6. REPORT ON COMPUTING AND INFORMATION SCIENCES

A. Report

Vice Provost Cutberto Garza: "I wanted to give a thank you to Bob for giving me the opportunity to address you today. I mean that sincerely, proof that just because you move to Day Hall, it doesn't mean you lose your sense of humor. I also want to publicly congratulate Don on his move to Chicago. It goes to prove that he's already learned one important lesson that as President he will continue to do the difficult and continue to contract out the impossible. (Laughter).

"The objective for today is to provide an update of discussions that Mary Sansalone and I have been having with committees, college deans, the Dean of the Faculty, and the Dean of the Students related to the Task Force Report and Recommendations regarding this important area. I will be discussing the report in light of there being a draft, as opposed to a definitive document, and would very much like to hear discussion from you and your points of view as we have up to this point. We've attempted not to try to provide something that everyone will agree to because that would require sinking to the lowest common denominator, but rather something that at this point is the best, most timely idea. I thought we would start by reviewing the assumptions that you walked in with in terms of trying to formulate the recommendation to the Provost and the President.

"The first assumption is that we do have a dean of Computing and Information Sciences and that this position is transitional. What I mean by transitional is that we expect this office to be one that we would want to maintain for 30 or perhaps 50 years but we don't see it as being as permanent as those along the lines of the Dean of Arts and Sciences, which we tend to think of in terms of centuries rather than decades.

"The second assumption is that the creation of this position supports the idea that Computing and Information Sciences will enable teaching, research, and outreach efforts throughout the University. This idea is not new, in fact it has gone through informal and formal examination and began with a task force chaired by Norm Scott and John Hopcroft that identified three enabling areas in Genomics, Material Sciences, and Computing and Information Sciences.

"The third assumption was that resource constraints heightened competition and accelerating change in this and other fields requires structural adjustments that allows greater nimbleness in responding to change and more intense collaboration across the University. These outcomes, however, are not usually complimentary: the greater your collaborative network, the more discussion that you have to hold, therefore the less nimble you are. Given the fact that they're not complimentary, means often that these solutions are not straightforward.

"The goal then, with those assumptions in mind, was how to build stronger departments and colleges or rather to build stronger departments and colleges with the principle strategies. The first was to develop and implement a vision through institutionally supported University-wide collaboration and to vent this collaborative effort with the necessary resources, responsibilities, and authority to ensure a meaningful measure of accountability. So, we looked at the two Task Force Reports, looked carefully and intently at the discussion that occurred in this body, and are thinking with this draft document of the creation of three additional positions or units.

"We have a Dean of Computing and Information Sciences -- the position was created to move the University's efforts in this area forward in a timely and organized way. The document (Appendix C, attached) that you were sent over the Internet proposes the creation of a faculty of computing and information sciences. This body is used to designate a defined University Faculty body that is responsible for advising the University regarding the enhancement of teaching, research, and outreach related to this important area, and ensure a cohesive development of this area across the University. Thus, this proposed body is expected to take a key role in enhancing the quality and breadth of the faculty and assisting in avoiding the inappropriate duplication of faculty positions. Now that doesn't mean that we should avoid all duplication. Obviously at times that's a very necessary need."
"We also propose the creation of an Executive Board. Among the Executive Board's principle roles will be to advise the Dean of CIS on policies that will govern the operations of the Office of Computing and Information Sciences and assist this dean in meeting the goals that are set forth in the document that you were sent and that may be recommended by the Faculty Senate. We also have suggested the creation of the Office of Computing and Information Sciences. This is intended to serve as the administrative unit for the FCIS and the Dean of CIS. This office would report directly to the dean and through the dean to the Office of the Provost.

"I'd like to go through each of these and describe briefly their responsibilities. The responsibilities of the dean of CIS have been summarized into six. (1) Lead the campus discussion in development of the area of computing and information science. (2) Administer and manage the Office of Computing and Information Science. (3) Develop this area of scholarship within relevant University units. These responsibilities will include the development of CIS faculty by providing bridging or longer term funds that would enable hiring throughout the University and support the current faculty for development and enrichment of CIS in departments throughout the University's colleges. (4) Direct this office and the FCIS subject to the policy guidance of the Executive Board. (5) Carry out the goal activities, to be able to increase resources as they become available to his office. (6) Expand external relations with industry in partnership with the University colleges, programs, and centers.

"The responsibilities of the proposed FCIS are: (1) Identify key areas for faculty recruitment in a timely fashion. (2) Advise the colleges and central administration on issues that relate to faculty promotion and retention. (3) Anticipate facilities and other resources as are needed to maintain the University in the forefront of this important field. (4) Promote collaboration and attain objectives that are related to the University's teaching, research, and outreach missions.

"Degree-granting privileges and the ability to make primary appointments, that is tenure, tenure-track, or professorial appointments, are reserved for the University colleges. Nonetheless, the FCIS would be expected to have University-wide membership of the type of adjunct appointments. Their initial charge would be the development of a five-year academic plan for the University-wide enhancement of our three principle missions of teaching, research, and outreach as they relate to this important area. Also, they are to help assure that the quality and breadth of faculty appointments in support of these recommendations are carried out. A very important piece of the Senate's discussion has been the location of the Department of Computer Science. It's location in existing colleges has not been determined and we don't make a recommendation as to where it should be placed because we feel strongly that it will follow strongly from the five-year academic plan, once it's put together by the FCIS.

"The Executive Board would be appointed by the Provost with the advice of all of the Ithaca-based college deans and the Faculty Senate in a manner that is similar to that which is followed by the university-wide committees. Among this board's role would be to advise the dean on policies that would govern the operations of his office and assist him or her in meeting the goals related to CIS and that may be recommended by the Faculty Senate in the future. The Board's membership would be representative of all of the University's Ithaca-based colleges and it would be chaired by the Dean of CIS. The roles and responsibilities of this board would be reviewed after three years of its initial appointment.

"There are other working assumptions and terms of the proposals that I'd like to review very briefly. The first, as we may expect, is sharing responsibility for all CIS-related proposals that are forwarded to the Office of Sponsored Programs by members of the FCIS. The reason for this is that this office is going to have resources and we would expect them to participate in matches or other types of resource requirements as we go forward with sponsored programs. Academic appointments of the faculty, FCIS appointments, are anticipated to involve the endowed as well as the statutory units however, the authority to make primary professorial appointments will be reserved to the dean of the University's colleges. The Dean of CIS would participate in the appointment, search, promotion, and tenure committees jointly with the Dean of the candidate's own college for all proposed or current members of the FCIS. Appointment, tenure, and promotion recommendations would be made according to the University's policies that apply to the candidate's home department and college. We would hope that the FCIS would also play a role in undergraduate curriculum and affairs. The existing CS major -- that is the undergraduate Computer Science major -- would be maintained in the Colleges of Arts and Sciences and Engineering. However, we hope that new undergraduate majors and concentrations would be explored and their creation explored by this body. The dean would be expected to consult widely with the computational and information scientists science community at the
University to determine the goals and aspirations of proposed concentrations and majors and will develop plans for their implementation through mechanisms to be determined by the FCIS and, importantly, the sponsoring colleges and departments. Lastly, regarding the relationship with the Graduate School, we don't see any changes proposed there. The relationship between members of the FCIS and the Graduate School would be similar to that which now exists. Thus, Ph.D. and M.S. programs would operate entirely as they do now by the structure that we would put in place. I will now take questions or suggestions."

Speaker Howland: "Peter?"

Professor Peter Bruns, Molecular Biology and Genetics: "I have a question, and I noticed that there's a difference in what you showed there and what we got. One important sentence that I think is critical to understand -- and I can't tell if you are drafting an idea or was it just left out for brevity -- 'Thus professorial appointments to the FCIS will be secondary or adjunct to primary appointments in departments within any of the University's colleges.' That is, there will be no faculty appointment primarily within this unit and that they will always be in some other unit first?"

Vice Provost Garza: "That's what I meant here by saying that primary appointments would be restricted to the University colleges. All appointments to the FCIS would be secondary or adjunct."

Professor Bruns: "So, you're not adding new faculty, you're going to be using existing faculty in a position for something different. For instance, if you create a new major outside of the existing departments, you will anticipate that the departments will use one of their positions to help staff that?"

Vice Provost Garza: "Yes. Now, those positions can be funded through the FCIS and there may be bridging money that may be available to those departments or, in fact, faculty time could be 'purchased' or 'facilitated' by resources that OCIS might have. For a major that would cross multiple departments, the example we use in the text is Information Management, it would still have to reside or be sponsored by at least one department in an existing college."

Professor Bruns: "But you see this as a permanent budget for CIS rather than a temporary bridge?"

Vice Provost Garza: "With the transient definition we have. So it's permanent but not in the sense of centuries." (Laughter).

Associate Professor Alan McAdams, Johnson Graduate School of Management: "I don't want to jump the gun, but I see an awful lot of overlap and potential conflict between what you've just described and e-Cornell, except that this organization operates on a not-for-profit basis and the other operates on a for-profit basis, I just wondered how this is all going to mesh."

Vice Provost Garza: "When you hear Mary's presentation, you will see that they are totally disparate organizations with very little overlap other than programs that FCIS would be interested in that might benefit from e-Cornell. If that doesn't prove to be the case after Mary's presentation, I will come back and address your question, but I think you'll see they're quite separate."

Speaker Howland: "Professor Stein?"

Professor Peter Stein, Physics: "At various times in the same way that the 20th century was the century of physics and chemistry, one hears every week in the Sunday 'Week in Review' section of the New York Times that the 21st century is the century of Information Science and Biology. I'm sitting here missing something because it seems to me that the structure that's being proposed bears a remarkable similarity to the Division of Biological Sciences, (Laughter) in that you will have to coordinate the different sciences all over the University and it's very important that there be close interaction between them and one will gain from the other, and if you take out 'Biological' and put in 'Computing' you can make a good argument that they're the same. As you know, we went one way in one of the 21st century's seminal issues and we're going the other way in this one --- is that sort of hedging our bets in case one of them fails? (Laughter). Why did you decide to go this way with Computing Sciences and go with a more traditional structure in Biological Sciences?"
Vice Provost Garza: "Well, Peter, remember that there were some of us that, in fact, are being consistent in making decisions. I'm afraid that I can't speak for the President. We will be forwarding this recommendation to him but he could very easily take the more traditional approach. This is what we will be recommending to him and the Provost."

Provost Randel: "Let me add to that. Clearly, the analogy goes a certain distance, but no analogy is perfect. I would say for a start, one would have to add a chronological dimension to the comparison and to say that the situation with computing and information Sciences is at a very different stage in its development from the stage that the biological sciences are on this campus. So one could perfectly well imagine and might agree that the division was the right thing to have done thirty years ago, but that it had outlived its usefulness by now, but that computer science, being what it is, calls for precisely that structure and that thirty years from now we might make better of it as well."

Speaker Howland: "Sorry I have to interrupt the discussion, but we have a motion that's going to be presented by Professor Fine."

B. Resolution

Professor Terence Fine, Electrical Engineering: "I'd like to withdraw the motion on behalf of CAPP. It's a little difficult, procedurally, because we just got this written version of the motion midday yesterday. The motion basically reiterated something that we already supported by a vote of 49 to 3 much earlier. At this point, I think it's redundant. I've surveyed the CAPP Committee and we'd like to withdraw the motion and give a little more time to discussion."

Speaker Howland: "So, you're asking for unanimous consent to withdraw the motion?"

Professor Fine: "Yes."

Speaker Howland: "Are there any objections? Hearing none we have more time for discussion. Yes?"

Professor Philip Nicholson, Astronomy: "I just wondered if you could clarify the role that this new faculty would play in tenure reviews and appointments of existing faculty. It sounds like an extreme case of what you were saying is that an existing assistant professor in the Astronomy Department who had an interest in computation would, whether he liked it or not, be part of this FCIS and then therefore the FCIS would be involved in a tenure decision of the Astronomy Department."

Vice Provost Garza: "No, what we were saying is that if they were members of the FCIS, they would want to join that faculty, and that for it's membership, it would be a voice along with his or her home department or college in helping make that decision. We hope to bring a measure of cohesive development that in fact this body would be involved in that decision process along with home departments and colleges."

Professor Nicholson: "This would be a voluntary matter of associating for existing faculty members?"

Vice Provost Garza: "Exactly."

Dean Cooke: "And it would be advisory to the home department?"

Vice Provost Garza: "Yes, it would be advisory to the home department. Now, it's secondary role would be that the dean or those members of the FCIS would be in charge of appointing committees in terms of being advisory or through some other mechanism of that whole process to be agreed upon by the FCIS."

Speaker Howland: "Professor Fine?"

Professor Fine: "First, I'd like to thank Vice Provost Garza for his patience and sustained efforts in resolving this. I'm aware that he worked on many versions of this and that he's trying to reconcile strong positions that are in conflict with each other. As he said at the outset, no one will be completely happy with what he has to say. I think that part of the key to the reconciliation has been kind of latitude to the development of the plan. It depends on
who's going to be helped here and how this is going to turn out. The plan defines it's own outcomes at this point, and maybe that's acceptable. If we trust the people in charge, the Dean of CIS and the Provost, then we can hope for a good outcome. So that's one issue. For example, I think it's perfectly reasonable that the FCIS examines where it will locate the CS department, in which college, as part of the five-year plan. I certainly hope that it doesn't take five years to do so. (Laughter). It's not clear to me, however, that it couldn't take five years to come up with that resolution. I like the part that emphasizes that it must go back into a college. I take it that is correct, however, it doesn't say when that will happen. And although Vice Provost Garza believes that the thirty to fifty years is a transitory period, I know I won't be here in fifty years. (Laughter).

"The other issue is very critical and we have soldiered on about this, but the Senate must be consulted on this issue. This is part of the response to that. I'm concerned that we won't have a chance to be heard beyond the few seconds remaining today. I think we should think about how our opinion will be communicated in the remaining few minutes. One possibility is to e-mail the Vice Provost directly with comments on the document. Another possibility is to e-mail the CAPP Committee and they will attempt to meet within the next week or so and make its own recommendation, not from the Senate, but from the CAPP Committee. I think that we need some sort of mechanism for responding beyond the remaining seconds."

Vice Provost Garza: "Two mechanisms you might want to think about are: to use the time that the Provost will be here at every meeting and to hold him or her accountable for how this develops over time; and the second would be that there will be an Executive Board and nominations to that board will be coming from the Senate and that provides yet another mechanism to ensure that the Senate's voice is heard as we begin to implement this or some other plan."