

Minutes*

**Senate Research Committee
Monday, March 21, 2005
1:15 - 3:00
238A Morrill Hall**

- Present: Gary Balas (chair), Richard Bianco, Victor Bloomfield, Christopher Cramer, Sharon Danes, Kathy Ensrud, Steven Gantt, Paul Johnson, James Luby, Timothy Mulcahy, Mira Reinberg, Maria Sera, Charles Spetland, George Trachte, Barbara VanDrasek, Jean Witson
- Absent: Mark Ascerno, Dianne Bartels, James Cotter, Dan Dahlberg, Robin Dittman, Genevieve Escure, Michael Hughey, James Orf, Mark Paller, Thomas Schumacher, Virginia Seybold, Michael Volna
- Guests: Ed Wink (Sponsored Projects Administration); Mark Bohnhorst (Office of the General Counsel)
- Other: none

[In these minutes: (1) committee bylaw; (2) closing and merger of graduate programs; (3) institutional conflict of interest policy; (4) research secrecy update]

1. Committee Bylaw

Professor Balas convened the meeting at 1:15 and asked Committee members to review the Senate bylaw that creates and charges the Committee. With one minor change, the Committee approved the bylaw unanimously.

In the course of discussion, Professor Balas noted that the Committee has not been formally asked "to assist in the evaluation of research programs within the University." Vice President Mulcahy said he knew of no such activities that are run through his office but if in the future there are decisions to be made, at a global level, about research priorities, he would view this Committee as a valuable participant in the discussions.

Professor Balas noted the recent letter from the President to members of the University community about strategic planning. If the University wants to be among the top three public universities, it must understand the strengths of the top ten institutions, where it has strengths and where it must be strengthened. Presumably part of the strategic planning process will include such a review; he encouraged the administration to think about it.

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

2. Closing and Merger of Graduate Programs

Professor Balas turned next to Interim Dean Bloomfield to provide an overview of graduate program closure and merger.

Dean Bloomfield said that it was actually good that the information was in the news. He said he has not experienced any hostility as a result of the publicity; it's been more a matter of surprise that the University is finally doing something.

Dean Bloomfield next drew the attention of the Committee to the "Policy on the Merger or Discontinuance of Programs Under the Aegis of the Graduate School." The policy was formulated in 1996, used for about two years, and then approved in 1999, so the principles and procedures have been around for a long time and came out of the governance process in the Graduate School. There was a lot of faculty and student involvement in the development of the principles. He reviewed the principles:

Principle 1: Restructuring should be primarily to increase relevance and/or quality. If economic savings can be accomplished without sacrificing program quality, they should be pursued. Serious decline of a program on one or more of the general criteria on page 2 may indicate a need for restructuring; such declines may also represent temporary aberrations. Therefore:

Principle 2: Restructuring must take place in orderly stages. The first stage is to involve all relevant faculty, current graduate students and, as necessary, relevant budgetary dean(s) and provost(s) to determine whether restructuring might be beneficial. If the answer is yes, the second stage is to develop a proposal, either for merger or for discontinuance, which is as broadly acceptable to the affected parties as possible. The proposal is presented to the appropriate Graduate School Policy and Review Council(s) and, if approved, to the Graduate School Executive Committee. The last stage is forwarding the proposal to the Board of Regents.

There are three final principles implied in the stages outlined.

Principle 3: Graduate faculty, graduate students, budgetary college deans and provosts of all programs affected must be involved in restructuring decisions and actions.

Principle 4: The rights and interests of current graduate students in restructured programs must be identified and accommodated such that those students are not disadvantaged.

Principle 5: Responsibility for restructuring of graduate programs rests in the Graduate School. A restructuring process may be initiated either by the programs involved or by the Graduate School.

The point of the first principle, Dean Bloomfield emphasized, is educational quality. Disestablishing a small program will not typically save very much money, but merging two small programs can bring increased efficiency and effectiveness. With respect to Principle 5, the process is usually cooperative interaction.

The criteria used to judge programs are ones that everyone is familiar with, Dean Bloomfield said, and have been reiterated in the strategic planning process. From the policy, they are

The five criteria, with explanatory excerpts from the 1986 document, are:

- Quality ". . . of the faculty (in teaching, research and service as reflected in peer national ratings, publications, outside funding), ... of students, library collections, and other indices."
- Centrality ". . . of research, instruction and service represents a program's contribution to a coherent whole which helps to sustain and stimulate related work elsewhere in the university."
- Comparative Advantage ". . . the unique characteristics of each program that make it particularly appropriate in this university? . . . What is the rationale for the program at the University of Minnesota?"
- Demand "The direction of change in demand. . . . Other indicators . . . [are] number of applications, quality of acceptances, services performed in support of other programs degrees awarded, instruction of students or research undertaken for the solution of pressing problems of society."
- Efficiency and Effectiveness "When taken together, efficiency and effectiveness provide an important measure of whether funds are being put to the best use."

Ultimately these are qualitative judgments, Dean Bloomfield said, but the first indicators of a potential problem show up in the data: the number of students, faculty, courses, and so on. "Indicators and warning levels" included in the policy are these:

that there are sufficient fellow students to provide a rich environment of mutual learning and discovery,
that there is sufficient opportunity for strictly graduate level instruction,
that graduates of the program have a reasonable probability of appropriate employment,
that students who have enrolled in the program have a reasonable probability of completing their degree,
that there is ample opportunity for intellectual development beyond the boundaries of the specific program, and
that there are no uniquely troublesome signs such as program disorganization, poor or inadequate instruction, poor faculty productivity, or lack of student confidence in the program.

Possible findings and actions include:

Findings (actions) that can ensure from a review of the data:

- Program satisfies all criteria despite numerical indicators.
(None.)
- Temporary aberration or set-back, with good evidence that the program overall is strong and viable.
(Where relevant, offer advice or assistance to aid recovery. Make no recommendations regarding merger or discontinuance.)
- Weakness primarily due to a lack of adequate resources.
(Work with appropriate Head(s) or Chair(s), Dean(s) and Provost(s) to determine whether additional resources can be provided.)
- Serious shortcomings on multiple criteria, with little prospect of rapid recovery.

- (a. Suspend admissions.)
- (b. Advise program personnel to consider merging with one or more other programs if it appears likely that creating a larger, unified degree program is feasible.)
- (c. Initiate discussion with appropriate dean(s) and provost(s) regarding merger or discontinuance.)
- (d. If merger appears feasible, work with all relevant personnel to effect a larger, unified program within which the existing program can be viable. If merger is not acceptable to the program faculty or to the faculty of programs with which it might be combined, recommend discontinuance.)

In 1995 President Hasselmo asked the Graduate School to disestablish 20 graduate programs; the effort was begun and led to the development of the policy now in front of the Committee. Last fall, Dean Bloomfield related, Provost Sullivan asked him to do the same thing; he had assembled a list of programs that generated few degrees while the Graduate School had a list of programs that had few students. Not surprisingly, the lists overlapped. He sent a message to the appropriate deans asking if these were viable programs, if alliances or mergers would make sense, and asked for a report. In some cases, things were already under way; in other cases, deans said they needed to talk with faculty; in yet others, there was agreement that the program was not functioning.

The list of programs that appeared in one of the local newspapers was accurate, Dean Bloomfield said. Some are done, some are in process, and some are being discussed (and honestly so, with no preconception of what will happen).

Graduate students are concerned about this, largely because of what has happened to Occupational Therapy (which is not on the Graduate School's list—the Medical School decided that OT potentially is not part of its mission and suspended admissions to the program). That action led to a request that the process be more open and that the Graduate and Professional Student Assembly and the Council of Graduate Students be more involved. Dean Bloomfield said that in one way he agreed entirely with the goal; the policy calls for student involvement, but that is on a program-by-program basis. He said he would argue against student and faculty governance (this Committee, GAPSA, COGS, FCC) being involved in decisions about individual programs. Those groups should be involved in setting policy on how decisions are made, but decisions about individual programs depends on subject-matter expertise.

When he learned that the local newspaper had asked for the list of programs to be merged or discontinued (they did not intend that it appear in the paper), they decided they needed to comply but also concluded they did not want the first notice to students to be in the newspaper. Dean Bloomfield said he sent messages to the deans and directors of graduate studies asking them to be sure students had been involved in the discussions, as required by the policy. He said he believed that had happened.

Dean Bloomfield said that he believed the discussions would lead to improvements. A number of programs have a lot of intellectual justification and they are probably intrinsically small. Some, however, are very small; if those very small programs are to be offered, they must be livelier and provide a better experience for the students. Most of the discussions are not death sentences but rather a warning that the program needs to be tuned up.

Ms. Witson asked if the decision about Occupational Therapy was made using the policy. Dean Bloomfield said that action was taken independent of the policy.

Professor Balas commented that many interdisciplinary programs are small because the faculty involved are tenured in a particular department and colleges are not inclined to give a lot of support to them. Everyone thinks these interdisciplinary programs are fabulous—in some other department. Have they done a study of the size, support for students, and the willingness of deans and faculty to support the program? These programs should not be about "more for us" but about making both units better. A couple of the most successful interdisciplinary programs are intercollegiate, Dean Bloomfield said, although it has not been easy to manage them. A couple of the least active programs are intra-collegiate, even though they are potentially of intellectual interest. There is a tension, he agreed. The NRC-ranked departments want to see faculty efforts aligned with disciplinary activities, so the situation could get worse vis-à-vis interdisciplinary efforts. The deans are talking about this issue, he said, and it is central to the new budget model discussions (the University's proposed new budget model makes no explicit provision for support of intercollegiate interdisciplinary activity).

Professor Balas said that he has been involved in a small interdisciplinary program, one that does not line up with the metrics set out in the policy. The program was livelier in the past and it was seen as a great program; with a shrinking amount of funding available, however, it is difficult to continue it. The University is talking past interdisciplinary programs because it is not providing the money they need. Dean Bloomfield agreed; declining funding makes it more difficult to support the programs. They do have a fund for interdisciplinary graduate programs (which is not large), and the money goes primarily to larger programs—some for student support and some as a block grant for administrative support (which is needed in complex interdisciplinary programs).

Professor Johnson suggested that the strategic planning process might include a call for better support for Graduate School funding for interdisciplinary programs. Is that on anyone's agenda? It has been, Dean Bloomfield said, but it appears that the favored new budget model is an even purer form of Incentives for Managed Growth (IMG): each college retains all its tuition revenue and indirect cost funds while the administration retains the state funds; the colleges are billed for central services. The Graduate School is a central service.

What is the Graduate School for, Professor Johnson asked? They give support for interdisciplinary programs, provide student support, assistance for directors of graduate study, and administrative functions, Dean Bloomfield said. The Graduate School budget is about \$17 million, of which about \$2 million is for expenses and \$15 million is pass-through funding. The question is whether colleges will continue to be comfortable paying for the services of the Graduate School but receiving funds from the Graduate School on an all-University competitive basis. It will be tempting for each college to ask for its share of the money currently coming from the Graduate School, which would completely remove the University's flexibility to support interdisciplinary programs.

Professor Balas asked about Dean Bloomfield's role in the compact process. He sits in as Vice Provost for Research, Dean Bloomfield said. How does discussion and funding for interdisciplinary programs come up in the compact discussions, Professor Balas inquired. There are a couple of big interdisciplinary programs—renewable energy and the environment, for example—that reflect cooperation among several colleges, Dean Bloomfield said, and each included them in their compacts.

But as long as there are compacts with one college at a time, there is no automatic encouragement for such collaboration; colleges have to make an effort to support them.

Vice President Mulcahy asked if, in discussions of program merger, there had been any discussion about the taxonomy used by the National Research Council? The University would not want to be at a disadvantage in NRC rankings by using program names that do not fit. They did look at that in a couple of cases, Dean Bloomfield said, and it is a good question. When he looked at the names of some programs that will continue, Dr. Mulcahy commented, it seemed to him that some had extremely long names and they were not as informative as they might be. Has there been any consideration given to re-titling to enhance them? He said he did not want to see the University respond to ranking pressure, but the NRC rankings will be long-standing. The long names try to be MORE informative, Dean Bloomfield said, and some of them are not NRC-ranked.

Professor Sera said that she was bothered by the fact that the decisions about programs is supposed to be an open process but that a prospective newspaper story is what led to information being provided to students. She also said she thought it would be a good idea if there were an all-University policy on adding programs. Dean Bloomfield agreed and said the criteria in the policy do inform the strategic planning process. What bothers him as graduate dean is the idea that graduate programs can be discontinued but departments cannot. Departments can also become old-fashioned. It is not clear to him, he said, that departments should be less flexible than graduate programs. In fact, the best departments are often quite flexible in incorporating new areas of research and teaching. In terms of the information, he said he thought he had set machinery in motion to convey information to the students. He had spoken with the deans about the need to do so. In some cases it did not happen and he had to remind people that students were to be involved in the process.

Of the 150 or so graduate programs, how many are under consideration for merger or elimination, Professor Trachte asked. About 16 are still under discussion, in addition to those about which decisions have already been made, Dean Bloomfield said. His guess was that there will be about 25 fewer programs than at present when the process is completed.

Does this Committee serve as an advisory group to the Dean of the Graduate School or is there another group, Dr. Mulcahy inquired. It is the Policy and Review Councils that serve that role officially, Dean Bloomfield said, and the Graduate School Executive Committee includes the chairs of all the councils. He said he also speaks with Dr. Mulcahy, this Committee, the Council of Research Associate Deans, and the Senate Committee on Educational Policy, so will receive a lot of opinions, as he should.

Earlier in this meeting, Dean Bloomfield recalled, there was talk about the role this Committee should play in setting the University's research agenda. Aspects of that question are illuminated by Graduate School issues. What is the proper role of a governance committee? To deal with intellectual target areas for the University or to set up the proper procedures and structures in which the deans and others make such decisions? He said he was not clear about the answer to that question. Dr. VanDrasek commented that there is not a lot of clarity about the nature of the consultation that should take place. It would help if the President or Provost would clarify the issue.

Professor Balas thanked Dean Bloomfield for his report.

3. Institutional Conflict of Interest Policy

Assistant Vice President Bianco noted that he had presented draft administrative guidelines to the Committee in January and would respond to questions. He has received none. He said he has gone to many committees to keep everyone in the loop, and there seems to be a consensus that there is very little controversial in the draft. Given that, they will move forward.

There was no objection from Committee members. Professor Balas thanked Mr. Bianco.

4. Research Secrecy Update

Professor Balas next provided an update from the research secrecy subcommittee. The subcommittee is meeting this week, he said, and he expects it will be the last meeting before draft administrative policies are sent to committees for comment.

One item that has come up is the discussion at the University of Wisconsin about setting up a separate facility for sensitive or restricted research. The subcommittee concluded it could not answer the question, that this is an issue that needs to be debated in a larger body of faculty. MIT, Berkeley, Johns Hopkins, Georgia Tech, and Penn State, among others, have such facilities. The model is one that was developed after World War II and has probably not been revisited much. Is this a good idea for the University of Minnesota? Should it consider it? Or is current policy (barring research secrecy unless an exemption is specifically recommended by this Committee and the Senate) sufficient to meet the research needs of the country?

Dr. VanDrasek said it would help to lay out the implications of a decision. Dr. Mulcahy reported that MIT had a blue-ribbon panel investigate the question and issue a report; that report did a good job of outlining the issues and challenges. He promised to send a copy of the report to the Committee. MIT does classified research; the report said that none of it should be done on campus. Aside from questions of academic freedom and restrictions on access and publication, there are huge financial issues. This is a question that can touch a nerve on campuses, he observed; even if one is not in a field where classified research is done, one is likely to have an opinion about the kind of research the institution should do.

Professor Balas said that some of the "cons" are that classified research is very expensive, all who are involved must receive security clearance (including those in SPA, the Vice President for Research, the President), security is a significant burden (there are restrictions on telephone and data lines, sharing information, and so on). The "pros" include the possibility of colleagues doing research that would benefit the nation and state. On the latter, however, it can also be argued that many in Germany in the 1930s and 1940s were doing research to benefit the state, he added. Should the University do research that will benefit humanity and not research that does not receive peer review?

Are there degrees or is it an all-or-none proposition, Professor Johnson asked. There are degrees, Professor Balas said. Technically, at the federal government level, there are only two types of research, Vice President Mulcahy said: classified and not classified. They are seeing creep in the classifications, however, so it would be helpful if this Committee were to set guidelines—because the question will come up more and more frequently. There is now a middle ground that is the most difficult to deal with: "sensitive-but-unclassified" research. The University will make a decision about doing classified research, but a decision about sensitive-but-unclassified is being forced upon it. The Reagan

administration declared that research is classified or unclassified and to be classified it had to go through a formal process. Now this middle category keeps creeping in.

Ms. Witson said the discussion appears to be about whether the University should do unclassified research off campus, which is putting the cart before the horse. The University has a policy that says it will not do classified research. That issue should be discussed first—does the University want to do classified research?—before there is talk about doing it off or on campus. That is exactly what the subcommittee has formed as the question, Professor Balas said, because the research secrecy policy is up for review by the Board of Regents. And what does the University wish to do about sensitive-but-unclassified research? The subcommittee has developed the procedures to deal with the latter category. Do the procedures carry the implication that the University will do as much of such research as it can, Ms. Witson asked? They do not, Professor Balas responded. They are in the spirit of the Regents policy: anything that requires an exemption must go through the subcommittee, to this Committee as a whole, and then to the President for a decision. There will be a tracking procedure to determine if there is a trend in such research, and an evaluation of whether such research is part of what a faculty member is already doing or if it is a quest for new money. They will also look at whether such research is affecting the research mission of the University.

With shades of gray there is a need for guidelines, Dr. Mulcahy said. It will help to have a policy statement that can guide in framing answers to questions down the road.

Is this an issue that only arises with respect to the government, Professor Johnson asked? It is not, Dr. Mulcahy said, which is why there is need for a set of principles that can be applied to all kinds of activities. Foundations are more and more often putting in language saying they will not support research that is being supported by others. The research secrecy subcommittee will recommend policies governing the conditions the University will and will not accept when it receives money. Professor Cramer said the subcommittee has a variety of views about restrictions; government restrictions are the smaller part because there are also corporate publication restrictions and so on.

Mr. Bianco pointed out that the institutional conflict of interest policy addresses inappropriate quid pro quos (censorship, inducements, suppression of results, etc.)

Are the guidelines something this Committee comes up with, Professor Johnson asked? The Committee will see them, Professor Balas said. The Regents policy is a one-page statement; the subcommittee will bring administrative procedures on how to handle gray areas. This is what the subcommittee has been working with the administration on and what will come to the Committee. Are they talking about the broad criteria they would use to decide whether or not to grant an exemption, Ms. Witson inquired? They are, Professor Balas said—that is what has taken the most time. Exemptions will continue to come to this Committee, Ms. Witson asked? They will, Professor Cramer said; requests will go to the subcommittee and this Committee, with time limits on when the decision must be made.

Vice President Mulcahy reported that there is a real possibility that there will be a faculty committee on campus (a biosafety committee) that will decide if certain research should be published—a faculty committee will decide about another faculty member's work. This follows a federal recommendation: institutions should ask if it is in the national interest to publish something or if it should not see the light of day because it would aid terrorists. This issue should also be in the mix of the discussion, he suggested. That would represent a major change at the University, Professor Balas

commented. And at the federal level, Dr. Mulcahy added. This proposal has not been enacted and there is considerable discomfort with biosafety committees because some have been found not to function well.

The procedures will go to the Faculty Senate, Professor Balas said.

Professor Sera said the Committee appeared to be comfortable with the present policy that bars secrecy in research. The question is what happens over the summer, when there are deadlines that must be met. Professor Balas said the expectation is that the subcommittee would meet if necessary in the summer. And if necessary, there will be votes by email from the subcommittee and this Committee. Professor Johnson recalled that it had not been easy to decide when these issues were presented by email in the past; it will help to have criteria. That is why the subcommittee spent so much time on them, Professor Balas said; it is not possible to be completely comfortable with them, however, because each case brings new questions.

Is it clear that the subcommittee will have sufficient clearance that it will have enough information to make a decision, Dr. Mulcahy asked? The procedures provide that if the subcommittee does not have the information it needs, the request for an exemption will not be approved.

Dean Bloomfield observed that the discussion began with labs off-site for classified research, and the Committee thought they would be too expensive and the University should not have them. He wondered if that is true, and whether such research might be conducted on campus. Traditionally, such research is handled off campus, but universities will likely see more such research in the future and the traditional structure may not be appropriate. Minnesota could choose to opt out of such research and that could be the right choice. But it may not be if the University wants to have its faculty involved in important research. Many have suspicions about whether there is need for classified research, but the world is changing and there could be reasons to think about having it at the University.

That is a legitimate question, Dr. Mulcahy agreed. But there are a lot of hurdles that would need discussion. Ms. Witson repeated her point that the discussion about doing such research should precede a discussion about how to facilitate it. Dr. VanDrasek said that asking the question about an off-site facility inevitably would spur a discussion about the principles involved, and that all voices must be heard in that discussion. Mr. Wink said that doing such research off-site makes things a lot clearer. The University is doing stem-cell research on campus, and although it is a different matter, when things "all run together" is when there are breaches. But he agreed there is a potential benefit to doing such research. Mr. Bianco said that from a compliance standpoint, it is better to have research on campus; it is easier to assist with compliance. It is also easier to the research on campus because it is in full view, to the extent possible. Mr. Wink said that if it is off campus it is still subject to the same compliance mechanisms and easier to manage. The University has been successful in managing stem-cell research compliance and it has been kept on campus, Mr. Bianco pointed out. But there are restrictions on email, more required for ID cards, and so on, with classified research, Mr. Wink said; that is a very different situation. It would be tough to do classified research on campus, he concluded.

Ms. Witson said that when one talks about secret research and who can work on it and who can see it, she would argue that it is not within the scope of the University's mission. It should be the University's policy to avoid classified research.

Dean Bloomfield said that Ms. Witson has been eloquent in opposing classified research, and that while he feels strange making the argument, the world is changing and there are dangers that science has produced that the country needs to protect itself against. The U.S. has arguably been among the most aggressive in promoting such scientific developments. In World War II, many physicists went to Los Alamos and developed the atomic bomb; most physics research was diverted there. The country is not in that kind of crisis now, but given a few more terrorist incidents, which many are predicting, there will be calls for a lot more research on protecting the United States against various kinds of terrorism (e.g., bioterrorism). Do universities participate in that research? Or not? Or some mix of them? Dean Bloomfield said he did not know the answer, and would love to say that universities should keep their hands clean, but he said he feared that would be unrealistic. The Committee should discuss University policies but keep in mind that the world can change rapidly.

This is not like Los Alamos, Professor Sera said. That was set up by the government, not run within a university, and they recruited people for the project. She said she would not say the University should not do such research, but the government can do it and recruit people for the purpose. The first step, however, is to take a vote on keeping or changing the policy.

Classified research facilities do exist, Professor Cramer commented; the government does not lack places to get its research done. The University of Minnesota should do such research only if it feels it would lose valuable faculty who were making contributions to the University if it did not have such programs. The Committee needs to be careful, he cautioned; secrecy is a level of government classification and it is banned here—the subcommittee has had nothing to do with classified research and is not making any suggestion that the University should accept classified research. If, however, a large number of faculty feel a need to do classified research, the University could consider responding to national needs, in the way Dean Bloomfield suggested, but it is not clear that the University of Minnesota needs to be "altruistic" and start a large and expensive effort. He said that it is critical that the work of the research secrecy subcommittee be kept separate from the larger issue of classified research.

Professor Balas noted that this discussion had taken place without any document; next time there will be a proposal from the research secrecy subcommittee. He said he will also invite representatives from the Social Concerns Committee, which has expressed an interest in the issue. This is an issue that faculty feel passionate about and it must be discussed in the "bright light of day" so that everyone knows what the policies are.

Professor Balas adjourned the meeting at 2:50.

-- Gary Engstrand

University of Minnesota