

Minutes*

**Senate Research Committee
Monday, February 28, 2005
1:15 - 3:00
238A Morrill Hall**

Present: Paul Johnson (chair pro tem), Gary Balas, Dianne Bartels, Richard Bianco, Victor Bloomfield, Christopher Cramer, Dan Dahlberg, Kathy Ensrud, Genevieve Escure, Steven Gantt, Michael Hughey, James Luby, Timothy Mulcahy, James Orf, Mark Paller, Mira Reinberg, Thomas Schumacher, Maria Sera, Charles Spetland, George Trachte, Barbara VanDrasek

Absent: Mark Ascerno, James Cotter, Sharon Danes, Robin Dittman, Virginia Seybold, Michael Volna, Jean Witson

Guests: Dean Robert Elde; Executive Associate Vice President Alfred Sullivan; Winifred Schumi, Brittany Lloyd

Other: none

[In these minutes: (1) update on University Enterprise Laboratories; (2) presidential initiatives and how the University arrives at its research priorities; (3) eResearch Central]

1. Update on University Enterprise Laboratories (UEL)

Professor Johnson convened the meeting at 1:15, welcomed Professor Balas by telephone connection, and turned to Dean Elde to provide an update on the status of University Enterprise Laboratories (UEL).

Dean Elde distributed copies of handouts entitled "Backgrounder and Fact Sheet" and (a press release) "University Enterprise Laboratories Closes \$24 million Financing Package" and said he would provide a brief history and current status report. He recalled that he last met with the Committee about 18 months ago, when UEL was in the process of raising funds. Since then, UEL has raised about \$9 million in contributions, largely from business (Xcel Energy, 3M, Allina, U of M, Boston Scientific, Guidant, etc.). The University contributed \$1 million and also signed a 10-year lease for an additional \$1 million. The \$9 million was used as equity to obtain the \$24 million in financing. UEL owns a building on the transitway, near Highway 280, that consists of office space and warehouse space. The warehouse portion is being renovated to provide 22 incubator labors; construction will be complete about July 1, 2005, and 14 of the 21 available labs have already been committed. During last summer and fall, UEL hired a CEO, Peter Bianco, who is now running UEL, and the Board of Directors is now working on policy issues.

One thing that was not clear from earlier discussions the Committee held, Professor Johnson said, was whether University faculty would lease the space or if it would be leased to start-up companies.

* 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.

Except for the office space the University has leased for the Office of Business Development, the space is not assignable in the University's space inventory, Dean Elde said. It is collaborative space for faculty and companies. Of the 21 companies, probably about two-thirds are University-based start-ups, however. The basic requirement for a lease is that a company be incorporated. They do not orchestrate the faculty-company collaborations; those occur on an as-needed basis, and any company might retain faculty as consultants. It is likely that a number of the companies will use University-based intellectual property and they could include faculty on leave developing it or a faculty member who had a relationship with the development of the intellectual property who works with the company. Students will also spend time at UEL, Dean Elde added, as employees or interns. May students work there if their faculty sponsor is not involved, Professor Johnson asked? They may, Dean Elde said.

Are there any companies in UEL headed by a University researcher, Professor Trachte asked? None of the incubator spaces are occupied yet, Dean Elde said, but several of the start-ups are likely to be headed by University people.

Professor Dahlberg said it was his understanding that no University general funds would be involved in UEL and the funding would all come from outside. That is true as far as he knows, Dean Elde said; the University contribution and the lease funds came from royalty streams (over which he has no jurisdiction).

When UEL was first discussed, it was not going to be specific to bioscience start-ups, but the language now appears that it will be restricted to such companies, Professor Dahlberg said, noting that the background document included the phrase "early stage bioscience companies." UEL is not reserved for bioscience companies, Dean Elde said; it is available for any company that needs lab space, wet or dry. The language may appear to be focused on bioscience companies, but that is because, for example, a start-up software company is not likely to need UEL lab space. Professor Dahlberg suggested that the wording could be revised so it is consistent with the UEL mission. Dean Elde agreed. He said that any company that wants lab or office space will be welcomed.

As the space is subscribed, who decides which applicants receive space, Professor Luby asked? Or will UEL expand to meet demand? The Board of Directors has been expanded to include the contributing entities and more, Dean Elde said; the intent is to also have representatives from several University colleges. They are now engaged in a strategic planning process and one goal is an interface with the University's Office for Business Development. Up to now, the criteria for occupancy have been that an organization is incorporated and can pay the rent, but as the space fills up they may need to select. They have talked about requiring that an activity be more than hobby-level and that there be some likelihood of long-term success. UEL is on 11 acres and will initially have 21 incubator labs; there is space that is not being built out, to begin with, so companies could remodel that space. There is also space for another building, if needed. If several applicants meet the criteria, how will UEL decide, Professor Luby asked? The space was to be competitively priced, so there could be a demand for it. That is now being discussed, Dean Elde said, and the process will be above-board and fair.

How does allowing any company to lease space square with the bioscience zone, Dr. VanDrasek asked? Why NOT give preference to bioscience companies? And how does the tax advantage work? The tax advantage is pretty irrelevant, Dean Elde said, because start-ups do not typically generate money, they spend money. The intent of UEL was to help the state develop bioscience companies, Dr. VanDrasek pointed out. That will happen without UEL controlling it, Dean Elde said. Given that UEL

offers wet labs, and that a higher percentage of federal funds are going to biology than other areas, and that bioscience activities may have more commercializable products means that most of UEL's companies will be bioscience ventures.

How will they determine when a company is ready to leave UEL, Professor Orf asked? After a company has been there five years will it be told it is time to go? If a company gets too big, it will leave on its own, but presumably a company cannot be in UEL for 20 years. That is the other side of the screening process, Dean Elde replied: how effectively is the space being used, and what is the demand? Will there also be a technology oversight group, Professor Johnson asked, or will a company be permitted to stay if it can pay the bill? UEL will have no equity stake in the companies, Dean Elde said, and no voice in their operations. The market will drive the decisions. He said he did not know what they would ask companies to provide in a performance report.

So UEL has purchased the building and is leasing space, Professor Johnson concluded. Dean Elde noted that UEL is a separate, stand-alone 501(c)(3) organization, not connected to the University.

One of the motivating factors behind UEL was to permit the University to recruit and retain faculty who wanted the opportunity to begin a start-up company close to the University, Professor Balas recalled. How is that working and how will it be measured? Dean Elde said he knows of faculty hiring where UEL had a role in the decision; they have not quantified the impact of UEL on hiring. If the University wants to use UEL as a test, there need to be metrics to track whether it is meeting the objectives of the \$1 million University investment, Professor Balas said.

Another factor motivating the establishment of UEL was that there were start-up companies on campus, Professor Balas said, and the idea was that they would be moved to UEL, thus freeing up space on campus. The leases for the on-campus start-ups will be terminated once UEL is operating, Dean Elde said. Professor Balas asked about the percentage of companies in UEL that need to meet the gift agreement; Dean Elde said he did not have the number but that it was supposed to be the majority.

Who from the University is on the Board of Directors, Professor Balas asked next. Dean Elde himself is, he noted; is he the one overseeing the University's investment? Dean Elde said he was not playing that role. Others on the Board, however, include the President and the Chief Financial Officer of the University of Minnesota Foundation, and there will be additional University people on the Board as it is expanded. He said he would defer to Vice President Mulcahy in how the University will operate in the future vis-à-vis UEL.

Based on what he has learned so far, if the University has the opportunity to do this in other areas, what has he learned, Professor Balas asked? The University may not have to do this again, Dean Elde said. He said he could not see the need for another not-for-profit entity of this sort; he said he assumes UEL will expand to meet needs—and that the University would not be asked again to contribute to it. Once launched, the goal of a non-profit is not to make a huge profit but to have a positive bottom line. It is an opportunity for the University to think about moving intellectual property and if it is the best way to spend the money—or if there are different ways for faculty to move intellectual property out of the University. A crucial step was the establishment of the Office for Business Development, Dean Elde said, which is a complement to drive the agenda. UEL provides space and programmatic relationships with the cities; there is a need for more development work in the Office of Business Development.

Does UEL only receive revenue from the leases or also from licenses, Mr. Hughey asked? What is needed for it to sustain itself? Dean Elde said they have already reached the revenue level modeled by the second year in the business plan. The revenue projections were modeled very conservatively and UEL is sustainable based on the lease payments. The financing deal is well-capitalized; the model assumes there would not need to be an annual effort to raise money.

Professor Johnson thanked Dean Elde for joining the meeting.

2. Presidential Initiatives and How the University Arrives at Its Research Priorities

Professor Johnson now welcomed Executive Associate Vice President Sullivan to the meeting, to join Vice President Mulcahy and Dean Bloomfield in a discussion of research initiatives and priorities. Dr. Sullivan began and distributed a handout with information about earlier initiatives.

The administration reported to the Board of Regents at its last meeting a summary of what has been accomplished with the five presidential initiatives launched in 1998 under President Yudof. The University had external review teams—stellar groups—look at the initiatives. The groups were asked: if the initiative had achieved its objectives; for comparisons with similar initiatives across the country; to assess the impact on the University and fostering of interdisciplinary activities; to evaluate the return on the investment; and to identify theoretical/empirical advancements from it. The review teams (different ones for each initiative) used terms such as "dramatic progress" and "exemplary achievement" and similarly laudatory terms. The initiatives are now embedded in the ongoing process and are regularized, Dr. Sullivan said.

There are new initiatives, developed over time, that were announced in the President's State of the University address in October, 2003, Dr. Sullivan explained. There is an interdisciplinary theme to them; they are eight initiatives that President Bruininks chose after a lot of study going back a number of years that included task forces and reports. The ideas came through the college compacts and reflected areas in which there was a lot of prior investment. When the University identifies five or eight initiatives, it is not saying they represent all the important things being done in the University; they are singled out for prominence but they are only a small percentage of what is going on. The criteria for selecting initiatives include state and University comparative advantage, the existence of high-quality University programs they can be launched from, centrality to mission, reflection of the needs of the state, the potential for leverage with internal resources, and likelihood of attracting outside funding.

Dr. Sullivan related the sequence of discussions that led to selection of the environment and renewable energy as an initiative. As Dean of the College of Natural Resources, he talked with Provost Bruininks about the topic. Provost Bruininks realized that a number of deans were interested in environmental issues so he charged a committee on environmental science and policy to put together a proposal. The committee consisted of 10 deans and 10 distinguished faculty and provided a report, which came to the administration when Provost Bruininks was becoming President Bruininks, who then selected it as an initiative. There are similar stories for the other initiatives. Presidents want to have initiatives and they serve the University well, Dr. Sullivan said; they give impetus and momentum, and attract funds, to issues important to the people of the state. Each of the eight initiatives rests on a high-quality foundation and has a long history behind it.

Vice President Mulcahy said the point he would make, from the perspective of the Office of the Vice President for Research, is that his office must inform the discussion any time there will be selection of areas of research to emphasize. The criteria are critical to selection in the face of declining state funds. He said he has been happy with his involvement in the process and access to the President and Provost and he assumes they would welcome his office as part of the discussions about research initiatives. He recalled that he told this Committee earlier that he would be active about research and work with a lot of groups. He said he believes that having research proposals "bubble up" is a key element of successful initiatives—they must be grassroots efforts. With connections across campus, the Vice President's office should be able to know where initiatives are. He said he needs to learn how the process has worked in the past but he will not be shy about making suggestions.

Professor Johnson said he could not recall any process he has known about in the past that led to the initiatives that have been selected, at the college level, to the dean, to the administration. Perhaps there was such a process and he was unaware of it. Dr. Mulcahy said he could not attest to the question. He said he sees it as an important function of his office that it be "plugged in" everywhere with respect to research so that when there are dialogues, the office can identify who else might be working in the same area. The central administration will set the overall priorities (e.g., interdisciplinary programs, programs that merge areas of strength) and the criteria will allow selection. The Vice President for Research needs to know where opportunities exist to satisfy the criteria. If those kinds of consultations are not taking place, his office should call for them. His role is to be an advocate for research on campus and he needs to be involved in discussions about initiatives. As the process emerges, he will ask how the decisions are being made.

Professor Balas said that the reason this item is on the agenda is because questions came up at a meeting of the Faculty Consultative Committee; there was a feeling faculty did not have any voice into the selection of the initiatives, did not know how they get started or how to get ideas forwarded. He said the Committee would like to know more, if there are future initiatives, about what process will be used to decide on the directions. There also seems to be an overlap in presidential initiatives, vice presidential initiatives, and interdisciplinary initiatives, he said; they do not seem to work together. Why are the President's initiatives not housed in the Graduate School or the Vice President for Research rather than in a separate office?

Dean Bloomfield said that there isn't a single process, things are not uni-directional, and they should not be. Faculty who have ideas or programs they want to build made their voices heard by talking to the department head, the dean, the provost or Senior Vice President Cerra—there is a consciousness in central administration about the interesting things that are going on. Those who talk the loudest and most consistently get the attention, but the administration has ideas about the strengths of programs and active faculty. The administration also receives a lot of messages—as well as messages about what is socially important, from outside the University. So initiatives from faculty get connected with things that are important and that can get funded, through the compact process or in other ways. The process is neither pure bottom-up nor top-down, Dean Bloomfield said, and they need conversations. Interaction between the presidential initiatives, the Dean of the Graduate School, and the Vice President for Research are in flux and need to be worked out; new officers need to work out relationships.

Dean Bloomfield reviewed the changes in the Graduate School. When he came to the Graduate School as associate dean seven years ago, there were small planning grants of \$10,000 and two-year \$50,000 grants for interdisciplinary research. His view was that the pay-off from the larger grants did not

usually justify the investment. The idea was that there would be funding for two years, after which the activity would obtain external grants. That did not happen very often; the money was spent for two years and then not much came from it. His perception is that new research is developed when people mull over things for awhile. Getting busy faculty to agree to move in new directions takes time. He said he decided to use a small amount of money for "coffee and donuts" (the IRSCA fund) to sponsor small regular meetings of faculty, students, and perhaps the community, to get together for a year or two and see if interest in a project could be maintained. The offer tempted more people in the humanities and social sciences than the natural sciences. Before the University spends a lot of money on a project there needs to be substantial discussion and demonstration of long-term commitment.

There was a larger pool of funds, about ½ million dollars, reserved for 1-3 larger projects each year that really seemed promising, that had commitment, and where one could see an alignment with the ideas from deans and the presidential initiatives, so there would be resources behind them. In the sciences, one needs \$200,000 per year to give a program a chance of success. This fund was to be available about the same time the state cut \$185 million from the University's budget, so there were no funds available to deans for new investments. The timing was bad.

Dean Bloomfield told the Committee that his philosophy is that the University must choose a relatively small number of things it will be excellent at rather than adopt a scattershot approach. There should be faculty initiatives, but they should not be isolated; rather, they should fit with broader college or intercollegiate priorities so that they can have more impact.

Dr. Sullivan said he wished to reinforce Dean Bloomfield's points. There is no one process. The majority of the proposals have come through the compact process, which they are still trying to improve. They have left internal consultation to the deans but have emphasized it if they sense there has not been enough. He said he received a lot of comments when he served as dean and had a lot of talks in the college about priorities. What they are seeing more of this year is groups of 3-4-5-6 deans who have gotten together on a unified proposal.

The initiatives are discussed by the executive team and vice presidents, Dr. Sullivan said. Why are the initiatives in the President's Office? Because they are the President's initiatives; there's nothing sacred about the location. He also said there is not really an "office"; he and Dr. Taylor in the President's Office oversee the initiatives for the purpose of budget monitoring, but the initiative work is done in teams. The initiatives are a small part of his and Dr. Taylor's portfolios and there is really no "office." The administrative strategic planning task force is also looking at the initiatives and where the activities of support units can help carry out the mission.

What has become of the funds in the Graduate School, Dr. VanDrasek asked? They have been used for other things, Dean Bloomfield said (e.g., diversity fellowships) or they are waiting to be used.

There are some initiatives from before that will be on the new list and there will be recommendations that some parts of earlier initiatives no longer be funded, Professor Orf said. Will these stop except where there is overlap or will there be a transition? There will be a transition, Dr. Sullivan said, and very little will be abandoned. Most of the activities in the earlier initiatives are very important, they are just not initiatives any more but have been mainstreamed. Some provide the foundation for the next steps. Might there be a new round of initiatives in 4-6 years, Professor Orf asked? Dr. Sullivan said that has not been discussed. He said he supposed there would be but he had no idea when. It is still early

in the work of the current initiatives and it would not make sense for the University to add more now. The question is how many initiatives the institution should have going at the same time.

One would hope that the initiatives have legs and a productive future, Dean Bloomfield commented. Some will be built on; some have modernized programs and enriched departments. One would also hope—it is his conviction—the University will pick productive, long-lasting themes and not identify new ones every few years. If the University is to be among the top three public research universities, it cannot do all and must pick things that matter to the world. Of the past initiatives, Dr. Sullivan reported, molecular and cellular biology received the most money and was hugely successful. The design and new media received a smaller amount but allowed tremendous advances and brought back the School of Journalism. Whether these are still initiatives or continuing support is a matter of words.

With the University allocating funds to colleges, deans can have different initiatives from the faculty, Professor Johnson observed. Deans can band together. In the past, faculty banded together, but it is not clear that can happen with the compact process, that a compact can reflect collaborations among faculty across colleges. Perhaps those activities need to take place under the auspices of the Dean of the Graduate School or the Vice President for Research. Professor Johnson said he was worried about the path that collaborative activities by faculty might take. One of the initiatives, the environment and energy policy, involved a number of deans but not just deans, Dean Bloomfield said; the group that proposed it included prominent faculty. It was his hope for the donuts and coffee discussions, and it did happen to some extent, and he will put out the invitation again. He agreed that it should be easier than it is for intercollegiate projects to emerge through the compact process.

Professor Johnson thanked Dr. Sullivan and Dean Bloomfield for their report. (Vice President Mulcahy had had to leave the meeting earlier.)

3. eResearch Central

Professor Johnson turned now to Ms. Schumi, who introduced Ms. Lloyd (the eResearch system support leader), to discuss eResearch Central. Ms. Schumi recalled that she and Interim Vice President Hamilton made a presentation to the Committee earlier and she now wished to bring the Committee up to date. They have heard what people have said about improving and streamlining administrative processes

Ms. Lloyd described phase one of eResearch Central (in March, one can initiate and track IRB and IACUC continuing review forms, use it as the entry point to other research compliance systems, such as effort certification; they are also building the infrastructure). They have heard that once the application forms seem to go into a black hole and that one only learns later if the application has been approved or must be changed.

They understand the frustration of researchers, Ms. Lloyd said, and are trying to bring all the elements to one place and smooth the process as much as they can. One goal is that people not have to enter personal data every time. Ms. Schumi said they are aware that if one had to go through all the protocols for a research project, one would have to put in data 12 times; this is a first step to improving the process.

Professor Bartels asked about the security of the information, and noted that access is through the University X.500 id. If one is listed on the project, he or she will have access to it, Ms. Lloyd said,

although scientists and technicians will not unless the PI indicates they should. There will be a link to EGMS, Ms. Lloyd said, but they will not do away with EGMS. eResearch Central, however, will allow someone to use only one website rather than maintain a variety of bookmarks for different sites.

Professor Sera asked if they had received advice from faculty and PIs. They did surveys, Ms. Lloyd said. They also used focused groups of faculty, Ms. Schumi added, and tried the protocols on user groups.

What is in phase two, Professor Gantt asked? Incorporation of existing systems, Ms. Lloyd said. Phase three will pull more complicated review boards on line (e.g., Cancer Center, Clinical Research Center). Those are still paper-based and it will be a large commitment to move them to an electronic system.

Professor Trachte said this was a great idea and he thanked Ms. Schumi and Ms. Lloyd. The biggest complaint he hears from newer faculty, he said, is about the phenomenal number of forms they need to fill out. It would help if there were instructions to new faculty: if you are using X, you need to do this (e.g., wet labs, animals, biological agents). The forms are overwhelming. They would like to do so, Ms. Schumi said, although it will take time and money. She agreed it would be helpful for new faculty to have a list of things and forms that are required; that is the vision. Vice President Mulcahy is very supportive about getting to that point, she said. What they need from the faculty, and this Committee, is continued support and feedback. Every new requirement takes time and money to get done.

Professor Johnson thanked Ms. Lloyd and Schumi and adjourned the meeting at 2:50.

-- Gary Engstrand

University of Minnesota