

Minutes\*

**Senate Research Committee  
Monday, May 5, 2008  
12:30 - 2:15  
238A Morrill Hall**

- Present: Dan Dahlberg (chair), Linda Bearinger, Arlene Carney, Jerry Cohen, Tricia Conway, James Cotter, Sharon Danes, Steven Gantt, Juergen Konczak, Frances Lawrenz, Jennifer Linde, Timothy Mulcahy, Charles Spetland, George Trachte, Barbara VanDrasek, Sanford Weisberg, Jean Witson, Lynn Zentner
- Absent: Robin Dittman, Tryphon Georgiou, Bridget Helwig, Shikha Jain, Paul Johnson, Michelle Lamere, Mark Paller, Federico Ponce de Leon, Steven Ruggles, Virginia Seybold
- Guests: Associate Vice President Pamela Webb
- Other: Melinda Sewell, Peggy Sundermeyer (Office of the Vice President for Research)

[In these minutes: (1) statistical consulting on campus; (2) policy subcommittee; (3) issues for next year; (4) thank-yous]

Professor Dahlberg convened the meeting at 12:35 and welcomed Lynn Zentner, the new Director of the Compliance Office.

**1. Statistical Consulting on Campus**

Professor Dahlberg next welcomed several guests to the meeting (at various times as they were able to make the meeting): Steve Carnes, Jan Jannett, Kathy Olson, and Curt Squires, all from Academic Computing in OIT (formerly Academic and Distributed Computing Services); Andrew Merrill, from the Office of Measurement Services; Rossana Armson from the Minnesota Center for Survey Research, John Connett, Division of Biostatistics, School of Public Health

Professor Weisberg began by relating that he wished the Committee to discuss statistical consulting because the University seems to have no plan for how to use such services. Most institutions have statistics departments—the University has five, which do world-class work—but statistics services are also part of the research infrastructure, necessary for any quantitative work. Some universities do better than others at providing statistical support for research; the University has several groups that work on and help with statistics with different funding arrangements for each.

Statistical support includes helping to design surveys, carry them out, evaluate the data, manage the data, obtain licenses for statistical software, as well as providing short courses and aiding in cross-field collaboration. His own group has been funded by the Agricultural Experiment Station for 35 years and works on about 400 projects per year, mostly on the St. Paul campus. Some research, however, receives no support.

---

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

Professor Weisberg said he had two action items to propose to the Committee:

-- The Senate Research Committee requests that the Office of the Vice President for Research fund a survey to catalog all available statistical services at the University, and that the results of the survey be made available to the University community, preferably through a web page managed by the Office of the Vice President.

-- That an ad hoc committee consisting of providers of statistical services and users of those services be formed to advise the Senate Research Committee and the Vice President for Research on how statistical infrastructure at the University can be improved.

Mr. Merrill, from the Office of Measurement Services (OMS), reported that OMS does both administrative and academic work. It conducts research and administers course exams; it also manages the results from the student ratings of teaching forms, helps write exam questions, and assists with personnel reviews. Although OMS is not content-expert in the specific academic areas in which they consult, they have expertise in measurement and statistics; they aid with methods. OMS has 11 full-time employees and a number of student interns.

Mr. Merrill, from the Office of Measurement Services (OMS), reported that OMS does both administrative and academic work. It conducts research and administers course exams; it also manages the results from the student ratings of teaching forms, helps write exam questions, and assists with personnel reviews. They are not content experts; they aid with methods. OMS has 11 full-time employees and a number of student interns.

Ms. Armson reported that the Center for Survey Research does original data collection for mail and telephone surveys; it does not conduct surveys on scannable paper forms. Like OMS, they consult on data collection and design, and also like OMS, they are not content experts. She noted a message the Committee had received from a faculty member who was frustrated in seeking statistical consultation; she bounced around the University before she finally received help from the Center, Ms. Armson said, and did a lot of work for little money (which is often what they do). They are funded from soft money so must limit the services they can provide for free, but they do work with faculty, staff, and graduate students on their research and also provide a service to external units (for a fee). The Center has two full-time staff and number of student employees. Ms. Armson said that they provide support for SPSS and SAS, although SAS is used primarily in the Academic Health Center and those units do not typically come to the Center for their work.

Professor Weisberg reported that there is also a biostatistics group in the Academic Health Center that is hoping to have 15 FTE staff, and they also have a computer center that provides limited statistical consulting on SPSS. Vice President Mulcahy noted that the Cancer Center provides statistical support for Cancer Center staff.

Professor Bearinger commented that there is school-level support as well as University-wide support; she said she was trying to picture how these fit together. Will there be an attempt to identify the gaps? Professor Weisberg said it is his view that statistics support should be part of the infrastructure; if someone comes to the University and needs support with statistics, it should be available. Unfortunately, that is not the case at Minnesota, although it is at a number of other institutions that provide the funding. Is the support elsewhere provided for a fee, Professor Dahlberg asked? Some is, Professor Weisberg said. And some not, Professor Dahlberg asked? There needs to be access to consulting that is free at first,

Professor Weisberg responded, with fees perhaps charged as work on a project becomes more complex. There needs to be some central funding involved to provide the services needed. Like the computer helpline, Professor Dahlberg commented.

Ms. Armson said the Center often receives requests for information about sample size needed for a proposal; they do not charge for that assistance because someone is developing a proposal and does not have any funding yet. One needs information to make a proposal solid, Professor Konczak agreed. He said he understood Professor Weisberg to be proposing the University create a statistical-consulting clearinghouse to which all statistics groups could contribute; if all of the service were fee-based, that would create a gap between those who have funding and those who do not. Graduate students on a grant would have support while those not on a grant would not. He said he tries to manage this problem in his department and it is a constant struggle. The problem needs to be addressed, especially if one is to talk about moving the University forward.

Even if one can afford consultation, Professor Cohen said, if the University does not maintain funding for long-term operation of the offices, the infrastructure does not exist. This is important not only for those who have no funding; even for those who have grant funding, it is no help if the investigator has to build statistical support from scratch.

Vice President Mulcahy said this needs to be viewed as a continuum of services, from simple consulting to get an answer to a question to involving a statistician who is written into a grant, so the funding mechanism needs to be a continuum as well. If a project will take person-hours of work, there should be an effort to seek some recovery from grants funds. He agreed that there is need for a comprehensive survey of what is needed and what is available at the University and that this is an important infrastructure question. There are, moreover, institutional benefits; his own experience with statistical consulting led to better experimental design, increased competitiveness of his grant proposals, and a reduced need for resources. This is not just a matter of someone providing a p-value.

Vice Provost Carney said the issue of statistical consulting comes up in the New Faculty Orientation every year, from faculty who come from institutions with different models of providing such support. The University does not have a great story to tell new faculty; many arrive with large data sets but no funding and need support for their work. What do other universities do, Professor Dahlberg asked, such as Wisconsin and Michigan? Professor Weisberg said that Michigan has a very large statistical consulting organization; most schools of public health have them as well because NIH requires it. This is an area where the University could obtain a competitive edge and give faculty an advantage—and it would not cost that much.

Professor Dahlberg asked how all of this ties to informatics, a term that has become widely used. Professor Cohen related that he is involved in research obtaining data no one has had before but that they need the help of a statistician to distinguish between results and noise, and since they are doing work with protein data, it may be considered bioinformatics. So informatics is not orthogonal to the issues being discussed, Professor Dahlberg concluded; several of the guests concurred. The difficulty in understanding reflects the state of the art, Dr. Mulcahy said, because people are defining what they do with the old vocabulary: one must sort through informatics, statistics, biostatistics, and so on, and the challenge is to define the new universe of interdisciplinarity that relies on a multitude of different tools. He said it will be important to be mindful of the importance of informatics as the University moves forward with interdisciplinary work.

As for the items that Professor Weisberg proposed, Vice President Mulcahy said he did not believe that either would require a great deal of money. With respect to #1, a survey of the services available, his office would also like to know as well in order to get a handle on the infrastructure that exists. For #2, it is important to have a knowledgeable group of people advise on how to stitch together the various pieces that exist. Vice Provost Carney noted that there is a cohort of new faculty who have gone through the New Faculty Orientation the last two years and another group coming this fall, all of whom are new users of services; it could be helpful to find out from them what struggles they have faced and what they need. And what they had at other institutions, Professor Bearinger added.

Professor Bearinger suggested that any discussion of existing and needed services should take into the account the needs of postdocs. They are often users without resources; how can their productivity be helped?

Ms. Jannett next explained that the primary involvement of the Office of Information Technology is distributing site licenses for software such as SPSS (about 1000) and SAS (300-500). Mr. Squires explained that ADCS works in four areas: licensing and distribution of software, a statistical-software helpline (which has been cut back quite a bit and now provides help primarily with installation), student computing facilities around the campus, and training (e.g., classes in SPSS and SAS). Ms. Jannett explained the difficulty they have in finding appropriate personnel to work on statistical software helpline.

Professor Weisberg, noting that it had been said that Academic Computing distributes site licenses, said he had spoken with a SAS representative—who had no idea how the software was provided to users. The University has decided to charge for use of SAS, which limits its availability. How are the site licenses obtained and how was that decision made? Is not Academic Computing part of the University's infrastructure? Mr. Squires said that historically they have tried to recover costs and they have had discussions about having a large number of users who pay a small fee versus a smaller number of committed licensees who pay a larger fee, and they have also talked about distributing JMP software free to students since our license for JMP is unlimited. (JMP is a software package, a product of SAS Institute, and is used for statistical analysis, although its capabilities differ from SAS software; the JMP license is unlimited. They currently pay for SAS licenses per-computer, so a license for 55,000 users would cost a lot, Ms. Jannett commented.

Professor Bearinger recalled that the Committee had someone talk about research ethics and using direct funds for what should be paid for by indirect funding. What is the status of buying SPSS, for example, with direct funds? That is permissible, Associate Vice President Webb said.

Mr. Carnes said that OIT would love to find ways to make all the needed statistical packages available to all faculty and staff who want them, although they face daunting budgetary and staff constraints. SAS is an example of a more narrowly-focused need than such services as UMCAL, the network, the Enterprise Financial System, etc. It is more difficult to argue that SAS is a common good, like the other services that are funded centrally. Professor Cohen agreed that the argument is not as strong if limited to those programs, but if they went around campus and identified programs needed, one could argue that the result is a common good if one looks at research-based software needs generally—that would cover a large number of people. The challenge is to obtain a license for the University that is not tied to numbers in order to make it financially feasible, Mr. Carnes said. He said they would love to have a site license for unlimited access for 55,000 students and 25,000 staff.

Professor Linde reported that in her division, they have some dedicated statistical consulting and provide SPSS and SAS consulting free for students three times per month. She said she took it for granted that such support was available elsewhere in the University as well. She said she believed her division funded the support.

Professor Connett next told the Committee that he heads the Division of Biostatistics in the School of Public Health, which has about 20 faculty, a lot of whom do statistical consulting for the Academic Health Center. He is also the Acting Director of the Biostatistics, Design, and Analysis Center (BDAC), a consulting group in the Office of Clinical Research that has five staff members (and they are hiring two more). They help write grant applications (without charge, although they ask that time for their staff be included in the grant application), they subcontract with departments for people who come in with data sets that they want analyzed; charges are by the hour. This center started about 18 months ago, is growing considerably, and there is a lot of demand for their services. They also help people outside the Academic Health Center, to some extent. They have not had many requests for assistance for help from postdocs, he reported in response to a question from Professor Bearinger, but would help with grant applications (for which they would not charge). If they are asked to do work, they ordinarily charge; they provide free help with grant applications.

Vice President Mulcahy asked how they assess overall when they can provide statistical support and where they could do better. Professor Connett said he was probably not the best one to ask but it did appear that there was not very much coordination and support. Sometimes departments have a statistician, which can work, but the person may be asked things they do not know about and the individual is not in an environment where he or she can work with other statisticians. Dr. Mulcahy asked if there are central funds supporting the BDAC; Professor Connett said the Office of Clinical Research provides central support, a decision that was deliberate in order that its staff would have free time to work on new projects.

Professor Bearinger asked if the guests at the meeting had ever met as a group. They have not, Professor Weisberg said; this is the first time they have all been together. Professor Bearinger said she was not clear about the interface between the various groups, where there is overlap and where there are gaps.

Professor Dahlberg said the Committee would vote by email on the two resolutions that Professor Weisberg presented. It was suggested that the first one also include a request to learn what other institutions provide. Mr. Merrill reported that OMS has some information on what other Big Ten universities does. He thanked the guests for joining the meeting.

## **2. Policy Subcommittee**

Professor Dahlberg next explained that there is need for an ad hoc policy subcommittee to do a review of Senate and related policies governing research. There has been some confusion about which policies should go to the Faculty Senate and questions about the status of some research policies the Senate has adopted in the past. A joint subcommittee of the Faculty Consultative Committee and the Committee on Educational Policy has been working this year on a review of all the educational policies and that model seems to be one that could be used for a review of research-related policies as well.

Professor Dahlberg related that the intellectual property policy, which had been reviewed by this Committee, went to the Faculty Consultative Committee. FCC members had a plethora of questions

about issues that this Committee had not worried about. It is not that this Committee did not do due diligence; there was only one other person on FCC who had obtained a patent (and that individual did not have any questions), so FCC members were not familiar with the process. He said he did not believe the work of the subcommittee would be too onerous but the questions need to be answered.

Vice President Mulcahy said there has been an institutional effort to harmonize policies in given areas; in research, there are Regents' policies, administrative policies, and Senate policies, and no attempt has been made to create order out of all of them. He said it makes sense to have a subcommittee look at all of them and advise the parent committee on how to proceed.

### **3. Issues for Next Year**

Professor Dahlberg asked Committee members to review the list of issues pending and indicate which ones they wish to see taken up next year. One item will be to follow up on will be the themes that were discussed last fall over several meetings; Vice President Mulcahy has agreed to pay for an email survey to deans and department heads about the issues raised at those meetings. He had provided copies of the survey to the Committee and emphasized that he had tried to keep it short.

Dr. Carney said that the survey has questions about faculty recruitment, retention, and support framed completely in the context of research. Her office next year will focus on mentoring; the President's Emerging Leaders group worked with her on asking questions about mentoring and the response rate was not robust. She pointed out that people may also not be retained because of their teaching and this survey may account for only a small part of retention. In some parts of the University, teaching is less important than research, but that is not true in all units. She said she does not want to see deans and department heads over-surveyed, and while she does not want to add to the length of the survey, it is important to think about the questions to be asked. Perhaps a joint survey could be conducted.

Vice President Mulcahy commented that part of Associate Vice President Lawrenz's expertise is assessment and she may be able to help on whether to use open-ended questions or those where one picks a response. Dr. Lawrenz offered a few suggestions about the draft survey. The Committee agreed the effort should be made and that the format can be developed over the summer.

### **4. Thank You**

Professor Dahlberg thanked Professors Danes, Gantt, Johnson, and Seybold and Dr. VanDrasek for their service on the Committee, all of whom have served the six years allowed by Senate rules. He also thanked Professor Konczek for filling in for a faculty member on sabbatical and Mr. Spetland, who has represented the libraries for a number of years.

Professor Dahlberg adjourned the meeting at 2:00.

-- Gary Engstrand