

Minutes*

**Senate Research Committee
Monday, October 13, 2008
12:30 - 2:15
238A Morrill Hall**

- Present: Melissa Anderson (chair pro tem), Jerry Cohen, Tricia Conway, James Cotter, Tom Hayes, Bridget Helwig, Michelle Lamere, Frances Lawrenz, Jennifer Linde, Steven Ruggles, Andrew Van de Ven, Karen Williams, Jean Witson, Lynn Zentner
- Absent: Dan Dahlberg, Peter Argenta, Linda Bearinger, Saif Benjaafar, Arlene Carney, Leslie Delserone, Robin Dittman, Genevieve Escure, Timothy Mulcahy, Mark Paller, Federico Ponce de Leon, George Trachte
- Guests: Mark Bohnhorst (Office of the General Counsel)
- Other: Peggy Sundermeyer (Office of the Vice President for Research)

[In these minutes: (1) academic freedom and relationships with industry; (2) how Sponsored Projects Administration can be helpful; (3) metrics and measurement subcommittee report]

Professor Anderson convened the meeting at 2:15 and explained that she had been asked to serve as chair because Professor Dahlberg was out of town.

1. Academic Freedom and Relationships with Industry

Professor Anderson noted that the Committee had been asked by the Committee on Academic Freedom and Tenure to look at the issue of academic freedom as it comes into play in the University's relationships with industry. The question was raised last spring in connection with soybean producers; the Minnesota Soybean Research and Promotion Council and the Minnesota Soybean Growers Association suspended about \$1.5 million in annual grants because they objected to research published by University faculty members suggesting that the increased use of land to grow bio-fuels (including soybeans) would increase global warming. That incident raised the question about when or whether funding from industry could clash with the values that all at the University hold dear. To what extent is industry funding affecting the way the University does business?

Professor Anderson welcomed Mr. Bohnhorst from the General Counsel's office to provide his perspective on the question. Mr. Bohnhorst began by saying he tried to think of analogies with the soybean incident and only one came to mind, when some Foundations required that grant recipients not receive funding from tobacco companies. This was an example in which the funding agency attempted to impose restrictions broadly and restrict researchers who had no relationships with the funder.

* 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.

If a contract with industry proposes some specific kinds of limitations that apply only to one lab and are limited in scope, and if that PI does not feel they restrict his or her research, the University will sign the contract. The PI is able to make the call.

Mr. Bohnhorst's understanding of the larger question that was posed in the question to the Committee is how it can be sure that restrictions are not working into the University, given the large number of contracts it has. Sponsored Projects Administration (SPA) and the Office of the General Counsel (OGC) look at all contracts that support research with an eye to whether they comply with the Board of Regents policy on Openness in Research. The University will not take money if the research results cannot be published or if conditions on it will interfere in the conduct of research (this goes beyond academic freedom to the broader principle that the academic community is international and the University is part of that community, so restrictions on the use of foreign nationals, for example, are unacceptable). The Regents policy can be a restriction on research if one wants to use only U.S. citizens in research.

Mr. Bohnhorst also noted the Senate policy on principles guiding private sponsorship of research:

External support for faculty research and scholarship has become increasingly important in recent years, and will likely remain important for the foreseeable future. Faculty, departments and colleges should be encouraged to seek private support, as well as public support, for their research endeavors. Private support for research and scholarship at the University of Minnesota should be guided by these principles:

- Acceptance of private support should be the prerogative of, and according to the policies and procedures of, the University, not of the individual units or faculty;
- The University must exercise care when accepting funding from private sources that it is not unduly burdened to provide support for the infrastructure that the privately supported research will require;
- The University must exercise care in negotiating contracts with private entities to assure that academic freedom is preserved, particularly with respect to the faculty's right to interpret the findings and to publish new discoveries in an appropriate timeframe, with appropriate consideration of the sponsor's proprietary information, and with the faculty's right to choose the area of scholarship s/he wishes to pursue;
- The University must exercise care that the receipt of private funds does not adversely affect distribution of University resources or alter University priorities in areas that are not able to generate private support.

The University follows the policy, Mr. Bohnhorst said.

If someone accepted U.S.-citizen-only research, Mr. Bohnhorst explained, that means it is export-controlled, which creates a lot of problems. It essentially must be treated as classified research, because it is a crime to reveal it to a foreign national. A PI may appeal the provisions of the openness policy; there are well-developed provisions for an appeal, through the openness-in-research subcommittee of this Committee, to this Committee, to the Vice President for Research, who makes the final decision. It is a fundamental principle that secrecy in research can harm academic freedom, but there is an institutional process for addressing exceptions.

SPA reviews all contracts for their publication terms, Mr. Bohnhorst said, including all zero-dollar agreements.

There are tangential ways that academic freedom can be restricted. A sponsor may want the existence of the contract kept confidential; the Regents policy says the University cannot accept such a contract. The Minnesota Data Practices Act provides that as a state institution the University must be transparent in what it does, so it is legally obligated to release information about a contract even without the Regents policy.

On the one side, one can disclose the general kinds of research that is being done; on the other, one cannot prematurely reveal work because of publication problems and possible insider-trading charges. So the University respects an embargo for a company just as it would for the publication *Nature*; under the Openness in Research Policy, the University will agree not to disclose research results until the research is published.

Companies sometimes push for exclusivity in a long-term relationship with a team of experts. That sets off alarm bells with SPA and OGC, Mr. Bohnhorst said, although they try to work with companies. The University may agree to an exclusive relationship with a lab for the duration of a project, for example. If the PI accepts the conditions, the administration will support him or her.

Another area of potential tensions is licensing, Mr. Bohnhorst said. If the University grants an exclusive license for something out of a University lab, the University expects the entity will carry forward the product, develop it, and make it useful. Sometimes a company will push back and will want to know what more the University will do. The University keeps a research license in order to continue work and share it with collaborators; companies sometimes don't like that.

Professor Van de Ven asked what was at issue. Is there a sense that the procedures and guidelines are up to the task of dealing with the problems? Professor Anderson said the Academic Freedom and Tenure Committee had asked this Committee to look at the issues.

How does Minnesota compare with its peer institutions, Professor Cotter inquired? Minnesota pretty much does what institutions nationwide do, Mr. Bohnhorst said. Do others deal with exceptions in different ways, Professor Anderson asked. At one institution, a researcher took federal funds with restrictions on them and then revealed information to Chinese and Iranian students—and he is now under a criminal indictment.. Would that happen here? The institution in question has a high-security national lab that does top-secret research, Professor Cotter pointed out.

The openness-in-research subcommittee has approved a couple of contracts with restrictions in them, Ms. Witson reported. There have to be technology-control plans in place so that only the appropriate people have access to information, Mr. Bohnhorst said. In the case cited, it was determined that the PI misled the institution—he knew he could not share information but did so anyway. It is also not clear in that case whether he was acting as a university employee or consultant. If something occurs outside University procedures, there are no technology-control plans in place.

If the question is whether contracts with industry affect research, what did the soybean producers want, Professor Cohen asked. There are gray areas. The soybean producers raised the issue and then the President intervened. This was the producers' advocacy group, Professor Cohen said, which is attuned to

public perceptions, and it did not like the University findings. It was a public perception issue that both the producers and the University had to deal with. It had nothing to do with not believing in or not wanting academic freedom but it does affect relations with donors.

Why not apply the standards of the Senate policy to all external support, Professor Van de Ven asked. Why assume that private support is more tainted than public support? All research should be guided by the provisions of the Senate policy. Federal agencies increasingly mandate agreements with private entities, requirements that will have an impact on research. Public and private support are in a synergistic relationship and the principles should apply to both.

Ms. Witson pointed out that if the University applied the principles to public support, such as that from NIH, to stem-cell research, there would be a problem. NIH says it will NOT support stem-cell research unless an institution abides by certain rules, and it is not clear "the University can stand up to the feds" on that point. Mr. Bohnhorst noted that the Regents policy requiring Openness in Research does not distinguish between public and private support. Professor Cohen demurred from Ms. Witson's point, saying that NIH does not prohibit stem-cell research nor does it restrict findings. If such restrictions were to be adopted by statute, that would be different. Federal law prohibits exclusivity in research so there should not be a conflict. What is trickier is secrecy, he said, and there is a legitimate question about whether universities should do secret research. There are a lot of agreements to do secret research with the Department of Defense, the Department of Homeland Security, Office for Naval Research, and so on, Professor Van de Ven said—and those are covered by the Openness in Research policy, Professor Ruggles pointed out. Mr. Bohnhorst agreed that the University has dealt with as many "troublesome clauses" in government-funded research with security agencies as with private-sector funding.

What is common in relationships with industry is a delay in publication, Professor Anderson observed, perhaps six months, so that the organization can take advantage of the research. Are there problems with companies trying to string out that period? Mr. Bohnhorst said six months is the outside time limit: the usual term the University will propose is 90 days. The actual time limit often does not matter; it all depends on how quickly the University can get a provisional patent filed. Once the provisional patent is filed, the University researchers can publish.

Professor Anderson thanked Mr. Bohnhorst for his report.

2. How Sponsored Projects Administration (SPA) Can Be Helpful

Professor Anderson next asked Committee members to make suggestions on how SPA can be more helpful to faculty. Associate Vice President Webb intended to join the meeting but was unable to do so at the last minute. The question came up some while ago in this context: some units/colleges have large amounts of research funding and an experienced officer to deal with SPA, while other units have little or no external funding, so dealing with SPA is not an issue. It is the intermediate case that can be the problem, the unit or faculty member who receives the occasional \$50,000 or \$100,000 grant. Is there a way SPA could be more helpful in those cases, among others?

Professor Cohen said that SPA has changed so that it assigns a person to a unit rather than a grant domain, which has not been seen as helpful. It is better for the SPA staff to know the agencies or how to deal with small grants than it is for them to know him. That is potentially a bad decision. He said he has

been on both sides (university and agency) and SPA is much better at Minnesota, from the agency point of view, than at most universities.

Professor Ruggles commented that he has been submitting grants for about 20 years and on the whole SPA has been a lot better the last 3-4 years. It was horrible in the past and is now moving to less bad, which is positive for faculty. "Exceptional" status caused a lot of turnover in SPA, and it has had serious problems with retention, so that few grants officers know the rules as well as he does. He said his wife had participated in a grant but those involved (historians) did not know it should go through SPA—and the staff were very mean to them. There was no significant amount of indirect cost funds involved (it was an education grant), and it did violate procedures, but no one in the History department knew. SPA would be wise to train program officers to be gentle with those in the humanities.

There are also individuals who lack the ability to interact with faculty, Professor Cohen said, and he noted the case of a deadline that was 5:00 Friday afternoon. They asked if the deadline could be changed to 8:00 Monday morning; SPA's response was that everyone knew about the deadline in advance and they should have it in on Friday (but they did grant the extension). SPA staff don't work on weekends, so it made no difference to them, but faculty do and it gave them the extra time they needed. Professor Hays said he has had a similar discussion, and SPA has never said no, but they may fear they will be flooded with request for delays. He agreed with Professor Ruggles that the process has improved considerably. Professor Cohen said it is Vice President Mulcahy's policy that SPA should grant extensions when it can and not give people lectures about it. What has also improved, Professor Ruggles said, is that in the 1980s and 1990s SPA staff saw faculty as bad and their job was to admonish faculty about why; that has improved. It is helped by electronic submissions, Professor Hay observed.

Professor Linde recalled that SPA had moved up deadlines for grant applications, which meant faculty lost about two weeks—but SPA has also become very efficient and gets the grants in before deadlines. Does that mean the faculty can have some of that time back? The Committee discussed how grants.gov has made the process much easier. The question is why the college requires a grant be submitted two weeks early, Professor Anderson said; the University's competitors do not so faculty can submit them the last day. Professor Cohen agreed that units that generate large grants have them handled very efficiently. Professor Ruggles suggested asking SPA about this: the 5-day requirement was reasonable as grants.gov came online, but is that time needed now?

The bigger problem is that the agency does not know about the grant application unless forwarded by grants.gov, Professor Cohen said. Ms. Witson said that grant applications that were kicked back for technical reasons was a problem that SPA worked on and now even complex grants go through without much trouble.

What is the cost/benefit analysis of SPA, Professor Van de Ven asked? It is earning its keep? Does it provide benefits for faculty in research? A colleague in microbiology tells him that one grant in 20 is funded; if the available research funding is cut in half, should SPA be cut in half as well? A number of Committee members responded "no," with vigor. That is not the correct picture, Professor Cohen said. With an increased number of scientists and only a modest increase in funding, more people are competing for the same funds and there are a lot more highly-rated grants that are not funded—but that come back later, so the number of grants increases. The pay-off rate for grants has gone down with the same amount of money on the table, but the number of people applying for grants has not doubled. That increases the importance of the cost/benefit question, Professor Van de Ven said. Without SPA, Professor Anderson,

the grant application process would be decentralized and duplicative across units. There would also be increased disparity across units, Professor Hays said.

Professor Hays said he has the sense that PIs do not receive fast notification when there are changes in agencies. Professor Anderson said this seems to be one of several communication issues; are there others for SPA? Professor Linde noted that Vice President Mulcahy's office is now querying PIs about Research News Online (RNO)—the question is whether PIs want information out immediately or are willing to wait for the next issue of RNO. The question is whether they want more junk mail, Professor Ruggles said. It is not junk if SPA can sort it out for people, Professor Hays said.

Professor Cotter took issue with Professor Cohen and said he has found it helpful when someone at SPA knows him, rather than just the agencies. If a liaison must know all funding agencies, Ms. Witson said, he or she probably knows less. Her unit receives grants from all over and it is a problem if the grants administrator is not up to date on what the agencies are doing.

There is a high bias in favor of NIH funding in SPA, Professor Cohen said. He knows of colleagues who receive individual grants of \$5,000, \$15,000, and \$20,000, that all add up to the \$200,000 one might get from NIH, but SPA does not like those small grants and discourages the process to seek them. As far as he is concerned, if someone brings in money to the University, that is good. It is OK to receive cherries rather than watermelons. Except that the University loses money with every grant, Professor Ruggles said, and administrative costs are high, so the more cherries get picked, the poorer the University gets.

Professor Cohen disagreed. Every dollar brought into the University provides a boost to research, he said, and is an opportunity for students and faculty. It is better if indirect costs are also provided, but there are a lot of funding agencies that impose limits on indirect cost funding (e.g., USDA, foundations). SPA could be more supportive by recognizing that those funding models exist, they are keeping parts of the University's research community alive; one should be glad PIs are bringing in those funds and one wishes they could bring in more. He said he does not like comments about the possibility of not supporting such research and would not support a proposal to charge for every grant. There is a charge for every grant because SPA is supported by the cost pool, Professor Ruggles said, and a \$12-million grant pays 1000 times more than a \$12,000 grant. Professor Cohen said he is rewarded by having colleagues who are supported by other funding models. SPA could productively increase the number of small grants because it is beneficial to recognize that small grants have a value for the University, even if they are only for \$3,000.

Given the change to electronic submissions, has the SPA budget been constant? Associate Vice President Lawrenz said SPA has hired new people (temporarily) to work with the new Enterprise Financial System, but its budget has not gone up or down significantly. Associate Vice President Webb is trying hard to do things as cost-efficiently as possible. She added, on the issue of small grants, that they take the same amount of work and it is expensive to have a lot of them, but they do help meet University goals. What is needed is a balance of those small grants with other grants that bring indirect-cost funds (and even in those cases the University loses money). Professor Cohen pointed out that the University does many things that cost it money. If faculty obtain money and a graduate student is supported, the University wins. It is better if grants have indirect-cost funds, Dr. Lawrenz repeated. SPA is there to support the academic program, not win or lose, Professor Cohen said, and on average it should break even. If the faculty obtain funds from one place that benefits the institution, faculty, and students, the

University needs a cost structure to support obtaining funds. The question is not if something is good for SPA, it is whether it is good for the University. Indirect-cost funds are good, he agreed, but the University should nonetheless accept funds with indirect-cost limits or funds that allow the University to do good things.

Professor Cotter recalled that last year the Committee had conversations with representatives from various elements of the research infrastructure. If the infrastructure is not among the top X institutions, can the University be among the top X? Is this relevant to SPA? It was helpful to have the discussion with the unit heads last year and perhaps the same conversation should be held with Associate Vice President Webb. Dr. Lawrenz said that Ms. Webb would welcome such a conversation.

Professor Anderson asked if anyone could shed light on the problem of turnover at SPA. Dr. Lawrenz said that Ms. Webb is trying to develop opportunity for advancement within SPA in order that people can move up the ladder. She is also trying to make salaries stable, but it is a challenge to increase salaries because they are part of the cost pool, so if salaries increase, so do the charges to the colleges.

3. Metrics and Measurement Report

[Due to a scheduling mix-up, Professor Windsor, chair of the FCC Metrics and Measurement Subcommittee, was unable to join the meeting.]

Professor Anderson noted that Committee members had all received the Metrics and Measurement Subcommittee's report; the subcommittee had been charged to respond to the work of the strategic-positioning task force on metrics and measures. Because the University has adopted The Center measures for public universities, it is those measures that the subcommittee looked at and concluded there should be changes. The subcommittee recommended adding publications, combining National Academy and other faculty awards into one category, dropping the number of postdocs appointments as an external measure, and move faculty satisfaction and diversity to another category. The subcommittee also proposed using more internal measures.

Professor Cohen said he did not understand the recommendation that postdocs not be considered an external measure of research and scholarship. It would be a measure if one is on federal funds and it needs to be captured because it is a clear measure of distinction. It would not be for research funded by the University itself. Professor Anderson noted that the report said such a measure favors science, engineering, and health-related fields. The Committee discussed the use of postdocs as a measure; Professor Cohen maintained they are a significant aspect of the University's ability to compete nationally and internationally and the measure is not captured elsewhere.

Professor Anderson said she had two concerns. One, combining the awards blurs the reality that they must be tracked separately in any event, if the University is to use The Center measures. Second, since there are two measures of culture, where did they go?

Professor Cotter asked if the subcommittee and the task force wanted to do the same things. The metrics task force recommended aligning measures with The Center numbers and database. The subcommittee is starting discourse on how the University knows what it does is valuable. But if the University is to use The Center standards, should it not collect the data? The President must say what will be collected in terms of faculty awards. Professor Anderson agreed that is a fundamental question: if

the task force recommendations are in line with The Center's work, how do the subcommittee recommendations take the University away from them? It was noted that The Center does not measure diversity nor does it count publications. Professor Cohen said the latter should be counted; the National Research Council counts them, he pointed out.

Professor Anderson concluded that the Committee could go no further until it has a chance to meet with Professor Windsor, and adjourned the meeting at 3:30.

-- Gary Engstrand

University of Minnesota