

Minutes*

**Senate Research Committee
Monday, March 12, 2001
1:30 - 3:00
238A Morrill Hall**

- Present: David Hamilton (chair), Melissa Anderson, Victor Bloomfield, Esam El-Fakahany, Eric Klinger, Leonard Kuhi, Phillip Larsen, Scott McConnell, Richard Poppele, Barbara Van Drasek
- Regrets: Daniel Brewer, Mark Paller, Susan Miller, Sharon Neet
- Absent: Robin Dittman
- Guests: Bruno Averbeck, Kristin Schreiber, Carrie Wade (FACTS: Focus on Animal Contributions to Science)
- Other: Richard Bianco (Assistant Vice President, and Institutional Official for Animal Care); Laurie Evans (Department of Psychiatry), Moira Keane (Director, Subjects Protection Program), Joseph Janzen (SOAR: Student Organization for Animal Rights); Andrew Morgan (Department of Psychiatry); Peter Santi (Otolaryngology; Institutional Animal Care and Use Committee)

[In these minutes: (1) use of animals in research; (2) "The Kept University" and private support of research; (3) Intellectual Property Policy procedures; (4) other business]

1. Use of Animals in Research

Professor Hamilton convened the meeting at 1:30 and welcomed the representatives from FACTS (Focus on Animal Contributions to Science). Ms. Schreiber said they would introduce themselves, briefly present their perspective on the use of animals in research, and take questions.

Ms. Wade told the Committee she is an undergraduate in neuroscience and works in a faculty member's lab using animals (not primates). She said the use of animals is required to obtain good research results.

Mr. Averbeck reported that he is a graduate student who works with primates in research. The work he is involved in is basic research rather than something used directly in clinical applications; it is work which can indirectly increase the quality of life of those whose motor control has been damaged or eliminated. Motor control in neuroscience is movement; they are not looking at specific disorders but once they understand how motor control systems work it will be possible to use the knowledge for clinical intervention.

* 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 represent the views of, nor are they binding on, the Senate or Assembly, the Administration, or the Board of Regents.

Ms. Schreiber informed the Committee she is an M.D./Ph.D. student and that as a future M.D. she believes the use of animals is important not only for what has been contributed to medicine and what is known now but also what will be contributed in the future to the treatment of disorders. As a graduate student she has seen how powerful the use of animals in research can be, especially in dealing with pain. She is interested in seeing what can be brought to the clinic through animal research. She said she believes it is important for the University community to support faculty and students in the responsible use of animals in research and to explain why that use is important. There have been attacks on individual researchers and labs, she said, so people may be reluctant to talk about the importance of animals in research.

Ms. Schreiber then turned to the handout that had been distributed to Committee members and began by explaining the goals of FACTS: "to educate the public about the benefits of using animals in biomedical research, to support the responsible and humane use of animals in research, and to coordinate the scientific community in these efforts." FACTS was formed in 1991 by graduate students; since then others have joined it, and it is in contact with similar groups at other student organizations across the country. FACTS has also published articles in the DAILY and sponsored a symposium on "ethical, regulatory, and practical issues" in the use of animals in research.

Ms. Schreiber reviewed the articles' focus on the benefits of animal research, the use of alternative methods of conducting research while keeping the same level of quality in results, and the "myths" that have been spread to discredit the use of animals. She noted the itemization of the advances in medicine that have occurred as a result of research on animals from before 1900 to the present. She also presented information about what she described as misinformation and libel by the Student Organization for Animal Rights (SOAR) with respect to one researcher at the University and cited an affidavit submitted to court requesting a restraining order against SOAR and the Animal Liberation Front. Ms. Schreiber drew the attention of the Committee to testimony from directors of the National Institute on Drug Abuse, the National Institutes of Health, and the National Institute of Neurological Disorders and Stroke about the benefits of using of animals in research. She pointed out that these individuals testify they rely on animal research for their work in the treatment of human disorders (contrary to the assertion of the animal rights' advocates, who claim the research is useless).

Professor Kuhl said that when the Committee heard from SOAR it was told that there was no connection between animal research and application of research results to humans. Can they address that question?

Mr. Averbeck related that if one loses the ability to interact with the environment (perhaps because of brainstem damage, for example), the quality of life is greatly diminished. There is work being done with primates to develop robot arms so that individuals can begin to interact with their environment again (e.g., by picking out letters and words to communicate). This is very difficult research and they need to use animal models. It would be possible to confine the research to humans but it would take longer to develop and thus condemn many to suffering longer than would otherwise be the case.

Ms. Schreiber noted the four pages in the handout summarizing some of the impact that animal research has had on the treatment of various diseases. She said there have been attacks on the validity of these claims (e.g., in the case of polio, the animal rights community says the vaccine was developed in human cells and that animal research led the field astray; two Nobel Prize winners, however, have said the opposite, that the animal research LED TO the development of a vaccine.)

Professor McConnell said he had asked the SOAR representative to crystallize the ethical basis for the use of animals in research and that he would like a similar statement from FACTS. Mr. Averbeck said use of animals comes down to trading a certain amount of suffering in animals for suffering in humans. One's position depends on where one puts the weight on those two factors. He said that animal suffering must be minimized but that throwing out all animal research will condemn humans to suffering. That is the fundamental issue. It comes to the value one places on human life versus animal life. He said researchers do not want to see anyone suffer but the idea is to alleviate human suffering over the long term.

Ultimately this must be a democratic decision, Ms. Schreiber said; there are a lot more people who would rather see human suffering alleviated than who take the position of animal rights advocates who believe humans should suffer. SOAR makes legitimate points, Mr. Averbeck added, about animals being healthy and well-treated; that leads to better research results. Researchers do all that they can, within the limits of their resources, to provide a good environment for animals.

Professor Bloomfield asked if the utility of experiments done on animals helps to solve both human AND animal problems? Mr. Averbeck said it does; veterinarians must understand animal physiology if they are to care for them. The quality of life of domestic pets has been improved because of animal research. The research has also produced vaccines for animals, Ms. Schreiber added.

Professor Poppele inquired if the use of alternative methods of research have been explored. Mr. Averbeck said that SOAR makes the point constantly that computer modeling should be used. That overlooks the fact that computer modeling relies on principles and assumptions drawn from basic data from animal experiments. Those data can only be obtained by animal experimentation. Ms. Schreiber said that there are many alternative systems used to learn, for example, if therapies developed are valid, but they must have animal studies to test the therapies. They favor reducing the number of animals used, which has occurred. Ultimately, however, the technologies are an adjunct to actual physiological research. Mr. Averbeck pointed out that computer models are also MUCH cheaper and easier to do and they take less time; there is no way that researchers would not use them to get the information they need more quickly if they were more or as effective. If those models worked so well, researchers would be seeking many more grants to use them.

Mr. Janzen said that he was not a scientific expert but said that the claims about the harassment of the University researcher were inaccurate and that they were five years old. He maintained that it was not valid to claim that animal should suffer so that humans do not.

Mr. Averbeck said the line was arbitrary, wherever one draws it. Animals are considered simpler, not as sophisticated, and do not lead as long a life as humans. They cannot contribute to human society; they can be pets but will never do anything to make society better.

Animals make their own society, Mr. Janzen said. Mr. Averbeck responded that individual members of other species do not have the impact on their society that individuals can have on human society.

Mr. Janzen said that using life span could lead one to subjecting a lot of humans in experiments. Mr. Averbeck corrected himself by saying that the AVERAGE lifespan of humans is longer than that of other species.

Professor Hamilton commented that there are basic things that everyone is missing. Some believe that animal populations in the wild do not equal animal populations in captivity. He recalled being in Africa and seeing that animals do not behave in the way Mr. Janzen envisages them; an understanding of animal biology can be helpful.

Ultimately, Ms. Schreiber said, research is from a "speciesist" point of view: humans are looking out for their own. As long as the majority of people believe that is appropriate, that is what humans will do. Mr. Janzen believes all species are equal, she said; there is an argument that there is an ethical difference but one could conduct the argument all day long. If other species had the ability to dominate humans we do not know if they would do so, but all beings on the planet have "speciesist" tendencies. Humans do so; they use animals for food and clothing (for example, humans use yeast).

It would be useful in elevating the discussion if FACTS and SOAR could ground their positions in formal ethical argument, Ms. Van Drasek said; that would make it possible for the two to talk to each other and all would know where each stands. She said it would be helpful in a university environment if they were to do so, putting the arguments on a common plane.

Ms. Schreiber said there have been attempts to have a debate between the two groups and in her experience it has been difficult to get to a common ground. While one can get to the ethical questions, FACTS is more focused on practical outcomes. They have also had difficulty finding a neutral third party to mediate a debate.

These are essentially religious differences, Professor Klinger said. The arguments are interesting and can be stimulating but there is no fundamental basis for a resolution. Religions rely on different documents, bases, and values as their source of action; that will not change and there will be no resolution. Society must decide what values it WILL act on. If the decision is that the welfare of humans takes precedence over the welfare of other species, those who do not agree will not be happy.

Professor McConnell observed that he works with children so all his research must be reviewed. There have been a lot of changes in both HOW and WHAT can be done, and many questions either cannot be asked or are very difficult to ask. Have there been similar changes in animal research?

The Animal Welfare Act has been updated five or six times since the 1960s, Ms. Schreiber said, and the methods of euthanasia have changed a lot. The care standards have changed but not the nature of the work, Professor McConnell then asked? Professor Hamilton responded that they have. He said that IACUC took the position that what he did to euthanize animals was not sufficient to eliminate pain and suffering so he had to do things a different way. IACUC made suggestions, which he accepted; it changed the way he could do things.

Professor Poppele reflected that he has worked with animals virtually his entire career and has seen enormous changes in the last 20 years. One, there is more awareness by investigators that they must deal with pain and suffering in animals; that concern is paramount. Two, institutions--including, for example, journals and funding agencies--are much more aware of the issues every step of the way.

Professor Santi told the Committee he serves on the IACUC and that investigators who submit protocols see IACUC as the group that imposes a lot of rules on their research. In his three years on IACUC, however, he has seen a committee that is very careful about protocols and especially principles concerning reduction, refinement, and replacement.

The animal rights advocates want IACUC to look at alternatives. The committee asks researchers to refine their procedures to reduce pain and stress and the number of animals used. He said that the decision to use primates is not a simple one; they are more complex, more expensive, and humans who work with them can contract fatal disease. If the committee entertains a proposal to abolish primate research, how would IACUC handle such a statement? IACUC is a creature of federal law; how would it implement a requirement that would bar PIs from submitting grant requests including the use of primates?

Mr. Janzen said that federal law does not prohibit institutions from barring the use of animals. University policy could do so.

Mr. Bianco explained that no animal can be used at the University for research without the approval of IACUC; it is part of the University even though required by federal law.

If a PI submitted a grant request using primates, and met all the rules, would the University stop the request, Professor Santi asked?

Dr. El-Fakahany said that with respect to alternative methods, there are examples of their use when research advances to a certain point that allows for replacing animal research by alternative methods. For example, it is no longer required that pigs be killed to obtain insulin--but that had to be done until research reached a certain stage. Scientists are cognizant of the use of alternative research methods and use them when they can.

Professor Hamilton thanked the FACTS representatives and everyone from coming and said the Committee would take up the issue in the future.

2. "The Kept University" and Private Support of Research

The Committee now turned to a draft statement concerning private support of research that had been prepared by Professor Hamilton; the concerns arose because of the points made in "The Kept University" articles that appeared in THE ATLANTIC MONTHLY last year. Professor Hamilton explained that this statement, when approved by the Committee, would be forwarded to the Faculty Consultative Committee for discussion at its April meeting on the intellectual future of the University.

The Committee edited the draft. The points of importance that emerged were several.

-- There should continue to be a reference to proprietary information because it does come up in negotiations with those who support research

-- It is important to make the point that the University's research infrastructure cannot be unduly burdened. Professor Bloomfield observed that the University knows it does not recover the full cost of support for research; the lack of full support is one thing in the case of research that is federally sponsored

but in the case of research from private sponsors, failure to provide for the cost of support can be seen as a subsidy to a private party.

-- The University must retain the right to decline private research support and it must be careful that receipt of private funds does not adversely affect University priorities or the distribution of University resources. The University must be able to make choices about the allocation of funds, Dr. Maziar observed; if a sponsor requires cost-sharing that the University cannot accommodate or that is outside the University's strategic directions, the dean and the department must have the right to decline the funding.

-- The statement should be decoupled from "The Kept University" articles, Ms. Van Drasek said; Dr. Maziar agreed, saying she did not want any long-term University attachment to magazine articles that contained significant flaws.

The Committee then agreed on the final wording, as follows:

Private Support of Research

Introduction

The Senate Research Committee discussed the implications to the University of Minnesota of issues raised by the article "The Kept University" published in the *Atlantic Monthly*. There were sufficient disturbing aspects in the article that it was felt that the Committee should develop a set of general principles that could guide the University of Minnesota if a similar situation arose here.

Recommendations

The Senate Research Committee believes that the following principles must be adhered to when accepting money from private sources:

- Faculty, departments and colleges should be encouraged to seek private support for their research endeavors, including in areas in which federal, state or University sponsorship is not readily available;
- Acceptance of private support should be the prerogative of the University, not of the individual units or faculty;
- Care must be taken when accepting funding from private sources that the University is not unduly burdened to provide support for the infrastructure that the privately supported research will require;
- Care must be taken in negotiating contracts with private entities to assure that academic freedom is preserved, particularly with respect to the faculty's right to interpret the findings and to publish new discoveries in an appropriate timeframe, with appropriate consideration of the sponsor's proprietary information, and with the faculty's right to choose the area of scholarship s/he wishes to pursue;

- The University must exercise care that the receipt of private funds does not adversely affect distribution of University resources or alter University priorities in areas that are not able to generate private support.

The Committee agreed that the statement and the articles from THE ATLANTIC MONTHLY should be forwarded to the Faculty Consultative Committee.

3. Intellectual Property Policy Procedures

Professor Hamilton asked Dr. Maziar to comment on the draft Intellectual Property Policy procedures that had been distributed to the Committee.

Dr. Maziar reminded the Committee that the procedures were originally brought to the Faculty Consultative Committee and this Committee in the spring of 2000 for review. They were then reviewed by the Office of the General Counsel, at her request, before they were forwarded to the President. The General Counsel's office spent a lot of time on its review and made a significant number of changes in the text. In reviewing the changes, she concluded that they were substantially favorable to the faculty--but also believed it was not appropriate for her to make that call. As a result, she reconvened the working group that had originally drafted the procedures to look them over; a number of changes were again made. She said that she and the working group now believe the procedures are substantially the same as the original with language that has been tightened up and with changes that are faculty-friendly; she now recommended that they move forward.

One question that has arisen is about the provision requiring individuals to sign an acknowledgement that they have read the policy: if this policy is singled out, will the University be vulnerable with respect to other policies that do not have this provision? This proviso is included in response to advice from both the auditors and the General Counsel. Originally it called for faculty to sign if asked; now the advice she is receiving suggests there should be an aggressive effort to get a large number of faculty to sign it. The General Counsel's office is reviewing the question of singling out this policy for acknowledgement; the acknowledgement provision of the policy is being withheld for the time being.

Professor Poppele said that while the policy may be more refined, he finds it much more difficult to read; he noted, for example, that there are three parenthetical comments in the first sentence alone! Dr. Maziar agreed that the policy as worded is more legalistic and contractual; she thought that it should be readable by a non-lawyer but has been persuaded that since it deals with tangible assets it needed to be crafted more carefully. Professor Hamilton said he thought the new language was better and admitted to being impressed with the precision of words that lawyers believe they can achieve.

Committee members were considerably amused by the use of the term "Creator" with a capital C throughout the policy.

With respect to the timeline between Creator disclosure and Patent and Technology Marketing (PTM) response, Dr. Maziar said the response time depends on a number of factors, especially when there is actually full disclosure by the Creator; in some cases it requires a dialogue between PTM and the Creator in order for PTM to obtain all the information it needs. Professor Hamilton said that PTM is fully aware of faculty concerns about delays. Dr. Maziar conceded that in the past things were not always

handled in a timely fashion, primarily because of a shortage of staff; since she has come to the University there have been significant strides in this regard.

Professor Hamilton noted again the long history of these procedures and pointed out that if the Committee is satisfied with this version, they could be approved and forwarded for action by the Faculty Senate in April. Dr. Maziar noted that this Committee was represented by several individuals on the working group that reviewed the redrafted procedures.

Professor Hamilton proposed, and the Committee agreed, that anyone who had questions or problems with the procedures should contact him by the end of the week; otherwise they would be considered approved for Senate action. If there were any significant reservations, he said, the Committee would have an extra meeting if the reservations could not be dealt with by email.

Dr. Maziar said she did not believe there would be similar difficulties in the future with other procedures because since this process began the General Counsel's office has designated two attorneys to deal with issues arising from PTM and SPA (rather than one part-time attorney); the quality of service has improved tremendously. The funds for this increased service have come from royalty income; the increased staffing has also led to a significant improvement in the negotiation of research contracts with private organizations.

4. Other Business

SPA Deadline: Professor Hamilton reported that the Sponsored Projects Administration advisory committee asked SPA to move its deadline for grant requests from 1:00 p.m. the day the request must be postmarked to 5:00 the day BEFORE it must be postmarked.

Committee Charge: Professor Massey, incoming chair of the Faculty Consultative Committee, asked him to take up with the Committee its charge, Professor Hamilton said; Professor Massey would like to see this item on the agenda for the FCC retreat in August. The Committee will begin its review at the April meeting.

Animals in Research: Professor Hamilton said he wants to talk to Professor French, chair of the Senate Committee on Social Concerns, to learn what that committee is doing, before he recommends anything to this Committee.

Professor Hamilton then adjourned the meeting at 3:10.

-- Gary Engstrand