Minutes*

Senate Research Committee
Monday, January 22, 2007
1:15 - 3:00
238A Morrill Hall

Present: Steven Ruggles (chair), Arlene Carney, Dan Dahlberg, Donald Dengel, Genevieve Escure, Paul Johnson, Jennifer Linde, James Luby, Ellen McKinney, Timothy Mulcahy, Federico Ponce de Leon, Thomas Schumacher, Charles Spetland, George Trachte, Sanford Weisberg

Absent: Linda Bearinger, Richard Bianco, James Cotter, Sharon Danes, Robin Dittman, Stephen Ekker, Steven Gantt, Mark Paller, Selam Rodriguez, Virginia Seybold, Barbara VanDrasek, Michael Volna, Jean Witson

Guests: Associate Vice President Winifred Schumi

Other: none

[In these minutes: (1) research funding data; (2) guidelines for University-wide centers; (3) search update]

1. Research Funding Data

Professor Ruggles convened the meeting at 1:20 and turned to Vice President Mulcahy to lead a discussion of research infrastructure funding and related matters.

Vice President Mulcahy said he had two items to discuss, his annual report to the Regents and a study on research funding. He drew the attention of Committee members to the report from Professor Pardey and colleagues entitled "Long Gone Lake Wobegon? The State of Investments in University of Minnesota Research," a study of research funding trends at the University for the last 30 years or so. [For additional information about this report, see the minutes of the Committee on Finance and Planning 12/19/06, item 2, at http://www1.umn.edu/usenate/scfp/06-12-19.html.] The University's research funding has increased every year, but at a slower rate than funding increases at peer public institutions. The University remains in the top 10 (tied for eighth with Berkeley), but it was number two in the early 1980s.

Dr. Mulcahy reviewed a graph which plotted academic R&D expenditures at Minnesota and 13 peer institutions for the period 1972 to 2004. From 1972 to 1991 the University's increases in academic R&D spending were above the average of the group; the University's increases flattened out from about 1991 to 1999 (in comparison to peers), and since 1999 the University's rate of increase in spending has been below the average of the peer group. In 1991-92 the University faced significant financial problems and then had the ALG problem in the 1990s; the rate of increase declined again in 2002, after which the University took a large cut in state funding and reduced the number of faculty. It is just now beginning to

* 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.
rebound from the events of the last couple of years. It is important that legislators understand that the two
greatest declines in academic R&D expenditure increases vis-à-vis the University's peers correspond to
significant cuts in state support (in 1991-92 and again in the last few years)—and that those cuts have
long tails in their impact, not just a two-year budget cycle effect.

Dr. Mulcahy agreed with Professor Ruggles's comment that there can be other factors (the state
cuts the University's budget because of a recession, which may also mean a freeze in federal funding, for
example), and state funding cuts are not the sole explanation, but a recession does not cover 8-10 years
while the impact of the cuts does. And while Minnesota was being cut, some of its peers were the
beneficiaries of positive state investment. The slide in Minnesota's position is what led to the title of
Professor Pardey's study: the University is no longer above average. It is also important to understand
that Minnesota remains among the elite institutions in terms of academic R&D: it is still eighth out of
500 universities in the data set, way above average, but the University is not doing well compared to its
peers.

The spread among the top and bottom institutions in the peer set has increased considerably,
especially in the last several years. Dr. Mulcahy said he believed that there have been significant strategic
efforts at a number of institutions to improve their competitiveness. A number also recognized that these
data are being used for ranking purposes, so may have adjusted their accounting practices to be sure
everything appropriately academic R&D was counted as such. There are two tiers in this group: those at
the top (three institutions) and a competitive group just below that top three.

A summary figure illustrated the point. In the period 1972-1980, the University was above
average in funding increases from all four of the major sources (state and local government, industry,
federal government, and institutionally-financed). In the period 1990-2004, the University was below the
average in all four categories.

In his annual report to the Regents in 2005, Dr. Mulcahy said he reported that the University was
not keeping up; that report presaged the Pardey report. He distributed copies of his 2006 annual report
and highlighted indicators that echoed the Pardey report. To get into the top three public universities in
academic R&D spending (that is, to get to where Wisconsin is now), the University needs to increase its
investments by $237 million per year.

By categories of sponsored research expenditures, those of Minnesota and those of the number
one institution in that category are as follows (all numbers in millions):

Federally-sponsored research: $308; $625 (U of Washington)
State/local government: $50, $80 (U of Florida)
Institutional support: $70, $210 (U of Wisconsin)
Industry-sponsored: $22, $86 (Penn State)
All other sources: $76, $123 (UCLA)

The University does reasonably well in state and local support (it ranks fourth in the group) and "all other
sources" (it ranks third); in the other categories, it ranks number 10, 13, and 12. It is possible for the
University to improve in each of those categories and plans are under way to do so. It will not, however,
be possible to duplicate some activities elsewhere (e.g., the Wisconsin Alumni Research Foundation gives
$50-60 million per year to Wisconsin).
Dr. Mulcahy noted that one problem with measuring research expenditures and rankings is that using them favors institutions with medical and engineering schools. When the data are deconstructed to take into account differences among institutions in this regard, some institutions change ranking dramatically. Illinois drops 40 places when engineering is removed. The Florida rankings, which include analysis without medical and engineering expenditures, found that Minnesota has among the most balanced research portfolio in the group: its ranking changes very little when those expenditures are taken into account—which means it values other research as well. The Florida study contains this language about institutions whose rankings on academic R&D do not change when medical and engineering contributions are factored out: "reflects an academic commitment to the notion of the well-rounded university—the campus that cultivates the liberal arts and sciences as the core activity of a mainstream University." The University is very good overall, Dr. Mulcahy said, and there are only three universities in the top 39 that have that kind of status—Wisconsin, Michigan, and Minnesota. The University has a balanced research portfolio that it should not allow to be eroded.

The take-home message from these data, Dr. Mulcahy concluded, are that the University is still among the elite, its position is more tenuous, it must be more strategic in making research investments, and it must convince the state that it is a critical partner for the University.

Professor Dahlberg said a missing datum is the number of faculty; one needs to know the number of dollars per faculty. It may be the University and some of its peers have an equivalent number of faculty and the University is not doing as well—or some peers could have twice as many faculty, so generate more research spending. Dr. Mulcahy agreed and said that analysis is being done; the problem is complicated because it is not clear who a faculty member is. And the makeup of the faculty at an institution makes a difference: at UCSF, for example, almost all the faculty are medical, so all have access to federal research funding; at Minnesota that is not true. Professor Pardey did a little research in this area; in comparison with UCSD, for example, the research expenditures per faculty member at UCSD are twice as high as it is at Minnesota. It is not just numbers, it is also individual performance, and also what the University is doing to enhance or hinder faculty success. Some would say that the way Minnesota handles research funding makes it more difficult for faculty to obtain funding; his office is trying to identify why that is the case. They are also looking at research expenditures by college and will ask questions if the funding is stagnant. He does intend to tell the state that the number of faculty is part of the equation—and that the University needs more research facilities and more faculty.

One small point in all of this, Dr. Mulcahy pointed out, is that it does matter where one puts numbers in reports when dealing with the federal government. If the expenditures are counted incorrectly, the University's numbers are wrong.

Dr. Mulcahy agreed with Professor Ruggles that declines in research funding may show up even more in 2007 than they did in 2006. There will be no increases in federal spending (operating under a continuing resolution) and there may be administrative cuts. Growth rates in funding at other institutions are likely to level off as well.

2. Guidelines for Designation of University-Wide Centers or Institutes
The Committee next took up a draft of guidelines for designation of University-wide centers/institutes. Dr. Mulcahy said it is a work in progress and he would appreciate comments from Committee members.

The University has put a new premium on interdisciplinary activities and has started one new University-wide center; others could attain that status. The Provost has asked for guidelines on how to decide which centers achieve such status.

A tricky element for big centers is financial support, Dr. Mulcahy related. Some believe that if a center obtains a grant, it should keep the indirect cost revenues. At the same time, college say they are responsible for faculty who in the center (the college may provide the office space and other kinds of support) and that the faculty member would participate more in college activities if not working in a center. If the University is put a premium on interdisciplinary research, there will be a tension between the colleges and such research, especially with the new budget model.

This document provides that centers that receive University-wide designation will be treated like a college for the purposes of indirect costs: they can receive the indirect cost funds. However, there is a fairness issue, because few faculty are completely independent of support from their college, so there must be an equitable attribution of indirect cost funds so that both the colleges and the center receive them. The guidelines establish how a center becomes University-wide, how to deal with centers that do not achieve that status, and steps for dealing with centers within a college that seek University-wide status because they believe they will be better off.

Associate Dean Ponce de Leon said this is a good idea but it will be important to work out the details. There are issues that will need to be worked out. Dr. Mulcahy said the Committee should look at a document on ICR distribution at its next meeting, which will guide the assessment of how the funds should be distributed. In essence it provides that three activities should be considered: personnel (faculty lines), facilities, and administrative support. There will not be a specific formula, Professor Ruggles said; there will be principles and guidelines and a process of negotiation, and a way to make a decision if there is disagreement (through the Office of the Vice President for Research).

Professor Weisberg observed that indirect cost revenues may not cover all of a center's costs. Dr. Mulcahy agreed; in early stages, a center would not have revenues to pay its expenses and there would need to be institutional support. So the new budget model would not apply everywhere, Professor Weisberg observed, and centers would be treated differently from colleges. If a center is within a college, the college is responsible for it; if not, the center will be responsible for some things but not others. If a center is granted University-wide status, Dr. Mulcahy said, that means the University sees some advantage to that structure for that center—and it has an obligation to provide support for the center. The University right now has over 300 centers, but there should be no more than a handful that receive University-wide designation. They would be outside the normal budget model, he agreed, and the source of funding would reflect institutional priorities and a decision to invest it.

What about centers under one college but with faculty from four or five colleges and labs scattered around; how does the budget model work then, Professor Johnson asked? Probably the way it does now, Dr. Mulcahy said (for non-University-wide centers). It isn't handled now, Professor Johnson said, and the arrangements do not encourage interdisciplinary research. The budget model creates problems when centers are within on college. Dr. Mulcahy said he believes there should be a mandatory
model for centers under one college and that deans should be required to agree on the arrangements. The current situation is that there is no neutral broker, Professor Ruggles said. There needs to be some authority with the power to arbitrate disputes and an appeal process. But not one so onerous it discourages interdisciplinary research, Professor Johnson added. Dr. Mulcahy agreed and said there would be a committee of five (with representatives from his office, the faculty, the deans, and center directors) to look at requests and make recommendations to the Provost. Some centers within colleges work very well; this will provide a way to deal with disputes. The fact that the process exists might encourage people to come to agreement rather than using it, Professor Ruggles observed.

Dr. Mulcahy said there will also be a provision in the guidelines, not yet written, that will require review and evaluation of University-wide status for centers. Does it continue to meet academic goals? Professor Dengel said there needs to be a mechanism for withdrawal of center status; some exist only on paper and need to be eliminated; will there be a way to close them? Not in this document, Dr. Mulcahy said; they will encourage the colleges to look at the issue, and any center that receives central support will be reviewed. There is a campus policy on centers that creates four categories, he said, but it provides little except a description—nothing on process or guidelines. He has also looked at a model used in the Academic Health Center.

3. Search Update

Ms. Schumi informed the Committee that the search for the Associate Vice President for Research Administration (with responsibility for SPA, among other things) is underway. Professors Luby and Ruggles are on the search committee (six faculty and two administrators); they will meet with candidates next week and determine finalists to be invited to campus. Interviews will take place in February, including with this Committee.

The pool is very good, Dr. Mulcahy said.

Professor Ruggles adjourned the meeting at 3:50.

-- Gary Engstrand

University of Minnesota