

Minutes*

**Senate Research Committee
Monday, February 11, 2013
2:00 - 4:00
238A Morrill Hall**

Present: Linda Bearinger (chair), Melissa Anderson, Arlene Carney, Jerry Cohen, Susan Everson-Rose, Benjamin Fuller, Maria Gini, Greg Haugstad, Goran Hellekant, Brian Herman, Brian Johnston, Frances Lawrenz, Richard Leppert, Hinh Ly, Suzanne Paulson, Kathleen Thomas, Thomas Vaughan, Karen Williams, Lynn Zentner

Absent: Seung-Ho Joo, Tucker LeBien, Federico Ponce de Leon, LaDora Thompson, Kyla Wahlstrom

Guests: Jon Guden (Institutional Compliance Office)

Other: Associate Vice President Pamela Webb

[In these minutes: (1) discussion with Vice President Herman; (2) Institutional Conflict of Interest policy changes]

1. Discussion with Vice President Herman

Professor Bearinger convened the meeting at 2:00, called for a round of introductions, and welcomed Vice President Herman to his first meeting with the Committee. She noted that she had provided Dr. Herman with a few questions in advance of the meeting:

1. Can you please share with us a vision you might have for encouraging and supporting the growth of research at the University? Overall, what specific aims do you have here, and on what timeline?
2. What do you consider y/our biggest challenges and issues you might want to tackle in your role as VP for Research? What do you regard as long-term issues and what do you regard as short-term issues? Would you describe for the committee your ideas for beginning to address them?
3. It has been said that the University needs to improve on its "friendliness" to business, e.g., regarding technology transfer and faculty entrepreneurship. In your first months on campus, do you have a sense of current policies that may be contributing to the challenges of being "business friendly"? What kinds of policies or policy changes might make us more business friendly?
4. We recognize that you are in the process of becoming familiar with various aspects of the University of Minnesota, including faculty governance. Do you have thoughts on how this group, the Senate Research Committee, can most effectively partner with you, knowing we share the goal of advancing research at the University of Minnesota?

* These minutes reflect discussion and debate at a meeting of a committee of the University of Minnesota Senate; none of the comments, conclusions, or actions reported in these minutes represents the views of, nor are they binding on, the Senate, the Administration, or the Board of Regents.

Vice President Herman began by saying that former Vice President Mulcahy had told him how important this Committee is as an advisory and consultative body; he said he hopes to continue the relationship that the Committee had with Dr. Mulcahy. He said that as a scientist he likes a lot of dialogue, discussions, and data. He then turned to the questions that Professor Bearinger had sent him.

With respect to the first one, his office has undertaken a strategic planning process (that will be very consultative); he said that the strategic priorities as things now stand are the following, not in any particular order of importance:

-- Enhance collaboration: Identify ways to promote collaboration between researchers in all disciplines and increase public-private partnerships. The president has announced a goal of taking the University to the top 3 in research; one key to achieving that goal will be collaboration across disciplines. Dr. Herman said he would work with anyone and everyone to facilitate interactions. Given the increasing likelihood of sequestration at the federal level, and reductions in state funding, the University cannot count on its traditional sources of funds for research, so it must increase partnerships with the private sector—and with the businesses as equal partners.

-- Promote a culture of serendipity: Create an environment where serendipity is encouraged and nurtured. Dr. Herman observed many major scientific discoveries have happened by accident, and organizations can take steps to enhance the ability to take advantage of serendipity.

-- Advance academic excellence: Increase the research and entrepreneurship opportunities for students. Dr. Herman said he hoped his contribution could be getting undergraduates more involved in research and also get the faculty and the public more involved in being more entrepreneurial. The mission of the University is to use its assets to enhance the social good and he believes in the University helping to make improvements in society.

-- Promote risk recalibration and operational excellence: Encourage informed risk-taking that will result in a more efficient organization. People do not apportion the perceived risks in society so they are in line with actual risks (it's far riskier to drive a car than fly in an airplane but people worry more about the airplane than the car), and the University needs to think about the appropriate apportioning of risks and be tolerant of increased risk where it is possible and reasonable to do so.

-- Increase informatics capabilities: Support researchers across a broad range of informatics applications. Large databases are essential to research, there are infrastructure costs in maintaining them, and the technology is evolving. Dr. Herman reported he is pulling together a group of stakeholders to assess where the University is right now.

-- Strengthen the research infrastructure: Identify areas for targeted, strategic investments. The University has done an excellent job in this regard, Dr. Herman said, but it is an aging institution that needs more funding for its research infrastructure. He is working with President Kaler and Vice President Pfitzenreuter to identify recurring funding for it.

-- Enhance technology transfer: Accelerate the transfer of University intellectual property to commercial partners. Dr. Herman said he would like to see continued improvement in the Office for Technology Commercialization and to reach out to the private sector to enhance its ability to interact with the faculty.

-- Support the MnDrive goals: Ensure optimal use of state funds in four focus areas (securing the global food supply, advancing discoveries and treatments for brain conditions (neuromodulation), supporting robotics, sensors and advanced manufacturing, and advancing industry and conserving the environment). Dr. Herman said he is optimistic the University will receive the funds it has requested from the state and asked him to assemble a group to decide how to use the funds and how to measure accountability for the work done.

Dr. Herman said, in response to the second question, that he does not like the word "challenge" and instead regards them as opportunities in disguise. Many academic institutions need to become more collaborative across the organization and across systems. In his own field collaboration has led to advances that individuals alone could not have achieved. The University has been very successful in allowing people to do their business, left to their own devices, but the success has not been coordinated or strategic. With the current funding environment, there is a need to find solutions to "wicked problems," which will mean bringing in people from across the humanities, arts, social sciences, and the other sciences. Each will keep doing his or her work but at same time develop teams; faculty as well as colleges must be willing to collaborate.

Professor Everson-Rose said she agreed with Dr. Herman about collaboration but said there is a disconnect between the desire and the promotion-and-tenure process. How can he realign the promotion-and-tenure process and the reward system with greater collaboration? Dr. Herman said he has not talked extensively with Vice Provost Carney or Provost Hanson but has spoken briefly about the need to review the reward system.

Dr. Carney reported that all of the new 7.12 statements from the Academic Health Center colleges have language in them about team science and about being either the PI or a significant collaborator. First it is necessary to have the right language in the 7.12 statements; second, the faculty must follow the language and must call on their colleagues when the discussion about promotion and tenure does not reflect the criteria in the 7.12 statement. That is part of what she does: Evaluate whether a departmental decision was based on the 7.12 standards or on covert standards, which are unacceptable. Professor Cohen agreed that it is necessary to first change the words and then change the culture; he said he has been surprised at the number of faculty members who have not read their departmental 7.12 statements. And that is why the provost overturns some recommendations, Dr. Carney responded (which she should, Professor Cohen interjected), because it is the University's legal obligation to follow the standards that have been established. There is new language in the statement about recognizing work that is not single-investigator based. Inasmuch as the faculty voted on the new 7.12 statements, one presumes there were discussions about their provisions.

Professor Hellekant spoke about the difficulties of doing research using animals and the obstacles to collaboration; Professor Bearinger suggested that the questions might be brought to the Institutional Animal Care and Use Committee (IACUC) first.

Professor Bearinger agreed that to advance collaboration, there needs to be a better fit with the way that departments value and judge merit.

Vice President Herman said that the University of Texas, the system president required every campus chancellor to identify what he or she did to increase research collaboration on a campus and used

system funds to seed collaborative activities, which was an important motivator. Scientists collaborate by nature but faculty members, deans, and presidents are not judged on metrics of collaboration—and that needs to change. He said he hoped to articulate why collaboration is desirable; it must be a win-win situation where everyone benefits. He has found that most faculty members see a career benefit when they collaborate.

Professor Cohen said he has spent time thinking about this and is a strong supporter of collaborative research. Around the world there have been many models supporting collaboration in research—but most of them are not successful. The University perhaps does too little to encourage collaboration, but the basic research grant to a PI is still the source of a great deal of creativity. Collaboration allows one to dream great dreams, but one must modify one's enthusiasm for collaboration because there must always be a balance between individual and collaborative research. Dr. Herman concurred.

Professor Bearinger said it is important to distinguish between an individual research grant and a research grant that could still be an investigator/individual grant but that could have collaboration built into it.

Professor Cohen clarified that he does not mean to be dogmatic about the matter and repeated that he is enthusiastic about collaborative research grants. The NSF IGER grants allow one's imagination to run wild. The unique aspect of American science is that the individual PI sells one idea.

Professor Hellekant said one question is whether there are scientists in one's area around so that there can be fruitful collaboration. Collaboration should not be limited to the physical campus where one works.

Professor Gini inquired what Dr. Herman has in mind in the area of informatics planning. Dr. Herman said he plans to obtain a lot of feedback across the institutions. Much of what everyone does today depends on information technology, information is knowledge, and the world is flat and information can be sent anywhere. The questions being investigated in research are more complex and require more analysis and more variables. Informatics is a very broad activity that includes a physical element—does the University build its own or outsource informatics to the cloud? The University is not connected to the fastest network in the country; why not? There is the Minnesota Supercomputer Institute—but since he did not even know about it before he came to the University of Minnesota, he surmises that it may not be doing the kind of work that garners broad national recognition, even though it may be good work. Vice President Mulcahy had a committee, UMII (University of Minnesota Informatics Initiative) that he intends to revive, Dr. Herman related, and will ask it to have a broader discussion about informatics. There is also a need for faculty members with expertise in the area, so the University must recruit faculty with the right academic backgrounds.

Professor Cohen commended Dr. Herman for indicating he would address problems that exist at the Minnesota Supercomputer Institute. He has identified problems in the past; the previous director said they were not problems. There is a huge gap between (1) services for those who know nothing about supercomputing (they are taken care of) and those who know a lot (they are treated well), and (2) those who are in the middle (they are not provided access or support). There is a big firewall between the Institute and the world. He said hopes Dr. Herman will make the Institute better, faster, and provide more access.

Professor Leppert asked Dr. Herman if his office had any role in a system-wide problem, which is the underfunding of graduate student support. Dr. Herman said he has not heard about the matter in his office but he is interested in it as a workforce issue: Keeping an eye on the pipeline and graduate students going through it. But his office does not have a great deal to do with the issue. Professor Leppert said he suspected as much but the situation at the University is very bad and it has been falling behind. Offers to graduate students are \$10,000 - \$15,000 lower per year than those from competitors, which affects the ability to recruit high-quality students, which affects research. He said he never heard the issue being discussed outside the Graduate School, and now with decentralization, there is no central involvement in it. The situation is becoming desperate. The problem also hinders collaborative research across the University, Professor Thomas added, and she noted a large discrepancy between the support for a graduate student in neuroscience and one in child psychology (the two fields in which she works).

Professor Bearinger observed that postdoc capacity also affects research capability and recalled that the responsibility for postdocs was moved to the purview of the Vice President for Research. Associate Vice President Lawrenz reported that the postdocs are generally pleased but also have different issues from graduate students (postdocs, for example, receive the University's employee benefits).

Professor Bearinger commented that there are a number of issues facing Dr. Herman—risk, informatics, supercomputing, and others—and asked if he has a sense whether current policies create a more business-friendly environment. Dr. Herman said the University has done a very good job, under Vice President Mulcahy, of improving interactions between the Office of the Vice President for Research, the Office for Technology Commercialization (OTC), and industry. They hired someone from industry with experience to run OTC and have simplified the procedures for companies to deal with the University. He has been meeting with people from the business community and they say the University's reputation has gotten better. So he concludes that the University has been doing a good job, but there are always ways to look at how the institution does business, and if there are appropriate modifications, they should be made. He tells people that he has a metric: He does not want to be on the front page of the New York Times, the Wall Street Journal, or the Washington Post for the wrong reasons. The University can manage most conflicts effectively; he said he wants to encourage faculty and staff entrepreneurialism and he will try to be a good University representative in asking how it can be helpful to companies.

Professor Bearinger said that one opportunity the University has is to try to align its timing with the speed of the business world. She has heard that it can be weeks or months before the University works through the elements of a contract--by which time in the business world a project has already been advancing. Dr. Herman said that some might say that if one has seen one Material Transfer Agreement, one has seen them all, but that is not true; each presents unique challenges that have to be negotiated. There is considerable interaction between his office, OTC, and the General Counsel, but he does not at this point know how risk-averse the General Counsel is.

Associate Vice President Webb said that in the last two or three years there have been few complaints to her about turnaround on contracts, although there were in the past. They have taken steps to improve the process and have standardized agreements that can be completed in a week. The problem is that sometimes companies start with their model, and their attorneys, and the University needs to talk through the issues with them. She said she has not heard about any bad time lags with the new MNIP process—and she would like to be informed about problems if they exist. Many agreements are complex

and need to be customized, and she wants the faculty to be well-informed about them and to help put agreements in place.

Professor Hellekant related that his experience in working with a company was that it took the University from March to the following year to resolve contract issues; by then the company had lost interest and the University received no funding. Each unit does not care about the larger picture but they do want to protect themselves. Associate Vice President Webb responded that "I care" and that situation is exactly the kind of thing she wants to hear about. Professor Bearinger commended Ms. Webb as an excellent problem-solver.

Vice President Herman said that if there are problems, people should call or email him. He said he also cares; if the University is not doing a good job in this arena, it will not move forward.

Professor Bearinger asked how effective Dr. Herman viewed the relationship with the Committee, as posed in the fourth question. Dr. Herman said he views the relationship as important and the Committee as a critical consulting body with regard to research; he has, for example, already noted several things at this meeting that he intends to follow up on. The Committee had a great relationship with Vice President Mulcahy, one that he would like to continue.

Professor Bearinger thanked Dr. Herman for his comments.

2. Institutional Conflict of Interest Policy Changes

Professor Bearinger now invited Ms. Zentner and Mr. Guden to the table to discuss proposed changes to the Institutional Conflict of Interest (COI) policy.

Mr. Guden began by noting that the University has three COI policies, one for individuals generally, one for individuals who are involved in clinical work, and one for the institution. The institutional COI policy is administered by the institutional COI committee, which meets about six times per year and is chaired by Professor Dan Feeney. The committee consists of faculty members from across the University as well as a former member of the Board of Regents and a local attorney who serve as external members. There are also several administrative members, Ms. Zentner added, including Associate Vice Presidents Webb and Klatt.

Mr. Guden explained that one purpose of the policy is to identify when high-ranking University officials, because of personal financial interests, could have an overlap with University interests, or where the University may have a financial interest in an area that could be affected by the outcome of research conducted by the University. The language of the policy, as revised, would read in part as follows:

Institutional conflicts of interest may arise when:

1. a University official with a business or significant financial interest in a business entity is in a position to take action on behalf of the University that may benefit or be perceived to benefit the business entity;
2. the University licenses an invention to a business entity and holds royalty or equity interests in the entity that may be affected by ongoing University research or other

University activities;

3. a business entity that has a financial or business relationship with the University also donates a gift to the University;
4. a vendor or potential vendor to the University has a separate financial or business relationship with the University;
5. the University holds investments in a business entity that has a financial or business relationship with the University;
6. the University enters into a commercial transaction that compromises or appears to compromise the University's research, teaching, or outreach mission activities, or its institutional reputation; or
7. the University has a business or significant financial interest in a business entity whose commercial interests may be affected by human subjects' research conducted at the University.

The policy has been in place for several years, Mr. Guden said, and also has a set of six procedures accompanying it; they propose to condense them to one. The policy is being modified to align with recent changes to the Board of Regents policy on institutional COI and to make it clear when University officials must file disclosure forms. The Conflict of Interest Program is also proposing standards to apply in the context of human subjects research when the University has a financial interest in the outcome of that research, and in connection with mission-related commercial transactions:

University Interests and Related Transactions

The Conflict of Interest (COI) Program will review annually reports of University royalty earnings, gifts, purchases, and industry sponsored research projects to evaluate whether any institutional conflicts may arise from these interests. The COI Program will refer potential institutional conflicts of interest to the Institutional Conflict Review Panel for review and action. The University relies on the separation between its investment decisions and research activity to effectively manage any potential conflicts related to investment holdings.

The General Counsel will assess whether there is potential for an institutional conflict of interest prior to entering into substantive discussions or making an oral or written commitment regarding a commercial transaction that has a value greater than \$2M, appears to have a significant impact on the University's mission or raises unusual questions of public interest or public policy.

The COI Program will refer those matters that meet the criteria for Board of Regents (Board) approval under Board of Regents Policy: *Institutional Conflict of Interest*, to the Board for review and action.

Human Subjects Research Involving More than Minimal Risk

When a department within the University proposes to evaluate a technology in which the University has a financial interest, and the evaluation is determined by the Institutional Review Board to involve "more than minimal" risk to human subjects, the COI staff and Executive Panel will gather information for consideration by the full Institutional Conflict Review Panel. In assessing and managing potential institutional conflicts of interest involving human subjects' research, the Institutional Conflict Review Panel (ICRP) presumes that the research should not be conducted at the University unless there are compelling circumstances that justify proceeding with the research here despite the institutional conflict. (See Administrative Procedure: *Reviewing and Managing Potential Institutional Conflicts of Interest: Special Situations*)

Professor Hellekant asked how "minimal risk" is defined. Mr. Guden said that is left to the IRB to decide. Professor Hellekant said it is his sense that the IRB is more and more risk-averse, even if the risk is very remote, and that now one can do almost nothing; it has put a stop to much research. Professor Bearinger said the Committee could take up that matter at a future meeting.

Professor Cohen said that the institutional COI panel needs to address not just the legal aspects but also the public perceptions. He said that he has great respect for President Kaler, but having the president of the University appoint the institutional COI review panel may not be the best process. There is even a representative of intercollegiate athletics on the panel; does that person have a say even if the issue has nothing to do with athletics? He said he is concerned about how the public would look at how the panel is constituted; it seems as though the president picks his own board, which then decides there's no institutional COI.

Ms. Zentner said the composition of the committee has been about the same for the last five years and the membership has been largely the same as when the program started in 2005. Nothing has changed in that regard since the start of President Kaler's term. In addition, the policy, in the Definitions section, prescribes in part who the members of the committee should be, e.g., the University Auditor, the Director (or representative) of Intercollegiate Athletics, and at least one member from the community. The Director of the Office of Institutional Compliance and a representative of the Office of the General Counsel are designated to serve as non-voting members of the panel.

Professor Cohen said that HE trusts the president; the question is the perception. He urged that they re-think the question of appointment process.

Mr. Guden, responding to the point about public perception, noted that they have proposed to change the definition of institutional COI to include the language (in caps) ". . . its institutional reputation may be compromised OR APPEAR TO BE COMPROMISED. . . ."

Professor Leppert inquired why someone from athletics serves on the panel. Are there many conflicts in athletics? Ms. Zentner said that in order to balance the committee, they have representatives from several departments; one should not conclude there are more conflicts in a department simply because there is a representative from that department on the committee.

Professor Thomas said that it appears the membership on the committee is based on University titles; the membership could be changed so that it is by position.

Ms. Zentner reported that all of the COI committee chairs and co-chairs offered a letter of resignation when President Kaler took office; the president opted to leave everyone in their position. She asked Professor Cohen who he would rather see appoint the committee. Professor Cohen responded that a problem could arise if the conflict involves the president's own personal holdings; one can ask if a committee appointed by the president can make a disinterested judgment. Mr. Guden noted that the procedure requires that if the president has a potential COI, that matter would go to the Board of Regents for review and decision.

Ms. Zentner explained that they looked at policies at a number of institutions and considered whether to include the rebuttable presumption in the revised policy. If incorporated, this presumption would require a review of several factors whenever the University has a financial interest in the outcome of human subjects research that involves "more than minimal risk" to human subjects. They propose adding language to the policy establishing a structure to be used by the institutional COI committee in these circumstances to decide whether the research should be conducted at the University, and also to decide how to manage the conflict if the research remains at the University.

In late 2010 former President Bruininks charged a group to look at, among other issues, the scope of the policy, Ms. Zentner reported. They looked at 17 other policies in higher education to see how broad they were. The University's policy was different from some because it is an all-missions policy; many institutions have narrower policies. They considered whether the University policy should be narrower and concluded it should not be limited in scope; however, the work group also decided that the policy should define a process for evaluating commercial transactions for potential conflicts of interest. The work group recommended that when COI issues around commercial transactions arise, the General Counsel should review them with the vice presidents involved in the commercial transaction and also advise Ms. Zentner and the chair of the institutional COI panel of the potential conflict. Given the nature of commercial transaction, a decision about how to most appropriately proceed may need to be made quickly, requiring that input be provided quickly. The recommendation is taken to the president for resolution.

Associate Vice President Webb clarified that a commercial transaction as defined by this policy does not equal a research agreement with a business sponsor or extra revenue.

Committee members discussed the wording of several of the proposed amendments. It agreed that because the institutional COI committee is a standing body, not appointed at the time a conflict arises, and could perhaps be identified by position held, it was acceptable. The Committee voted unanimously to endorse the policy revisions.

Professor Bearinger thanked Ms. Zentner and Mr. Guden for bringing the policy to the Committee and adjourned the meeting at 3:50.

-- Gary Engstrand