropriate courses. That is part
of that discussion. The timing of rotations which,
Q. And that student then selects another lab. They don't feel is a good fit to their lab.

A. The student decides that. The PI may determine that they do not wish to accept the student perhaps because they've already accepted other students, the lab is full or for other reasons. The PI is not forced to take in students that they don't feel is a good fit to their lab.

Q. And that student then selects another lab?

A. Yeah. So they've done their other rotations. And if they have not been able to identify an appropriate lab, then this happens rarely, but we will allow them to perform an additional rotation to get them an increased opportunity to find an appropriate lab.

Q. Ultimately a student is not assigned to a lab unless that student wants to be in that lab?

A. Correct.

Q. So I take it that means when the student first picks the University of Chicago and then picks the -- your division, BSD, and then is admitted into a particular program and then selects the lab, that when that student is presenting research in the lab it's because of that process that they've chosen. What we shared today with you, correct?

A. Absolutely. They are following their intellectual interest and that is absolutely what we encourage them to do.

THE HEARING OFFICER: Before going to the next question, how long do lab rotations typically last?

BY THE WITNESS:

A. Lab rotations during term time, when students are also taking classes, last a full term. We're on a quarter system so those are ten-week terms. In the summer when students are not taking classes, the time frame of rotations can be reduced to as little as five weeks in some instances because a full-time experience rather than a part-time experience.

THE HEARING OFFICER: Thank you.

BY MR. WEITZMAN:

Q. By selecting the lab, the student is also selecting their research advisor?

A. Yes.

Q. For what period of time, in terms of years, will a student make that lab their home at the University of Chicago?

A. That will vary by individual student, but typically at least four years.

Q. What is the role of the research advisor in helping a student come up with a proposal for their dissertation?

A. The overarching interest of the research advisor and the kind of laboratory they run is going to define the broad parameters of the
research proposal. For example, I do zebrafish biology. So if a student wanted to study structural biology, they would not come to my lab. Within the domain of zebrafish biology, I have certain interests which it's likely the student would wish to also pursue because that is why they selected my lab, but on occasion students have shared with me related but different interests which have led to entire new research programs within my lab. These are cases where the students' interest and creatively have helped to drive new research directions which I personally find very exciting.

Q. How do you fund research that is not covered by an existing grant when the student comes up with a new brilliant idea?
A. Most labs have some funds available which are not tied to a specific project, and many early stage students are being, in part, supported through our federal training grants. Many of which come from NIH. That allows the student a certain latitude in exploring different experimental ideas. Often our students have their own personal fellowships that also allows them latitude. In the past I have written grants which have led to entire new research programs shared with me related but different interests which have led to entire new research programs.

Q. I don't know that I've asked you when the dissertation topic is chosen?
A. It's chosen in a process leading up to the point of defense of the dissertation proposal. The division requires, unless there's a petition, for all students to complete the dissertation proposal and the associated admissions candidacy in the autumn quarter of their third year, but for many programs that process happens much more quickly.

For example, students in development regeneration and stem cell biology, which all my students are, the program currently requires them to defend their thesis proposal by the January of their second year. So they have defined the topic within about a six-month period of joining the lab, or it could even be a little shorter than that.

Again, the topic is not set in stone, but the broad strokes of it will typically be maintained throughout the student dissertation work.
last week.

Q. You're their advisor for their senior thesis?
A. Yes.

Q. Let's talk about the PhD students.
A. Each of those students is pursuing their own independent research project.
Q. In furtherance of their dissertation?
A. Yes.

Q. How does what the PhD student does in the lab differ from the lab tech does?
A. The lab tech is a support role. She does some small experiments, research experiments, but her primary role is to support the research of those students in the lab.
Q. How does what the PhD students do in the lab differ from what the undergraduates do in the lab?
A. Given their greater experience, they do more complex, longer term experiments than undergraduate researchers would be expected to do. They also play a much greater role in crafting the direction of the experimentation.
Q. You've already told us about the role you fulfill in mentoring the research in your lab by PhD students.

What is a thesis committee, and what role does the thesis committee play in the mentoring, separate and apart from what you provide?
A. So every student in the PhD program has a thesis committee which comprises a minimum of four faculty, one of whom is the research advisor. A different faculty member will be chair of the thesis committee and then two other faculty. The role of the committee is to provide additional mentorship and support of the students and to help guide the research direction. In large part this is done through meetings which happen at least annually, often more frequently. But the thesis committee members additionally meet one-on-one with the student to give the student advice about their project, but potentially also on other topics such as career development.
Q. Are the students who do research in the Prince lab provided with ethical training?
A. All of our first-year students are required to take a quarter-long course called scientific integrity in research, but we typically just call it the ethics course. I'm a co-director on that course. It happens in the spring quarter. In addition to that first-year ethics training, every student goes through senior ethics training in their fourth or fifth year unless they graduate early enough to avoid it. There is also --
Q. What is the difference between the first year and the more senior course?
A. The more senior course takes into account the real world experience the student has gained, and rather than being run in a huge format of their class it's run in smaller groups that are based on clusters which are combinations between two and five different graduate programs with common interests.

The senior ethics is verymuch discussion based, usually using case studies to invoke the good discussion under the mentorship of the faculty member. The first-year ethics course is taught, in part, through lectures but only a short number. Most of it involves groups of students, between six and eight students, meeting separately to the class with a faculty advisor to explore a particular topic, for example, publications and authorship, the use of stem cells or communication to the public. There's a whole range of topics. Use of small animals in the lab. That small group of students will meet with their mentor, discuss the topic and as a group working as a team, they will put together a presentation that they then subsequently will give to the entire class such that everybody in the class will be hearing about all the different topics and discussing all the different topics at the end of that presentation but each small group will really focus in detail on one topic.
Q. So in addition to these, I'll call them, more formalized training session settings, what do you do in the lab to further the ethical training of the PhD students who are in your lab?
A. So ethics related topics come up on a regular basis. We use animals, so proper ethical use of animals in the lab involves everybody being appropriately trained and compliant with the institutional animal care and use protocol. So I discuss that with my students and monitor how our animals are being treated.

Smaller topics come up regularly. For example, if reagents have been published in the literature, it is ethical practice to be willing to share those agents. I would ensure that my
students are quick to respond to such requests. I believe that if we are responsive to other labs, they are likely to be responsive to us. We also talk about the ethics of authorship order on papers which is sometimes a difficult topic. I discuss with students the best approach to ensure that in a collaboration everybody fully understands their role in ultimate authorship order. So there are just day-to-day interactions where topics related to training will come up and be covered either in group meeting or in just discussions in the lab.

Q. You're being modest. Are you also a role model of ethics?
A. I hope to be. That is my goal.

Q. Is there a limit on the number of hours students can spend researching in the lab?
A. No.

Q. Why not?
A. The kind of experiments that we do that involve rapidly developing embryos sometimes require the experimenter to be present in the lab late at night or early in the morning. The experiments could not be conducted effectively if the hours were limited.

Q. Does anybody track the hours of the PhD students in the lab?
A. No. We don't track hours.

Q. Is the student's stipend level dependent on the number of hours that he or she spends in the lab?
A. It is not.

Q. Does a PhD student obtain additional funds as a result of spending more hours in the lab?
A. No.

Q. Is there any benefit to the students spending more hours in the lab than a fellow student?
A. There is. They may through spending more hours, be able to make better progress, publish stronger, more high-impact research and therefore further their own career.

Q. Is it fair to say the number of hours that a student researches in your lab is a student's choice?
A. Yes.

Q. How are graduate students who research in the Prince lab evaluated?
A. Students are evaluated by the thesis committee. It is a regular tracking mechanism that the graduate programs are using to ensure that students are continuing to make good academic progress. The chair of the thesis committee produces a write-up that outlines progress as well as future goals and typically a recommended time for the next committee meeting and shares that with the group as a whole, including the student and the graduate program, to enable the graduate program to track student progress.

Q. Do you personally meet with your PhD students in conjunction with the progress?
A. At the end of the thesis committee meeting, there's typically group discussion about the expected goals which will then be reiterated in the written document, but we also use that written document. I meet with the student and talk about it. We often refer to it later to ensure that we don't forget some of the good suggestions that have come from thesis committee members, and this can help keep the student on track through the next period until the next meeting.

Q. What does it mean to be, quote, making satisfactory academic progress, closed quote?
A. When students are progressing through their dissertation research and being productive and moving forward, we would call that making satisfactory progress.

Q. So what's unsatisfactory progress?
A. On rare occasion students are no longer even attempting to produce data. The nature of unsatisfactory progress can vary case by case, but it would usually involve a loss of motivation by the student and therefore minimal or no progress being made towards the goals of the dissertation.

Q. And then what happens to that student?
A. The student is placed on academic probation. A probation document is prepared by the graduate program in conjunction with the thesis committee chair, and with input from the research advisor that probation will lay out some expected milestones typically over the next quarter. The document is shared with my office and placed on file in the office of graduate affairs. If the student is unable to comply with the expectations of the probationary document, the program may elect to propose that the student be dismissed from the program. The dismissal would then be evaluated by a standing committee that I have arranged through the office of graduate affairs to evaluate such
requests and determine whether they're appropriate before a student is dismissed.

Q. This is an academic decision?
A. Yes.

Q. I'm going to talk to you about what happens when for one reason or another -- we'll talk about all the reasons -- a student wants to change lab. But before I do, I don't want this to get blown out of context. How often does this kind of situation happen?
A. An estimate of how many students change lab each year is probably four, around four, maybe five in some years.

Q. So we're talking about a very small number out of the 385?
A. Yes. Some of those faculty leave the institution.

Q. So what are the circumstances -- would you lay them out for us -- that would lead to a student needing to find a new lab or wanting to find a new lab?
A. One reason is that the faculty member informs the student that they have decided to move to a new institution. In some cases the student would decide to go with the faculty members, especially a senior student but continue to be mentored long distance by the thesis committee and receive a degree from the University of Chicago. But often, for a variety of reasons, including the personal desire to stay in Chicago, the student would instead elect to move to a different laboratory with a new research advisor. In some cases a senior student can complete the original research project while staying at Chicago with some local mentorship combined with long distance mentorship, but an earlier stage student would find that very difficult and so instead we would encourage them to select a new laboratory and a new research advisor with whom to complete their research and dissertation work.

Q. Is that selection process successful?
A. Usually. So because the faculty member may be somebody who the student didn't originally rotate with -- for example, new faculty have come to the institution who better fit with the student's intellectual interest. We would allow the student to perform another research rotation while being supported from divisional funds to give both the faculty and the student another opportunity to make a good match before they join that lab. So that's one reason why a student might move labs.

Another is that there has been some breakdown in communication between the student and the mentor which is leaving the student feeling unhappy and dissatisfied with the experience. In which case, again, if it's a very senior student, I would meet with that student and encourage them to think about whether they can fast track their progress and complete their dissertation in that lab rather than trying to move from a situation that's not ideal at a late stage which is likely to significantly extend time to degree.

The earlier stage students, if I feel the loss of communication is really significant and unlikely to be resolved, then I would encourage them to use the same process that I just suggested for those whose mentors leave, which is to talk to other faculty about doing a research rotation which would be funded by the division to enable that student to identify a new lab to join.

Q. You didn't mention the possibility that a faculty member with a research grant could lose that funding and how that would affect the student who is in that lab?
A. When we provide the offer of admission to a student, we guarantee five years of full funding support. In practice, we continue to support students up until the point of graduation. So loss of funding by a PI would not be a reason for a student to need to transfer out of that lab.

The division will ensure that the student stipend is covered and the departments provide bridge funding to cover the cost of experiments while the PI writes new grants to attempt to resolve the lack of funding.

Q. Does BSD have any non-lab research assistants?
A. No.

Q. Does BSD have any workshop coordinators?
A. No.

Q. You told us a moment ago about the five-year guarantee. What is included in the five-year guarantee?
A. That includes stipend support which is currently $30,500 a year. It includes full tuition, and it includes healthcare.

Q. What's the only condition upon which that guarantee would not be --
A. The student must remain in good academic
MR. WEITZMAN: Finished faster than I thought. I pass the witness.

THE HEARING OFFICER: Do you want to take a break before cross or are you ready?

MS. AUERBACH: No. I need a break.

THE HEARING OFFICER: Off the record.

WHEREUPON, a lunch break was taken, after which the following proceedings were had:

THE HEARING OFFICER: On the record.

MR. PORZIO: Madam Hearing Officer, before the cross starts, I'd like to do one thing on the record quickly. I'm hand delivering to Union's Counsel and the Hearing Officer a request for special permission to file briefs in this case that we'd ask that you and the Regional Director consider.

THE HEARING OFFICER: Thank you. Would you like this document to be entered into the record?

MR. PORZIO: It's up to you.

THE HEARING OFFICER: I'll review it and then we'll decide before the end of the day today.

MS. AUERBACH: For the record, the Petitioner opposes time to file post-hearing briefs. Union thinks this case is governed by settled Board law and there's no need for post-hearing briefs.

MR. PORZIO: And that's reflected in our letter.

THE HEARING OFFICER: Thank you. You may proceed with cross.

BY MS. AUERBACH:

Q. Dr. Prince, when you were asked to identify the first web page, Employer Exhibit 27, you referred to a new web page.

A. It's about one year old now.

Q. So part of 15 -- it's the document those blow up charts were taken from. And you identified teacher requirements for biological sciences division. If you go to the last page of this exhibit, footnote two it says that certain graduate programs in this program are subject to additional teaching requirements based on their funding, that's funding provided by the biology sciences division?

A. That's correct. We refer to it as divisional unendowed funding.

Q. And the students who do not have that additional requirement are being funded other than by the divisional --

A. They're being funded by one of the several sources I just mentioned.

THE HEARING OFFICER: Before the next question, do you know approximately how many students would fall into that category?

BY THE WITNESS:

A. This quarter we have eight students in that category.

THE HEARING OFFICER: Thank you.

BY MS. AUERBACH:

Q. And the admission letters that students who are accepted into the BSD receive, does that outline the financial package for them?

MR. WEITZMAN: Objection. Best evidence. We can't ask the witness to testify from memory as to what a letter says.

MS. AUERBACH: Well, she says that she oversees that --

THE HEARING OFFICER: Thank you.

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MR. WEITZMAN: Objection. Best evidence. We can't ask the witness to testify from memory as to what a letter says.

MS. AUERBACH: Well, she says that she oversees that --
MR. WEITZMAN: It's not best evidence.

MS. AUERBACH: Well, that's one of the documents I've subpoenaed and the subpoena is outstanding. The Petitioner has focused on -- I have subpoenaed sample admission letters from --

MR. WEITZMAN: She can answer if she has a photographic memory.

THE HEARING OFFICER: She can answer if she recalls what it contains and then as far as what her memory may contain, if that is not perfect, which nobody expects it to be, then that testimony will be given the appropriate weight.

You can proceed, Petitioner.

BY MS. AUERBACH:

Q. Do the admissions letters inform students of their financial package?

MR. WEITZMAN: If you recall.

MS. AUERBACH: Objection. I mean, it's already been ruled on. Objection to Counsel interrupting the question.

THE HEARING OFFICER: You can answer the question, Dr. Prince.

BY THE WITNESS:

A. I previously indicated that we offer five years of full funding, including stipend support and medical coverage. That is outlined in the letter. Beyond that I don't recollect more detail.

BY MS. AUERBACH:

Q. Do you recollect whether an admissions letter that informs students that as part of the funding, receiving that financial package, they will be required to teach the TA?

MR. WEITZMAN: Objection. I mean, it's already been ruled on. Objection to Counsel interrupting the question.

THE HEARING OFFICER: You can answer the question, Dr. Prince.

BY THE WITNESS:

A. I don't recollect.

BY MS. AUERBACH:

Q. You talked about students who can achieve one of the two TA-ships required by some activities outside of the university such as teaching in a high school. Approximately what percentage of students do that?

A. To date it's been a very small number. I don't know the precise number. Fewer than ten students total.

Q. Total over what time period?

A. Over the time period that I've been dean for graduate affairs. Since 2010.

Q. Then you talked about being a TA for boot camp. Who participates in that boot camp?

A. The incoming graduate class.

Q. So the BSD graduate student for that boot camp is a TA for a class that consists of other graduate students?

A. Correct.

Q. What amount of graduates do that TA-ship?

MR. WEITZMAN: Objection. Vague.

THE HEARING OFFICER: You just --

BY MS. AUERBACH:

Q. What percentage of students do that?

A. This is a recent policy. No students have yet completed such a TA-ship.

Q. Are there people who are doing it right now?

A. It doesn't happen until September.

Q. Do you have Employer Exhibit 28 in front of you?

A. I have 29 through 32. One of the previous ones must have been 28. Yes, I do.

Q. Would you turn to Page 5 of 8 of that exhibit. Under the question, What if enrollment in my TA course changes or the person cancels? It says that the number of TA-ships listed for any course is based on the projection of the number of students who will enroll in that course.

MR. WEITZMAN: Is there a question?

MS. AUERBACH: Yes.

BY MS. AUERBACH:

Q. The question is: How is the number of TA-ships for a given course determined?

A. I stated based on the enrollment in the course.

Q. Is there a certain number of undergraduate students per TA?

A. I don't know.

Q. The next sentence refers to changes in enrollment, possibly changing the number of TAs required for the course. So are there any types of policy that's set forth how many TAs are required for a course?

MR. WEITZMAN: That's not what the document says. I don't see the word "possible."

BY MS. AUERBACH:

Q. The document says if the enrollment is very different from the projection this may decrease or increase the number of the TAs required.
for the course.
So I'm asking, is there any policy
that sets forth the number of TAs required for the
course?
A. I don't know.
Q. Are there certain courses in which
graduate students serve as TAs?
A. Yes.
Q. How many courses? How many different
courses are there?
A. It's a high number. More than a hundred
possible courses.
Q. The courses that you've taught where
there are TAs, what courses have those been?
A. I've been on campus for 20 years. So
the primary courses where TAs have served with me
have been a course sequence that we refer to as the
AP 5 sequence. That was a two-quarter sequence
offered to undergraduates who arrived on campus
with a score of five in their advanced placement
biology.
Before that, I taught a course in a
sequence called the 170s. I believe it was called
evolution and development.
Q. Let's stop there. So taking the first
one, the one for students who achieved an AP of 5.
Do you recall how many TAs you have in that course?
A. We had -- I taught that over multiple
years. Most years we had three TAs.
Q. Do you recall approximately how many
undergraduates were in the course?
A. Approximately 60.
Q. Is that course ever taught without use
of a TA?
A. No.
Q. The courses in which TAs are used, are
any of those ever taught without use of a TA?
MR. WEITZMAN: Objection. Vague. Are
we talking about Dr. Prince's experience in BSD?
MS. AUERBACH: Right now I'm talking
about the whole division, if you know.
BY MS. AUERBACH:
Q. Are there any courses that are --
sometimes use TAs and sometimes don't?
A. I don't know.
Q. The courses where you have taught with
TAs, have you ever taught those same courses
without the use of TAs?
A. No.
Q. Does anyone other than graduate students
serve as a TA in these courses that you've taught?
A. Yes.
Q. Who else can serve as a TA or who else
has served as a TA?
A. Occasionally upper level undergraduates
have been asked to serve as TAs in the AP 5 course.
Q. Are the vast majority of the TAs
graduate students?
A. Yes.
Q. I'm referring to Employer Exhibit 28.
Would you turn to Page 6 of 8. Under the caption
Teacher TA for Pay it says that after TA-ing twice
to fulfill the requirements students may hold
teaching assistantships for additional pay in
courses with unfilled TA positions.
Does additional pay mean paid
beyond their guaranteed funding?
A. It does.
Q. And what amount of pay do graduate
students receive for TA-ing in a class for that
pay?
A. It varies depending on the class.
Q. Can you tell me what the range of pay
is?
A. I'm not sure.
Q. Do you know how that pay is paid out?
Is it paid out biweekly or is it paid out by the
quarter?
A. It's paid out biweekly.
Q. Is that paid from division funds?
A. It's paid from university funds. The
biological sciences collegiate division is somewhat
a separate entity to the biological sciences
division.
Q. Do you know approximately what
percentage of graduate students in the biological
sciences division TA for pay beyond the part of the
TA-ship?
A. I don't.
Q. Is it the case that graduate students
from other graduate divisions can also TA for pay
in the biological sciences division?
A. I don't know.
Q. The graduate students who TA in
the -- Well, strike that.
For the requirement of running
discussion sections that TAs fulfill, how often are
they expected to conduct discussion sessions?
A. Typically weekly.
Q. For how long?
A. One hour.

Q. In courses that you have taught with use of TAs, do you also hold a discussion session?
A. No.

Q. In the courses where you've TAs, how often are the TAs expected to hold office hours?
A. Weekly.

Q. For approximately how long?
A. Typically two hours.

Q. How are the undergraduates notified of what the office hours are?
A. They're typically posted on the chalk website associated with the class and announced early in the class.

Q. Are the graduate students who service TAs expected to devote a certain number of hours per week total to the TA-ship?
A. No.

Q. The TAs who work in classes that are lab based, how many labs are there weekly they're expected to participate in?
A. Could you clarify the question, please?
Q. And it would not serve the undergrads well if the grading were inappropriate.

A. That is why it is my job to ensure that the grading is completed effectively and it's my responsibility because it would not serve the undergrads well if the grading were inappropriate.

Q. And you want the grading done appropriately.

A. I don't look through at every single question. I scan through to be confident that the TA has done an effective job on grading. I know that our undergraduate students will raise any questions they have about the grading with me. So I am careful to be very confident that grading was done appropriately.

Q. Is one reason you ask the TAs to cover more difficult areas in discussion sections?

A. I do cover those areas in the lecture classes.

Q. So why do you ask the TAs to further discuss them in the discussion sections?

A. Some topics are particularly difficult to grasp on a first hearing. I additionally encourage the undergrad students to visit me in office hours to ensure that they gain a full grasp of those topics.

Q. So is one reason to pay attention to areas the students may find confusing in these discussion sections because it may be more helpful to the undergraduates to hear about it in a smaller group setting?

A. The TAs.

BY THE WITNESS:

MR. WEITZMAN: Objection. Compound.

BY MS. AUERBACH:

THE HEARING OFFICER: I think we're referring to the same thing. I don't know that it's necessarily compound.

MR. WEITZMAN: It's inappropriate and inconsistent. We have to break it up.

BY MS. AUERBACH:

Q. It would not benefit the undergraduates if the grades they received were not related to the work they performed, correct, were not appropriate for the work they performed?

A. That is why it is my job to ensure that the grading is completed effectively and it's my responsibility because it would not serve the undergrads well if the grading were inappropriate.

Q. And it would not serve the undergraduates if the grading isn't consistent to the extent that the same quality of work for one student received a different grade than the same quality as another student, correct?

A. I think the answer I just gave addresses that same question.

Q. You said in the discussion section you want the TAs to teach the students about areas that they might find confusing, correct?

A. Yes.

Q. Why don't you cover those areas in the lecture classes?

A. I do cover those areas in the lecture classes.

Q. So why do you ask the TAs to further discuss them in the discussion sections?

A. Some topics are particularly difficult to grasp on a first hearing. I additionally encourage the undergrad students to visit me in office hours to ensure that they gain a full grasp of those topics.

Q. So is one reason to pay attention to areas the students may find confusing in these discussion sections because it may be more helpful to the undergraduates to hear about it in a smaller group setting?

A. These are typically topics which are difficult to adequately communicate, and an important component of developing communication skills is if the graduate student is to practice ways of describing this information in different ways using different analogies such that any audience can better grasp the information.

Q. I'm asking about it from the perspective of the undergraduates. Is one reason that you cover more difficult areas in discussion sections because the undergraduates may benefit from hearing --

MR. WEITZMAN: Objection to the word -- you mean the TAs or the professor?

MS. AUERBACH: The TAs.

BY THE WITNESS:

A. Could you repeat the question, please?

BY MS. AUERBACH:

Q. Is one reason you ask the TAs to cover areas the undergraduates might find confusing in the discussion section is because the undergraduates may find it easier to learn about those subjects in a smaller group setting?

A. Again, the primary goal --
Q. I'm not asking about the primary goal.

MR. WEITZMAN: Objection.

MS. AUERBACH: Well, every question I'm asking she's not answering the question. She's talking about the primary goal. I'm just asking a reason, not whether it's primary.

MR. WEITZMAN: So the way it should work is this. Counsel asks the question. The witness is allowed to complete an answer. If the answer is not responsive, Counsel can move to strike, but for Counsel to jump in in the middle of a question just because she doesn't like an answer, she's taking over the role of the Hearing Officer. She's preempting the decision as to whether it's responsive or not. That's your role, not her role. She must be allowed to answer the question.

MS. AUERBACH: Well, this hearing is going to take all day if the witness just keeps giving rehearsed answers for every question I ask. I'm not asking just about primary or what she views as primary. I think I'm entitled to an answer to the question.

THE HEARING OFFICER: So I agree with both of you let the record reflect. So the witness should be permitted to give a full response.

However, I do understand the Petitioner is repeating its questions because we're not necessarily getting the answer to the question asked. So maybe rephrase your questions a bit. There's a lot of double negatives.

With regards to complex issues raised in lectures that are then discussed in the smaller setting with the TAs, would you say that the graduate students glean a benefit from repeating or repeat coverage of these complex topics? Sorry if that was not clear. Because we're such a long hypothetical, which is why I hate these questions.

A topic -- a complex topic which was covered in lecture is being covered again by a TA in a small discussion session. Is that beneficial to the undergraduate student?

So we know in your testimony there is primary benefit to the graduate student in teaching in that format, but is there a benefit to the undergraduate student?

BY THE WITNESS:

A. There should be a benefit if the TA has developed sufficient skills to adequately describe the topic.

THE HEARING OFFICER: Thank you.

BY MS. AUERBACH:

Q. If the TA, in a discussion session, stays on the topic that was designated for that discussion session, that would provide more benefit to the undergraduates in the section than if the TA goes off topic, correct?

MR. WEITZMAN: Objection. Hypothetical.

MS. AUERBACH: She testified specifically about telling TAs to bring the discussion back to the topic.

THE HEARING OFFICER: That was one of the things covered under direct about --

MR. WEITZMAN: The question was if, so that made it a hypothetical.

THE HEARING OFFICER: This seems to be what we're dealing in mostly these days, so I'll allow the question.

Please repeat the question, Counsel.

BY MS. AUERBACH:

Q. If the TA stays on the topic designated for discussion sections, that provides more benefit to the undergraduates in a section then if the TA goes off topic, correct?

A. It's difficult to give a response to that without knowing more details about the hypothetical situation.

Q. Well, you said the TA knows the core of the materials that would be the subject of the exam?

THE HEARING OFFICER: Would it be fair to characterize if the TA strayed away from nonlesson plan material? Would that be a good hypothetical in this scenario?

MS. AUERBACH: We can try that.

MR. WEITZMAN: If the hypothetical has no foundation, I don't know that this has ever happened. It's a pure hypothetical.

THE HEARING OFFICER: I mean, she did testify that one of the things that she does teach to the graduate students in how to properly conduct their discussion sessions is how to -- should the discussions stray off topic is how to lead it back to the topic at hand.

MR. WEITZMAN: Exactly. That's when the student takes it off topic. Not when the TA takes it off topic which is a hypothetical.

MS. AUERBACH: Well, the question was intended to be geared at keeping the discussion...
session on topic. That would include discussions
by the graduate -- the discussion in the session
presumably between the TA and the undergraduate.

THE HEARING OFFICER: Can you repeat the
question?

BY MS. AUERBACH:

Q. If a TA does a good job in keeping the
discussion in a discussion section on the topic
designated for that section, that benefits the
undergraduates in the section more than if the TA
allows the discussion topic to go off topic,
correct?

A. It's really not possible to answer that
given that I cannot speculate whether the off-topic
discussion may have had some intrinsic value to the
student given that I'm not there to witness it.

Q. Well, let's try this. If the TA keeps
the -- does a good job of keeping a discussion in
the discussion section on the designated topic,
that benefits the undergraduates more with respect
to learning the course material designated for that
section than if the TA allows the discussion to
stray off topic?

MR. WEITZMAN: Asked and answered.

THE HEARING OFFICER: I don't know if it
was answered in this context.

You can answer it, Dr. Prince.

BY THE WITNESS:

A. That is correct.

BY MS. AUERBACH:

Q. When an undergraduate goes and talks to
a teaching assistant during a teaching assistant's
office hours for help with understanding course
material, that benefits the undergraduate students,
correct?

A. It benefits both the graduate student
who's having the opportunity to practice the skills
of explaining topic and the undergraduate who's
gaining information.

Q. And you said that you provide guidance
to a teaching assistant before a teaching assistant
will give a -- have a chance to give a lecture in
the class?

A. Correct.

Q. And that benefits the undergraduate
because they receive a higher quality lecture in
that class, correct?

A. It's likely that if I, as the
instructor, gave the lecture it would be of higher
quality. Part of the goal is to ensure that our

graduate students have an opportunity to present to
students in a mentored fashion and learn to do that
as part of their professional development.

Q. Dr. Prince, I did not mean to compare
that -- graduate students lectures to your lecture.
I was intending to compare it to a graduate student
giving a lecture without having first received
feedback from you.

A. If the graduate student didn't get
adequate mentorship and training from me as the
faculty instructor, the lecturer would indeed
likely be of poor quality.

Q. And so it benefits the undergraduate if
the TA receives guidance from you before giving a
lecture? The undergraduates attending that lecture
will receive a higher educational benefit from the
lecture if the TA receives guidance from you than
if the TA doesn't receive guidance from you
beforehand, correct?

A. Correct.

Q. You testified that the division offers
graduate pedagogy courses. Those courses are not required
for graduate students?

A. No.

Q. Is that correct?
evaluation. Is there also a student evaluation completed by undergraduates for faculty members in the division who teach courses?
A. Yes.
Q. Is it similar to Employer Exhibit 29?
MR. WEITZMAN: Objection. Similar is vague.
MS. AUERBACH: She can answer.
BY MS. AUERBACH:
Q. Are the questions similar?
A. The questions are not identical.
Q. How do the questions differ?
A. Without having a copy of the faculty evaluation in front of me, I can't go into details, but they are not the same details as on this list.
Q. Do students -- are students asked to fill out evaluations for all courses taught by faculty members?
A. They are.
THE HEARING OFFICER: Before we move on from these exhibits, I had a quick clarifying question.
Employer Exhibit 31, the course director evaluation, is the course director the same as the instructor of record?
A. Yes.
BY THE WITNESS:

THE HEARING OFFICER: Thank you. That was my only question.
(Pause.)
BY MS. AUERBACH:
Q. When it's time for the graduate students to select a lab that they'll be conducting their research in, the graduate students select labs where research that they're interested in is being conducted, correct?
A. Correct.
Q. And the research that they do in the lab is for both their interest and that of the principal investigator in the lab, correct?
MR. WEITZMAN: Compound.
THE HEARING OFFICER: I suppose that's the first, the interest of the graduates.
BY THE HEARING OFFICER:
Q. So conducting research in a lab that jives with their own interest as far as the interest of the graduate students, is that an accurate representation? Is part of the interest of the graduate student to conduct research in a lab that is consistent with their interest? Is that accurate?
A. Yes.
Q. And does it further the interest of the PI to have graduate students working in their lab conducting research that are similar in nature to their own?
A. Yes. But because PIs are very interested in developing graduate students to be excellent scientists of the future. So in that regard it certainly is value -- brings value to the PI whose legacy is the mentee's that they generate through mentoring in the laboratory environment.
BY MS. AUERBACH:
Q. So the researcher in your lab, your graduate students who are in the lab, are all doing research related to the subject of your research?
A. We have a team that is all doing research in the same broad topic.
Q. And you talked about graduate students writing manuscripts for publication, correct?
A. Students do write manuscripts for publication, yes.
Q. And you are frequently listed as one of the authors on those publications and those articles?
MR. WEITZMAN: Objection. Frequently is vague.
MS. AUERBACH: She can answer.
THE HEARING OFFICER: You can answer.
BY THE WITNESS:
A. That would be the norm in my field.
(Petitioner No. 16 was marked.)
BY MS. AUERBACH:
Q. I handed you a document marked for identification as Petitioner Exhibit 16. Can you identify what this is?
A. This is the abstract of a paper published in 2015 in the journal Developmental Biology coauthored by a previous graduate student in my lab, Crystal Love and myself.
Q. Was Crystal Love a graduate student in your lab at the time this paper was published?
A. Crystal had recently left the lab after her graduation at the time the paper was published.
Q. Had she done the work that's the subject of the publication while she was in your lab?
A. Crystal and I both participated in the experimentation published in this paper. She had completed the part that she did before leaving my lab. I did additional experiments independent of...
MR. WEITZMAN: No objection.

MS. AUERBACH: I move the admission of Petitioner Exhibit 17.

THE HEARING OFFICER: Petitioner Exhibit 17 is received.

MR. WEITZMAN: No objection.

BY MS. AUERBACH:

Q. I've handed you a document marked for identification as Petitioner Exhibit 17. Can you identify what that is?
A. This is a list, I believe, completely comprehensive of all of the publications I have coauthored since 1990.

Q. Other than Ms. Love that we've already discussed, are any other authors listed here people who were graduate students in your lab at the time they participated in authoring the publication?
A. Yes.
Q. And which one?
A. We start with the furthest back in the past on the last page, James McClintock was my first graduate student, Michael Hunter, listed as Hunter, M. in this second from the top paper but also got to appear in other papers, was my second student. David Stafford at the top of that page was my third student. Then those authors appear in additional publications.
Q. And the additional publications they appear in, were those all published while they were in your lab?
A. Yes. Other students we've already mentioned, Crystal Love, Onie Mapp. I'm looking here for Monica Rohrschneider who should be on this list. I'm missing a page. I've got two copies of the first page, and I'm missing the second page. That's why I'm missing people. Monica Rohrschneider, Gina Elston, Onie Mapp and Crystal Love. Stephanie Eames also listed here, was jointly supervised by me and a colleague, Lou Phillipson, who is listed as the senior author on the fourth paper down. That's been all of my graduate students.

MS. AUERBACH: I move for the admission of Petitioner Exhibit 18.

MR. WEITZMAN: No objection.

THE HEARING OFFICER: Petitioner Exhibit 18 is received.

BY MS. AUERBACH:

Q. When you train graduate students in writing, that helps the quality of the publications that they co-author with you, correct?
A. That would be correct. It also develops their writing skills for the future.

Q. Training graduate students on use of the lab equipment, in addition to benefiting the graduate student, benefits the entire laboratory team, correct?

A. That's correct.

Q. With respect to grant proposals that you applied for, are those NIH and NSF?

MR. WEITZMAN: Compound. I don't know if she's saying yes to one or the other.

THE HEARING OFFICER: Any external experience out of NIH or NSF, do you apply for any such grants?

BY THE WITNESS:

A. I do.

BY MS. AUERBACH:

Q. What other sources do you apply for grants?

A. In the past I've had funding from multiple different organizations. The March of Dimes, The Juvenile Diabetes Research Foundation, The Chicago Biomedical Consortium. The one from many years ago that I'm forgetting the name of, The White-something, the Brain Research Institute in addition to NSF and NIH funding.

BY MS. AUERBACH:

Q. And when you apply for those grants, are you required to follow procedures set out by the university research administration?

A. Yes.

(Petition No. 19 was marked.)

Q. I've handed you a document marked for identification as Petitioner Exhibit 19. Are you familiar with this website from the university research administration?

A. No.

(Petition No. 20 was marked.)

Q. I've handed you a document marked as Petitioner Exhibit 20. Are you familiar with this web page?

A. No.

Q. Are you familiar with budget justification statements?

A. Yes.

Q. In grant applications, are you familiar with the term "graduate research assistant"?

A. Yes.

Q. And is that a PhD student who serves in your lab?

A. It's a PhD student who's doing research under my mentorship in my lab.

Q. That's the term used in the grant application, "graduate research assistant"?

A. Yes.

Q. And when you write a grant application, is there a section of the application for personnel costs?

A. There is.

Q. And in that section is one of the things that's listed a dollar amount to be allotted to graduate research assistants in the lab?

A. That's correct.

Q. Does the university research administration give you information as to what that dollar amount should be?

A. The source of that information is typically the grants person in the department, but the information may come from a high level.

Q. So there is -- when you say "the grants person in the department," is there someone in the department designated to oversee grant --

A. We have a grant administrator who works on pre-award grants and ensures that we use appropriate language in the budget justifications and elsewhere.

Q. And does that grant administrator give you the amount to list for the personnel costs associated with graduate research assistants in your lab?

A. They do.

Q. And do you recall for fiscal year '17 what that amount was?

A. Not precisely.

Q. Do you recall whether it was equal to, more than or less than the amount of the stipend given graduate students annually?

A. It should be the amount of stipend plus tuition as laid out here.

Q. By "here" you're referring to Petitioner Exhibit 20?

A. Yeah, on this document, which is the fiscal year '18.

Q. As a principal investigator in the lab, are you responsible for ensuring that the work performed by all of those listed under the personnel section on the grant are performing research consistent with the grant proposal?

A. Yes.

Q. Does the grant proposal also include a
dollar amount associated with indirect costs
or -- indirect costs?
   A. It does.
Q. Do you know what the indirect costs equals?
   A. Could you rephrase the question?
   Q. Do you know what items come within the term indirect costs?
   A. I don't.
   Q. Does it include budget amounts for use of the university facilities?
   MR. WEITZMAN: Asked and answered.
   BY MS. AUERBACH:
Q. I'm asking a more specific question.
THE HEARING OFFICER: Overruled.
BY THE WITNESS:
A. I don't know what is covered by indirect costs.
BY MS. AUERBACH:
Q. Is that -- is the amount of indirect costs also given to you by the grant administrator for your department?
A. Yes. It's a percentage that's negotiated between the federal agencies and the university.
and that amount, indirect costs, goes to the university rather than to your lab?
   A. Correct.
   Q. Do you know how that dollar amount of the indirect costs that goes to the university compares with the dollar amount that goes to your lab?
   A. It's low.
   Q. It's lower?
   A. Yes.
   Q. Is it about 60 percent that goes to your lab?
   A. It varies year by year. It's not necessarily the same agency by agency.
   Q. And in the grant proposals that you write, does the personnel cost section also include a dollar amount associated with your salary?
   A. It does.
   Q. Does that amount equal the amount of your actual salary?
   MR. WEITZMAN: Objection. Relevance.
   MS. AUERBACH: Well, she testified that she writes the grant proposals for the aid of the research assistants -- for the aid of the graduate students rather.
   MR. WEITZMAN: Dr. Prince's salary is irrelevant. She said it includes her salary. What the amount is is irrelevant.
   MS. AUERBACH: I didn't ask her for the dollar amount of her salary.
   MR. WEITZMAN: You asked her how it compared to other numbers. That's virtually the same thing.
   MS. AUERBACH: No, no, no. I asked her if the amount that's listed in the grant application for her salary is equal to the amount of her actual salary. I'm not asking what that amount is.
THE HEARING OFFICER: You can answer, Dr. Prince.
BY THE WITNESS:
A. It's not. It's for a small proportion to cover efforts associated with that particular study.
BY MS. AUERBACH:
Q. Is that dollar amount also given to you by the grant administrator of the department?
A. It's a discussion between the grant administrator, the chair of the department and the faculty member as to what an appropriate percentage is. In some cases it's defined by the agency.
That's true for NSF. A maximum is defined by the agency.
Q. Do you currently have one grant or more than one grant in your lab?
   A. I have two grants plus two training grants which is designated for student support.
   (Petitioner No. 21 was marked.)
   Q. I've handed you a document marked as Petitioner Exhibit 21. Are you familiar with this web page?
   A. I'm not.
   Q. Are you familiar with internal budget templates for grant writing?
   A. Yes.
   Q. If you will just look at the item, there are 12 items listed as direct cost items. Are these accurate as to the items that you have to complete for direct costs on your grant proposal?
   A. Yes. Although not every cost would be pertinent to a specific grant proposal.
   Q. Are there certain ones that would be included in all grant proposals?
   A. Yes.
Q. Which ones are those?
A. Salaries or wages, supplies. Those are the only two that would be consistent on every single research grant.
Q. Is it part of the mission of the university to conduct original research?
A. Absolutely.
Q. And the graduate students in your lab further that mission of the university, correct?
A. They do.
Q. We talked about training grants. Would you explain what those are?
A. These are grants primarily on our campus from the National Institute of Health, but we do have grants from other federal agencies also. We're not the only two that would be consistent on every single research grant.
Q. And are those -- how do you go about getting those grants?
A. If an individual faculty member wishes to apply for a training grant, they would typically, in the BSD, meet with me as the dean of graduate affairs to discuss whether that's appropriate, but most of the training grants have been running for some years. The training grant that I'm the PI on was a new training grant when it was first awarded approximately eight years ago.

The process is to identify whether we have expertise in a mission area and whether we have classes and training activities in place that could potentially be built on and augmented through the acquisition of the training grant to enable excellent training and research in the domain area. When we have expertise in a mission area and whether we have classes and training activities in place that could potentially be built on and augmented through the acquisition of the training grant to enable excellent training and research in the domain area, appropriate to the grant mechanism. Some grants include the NIH ethics training. However, many of the faculty are directly involved in teaching the ethics courses to our students providing a useful review.

Q. Is it true that some of the graduate students that are on training grants are required to do additional TA-ships as a condition of receiving training grants?
A. It's not true for any of the current training grants that we have on campus in the BSD. Have you conducted experiments in your lab that have failed?
A. Frequently.
Q. Helping graduate students troubleshoot when they experience failures, does that benefit the entire lab team?
A. The process of troubleshooting benefits the team and the individual because everybody learns how to be a more effective researcher.

Resolving the troubleshooting and moving the research ahead also benefits the team as a whole.

Q. When the graduate students do their rotations through the two to four labs that they rotate through, in addition to helping the graduate student choose a lab, does that also help the PI in the lab decide whether they feel they would like to work with a particular graduate student?
A. Yes. It gives a good opportunity for both sides to determine whether there's an appropriate fit in interest and in style.

Q. When you talked about a requirement that a student remain in good academic standing, does that include fulfilling the TA requirements?
A. In principle but that has never been an area where a student has fallen out of academic standing. All they have to do is do the TA requirement. My office reminds students if they're getting close to graduation and have not yet completed their requirement. Their graduate program tracks that also.

Q. Do the students receive notice each year whether the funding is going to continue because they've satisfied requirements?
A. We don't currently give annual notices of funding. It's assumed it will continue.

Q. Are faculty members who work in labs required to take ethics courses?
A. No.

Q. Are you required to do some kind of ethics -- some requirement to meet an ethics training?
A. NIH requires trainees to take ethics courses every four years. Currently they don't have a formal requirement for the faculty to have ethics training. However, many of the faculty are directly involved in teaching the ethics courses to our students providing a useful review.

Q. Does the ethics training that's given to the graduate students fulfill the NIH ethics training requirement?
A. It does.

MS. AUERBACH: I move to introduce Petitioner Exhibits 19, 20 and 21, which are pages to the website which I provided Counsel this morning before I went on the record.

THE HEARING OFFICER: So you just said 19, 20 and 21?
MS. AUERBACH: Correct.
MR. WEITZMAN: No objection as to
authentication.

THE HEARING OFFICER: Petitioner 19, 20 and 21 are received.

MS. AUERBACH: Could we go off the record for a couple minutes?

THE HEARING OFFICER: Sure.

(Whereupon, a break was taken, after which the following proceedings were had:)

THE HEARING OFFICER: On the record.

MS. AUERBACH: I don't have any more questions.

THE HEARING OFFICER: Before redirect I just have a few questions for the witness.

BY THE HEARING OFFICER:

Q. So you testified about the types of instruction you give to TAs who run discussion sections. You also testified that you do not -- sometimes do not personally run discussion sections.

A. I have in the past.

Q. How frequently does that occur in a particular quarter?

A. I would typically sit in once or twice at the beginning of the quarter and see how the discussion session is going. And if it was going well, did not feel the need to stay longer.

Q. You had testified about the TA requirements or TA academic requirements for PhD students within the BSD.

Is it accurate that PhD students within the BSD are never lecturers within the BSD?

A. That is accurate.

Q. This is just a clarifying question. I may have misunderstood your answer.

So you had testified about some of the core courses.

A. Yes.

Q. And you said that they have PhD-level lecturers. When you say "PhD level," do you mean grad students or in the faculty who have already obtained their PhD?

A. They are not faculty. They're staff members or nontenure track, but we would refer to them as lecturers. It's a different position.

They already have their PhD. They're employees of the division, and they deliver those lectures.

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A. They are not faculty. They're staff members or nontenure track, but we would refer to them as lecturers. It's a different position.

They already have their PhD. They're employees of the division, and they deliver those lectures.

A. It did not because I did not give the student a pass. I felt that his performance did not warrant a pass. Therefore, he only met the requirements when he had both completed the TA training course and passed the actual TA-ship.

Q. Would there ever be an instance where a grad student would be required to secure funding from outside the university for the research?

A. No.

Q. While graduate students are pursuing their degree at the University of Chicago, are they required to publish research in that time?

A. There's a strong expectation of publication. Some of our programs have a requirement of publication or submission of a publication before graduation. It's not a uniform requirement across the whole division.

Q. Can you give me an example of the department that requires publication?

A. The committee on development regeneration and stem cell biology requires a first author publication.

Q. Is it just one publication that is required?

A. Yes. But there is an expectation that
many students should publish more than one paper during their graduate student years.

Q. With regard to some of the equipment that is used in your lab, is there any particular training required before individuals are permitted to use certain equipment?

A. In order to work independently with our animals, students and other staff must complete training through the Institutional Animal Care and Use Committee, but the equipment we have in the lab requires basic safety training, but not specific training on a piece of equipment beyond what is provided in the context of the lab by me or other lab members.

Q. So the safety training that you just described is offered by the university?

A. Yes.

Q. Do any of the graduate students in your lab work with animals?

A. Yes.

Q. So then the certification that you described, it has to -- this is from outside the university?

A. No. It's an internal certification.

That's why it's called the Institution Animal Care and Use Committee. They have to do an occupational health and safety training as well as animal specific training, followed by lab specific training offered within our lab by me and other members of the lab.

Q. So you'll have to forgive myself as an unscientific layperson. What are reagents?

A. Usually chemicals -- I can't think of a better word. We purchase the ingredients, if you want to think of it that way, from companies, that are used in experiments. Commercially available typically.

Q. Whenever a graduate student is serving in a lab rotation, is their stipend affected at all by the time spent in that rotation?

A. No.

Q. You had testified about how many labs have certain amount of funding set aside for not necessarily unrelated research but tangential research.

Are there any special steps that need to be taken to access this funding?

A. Not typically.

Q. If a graduate student in pursuing a topic they have chosen for their dissertation, would they be able to access that funding? Or perhaps I'm talking about two different things.

A. It's obviously important there's funding available to allow the student to pursue their intellectual interests. A conversation about that would be an important part of selecting a lab to join.

Q. So when we refer to the BSD and the departments under that umbrella, are those departments only available to graduate students, or are they available to undergraduates as well?

MR. WEITZMAN: You called them programs.

BY THE HEARING OFFICER:

Q. Oh, I'm sorry. Programs?

A. The programs are not directly available to undergraduates.

Q. Are there undergraduate programs that would fall under the umbrella of the BSD?

A. Yes.

Q. Do you know how many of those there are?

A. There are currently two majors.

Q. Do you know how many undergraduate enrollments there currently are in those majors?

A. I don't know.

Q. You had testified about there are some instances when a graduate student in the BSD may enter a TA-ship after they had surpassed their two TA requirements.

Are you -- in your personal experience, are you aware of any individual who has already met those requirements and has applied for such TA-ship, have they ever been denied that TA-ship?

A. Not to my knowledge.

Q. You had testified about if the graduate student is performing poorly they may be placed on academic probation and if they continue to perform poorly they may be dismissed from the program.

Do you know if that's ever occurred?

A. It has.

Q. How frequently does that occur?

A. It's vary rare. Probably one or fewer per year.

Q. I know this may be somewhat broad, but in those particular instances, do you recall what sort of things led to their dismissal from the program?

A. Certainly they vary substantially from individual to individual.
Q. Do you recall -- was there any instance of this occurring in the most recent academic year?

MR. WEITZMAN: It would be preferable if we didn't talk about recent. Maybe something from the past would be better.

BY THE HEARING OFFICER:
Q. Oh, okay. So in instances prior, I apologize. Just generally do you know what sort of things would lead to students being dismissed from the program?
A. Typically it would involve a loss of motivation by the student who essentially loses the interest in pursuing their graduate studies and therefore is not showing up or is essentially not performing research anymore.

THE HEARING OFFICER: I think that was the last question I have.

MR. WEITZMAN: I have just a couple of questions. May I?
THE HEARING OFFICER: Yes.

REDIRECT-EXAMINATION
BY MR. WEITZMAN:
Q. On cross-examination you were asked whether faculty takes the ethics course. You said, no, we teach the ethics course. Are you one of those professors?
A. I co-direct the ethics course for the junior students. I'm also involved in teaching one of the courses for senior students. Although I missed my class today.
Q. Sorry about that.

By Exhibit 18 which is a list of articles, and you identified some of them where you coauthored with your graduate students.

With respect to those instances where you are listed as a co-author, did you comply with the ethical obligations that entitled you to be a co-author?
A. Yes.
Q. Let's talk about troubleshooting. Does any troubleshooting of failed experiments occur on graduate students dissertation research?
A. Yes.
Q. When that occurs, who benefits from the troubleshooting you do on graduate students failed experiments?
A. The student and the lab team.

MR. WEITZMAN: No further questions.
THE HEARING OFFICER: Does Petitioner have any further questions for the witness?

MS. AUERBACH: I have a couple.

RECORASS-EXAMINATION
BY MS. AUERBACH:
Q. The safety training that's offered by the university, do the technicians who work in your lab take that safety training?
A. They do.
Q. Do the technicians who work in your lab take the training on working with animals?
A. If they work with animals, they do.
Q. Do they take the OSHA training?
A. Yes.
Q. Do they also get the informal training within the lab that you provide?
A. Yes.

MS. AUERBACH: That's all I have.
THE HEARING OFFICER: Any further questions?

MR. WEITZMAN: No re-redirect.
THE HEARING OFFICER: All right. Then, Dr. Prince, you are excused.

THE WITNESS: Thank you.

THE HEARING OFFICER: Off the record for a minute.

WHEREUPON:
WILLIAM RANDO, PhD, called as a witness herein, having been first duly sworn, was examined and testified as follows:

DIRECT EXAMINATION
BY THE HEARING OFFICER:
Q. If the witness could state and spell your name for the record.

(Witness sworn.)
THE WITNESS: I do.

THE HEARING OFFICER: Have a seat.

WHEREUPON:
WILLIAM RANDO, PhD, called as a witness herein, having been first duly sworn, was examined and testified as follows:

DIRECT EXAMINATION
BY THE HEARING OFFICER:
Q. If the witness could state and spell your name for the record.

BY MR. SALVATORE:
Q. Good afternoon, Dr. Rando. By whom are you employed?
A. The University of Chicago.
Q. When did you begin working for the University of Chicago?
A. Three years ago, March 1st.
Q. So that's 2014?
A. That's right.
Q. What is your job title or titles at the University of Chicago?
A. I'm associate dean in the college and the associate director in the Chicago Center for Teaching.
Q. And have you held those positions the entire time you've been employed by the University of Chicago?
A. Yes.
Q. What's your educational background, Dr. Rando?
A. I have a BA in English and -- from Boston college and an MA and PhD from Northwestern University.
Q. What subject is your master's degree in?
A. My master's degree is in rhetoric and my PhD is in education.
Q. Where did you work just before coming to the University of Chicago?
A. Prior to coming to the University of Chicago, I worked at Yale University for 15 years.
Q. What did you do at Yale University?
A. Well, when I came there, I founded something called the Graduate Teaching Center which was in the graduate school of arts and sciences which later became the Yale Teaching Center in my last three years at Yale, because in addition to working with graduate students we were working with so many faculty it didn't make sense for us to be called a graduate teaching center anymore.
Q. What was the purpose of the Yale Center?
A. The purpose was to advance the skills of teaching among anyone who teaches at the University of Chicago.
Q. Is there an acronym typically associated with the Chicago Center for Teaching?
A. Yes. CCT which we can use that.
Q. The CCT?
A. The CCT.
Q. When you say it advances teaching, what do you mean by that specifically?
A. Well, a number of things. In some cases it can mean -- I mean, because teaching is advanced in a lot of different ways. Sometimes it means having access to the latest research on teaching and learning. Sometimes it means simply having a community of people to talk about what's going on in the classroom. Or sometimes it means being introduced to models of teaching that allow one to, say, reach students who you couldn't reach before. It also just involves the sharing of perspectives and best practices around everything from teaching seminars to designing courses. So that's what I mean when I say that.
Q. How long has the CCT been in existence?
A. Well, the CCT in its current name came into existence three years ago when I arrived. Prior to that there was a center called the Center for Teaching and Learning which I think had been around -- I don't know -- around 15 years. Yeah, 15.
Q. And where in the organizational structure of the University of Chicago does the CCT fall?
A. It falls in the provost office.
Q. At the time you were hired, did you have a mandate for the CCT or did you develop one?
A. I would say both in a way. At the time that I was hired and I was hired by two -- well, two people were very much involved in my hiring. One was a deputy provost, Debbie Nelson, and the other was the dean of the college. And basically what they told me is they wanted to really expand their efforts to support teaching on campus. So that was the mandate to start with. And then since then because it's my understanding that how one does that or what that
means is very campus or context dependent. Since then I think a deeper and more specific mandate has emerged.

(employer No. 33 was marked.)

Q. Let me show you, Dr. Rando, what has been marked employer No. 33.

A. Yes.

Q. Have you seen this document before?

A. Yes, I have.

Q. What is employer exhibit 33?

A. It seems to be a printout from the CCT website having to do with the mission.

Q. The mission of the CCT?

A. Correct.

Q. And did you draft this mission?

A. Yes. With my -- in collaboration with the rest of the other members of my staff.

Q. Does exhibit 33 appear accurate to the best of your knowledge, information and belief?

A. Yes.

Q. Is it a document kept in the ordinary course of business?

A. Yes.

Q. By the university of Chicago?

A. Yes.

MR. SALVATORE: We move it into evidence.

MS. AUERBACH: No objection.

THE HEARING OFFICER: Employer Exhibit 33 is received.

BY MR. SALVATORE:

Q. Dr. Rando, what do you understand the mission statement that you wrote to mean when it says "its aim is to promote teaching as a scholarly practice"?

A. Well, I think, you know, this in some ways is what I referred to before which is that -- it means a couple of things.

Number one, there is a literature on teaching and learning which, if attended to, can really enhance or widen or deepen one's ability to teach.

The other thing is that like other elements of scholarship which are often and by necessity the subject of conversation and debate and, you know, peer review for example, part of our work is to bring teaching out from behind closed doors and allow it to be more a part of scholarly life.

Lastly, like all scholarly work, it is best done in a process of iterative reflection, and it is not simply an element of just pure practice in other words.

So that's what I mean -- that's what we mean when we say making teaching part of scholarly practice.

Q. Grad students are eligible to participate at the CCT, correct?

A. Correct.

Q. And how does teaching as a scholarly practice impact grad students at the university?

A. That's a big question. From my perspective -- and this is true of graduate students and anyone who teaches frankly. It's that looking at teaching as scholarly practice. It's kind of a necessary part of developing as a scholar. You know, getting out of this modality of research versus teaching which -- and I think -- I just think -- I think it's a healthier and more productive scholarly academic stance to see -- to approach teaching with some of the same scholarly methods that one approaches research. I don't know if I answered your question.

Q. When you came to the University of Chicago three years ago, did you establish a model for the CCT in terms of how it would be executed?

A. Yeah.

Q. Tell us about that model.

A. Obviously I had been at Yale for 15 years. Also, by that time I was part of a group that had established quite a robust, what we call, an ivy-plus group, the directors of all the centers in the ivy league.

So in other words, I had access either through my own work or through the work of my colleagues to what is possible to do, but as I mentioned earlier, in my experience this kind of work is best done in conjunction with the culture of the place.

So in my first year there were some things that were already going on and that was good, but before I made any bold choices about how to add in all of this stuff, I was kind of all over campus and learning about it. What I came up with as a model for the campus is this -- and I should also say that I also chose to focus primarily on teaching by graduate students first and then -- and some work with faculty and then add the rest of the faculty work later which we're in the process of...
doing now. But the model for graduate teaching
that we came up with looked something -- I'll just
kind of -- it's pretty simple. To my mind it
mirrors the -- as closely as possible the teaching
experience -- the teaching experience of a lot of
graduate students.

So it's basically a five-stage
model which is orientation, fundamentals, skill
development, teaching your own class and launching,
all right? And so what I looked at in that first
year is what we were currently doing and where we
were doing a lot and then filling in where we were
doing less and trying to ultimately create a
program so that if you're a graduate student and
you're teaching, there is something there for you
every stage in the process.

Q. So let's just go through the stages real
quickly and give us two sentences about each one.
You said orientation. I assume that's orientation
to teaching is the first one?
A. Correct. Not orientation to the
University of Chicago. So basically, kind of,
helping or assisting graduate students in two
things.

One is making the transition from
student to teacher and the other is gaining some
knowledge about how the teaching works in different
disciplines and different divisions, how teaching
works. So that's orientation. Just a kind of
where am I.

Q. The second was developing fundamental
teaching skills?
A. That's right. To me, most places
don't -- I think this is a really important place
to focus, which is the first time you're actually
in the classroom. Not before you're in the
classroom but while you're in the classroom for the
first time and you're starting to have all these
observations of what it's like to have 12 students
or whatever. It's not something you can anticipate
and so what -- so that's where we focus on what we
call fundamentals.

Q. Number three was teaching advanced
skills. What does that mean specifically?
A. So for many graduate students they will
then TA a number of times and it's at this point
that folks have the basics down. Their confidence
is good, but there's still a lot more to learn,
learning about diversity and inclusion, learning
about effective lecturing and explaining, using
small groups, collaborative learning, techniques
for grading. All of these kinds of things that
there's a lot to learn about, so that's skill
development stage three.

Q. Stage four I think you said was learning
to teach your own course?
A. Yes. So for some graduate students,
certainly many more than was the case at Yale, they
have an opportunity to teach their own class.
So -- and this is another big transition to go from
being a TA to suddenly having your own class. And
there's a lot to be learned there too. So we
develop -- you know, I can talk more about it, but
we have a whole program for that.

Q. And the final, the fifth stage or the
fifth step was launching and I assume that's
launching from grad student into being a professor?
A. That's right. So -- I mean, ideally we
try to start talking about launching from the very
beginning simply because there's a lot of good
reflection to be done even from the very start, but
the truth of the matter is at some point graduate
students, some of them, go on the academic job
market, and in today's market that means developing
of materials that have to do with teaching and --
so we have a whole program that deals with that.
So that's it. Those are the five.

Q. Is this five-point model still in effect
at the CCT?
A. It is. It's one of the things that we
use. Not the only rubric that we use, but it's one
of the rubrics that we use when we are doing our
planning over the summer. We look back at the year
before and say, where are we doing a lot? Where
are we doing a little? And where are we doing
more?

(Employee No. 34 was marked.)

Q. And speaking of looking back over the
summer, I show you what's been marked as Exhibit
No. 34. Have you seen that document before?
A. Yes, I have.
Q. What is Exhibit Exhibit No. 34?
A. This is the Chicago Center for Teaching
Annual Report from last June, summer of 2016.

Q. Were you involved in the writing of this
document?
A. Yes, I was.
Q. And take a look at it. Is it complete
and accurate to the best of your knowledge,
information and belief?
### Page 757

<table>
<thead>
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<tr>
<td>1</td>
<td>A. To the best of my knowledge without going line by line this looks like it.</td>
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<td>2</td>
<td>Q. Is this a document that's kept in the ordinary course of business by the University of Chicago?</td>
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<td>A. Yes.</td>
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### Page 758

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<tr>
<td>1</td>
<td>The important thing is how this thing. You know, I would say for this report, again, which came out somewhere in the last year, if you look at the section on new opportunities which is on the first page under the overview, you know, these were the kind of the highlights and things that I'm happy to say have continued to be viable concerns and useful for primarily graduate students. So let me just talk about those a minute. The first one is the college teaching course -- course design in college teaching is the full name of the course. And, you know, in its short history, which I can now update you a bit, it's gone from 22 students in the fall -- 22 students in the fall and 22 students in the spring to this past spring we've expanded the course to 40 students and next year we're going to teach it three times, fall, winter and spring because every year it's highly oversubscribed. It seems to be meeting an important need in this sort of step forth about to teach your own class. So that was exciting then. It's even more exciting now. The fundamentals of teaching which were also started that year were made possible by the fact that earlier that year -- or the year before we had started a fellows program and it too had grown into a central part of what it means to be in the CCT. I'm going to talk about that a little bit more later. The last two things which I will just highlight. In that last summer we became part of a network which is known as the Scientific Summer Teaching Institute and -- which is an HHMI funded grant run out of Yale University.</td>
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### Page 759

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<tr>
<td>1</td>
<td>THE HEARING OFFICER: What does HHMI stand for?</td>
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<td>A. Howard Hughes Medical Institute.</td>
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### Page 760

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Dr. Rando, in my questioning I'm going to try to follow your five-point model. The CCT's course and program offerings, why don't we start with step one, the orientation to teaching.

Does the CCT offer a program called Teaching at Chicago?

A. Yes.

Q. What is that program?

A. Well, it is, in sum, an orientation to teaching for -- this is a program that we are continuing to refine. It'll be a little different next year, so I'm going to talk about what it was the last time we did it.

The last time we did it it's an orientation. It lasts two days. The first day is for people who are new TAs or interns or CAs and the second day is for people -- is an orientation for people who are teaching their own class for the first time, so lecturers and things of that nature.

As I mentioned before, the purpose is to help graduate students make the transition from student to teacher and give them a place to get their questions answered, because there's a lot of questions. So it basically consists of a couple of plenaries, plenary sessions with everyone together, some breakout sessions on kind of getting started in the classroom which are organized by division, and then the third thing -- the third thing is an opportunity -- we invite faculty members from every department and we always get -- and they come to have lunch with the new TAs in their department. So a little chance to find out what the local culture is and ask any other questions. And the last piece that we just added two years ago is an undergraduates panel where undergraduates talk about their experience with TAs and what has been useful for them. It's really orientation. I would say there's a slight training or skill development component but mostly it's about, you know, conceptual understanding and confidence and having a sense that, yeah, this is something that I can do.

Q. Now, that happens over two days?

A. Correct.

(Employer No. 35 was marked.)

Q. Let me show you what's been marked as Employer Exhibit Number 35. Have you seen that document before?

A. Yes.

Q. What is Employer Exhibit 35?
A. It seems to be a -- some kind of -- oh, a printout of the Teaching at Chicago page on the CCT website.

Q. Have you seen Exhibit 35?

Q. And does it look like a true and accurate document to the best of your knowledge, information and belief?
A. Yes.

Q. Is it a document that's kept in the ordinary course of business by the University of Chicago?
A. Yes.

MR. SALVATORE: We move Exhibit 35 into evidence.

MS. AUERBACH: No objection.

THE HEARING OFFICER: Employer Exhibit 35 is received.

BY MR. SALVATORE:
Q. Dr. Rando, let's go to step two. After orientation to teaching, step two of the CCT model is -- as I understand, to help develop the fundamental teaching skills of those that are participating?
A. Right.

Q. And are you familiar with something called the fundamentals of teaching workshop?
A. Yes.

Q. What is that?
A. It's actually what are they.

Q. Okay.
A. So every year, I guess this will be coming up the third year we did this. What they are is an opportunity for first time teachers to meet with peers as well as a facilitator who is a fellow in the CCT for a few weeks during the first few weeks of the class. I had mentioned this -- to me I think this is a very important moment in learning to teach. You're in the class for the first time. Things are happening. Students are doing things. And it's important to have a group to communicate with, ask questions of and explore ideas.

So we organize a series of these small groups based primarily on division. So we have fundamentals of teaching in STEM, fundamentals of teaching in social sciences, fundamentals in teaching -- you get it but then we also offer some fundamentals in departments that have large numbers of graduate students. And so we've had fundamentals of teaching in English and history and psychology.

Here again we're still -- we get feedback on these -- some of these little seminars and we're tweaking them and trying to figure out how best to do them but that's what they are.

(Employer No. 36 was marked.)

Q. Let me show you what's been marked as Employer 36 for identification. Have you seen this document before?
A. Yeah. This is definitely a printout of the CCT page on the fundamentals.

Q. From the website?
A. From the website. Thank you.

Q. Looking through it is this true and accurate to the best of your knowledge, information and belief?
A. Um-hum.

Q. And kept in the ordinary course of business by the University of Chicago?
A. Yes.

MR. SALVATORE: I move Exhibit 36 into evidence.

MS. AUERBACH: No objection.

THE HEARING OFFICER: Employer Exhibit 36 is received.

BY MR. SALVATORE:
Q. Are we now getting into step three of the CCT model?
A. Yeah, so developing skills.

Q. Teaching advanced skills?
A. Well, yeah. Yeah. That's right.

Learning and practicing and experimenting with advanced skills.

Q. What are the offerings of the CCT in this area?
A. Well, here it's -- right now it's more -- the offerings come from a lot of different places, okay? So I'll -- I'll just mention a few of them. Members of our full-time staff, for example, do workshops on things like -- so one topic might be diversity and inclusive teaching. That's one source of workshops on advanced skills.

Another source is that the fellows that I mentioned earlier, in addition to after in the fall when they led the fundamentals seminars, in the winter and spring they offer workshops or sometimes workshop series and these can take a number of forms. One is that they can be very
Q. Teaching your own class. I'm sorry.

A. Teaching your own class.

Q. That relates to your step four, learning to teach?

A. Which is the course that the CCT offers college teaching course.

Q. Website having to do with the course design and

A. It seems to be a printout from the CCT

Q. What is Exhibit 37?

A. Yes, I have.

Q. Let me show you what's been marked as (Employer No. 37 was marked.)

A. Yes.

Q. So let's go to step four which you described, learning to teach your own course. Are you familiar with the college teaching courses?

A. Yes.

Q. Exhibit 37. Have you seen that document before?

A. Correct.

Q. Has it been a popular course with graduate students?

A. Four.

Q. So let's talk about the course design in college teaching course offered by the CCT. What's its content essentially?

A. Well, the content -- so first of all, it's a quarter long course that meets two hours every Friday, plus people in the course meet in smaller groups almost like a section. Actually, like a section to work on things that are more disciplinary or at least divisional based, okay?

Q. So let's go step four which you've described, learning to teach your own course. Are you familiar with the college teaching courses?

A. Yes.

Q. What is Exhibit 37?

A. Yes, I have.

Q. What is Exhibit 37?

A. It seems to be a printout from the CCT website having to do with the course design and college teaching course.

Q. Which is the course that the CCT offers that relates to your step four, learning to teach?

A. Teaching your own class.

Q. Teaching your own class. I'm sorry.

A. No worries.

Q. You said this is from the website. Does this look accurate to the best of your knowledge, information and belief?

A. Yeah.

Q. Is it kept in the ordinary course of business by University of Chicago?

A. Yes.

MR. SALVATORE: We move it into evidence, Exhibit 37.

MS. AUERBACH: No objection.

THE HEARING OFFICER: Employer Exhibit 37 is received.

BY MR. SALVATORE:

Q. You say this is a course. Are students graded on a pass/fail scale basis?

A. Correct.

Q. How many times has the course been offered?

A. Four.

Q. Has it been a popular course with graduate students?

A. Well, yes. So each time it's been offered there's been a wait list and the wait list instead of getting smaller is getting larger. You...
Q. This isn't a required course for grad students?
A. No.
Q. Grad students volunteer to take it?
A. Yeah. Yeah. I mean, it's really helpful if you're about to teach your own class.
Q. Not only the content but just having, you know, this community of people who are trying to do the same thing you are and trying to be able to do course design with them, I think is pretty useful.
A. That's correct. I mean, the other thing that's nice is if you've done this, which means you've put all this time into teaching, now this is sitting on your certificate -- you put it on your student's transcript?
Q. What is it?
A. This seems to be a printout from the CCT website having to do with the certificate in college teaching.
Q. Flipping through it does it look like an accurate printout from the website to the best of your knowledge, information and belief?
A. Yes.
Q. And kept in the ordinary course of business by the University of Chicago?
A. Yes.
MR. SALVATORE: We move Exhibit 38 into evidence.
MS. AUERBACH: No objection.
THE HEARING OFFICER: Employer Exhibit No. 38. I ask you to take a look.
Have you seen it before?
A. Yes.
Q. What is it?
A. This seems to be a printout from the CCT website having to do with the certificate in college teaching.
Q. Flipping through it does it look like an accurate printout from the website to the best of your knowledge, information and belief?
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A. Yes.
Q. And kept in the ordinary course of business by the University of Chicago?
Q. It's a conversation starter, on a job interview?
A. That's well put. It's a conversation starter on a topic that graduate students can speak about well and that people want to know about.

Q. Have you done a version of this college teaching certificate for language instructors?
A. Well, that's an interesting question because I don't know if -- the language fields have a long and really interesting history in thinking about pedagogy. The whole second field of language is impressive for reasons that I probably don't have to explain. Just the process of teaching languages is quite complicated and involved.

So -- but at the time there was no certificate in teaching language so the director of the Chicago Language Center came to us and said, listen, can we combine forces here. We're doing some things -- because they do a lot over there -- and you do some things and let's put a program together and create a college teaching certificate so the director of the Chicago Language Center came to us and said, listen, can we combine forces here. We're doing some things -- because they do a lot over there -- and you do some things and let's put a program together and create a college teaching certificate in language. That was -- I think that was a nice move on our part.

Q. What does it describe?
A. It's a printout from the CCT website having to do with a teaching consultants program, or what we sometimes call the TC program.

Q. Tell us what the TC program is?
A. Well, the TC program is interesting. It actually predates me. It was a big part of the former center, but what it is, it's a program that -- in which we recruit and train advanced graduate students, people who are interested in teaching, who maybe want to keep their hand in. Maybe they're not teaching anymore or just want to get back, you know, to be part of that. So it's a program that we recruit and train advanced graduate students who then give individual consultation and observation to other graduate students. Usually people who are more junior than they are, but not always actually. So that's what it is.

Q. About how many of those teaching consultations go on in an average year?
A. I think -- oh, shoot. I don't remember.
Q. Well, don't guess.
A. It might even be in the data somewhere, but it's a couple hundred, I think.
Q. How many teaching consultants are there approximately?
A. Right now we have about 20, so they're kind of on call. They get paid every time they do a consultation.

MR. SALVATORE: I don't believe I moved Exhibit 40 into evidence.

MS. AUERBACH: No objection.

THE HEARING OFFICER: Employer Exhibit 40 is received.

BY MR. SALVATORE:
Q. Are you familiar, Dr. Rando, with the CCT fellows program?
A. Yes.

(Q employer No. 41 was marked.)
Q. Let me show you what's been marked as Exhibit 41. Have you seen Exhibit 41 before?
A. Yes.
Q. What is it?
A. It is a printout from the web page -- from the CCT web page about the CCT fellows program.
Q. Tell us what the CCT fellows program is, please.
A. So this is new as of my coming here. You know, it's funny. It's one of the things that...
I did bring with me from Yale because it was such -- it was a really effective program there and I think it's starting to become that here, too. So the fellows -- so each spring we put out a call to graduate students to become a CCT fellow which means for a year, being a part of the CCT and being a part of this group of fellows of which there are 15 or 16 and doing a couple of things. Number one is being trained. Getting more pedagogical training, getting more training in facilitation and running workshops and discussion leading and then using those skills and that training to run workshops or design programs for other graduate students on campus, particularly those in your division or your department.

So to me being a CCT fellow is, you know -- what we're hoping is that it is kind of a capstone experience for those graduate students at Chicago who have really been involved in sort of their own pedagogical development, and you know, this is a place for them -- for people in that situation to really get some great practice and some great experience. So that's what it is.

Q. Does Exhibit 41 explain that?

A. I think so.

Q. This comes off the website?

A. Yes.

Q. It's accurate to the best of your knowledge and belief?

A. Yes.

Q. Kept in the ordinary course of business by the University of Chicago?

A. Yes.

MR. SALVATORE: We move Exhibit 41 into evidence.

MS. AUERBACH: No objection.

THE HEARING OFFICER: Employer Exhibit 41 is received.

BY MR. SALVATORE:

Q. So Dr. Rando, I think we're up to step a five of the CCT model, launching into the academic world. Does the CCT get involved in what you describe as launching? What do you mean by that?

A. So, you know -- yes. The answer to your question is, yes, we do. And as I mentioned earlier, in today's academic market applying for jobs, getting jobs, getting ready for interviews, academic interviews means preparing not only yourself but preparing documents and documentation the same way.

So today instead of simply needing a CV and a writing sample you need a CV -- in many cases a CV, a writing sample, a statement of teaching and possibly you might be asked to submit a formal portfolio -- teaching portfolio.

So we offer, every quarter, seminars and workshops on teaching portfolios. I think it might come up in the course design course a little bit, but I'm not sure. It's interesting because this idea of launching kind of permeates everything we do because when you first start teaching, it's important to know that some day, three, four years down the line this is what you're going to be asked to do. So we do these workshops. We do a lot of workshops on teaching portfolios within departments. We get asked to come in and talk about it.

And the other thing is a lot of one-on-one consultations. So members of my staff do teaching statement review and portfolio review and it's a big part of what we do.

Q. So a grad student who is going to graduate and go out in the job market will come in and have someone on your staff review their materials and help them get ready to go out into the market?

A. Exactly. I mean, the first step is informing people what are the materials? What does it even mean to put together a portfolio? What goes in? What goes out? How do you do it? And then once the person has a draft, we start working with drafts, yeah.

Q. Dr. Rando, it seems like the CCT is involved in the entire life cycle of teaching pedagogy to grad students.

How is that working out, in your view, during the three years you've been at the University of Chicago?

A. Well, you know, that's kind of how I designed it. What we're trying to do is design a program that is useful for graduate student teachers at whatever stage of teaching they are. So I would say that after, you know, we're starting year four -- I'm starting year four. I think we're -- I think it's really starting to take shape, you know. We get it and how things are, and I think little by little the model is starting to
become more apparent not only to graduate students but to faculty as well. So that's kind of what we're up to.

MR. SALVATORE: Thank you, Dr. Rando. I have no further questions.

THE WITNESS: All right. Thank you.

MS. AUERBACH: Can I have a few minutes off the record?

THE HEARING OFFICER: Sure. Off the record.

(Whereupon, a break was taken, after which the following proceedings were had:)

THE HEARING OFFICER: On the record. Petitioner can proceed with questions for the witness.

CROSS-EXAMINATION

BY MS. AUERBACH:

Q. Dr. Rando, of all of the programs offered by CCT that you've testified to, are any of those programs things that grad students are required to take?

A. Not by us. We don't require things.

Q. Are any of them grad students -- do you know if grad students are required by any of their department programs to take any of the programs?

A. Some departments do.

Q. And some departments don't?

A. Correct.

Q. Is it true that most departments do not require their grad students to go to CCT?

A. I don't know about that.

Q. Do you know which departments do and don't?

A. I don't.

Q. CCT offers programs for grad students and tech members?

A. Correct.

Q. Post-docs are people who already have their PhDs who are employed by the university?

A. Correct. Yes.

Q. Are there some programs that CCT offers that are geared for faculty members rather than for grad students and post-docs?

MR. SALVATORE: Objection. What's the relevance to this?

MS. AUERBACH: The relevance that the University provides teaching training not just for grad students but for faculty to benefit the university.

THE HEARING OFFICER: In the Employer's exhibit there is some mention to faculty being offered some training, and I would like to know more about that.

So you can answer, Dr. Rando.

BY THE WITNESS:

A. Yes.

BY MS. AUERBACH:

Q. What types of programs does CCT offer that are very specifically for faculty members and not for grad students?

MR. SALVATORE: Objection. Now we're getting beyond the scope of direct. The direct was focused on the grad students. I specifically didn't go into the faculty offerings in order to expedite this proceeding. This proceeding is -- the petitioner wants to expedite it yet wants to go into discussion of faculty offerings. We stipulate that the CCT offers faculty courses. Period.

MS. AUERBACH: This is an investigatory hearing so scope to cross and direct doesn't strictly apply. It's the Union's position that the good quality teaching advances the interest of the university. It's relevant that this center does not just offer training for grad students but also for faculty as part of its purpose.

MR. SALVATORE: Okay. That's the Union's argument. That's argument. That's not for this witness. We've just stipulated that CCT offers programs for faculty. Period.

MS. AUERBACH: Well, I think it's relevant to what extent it is similar to what is offered to grad students and the purpose why they're offered. We don't agreed that they're offered just to benefit the graduate students.

THE HEARING OFFICER: I'd like to know the difference between the offerings for graduate students as opposed to faculty. You can ask your question again.

BY MS. AUERBACH:

Q. So what programs does CCT offer that are specifically geared towards faculty rather than graduate students?

A. So let me mention two in particular. So in the humanities division -- and I think this appears in the annual report. Faculty members on the tenure track, new hires, as well as those who are in their third or fourth year, have been reappointed. There's a paragraph in the letter...
that says they will be contacted by the CCT to talk about their teaching. And that's all tenure track faculty in the humanities. And so that has been going on for two years. And someone in my senior staff contacts each of these folks and often it results in an observation like the ITCs that we do for the graduate students, a consultation, an observation and then a post-observation meeting.

So there's that.

The HHMI summer institute that I just mentioned is also a faculty program. It isn't primarily designed for graduate students. Occasionally graduate students will come to it, but it is a faculty program. So those are two.

I mentioned a third, which I did mention in my testimony, which is that when we work with the core, we are working with faculty, both tenure and track lecturers, post-docs, and so in that case everyone is going to the same thing.

Q. What do you do when you do work with the core?
A. In this case it's the humanities and social sciences core. Both.
Q. So what work do you do with the humanities and social sciences? What does CCT offer with respect to the core in social sciences and humanities?

MR. SALVATORE: Objection.

THE HEARING OFFICER: You can go ahead and answer, Dr. Rando.

BY THE WITNESS:
A. What we have offered for the past two years and which we actually just planned again for next is a more than half-day orientation to teaching in the core. And what we do there for everyone who attends which is faculty, post-docs and graduate students, is try to open up a conversation about what the core is, what are the core learning goals, what are some of the challenges, for example, teaching first-year students, teaching -- when you teach in the core, you're often teaching material that is not your specialty by design. How do you do that? Why do we do that? What is the purpose of it? That's what that orientation is.

In addition, as a result of that orientation, we will be invited to certain core courses. So one of my colleagues in the CCT does -- every quarter does sessions in one -- two sessions in one of the core is called PIR. That's the name of the core and --

THE HEARING OFFICER: What does that stand for?

BY THE WITNESS:

So the point is that every quarter he goes in and has conversations with the folks who are teaching in that core course. So that's the work that we do with the core. Again, it's just getting started. And, in fact, we just had a meeting about expanding what we're doing in PIR, power, identity and resistance to other cores in humanities and social sciences.

Q. Is that work you do with the core intended to improve the quality of teaching in the core classes?
A. It's designed to help the people who are teaching in it. Teaching in the core is not easy. It's not typical and it can be hard to do. It can
THE HEARING OFFICER: Usually -- the testimony.

MS. AUERBACH: It highly relates to his testifying to it, then there's no reason that he should be asked that on cross-examination. She's beyond the scope of what he testified to. She's asking the same questions of every witness, but this witness hasn't testified to that. So, you know, there has to be some fundamental fairness here that if he is not involved in that and not testifying to it, then there's no reason that he should be asked that on cross-examination.

MS. AUERBACH: It highly relates to his testimony.

THE HEARING OFFICER: Usually -- the witnesses that we have had so far have made significant reference to the CCT, and it's important within the university, so I think the answer to his question -- to this particular question is relevant.

Can you ask the question again?

MS. AUERBACH: Can you read back the question?

(Whereupon, the record was read as requested.)

MR. SALVATORE: Note my continuing objection.

THE HEARING OFFICER: Overruled. You can answer, Dr. Rando.

BY THE WITNESS:

A. There is a strong positive correlation between people being good teachers and their students having a good learning experience. The two are connected.

Q. The graduate fellows are paid to be graduate fellows at the CCT?

A. They get a stipend, yes.

Q. And they teach in programs for graduate students?

A. The fellows create and run workshops for other graduate students, that's right.

Q. And so in those workshops the graduate students who enroll in the workshops are being trained not by faculty members but by their peer graduate students, correct?

A. Correct.

Q. Most of the programs that CCT offers for graduate students are also offered for post-docs, correct?

A. They are invited to attend.

Q. The Summer Institute on STEM Teaching, was that for faculty or was that for graduate students?

A. That is primarily a faculty institute. Occasionally, as I said before, a graduate student -- it's -- occasionally a graduate student will attend.

Q. In the Teaching at Chicago two-day orientation, what is the purpose of having an undergraduate panel as a component of that program?

A. Well, undergraduates are a big part of the environment when you're teaching undergraduates. So the purpose of that panel is to begin to -- and sometimes if you've been working on your own thesis for a couple of years and you're about to start teaching, you haven't really seen an undergraduate in a few years. The purpose of having them there is just to fill out the orientation, to let graduate students begin to hear from the constituency that they're about to teach. It's -- starting teaching can be scary if you've never done it, even if you have started teaching. And sometimes it's just orienting and calming to actually see some of the undergraduates and hear that, in fact, the things that help them learn are the things that you're intending to do. So it's just designed to help with, that first day, build confidence.

Q. The Teaching in Chicago conference is not required of graduate students?

MR. SALVATORE: Objection. I'm not sure what the Teaching at Chicago conference is.

BY THE WITNESS: It's Teaching at Chicago.

Same thing. Playing with the name. Sorry.

BY THE WITNESS:

A. I don't know. Again, it's the same thing. I don't know what departments do around that. I don't know.

BY MS. AUERBACH:

Q. Employer Exhibit 36 the CCT page on
Q. Does it include some programs that will be offered next year for the first time?
A. Yeah. The fundamentals that we offer each year are determined by the fellows that we have, how things went the year before, you know, attendance and new ideas. In fact, we are going to frame some of the fundamentals differently to see if we can make them relevant for more students next year. We do that every year.

Q. And the program on course design and college teaching, that's not required for grad students to take that?
A. Not to my knowledge. But it -- I don't know.

Q. So the certificate in college teaching is not required of college students?
A. The CCT isn't in the requirement business. We don't have that capacity so I don't know.

Q. Do you have any knowledge as to whether any graduate students are required by their divisions or departments to obtain that certificate?
A. I'm not sure.

Q. The second language pedagogy program, that's given to graduate students and post-docs? That's in exhibit Employer Exhibit 39.
A. Yes. This is a new program.

Q. Has it been offered yet?
A. Yeah, I think so. I think it's offered this year. It's made available to graduate students who are teaching language, teaching and studying language.

Q. I mean, I'm looking at the second page and it says graduate students and post-docs. So is it also offered to post-docs?
A. Post-docs can take advantage of it. We don't -- it's not a separate offering. It's not like one day for post-docs, one day for graduate students. They can participate if they choose to.

Q. And you don't have any knowledge that any departments or divisions require their graduate students to participate in this program, do you?
A. I don't know.

MS. AUERBACH: Yes.

BY MS. AUERBACH:
Q. And you don't have any knowledge that any graduate students are required, by your division, the programs, or departments, to take the -- participate in the teaching consultants program; is that right?
A. That's not correct.

Q. Do some departments require that?
A. No, no. To become a TC?

Q. No. I'm saying do any departments require that their graduate students become teaching consultants?
A. I don't know.

Q. Do any departments require that their graduate students use the teaching consultants service, the program?
A. I don't know.

Q. And the teaching consultants are graduate students?
A. Correct.

Q. And they consult with other graduate students?
A. Correct.

Q. In that case it's graduate students being consulted by their peers?
A. By more experienced trained peers, yes. In the literature they're called near peers. FYI.

Q. If graduate students who are teaching assistants do a good job as teaching assistants, that benefits the faculty members whose courses they're teaching assistants in; is that correct?
MR. SALVATORE: I'm sorry. I couldn't hear that question.

(Whereupon, the record was read as requested.)

MR. SALVATORE: Objection. This is again beyond the scope of the direct material. Also, he doesn't have teaching assistants. He runs a teaching
THE HEARING OFFICER: He can testify as to his knowledge if he did offer training to individuals.

As far as you know, Dr. Rando.

BY THE WITNESS:

A. It's so general and broad. I don't know.

MS. AUERBACH: I don't have any other questions.

THE HEARING OFFICER: I just have a few.

BY THE HEARING OFFICER:

Q. For the half-day orientation that you mentioned for teaching in the core, how often is that offered in an academic year?

A. So far we've offered it once per year.

Q. Is that only one session per year? Is there multiple going at the same time?

A. No. Last year it was one session. But, yes, next year we're going to break it up into two sessions because it's getting so big.

Q. Do you know how many attendees there were?

A. About 60.

Q. Of the 60 that attended, do you know approximately how many were graduate students?

A. I don't.

Q. For the Teaching at Chicago two-day you had mentioned, who conducts this orientation?

A. We do. The CCT.

Q. So it would be the staff of the CCT?

A. Correct. The staff run it.

Q. So you had mentioned that the course design training offered by the CCT has been offered four times. Over what time period is that?

A. Two years. Twice a year for two years.

Q. You had talked about how the CCT offers one-on-one consultation; is that accurate?

A. We do.

Q. Are these consultations conducted by the teaching consultants?

A. They are pretty much everyone involved in the CCT. At some point there's a one-on-one consultation. The teaching consultants, that's their primary role. But I -- so, yeah.

Q. Correct me if I'm wrong, but I believe you said that the teaching consultants are paid per consultation?

A. Correct.

Q. Do you know approximately how many consultations the single consultant may complete in an academic quarter?

A. I don't. I don't know how many they might complete. I don't. I mean -- no.

Q. Do you know what the rate is for how much the teaching consultant get paid for a single consultation?

A. Yes.

Q. What is that?

A. It's -- I don't know.

THE HEARING OFFICER: I think that's all of my questions.

Does the Employer Counsel have any further questions?

MR. SALVATORE: No, no questions.

THE HEARING OFFICER: Petitioner?

MS. AUERBACH: No.

THE HEARING OFFICER: Dr. Rando, you are excused.

THE WITNESS: Thank you.

MR. SALVATORE: Thank you, Bill.

THE HEARING OFFICER: With that it is 5:04 at the moment. If there's no objection, we'll adjourn for the day and resume tomorrow morning at 9:00 a.m. all right?

Off the record.

(Thereupon, at 5:04 p.m., the hearing was continued, to resume at 9:00 a.m., Wednesday, May 24, 2017.)
CERTIFICATION

This is to certify that the attached proceedings before the National Labor Relations Board (NLRB), Region 13, in the matter of The University of Chicago and Graduate Students United, Case No. 13-RC-198325, at Chicago, Illinois, on May 23, 2017, was held according to the record, and that this is the original, complete, and true and accurate transcript that has been compared to the recording, at the hearing, that the exhibits are complete and no exhibits received in evidence or in the rejected exhibit files are missing.

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