

Minutes*

**Senate Research Committee
Monday, September 22, 2003
1:15 - 3:00
238A Morrill Hall**

- Present: Gary Balas (chair), (George Green for) Victor Bloomfield, Kathleen Conklin, James Cotter, Christopher Cramer, Dan Dahlberg, Sharon Danes, Robin Dittman, Kathy Ensrud, Steven Gantt, David Hamilton, Paul Johnson, Katherine Klink, Andrew Koch, Maria Sera, Virginia Seybold, Thomas Schumacher, Barbara VanDrasek, Jean Witson
- Absent: Phillip Larsen, James Luby, James Orf, Mark Paller, Charles Spetland, George Trachte, Michael Volna
- Guests: Executive Vice President and Provost Christine Maziar, Vice Provost Al Sullivan; Moira Keane (Human Research Protection Program); John Engelen (Federal Relations); Assistant Vice President for Regulatory Affairs Richard Bianco; Ed Wink (Sponsored Projects Administration)

[In these minutes: (1) plans for renewable energy research funds from Xcel per the state; (2) search for Vice President for Research and for Dean of the Graduate School; (3) accreditation for the human research protection program; (4) discussion with the University's federal representative; (5) hazardous materials policy]

1. Initiative for Renewable Energy and the Environment (IREE)

Professor Balas convened the meeting at 1:20 and said it would begin with one of the few bright spots from the last legislative session: The University received money from Xcel Energy for the Initiative for Renewable Energy and the Environment (IREE)--for research on renewable energy. He welcomed Executive Vice President and Provost Maziar and Vice Provost Sullivan to inform the Committee about the funding.

Dr. Maziar began the discussion by explaining that when the funding for renewable energy research became available, Deans Elde, Davis, and Muscoplat and former President Keller were instrumental in helping legislators craft the bill and explain it to their colleagues. Once the funds are provided to the University, it is responsible for oversight; she said that she has asked Vice Provost Sullivan to work with a steering committee so that the University can tell what it has done and how what it has done aligns with institutional priorities and mission as well as serve the state. The Department of Commerce, the agency from which the funds are dispensed, is very happy with the University's arrangements, she said.

Dr. Sullivan distributed a handout of several pages, the first of which was an organizational chart for IREE, the funding for which will be \$20 million over four years. There will be an executive

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committee of Deans Elde (chair), Davis, and Muscoplat and former President Keller. They also propose an external advisory board with representatives from business and industry, agencies, non-governmental organizations, and interest groups in order to ensure the University has a good story and can talk in the future about what it accomplished with the money. He will work with the executive committee, Dr. Sullivan said, but not to micromanage the effort but rather to provide the University overview and to be an easy contact in Morrill Hall. He said he went to the first meeting of the executive committee and found it particularly uplifting.

Dr. Sullivan reviewed the legislative intent for the research: "development of environmentally sound production, distribution, and use of energy, chemicals, and materials from renewable sources; processing and utilization of agricultural and forestry plant products and other bio-based, renewable sources as a substitute for fossil-fuel-based energy, chemicals, and materials using a variety of means including biocatalysis, biorefining, and fermentation; conversion of state wind resources to hydrogen for energy storage and transportation to areas of energy demand; improvements in scalable hydrogen fuel cell technologies; and production of hydrogen from bio-based, renewable resources, and sequestration of carbon."

He also reviewed the mission of IREE ("promote statewide economic development, sustainable, healthy, and diverse ecosystems, and national energy security through development of bio-based and other renewable resources and processes"). The principles guiding IREE include that it must be consistent with the University's mission, multi-disciplinary, highly-leveraged, capitalize on unique or potential University strengths, opportunities, and faculty expertise, address clear and compelling social needs, consist of proposals balanced between high-early and longer-term impacts, and use reporting and accountability standards.

Dr. Sullivan explained that \$20,000 will be made available to each of several clusters to "jump start" scholarly activity, the funds to be expended by June 30, 2004. There will also be a seed grant program for 2003-04 that will provide \$125,000 to each cluster to support teams and fund proposals for scholarly activities. Finally, there will be grants of up to \$10,000 per proposal (a total of \$100,000) for development of education/teaching programs for 2003-04.

The total, \$20 million, is a LOT of money, Professor Balas commented; usually the legislature does not give the University this much. The funding comes from Xcel, Dr. Maziar reminded the Committee, and does not flow through state coffers.

Does the University have a long-term plan, a vision, for the next five years, on how it will spend the money and point to milestones demonstrating that the University was a good steward of the money, Professor Balas asked? That is exactly the issue the executive committee is dealing with, Dr. Sullivan said, and why he is a part of the group--so there is a University-wide view. The four members of the executive committee, however, are ably doing that, he said. The idea is to demonstrate what the University has to show for the money; the four on the executive committee intend to have something.

The seed grants may lead to the development of more extensive research programs, Dr. Maziar commented. She said she is also concerned that the University not build a structure with "tails" that extend beyond the funding provided by Xcel, with the expectation that University funding will be provide--unless the research proves so valuable to the University that it could attract external grants to support a research and education program the University wants.

Is the business community involved, Professor Balas asked? Or is this just a University research project? It is inappropriate to think of the business community as monolithic and speaking with one voice, Dr. Maziar said. They have heard from a large cross-section of those interested in ideas about developing alternative energy sources that do not rely on fossil fuels from somewhere else; there is also great legislative interest in the topic. And the funds were provided to the University because it has already been doing research in this area, Dr. Sullivan said; the funds did not just come out of the blue.

The money is from Xcel but the state is involved, Professor Dahlberg asked? What is the genesis of the focus on renewable energy and the categories that were chosen, he asked; were they motivated by interests in outstate Minnesota? The origin is related to an agreement the state has with Xcel about disposing of nuclear waste, Dr. Maziar related. Xcel promised that a certain amount of money would be spent on renewable and clean alternatives to nuclear power in return for keeping the existing nuclear plants operating. If those plants are not allowed to continue, the state would be in a difficult energy situation, but the legislature extracted something of public value in return. It was difficult to figure out what to invest in; Dr. Maziar speculated that in the past funding may have gone to projects that did not work out. The state does not have a vehicle to do research, so several legislators turned to the University as the most reasonable place to do it. They also look to the University to develop technologies, with this research, that can generate new industries. She surmised that there may have been some outstate influence on the selection of strategies identified in the legislation.

It is in the long-term best interests of the state and Xcel to get free of nuclear power, Dr. VanDrasek observed. There is no private access to the results of the University's research, Dr. Maziar said, but she agreed that it was in everyone's interest.

Professor Balas said he did not see where Policy, Economics and Ecosystems appeared in the legislative intent language of the legislation. Dr. Maziar said she has learned that in some areas of technology, they touch the entire population, people find facilities in their back yard, and there are significant public policy questions in play. It would be unfortunate to develop technology purely from an engineering point of view that does not include the social calculations needed to implement it. Professor Balas said he wanted to be sure that what the University does is in line with legislative expectations. Dr. Sullivan reminded the Committee that his background is studying the environment; in his experience, these issues have a lot of social policy implications. "There are no free lunches with respect to energy," he said. Even windmills create problems (a lot of dead birds).

Does the University feel it must spend the money quickly or can it take a long-term view and plan a good program to help the state, Professor Balas asked? The University has the opportunity to plan wisely, Dr. Maziar said. It is not obligated to spend the money quickly--but it can't sit on the money for 20 years, either, which could mean lost opportunities as well as a lack of imagination. The idea is that the University will do good things and get credit for them, Dr. Sullivan added.

Moreover, investments in environmentally-sound energy strategies are cyclical, Dr. Maziar said--and this investment is counter-cyclical. Would moving from University labs to implementation mean private investment, Dr. Green asked? It would, Dr. Maziar affirmed. Funding for environmentally-sound energy seems to depend on the party in power; if the University can make investments in environmentally-friendly science when the federal government is not doing so, it will put the University in an advantageous position when the federal government once again funds such science.

Mr. Koch asked if the University will simply distribute the money in grants or if it will take a more affirmative position. Dr. Maziar responded that in the compact process, the administration funds initiatives from the colleges--but origins of the initiatives are with the faculty. She said she assumed the seed grants would fund the most promising proposals. The Provost's office will not step in and direct funds to specific places for research; the role of her office is to be sure the University is a good steward, to avoid tails and downstream risk, and to ensure that the University's research and educational mission is supported through the research.

Presumably the funds will not be used to hire new faculty, Professor Balas observed. Dr. Maziar said that faculty must be hired on recurring funds. She could imagine, however, that funds could be used to bridge new faculty positions in anticipation of retirements. This, she said, is part of not creating tails.

Professor Dahlberg asked if some of the money could be spent on workshops and the long-term education of the people of the state on various energy sources, which is part of the University's outreach mission. For example, it could be that nuclear reactors are more kind to the environment than some may believe. Dr. Maziar said the funds could be used to educate but not to advocate. So it could be used to sponsor a forum where people of different views participated, Professor Dahlberg said. It could, Dr. Maziar agreed; it is always appropriate for the University to sponsor model academic debates.

Dr. Maziar said she was anxious to see enabling money so that the University can be more competitive for grants available in the next political cycle. This is also a great opportunity for the University to show it is a good steward, Professor Balas said, and let the legislature help the University grow in other areas. He thanked Drs. Maziar and Sullivan for joining the meeting and asked that the Committee be provided updates as appropriate.

2. Searches for the Vice President and for the Dean

The other item the Committee invited Dr. Maziar to talk about was the searches for the Vice President for Research and for the Dean of the Graduate School, Professor Balas said.

The search for the Vice President will be run through Vice President Brown's office, Dr. Maziar said, and work has already been done to identify search committee members. Dr. Paller in the Academic Health Center has agreed to chair the committee. When the position is announced, do they expect to have someone in place by the fall of 2004, or is that optimistic, Professor Balas asked? Not at all, Dr. Maziar responded; they would like to have the position filled by July 1. The same timing applies in the case of the Dean of the Graduate School, she added.

Will both searches be national, Professor Balas asked? The Vice President for Research search will be national; the Dean of the Graduate School search will be internal. That follows the pattern of peer institutions, Dr. Maziar told the Committee. They have not identified a chair for the Dean of the Graduate School search yet, and she is open to recommendations.

Dr. VanDrasek asked if keeping the Vice Provost and Dean of the Graduate School position together is now a permanent feature of the administrative structure. Dr. Maziar said it is; this is a model adopted by a number of other Big Ten schools that integrates the Dean of the Graduate School into the Provost's office and helps ensure more integrated academic planning. When the Vice President and Dean were the

same person, it made sense for the Vice President to have a reporting line to the President, but she also had a strong dotted-line relationship to the Provost and to the Senior Vice President for the Health Sciences. The graduate dean working with the Provost is very important.

Dr. Maziar said she was grateful to Drs. Bloomfield and Hamilton for the extended interim period and said she knows that they want to have the positions settled. What triggers the search now, Dr. VanDrasek asked? Last year there were huge challenges—at this point last year, the University did not know who the president would be, who half the legislature would be, who the Governor would be, or who the Regents would be, and there was still thought that the University might see an increase in its budget. Those challenges needed to be worked through; with the help of the people around this table and great deans, the University has done so, and now is in a position where the searches can take place.

Professor Balas wished Dr. Maziar good luck and thanked her for joining the Committee.

3. Accreditation for the Human Research Protection Program

Professor Balas now welcomed Ms. Moira Keane to the meeting to discuss accreditation for the human research protection program.

Ms. Keane reported that the University's research animal care program has been accredited for a long time but there has been no corresponding option for the human subjects research program until very recently. They decided to pursue human subjects accreditation early in the national process and sent the application to Washington, D.C. last week to the Association for the Accreditation of Human Research Protection Programs (AAHRPP). The accreditation is of the overall program, not just the Institutional Review Board, and serves to demonstrate to ourselves, to the consumers of research, and to regulators that the University has a fine research program and has procedures in place to protect human subjects, Ms. Keane summarized.

The AAHRPP will review the application and then conduct a site visit. They will have their own agenda and may wish to meet with Committee members to see how the system works. They will also interview researchers, IRB members, and staff. Ms. Keane said she was proud of the University's program and that it has a lot of depth. With the support of this Committee and the research community, it can achieve full accreditation--and would be among the first in the nation to do so.

How is this different from what happens now; what extra happens, Professor Conklin asked? The review addresses the integration of the entire system, Ms. Keane explained. Meeting regulatory requirements and ensuring sponsors that they do so is part of the picture, as is integration with Sponsored Projects Administration, ensuring that researchers know what to do, and that research subjects are educated. This is, she noted again, for HUMAN subjects research.

The accrediting body is an independent organization whose partners in development include the Association of American Universities, the Association of American Medical Colleges, and others. It is not a government body. Will the government look to it or will it affect the University's status with NIH and other agencies, Professor Balas asked? They are speculating that it will have an effect, Ms. Keane said. In the case of animals, it does make a difference--an external validation reassures regulators and sponsors. There is federal legislation proposed that would make human subjects accreditation mandatory;

the notion with the creation of AAHRPP is that they can get ahead of federal action and demonstrate that the academy can police itself and that no legislative mandate is required.

Professor Balas asked if the University had gotten any tips from the institutions that have already been accredited. They have been in touch with them, Ms. Keane said.

Is this something the research faculty have asked for or is it a top-down initiative, Professor Dahlberg asked? Is there something broken that needs to be fixed? Vice President Hamilton said that it was top-down, something that came about because of the interest of external constituents. The President of the Association of American Universities, Nils Hasselmo, put out a plea that universities begin the accreditation process because the federal government was threatening to take action. The worst outcome would be federal legislation on the subject so the institutions made the decision two years ago to go ahead in sponsoring the AAHRPP. Ms. Keane added that the University did an extensive self-evaluation in order to prepare an application that would stand the test of close scrutiny. If this began a couple of years ago, Professor Dahlberg asked, have they talked to all who apply to the IRB to find out if they are on board with this? Ms. Keane said that the endeavor does not include accrediting research projects.

Are there new rules--so that there will also be surprises? Professor Dahlberg then inquired. Accreditation will not affect existing reviews of research projects or federal rules, Ms. Keane said, nor will it raise the bar for research. It does explain HOW the bar is maintained and that this is a safe place for research faculty to come, that there is a good infrastructure to handle conflicts of interest, that labs are safe, and so on, but it does not change any accepted standards. They have, however, done a survey of the faculty and have involved PIs in the process.

How often will accreditation take place, Dr. VanDrasek asked? As with the process used for animal research, every three years, Ms. Keane said. If the University passes this year, the next time the University would have to reapply would be 2007. One benefit of the process is that it will help the University pay attention to the issues, Dr. VanDrasek commented. It is an opportunity for the institution to conduct a self-analysis and review standards, Ms. Keane agreed, in order to be sure it is complying with the rules.

What is the timeline, Professor Danes asked? The site visit is supposed to take place before the end of the calendar year, Ms. Keane said; this is a large program so they will need a significant site visit team. She promised to provide additional information to the Committee as it became available.

Professor Balas thanked Ms. Keane for her report.

4. Discussion with the University's Federal Representative

Professor Balas next welcomed Mr. John Engelen to the meeting.

Mr. Engelen began by explaining that he works for University Relations and serves as the University's liaison with the federal government and in particular the Minnesota Congressional delegation. He spends 60% of his time in Washington, D.C., has an office on campus, and serves all campuses. Last year he organized 275 meetings for University representatives in Washington with members of Congress and staff. His goal is that the members of the Congressional delegation will get to one University campus per year; in recent years, they have averaged two visits per year. Part of what he

does is sell the University so that the Congressional delegation knows what the University is, they trust it, and help get it money. He promotes the University with federal officers. He also brings newly-elected members of Congress to campus for a 4-5 hour visit that includes the President, research facilities, etc.

What about the Executive branch, Dean Green asked? He deals with it as an end result of policies and initiatives, Mr. Engelen replied; he does not search for competitive funding opportunities but if someone has a problem, he will work with federal agencies. He has had more time recently to introduce federal funders to the campus so the understand funding opportunities. In general, however, he spends more time walking the halls of Congress and less walking the halls of agencies.

Professor Balas said he saw the recent article about \$2 billion in pork-barrel funding for higher education. Is there a need to be more savvy about the playing that game? Large research universities compete well, Mr. Engelen responded; the discussion crescendos each year with the annual publication of the article in *The Chronicle of Higher Education* detailing pork-barrel funding. The Bush budget lambasted the top 30 pork-barrel universities, but Minnesota is on the list at #22 (according to the Bush administration). If one looks at the list of 30, and do a matrix with Congressional "appropriators" [members of Congress who have control over appropriations], the University of Minnesota is the only one with only a single "appropriator." (West Virginia is #3 on the list and has a lot of "appropriators.") The University can discuss the appropriate level of pork-barrel funding, Mr. Engelen said, but it is a zero-sum game.

Again, in looking at the list of 30 institutions that received pork-barrel funds, and compare those amounts with the money received by peer review, only three received more than \$100 million--and the University is number one. 27 of the 30 compete very poorly for funding through the peer review system, and they have made a decision to go for funding through their Congressional representatives. The top recipient of pork-barrel funds received \$75 million--it was not that any one institution received hundreds of millions of dollars, Mr. Engelen told the Committee. Moreover, academic earmarks are at an all-time high; with state funds declining, there is more interest in what funds might be obtained from the federal government.

Professor Balas recalled that Mr. Engelen had reported to the Faculty Consultative Committee on a Congressional effort to overturn funding for projects. Part of what he does in Congressional interaction is deal with trouble--the challenge is to be more strategic in articulating the next trouble point. He told FCC about one that needs thought. When the House of Representatives took up the NIH appropriation, there was a motion to delete funding for four projects funded through peer review because they were indecent or inappropriate for federal support. The motion failed by one vote. The Senate did not act on the motion. What is significant for him, Mr. Engelen said, is that "here we go again" in attacking the peer-review system. This is a heads-up that he needs to educate the Minnesota Congressional delegation on what peer review is all about.

Does he have a group of counterparts who mobilize other Congressional delegations, Dean Green asked? He does, Mr. Engelen said. There are federal relations councils, national associations, and they also compare notes at the Big Ten level. They take these issues very seriously. How did they deal with this one, Professor Balas asked? It came up at the 11th hour, Mr. Engelen said, and they must defend grants they know nothing about--they defend them on faith in the peer review system.

Is it a challenge to educate the Congressional representatives from Minnesota, Professor Seybold asked? Most outside a university do not know about the peer review system, Mr. Engelen said. The average age of the staff is 26; most are there 1-3 years, so education is big component of his work with them. People do not understand the system if they have not been associated with university research. It is a challenge but he does not anticipate a negative response. He is not worried that a member of the Minnesota delegation will go after the University but he does need to do his educational legwork.

It was said that some of the controversy in the House had to do with the title of the grants; do people need to be educated on the titles they use, Dr. Witson asked? There has been informal advice from NIH that people should be careful about titles and abstracts, Mr. Engelen said--they are supposed to be in lay terms so people can understand the research. Is this a "golden fleece" approach or the reaction of religious groups, Dr. VanDrasek asked? It is a hybrid, Mr. Engelen said; they bring a moral viewpoint that the money should be spent elsewhere (the grants were related to sexual behavior; this was not the typical Proxmire attack). This suggests that education about peer review is not the main problem, Professor Dahlberg said; this is a political act and there may not be much that can be done about it. Mr. Engelen agreed that he could not change deeply-held moral views but he can inform members of Congress that the peer-review system sorts out the unimportant research. He cannot change people's minds but it is important to make it difficult for such amendments to pass. The best strategy is to give people confidence that the process is working the way it is supposed to.

Mr. Engelen then reported on the proposal from Representative Sabo that would deny copyright to any work substantially funded by the federal government. The motivation is the cost of publications for universities and ensuring lay access to information. Mr. Sabo introduced the bill before talking with the University; since then he has consulted a lot with the University. It is a hot topic here and also made it to the front page of the Washington Post.

In part Mr. Sabo was motivated by the Public Library of Science, an open-access journal. Its business model provides free access to publications but those who submit articles must pay (\$1500 or \$3000). The University position is that the cost of publications is huge and there are significant issues with respect to for-profit publishers; the University has a problem, however, in denying copyright. Copyright protects authors; if there is no copyright for federally-funded research, who owns it? The federal government? The author? Who can do something with it? Copyright applies to software development, just like a patent. If the idea is that federally-funded research has no copyright ownership in the printed word, that could also apply to Bayh-Dole, which allows patents on the results of federally-funded research.

In July, several of the University's senior officers met with Mr. Sabo and his staff, at which point they were asked what the University wanted. That is the big question, Mr. Engelen said. They committed to Mr. Sabo that they would work with others outside the University to lead the discussion and see if the national associations, the Public Library of Science, etc., can talk about dealing with open access. AAU President Nils Hasselmo has proposed a National Academy study.

Is this discussion just within universities, Professor Balas asked? Do not companies also receive federal funds? Much Department of Defense funding goes to companies. The debate has been in the publishing community and universities, Mr. Engelen said. Mr. Sabo has said he is in this for the long haul but he wants to see the national debate continue and is in no rush to get legislation passed. He wants

a robust discussion about how to foster open access. The University is doing its part and has thought about sponsoring a national forum on campus.

One idea they gave to Mr. Sabo is for Congress to direct resources to develop server capacity to put on line all articles substantially supported by federal funds and make them freely available, Vice President Hamilton reported. He recently looked for an article that he had edited; he is a member of the professional society, and they wanted him to pay \$7 for it. One must be careful about copyright; one does not want to destroy it but something must be done to put articles on line.

Mr. Engelen said the University wants to find a constructive outcome and wants the debate to be civil. Professor Conklin asked if there could be difficulty separating copyright from patents. There is a VERY slippery slope, Mr. Engelen said; weakening or eliminating copyright could lead to similar actions with respect to patents. Professor Cramer said he thought everything was available under the fair use doctrine; anyone can have a copy of something. But some has the copyright, Mr. Engelen said. It is inconvenient but a copy costs very little, Professor Cramer responded. It is more than inconvenient, Dr. Hamilton said; it is a matter of finding information. There is also the issue that people must understand what they find, Mr. Engelen said. There is a lot of information on the Internet but people must be able to interpret it and apply it to their situation; there could be more medical information available, for example, but people would still have to see their doctor.

It is incumbent on the University to set up a forum and be a national leader, Professor Balas contended. It will be, Mr. Engelen said. Mr. Sabo's office wants to see the University successful and is aware of the concerns. Mr. Koch said most of the concern appears to be about medical research; would it help if the scope of the proposal were narrower? Mr. Engelen said it would not; they understand that the bill goes beyond medical research. The Public Library of Science proposed journals go beyond medical research as well, although they are biologically-oriented. There is a concern in a lot of fields, Dr. Green said. Mr. Engelen agreed; there has been a lot of consolidation in the for-profit publishing industry and there has been talk of a Department of Justice investigation.

Professor Balas said he was surprised to learn that the University has three people who work on state relations but only one who works with the federal government. What do other Big Ten schools have? Small staffs, Mr. Engelen said; Michigan has three people plus a medical lobbyist, Michigan State has two, Purdue has just opened a one-person office, and the rest do their work from campus (sometimes with more people involved). He is funded by the central administration. It is important that the University be aware of national trends and have a voice, Professor Balas said, and the Committee could advocate in favor of more money for federal relations. Dr. Hamilton said the Office of the Vice President for Research is in the last stages of hiring a person to work with Mr. Engelen and federal agencies to identify opportunities for the University. The person will not report to Mr. Engelen but will work closely with him and will be based in Minnesota. Mr. Engelen will help the person get access to federal agencies and relieve him of some responsibilities.

The term du jour is homeland security, Mr. Engelen said. It is difficult to sort through the new agency and identify opportunities that exist. The new person will be able to do that.

Mr. Schumacher said the Committee should keep in mind that there are powerful national associations that lobby for universities, such as the AAU, that do not exist on the state level.

Professor Balas thanked Mr. Engelen for joining the Committee and asked that he keep it informed as things come up.

5. Hazardous Materials Policy

Professor Balas turned now to Assistant Vice President Bianco to discuss the policy governing the use of potentially hazardous biological materials in teaching and research.

This is a new policy, Mr. Bianco reported, and jurisdiction is shared between his office and the Department of Environmental Health and Safety. The policy reflects current practices and includes a section on oversight of select agents in order to conform to federal law.

The major difference the faculty will experience is a requirement for annual reporting on hazardous materials in laboratories. It will be done electronically, like the REPA forms, but it will be simpler and will not be sent to everyone at the University--English professor will not be required to report on hazardous materials. They will maintain an inventory of hazardous materials and will also help in disposing of them.

If one is new to hazardous materials, and buys some, is there a form to fill out so the material becomes part of the inventory, Professor Balas asked? There is, Mr. Bianco said; the purchases are monitored in advance, must be approved, and there is a structure to help researchers comply with the rules.

Is there a threshold amount of use, Professor Seybold asked? How much inventorying will be there be--is it usage or at marked times of the year? It will be once per year, Mr. Bianco said. But each use must be recorded, Professor Seybold asked, such as of toxins? One is supposed to keep a log now of intake and output, Mr. Bianco said. Is this modeled after controlled substances procedures, Professor Seybold asked? They look at what is purchased and it depends on the material, Mr. Bianco said; some items, below a certain amount, will be exempt from reporting. This information must be presented so that PIs can understand it, she told Mr. Bianco. There is education to be done, he agreed; the policy is ready but the forms and the education is not. This will be an administrative policy, not a Regents' policy.

The primary goal of the policy is to protect researchers, Mr. Bianco said in response to a question from Professor Gantt, and to comply with federal regulations. If hazardous materials are used, however, once they get to a lab, they must be safely maintained. Select agents are "dangerous material" that must be registered with the Centers for Disease Control and that require separate licenses and laboratories. The vast majority of materials at the University are less dangerous but are still hazardous. If someone tries to do something illegal, Professor Gantt said, these protocols will not stop them. People can create their own viruses, for example; there are companies that run searches to order to be sure there are no known similar viruses. Is there any University policy on this?

The strength and weakness of the system is that it relies on self-disclosure, Mr. Bianco said. The faculty are good at self-disclosing, and they will get forms to colleges where pertinent. Apropos Professor Gantt's question, Dean Green asked, could someone get a University position, create something bad, and the University unknowingly house such an effort? It would be possible, Mr. Bianco conceded, but the people around such a person would not share the objectives and the person would have to quite secretive. It is like scientific fraud, Professor Gantt said, but it is not very likely. The University must be

on guard against the unlikely, too, Dean Green maintained. It relies on self-disclosure; what if someone at the University had bad goals? Some place hosted whoever sent the anthrax in the mail. But it is not clear how much regulation the University needs.

This is more a matter of awareness, Professor Dahlberg said, not preventing doomsday scenarios; it is so people in laboratories are aware of biohazards. Who thought people with box cutters would take over airplanes, he asked? One cannot envision everything bad that might happen. Mr. Bianco agreed. This is intended to create a culture of awareness; it is difficult to work in a total vacuum at the University and one hopes that someone would catch on to someone with evil intentions. At the same time there is the concern about someone with evil intent, there is also the need to protect academic freedom--"we cannot be so paranoid we cannot do our work," he commented. And one can be accountable, Professor Seybold added--if someone siphons materials from her, she can report it.

Professor Balas asked if the approval of the Committee were being sought. It is, Mr. Bianco said; it has been through the Executive Committee and is now brought to the Committee for approval. In terms of the forms, they will require yes/no answers and compliance monitors will follow up with questions about amounts. They do not want amounts and locations to be linked on an electronic database. Do all universities have a policy like this, Professor Sera asked? If they do not, they will soon, Mr. Bianco said; the University is a leader in the development of a number of policies in this area. Others will copy the University's, Mr. Wink commented.

It was agreed that since Committee members had not had an opportunity to review the details of the policy, it would come up for a vote as the first item on the agenda of the next meeting.

Professor Balas adjourned the meeting at 3:25.

-- Gary Engstrand

University of Minnesota