1. CALL TO ORDER
Speaker Pro-Tem, Steven Beer: “I would like to call to order a meeting of the University Faculty Senate. I would like to remind all senators to make sure you have picked up a clicker. We are going to be voting today by clicker, these little blue things in the satchel on the table.

“I would also like to remind you that there will be no audio or visual recording of the proceedings, except those that are done by the authorities. I would like to ask everyone to please turn off or silence your cellular telephones or other noise-makers. When a member of the faculty wishes to speak, please be recognized by the speaker and then rise, wait for a microphone to be brought to you, identify yourself as to name, department or other administrative unit, and then speak.

“We have no Good and Welfare speakers today, so the five minutes that are allotted for such on the agenda will be integrated into the rest of the proceedings for today.

“At this point, I would like to introduce Dean of the Faculty, Joe Burns, for remarks and introductions.”

2. DEAN OF FACULTY REMARKS
Dean of the Faculty, Joseph Burns: “Let me add my welcome to Steve's. I'm glad you are here. We are halfway through the semester, halfway through the term, pretty remarkable. I hope you all grabbed an apple or two. Two of those varieties are Cornell-derived apples. It amazes me the good stuff that's done up in CALS, and I don't know why I continue to work on Saturn's rings. Who cares about Saturn's rings when you can make good apples? But I do.

“I wanted to just review the agenda, if I could. You will see the president is here with us for 25 minutes or so to talk about a variety of issues. If there are too many issues, it's my fault, because I gave him lots of possible topics to talk about.

“Then we have a report on what's going on in the New York City campus from Dean Dan Huttenlocher. Then our final topic is a discussion preceding a resolution to vote on approval of a master of science degree in Information Systems at Cornell New York Tech in conjunction with Technion. We have tried to allot a lot of time for that topic because we want to be sure the senate has an opportunity to think about it deeply and make a good decision.
“So these are my topics. We have already done the first one. And the second one is the same thing I did last month, namely, if you see anybody in your vicinity who you don't know, please reach over and say hey, I'm so-and-so, from this department. That seemed to go over real big. And let's do it again.

“I just wanted to say a few words about what I have been doing in my spare time. We still are pushing this faculty lunch that Jerry Hass organized. Seems to be flourishing at the present time. We have more attendance than we expected. On Fridays, we can often cannot seat people; but it's still $3.50. And the new thing is that online, if you wish to find out what are the soups of the day, you can find them on our web site for the next month or so.

“We had our first faculty forum concerning MOOCs two weeks ago, and that had quite good attendance from the faculty. There was about 150 people, most of them faculty members. So that was good. We had a fine discussion -- there were some technical issues, which is a real problem, given that we are talking about how technology is going to overturn education, but such things happen on first runs. I think many people learned a lot. And now that's over, I ask what are the next steps in order to participate in this discussion. There is a committee of faculty members that the provost, Eva Tardos and myself have put together to look at the whole MOOCs issue, but I would like to be sure that every voice is heard. Most of the people were really enthusiastic, but there must be some nay-sayers out there. We have a MOOCs blog on the faculty senate web page, and you could put your negative statements there.

“And one last thing. We have gone through a first round, where almost every senate committee has met, and they seem to be functioning very well. I now want to move on to the important part of the agenda, the presentations by the president and the dean, and then the presentation from CAPP.

“We have David Skorton with us. He's been here five-plus years. Seven years. Time flies when you're having fun, huh? Anyway, he came from Iowa, a cardiologist by profession, but somebody who's been an academic leader in higher education for decades. He was president at Iowa in the last position he held there. David has very broad interests across the arts, especially jazz, but also the humanities; he has been a spokesman for humanities. It is a great pleasure to have you here today, David. Thank you.

3. **REMARKS BY THE PRESIDENT**

President David Skorton: “Thank you. Can I get about 90 seconds of that Good and Welfare time? That would be great to keep Joe off my back about timing. I like the business of introducing each other. It changed my whole attitude about the senate in a very positive way. I appreciate everybody turning out. There are
very important issues to follow my talk, and I look forward to listening to your thoughts about those issues. I'm under strict orders to be brief, and Joe gave me directions. He said I should have a good beginning and a strong end, and not much between them. I'm going to try to do that.

“I want to say just one thing about Cornell New York City Tech, and that is the interest in it is extraordinarily broad and deep on this campus, obviously, and elsewhere. And I have been very, very much admiring the work that Dan Huttenlocher has done, along with Kent Fuchs, Cathy Dove and Lance Collins in leading this effort. I want to thank you, Dan, for the vision and for how well you have been executing. I will be very interested to hear the discussion today.

“One thing you may have heard about the tech campus, that through Dan and Kent's good work, they have established a steering committee of Mayor Bloomberg, who, before he was mayor was a tech entrepreneur; and perhaps our most famous tech entrepreneur alum, Irwin Jacobs, founder of Qualcomm, a Cornell undergraduate; and Eric Schmidt, for ten years the CEO of Google. And we're learning a lot from working with those individuals. So looking forward to the discussion.

“The biggest issue to talk about today, I believe, and what I have been thinking about more than anything else the last three or four weeks is the campus climate in the wake of a difficult start to the semester with what appeared to be bias incidents at the very beginning of the semester, and then a series of sexual assaults, which has been very upsetting to me, and I know to you and to the campus in general.

“I hope that you had a chance to read CU Police Department Chief Kathy Zoner's messages of a couple weeks ago, ten days ago, and an initial message from me last week. My next column in "The Daily Sun" is a week from Friday, the 19th, and I will have more thoughts about things that we can do moving forward.

“Probably the most eye-opening thing about this period for me has been to spend as much time as I can with the undergraduate students. I have office hours, I meet with the student leaders, I go to the student assembly, and meet with them in different groupings. We have had a lot of contact with students the last few weeks -- we, being Vice President Murphy, Vice President Opperman, Dean Hubbell, myself and others, and here's what the students are telling me about the campus climate: They are concerned, they feel vulnerable, they are afraid.

“Many of them do not know about safety services that we offer on the campus, like the blue light escort service and the buses. Obviously, we have to improve
our communication about those services. Many of the students who do know about those services don't choose to use them. We are asking why, trying to find out what we could do to make that a better connection. We are talking about a much, much harder-to-address issue of the so-called rape culture in the world, which is very disturbing. And the Dean of Students office, the Title IX coordinators, Gannett and others on campus, are looking at current programs and trying to decide how to improve effectiveness; but the main thing, we are listening to what the students themselves are telling us.

“To the extent that you feel motivated to ask your own students and your own classes, if and when you think it's appropriate, I would love your feedback on what we are doing, what we could be doing and what you are learning from the students. It is very important, I think, to get your input directly as individual faculty members.

“The university set up some interdisciplinary teams to look into programs, policies and procedures. Our goal this month is to get through the process of thinking through the next steps we might take. And I will try personally, and I know my colleagues in student academic services and in the police department, will keep the campus apprised of ideas that we have.

“Once again, I'm very interested in hearing from each of you, whatever you choose to share with me and, as you know, I give you all my private e-mail -- I hope you take advantage of it -- david.skorton@cornell.edu. This is a big set of issues.

“This semester also marks a major redefinition of our attempt to establish a more diverse campus and a more inclusive campus. As many of you know far better than I do, Cornell has had an orientation toward inclusiveness from the very first matriculants, and rhetoric of inclusiveness from the beginning of the university. Building on previous efforts and the work of a lot of people, some in this room, we have developed a new effort that I hope many of you are aware of that we put out on the web a few months ago called Toward New Destinations. And basically it consists, to make a long story short, of having direct personal accountability of leaders for success in making the campus more diverse and inclusive.

“It consists of the board of trustees holding me accountable, me holding Provost Fuchs and Provost Glimcher at Weill Cornell Medical College accountable, the provost in New York holding the department heads of the medical school accountable, and the provost here holding the deans of the Ithaca campus accountable.
“This university-wide project is moving along very rapidly, and we have set diversity goals in each unit. The deans and the vice presidents and the two provosts and I have set goals for our units. We've submitted those goals to a group of professionals who have been brought into the campus to work on different aspects of diversity. I hope you have been interacting with some of these folks: A.T. Miller, Yael Levitte, Renee Alexander, Sheri Notaro, and Lynette Chappell-Williams. They sent back several of the submissions to the vice presidents and deans, and those folks were very responsive.

“So we now have approved initiatives against which people will be held accountable that not only include the composition of the university students and workforce, but also include a variety of variables related to success of the people here and the climate on campus. And many of you have talked to me about the importance of climate, and not only emphasis on compositional diversity. We have right now 158 specific initiatives distributed across all of those units, and they'll have an impact, not only in the composition, but also on the climate of the campus. I'm very hopeful about that.

“I want to tell you about one more aspect, and I want to implore you to take advantage of this aspect. Earlier this week, Joe Burns, Kent Fuchs and I, and staff in 300 Day Hall and the units that are attached to the president's office, the judicial administrator, the commencement office, and several others had training -- this is part of a training program called Respect at Cornell. It's put on by Alan Mittman, who is an employee-elected trustee and director of Workforce Policy and Labor Relations, and an EEO specialist, Laurel Parker. The program requires about an hour of attention to an online tutorial and then some time in a group that we spend together -- and I don't want to speak on behalf of Joe or Kent, but I feel it is a valuable experience.

“I'm a bureaucrat and conversant with these procedures and policies but I learned things about Title IX, about the interactions we are all held accountable to on this campus, and I'm imploring you to take the time to have this training. I know you are busy; we are all busy. I'm hoping as many of us as possible on the faculty and staff can learn from this situation, especially on a campus that suffered sexual assaults as we have in the last year.

“We also had our first diversity related retreat, which included the deans, vice presidents, Kent and I, and folks from Weill Cornell Medical College. That was also helpful. Also, through Laura Brown's really superb leadership, we have brought more of an academic flavor to some aspects of this. There's a new course this semester that supports both a curricular offering as well as experiential learning. It's Education 2610, intergroup dialogue, a three-credit letter grade only course. It is listed in CALS where it fulfills two of the requirements in
CALS, a diversity requirement, which CALS has, and a cultural analysis requirement; and it is open to students from all the undergraduate colleges, to my knowledge, which is terrific. And we'll see how that works out.

“In addition, Renee Alexander, one of the professionals I mentioned, who is the associate dean of students and director of intercultural programs and oversees the 626 Thurston program at the Intercultural Center, has organized a leadership roundtable, which involves about 30 student leaders from a variety of areas of the campus. To save time, I won't mention all the different organizations. I believe that that group will be very helpful in having the students have a strong voice in our thinking in this area.

“The last thing that Joe asked me to comment on before we open up for questions is how we're doing with faculty renewal. Every year when I come to see you, I have been bemoaning the fact that we had to slow down faculty hiring at the beginning of the recession. We had a year where we had very little hiring and no increases in salary, as you know, and then we had an accelerating pace of hiring. I want to give the credit where it's due. Because Kent Fuchs is very disciplined in careful stewardship of the university budget, we have more liquidity than some of our peer institutions. Because of that, the deans and department heads have been hiring at a very rapid clip. I'll give you some of these figures. They are impressive. During last academic year, '11-'12, on this campus, 71 new tenure track appointments. That number in the year before was 27. The year before that, 42. So we have faster hiring, successful hiring -- not just putting out searches -- than we had before the recession, which is good, because we have room to make up. And on the Weill Cornell campus, 85 tenure track appointments, compared to 55 the year before.

“Just to put that in perspective, you may or may not be aware that 60% of the faculty in the university are in Ithaca and 40% of the full-time salaried faculty are at the medical school; about 1,600 here and 1,200 in New York. So about 160 successful recruitments in the last year between those two, across the university; a pretty good number if the faculty renewal continues.

“Student access, as you know, is a big issue for me, and I know for all of you, and we have ratcheted up the amount of funding we are putting into need-based financial aid. You know how expensive a Cornell education is. It's an excellent education, but it's pricey. Since the recession, the tuition has been going up an average of 4.6% a year, and financial aid's been going up an average of 20% a year. We now spend $225 million each year on undergraduate financial aid and, beginning with the students matriculating next year in 2013, class of 2017, we are making, as I hope you read about, some changes in the financial aid policy to make that program more sustainable for the long-term future.
“I want to add one thing you didn't ask me to comment on, but just want to tell people, last year, in '11, the provost asked me to write a sort of personal op ed, a white paper about how we are doing in terms of international focus at the university. I submitted that to him, I put it out on the web for everyone to look at, and the two provosts appointed a faculty committee, which I believe had one faculty from Weill Cornell and seven or eight from Ithaca, and they are just about to tender their final report to the two provosts and to me.

“I have seen a draft of the report. It's extensive, 65 single-spaced pages, but who's counting? And there's no fluff in the report. It is hard-hitting, there's many recommendations, and as has been my habit, I'll put it out there for all of you to see and hope that the faculty not on the committee will also have a chance to weigh in on this. There’s very, very useful advice and some bold ideas there. And I'm assuming that those bold ideas will be in the final submission, so you'll see that stuff soon.

“That's basically it. As I have been every year since I've gotten here -- this is the seventh time we have been together -- it's an extraordinary privilege to be your colleague and a faculty. It really is. I'm giving my once-a-semester talk to biomedical engineering students in a couple weeks. It will be sort of a dip in performance during that week. And after that, I'll go back where I belong at 300 Day Hall. So thanks for spending time with me, and we have a few minutes for questions.”

Speaker Beer: “Thank you, President Skorton. Any questions or comments for the president?”

President Skorton: I have some questions for them, if I have a couple minutes.”

Professor Valerie Hans, Law School: “I want to ask you about your diversity initiatives. I am wondering whether or not you are getting advice from the legal counsel's office or elsewhere. As you know, this morning the Supreme Court heard oral arguments in an important case involving Fisher versus the University of Texas that may result in a very dramatic change in what universities are permitted to do to achieve diversity in the university. So I wonder if you would speak a bit about that.”

President Skorton: “Yes, this is a hugely important issue. The case of Fisher versus Texas is a huge case, a landmark case in this area, not the first one; may not be the last one. The beauty of the plan that was developed by Professor Brown and others is that it is not based solely or even primarily on compositional diversity. It's based in part on compositional diversity. We'll have to see what
the Supreme Court weighs in on and how that mixes with our policies for advertisement, recruitment, decisions about admission. This is a more holistic -- if I could use that term -- approach, that includes plentiful helpfuls of attention to success in the case of the student body and retention in the case of the workforce.

“So we did get advice, because it's very, very important, and we have seen this case coming, as I know you have, professionally, for a while. I'm confident that the vast majority of what we are doing will pass muster regardless, but I'm the farthest thing from a legal scholar. Any comments on that?”

Vice Provost Laura Brown, Undergraduate Education: “We have been in very close contact with counsel's office throughout the process, so whatever they advise, we have been pursuing. At this point, we are in good shape, and, if changes occur, they will be ready to advise us there.”

President Skorton: “I just want to make one personal comment, which is not a direct answer to your question, but I'll take the prerogative. I do think that some of us have to be out there a little bit, trying to make sure that we don't back away from the inclusiveness of the campuses. And one of the things that, once again, thanks to the Provost's management of the budget, Cornell's undergraduate student body is the tenth most economically diverse student body in the country for national universities.

“Let me say it again. The undergraduate student body ranked Number 10 in economic diversity among national universities in the U.S., which is a very, very broad measure of the diversity of the campus in other, but not all categories. So we have to do, I think, whatever we can do. Obviously, that's on the right side of the law, to maintain inclusiveness in the campus we are trying so hard to maintain it, but it is a very important question and we'll know a lot about that soon.”

Professor Emeritus Howard Howland, representing CAPE: “I hate to bring up another worrisome topic, but anyway, you probably saw the article in, "The Sun," about the Bain Report and claims that Cornell is on an unsustainable path. I read that, and we also heard at the last senate meeting that we had a $60 million deficit in the general purpose budget. I must say, the article wasn't terribly reassuring. One of the things that said was that we are getting less tuition money, but on the other hand, we're making more money from the medical school, from the doctors in the medical school.”

President Skorton: “I'm going to draw you a picture.”
Professor Howland: “I just want you to comment, if you can, on the situation.”

President Skorton: “I will. If we can turn off the slide, if that's all right, so I could draw a couple of quick graphs, and I'll be out of your hair in three or four minutes, I promise.

“So I just want to quickly tell you how the university budget works. This is Budget 101, and I want to tell you what Kent Fuchs did, if you either cheer him or yell at him.

“This is university-wide, Howard, tuition, about 26 cents on the dollar, university-wide. The vast majority of those tuition incomes are here. We have 22,000 students here. The medical school has four years times 100 students a year and a grad college about the same size. So we have a lot of tuition flowing in the Ithaca campus. Tuition increases add net dollars to the university. Financial aid is high, but we still add net dollars to the university. The physician practice organization, the physician organization is about 21% of the university's income.

“This obviously recycles back to the medical college, so that's about half the story right here. You all bring in this money, the 26%. You also bring in research funding, and the research funding in the aggregate is about 17% including direct costs and indirect costs. And so you are the earners, the rain-makers in the university. This is pretty solid. Although financial aid has encroached on net tuition proceeds, this is solid. This is very, very solid for your colleagues in New York City. This depends on your elected officials, and one of the things I do, along with Kent and a lot of others, is try to fight the good fight for research funding, and we'll see what happens in that.

“This campus has been pretty successful, because you are very competitive; but nonetheless, you've got to wonder about that in the long run. Philanthropy, including earnings from the endowment and outright gifts that are spent that year, is roughly about 14%. About 10% of our operating funds come from endowment earnings, compared to 35%, at Harvard, and so we are less dependent on those. It's because of the other revenue streams, because of how much research you do and the size of the student body. And then there are other aspects. The State of New York gives us 4% now, Kent? Something in that order, a bit down from what it was before, not counting capital expenditures. It is down for two reasons. The State has cut it, and also the other revenue sources have risen faster than the State could ever rise anyway.

“You've brought more tuition in. The physician organization has brought more patient dollars, and you brought more research in. These are the major
categories of funding. There are some other enterprises. This is time, this is dollars, and this is years. This is '08-'09, and this is this year, '12-'13, and I'm going to draw curves for expenditures and revenue. It's too complicated for a cardiologist. This is going to be expenditures, and this is going to be revenue. The path we started with, we had a delta between revenue and expenses of $148 million in '08-'09. We were $150 million in the red. Scary, 12% or so of the unrestricted budget. And without actions, expenditures beyond revenues would have gone up to what David Harris estimated to be $215 million.

“So what Kent Fuchs did was through all the mechanisms that you are aware of, cut down the rate of rise of expenditures. About 55% of balancing the budget, as planning and budget has estimated, came from expenditure reductions. Nine hundred fewer staff in the university, some shrinkage in the faculty in some areas that are coming back on now, much less construction, no more new external debt, and about 45% was from increases in revenue, as the endowment came back and as more philanthropy came in and as tuition rose, so that this year, 2013, these curves are crossing. Expenditures and revenue are crossing, so in 2013 we'll have a balanced consolidated operating budget. First time in a very long time that those curves have crossed, longer than the years I have told you about.

“So it is sustainable. It's going to require discipline on everybody's part. We never raised tuition willy-nilly, but there will be more constraints on the rate of rise of tuition, and we'll have to hang together, make tough decisions about capital construction projects; but it's not true that this isn't sustainable. It is sustainable, short of another recession or something untoward of a major type like that.

“Okay, thanks a lot. If you didn't have time to ask me a question, write me, david.skorton. And if it's okay with the senators, I would like to stay and listen to a little bit of this, if that's all right. Thank you.”

Speaker Beer: “Thank you very much, President Skorton. If we can now go back to the consideration of the minutes of the September university faculty meeting.

“First, all senators should have a blue clicker, and the procedure is push the button to turn it on. And the idea is if you click A, it means yes. If you click B, it means no. If you click C, it means you abstain.

“Now, the question is, do you approve the minutes of the September 12, 2012 meeting as distributed. All those in favor of approving those minutes, click A. Those opposed, click B. Those abstaining from this vote, click C. And we'll give you about a minute to get your clicking in progress. If you watch at the very top
of the screen, the clicking time is ticking off. 28 people have properly clicked so far. I believe there are more senators present than -- number of senators are growing.

“Okay, we're reaching one minute, and so now we'll see what the results are. We have 84% or 31 voting to approve the minutes, 1 in opposition to the minutes, and 5 abstaining from approving the minutes. I would say that the minutes have been approved rather overwhelmingly.

“Now we'll go on to the next item on the agenda, and the next item on the agenda is the report from Dean Huttenlocher from the NYC Tech campus.

4. REMARKS BY DEAN AND VICE PRESIDENT DANIEL HUTTENLOCHER - SLIDES

Dean Daniel Huttenlocher, Cornell NYC Tech: “Thanks. I have a few slides I'm going to go through and then open it up for questions.

“I want to talk about a few things about the campus. I view this as an update, but some of you may not have had a chance to hear some of the background, so it's a mix of an update and some background description of the academic programs. I'm mainly going to focus on the academic side and touch at the end for a minute on what's going on with the campus development on Roosevelt Island.

”The most crucial thing in what we are focusing on at the moment is really building the culture of a new organization. I think every department at Cornell, the university as a whole, many of the colleges have strong cultures. That's a great thing about Cornell, that we have both strong departmental, strong college and strong university cultures. And the goal here is really to identify and build a culture that's part of Cornell and also has the kind of identity of separateness that we have across the colleges and departments that make this both a whole and a diverse organization with different views and different approaches.

“In New York, what's really important is the focus of this campus on a mix of academics and impact on the real world, related to technology broadly construed. We're really looking at a culture that brings together three types of people and approaches that frankly haven't always played that well together. One of them is the culture of academic excellence, one is the culture of commercial impact, and one is the culture of societal good and societal impact.

“So really, we're looking at bringing together academia, business and the non-profit sector's societal good on this campus, and that is an important aspect of what we are building. Deborah Estrin, from UCLA, set this impossibly high bar,
in that she really in one individual represents absolute excellence at all three of these, and we're certainly not looking for that in every individual that we hire, but we are looking for that as a culture that respects and mixes those together.

“The other piece that's very important is the entrepreneurial approach to things. And that doesn't just mean entrepreneurship in the sense of running out and starting companies. It means an entrepreneurial approach to people's careers. Academics are sort of natural entrepreneurs in that we're all each sort of free agents to some degree within our academic fields. This is taking that entrepreneurial approach and really connecting it, not only to the academic world, but to the commercial world and to the non-profit world. Someone can be very entrepreneurial as an academic and in the non-profit sector. That would be a great fit for the New York campus. Someone could be very entrepreneurial as an academic, and in the commercial sector that would also be a great fit. Someone who's just purely an academic, no matter how entrepreneurial in the academic world, given that the focus of this campus is the impact in the outside world and not just within academia starts to be a less good fit to the campus in New York; but we really envision this campus as having a mix of academics, people from companies and people from non-profits.

“The other thing I'll touch on in a minute in more detail is the hub structure of the campus, which is really a matrix structure between technology fields that are sort of at the core, and then these cross-cutting focal areas that are related to industries in New York City. I touched on this before. We want something that's both in one sense a part of Cornell broadly and very strongly tied to the Ithaca campus, but also has its own identity. And I'll touch on the Technion Cornell Innovation Institute, which is a component of the overall campus in more detail in a second.

“What's driving this campus is two big changes in the information age economy. The first is nothing short of the revolution that I think you really only see every 75, 100, even 150 years. The information economy is starting to mature and, depending on how you measure, maybe it started 25 years ago, maybe it started longer ago, but sometime in the last few decades. As that's starting to mature, it's becoming increasingly clear that the sort of traditional models of research and development that really drove the growth of the modern research university are breaking down.

“So when you look at the modern research university, the sort of sciences and engineering and computing disciplines, a lot of that was built at the heyday of the industrial age. In fact, during World War II and post-World War II there was a lot of the growth in both government and private investment. At that point, technology development was very sequential, over fairly long timelines, often of
many years to a decade. People often talk about it as a pipeline or a funnel model, where basic fundamental research happens first and then informs later technology development at companies, and eventually product development, and things getting out there in the world.

“So one thing that's happened in the information age is that timeline is compressed radically; but more than that, it's not just that it's compressed in time. It's that things that used to be sequential are happening in parallel, so that the quote/unquote early research is often not predating the product development. As these things start to happen in parallel, there's this opportunity and, in fact, we think really imperative to not just assume that information flows from universities to companies, but in fact that that flow of information is back in the other direction as well.

“And so one of the reasons for building very tight ties between the academic research and the work at companies is that this drives better academic research, not just that this is driving the commercial development. And I think in some of the discussions about the tech campus, particularly since the Bloomberg administration of course is most interested in the economic development side, the academic impact of doing things more closely together sometimes gets lost. So I really wanted to highlight that here.

“And that's something that actually predates any proposal that went into the City of New York. Both in the College of Engineering and in Computing and Information Science, there had been a lot of discussion among the faculty over the last five or six years about the fact that many peer departments and schools and colleges in places where there's deeper ties with companies were being able to take advantage of this feedback effect, and that was much harder for us here in Ithaca. So it's not just about the tech campus, but really how certain disciplines are changing.

“I should say that we see this as not something just located at the tech campus. Rather, the tech campus is the place where there will be more of this. We see it ties back to Ithaca and increases ties between companies and appropriate departments and units in Ithaca.

“The other piece is more New York-specific. As we look at the tech sector, there's a fundamental shift happening in the technology sector, where -- I hate to say this as a tech person, but I'll say it -- the history of the tech sector so far you could often caricature as the tech geeks doing stuff that the rest of us got stuck with. It might have been great from a technology development perspective and a really fundamental advance, but it wasn't often designed with the eventual use in mind. That's something that's really changing rapidly in the technology sector, where deep engagement of initial customers, users, people from outside
of the technology sphere with technologies early on in the process, is becoming very important in the business world. And so to the degree to which that shift is happening, New York is an amazing place for technology companies to be developing. And that's why we are both seeing this organic, nascent growth of the tech sector in New York and we are seeing an opportunity for us at Cornell to fuel that and be really a hub of activity in that.

“So really at Cornell Tech, what we are looking at at the tech campus in New York is this information layer across so much of urban life and commerce, and how it is that academic research and these closer ties with companies and non-profits can help drive that. There's really this mix of academic disciplines and then these interdisciplinary hubs on the campus. So there are a set of core disciplines that lie at the intersection of the hubs, and I'll have the hub diagram in a second.

“There's a bit of a chicken and egg problem here in explaining this, so bear with me; but there are a set of core academic disciplines: Computer science, information science, electrical and computer engineering, and operations research and information engineering, which are the focus in the initial plans -- and I should say this is all part of the academic planning currently. And over the next few years, this campus will, as it grows, continue to broaden, but this is what's happening initially: One-year professional master's, either master's of engineering or master's of professional studies, degrees planned in these four disciplines that are fairly closely modeled on programs we already have in Ithaca, but with added components that I'll talk about in a minute that really tie them more to the business and entrepreneurial worlds.

“And then there are interdisciplinary hubs aligned with industries in New York City that really cut across a wide range of disciplines from an academic perspective. And there we have planned two-year master's of science degrees, which are dual degrees that will result in a Cornell master's of science degree and a Technion master of science degree. And then all of this, both the one-year degree and two-year degree programs, and much of the research on the campus is then fused with business and entrepreneurship, both courses taught by Johnson School faculty and accelerated versions of the MBA program that require students to already have an advanced degree in a technical field. And then there is the entrepreneurial office, which is something that we're doing in New York City that's really new, which is to have a portion of the campus that's responsible for the student projects and where faculty research is also interested in tying faculty research to companies and to practical experiences that our students will get out in the City of New York.
“In terms of growth plans, I want to stress that the enrollment here of these programs is really going to be driven by two things: One is a faculty that's based in New York, complemented by faculty from Ithaca, and the resident faculty is an important constraint on the growth. We want the students to have an experience that really has faculty there all the time, so the growth of that resident faculty is crucial to the growth of the student programs, and then so to the quality of the student applicants that we see. So I'll give you some estimated growth numbers, but they really depend on those factors.

“You may have seen this diagram about the three initial hubs before. We're looking at these three interdisciplinary areas: Connective media, healthier life and the built environment. These are each sort of the information layers. When we say healthier life, we are not talking about biotech and pharma. We are talking about the information component, which is very broad in many of these things, similarly in the built environment and connective media. And each of these is tied to a broad range of industries in New York City.

“Just to look at the same diagram from a more discipline-centric point of view, this kind of blows this up and shows the overlap. There are a set of disciplines in the middle here, and there's a fairly broad range of disciplines that play a role in at least one and sometimes two of these interdisciplinary hubs. At the core, we're looking at disciplinary programs, as well as interdisciplinary hubs. And then outside of the core, we're looking at engagement primarily through these interdisciplinary programs.

“So the whole style of learning, and actually the MOOCs – a brief reference to the MOOCs discussion -- I often get asked questions given how prevalent the massive online courses are, what this means to the tech campus. I am asked if it is going to be driving massive online courses. And in some sense, this is like the Luddite version of education. Not seriously, but really, what we are focusing on is an apprenticeship kind of process, where the students are working closely with a faculty member and somebody from industry. And that apprenticeship process does not scale well to massive online courses. And so in New York, we do plan, as I hope people in Ithaca plan over time, to take advantage of the MOOC offerings for the kind of factual, material side of education; but one of the things that really distinguishes what we are doing in New York is this apprenticeship style, where we really have a hands-on experience for the students.

“Another thing is taking a page out of the professional schools approach. The regular academic curriculum in New York will be Monday through Thursday. On Fridays, when most business schools, and many law schools have a different
kind of program, will be oriented toward more practical experiences for the students, which the entrepreneurial office will be helping with.

“We're also looking at trying to have a broadly interdisciplinary faculty, where faculty are able to teach in multiple disciplines and across hubs. I think Cornell is wonderful compared to most peer institutions with the graduate field system at the graduate level. We do a lot of education across the disciplines. The idea is to take that a step further in New York. In terms of degree programs, it will be full master's degrees. Starting right away, doctoral students will spend their initial year or even three semesters in Ithaca. And then, if they are working with a faculty member in New York, move to New York. In terms of undergraduates, we will have, and in fact we already had over fall break, a program for some students to be down in New York for a short term, but we won't be offering degree programs for undergraduates in New York.

“So the TCII, the Technion Cornell Innovation Institute, is a key component of the campus. It's this 50/50 partnership between Cornell and Technion, and it's responsible for the delivery of interdisciplinary dual degree master's programs around the hubs. Now, when I say responsible for delivering, what do I mean? These are degrees from each university. So each university has to go through its approval process for the content of the degrees and the oversight process. At Cornell, that's the graduate fields, because these are graduate degrees.

“We're looking in the case of the first one of these programs -- two fields, computer science and information science, are actually together working to sponsor that degree. In terms of coordinating the offerings on the campus, because it's a mix of Cornell and Technion faculty the TCII will be responsible for the day-to-day delivery within the institute.

“Another thing that's important here is not just the teaching, but collaborative research between faculty of the two institutions. And the research in the TCII will tend to be more focused on the hubs because of the interdisciplinary nature of the teaching obligations of the faculty in the TCII. As a part of the Cornell campus overall, the TCII will be following our Cornell policies broadly. So in terms of faculty, we're looking at having a mix of faculty, both tenured track and a fair number of instructors and adjuncts and people who bring another view in addition to the academic viewpoint.

“The tenure track faculty will be appointed in an existing department or school. This is something where we have been in discussion for quite a while, even since the proposal process with CAPP, with various deans. We want to put together a structure that ensures that we're hiring the absolutely highest quality faculty into tenured track positions in New York, and also that we're building this web that
will tie the New York campus to the Ithaca campus closely so it's one tenured faculty body between the Ithaca and New York campuses. Most of these disciplines -- and a little bit with the medical college, but most of the tenured and tenured track appointments will be joint appointments with the Ithaca campus. There's some opportunity with Weill Cornell, but where the teaching and research and the salary are paid by the New York campus, and then the service responsibilities and interactions that the faculty have are on both campuses.

“So in terms of academic planning, I wanted to tell you about where we are organizationally. The grad fields and the departments in these core disciplines have been actively engaged in planning since the spring. There's a faculty planning committee that got going in the late spring, co-chaired by Rajit Manohar and David Shmoys. That group has a number of subcommittees, but in particular, three of them are focused on the dual degree programs where Claire Cardie is the lead for the connective media program, Shane Henderson for the healthier life, and Kevin Pratt for the built environment.

“We also have been engaging with CAPP in terms of running various thoughts by them and getting their reactions to things and getting recommendations from them. The structure of the tenured track positions comes out of discussions there. And then there's the committee of deans and vice provosts co-chaired by Lance Collins, the engineering dean, and myself.

“So in terms of Ithaca campus impact, I always have to remind everybody the tech campus is teeny, and the Ithaca campus is huge; and the tech campus is, by design and by Kent's mandate, separate, self-supporting financially from the Ithaca campus, but academically part of the Ithaca campus. As the dean of the New York campus, I'm reporting in to Kent, along with the rest of the academic deans.

“The visibility from the New York campus has been great for the university overall, and that's something that we both want to keep a high level of visibility and keep that visibility as something that's an asset for the whole university. There are a couple of institutions that are firmly in the top ten research universities in the U.S. that do a very good job of exploiting their visibility in certain areas like tech for broad institutional representation. I think that's something we really can benefit from at Cornell.

“If you talk to Lance Collins or Peter Lepage, they believe that they are already seeing positive impact on gifts to Ithaca as a result of the publicity. So the publicity is not all about fundraising for New York City, by any means. And Lance in particular was pointing out the other day that the enrollment yield for undergrads in engineering, which is this incredibly stubborn number, for the
first time in years, took a substantial bump up this year. And it's hard to say whether that's sustainable or not, but it's also hard to argue it has nothing to do with Cornell being in the press all of the time.

“There's also a lot of hiring potential here, and doing that jointly with the departments in schools offers us the opportunity as a university to broaden and grow the faculty. I don't want to diminish that there's a lot of careful planning to be done here to build close ties between the two campuses, while also maintaining the things about New York that will really make it be complementary to what's going on in Ithaca.

“So this [slide] is a sampling of some of the public interest. It's really been amazing. I wanted to close with a couple of slides about the physical site. This [slide] is from Google Maps, and shows an aerial image where this is the site, this is the Queens Borough Bridge, which does not stop on the island. It goes across. This is the tennis bubble. Most people in Manhattan have never been to Roosevelt Island, unless they play tennis. When we build out the tech campus here on this site, I would like to be able to say the same thing about the tech community in New York; that most tech community people in New York City have been to Roosevelt Island, even if New Yorkers in general haven't.

“This is about a 12-acre site, currently occupied by a hospital that's partially functioning. I just want to show what an amazing location this is. If you go to Roosevelt Island and look at it, it's really not been maintained for decades. The view of Manhattan from there, the notion of sort of being a part, while being right there, adjacent to Manhattan, and I guess I got ahead of myself. This is the F subway line, and then this is the tram that runs over to 2nd Avenue. From the F, we're about three city blocks, and from the tram, about a block. It's pretty well connected into the transportation infrastructure.

“There are a bunch of principles driving the campus plan and, in the interest of time, I will go past a bunch of those, but I wanted to show you that what we're looking at over time here is a pedestrian walkway down the middle with a mix of academic, corporate buildings, where companies will have facilities on the campus that are interacting closely with the academics; and then housing and an executive education center. It will be a mixed use set of buildings, but the idea is that we really tie the two sides of the river together. And the current hospital has a big spine down the middle that's indoors and completely blocks the two sides of the site. And the goal is for this to be open as a place for people to spend time in the outdoors. The first phase here is on the north end, and that's the initial phase of development.
“In terms of timeline, we're just starting a very small CS MEng class in space that Google's donated to us in their building. By next fall, we plan to have two or three master's programs running. The demolition and construction will start in the spring of '14, moving to Roosevelt Island a little under five years from now, at which point we wish to have several degrees, 300 or more students, 40 or more faculty. Then long after I'm retired, if not departed from the planet, a couple of thousand students and about 250 faculty. So with that, I wanted to stop and take questions.”

Professor Nina Bassuk, Urban Horticulture Institute: “There're several of us who have been very interested in looking at the development of the site. And as you showed pictures of it, there's quite a lot of green space, and we feel it could be a model for the development of green space and a learning landscape on that site. And so far, we've had letters and trying to get involvement, but there's been not much coming back.”

Dean Huttenlocher: Let me give two answers. One is the apology and the other is hopefully a constructive answer. So the apology answer is we literally have eight people. That is the entire tech campus right now. And there's 40,000 people on the Ithaca campus. And even if we just take the faculty, there's 1,600 faculty on the Ithaca campus. The apology part is just there's this huge scale mismatch between Ithaca and the tech campus, between Weill and the tech campus, between New York City, the nation, and world. The constructive piece and suggestion is that we actually, with CUSD, the sustainable design group at Cornell, there's quite a bit of involvement of both faculty and students in the planning and design process for the tech campus.

“I think that a natural model to look at reproducing for things like landscape design, is to look at engaging with the campus design process in ways that we have been doing for CUSD. So if you send me a note, I will follow up and look at whether it's practical for us to do that on the other side.

“My biggest challenge, frankly, right now is how to capitalize on all this excitement, build the connections that make sense today, and then figure out how do we maintain the excitement for the connections that don't make sense for a year or two years or five years, or some won't make sense for ten years; but I think there is a model around sustainability which may make sense in this case too. I'm a little far from the site development piece, so I have to defer to my colleagues there who are doing that, but at least on the surface, that sounds possible. Thanks.”

Professor Brian Chabot, Ecology and Evolutionary Biology. Could you say a little more about what you envision to be the eventual ratio of Ph.D. to master's
students? Part of my concern here is Ph.D. students tend to be more important in terms of the career development of faculty. And if you are hiring these bright, young folks, how’s that going to work?”

Dean Huttenlocher: “So let me stress the academic excellence piece of those three things I said at the beginning: Academic excellence, commercial success and societal impact. There’s no way to get academic excellence at the level of Cornell without very serious Ph.D. student participation. You just won’t get faculty at that level. So if for no other reason, that’s a critically important piece, because there’s no way we’re going to sacrifice the academic quality. In terms of ratios, it’s a little hard for me to say right now. There will be more master’s students per faculty member in New York than there are here in comparable disciplines, but there won’t be undergraduates.

“I doubt there will be less Ph.D. students per faculty member in New York than there are in Ithaca in these disciplines. There tends to be about 4 per faculty member in these disciplines in Ithaca. So if we are looking eventually at a couple of hundred faculty in New York, we are looking at an order of 1,000 Ph.D. students. But I don’t know if that’s the right multiplier. Is it 3 instead of 4 because the faculty are spending a bunch of time doing commercial things? But that really has to be driven by the faculty and where they’re spending their time, but the Ph.D.s are a very important piece.

“Initially, we don’t anticipate any fully separate Ph.D. programs in New York, because a Ph.D. program of necessity involves a certain critical mass of faculty. And given the broad disciplinary bases of this campus, we are not going to have eight or ten faculty in a given discipline for quite a while. It doesn’t seem really sensible or possible to offer a full Ph.D. program in New York. So we’re really looking at ways to build strongly coupled Ph.D. programs with students who some of them spend time in Ithaca, some time in New York, where the early years are largely in Ithaca, because that’s where a lot of the earlier experience happens. And one of the great strengths of Cornell, and I believe this will happen field by field, is that the fields will structure this in ways that work best for the individual fields that are engaged there.”

Associate Professor Richard Geddes, Policy Analysis and Management: “Thank you for a great overview of what’s going on in the tech campus. This might be a little bit of an unfair question. Given the hubs are connective media, healthy lives and the built environment, the last of which I sort of interpret to mean physical infrastructure broadly construed, I would say that all of these activities take place within a pretty messy policy environment, both state, federal, and local level. So public policies have the ability to either encourage or to quash terrific ideas that the commercial folks and the academics come up with together. I was
wondering if you could just give us your thoughts on how you would see that interacting with your vision for this campus.”

Dean Huttenlocher: “Absolutely. I think there are policy issues, there are legal issues, all of which are very important. And I think here's sort of the opportunity and the challenge: So opportunity is for faculty who are in, say, policy or law or other areas that are very important to these hubs who really want to be in an environment where they're primarily engaged in the activity of those hubs. Those are great faculty full-time in New York engaged in the hubs. For those who want to be in a broad policy school or a law school, that's not what we're building on that campus. So we'll be looking at ways to have close ties with the Ithaca campus, where people might go back and forth for a semester or a year.

"There are a lot of mechanisms you could imagine where somebody who doesn't want to full-time be on a tech campus, still wants to spend some time there, spend some part of their academic career there. We have to do that in ways that work for the students in New York also. Some amount of resident faculty is very important for the New York programs, but there are a set of ways of addressing these questions, both with Ithaca faculty and with permanent faculty in New York, but the permanent faculty have to somehow fit with the degree programs that it makes sense for the campus to be offering right now.”

Speaker Beer: “Thanks so much. I think we have to move on to another aspect at this point. We are going to hear a report from the Committee On Academic Programs and Policies from its chair, Professor Cleland.”

5. REPORT FROM PROFESSOR THOMAS CLELAND
Assistant Professor Thomas Cleland, Psychology, chair Academic Programs and Policies Committee: “So you may remember that last May, CAPP made a report to the senate about the first degrees to be initiated at the tech campus. These were variances of existing degrees out of the College of Engineering. What we have to present to you today, as a resolution, is the first of the new degrees at Cornell tech, and specifically the dual degrees between Cornell Tech campus and the Technion Israel Institute of Technology.

“I have a few slides here, which were intended to provide some background and reminders. Many of them will be redundant with what Dan has just gone through, so I may go through quickly, but I have some key points to make, and I'll make those.

There are a couple of points to make with respect particularly to the academic programs and policies and our goals as a university institution here. This is meant to indicate that the green loop is the physical campus, which includes all
of Cornell NYC Tech, and also some Technion faculty, which is the overlap, which is this here; and the Technion Cornell Innovation Institute, which is the 50/50 joint institute between them. This is here to bring up a couple of points, one of which is that, as Dan indicated, the TCII is the functional unit that will be delivering a lot of these dual degrees, because that is where the faculty from Cornell and NYC Tech and the Technion meet. The degree itself is by the two degree granting institutions and not by the TCII, per se, but an important one.

"What we are looking to talk about and propose to you here is passage of the master's of science and information systems from Cornell. The equivalent from Technion has already been approved by the New York State Department of Education, which is a plus for us in thinking about whether the content of the current master's of science degree program will also meet New York State requirements.

"This proposal has been gone through informally both by CAPP and members of the General Committee of the Graduate School prior to its formal consideration by the General Committee on the 25th of September, and subsequently by my Committee on Academic Programs and Policies on the 2nd of November. There were many details and many requirements and suggestions for modifications and such that went back and forth, one of which is really substantive. I want to tell the senate about this because I think it occupied a certain amount of the general committee's time. This is the issue about the master's of science degree being an academic degree and how this fits in with a very practically oriented, entrepreneurship-oriented campus. The gist of it is – and it comes out to both the General Committee's satisfaction and our own-- that this is better suited as an academic degree than it would be as a professional degree of various sorts. It is a long program, a great degree of practical output, but also interested in the fundamentals of both information creation and dissemination, as well as production of output.

"In particular, the substantial second year research project, which is a quarter of the entire academic commitment of students in this proposed program, matches a master's thesis in both form and in the deliverable, which includes substantial written content. In other words, the key elements of an academic degree, the fundamental information creation and the thesis requirement, have been met to the satisfaction of both the General Committee and ourselves. Again, this will also be the view of the Department of Education at the State, and has been substantiated by the fact that essentially an earlier version of the same proposal has already passed DOE in the form of the Technion's equivalent proposal.

"This is a brief timeline of what's happened here. We've both been engaged since fairly early in the process. The General Committee of the Graduate School
approved the program unanimously in its revised form on the 25th of September, and CAPP's final approval and my recommendation to you was concluded on the 2nd of October.

"I will then present the formal resolution itself. It's the same as the one you all have obtained. If there are questions, I will take those that pertain to CAPP and I will distribute those. They can be better answered by representatives of the General Committee or the tech campus. That's all I have to say. CAPP is happy to recommend this resolution for approval."

Speaker Beer: "Just as a point of information, the resolution presented by the committee is before the senate now for senate approval of the resolution, as written in the final five lines on the screen. Perhaps we should read that resolution or the revolved portion.

""Be it resolved the faculty senate approves the establishment of a new master of science degree program in information systems, concentration in connective media, to be offered at Cornell NYC Tech by the Cornell graduate fields of Computer Science and Information Science, as a dual degree with Technion Israel Institute of Technology."

“So that is the resolution that the senate is now considering. Any questions or comments on that?”

Professor Christine Shoemaker, the Joseph P. Ripley Professor of Engineering: “When I have been involved previously in new degree programs, the petitions always just went to the graduate school and didn't come to the senate. Could you identify first why this is being dealt with in the senate? Is it because it's two universities involved, or because it's a whole new program, or what distinguishes this from normally a new program?”

Professor Cleland: “I believe the governing feature is this is not only a new degree program, but a new degree, applying the master's of science to this engineering program and the establishment of a new dual degree program.

“In counterpoint, the master's of engineering programs were just reported to the senate because they're essentially variants of existing degree programs within graduate fields at Cornell. A more sophisticated answer I may have to delegate. Shall I?”

Professor Shoemaker: “I guess it depends if other people think it's something we need to discuss.”
Speaker Beer: “Thank you. Further questions or comments or debate on whether or not the senate should approve the resolution before you?”

Professor Gregory Dyson, Applied Economics and Management: “You referenced some present programs that have similar MS programs to Cornell that would have more practical MS programs or more practical theses. Could you give me the names of those programs?”

Professor Cleland: “These are not Cornell programs. These are pursuant to the idea of the package the New York State Department of Education will accept without controversy. I have a list. One of them is from Columbia, very practically oriented master of science program at Columbia College. There's another one from New York University, again, extremely practically based, technologically based one, much more so than this proposed degree program, which is substantially academic as well as practical.

Professor Risa Lieberwitz, Labor and Employment Law: “Since there was so much controversy about having a partnership with Technion, whether your committee or you know if the General Committee discussed whether it was appropriate to do a dual degree with Technion, you know, that is not just the issue of having research done, but also actually jointly offering a dual degree. Was there any discussion about that? Or was it just assumed that Technion was fine?”

Professor Cleland: “I have two answers to that. Our committee was really charged with vetting the structure of the academic degrees, and so we didn't explicitly discuss that issue as part of our report to the senate and our judgment of the academic program itself.

“Many of us have opinions. For want of a more broad spectrum, I have personally been very critical about the Israeli government policies after the assassination of Yitzhak Rabin, but I think it's a very different question than engagement with Israeli civil society, with which I have no particular problem. No problem at all.

“My criticism to the Israeli government are similar to the criticisms of our own government under certain circumstances and certain administrations, so that's where I put myself. I know this came up, and I felt that I would need to have an opinion I could present because of that controversy having been brought up in the senate before, which is why I created that little description; but that's where I am.
“I'm comfortable with this idea because I don't think it is any stranger than associations with other countries and the United States, India, Singapore, all of which have government policies that could be easily criticized, but I think are not the governing feature here.”

Professor Lieberwitz: “One question, for example, that could be raised would be, for example, if Technion is doing research, secret research that Cornell would not approve on a Cornell campus. Would it be appropriate for Cornell to do a dual degree with any university that does research that we would not allow? And I didn't know if something like that was discussed at all.”

Professor Cleland: “That was not something that our committee discussed, but I know such things are always at the forefront of Cornell’s top academic policy-makers. If something like that is alleged or comes to light, Cornell is going to have to, as an institution, make decisions based on that.”

Speaker Beer: “Could the senate now turn to debate on the resolution before us. And we’ll first take a speaker who wishes to speak in favor of approving the resolution before you.

“Seeing none, are there any speakers who wish to speak in opposition to approving the resolution before you?

“Seeing none, the implication is that the body is ready for the question. Is that correct?
“So the resolution is before you. You've had practice with your clicker today, so please get it out, turn it on again, if you have turned it off, and wait one moment until I can start the clicker.

“If you have clicked before the clock started, please click again. A, if you approve the resolution -- okay, please withhold your clicking.

“There's a reason why we have a technical person here. Fortunately, we have enough time before our scheduled adjournment for solving the technical problems.

Unidentified Speaker: “Why don't we just vote right now with hands?”

Speaker Beer: “Let me check with our technical expert, see where we are. The technical expert assures me that it won't be long.
“I revise that statement. The clicker is broken. Therefore, all those in favor of the resolution, please stand. Could the Dean of the Faculty please count standing bodies?”

Unidentified Speaker: “Point of order. The count has not been called for. Unless no one calls for count, we can just look at it.”

Speaker Beer: “If that's the case, turn around and see how many people, senators only, who are standing.

“And now those that are standing, please be seated. And those who wish to oppose the resolution, please stand. Please look around and see those standing.

“And those who are now standing, please be seated. And those senators abstaining, please stand.

“Well, in the judgment of the speaker, there were more people standing to approve the resolution than those either standing to oppose it or to abstain in its consideration. So therefore, the resolution as presented by the Committee on Academic Policies is approved by the senate. Thank you.

“So at this point, we've reached the end of the scheduled agenda, and the senate could adjourn, with three minutes to spare. And there are more apples and more apple juice available. Please help yourselves as you exit.”

(MEETING ADJOURNED.)