Minutes*

Senate Research Committee
Monday, February 11, 2002
1:15 - 3:00
238A Morrill Hall

Present: Scott McConnell (chair), Melissa Anderson, Gary Balas, Victor Bloomfield, Kris Davidson, David Hamilton, Lawrence Jacobs, Katherine Klink, Leonard Kuhi, James Luby, Sharon Neet, Mark Paller

Absent: James Cotter, Robin Dittman, Phillip Larsen, Susan Miller, Diane Nguyen, James Orf, Stephanie Root, Virginia Seybold, Sarah Shoemaker

Guests: Vice President Christine Maziar, Candace Kruttschnitt (Faculty Consultative Committee), Moira Keane (Research Subjects Protection Office), Professor Charles Furman (Institutional Review Board); Mark Bohnhorst (Office of the General Counsel), Ed Wink, Sheryl Goldberg (Sponsored Projects Administration), Win Ann Schumi (Office of the Vice President for Research)

[In these minutes: (1) committee business; (2) the role and responsibilities of the Institutional Review Board; (3) developing a Conflict of Commitment policy; (4) request for an exception to the Regents' policy barring research secrecy]

1. Committee Business

Professor McConnell convened the meeting at 1:15 and began by noting that a number of new members have been appointed to the Committee, most of whom will begin attending with the next meeting. He introduced Professor James Luby from Horticultural Sciences. He asked that the minutes express appreciation to the members of the Committee on Committees for promptly filling the newly-created positions on this Committee.

At a recent meeting of Senate committee chairs, sponsored by the Faculty Consultative Committee, one theme was to identify cross-cutting issues that fall within the ambit of two or more committees. One of those issues was the libraries, which was seen as of interest to this Committee; there was no specific issue except support for the libraries. FCC has also expressed an interest in some of the issues that this Committee is working on (i.e., the Institutional Review Board and secrecy in research). The chairs have been asked to return to a final meeting in May to review the status of issues.

Another emerging issue, about which Vice President Maziar will speak later, is conflict of commitment.

This Thursday there will be a special meeting of the Senate Consultative Committee to consider recommendations from this Committee on exceptions to the policy on secrecy in research.

* 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. Institutional Review Board (IRB)

Professor McConnell now welcomed Ms. Keane and Professors Furman (chair of the behavioral sciences panel of the IRB) and Kruttschnitt (representing the Faculty Consultative Committee) to a discussion of the Institutional Review Board. He said that today's meeting was intended to start a short conversation about the role of the IRB and the subjects protection program at the University, the role it plays in the review of research proposals, as well as permit part of the research community to talk TO the IRB and how the members of the community can participate in the process.

Professor McConnell recalled that there had been brief discussion at the last Faculty Consultative Committee meeting about the IRB; he informed FCC that Ms. Keane was coming to a meeting of the Senate Research Committee. Professor Massey, chair of FCC, asked Professor Kruttschnitt from FCC to join the discussion as well.

He wanted to acknowledge two things, Professor McConnell told the Committee. First, the IRB serves an important function at the University in terms of ethics and oversight, the University needs it, and he expressed the hope that the research community was strongly committed to it. Second, he was on the IRB a number of years ago--and it was a LOT of work. The workload has expanded almost exponentially since then. Those who serve make an extraordinary commitment, the work is important, and the faculty must pay attention to the valuable effort the IRB makes on behalf of the University. Professor McConnell asked Professor Furman to extend thanks to his committee members for their service.

Ms. Keane began by noting that the IRB is a federally-mandated entity; any institution that receives federal funds must have a board to ensure that standards governing protection of research subjects are met. The IRB has three sources of authority: the Office of Human Research Protection (Department of Health and Human Services), the Food and Drug Administration, and the Board of Regents (whose policy affirms the University will follow federal rules).

To function as an IRB, the University files a document with OHRP, which is almost a contract, that provides the University will apply the rules to all research projects irrespective of the source of funds. Vice President Maziar signs the document every three years.

The rules provide a common denominator; each institution then develops its own local norms and mores, Ms. Keane explained. The IRB is charged to ensure that researchers have prepared plans to protect research subjects (the IRB does not protect subjects; that is the responsibility of the researcher). They do a lot of critiquing and embellishing of plans, which requires careful reading of proposals; each IRB member receives hundreds of pages to review. It is a huge task but the IRB is composed of dedicated members. The University also has a separate panel for the social and behavioral sciences, which is not common in universities (most have blended panels, which can lead to misunderstandings across disciplines).

It is also important to recognize that the University's IRB is part of a larger community of IRBs. They communicate and compare notes with other IRBs. This is not a black hole, she averred; they do have discussions with other institutions. They also spend a lot of time talking with federal regulators and

participating in national meetings; they also serve as consultants to the government and serve on committees. The IRB is subject to audit by the FDA and OHRP.

There are challenges. Much has changed in the last few years, Ms. Keane told the Committee. There is increased public scrutiny of IRBs in part because of scandals that have drawn public and Congressional attention. Taxpayers worry that their money is being directed to research that does not provide adequate protection for research subjects. There are, as a result, movements to accredit IRBs. They also have much more interaction with other committees at the University, such as those that deal with conflict of interest, biosafety, radiation, scientific review, data safety and monitoring committees and clinical monitoring functions.

While the IRB has had to increase monitoring, it has also faced an increased number of research proposals. As of February 8, there were 6780 active studies underway on all campuses that involve thousands of research subjects. The IRB has no control over the influx of proposals; it is reactive. Last year there were 2000 new proposals that the IRB had to review and approve. In addition, the number of projects retired has decreased, so the workload has increased in that respect as well because some active projects require continuous review.

In the past, once a researcher finished collecting data, he or she did not need to renew the IRB form, Professor Kruttschnitt recalled. Now one must, she asked? Is that new? The review could go on indefinitely! That is because of a "durable confidentiality risk" that could create University liability, Ms. Keane explained. If all identifiers are stripped from the research data, so there is no link back to subjects, the IRB need not be involved any further. Privacy is a very scary topic to the public. This needs to be made clear to researchers, Professor Kruttschnitt said; if that were done, it is likely that some projects could be retired. Researchers may keep data on demographic data such as gender and age, Mr. Wink noted. "For now," Ms. Keane commented.

Dr. Maziar asked Ms. Keane to explain internal institutional relations and the independence required for the IRB. The independence is built into federal rules, Ms. Keane said. Her office reports through Vice President Maziar but when the IRB is acting as a review body, it is autonomous from the institution--it is like a franchise of OHRP or FDA. If the IRB decides research is too risky, the institution cannot overturn that decision. This independence can create tension within the University but it also protects the University.

How is her office funded, Professor Balas asked? By the Vice President for Research, Ms. Keane said. The Vice President could not pull the funding? She could, Dr. Maziar said, but the federal government would view that as potential interference in the work of the IRB. It would also have a direct impact on all researchers who use subjects, Professor McConnell said: they could not proceed with their research without approval of the IRB.

The IRB has two functions, Dr. Maziar explained. One is administrative, doing paperwork and moving things along. In that area of work she can insist on performance benchmarks. The other function is making decisions; in that area the independence of the IRB must be preserved. Her office can affect the quality of decisions by ensuring that IRB members have the opportunity for training and providing the IRB updates on policies. The IRB also has a chair emeritus who serves as an educator and works with researchers, Ms. Keane reported; that situation is unique to Minnesota and the person has been very valuable.

One theme that recurs in conversations between researchers who work with human subjects about the IRB, Professor McConnell observed, is that the IRB plays a regulatory function and comes between them and their work. Some will chafe at any outside control--regardless of its regulated nature--and this may be where the IRB will hear about timeliness and efficiency.

Another observation, he said, is about the need for education: the IRB has a huge load to keep up with; that load affects the speed with which the IRB can review proposals. At the same time, faculty may inadvertently contribute to that load because they may not be aware, for example, that removing all identifiers from their research data will mean there is no longer need for IRB involvement. Researchers need to learn more about changing standards for conducting research with human subjects in Minnesota, which could be different from those elsewhere. Similarly, the IRB must have some mechanism for considering the experiences of researchers and the standards and mores of the local community. There is need for communication between her office and researchers, Professor McConnell told Ms. Keane, and they need to have the opportunity to make changes in areas that create problems.

Professor Furman said that one part of education takes place because bigger departments send members to serve on IRB panels. The IRB has one panel on the behavioral sciences and four panels for medical sciences, but there are about the same number of studies in the two areas. The IRB has a hard time getting people to serve, but doing so is an excellent way to become educated. In departments where faculty have served on the IRB, there are good relations between the department and the IRB because there is a dialogue about how to do things. It is impractical, he said, to update all the web documents every day. There has been talk about establishing a second behavioral sciences panel, but it has been difficult to recruit people to serve; creating it, however, would double the amount of work the IRB could do in these areas.

From what departments do members of behavioral sciences panel typically come, Dr. Maziar asked? Ms. Keane and Professor Furman itemized them: Education, Fairview Nursing, Human Sexuality, Music Therapy, Family Social Science, Social Work, General College, Psychology (in the past). But not, Professor Furman added, from several sectors of the University even though they have been asked for appointments. These departments tend to be ones that have or use clinics, Dr. Maziar observed, but there seems to be a lack of representatives from the classic social science departments. Ms. Keane also mentioned that the departments that do field work are not represented and that a lot of misunderstandings result because of that absence on the IRB.

Professor Kruttschnitt said that the two functions of the IRB (making decisions regarding adequate protection of human subjects and facilitating the research endeavor) are closely intertwined in important ways, with implications for the way it gets things done, especially for assistant professors, who cannot get into the field to do their research and thus obtain tenure. With respect to workload, federal regulations, and ways to get things done, answering telephone calls and one-on-one meetings could facilitate the intersection between researchers and the IRB.

Professor Furman expressed doubt that calls are not returned. The IRB logs telephone calls and how long it takes to respond. There is a lot of legend that gets blown out of the water when the facts are examined, he said. The IRB has looked at the numbers and has not found a problem.

Is there ever a case when a researcher responds to a letter from the IRB and the response is heard from a panel different from the one that heard the original proposal, Professor Kruttschnitt asked? That is theoretically possible, Ms. Keane said, but since there is only one behavioral sciences panel, not in that area--but Professor Furman did acknowledge some turn-over on this panel in the past. In the case of the medical sciences, a proposal stays with the same panel. They try not to second-guess decisions a panel has made.

When a proposal comes to the IRB office, Professor Furman explained, that is where the staff and the IRB are intertwined. The staff first decides what kind of review the proposal should get (exempt, expedited--which means it goes to one member of the IRB--or full committee review). If there are minor stipulations, as soon as they are met the proposal is routinely approved. If there are MAJOR stipulations, a researcher might have to wait for the next meeting of the IRB, which occurs monthly.

In terms of the information flow between the researcher and the IRB office, are there templates or some kind of FAQ or case law, Dr. Bloomfield asked? Some is on the web, although not as much as they would like, Ms. Keane said. They are trying to improve the information modules provided to researchers. They also encourage IRB members to communicate with researchers. In addition, the staff will coach researchers (especially students) to help them improve their proposals before they come to the IRB.

If the written or on-line information is not adequate, the IRB should ask Dr. Maziar for money to help get the task done, Dr. Bloomfield said. Social scientists educate each other by word of mouth; there is a lot of lore but nothing structured. They have been assessing the time they spend at research seminars and faculty meetings, Ms. Keane said, and are trying to make their efforts more concentrated so they are more effective.

Dr. Paller said all peer review committees face the same problem, that of getting information out. It would be helpful if they could get common learning to people in a timely way. To the extent that does not happen with one project, the next person starts all over with no knowledge about what is consistent with local habits.

A lot of these issues percolate darkly, Professor McConnell mused. The IRB is overworked and PIs wish they didn't have to go through the process--there is a broad level of wishing things were different. There may be opportunities to clarify the process, although he said he was not fully certain what they might be. Part of doing so might be summaries of decisions that have been made in the past. Another part may be to explore ways of appropriately creating ways for IRB members to hear perspectives and concerns from the research community.

Professor Furman said that one hears talk about the IRB protecting human subjects, but what they do is try to get projects approved. The IRB is not an independent body making decisions alone; it is an independent body that is trying to help get research done, research about which the University can be confident. The approval rate is well above 75%; fewer than 25% of proposals have substantial questions that require additional information. Are those mostly students, Dr. Maziar asked? Many are, Ms. Keane said, and that is probably because they are novices. Of the projects not approved, most are deferred, with only a few that "never happen." Professor Furman said they looked at 100 studies last fall: of the 100, 8 were deferred and in only one case was their decision "don't submit this again."

What happens next, Professor McConnell inquired? Provision of case law, identifying more people to serve on the IRB, and perhaps he and Professor Furman can talk about how to increase communication and address themes of concern. This could also be a topic for discussion at the social sciences and education and psychology policy and review councils of the Graduate School, Dr. Bloomfield said.

Professor McConnell thanked Ms. Keane and Professor Furman for joining the meeting and asked that they express the appreciation of the Committee for the work that IRB members do.

3. Conflict of Commitment

Dr. Maziar began by commenting that those who have been around the University a long time will recall that at the same time the review of the conflict of interest policy was conducted there was also an effort to develop a conflict of commitment policy. The effort ran into roadblocks and was suspended. She said she was raising the matter again and is asking the Committee to discuss the process by which to develop a conflict of commitment policy suitable for the University of Minnesota.

Many universities have combined conflict of interest with conflict of commitment, which can confuse the two, Dr. Maziar said. There is, however, a concern that the University does not have a conflict of commitment policy.

Dr. Maziar said she would like to use the process that was used in drafting the intellectual property policy: a task force with representatives from this Committee, the Committee on Finance and Planning, and from the administration. And the Office of the General Counsel, Professor Kuhi suggested.

It was useful, as the intellectual property policy was developed, to have frequent conversations with faculty governance committees as the proposals evolved. The committees were kept informed of the issues the group was wrestling with rather than have text delivered to them at the end of the process. This process takes a lot of time, perhaps about two years, to air all the issues. Would that process be acceptable, she asked? If so, she would ask Professor McConnell to identify volunteers to serve on the task force.

Professor Kuhi said he thought it was the only way to proceed. Professor McConnell agreed. The process is inherently inefficient but the only way that will work. The last effort got more attention because it came at a time when faculty were more involved; is there a way to articulate that need again, he asked? One reason is that intellectual property hit close to home for a lot of faculty, Professor Balas suggested; faculty are as interested today as they were then. Faculty become uninvolved when their participation does not lead to any results, he said. It is therefore important to indicate why participation is needed, Dr. Bloomfield said.

Dr. Maziar said that conflict of interest focuses on conflicts that faculty or staff might find themselves in when they have a financial interest in their work related to the University and some might believe their judgment could be impaired. Conflict of commitment is impairment of one's ability to give full-time effort to the University. Some people may be involved in activities that come close to two full-time jobs (for example, with start-up companies, teaching at other higher education institutions, developing courses for teaching on line that would be in competition with the University, and so on).

It would help to have case studies, Professor McConnell said, which would tell faculty why this subject matters to them.

Does this apply to other academic endeavors, such as writing The Great American Novel, which the author would expect would sell millions of copies? That depends on the time taken and the commitment to the University, Dr. Maziar said. This is fuzzy, she said, and with effort certification one can work 100 hours a week and only be working full time. Teaching at another institution is a concrete example, however.

A question arose with the intellectual property discussions, Professor Balas recalled: a novelist keeps all the royalties but the software inventor does not. Faculty will see a conflict of commitment policy as one more thing they cannot do. Many universities to which Minnesota aspires to be compared to have conflict of commitment policies, Dr. Maziar pointed out, and they do not cover only activities for which one is paid. The issue is spending too much time on another activity or for another organization--one could spend too much time with a non-profit. The issue is letting an outside organization draw away from the University one's talents and time. This is also fuzzy because University faculty do not punch a clock.

Professor McConnell said the Committee would participate in the process.

4. Exception to the Policy on Research Secrecy

Professor McConnell now recalled that at the last meeting, the Committee had been faced with a request to recommend an exception to the University's policy on secrecy in research at the end of the project; at this meeting, there comes a request at the beginning of the research. Vice President Maziar and Mr. Bohnhorst, from the Office of the General Counsel, have cautioned that these requests may become more commonplace as there is increased scrutiny by those who fund research. There are, at present, no other projects in place at the University that have required an exception from the policy (there is one that has been approved but that is inactive).

Professor McConnell turned first to Professor Kumar Tamma, Mechanical Engineering, the Principal Investigator whose work has prompted the request to the Committee. Professor Tamma explained the background of work he does for the armed services. He also explained concerns if the International Trafficking in Arms Regulations (ITAR) were to come into play. If a research project is deemed subject to ITAR, it cannot include foreign students, the results of the work cannot be published without government approval, and the work might be considered classified.

Mississippi State signed a contract with the Army (part of which included doing classified work) and asked him to collaborate on some of the work. The work he would do is the same work he has been doing for some time. At first, he was confronted with three clauses in the Mississippi State contract. Two of the difficulties have been removed, (ITAR/foreign students and a requirement for a secret clearance, treating the University's subcontract as if it were classified) but the government has not been willing to change the clause concerning prior approval for publication. The government officials involved in the work have agreed that the research is not classified and that it should be freely publishable, but they will not change the publication review clause. As the contract now stands, all work Professor Tamma completes on the project must be reviewed by the Army prior to dissemination; however, his colleague on the project is the contract person who will conduct this review. Professor

Tamma told the Committee he is in the position, with respect to that clause, of either taking it or leaving it--or else he must perhaps appeal to the Department of Defense and ultimately to Condoleeza Rice, President Bush's National Security Advisor. He told the Committee he does no classified work, and no sensitive work, but this is an eight-year project worth over $1 million (and that could generate additional research if he can write grant proposals that follow from it). At the same time, he holds dear University policy about barring restrictions on publishing.

Professor McConnell thanked Professor Tamma for his statement and turned next to Mr. Bohnhorst to walk the Committee through the issues.

Mr. Bohnhorst distributed two handouts. He began with a discussion of the recent history of federal policy with respect to "sensitive information" and publication clearance. After the 1980 presidential election there were statements by the new administration that threatened to impose limits on university research even when it involved information that was not classified. In response, in February of 1981, five university presidents (Stanford, MIT, Cal Tech, Cornell, and the University of California) wrote to the Secretaries of Commerce, State, and Defense to say that there would be tremendous problems for universities if these restrictions were imposed. In late 1981 President C. Peter Magrath from this university wrote to the Department of State concerning restrictions that were proposed for a visiting Chinese scholar; President Magrath echoed the concerns of the five presidents.

In 1982 the National Academy of Sciences convened a panel supported by the Department of Defense and National Science Foundation that issued a report on scientific communication and national security. This was a very thoughtful document that recommended that if the government is going to ask universities to do research, it should not restrict dissemination of the results except through the classification process because such restrictions are incompatible with university values. At the same time, the report recognized that there is a gray area that involves information about which the government could be concerned. For example, in areas of rapidly developing technology, there can be findings that can be put to military uses that could have benefited the USSR (this report came in the atmosphere of the Cold War). In the case of research in this gray area, the scientist should provide the government with the research findings 60 days in advance of publication. The faculty member would still have the right to publish, but presumably the government could raise issues if there were concerns.

In 1985 the White House issued a government-wide directive--National Security Decision Directive (NSDD 189), which provided that there would be no restrictions on dissemination of the results of university research except through the classification process.

In 1987 the Department of Defense issued a directive that waffled somewhat on the NSDD 189 directive. It had the same language and definition of fundamental research and it provided that the only limit on dissemination of such research results would be through the classification process. However, within what the Department of Defense classifies as "exploratory development" work (so-called "6.2" funded work; 6.1 funding is for "research"), the directive stated that there could be "exceptional and rare" situations in which the work was highly likely to reveal performance characteristics of weapons systems. This would not be considered fundamental research (even though it is not classified) and could be subject to publications restrictions.

In 1991 a Department of Defense Federal Acquisition Regulation (DFAR) was issued, which involves "sensitive but unclassified" information on a classified prime contract. Another institution may

receive a contract that includes classified work (which the University would not take), but may break off a piece of the contract that involves unclassified work and subcontract it to, for example, the University (which is what has occurred with Professor Tamma's work). Some of that work could be "sensitive but unclassified," and the prime contractor may be required to "flow down" the DFAR publication review provision to the subcontractor.

In 1993 International Trafficking in Arms Regulations (ITAR) revisions were adopted. The ITAR may affect research on military technology. Where the ITAR applies, non-resident foreign nationals are effectively barred from participating because for them to do so is considered a "deemed export" of the work to the person's country of origin. The technical data developed in the course of the research could be more important than having the item itself, Professor Tamma observed. Mr. Bohnhorst and Dr. Maziar later clarified, however, that the ITAR contain an exemption for technical information that is in the "public domain," which specifically includes university-based "fundamental research" (which is defined in the ITAR as "basic and applied research in science and engineering where the resulting information is ordinarily published and shared broadly within the scientific community.") Thus, where the University retains the right to publish the results of the research, the "fundamental research" exception to the ITAR applies; preserving the right to publish in Department of Defense contracts or subcontracts is very important for it exempts universities from the export control regulations and all the problems that flow from those regulations.

Professor McConnell noted that the University can accept restricted data, but with the understanding that the results of "fundamental research" completed with these data can be freely published. Professor Davidson urged that anecdotes be used to explain this because the situation is otherwise very confusing. Dr. Maziar explained that she might receive information from large corporations about transistors they were working on; she cannot share the proprietary information but she can publish models that were built on the data. The University will accept restrictions like that, she said, because HER work would be in the public domain. If the technology is controlled, however, to bring it to the University there would have to be a lot of processes gone through in order to be sure it was not shared with a non-resident alien, or else it is "deemed export." One reason the University does not take classified data is because it does not have the means to control it, Dr. Maziar added. Further, the University opposes research with ITAR restrictions because it affects how faculty structure research teams, how research results are discussed among colleagues and students, whether the research can be published, etc.--because the types of discourse that can be conducted regarding a particular research project are at odds with the principles of an open university.

Professor Tamma said that under the terms of the contract with Mississippi State, he must obtain government approval no matter what he does. That is because, Dr. Maziar commented, he (Professor Tamma) is interacting with people who have sensitive information. The Army takes the view that he thus has access to the information so there is a potential problem.

Returning to the discussion of recent history, Mr. Bohnhorst noted that in 2000 there was a National Academy of Sciences workshop that noted the increasing concerns over proliferation of "sensitive" information. (In addition, as noted in Mr. Bohnhorst's handout and quoted in materials provided in advance of the meeting, on November 1, 2001, National Security Advisor Condoleezza Rice reaffirmed that NSDD 189 is still in effect and is to be followed, pending completion of a government-wide review of the technology control process which was to begin last year.)

Mr. Bohnhorst then reviewed a table outlining the various categories of research. At one end of the spectrum there is basic research (Department of Defense 6.1 research), which may be freely published and discussed and a research team may include anyone. At the other end there is classified work, which it is a crime to publish and a crime to release to anyone without a security clearance.

In between the table depicted categories of developmental or applied research: not sensitive (which is treated the same as basic research); possibly sensitive (which one may freely discuss with anyone, and research teams for which may include anyone, but publication of the results of which might involve government clearance); and sensitive (which appears to be similar to the "gray area" noted in the 1982 National Academy of Sciences report, the "rare and exceptional" area noted in the 1987 Department of Defense instructions, and ITAR, for which some elements within the government are now requiring publication clearance, which, if accepted, and if ITAR applies, means that research teams may not include foreign nationals and information may not be released to foreign nationals).

The area of developmental or applied research includes some "sensitive" but not classified information. The 1987 Department of Defense instructions expected the examples of "sensitive" information to be rare, and--based on information from a federal official and universities' experiences--there had been almost none until last year. However, both the 1982 and 1987 documents agreed that there is an area of legitimate government concern; as of 2000, it appears there may be a lot of sensitive technology that is cause for concern (e.g., satellite, biological, computer). The fear is not the Soviet Union any more; the world has become more complex and both government and academic policy documents recognize a legitimate concern.

In the last year the University has seen more government contracts that insist on publication clearance, Mr. Bohnhorst reported. This is primarily from contracts with companies where the University is a subcontractor.

Professor Jacobs said it would be helpful to know the criteria used in the National Academy of Sciences reports. This seems very fuzzy; are these cold war regulations that close the door to the University or are they something reasonable that people could agree on? Dr. Maziar mentioned the Export Authorization Regulations which are administered by the Department of Commerce and that are somewhat more economically driven and reflect a concern for economic espionage. There is a broader context of heightened concerns over economic as well as military loss of technology, which partly explains why the government is becoming more rigid on the Department of Defense side of things. Before last September 11, there were parts of the government that were raising concerns about economic threats. Commercial technology is outpacing military technology, she said; Intel processors are faster than anything a defense contractor might have. The change in government attitudes toward "sensitive" military technologies may partially reflect a broader concern that includes loss of economically valuable information.

The government can say information is classified or it can say it is "sensitive" and include contract clauses which require review of publications, Professor McConnell said. Mr. Bohnhorst cited the example of work on ballistic missile defense data and the consequences of missile destruction on chemical weapons materials. The research relates to what happens if a missile is intercepted and exploded. The research data might help the Department of Defense predict what areas down-wind from the explosion would be affected by any materials in the missile. From these results, hardware and software can built to model the consequences of missile defense actions so that the government could

respond with help. The work is fundamental research on what happens to molecules and compounds at certain atmospheric pressures. But even though the work is fundamental, the Army might not want the work published and is now requiring pre-publication approval, which the University has refused to accept because the research would not be open to public disclosure of results and would be further subject to ITAR--foreign national students could not be involved in the research, the research could not be freely discussed within the University community, etc.

Professor Davidson said that if the military wants the information kept secret, it should just classify it. What has happened, Dr. Maziar replied, is that the burden has shifted from the government (to classify) to the universities (to guard "sensitive" information).

There could be many more of these kinds of contracts, Professor McConnell said. Dr. Maziar agreed. Mr. Bohnhorst said the University has had several in the last year. Some have been resolved (i.e., the government has agreed to drop the publication approval terms); some cannot be. In some cases the Army will not say if research is covered by ITAR; if it turns out it is, and the University accepts publication restrictions, then the other consequences follow as well (e.g., who can work on it). It is the University's hope that for research which falls under ITAR, the government will at some point in the future modify the ITAR regulations so government officials will be in a position to limit requested controls to review of publications--that is, that a control simply to review for possibly "sensitive" information would not automatically carry with it the problems of exclusion of foreign nationals from the research. (The original National Academy of Sciences study recommended that there be no export controls involved as part of any provisions governing "gray area" research; the Commerce Department's Export Authorization Regulations already contain a clause along the lines which the University would hope to see in the ITAR regulations.)

The issue before the Committee, Professor McConnell said, is whether it should recommend an exception to the Regents' research secrecy policy. They are presenting the issue because it has been established that this contract is not covered by ITAR and therefore does not give rise to all of the problems discussed above. However, the contract does include publication clearance even though there is nothing sensitive and there are no restrictions on the research. The publication review is part of Mississippi State's very large contract with the government and is a term which the University has tried very hard to remove but cannot.

Even though this contract is not subject to ITAR, Mr. Bohnhorst explained that he had been asked by Dr. Maziar to discuss the history and ITAR in order to give the Committee an advance "tutorial" about an issue that may be before it again soon. The issue at this meeting is in this context: because publications restrictions normally carry severe ITAR consequences, the University is steadfastly refusing to consider accepting such terms, is negotiating vigorously to have the terms dropped, and is NOT bringing cases which would involve ITAR consequences to the Committee. By way of contrast, this agreement is unique, exceptional, perhaps "compelling," because there are no such unacceptable consequences. Professor Kuhi caught the essence of the reason for the discussion in his brief remarks in introducing the motion (see below).)

Professor Tamma is pursuing a line of work that he has been doing for years, Dr. Maziar explained; the change is in the contract language, not his work. They are asking that the Committee allow a faculty member to continue doing work he has done for years. It does not involve accepting classified data.

The University CANNOT accept the contract unless this Committee recommends to the Senate that it do so, Professor McConnell said. Later in the week the Senate Consultative Committee will have a special meeting and exercise its authority to act on behalf of the Senate in order that the contract can either be accepted or rejected in a timely manner. (The Senate in turn makes a recommendation to the President.)

If this were one limited case, voting to approve it would be a reasonable outcome, Dr. Bloomfield said. Or is this the camel's nose under the tent, establishing a precedent the University does not want, he asked? There will clearly be more cases, Dr. Maziar said, given the change in the external environment. There is no change in Professor Tamma's work; the likely increased contract restrictions are no fault of the University but rather reflect federal sponsors exercising increased control that the University wishes they would not. Dr. Maziar emphasized that the University and its peers are working vigorously to change national policy (which, as Dr. Rice indicates, is currently under review at the highest levels) so that research can be disseminated broadly; it is hoped that this is a temporary period of restriction. But changes in federal policy, as Mr. Bohnhorst's history makes clear, can take several years.

Dr. Maziar emphasized that she is NOT asking the Committee to change the University's policy barring secrecy in research. But the policy does allow for exceptions; in this case, faculty are not doing risky or sensitive work but are caught in a tidal shift of federal policy.

Professor McConnell, noting the time, asked if the Committee wished to continue the discussion, delay a decision, or vote? Professor Kuhi moved that the Committee recommend an exception, with the understanding that the action applied ONLY to the language concerning restrictions on publication in this particular agreement. It was important, Professor Kuhi noted, that this agreement does not involve any of the problems that would arise if there were ITAR involvement.

The Committee voted unanimously in favor of the motion. Professor McConnell said he would carry the recommendation to the Senate Consultative Committee on Thursday.

Professor McConnell then adjourned the meeting at 3:10.

-- Gary Engstrand

University of Minnesota