

Minutes*

**Senate Research Committee
Monday, February 24, 2014
2:00 - 4:00
238A Morrill Hall**

- Present: Kathleen Thomas (chair pro tem), J. Michael Autry, John Bischof, Jeanette Gundel, Daniel Habchi, Goran Hellekant, Brian Herman, Philip Herold, Seung-Ho Joo, Frances Lawrenz, Hinh Ly, Scott McIvor, James Orf, Thomas Vaughan, Kyla Wahlstrom, Joel Waldfoegel
- Absent: Arlene Carney, Jayne Fulkerson, Maria Gini, Brian Johnston, Michael Kyba, Tucker LeBien, Amanda Maxwell, Richard Nho, Suzanne Paulson, Emily Saunoi-Sandgren, Michael Schmitt, LaDora Thompson, Lynn Zentner
- Guests: Associate Vice President Pamela Webb (Sponsored Projects Administration)
- Other: Emily Lawrence (Office of the President)

[In these minutes: annual research report]

Annual Research Report

Professor Thomas convened the meeting at 2:00, explained that Professor Gini was out of town, and turned to Vice President Herman to present the annual research report.

Dr. Herman explained that he spoke at the last meeting of the Board of Regents and presented the "state of the university research activities" and where his office stands in strategic planning in research at the University.

In terms of the University's research status, the news is that if one discounts the earlier federal stimulus funding, research funding has been flat the last five years (up 14% if one counts the stimulus funds). Usually he would say that standing still is falling behind, and with inflation the University has actually lost about 35% in research funding, but despite that it has done well: it is 9th in the latest NSF ranking of public universities and 29th or 30th in the world. The University has done well because historically it has used a considerable amount of internal funding to support research when there are fewer extramural dollars available. About 25% of the University's research expenditures are institutional funds, which is high in the CIC (although lower than Michigan and Wisconsin). The University has done well in technology commercialization, with about 400 inventions per year brought to the Office for Technology Commercialization by the faculty.

His office created MNIP and has about 85 agreements within the last year. The program is popular in industry because it has simplified access to University intellectual property, Dr. Herman said. They are starting another program that will allow industry to try, for a year, technology developed at the

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University for a small upfront investment; if it turns out to be of value, an agreement will have to be signed, but if not, then it is returned to the University. The University has received positive national press coverage for the plan.

Another big investment is MnDRIVE; his office has approved \$19 million in projects around four thematic areas that support broad areas of research, Dr. Herman reported. MnDRIVE was a prescient investment by the State of Minnesota because it will make the University more competitive for top faculty members and increase the alignment of the University with the needs of state. The state allocated \$18 million per year, they have allocated \$19 million, and are starting a new program to allow proposals that cross three of the four areas supported by MnDrive in order to encourage collaborative research. The results of the MnDRIVE work have to be reported to the legislature and thus far there has been great creative collaboration.

The bottom line is that the University is doing well but that it faces an uncertain future with respect to federal funding, Dr. Herman concluded. A large percentage of the institution's research funding comes from NIH and NSF, so it needs to diversify its funding sources; one way to do so is to encourage corporate sponsorships and industry funding. They have set up an office to help coordinate entry into the University for non-profit and corporate organizations to help identify needs and a way to meet them. They will also seek to increase philanthropy in support of research.

Dr. Herman next reviewed the elements and stages of the strategic planning process in the Office of the Vice President for Research, which began in May 2013. They are at the point now of developing the plan and beginning to implement it. The output of the process has been termed "Five Years Forward" and includes five elements: "bringing people together in new ways, fostering discoveries, and making our world a better place," which includes the four cornerstones of "enhancing research excellence, advance interdisciplinary partnerships, accelerate transfer of knowledge for the public good, and promote culture of serendipity." He amplified briefly on each of the last four, the supporting goals for each of the cornerstones, and how metrics will be used to evaluate how well they are doing on each and on implementing action plans.

Professor Hellekant noted that one of the supporting goals of enhancing research excellence is "grow and recruit more honorific award winning faculty." He suggested that chasing outside star faculty may be good public relations but it does not necessarily mean the University ends up with stars; the effort is not always successful. Moreover, stars often have no loyalty to an institution; they come for the money and leave when it runs out. He suggested a greater emphasis on postdocs and graduate students because the units can better judge their talents and they will have loyalty to the University, and more funding should be put into supporting doctoral students with promise. Putting more money in the younger generation will mean the University can get much more for its money. Is Dr. Herman considering that option?

Dr. Herman said the goal is to use the consultative process; it is not *his* action plan. The effort now is to bring people together to talk about the goal and identify the best strategy for achieving it. He agreed there are great people at the University that it must continue to support, and it must also recruit new young talent. But if the opportunity to recruit a senior faculty arises, and collaboration with others already here will be good, and the University has the right infrastructure, the person will not be rejected just because he or she is more senior. He said he does not know the recipe for achieving the 16 goals (the four

cornerstones and the four supporting goals for each), which is why there is a need for discussion about the best place to put the funds. Those discussions will take place in task forces, not his office.

Professor Hellekant also asked whether the executive group overseeing the planning process will contain critical voices, not just those who will go along. Dr. Herman said the executive group was selected because it is opinionated and the individuals are strong advocates. They are committed to the University and willing to push boundaries; he said he is confident they will push the University forward.

Professor Ly asked about the timeline. Dr. Herman said there will be a meeting the following week to develop action plans and goals by the end of the summer. Professor Ly suggested a leadership academy might be helpful. Dr. Herman said he did not know if there was one available but said he believes there will be 150-200 people involved across the University, so ample opportunity to involve the young and enthusiastic. There has been some discussion about the need to train the next generation of leaders and said that Human Resources has been charged to think about a leadership strategy for the University.

Professor Bischof asked Dr. Herman to reflect on how departments would be engaged in the process. Is it intended to be supra-departmental? Vice President Herman said there is no idea of changing college or department structures. They will accept the priorities identified by the colleges for areas where faculty need to be recruited, for example. The goal of promoting targeted initiatives (under enhancing research excellence), for example, is aimed at bringing structures together to create better partnerships. They are interested in transdisciplinary research, bringing people together in ways to align expertise that may not have occurred in the past. Aligning the interests and expertise of faculty leads to better success for teams (e.g., agriculture and engineering).

Professor Bischof asked if Dr. Herman sees a process driven above the department level, such as MnDRIVE and cluster hires. Those are not within a department, they are a broader discussion, which he said is healthy. In terms of younger faculty, he said, as funding decreases, and the model is broken, it is important to find ways to support and help junior faculty be successful and find the next model.

Dr. Wahlstrom said that when groups are formed, it is important to have quick and effective training on group processes, because groups do not necessarily function well. Some leaders are great facilitators; others may be great at examining the question but not reach the solutions.

Professor Orf inquired what "increase prominence of international research" means. There are a number of ways that can happen, and RFPs from agencies can require coordination at a higher level than the college—something that has not always been done well at the University. Dr. Herman said his message for the community is that it needs to broaden research. The efforts have been uncoordinated and not strategic in allocation of resources. Much of the effort has been at the individual level but many countries want to deal with the institution, not individuals. One concern is that the University is not organized appropriately or well to advance international research and the task force looking at that goal should help out.

Professor Waldfogel asked what "promote a culture of serendipity" means (one of the four cornerstones). Vice President Herman said it means bringing a lot of people around wicked challenges in the world. People forget the arts and humanities, which provide information about a solution even if a problem also requires a technical solution. The idea is to empower many people at the University to

discuss complicated problems, which need the right people under the umbrella with the right skill sets and cannot be addressed within one discipline. Some of the most significant findings in society have arisen serendipitously by having the right people in the right place and time.

In terms of implementation, Professor McIvor said that what works is dangling money in front of people. With respect to international research, that could mean considering travel grants; they would get people moving. Will Vice President Herman decide where to invest funds? He will not, Dr. Herman said; it will be a University-wide plan following a University decision. The idea is to develop the best plans possible for the four goals and then align the budget with them.

The goal is to support great people doing great things, Dr. Herman summarized. It is difficult to predict what the next great thing will be; they want excited groups focused on topics.

Professor Thomas thanked Dr. Herman for the report and adjourned the meeting at 3:00.

-- Gary Engstrand

University of Minnesota