

A MEETING OF
THE UNIVERSITY FACULTY SENATE
WEDNESDAY, OCTOBER 9, 2013

1. CALL TO ORDER

Dean of the Faculty, Joseph Burns: "The October faculty senate meeting is about to start. We have a different interim speaker. It's Ann Lemley, a long-time former chair of textiles and apparels, former chair of the EPC Committee, I think, of the senate, and she will be leading us today."

Interim Speaker, Professor Ann Lemley: "Thank you, Dean Burns. The meeting is called to order. Just some quick reminders: No photos, tape recorders allowed. Please also turn off your cell phones -- I just did that -- so we'd appreciate that. When we have discussion, please identify yourself and your department and wait until you have the microphone. I think that's fairly important.

"I will ask for comments from senators first and get through the senators, and then open the floor to other comments. No senator will be speaking twice before others are given an opportunity. So we want the folks who are going to vote to for sure get their points across, but we want to make sure that other people do also. We'll allow two minutes per speaker, and we also do not have any Good and Welfare speakers for today; so therefore, we will allow the provost to go over for the discussion of the provost's topics today, to go slightly longer. So the first item on the agenda is the dean's report, and Joe Burns will take care of that."

2. REPORT OF THE DEAN OF THE FACULTY, JOSEPH BURNS

Dean Burns: "As normal, we have food supplied by some part of the university. Today we are hearing from the Department of Horticulture, cider and apples from the orchard. Always great to get that stuff, and it's always excellent."

"We are going to continue our practice of introducing ourselves to the persons around us, just so that, you know, we get to know one another and we start to think of ourselves as a community. So take 30 seconds or something and look around. If there's anyone you don't know, tell them who you are.

"Okay, we can't have too much fun. So if you remember, we were trying to change the senate procedures a little bit, and some of the things have been suggested and we will be carrying out for the first time today will be to -- in the past, I have reviewed the agenda. I won't review the agenda today.

“We have moved to some of the more routine matters, making the matters for consent approval. They have been sent out to the senators. And we have heard from no one, so they will be approved by a single vote. And also, it's been suggested that senators should report back to their department, so we get better flow of information. Brian Chabot showed me an excellent one paragraph of what happened at the senate. That's the way he handles it. Looks like a great idea.

“Also, when we have resolutions run in the senate, the UFC will try to provide a pro and con on each of the issues in order to try to get some discussion going by e-mail before the meetings, and then after the meetings, and look for comments on the faculty web site. So those are a couple of the changes.

“We're supposed to have our UFC report today; but instead, to save time, I'm going to give that myself rather than hear from a UFC person. Those are the modified senate procedures, such as we have them today.

“I also wanted to tell you a bit about committee activities during the past month. As I mentioned at the last meeting, there is a divestment resolution that came to us, asking for a divestment of Cornell's holdings in fossil fuel stocks that has now been discussed at the FPC, Financial Policy Committee, along with the four members of the proposers of that resolution have met with the FPC at the same time. The university investment officer came, the chief investment officer, and they had a conversation, a very cordial conversation with lots of information going back and forth. And there will be almost certainly another resolution, but it will be a different resolution than the one that we had originally seen. So that seemed to work well.

“The Distance Learning Committee continues to be very active. As you know, the provost supplied some funds in order to allow requests for proposals that were sent out a couple of weeks ago, asking for suggestions for new MOOCs to be given in the following academic year.

“There was also a request for proposals on smaller, preliminary versions of distance learning courses; and then third, for innovations in distance learning. It appears that committee has been very active. Whether or not we will be able to report out by the December 1 deadline that we have in the charge in the committee is yet to be determined. We will keep you informed of its progress.

"I said I would say a few words about federal shutdown effects at Cornell. There's been some concern from graduate students and some principal investigators on the effects of the dysfunctional legislature. You see what happens when you have people that can't work together. A dysfunctional legislature has meant that the federal funds are not appearing here. And at present, there doesn't seem to be any great problem. The university will provide, assuming that the funds will eventually appear, will be able to continue research support and support for graduate students and so forth. If the funding in the federal agencies gets delayed for an extensive time, then things might get bad.

"The final thing is that we had a meeting with the president -- last UFC meeting, the president and provost was supposed to appear, but he decided to fall down instead and break his ankle, and so he did not appear. And I wanted to summarize that discussion for you.

"The president will be coming here at the November meeting in order to discuss this issue, but the main issue that he discussed with the UFC was he felt that there is a train wreck or two coming down. The main train wreck everybody can maybe see in front is the decrease in research support from the federal agencies, the drop in the amount of funds that we get from the state agencies, concerns about increasing tuition, concerns about federal student loan problems, things like that.

"The issue is there may be less funds coming to Cornell, and yet many of our faculty, all of us would love to have our lives continue much like they are, with good federal support for research, support for our labs, for our technicians, for our graduate students. And the president sees there's a very good chance that may change in five years. Those prospects may not be true in five or ten years, and he had the feeling that many of the faculty were blindly unaware of this, and that they would be caught unaware and then suddenly there would be a crisis. And he felt that it would be a good idea for the faculty to start to have discussions in small groups, discussions that then would allow them -- small groups centered around disciplines that would allow them to say how their discipline would deal with a 10% or 20% cut in the operating budget of the university. So the UFC asked that when he come next month to speak to us, that that be the major theme of his presentation.

"So that's my report. We have a few minutes, if anyone wants to ask questions or make comments on that. Okay, I'll move on."

Speaker Lemley: "As was just discussed, we're going to change the procedure, preferably for the future here; and rather than looking at each of these three issues individually, we're going to look at them as entirely. So we will be doing this by a consent vote of the body.

"The first is approval of the minutes from the [September 11th meeting](#). The second is report from the [Nominations and Elections Committee](#), and the third is the routine matters from Academic Programs and Policies. A [clinical professor](#) requests [two dual degree promise programs](#) that are bridging human ecology and policy analysis and management. So I call for a motion that we consent to these three items.

"Second?

"All in favor? Opposed? Abstentions?

"Okay, so that has been taken care of. And now we'll move on to the first report from a committee, and this will be the Committee on Athletics and Physical Education, and Frank Rossi is the chair of the committee.

3. [REPORT](#) FROM THE COMMITTEE ON ATHLETICS AND PHYSICAL EDUCATION

Professor Frank Rossi, Department of Horticulture and Chair, Committee on Athletics and Physical Education: "Thank you. Good afternoon. Thanks for having me. Joe, I appreciate the opportunity to present. We have been fairly active with what we call FACAPE, the Faculty Advisory Committee On Athletics and Phys Ed. I'm in the Department of Horticulture.

"Not sure the last time that this body heard from this committee. I have been on the committee for five years. I am entering my second year as chair. Just want to give some updates.

"So you understand what we do, we advise the athletic department in their programs to support and complement the educational objectives of the university. Nothing fancy there, but I can tell you wholeheartedly that after all these years of working with Andy and now Sarah at the helm of the academic liaison role, I can tell you there's a real culture of seeing the value and adhering to the highest standards that we, as Cornell faculty, believes they should.

"There's a picture of Andy, if you don't see his face around everywhere. He's a wonderfully pleasant guy to work for; again, believes and sets a culture in a department that does adhere to the academic requirements that we believe in. And also they win a lot, which makes everybody happy.

"We consult with the athletic director. I spend a lot of time doing that -- so does the committee -- to ensure that our programs, intercollegiate, the Phys Ed, the intramural and the rec program -- those make up the part of the athletic department -- are of the highest quality, and we do that through these four measures. I bold the ones that we spend a fair amount of time working on: Admissions, academic performance of student athletes, and I'll go into that a little more.

"I, personally, in the years that I have been involved, other than the self-study and the recertification from several years ago that Rosemary Avery was involved extensively in helping with that. We do a lot with guidelines, leaves and absences -- and I'll talk to you about that. And then, of course, the Phys Ed requirement. So we usually have to spend a fair amount of time doing that. We have a subcommittee that addresses that.

"Many of you see this form. Who has seen this form this year, I hope? Have athletes in your class; they should be providing you with these leave forms that have my signature on it. I look at every single one of them. We have very strong policies on the number of days these teams are allowed to miss: Five for a one-semester sport, eight for a two-semester sport.

"I can tell you, from the coaches and captains and athletes that I interact with, they tend to avert most of their problems with this, if they talk to you up front about it. If you know you have athletes in your class and you know you're paying attention enough to know they are going to be gone for something and you don't see this, that's the kind of problem that gets to be bigger problems when they feel like oh, I have to go and you have to excuse me. So that's one issue.

"The other issue is we have to be really careful about that 4:30 to 7:30 time period. That is a time period that is reserved to not have classes and activities. Now, of course, there's going to be exams from time to time; but we hope that the athlete and the faculty member can communicate to make sure that's done smoothly, adhering to the highest standard that you believe it should adhere to and the student still held accountable for passing that thing.

"The other part of the work we do is making sure we have strong academic advisement. In just my year and a half of being chair now, that's where I've spent a lot of my time, both on the leave policy and making sure we are doing the best we can with the team advisors. And I'll talk about that in a second.

"We have not done much in our committee with the seminars or meetings with captains. I've met with a bunch of captains over time, but I can't say we're really sort of fulfilling those to the level I want to; but I have to tell you, I think the academic advisement system, the team academic advisement system was in quite a disarray when I took the chairmanship recently, so we've spent a lot of time getting that working.

"I have been pleased to work with people like Dale Grossman, and Rosemary as well have been past chairs and members of this committee that helped a lot with that. And also procedures for working within individual academic problem cases. We want to deal with more of that.

"We just completely redid the team faculty advisor guide. Do we have any team faculty advisors on the senate as well? What sport? Lacrosse. Excellent. So it's -- of course these are the people who said, you know, I want to be more involved with these student athletes, I want to be more involved in making sure that they are students first, athletes second.

"I can tell you these kids really need as much support, and we try to do as much as we can to surround them; at the same time, hold them to the same standard we hold every other student. That has been my joy to work with one of our former athletes Sarah Wattenberg, assistant director. Her job is student services, so she's meeting with students constantly, looking at grade points.

"I can tell you that the level of concern that the athletic department has when they see students not performing well, when they hear from us that we don't see them, when they hear from the college that things aren't going well, they jump right all over these kids. It starts with the coach, and it should start with the coach. When the coach really isn't setting that tone, that's where we see we have problems. And we have very few of those problems, at least from my perspective, on the majority of our teams; but we do have high-profile, really big, really successful high-performing teams where we have to be very careful about making sure we're still adhering to standards that well exceed what the NCAA requires. To be honest, most of us would laugh at what we think the NCAA

finds to be acceptable, and we would never think that would even be basically acceptable here at Cornell.

"So with that, I'm going to open it up. The chair asked me I made sure there was time for questions. I want to get my son to his soccer game in Lansing. I would like to take questions, if there are any matters concerning this issue."

Speaker Lemley: "Thank you, Frank. We'll start with senators. Are there any questions for Frank from senators first? Yes."

Associate Professor Debbie Cherney, Department of Animal Science: "It's more of a comment, but I think when you want to schedule like an exam during that 4:30 to 7:30, is it a policy that we actually have to go through Student Services and get that approved?"

Professor Rossi: "I don't know. Did everybody hear the question? I don't know about how you have to get it approved."

Professor Cherney: "I think I had to do that. So that helps keep things on the up and up for all of us."

Professor Rossi: "We have to apply to be able to do a test at that time? Which then -- that's because we want to make sure that time's free for the students."

Speaker Lemley: "Other questions from senators? Questions from anyone else?"

"I have explored hazing with the administration of the athletic department, and I here's what I can tell you. As well as the freshmen orientation commitment we have anti-hazing, which comes through and through in the freshmen orientation for just freshmen, there's an ongoing hazing training program, which was in place before this particular incident occurred. So obviously, we're going to keep hounding on that; but at the same time, there is, I would say, significant interventions underway with teams where we've identified this has been a problem or could be a problem in the culture of the way the team behaves. And that's just the nature of athletics, like it would be in a fraternity or any other collective group of students where you have a hierarchy.

"So we are concerned about it. Any time anything makes ESPN that's not telling how well we did, you can imagine it gets everybody concerned. So I believe that

and can even outline sort of the system that's in place that continue to prevent this, but I will just really stress that our regular interaction with these students and understanding what they are going through in their team sport and finding out that culture is really where that emanates from, and we got to keep doing the training and keep reminding the coaches and keep reminding the athletes the seriousness of this."

Professor Risa Lieberwitz, School of Industrial and Labor Relations: "I was just thinking about this because of the "Frontline" program that was on last night about brain injuries in football, and I wondered if your committee gets involved at all in the health issues that are part of, you know, certain sports like football. And I'm sure there are other things in other sports, but I wonder if you could comment on that."

Professor Rossi: "Not at all. We stay focused on the academic stuff. I can tell you as a turf grass scientist what I could tell you about collisions and problems with athletics, but not relative to this committee, no. Other question?"

Professor Kathryn March: "Is there anything we should be aware of that would be coming down with regard to following up on the hazing question, the wrestler who's coming to trial for the rape charges last spring?"

Professor Rossi: "I have absolutely no idea. I'm sorry. We don't get involved in those sorts of things. The hazing thing I asked, because Joe said there would be questions; but other than that, our commitment is to making sure those athletes are supported academically. Thank you very much."

Speaker Lemley: "Thank you, Frank. We are going to move on to a presentation from the Committee On Academic Programs and Policies by Tom Cleland."

4. [REPORT](#) FROM THE ACADEMIC AND PROGRAM POLICIES COMMITTEE

Professor Thomas Cleland, Department of Psychology and Chair, Academic and Policies Committee: "Hi, folks. I'm Thom Cleland. I was asked by Joe to give sort of an overview of what CAPP does, and more specifically what CAPP has done over the last couple of years for both label and kind of off-label issues, as well as also to bring up a couple of issues that have arisen with regard to that mandate and some uncertainties that we have, and like to request senate guidance on how to proceed."

“Particularly, one of the issues that came up is regarding Cornell NYC Tech and our involvement in that on behalf of the senate, so let me just take you through it. Ask questions any time, but I'll pause a couple times during it for general questions.

This first slide is really kind of our on-label work. Our original charter is about reviewing academic programs and policies that fall under the jurisdiction of the senate, which essentially means those that extend between Cornell units. So things entirely within the arts college or within the graduate school we don't see, but joint ventures between units come to us. And I see our task as largely being ensuring that governance conflicts don't arise and that it's a system that will work well.

“Among these, some of the less routine ones have been looking at implementations of eCornell, most recently May 2012 for distance learning. We've processed now three applications by units for use of the clinical professor title that this body authorized originally in 2002, but didn't begin being implemented until 2011. Now the vet college, the Johnson and the hotel school all have established clinical professors, the latter actually just now, a few minutes ago, in the routine items that were presented.

“One other thing of some note, it's a little esoteric, but it is significant is that CAPP no longer reviews programs that fall entirely within the purview of the graduate school. This is consistent with our treatment of other colleges, but there was a historical blip that had us redundantly reviewing things that came through the general committee. So that's no longer the case.

“A fair amount of our work in the past two or three years, since I have been chair really, has been sort of off-label. In these cases, we have been essentially asked by various entities, including the original pre-implementation Cornell Tech planning group, the MOOC Advisory Committee before the Distance Learning Committee took it over and as an advisory committee to another committee regarding the school of public policy discussions.

“In each of these cases, we've served essentially as an existing committee with representation broadly across the university to serve as a sounding board and advice-giving unit that would spare the difficulty and other problems of pulling up ad hoc committees all the time. So in other words, a lot of these cases we didn't do a great deal except advise in a couple of particular meetings, because Dr. Avery's committee, composed of faculty interested in all the developmental

details of this, are charged with forming this and eventually implementing it. And we were a sounding board for broad-based representation and input from the rest of the university on behalf of this larger body here.

"If there are general questions about these, now is a good time. I understood from Kent that there are a few questions floating around about certain issues regarding Cornell Tech. CAPP has been -- before I go into that, any questions about simpler things I have mentioned so far? Reasonably routine sounding board.

"Before we go to the next slide, I will point out that we've been involved on behalf of the senate and have presented each step of this to the senate since early 2011, when we first engaged in earnest with the proposal by Mayor Bloomberg for applications to run a tech campus in New York City. So before we actually won the competition in December of 2011, there were a couple of presentations that we made here. Afterwards, CAPP really didn't do the presenting so much, because of course at that point, Dan Huttenlocher, Kent Fuchs, the actual design teams were the ones giving much longer presentations of details to this body.

"We were involved in questions which I think are really of most concern to this body, which are things about faculty governance, tenure issues and appointments. And the key point of that is a report that we offered in September 2011, presented here and put on the university faculty web site at that time regarding our recommendations, among a few options for how to instantiate the overarching system of faculty governance and tenure policy and the like.

"As a first principal component, this has largely been followed, and I'll be able to say a little about this and take some questions, although I caution you that because we've not been involved directly since about October 2012, which was, I think, the last very serious engaged meeting we had on these topics, I may be out of date in certain details; however, this will come up in the next slide.

"These issues, about which I haven't really seen directly what the questions are -- I'm hoping you will ask them of me and those present -- here's the cautionary note: October 2012 is the last time we were directly engaged with this. This is when we presented to this body the proposal for the master's of science and information systems joint degree with the Technion, which of course required passage by this body as a new degree.

"These policy statements regarding tenure and governance were available online September 2011. They have now been replaced by official documents put up there by the Cornell NYC Tech executive committee, which I'll show you in a moment. Those are, as far as I understand, the main public governing documents.

"I think, some of these issues come up now is that it is still my understanding -- and tell me if I'm wrong -- that everything, that all current faculty appointments at Cornell and NYC Tech are tenured, tenure-track. And what is true is it is the policy that all such appointments are based in Ithaca as far as tenure review and "home base", although many of the other features of those positions are instantiated to NYC Tech.

"As far as available information, this from the provost's web site, and these five documents here are, as far as I know, the summary policy documents that are true, as of now. As I mentioned, these largely follow the first principal component of CAPP's favorite way of doing things, as discussed in our meetings and as presented to this body in September 2011.

"Now, of course, this isn't what we do anymore. I'm happy to give opinions when asked, but of course it now is a real institution and is governed by the NYC Tech executive committee, whose members are described on this home page, along with the governing documents. So I will do my best to answer questions, but those are the caveats."

Speaker Lemley: "Sorry. Please turn off the cell phone."

Professor Cleland: "The key issue, which I think has gone around is about tenure. And I think it's fair to say that a lot of the issues with Cornell NYC Tech are new ground. What was decided early on is it was extremely important that NYC Tech be Cornell.

"And the way this was instantiated, or the dominant way it was instantiated was to have all tenured and tenure-track faculty appointments living at NYC Tech actually be members of departments and colleges here at Ithaca, with tenure review to be granted according to the policies of that school and department, although with additional representation from NYC Tech, because -- and here's the tension we were all dealing with in this case -- NYC Tech has to be a bit different from Cornell Ithaca.

"This is where I think many of the issues are coming up about how it should be governed and in what situations the senate should be involved, to what extent to be treated as a separate institution. To what extent would it be treated as a medical school is? And what extent is it simply an outpost of existing departments here? It's a little bit of both. There's certainly a lot of administration work on this, exactly how to define this, and I suspect this is where a lot of the questions are coming up.

"The first principal component is that these faculty are home in Ithaca, and it is largely through negotiation between home departments and the administration of NYC Tech in New York City that many of the out-of-ordinary or unforeseen details will be decided. So that I don't start saying more and more diffusive things, maybe I'll ask if there are any particular questions that I could address or ask someone else to address.

(PAUSE – after several questions asked simultaneously)

It wasn't as big a concern as I was led to believe."

Professor John Marohn, Department of Chemistry and Chemical Biology: "When I arrived, I was told by the dean of faculty that the tenure rate for the arts college was about one in two and the tenure rate for those with appointment in two different departments was one in seven. And the reasons are pretty obvious. You can't serve two masters, and so you're not on committees here, you don't have face time here. Are you concerned about this?"

Professor Cleland: "This is one of the hard points. I've come to understand one of the troubles was worry about tenure being too easy for people that were out in the world and weren't in Ithaca, we didn't know very well; because I think as you pointed out, the problem is more the opposite, is how to reconcile the culture so that largely academic long-term research or scholarship-oriented departments in Ithaca can recognize accomplishment when it comes in a different form.

"I think that the least evil was chosen among all the problems when we decided to house all faculty in Ithaca, regardless of their physical location; but that is the down side, and there's really, I think, no way around this, except for departments to be aware of those. And I think this is also the reason why ad hoc committees and early tenure review committees are asked to include other representatives of NYC Tech, to make sure that point gets through.

"NYC Tech right now is mostly an out-post of the College of Engineering, who I think are already in a mind-set that's able to deal with the kind of faster, more entrepreneurial, more industry-engaged culture that NYC Tech is likely going to have, but the problem is a bit larger. NYC Tech is one of the possibilities here. Yes.

Associate Professor David Delchamps, Department of Electrical and Computer Engineering: "We are not quite ready, as you say. Let me put it this way: My department has already made a couple of offers to NYC Tech faculty members. They have been declined. There's one going out now, another one, and your criteria is explicitly undergraduate education.

"Well, there isn't any undergraduate education in New York, so we're going to have to change that. We're not sure how that's going to shake out. The offers that have gone out, the candidates have been reviewed exactly as anyone would be reviewed for full professor appointment with tenure; but now they're starting to hire associate professors down there, so very soon promotion issues will arise.

"And our understanding was they were going to get a lot of critical mass of full professors and get the ball rolling and have some momentum and have an idea of what was going on there before they started to really address these promotion issues, which I think are going to be quite sticky. That's my impression at least, even in Engineering."

Professor Cleland: "Okay. Yes.

Professor Lieberwitz: "I guess I have a couple questions. One is related to the point that David raised, which is to make sure that whoever decides and how it's decided what the tenure review process will be that the faculty governance process is central to that, as opposed to those changes being handed down from the administration. So that was one point.

"The other one was it seems to me that another question will be whether there is a role for corporate representatives in tenure reviews, because my understanding is that there are corporate representatives on students' graduate committees, so I just really don't know if there's been any discussion about the role of corporations and their representatives in reviewing the work of faculty."

Professor Cleland: "So the things I think I know about that are not enough to answer your question. My understanding is that at the first level of tenure

review, the corporate input like that is advisory. I don't know what's going to happen at the ad hoc committee at the next step. I suspect that the nature of the enterprise is that -- actually, I don't know. I don't know what I suspect. This came after our engagement.

"Okay, thank you. So Joe says that Dan Huttenlocher is coming next month, and a lot of the questions about really what's -- would be best addressed to him then."

Provost, Kent Fuchs: "My understanding is that the rules regarding corporations or individuals from companies are the same as they are in Ithaca, so you can solicit letters, you can get input from letters, but they're not allowed to vote, if they're not faculty members."

Professor Cleland: "Okay, so you did bring up actually the last point I wanted to make, which was in a sense to ask for some advice, because there are a number of issues coming up in which -- exactly to what extent -- they are sort of qualitatively new situations in which the rules and guidance we have are not fully -- are somewhat ambiguous regarding what the role of my committee in particular and the senate at large, in which my committee is a proper subset, what they entail.

"To give you a couple of examples, which have actually occurred over the last two years, which I consider to be problems, and then more generally issues that are not problems, but are unclear things that I think we need to have some engagement and policy guidance negotiations between institutions, administration and the senate to understand exactly where we fit in; because as I see it, we have an interest in consistency of scholarship in ensuring that all the faculty, regardless of physical institution, are of equal levels and communicating regularly.

"Also recognizing NYC Tech is a different culture, we'll have to move fast and have some sufficient local authority to do that without everything having to circle through. And exactly what is most important in what situation is something that I think should be on the table sooner rather than later.

"Let me bring these up, because these are issues that I have had some trouble with over the past couple of years. These are situations in which, in my opinion, CAPP had jurisdiction, but was actively skirted. One is a case when the merger

of the economics departments happened. We heard about it, unofficially requested information and were denied that information.

"At this point -- so I see my -- as an executive committee, we act on behalf of the senate, not part of our mandate to argue about policy. So at the time I just mentioned the issue and let it slide, but being asked now what has arisen and what issues have arisen in past few years, this is one of them. This is rare.

"The second is receipt of proposal for what's now the university business minor did come to CAPP. We proposed some revisions, and that was the last we heard, and further inquiries went unanswered. And actually, this was instantiated in fall 2012, without CAPP or a senate review.

"I'm not sure exactly what I do in these situations. I don't think it's my job to start making policy by deciding exactly what comes, because I'm delegated things from the senate. So my question is what is done in these cases. So those are problems, but really the only actual problems that I've encountered in all the years I've been chair.

"The other issues that are not problems, but are things that will require some engagement regarding exactly what the senate does and doesn't do largely fall under this category. We are mandated with engaging with situations where more than one unit is collaborating. And typically, this has meant more than one Cornell unit.

"The reason is clear; is because if you want to have clear governance and ensure that someone says okay, all the situations in which these two separate bodies might conflict are resolved as a matter -- in the founding documents, but now we have a number of examples where there is one Cornell unit and one external unit, which is a little bit different. Is this now a Cornell unit -- is faculty senate governance basically about oversight about complicated things, or is it specifically about negotiation among internal -- multiple Cornell units, which without us, there would be no more general oversight. So Cornell Tech is one example, which we've talked about a great deal in the senate.

"Other possible collaborators: I would envision Cornell Tech would want to move fast, have several collaborators, both corporate and entrepreneurial, other institutions, and what degree does that -- what sorts of things would need to come to the senate. There's the interest of speed and efficiency, and there's the

interest of ponderous consistency and assurance of scholarship levels, and there's a tension here.

"There are two proposals from Hotel and the Johnson for engagement with universities in China. Hotel sent theirs to CAPP directly. Johnson is resistant to that, but these are -- again, there are fair interpretations that would say send to CAPP or not send to CAPP; send to the senate, not send to the senate.

"Having some guidance in this would be helpful. What I've been working with so far is a bilateral -- sort of extending the principles of a bilateral agreement between CAPP on behalf of the senate and the General Committee of the graduate school, of which this is part of the text, that programs for modifications, et cetera, of degrees that involve a school and another Cornell or non-Cornell college and school should be handled by that school and then CAPP. I've been applying this; but if I'm wrong, I would like this body to correct me.

"So my summary, we've done a lot of things directly in our mandate and off-label in sort of this advisory capacity, which I have enjoyed a great deal, as I hope my community has as well. With these jurisdictional issues, I would like some guidance from the senate. Not thinking this will take the form of people guiding me right now, but I would like to hear opinions from everybody.

"We may enter into sort of negotiations, much like that we had with the general committee and come up with proposals and ideas to present to the senate at future meetings, but I would appreciate any thoughts that are had by senators, particularly some with experience in long-standing knowledge of issues of this sort.

"And this generically, regarding Cornell NYC Tech, there's a tension between efficiency and exactly how to describe the institution in terms of its faculty governance and the rules which it follows. And I think in the interest of speed overall, these should be settled sooner rather than later, as best as we can predict. That's all I have, but I will take questions."

Speaker Lemley: "We'll keep this fairly limited, because we need to move on to the next topic. And Tom has just asked you to send opinions, because they are going to discuss this further. Are there any senators who have some important contributions now, without litigating specific things? Others have comments?

“Okay. Thank you, Tom. That was extremely interesting. We're going to move on now to Provost Kent Fuchs. We have a little logistics here, and he will talk first about the budget model, and then he'll take questions on that.”

5. REPORT FROM PROVOST KENT FUCHS

Provost Fuchs: “I have a new appreciation for the disabled. Is the microphone on? Thank you, thank you. So for about eight weeks, you'll see me riding around campus on this baby here. Because of issues with my foot, I may have to sit down for a few minutes at different points in the discussion. It's not because I'm being rude. It's just dealing with my disability here.

“So as Ann said, I would like to spend a little bit of the time -- and as Joe said, I have a little bit more, I think, than the 35 minutes -- talking about the budget model that was put into place effective July 1st of this past summer; and then secondly, spend some time on another big initiative in which I'm involved in beginning to engage you all in thinking about what Cornell should be measuring. And I'll set that up when I get to that. So we'll start with the budget model, we'll take Q&A. I'll let Ann run that, after I make some introductory remarks.

“For the budget model part, I have no PowerPoint. I have been here in the past number of times to talk about the budget model. There's a nice summary of it, if you haven't been engaged in discussions about it on the web site for the Vice President for Planning and Budget, and there's an endless amount of detail that I'd be happy to share.

“One of the advantages and disadvantages of the new budget model is that everything's transparent, so you can calculate all kinds of things, which results in sometimes challenges, which we may want to talk about. So to set the context, in 2009, we had a budget model at that point where each of the colleges and schools were exposed to different sets of expenses and different sets of revenues.

“So for some of our colleges and schools, they were what we would call tubs. An example of that, in 2009 was the Hotel School, which had all of its revenues, whether it's tuition or gifts or whatever, and it paid pretty much for all of its expenses, and then had a portion of the -- some central expenses that were allocated to it.

“Then there were what we call the contract colleges, of which many of you are in, which had sort of a modified tub. They had an allocation that came from the State that was determined by the provost's office, and there were some expenses that were pushed to them; and then some, but not all of the revenues.

“And then there were what we call the endowed colleges, for which the center basically took all the revenues -- I'm oversimplifying, but basically took all the revenues, took most of their expenses -- not salaries, but most of their expenses, and paid for a lot of things at the center for those colleges, remembering that it took the revenues from those colleges.

“There were certain things in the old budget model that are the same in the new budget model, so we're not changing which colleges pay for faculty salaries. That stays the same. Staff that are appointed in colleges, those colleges will still pay for those staff. If you have a research grant, you still get those revenues.

“Philanthropy to a college, it still comes to your college; but what we're changing and making consistent is the way that we look at tuition, whether it's undergrad or grad, and it's consistent across the entire university. We're also making -- and that's a revenue source.

“We're also making consistent how we think about those expenses that the center was paying for. Very simply now, they are all pushed out to the colleges and schools, so whether it is a new building for a college that previously the center was paying for, now that college is paying for that building, the mortgage on the building, or what we call the O&M on that building.

“And that's true, no matter whether they were a tub, contract college or endowed college. So it's all consistent. Simple things like utilities; that's treated consistently now. Colleges pay for those. And then shared facilities, we socialize that expense and push that out to all the colleges.

“So many of the colleges' budgets, both revenues and expenses have gone up significantly in the new budget model. It's not an attempt to either decentralize the budgeting of the institution nor centralize it. It's a mix, and it depends on your perspective as to what changed, as to whether you were a tub -- if you were what we called a tub previously, you are no longer a tub. You are part of this overall budget model, and you would think, if you were a tub previously, that it looks like a more centralized budget model, because about 10% now of the revenues are at the center of the tuition.

"Secondly, those then are reallocated out through the provost's office, back out to the colleges. So it looks more like a centralized budget model. If you were in one of the endowed colleges, it looks totally like a decentralized budget model now, because the expenses are formulaically distributed out to all the colleges. And 90% of the tuition revenue is formulaically pushed out to the colleges and schools. So we now have implemented that. It is in place, as I said, as of July 1st, and we're doing several things this fall. And by we, I mean myself and the academic deans and their associated business officers through the deans.

"We're going back and not changing what we call the principles of the budget model, which are very public and are very simple, but we're looking at how we implement very specific issues, such as off-campus units. If you're a faculty member on the Geneva campus, what expenses and revenues should you see? Should you see the same kind of expenses and revenues as a unit, a department here on the Ithaca campus?

"For example, in two weeks we'll be looking at the investments the institution makes in areas supporting research, scholarship. All those expenses are pushed out to the colleges. And how should those expenses be distributed across the colleges? Should it be based on the number of faculty? Should it be based on how much research, external research your college brings in?

"So we're looking at that. And we're also looking at how much we are investing from the center in each of those areas, because as you might imagine, now every dean, every college cares about that, because every one of them sees those numbers.

"We are talking about libraries in two weeks. We spend about \$40 million a year on libraries, and no longer do we have some colleges paying for their own library and then others the center paying for the libraries. The entire budgets together, \$40 million, including the facilities cost, and we distribute out those costs to the faculty -- to the deans, who believe they're faculty.

"And the question is very simply there that we're revisiting is what should be included in the metric for dividing up that \$40 million? Should it just be the number of faculty, or should it include the number of students? Should it include visitors? And so we're discussing that. What about off-campus units? Should Cornell Tech pay for the physical facilities associated with libraries here on campus?

"So those are the things going -- the lab of the Geneva campus, et cetera. So it's heavy slogging, as we do this, but as part of this transparent process -- and as you might imagine, everybody has a perspective that's engaged in this process; and it's usually, to be very simple and crude, which perspective benefits their budget the most.

"There is another broad area that is almost equally important to the budget model itself, and that is how we oversee the budgeting process and the budget model itself. Every budget model, every process that you have to allocate expenses and resources changes behavior; sometimes for good, sometimes for bad.

"So yesterday, we spent a lot of time in the dean's meeting asking each of the deans how were you thinking about taking the budget model, if you are, and pushing it out or using it to affect the budgets of individual academic departments, because the budget model is not designed, not intended, does not work, I believe, if it's pushed out to academic departments. It's intended to work at the broad level.

"And we do have some units that are thinking about pushing certain expenses -- usually expenses, not revenues -- out to individual departments. So we're in intense discussion about that, and in a number of the issues I mentioned, such as libraries, et cetera.

"This is where I welcome the input of the FPC -- to think about the process that we're going to use to oversee the budget model. And it includes not just the mechanics of expenses and revenues, but even in areas of courses. If we don't want -- I don't believe we want departments and colleges creating courses just purely for revenue that may degrade the educational mission we have as an institution in teaching and educating our students.

"So we have to have a process to, I believe, oversee even the educational offerings. And there's a role there for the senate, as we look forward to overseeing the budget model, both on the academic programs side and even in the sort of administrative process of expenses and resources.

"So we're very much engaged in that. That has nothing to do with the state of the budget of the university, but it's all about how we move and allocate resources within the university and how we do the same with expenses. And I'm

going to pause there, and I'd be glad to answer any detailed questions or take any input on this."

Speaker Lemley: "Could we first have questions from any who are senators? And wait for the microphone. Start with Brian, and then we'll move to you. Microphone."

Professor Brian Chabot, Ecology and Evolutionary Biology: "We are being told that the budget model has exposed that all colleges at Cornell and the university itself is spending more in a year than we're bringing in in a year; that is, we're in deficit. What are the plans to change that?"

Provost Fuchs: "Okay, so first it's not true. So I don't want to change it. The university's overall budget is balanced. The past year and this current year, we're projecting that revenues will exceed expenses for the institution, just for Ithaca, just for Ithaca, including Tech campus, Geneva, et cetera, but ignoring the medical school. Medical school also has a balanced budget, so the institution overall is balanced.

"There's no structural deficit in the institution, but there are two issues: One is that it's barely balanced. We're talking about \$1 million or \$2 million or \$3 million more revenues than expenses on a \$2.1 billion budget, so that's not very much, not much of an edge.

"The second -- and this is what's being, I think, intended in what you're hearing, and that is that the center, because of the downfall and the resulting decrease in revenues that were previously expected, like endowment payout, which we cut a lot, the center was spending more -- the center, not the colleges, but the center was spending more than it had in resources.

"And I gave talks about that in January 2009. We have been working on that. Either the good news or the bad news of the new budget model is that those expenses that the center had incurred are now all out in the colleges, those buildings. Whichever college occupies those building, that college now has the mortgage on those buildings, so the bad news is that what I did this year is I propagated for one more year deficit spending at the center to cover those increased expenses that many, many colleges had.

"So I allocated out tens of millions of dollars more to colleges and schools to keep them whole. Now, it turns out, even in the colleges and schools, everybody in

the colleges and schools, even during the worst of the economic downturn, fall 2008, 2009, 2010, all of the reserves across the institution grew, they grew dramatically. Every college, every school, they grew.

“And so what's happening is that our operating budgets have a deficit, but the total revenues exceed the expenses, and it's because they are going into these reserves. So it is an administrative problem that's got to be fixed, because the center can't be creating a deficit because it's pushing out too much money, but -- and the challenge here is taking that reserve growth that's growing dramatically and using that to pay very simply for these expenses that are now on the colleges.

“That's what we're working on. That gets tied into issues that affect all of us like what should tuition be next year. Number two, what should average salary increases be for faculty and staff, even what should the endowment payout be next year. The endowment itself, the market value of the endowment is roughly what it was at its peak, roughly, the market value, but the number -- and the reason for that is there's been a lot of recovery, plus there's been a lot of donations.

“So that combination has put us back to where we were, but the endowment payout is a lot less. The reason for that is we dropped the endowment payoff dramatically in calendar year 2009 to save the principal, the endowment. We did that -- it meant a budget cut for everybody, but we did that, and now the question is how fast can we regrow that.

“This is not supported by everybody, but I've argued we should move the endowment payout back up to where it was before we cut it, since the market value endowment is about the same. It's a little more complicated than that, but that's one of the issues.”

Speaker Lemley: “We have a question here.”

Associate Professor Thomas Björkman, Department of Horticulture: “You said you are going to discuss this in a couple of weeks, but one of the things we have been looking at in a department that has a lot of efforts in research and extension, engagement with society, which the budget model that we know of so far doesn't really address revenue-wise, and so we're losing a lot of faculty, we need to renew the faculty in those areas.

“And you put together the financial numbers as best you can under the new budget model, and a lot of the research and extension positions, the way it looks now, we couldn't possibly afford those. They'd be huge costs to the university. So asking you perhaps to develop during the next couple of weeks, when you're having the discussion, how would it look to have a position like that, that we really can't pay for, not really seeing right now what that looks like.

“They all looked very expensive with nowhere close to enough revenue for the college core budget, the operating costs for the program aspect, for the college core budget. It's very difficult to see the right way to go.”

Provost Fuchs: “Yeah, when you look at the individual budgets of different colleges, there are sort of two pieces. One is the formulaic revenues that flow, then the provost's allocation. The provost's allocation this year should have -- because I gave out more than I had, should have made every college whole. Should have, between the old and the new, but the question is what do we do going forward.

“So the fundamental revenues any college sees will be tuition, and that flows formulaically. Part of it comes back to the center. 10%, that's the provost's allocation, but the other is formulaically. Other revenues, if you are in a contract college, would be the State allocation.

“And remember, it's about a third down, about 30% less than what it was when I started as provost, so we have tough decisions to make. Do we take tuition money to fund that, knowing that any time we raise tuition, we only get about half of those revenues, because of our really generous financial aid policy.

“Remember, the budget model itself does not create any expenses, does not create any revenues. It's just about how we distribute them, and we ourselves make decisions about how we could get new revenues to the institution, and some of those sources of revenues -- Dean Burns was suggests this when the president was saying that some of those sources we're not real optimistic about, as faculty, no matter where you are, which university you are in the U.S.

“Others, I believe, and you'll see this in the slides I'm going to present, I think there are some interesting discussions and -- debates and decisions to be made in our departments and colleges about do we want to pursue any new revenue sources. As you'll see, some of our peers have been very aggressive in pursuing part-time students, master's degrees, et cetera. And it's up to the faculty to

decide if we want to do that. There are definitely opportunities there, but there are costs, and we may not -- costs in all kind of ways."

Speaker Lemley: "One more that I know of. Did you want to take one more question on this topic and then move on? Let's have this question."

Professor Bruno Bosteels, Department of Romance Studies: "I have a question, and then sort of a concern or request for explanation. One of the areas that you didn't mention and that has come up in recent weeks in discussions that we have had in our own department, the study abroad. And of course, if you could say a little bit more, the immediate response seems the budget plan is already applied.

"The immediate response, it makes no sense to count courses taken abroad; not just off-campus units, but courses for us, in Spanish and French, are very important, because these are not represented as warm bodies in the classroom. So if this is a topic that will be brought up and if there are measures that will be taken or could be taken in order to somehow include this in the algorithm for counting this.

"And the second question is you mentioned that there will be a role for the senate in helping out, working out some of these issues about how to allocate or measure, but what are the other channels for the to and from the committees that are already going on right now to deal with these so-called perverse incentives of budget model and what role the faculty at large, not just chairs or associate deans, could play in that?"

Provost Fuchs: "Wonderful questions. Ann, help me remember them. I'm off of painkillers, so I can't blame it on that. What was your first question? Remind me real quickly. Study abroad.

"So President Skorton last year stated in a white paper that a number of us asked him to write that he would like to see half of our undergraduates have a significant international experience. We're way, way, way below that. We're less than 20%. So that's the aspiration. Our president has said he wants us to move there. He's not commanding us to. He's saying I'd like to see you all do that.

"The changes that we have made -- this is very much a work in process, but the changes we've made, we've made some leadership -- made a change in the leadership of study abroad, and we have shifted where it reports into. It now reports into Laura Brown, the vice provost for undergrad education, with a

dotted dash line into Fred Logevall, the vice provost for international affairs. So they now have to work together in making study abroad more effective.

"We had one of the most expensive study abroad programs in the country, both from a student perspective and also from an institution perspective, and we just have to change that. We had an incredible administrative fee that was simply paying for financial aid for other students, and we have to get rid of that.

"The other part, though, of the question you're asking is if a student goes elsewhere and takes courses that transfer back for credit, and that tuition money goes there, then how come the provost doesn't give me, my department that tuition money.

"So what the budget model does is exposes where revenues are really going, so if indeed we have programs that send revenues to other institutions -- I'm not saying -- some study abroad programs don't, but some do. If they send revenue elsewhere, we as an institution may want to decide, we as faculty, to decide how we are going to replace that.

"We may want more transfer students in the sophomore, junior year to replace that tuition. If the tuition disappears, there's no way to reallocate it out. And when you couple that with the president really wanting, and I support it, that we grow the number of students that have international experiences -- it doesn't have to be study abroad. It could be work abroad.

"So simply, we are in the process of -- we have not changed the budget model for study abroad yet. We are going to do that. There's some hidden ways that financial aid gets paid for those students that need financial aid. We're going to try to reduce the cost to the student, and we're going to try to figure out how to backfill lost revenues to the institution, but it is something that we all should think about and work to approve a goal, and yet not bankrupt us in the process.

"The advantage in the past is we didn't have to think about these revenues. The center just took all the revenues and paid for the expenses, but I'll reveal a great secret: The provost is not smart enough to figure out all of these issues. And so the great thing about exposing all of this to everybody is that we all now will work together to either backfill the revenues or change the way that we administer study abroad; forces all of us to engage in these sometimes less-than-enjoyable discussions, but they are really, really important."

Speaker Lemley: "Do you want to go on to the next topic?"

Provost Fuchs: "Why don't I go on, if you don't mind. Here's what I would like us to think about as a university, and I'm beginning to think about this. I would like us, as a university -- and by that I mean as faculty, to think about how we, in an era of the foreseeable future of stable resources, stable revenues, how can we enhance the academic stature of our university and of our colleges, schools and departments. How can we do that?"

"And if it was simple, I would have figured it out and I would just announce it. It's not simple. I don't know how to do it, so I think all of us in our departments, our colleges, schools and even in the provost's office need to begin to work on this. How do we enhance the academic stature of the university in an era of stable resources? Stable, meaning we'll have enough resources to give out salary increases, but not a lot more. Not a lot more.

"And that's probably true for most universities. Stable external research funding, as Dean Burns mentioned, the president mentioned, stable resources from the State; in other words, not growing, but hopefully not being cut, tuition that we've been really aggressive, but it's not clear we can be aggressive in raising that, and philanthropy that hopefully will continue to increase, as it is for Ithaca and elsewhere, and endowment payout that will hopefully continue to increase, but not dramatically so.

"So to do that, I believe, to enhance our academic stature, I think we have to understand the university and understand it relative to our peers. And what do I mean by understand? I mean understand what kind of resources we have, what's our teaching load across the institution? What's our student-to-faculty ratio? How has that changed over the past 10, 20 years? Should we add more faculty somehow, cut back on some other area? And how does all of this compare to peers?"

"So for next summer, I'm going to ask each of the colleges and schools; in other words, through the deans, to provide a response in terms of comparing themselves to their peers, and we'll let them choose their peers, and it will be a set of metrics that they believe are important, and I will be making suggestions to them of examples of what those metrics might be -- student-to-faculty ratio is an example -- and I'm also going to do the same at the center for the entire university.

“So what I'd like to do now is give you sort of a sample of the kinds of things that our office of institutional research is helping to prepare at the center, and some of this then will translate down into colleges and schools, and therefore probably even departments.

“And it's comparing ourselves to our peers, whoever those peers are; comparing colleges and schools over time to themselves, how things changed over time in our colleges and schools, and then number three, comparing colleges and schools to each other here at Cornell.

“So let me start this, and I'm going to just show you a few -- you aren't going to be able to read the numbers, but you will see colors, and that's all that really matters are the colors, and I will give this slide deck to Dean Burns and ask him to put it on the web site under a Cornell ID-protected web site, Joe, if you don't mind; just as soon our friends elsewhere don't see this, although I know you all could always share it with them.

“So what I'm going to do -- I will click it, if you don't mind -- I will make a claim, then I will show you some information that may or may not prove what I claim. And much of this is quite obvious; but as I've gone through this now for many months, I have learned a lot about Cornell.

“And that's really the purpose of this, is to help us to understand ourselves as an institution and our individual colleges and departments, and I think you have to use this data to understand who you are, if you're going to enhance the academic stature of the institution.

“So my claim is that Cornell has truly, truly exceptional breadth and diversity in its academic programs, and even the way we're organized. So this bar, these names that you can't read here, are the 20 universities that I have chosen, plus Cornell, so they're actually 21.

“The greenish, brownish color is the Ivy League -- well, it's not the entire Ivy League. It's everybody except Dartmouth. And the blue are a set of elite privates, so Stanford, Johns Hopkins, Northwestern, Chicago, Duke, Washington University, MIT, Cal Tech. And the gray here are some significant publics: Wisconsin, UCLA, Illinois, Michigan, UC Berkeley, and University of Virginia.

“Now, in my discipline, these are not necessarily the peers. They may not be your peers as well, but if you think about the nation's top 20 universities overall,

most of these institutions would be on that list, I would argue. So what does this say? This is the number of academic departments, and you can see that Cornell - I would have thought before this that the big state universities probably would have had more departments. Not the case. We have more academic departments. Is that good or bad? It's part of our DNA, it's who we are, but I think it's interesting and actually important to know that.

"If you look at this now -- all this data's public, and it's obtained from public databases -- these are those same universities, and these are the number of distinct bachelor's degree programs, master's degree programs, Ph.D. degree programs, professional doctoral degree programs -- excuse me. Then these are the Ph.D.'s.

"So we don't have the most number of undergrad programs. We have a lot. We do have the most number of Ph.D. programs. You can think of this similar to the number of graduate fields we have. So we, I would claim, have exceptional academic breadth, compared to any peer.

"How about quality? This is now where we could spend all day and night arguing about it, but the best way that we have right now to measure quality, in a broad sweep, of departments is from a tool called academic analytics. This is a tool that was created in response to the lack of success of the National Research Council about ten years ago, and many of you were probably involved in that.

"It is discipline-specific and looks at, for a given year, how many publications faculty have. It weights it by the discipline. So in some disciplines, the book publications are more important. Others, it's journals. It looks at how many citations the faculty have, and it's normalized by the number of faculty. It looks at major awards, and it's categorized by disciplines.

"So if you look at Cornell in the red here, the width is the number of graduate programs we have, in which the faculty reside, so we are the widest. We already saw that. And then the height of it is the percentage of those programs -- can say departments, those departments that are ranked in the top ten based on this one tool across their institution.

"So roughly half of our departments are ranked in the top ten; however, if you look at the total number of our departments that are ranked in the top ten, we are in the top one, two or three, depending on the year. So the total number of

departments ranked in the top ten; that's what this says. This row here is the top ten programs.

"I've hidden the university names here, because I'm not supposed to tell you who they are, but Cornell had 42 departments, programs ranked in the top ten out of our 80-some. And there was another institution in Boston that had 42 as well, and there was one in San Francisco, a public -- San Francisco area, had 44. So we were tied for Number 2.

"If you look at how many were ranked in the top five, we had 22, and that same institution in the Boston area had 31. Another private in the San Francisco area had 32, and the other one in the San Francisco area had 20. So we were ranked Number 3 in the number of top five.

"So what does this tell me? This tells me that we have unique, truly unique combination of quality and breadth. Is that good or bad? It's our DNA. And I very much believe that our mission here is to focus on how we continue to raise our stature, our excellence compared to the excellence of our peers.

"I have five of these themes, so let me move a little faster. This one is pretty obvious, but Cornell is relatively undergraduate-focused. Not completely, compared to peers, but relatively; so again, those same institutions -- I can save time in not telling you what they are -- this is the total number of degrees awarded, undergrad and grad.

"So if I was to ask you all at commencement time, who in the Ivy League has the biggest commencement, who would you say? Well, you can see here that Columbia has the largest commencement. That's how many degrees they offer a year. You can see that Penn has a larger commencement, and even Harvard has a larger commencement.

"I didn't realize that Harvard graduated more students a year than we did. Not undergrads, but total number of degrees they award per year is slightly larger than Cornell. This is the percentage of those total number of degrees that are undergrads, and this is where you can see we have a lower percentage than the publics of this set. We are higher than most of our peers, not higher than Princeton or Brown in terms of the percentage of total degrees that are undergraduate.

"What's different? It's really the graduate degrees. Look at the master's degrees at the private peers. A lot more in terms of percentage; and obviously, we have the absolute numbers as well. It's a calculation based on these absolute numbers for master's degrees and even for Ph.D.'s, so I learned something from that, even though the theme was something that I knew before.

"Here are student head counts. This I also learned something. This is the total undergraduate enrollment, full-time and total. You probably can't see it, but there's a little gray bar hanging out the end of this for Penn, Harvard, Northwestern, for all of them. That's the number of part-time students.

"Harvard has 3,100 part-time undergrad students on a base of 7,200 full-time undergrad students. So they have 10,000 undergrads, if you count head count, not FTE. Penn has a relatively large part-time. Northwestern does, Columbia does. And these are just at the undergrad level. Even the states have some.

"If you look now at the total enrollment, you can see -- and this is a reflection of the degrees as well, that our total enrollment -- the one bar here is just Ithaca. The other includes the med school. The med school doesn't have a lot of students, so they are relatively the same. You can see that Harvard has a lot of students; 27,000 students, compared to our 22,000-some students, if you include part-time. So I didn't know that earlier.

"Theme Number 3: Cornell student-to-faculty ratios on the high side amongst the elite privates, and higher than it was in the past, but lower than the elite publics, as you might imagine. So what did I learn in looking at this? So this is undergraduate, it's full-time undergraduate students per tenured and tenure-track faculty, so we're not including the non-tenured or tenure-track faculty here, and it's just undergrad.

"So we have about 9.2 -- and this is just for the Ithaca campus -- undergrads per faculty member. Brown is slightly more; Penn has slightly more, and all the others have slightly less. If you include all the students, graduate in this number, it looks quite different.

"So when I go talk to the trustees and say I think we ought to grow the faculty by 10%, they want to see these numbers. And the question is, does our student-faculty ratio make an argument that we ought to grow the size of the faculty, just ignoring resources.

"This graph, again, you can't see the numbers, but I find it fascinating. It's now just Cornell, and it's over time. This line right here is the total employee-to-student ratio. Employees, including all of us that get a paycheck from Cornell, but not students. So all the faculty and all the full-time staff. It's been relatively stable -- this is back in 1950. I'm not going to ask for a show of hands -- from 1950, it's been relatively stable and, in fact, maybe improved a little bit.

"The average is a little over 1.5. And even with the economic downturn, we're at 1.47. Now, remember, this is a ratio, so if you increase the students, the ratio gets a little worse. If you shrink the faculty or staff, the ratio also gets worse, as a numerator and denominator. This is just that same calculation, but just for faculty, not students.

"So you can see the ratio had to dip back here in the '70s -- I have a hard time myself reading it -- and we have grown it, not dramatically. So we have about roughly nine faculty, tenured faculty per undergrad. It's changed some. So this is 7, this is 8, this is 9. The big difference is when you count all students.

"This number over here is that same ratio, but now I'm including master's and Ph.D. This tells me the load and faculty has grown a lot over the past three, four, five, six decades, whether it's reduction of faculty size or -- which is not. We have been really stable in faculty size, but we have grown primarily the professional master's pretty significantly.

"So the question to be had in all your departments and colleges, as we look at revenue, do we want to grow more the professional master's programs. There are opportunities there, but you need to take into account this trend, if you are going to decide to do that.

"And this is that same calculation, but for all employees, all students. And even then, it's not changed a lot. So interesting. I did not realize that this had changed so much here. Cornell does more with less than our private peers. The point here is that it would be really nice to have more resources. All of our jobs would be easier.

"And one interesting point, though, is this column is private gifts. This column is grants and contracts. This is just absolute numbers. If I also normalize it by how many faculty we have, we actually have fewer external grants, dollars per faculty than many, many, many of our peers. That's not good, because that has

to drive many of these expenses that we have; what's called F&A for facilities and supporting many Ph.D. students.

"If you look at philanthropy, we do really well, but some of our peers do even better than we do in terms of absolute dollars, and even if you normalize it. This is undergraduate revenue for tuition and grant aid, and this is just for the first-year students.

"I think the important part here is what I would call the tuition discount over here. So this is the percentage of the sticker price of the tuition that the students actually pay on average, and you can see for Harvard, the discount rate is dramatic -- not quite, but almost double our rate.

"The difference, though, their discount rate, the grant aid is paid almost completely out of endowment. For us, our grant aid is paid out of our operating budget. So it's not funded by endowment. So if you have endowment to do this, then it doesn't really affect the true net tuition you're getting in, because some of it's coming from students and some is coming from endowment.

"For us, we have to find other ways to fund it. Now, each of these places, particularly in the public, have different tuition levels, so the dollars are different.

"Last thing: Cornell's doing very well, but some of our peers are doing even better. So I'm going to give you two examples. I apologize; to make it simple, I just picked on the sciences. I'm not complimenting them. This is not necessarily a positive point.

"So what I'm going to show you is where we are with respect to the number of Ph.D.'s we graduate. And you might argue well, that's not a measure of anything helpful. It's just quantity is not quality, but then I'll show you the research funding. So on both of these, we've grown a lot, and this shows you our relative position in the number of Ph.D.'s that we graduate in the sciences. And it shows you that we were Number 4 in 1920, '24, and we were Number 8 in 1968. And today, we're down in here.

"The big change is that a lot of the big major publics have grown their Ph.D. programs; but interestingly enough, Stanford was not in this group, and now Stanford is Number 1. Berkeley being Number 2, et cetera. So we've grown the

number. This number is larger, significantly larger than 200. Now it's almost 400, but some of our peers have grown the number.

"What about research funding? This number shows you the total research funding that comes to Cornell from external agencies. In 1989, it was \$286 million. Every year it's grown. This past year was \$800 million, brought in by you all, brought in by the faculty. It's grown faster than inflation; but what about our relative position? We were 1989, third in the nation. We are 16th or 17th now. So I did not know that.

"So the relative -- we've done well. We've done exceptionally well in almost every category; but relatively, to some of our peers, they're even doing better. So that's the question I began with, and then I'll just stop here and we'll -- this is something for us, as faculty, as academic leaders and others to figure out, and I think it's the great challenge.

"And as I think Joe Burns said, the president will be talking about some of this as well. But I think we all need to be in our colleges, schools and the senate, in our departments, thinking about how we are going to do this."

Speaker Lemley: "Do we have a couple of short questions, starting with any senators or -- and others? Okay."

Provost Fuchs: "I'd love to hear from you what should we be measuring."

Associate Professor Richard Geddes, Department of Policies Analysis and Management: "So my crude understanding of the model of the tech campus, which you're much more intimately familiar with, could be characterized as sort of a public-private partnership type of model, where there will be much more interaction between the faculty and the private sector to help fund their research, et cetera.

"To what degree would you see, in answer to this question, more of that type of a model applying up in the Ithaca -- to the Ithaca campus?"

Provost Fuchs: "I think for certain parts of the institution, it's very, very relevant. It's not simple. It's not that we can simply get more foundation grants or get more partnerships; but for some parts of institution, it's relevant. For others, it's not.

"And there is an advantage in the urban environment too. That's one of the reasons to be there, but I do believe that in some parts of our institution, it could even be an extension area, that more of a partnership with other agencies, not just the federal agency, but other agencies, both private and public, is one of the ways that help fund what we want to do.

"So there's a whole spectrum of ways that we, as faculty, can decide that we want to bring in more revenues. And all I would say, and I know in my discussions with Dean Burns and others that he would say this even more vocally, that we should just be careful when we do that, we should think about the consequences, because I can create ways of bringing in revenues, but it just might take us off our core mission and we have to think about the core mission, but I do believe there are opportunities.

"The tech campus is self-sustaining. We're not investing any resources from Ithaca in it, so it's got to be very entrepreneurial in how it gets resources; and therefore, they're a little more hungry than sometimes than I am."

Speaker Lemley: "Other questions? Any other questions? Well, we'd like to thank Dean Fuchs."

Provost Fuchs: "Provost."

Speaker Lemley: "I'm sorry. Provost Fuchs. Well, I knew you first as dean. I apologize. Thank you. I didn't think you were going to be able to pull that off, and you are going to have the strongest right leg in all of Ithaca when this is over. So I would entertain, since we have reached beyond the time, I would entertain a motion to adjourn."

"Second?"

"All in favor? We are adjourned."

(MEETING ADJOURNED.)