Minutes[*]

Senate Research Committee
Monday, January 25, 2010
2:15 - 4:00
238A Morrill Hall

Present: Melissa Anderson (chair), Linda Bearinger, Margaret Catambay, Paula Chesley, Paul Cleary, Leslie Delserone, Donald Dengel, Genevieve Escure, Maria Gini, Tom Hays, Jennifer Linde, Toni Leeth, Timothy Mulcahy, Federico Ponce de Leon, John Sullivan, Thomas Vaughan, Karen Williams, Lynn Zentner

Absent: Mustafa al'Absi, Arlene Carney, Jerry Cohen, Robin Dittman, Demoz Gebre, Seung-Ho Joo, Nikhil Kundargi, Frances Lawrenz, Mark Paller

Guests: Vice President Kathryn Brown

Other: Kathryn Stuckert (Office of the President)

[In these minutes: (1) committee business; (2) revisions to the Regents policy on individual conflicts of interest; (3) report to the Regents on research]

1. Committee Business

Professor Anderson convened the meeting at 2:15 and began with comments about upcoming agenda items. She reported that the Faculty Consultative Committee has asked about the cost of research across departments and about training related to conflicts of interest.

One issue that was prominent when Committee members were asked to identify issues of importance was interdisciplinary research. She asked that Committee members contact her with suggestions for additional inquiry on the subject.

Professor Anderson announced that she would like to have lunch with Committee members, in groups of three, and would be in touch about scheduling them.

She prepared a Statement from the Senate Research Committee on the draft administrative policy on individual conflict of interest and circulated it for review to those who participated in the Committee discussion on December 7. She will forward it on behalf of the Committee to the committee that drafted the policy and to the Faculty Consultative Committee.

2. Revisions to the Regents Policy on Individual Conflicts of Interest

Professor Anderson welcomed Vice President Brown to review proposed changes to the Board of Regents policy. She noted that this is a policy the Committee has not seen before. [It should be noted that the draft reflected suggestions from earlier meetings with other groups and that they were also brought to the Senate Committee on Faculty Affairs and the FCC, and that as a result of the discussion

[*] 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.

recorded in these and later minutes, the policy underwent revisions. These minutes do not contain the exact language of the policy draft at the time it was presented, but the proposed policy being presented to the Board of Regents in February can be found at http://www1.umn.edu/regents/docket/2010/february/index.html]

Vice President Brown began by explaining that as Vice President and Chief of Staff (to the President), one of her roles is to serve as liaison between the administration and the Board of Regents, so when Board policies come up for review, she is often involved. She brings today proposed revisions to the Board's Individual Conflicts of Interest policy.

As background, Vice President Brown said there is a significant relationship between this policy and the one the Committee saw earlier in the year (the draft administrative policy). A couple of years ago the Medical School developed a conflict-of-interest policy for the Medical School; following that, it was thought that there should be a policy for the entire institution. A group was appointed to develop an administrative policy; the group consulted widely, including with this Committee. They received a lot of feedback, and pushback, which gave the administration reason to pause and evaluate where things stood.

The usual practice is to develop a Board of Regents policy first and then an implementing administrative policy. In this case, work began first on the administrative policy, but after discussion and the preliminary consultation, they decided to return to the Regents policy first, Ms. Brown related, and get that anchor set. The policy she brings today sets the ethical standard for everyone at the University and creates a template for what should be addressed in the administrative policy. The devil will be in the details of the administrative policy, she observed, where there are a number of issues that need to be addressed.

Vice President Brown then walked Committee members through the draft revisions, starting with guiding principles, which essentially provide that the integrity of the teaching, research, and public engagement activities is paramount, that the University encourages faculty and staff to engage in relationships with business entities to further the mission, that the University acknowledges there is the potential in these relationships that people's professional judgment could be influenced by the existence of the relationship and result in personal gain, and that the University is committed to ensuring that any such relationships are transparent, grounded in objectivity, and do not introduce bias into the professional judgment or performance of University employees.

The definitions are the heart of the policy, Ms. Brown explained, and there are six of them in the policy: covered individuals, individual conflict of interest, business entity, business interest, financial interest, and immediate family member. For example, covered individuals are defined as (a) faculty and staff, (b) individuals with responsibility for University research, and (c) others authorized to act on behalf of the University to fulfill its missions.

The definition of covered individuals is designed to include everyone at the University working on teaching, research, or public engagement, Vice President Brown said. The ethical standards should apply to all who work on the campuses. There were questions about financial reporting, so in a later section of the policy, it is noted that the administrative policy will deal with the nuances of covered individuals (e.g., unpaid adjunct faculty, etc.). There has been a great deal of conversation on this point, and she said she concurs with Vice President Mulcahy that they should look at the highest-risk factors and adjust the requirements accordingly.

An individual conflict of interest (COI) is defined as the relationship between a covered individual's private business or financial interests (or of his or her immediate family members) and the person's obligations to the University such that an independent observer might reasonably question whether the person's actions or decisions are determined or influenced by considerations of personal gain. The definition of individual COI is the heart of the policy, in particular language that deals with whether someone's actions or decisions are determined or influenced by considerations of personal gain.

An immediate family member is defined as a person's spouse or domestic partner and children as well as any other family member who the individual knows may benefit from the his or her relationship to the University. The definition of immediate family member is expanded from current policy to include "any other family member" who one knows may benefit from the person's relationship to the University. Vice President Brown contrasted a situation in which her brother might be in a business that could profit from doing business with the University whereas her sister may live 2000 miles away and have no involvement in any activity with the University that would produce gain.

There have also been expressions of concern about whether governmental entities should also be included with non-governmental entities in the definition of business entity, with so many faculty members serving on government panels (for agencies which often themselves have conflict-of-interest rules), but there is, for example, a University employee serving on the Metropolitan Council, and that individual could face a conflict with respect to the ongoing discussions about light-rail transit. So there can be conflicts with governmental agencies.

This policy is relatively straightforward, Ms. Brown concluded, and she invited questions. The challenges will lie in the substance of the administrative policy.

Professor Bearinger said she appreciated the expanded definition of family members but wondered if the term "immediate" should be dropped, since it does not apply with the revised language.

Professor Escure suggested breaking definition 2 into two sentences because it is difficult to understand as written.

Professor Gini asked if the reference should be to "dependent" children.

The discussion moved to the section on oversight. There are sections on internal reporting, identification and management of COIs, disclosure, and compliance. These sections essentially reflect current practice. For example, the internal report section addresses the current REPA process, Ms. Brown explained, and the identification and management section addresses the current conflict-of-interest review committees.

The last section on delegation of authority outlines specific elements that must be addressed in the administrative policy, ranging from defining and differentiating responsibilities for covered individuals to prohibiting activities that cause or may cause reasonable doubt concerning the integrity of University relationships with business entities. It is a standard clause in regental policies that the President shall maintain policies and may delegate the authority for doing so to other administrative officers.

Professor Anderson commented that the Regent's policy covers some of the issues that the Committee has discussed before in the context of the draft administrative policy. In those earlier discussions, it was clear that three aspects of the scope of a conflict-of-interest policy need attention: the individuals covered by the policy, the external entities to which it applies, and the activities or relationships to which it applies. The draft Regent's policy (section V) mentions the need to specify scope with regard to covered individuals and activities/relationships, but at present the definition of external entities is all-encompassing. What are needed are triggers and thresholds that determine when the policy does or does not apply to external entities. Ms. Zentner said they will address those issues in the context of the administrative policy.

Professor Vaughan asked how the definitions in the administrative policy will be used. Vice President Brown said that the Regents' policy is the guiding directive; they will return to the administrative policy and be sure that it cross-references the Regents' policy. The Compliance Office is responsible for REPA forms, conflict-of-interest committees, and so on. The responsibility lies with the administrative officers, the deans, and everyone at the University to report potential conflicts. The administrative policy will outline in more detail those responsibilities.

Professor Gini said that if one has a relationship with an entity that has nothing to do with one's University job, that should not be included. The policy does not say that, however, and as written, everything in one's life is a potential conflict of interest. Ms. Zentner agreed that the relationship should relate to one's University activities. Ms. Brown suggested that Professor Gini's concern is covered by the definition of individual COI: The relationship would compromise one's objectivity in making decisions related to one's University position. Vice President Mulcahy agreed that the policy could be more explicit about its scope, in order to avoid confusion, without changing the tenor. The language of Section V and the guiding principles are there indicating the relationship with one's University position, but one has to hunt for the meaning. Vice President Brown also noted other language that covered the point but agreed that the coverage could be called out more clearly.

Professor Anderson thanked Vice President Brown and Mss. Stuckert and Zentner for bringing the proposed revisions to the Committee.

3. Report to the Regents on Research

Professor Anderson recalled that in his first presentation on the sustainability of the research enterprise, earlier in the academic year, Vice President Mulcahy identified a number of issues related to the topic and said that he would talk about each of them at later meetings of the Committee. She turned now to Dr. Mulcahy to present the Committee with the report he provides annually to the Board of Regents. Vice President Mulcahy distributed a handout with a number of tables of data, graphs, and other information.

Dr. Mulcahy said that the Committee has found it useful to hear about the report he presents to the Board of Regents each year—and that its contents are directly linked to the sustainability of the research enterprise. He began by outlining the metrics framework, derived from strategic positioning, that identifies two major goals: breakthrough research and an outstanding organization. The metrics include highly-cited research publications, national academy members, major research awards, research expenditures, research proposals, technology commercialization agreements, etc. These metrics created a template for reports to the Regents and serve to measure productivity.

Dr. Mulcahy turned next to a table indicating the University's rankings vis-à-vis its peers on three different ranking systems for public research universities: NSF (Minnesota ranked 9th all three of the years presented, 2006-08); the Center for Measuring University 2008 (Minnesota was in group two of a complicated rating scale using several variables, which essential puts it among the top 25); and the Shanghai rankings of world universities (Minnesota was 28th in the world, 20th in the US among all institutions, and 9th among US publics). The NSF survey is the most uniform measure, with data normalized, so one can be reasonably sure comparisons are accurate, but it always 1-2 years behind, so the most recent data are for2008. Dr. Mulcahy emphasized that there is no single measure or metric system that allows ANY university to say it is #1 or #2 overall because there is no single metric that can measure the breadth of these institutions. Any university can be strong in certain areas, but none are in all. That the University of Minnesota is 9th among public institutions in the NSF survey, and 13th among all institutions, out of 600 institutions in the NSF data set, says the University is very near the top, a very influential and successful institution. The Shanghai rankings use a very different metric (it does not take into account the volume of research funding but considers the prominence of faculty, number of awards, and so on; at 28th in the world and 9th among US publics, the University is clearly doing quite well. (The eight public institutions ahead of Minnesota are, from the top, UC San Francisco, Wisconsin, Michigan, UCLA, UC San Diego, Washington, Ohio State, and Penn State.)

In the United States, when one talks about research, people want to know the volume of expenditures, Dr. Mulcahy told the Committee. The NSF data only includes research funding in science and engineering (which does include some of the social sciences), so does not include the arts and humanities but it does include all of medicine. The NSF data are recognized as the most consistent and reliable for measuring research volume. The University has seen a steady growth in research funding over the last decade and currently received about $683 million in 2008.

He has been more concerned about the trend, Dr. Mulcahy said, not just one year's data. The University also ranked 9th among public universities in terms of growth of research expenditures (2000-2008). Interestingly, few of the institutions that ranked above Minnesota in expenditure growth were the same as those that spent more in 2008; the institutions that saw their research funding grow the most during this period were UTX MD Anderson Cancer Center, Pittsburgh, UC San Francisco, UNC Chapel Hill, Ohio State, Florida, UC Davis, and Georgia Tech. In 2007 and 2008, the University ranked 13th and 15th, respectively, in growth in research funding. On the trend data, Dr. Mulcahy concluded, the University is doing well.

Dr. Mulcahy turned next to a complex table indicating where institutions changed in rank on NSF spending from 2005 to 2008. In summary, the University posted the largest percentage increase in research funding among all top 20 research universities in 2008, and the nearly 30% increase in funding since 2004 ranks the University 3rd among publics and 4th overall in terms of growth in research funding. The University has done extremely well, he concluded.

The Board of Regents is interested in comparative rankings so they try also to use non-R&D rankings, so they have looked citation rankings in 19 fields in the biomedical, physical, and social sciences as well. The University ranked in the top 10 in 15 of the 19 fields and in the top 5 in 5 of the fields.

Dr. Mulcahy noted that there is a difference between awards and expenditures. Awards are a commitment made by research sponsors; they precede spending and the award mechanisms (and hence reporting) are variable. There are two measures of research expenditures, sponsored expenditures (an institutional measure reporting expenditures in all fields), and NSF R&D expenditures, considered the most reliable measure, includes institutional spending for research and "unrecovered" indirect costs. Expenditures lag awards, typically by 1-2 years for NSF data.

In 2009 the University's data went significantly in the wrong direction, Dr. Mulcahy reported. Total sponsored expenditures increased by only 0.4%, and he expects a similar small increase in the NSF figure when it is reported for 2009. There was a decline in federal support, offset by incomes from other sources. In addition, research awards dropped for the first time since 2002, nearly 10%. If one sets aside federal stimulus funding, research awards dropped about 16.5%, a stunning decrease, Dr. Mulcahy said. There were several factors that contributed to the decline which, when taken into account, suggest the picture is not as bad as it might appear at first glance. There was a late release of some large FY09 renewals into FY10, so they could not be counted in FY09, there was a delay in FY09 award notifications as agencies responded to the stimulus funding, there was registration of some early FY09 awards into the close of FY08 in anticipation of the transition to EFS, accounting differences in EFS, a slow economy, and a decline in the number of grants to individual. Dr. Mulcahy surmised that except for the change to EFS at Minnesota, the factors could have a similar effect on the University's peer institutions.

The decline in sponsored awards did not occur in any one area; it happened in all but two areas: CFANS and the coordinate campuses. But the decline in awards means 2009 expenditures will be down, and the year after that the University's NSF ranking could also decline, unless other institutions saw the same effects on funding and awards.

The early data for FY10, Dr. Mulcahy reported, suggest that FY09 may be an aberration. Research awards for the first quarter of FY10 are double those of the same quarter in FY09. It appears the same will be true for the second quarter, so he said he is cautiously optimistic that FY10 will see a rebound.

In terms of technology commercialization, disclosures were up, as were gross revenues (both including the income from Glaxo for the HIV drug Ziagen as well as the non-Glaxo revenues). As he has reported to the Committee in the past, they have completely transformed the technology-transfer activities and are seeing increases in disclosures and revenues.

Dr. Mulcahy provided data about the University's success in obtaining federal stimulus funds. $21.5 billion was appropriated for research; the University has submitted 885 applications for $719 million in funding and has received funding for 244 awards totaling $130.6 million. Fifteen awards totaling more than $10 million were awarded to University faculty in the prestigious "Challenge" and "Grand Opportunities" programs; there were only 1216 awards made out of 22,000 submitted. The University also received the first construction award from stimulus funds, $40 million for the NOvA detector facility at Ash River.

What really needs to be focused on, Dr. Mulcahy said, is the impact of research, and that is much more difficult to measure. But the number of the University's faculty members receiving awards in recognition of their scholarship has increased significantly, demonstrating that the University's faculty can compete with anyone for them. The University in the past did not do a good job of promoting its faculty members for awards, but is doing much better now. He provided a list of examples of the impact of research conducted at the University, including protection of the world's food supply from a deadly chemical, monitoring the global forest cover to carbon risk management, hope for preventing a disease that affects 33 million people around the world, and so on. The true measure of "who we are is the effect we have on people."

Professor Cleary inquired if the growth in research funding takes into account the number who are participating. Dr. Mulcahy said that there has been no change in the number of people but that it is difficult to get a firm FTE report, so he does not believe it possible to get a number in which one can be confident in terms of the number of research faculty. Overall, however, there appears to be an increase in productivity.

Professor Bearinger commended Dr. Mulcahy for valuing the products of research, e.g., publications. One hears that research costs the University money; it is helpful to balance this with the metrics regarding what is produced, such as scholarship. This is the business the University is in: to produce science as well as educated graduates. At a recent faculty meeting in one department, the financial head indicated that, in their department, the actual costs for grants administration was between 28-30% of direct costs. As colleges develop plans through their blue-ribbon committees, it would be beneficial for colleges to know their actual costs for grants administration at the school and departmental level. It would also help if colleges and departments have a template on how to calculate administrative costs.

Dr. Mulcahy said he would be talking to the Executive Committee about F&A costs, the costs of research, etc., and he can share the report with this Committee. The costs are not uniform across campus but one must get into the details to understand the costs. It is clear that doing research costs more than the University receives, but research is a core mission and the University will not say it will not do research unless it does not cost anything. It helps to know what it costs, however, and in some cases behavior helps prevent the University from getting money back.

Professor Sullivan commented, apropos of the 2009 data, that there appear to be two categories of reasons for the decline, idiosyncratic and generic. Will Dr. Mulcahy obtain comparative data? He does not have it yet, Dr. Mulcahy responded, but is trying to get it. One reason for the decline may be that faculty directed their activity to the stimulus funding available. He said that he will be more or less concerned about the drop once he has peer data to consider.

Professor Anderson commented that the University's own agency plays a role in changes, so to what extent can the changes over time be traced to the University's own efforts? Dr. Mulcahy said he very much views that as a big part of his job and that the University contributed positively to the increase from 2004-2008. It improved grant-processing, provided more pilot funds to generate larger grants, leveraged college funds, invested in major infrastructure facilities, and tried to streamline procedures and policies. He said he believed those changes have had an impact—the University has invested significant resources in research-related activities. But a great deal of the credit goes to the faculty, who have been extremely competitive. It has been a joint venture.

Professor Sullivan said that the data Dr. Mulcahy presented are all about external funds, but the new budget model create more funding for research than was available in the past. He said he would like to see the numbers over time and the principles that govern because there has been a lot of research supported with University funds. Institutional support is in the NSF data, Dr. Mulcahy said. He said he believed there has been a significant increase in institutional funding, but he did not know what the colleges have done. He said that he makes investments from royalty funds and that there have been more strategic investments as a result of strategic positioning; there guidelines put in place that focused on leveraging, priorities, and reputation.

Professor Vaughan said he would like to know what percentage of external funding is from industry. It has been roughly constant, Dr. Mulcahy said, about 10%. He indicated to the Board of Regents that if one looks at the elements of research funding, one would pursue separate strategies to enhance each of them. His belief is that the University does not do as well in obtaining support from business and industry as some of its peers do. The University has had the reputation of being hard to work with, something they are trying to change. They hope to attract more support because the University is an under-performer in this regard.

Professor Bearinger said that it is good to see an improvement in the 2010 data. She commented that there has been new pressure from departments to not support (i.e., not "sign off on") grants that have less than 51% in indirect costs. If it is possible to identify a more tailored budget model around costs of administering grants that may significantly vary by department and by school, it would be very informative for decision-making around grants that schools do or do not want to support. Dr. Mulcahy agreed. However, he said he believed the University must hold firm in what it collects, i.e., not waive indirect costs from agencies that will pay them. Even at the highest University indirect-cost rate, the University still underwrites a portion of research costs. If indirect costs are to be waived, it must be in a priority area. He said he often hears that grants would be more competitive if the University charged a lower indirect-cost rate, but when one serves on NSF study sections, one is told to pay no attention to indirect costs.

Professor Bearinger said the issue remains as to whether a department will refuse to sign off on a proposal that may be at a lower indirect rate, e.g., 26% off-campus ICR rate. The inability to submit a proposal because a college or department will not sign off on it conflicts with priorities of faculty on obtaining grant support for their work/scholarship. Dr. Mulcahy agreed and said faculty should not be in a position of having a proposal withheld for this reason; nor should they need to "shop" a proposal looking for a departmental home. That could have an impact on faculty's willingness to pursue external support, Dr. Bearinger said. Dr. Mulcahy agreed again; that is why the University as a whole needs to better understand the indirect-cost structure. He said he has been surprised at the lack of understanding of what one is giving away if one waives indirect costs. As state funds decline and federal funds stagnate, the University relies more on indirect costs, so there has to be an understanding about them.

Overall, Dr. Mulcahy concluded, everyone should be proud of the University. It looks like 2009 was a tough year but 2010 could see a rebound. Everyone here should be able to hold his or her head high because this is an important place that is doing important things.

Professor Anderson thanked Dr. Mulcahy and adjourned the meeting at 4:00.

-- Gary Engstrand

University of Minnesota