

**Minutes**  
**Business and Finance Committee**  
**Board of Regents of the University of Wisconsin System**  
**March 8, 2001**

The Business and Finance Committee met in Room 1920 Van Hise Hall at 2:10 p.m. Present were Regents De Simone, Gottschalk, Barry, and Marcovich.

**I.2.a. Approval of minutes of the February 8, 2001 meeting of the Business and Finance Committee**

Upon the motion of Regent Gottschalk and the second of Regent De Simone, the minutes of the February 8, 2000, meeting of the Business and Finance Committee were approved as presented.

**I.2.b. Support for Federal Funding for Stem Cell Research**

Professor James Thomson, Assistant Professor – Primate Research Lab and Assistant Professor of Anatomy, Medical School, provided the Committee with a background on human embryonic stem cell research. The stem cells used for research at the UW-Madison are obtained from embryos created by couples using in vitro fertilization due to their difficulties in conceiving. Embryos that are not transplanted may, with the permission of the couple, be used for stem cell research. No embryos are created for the purpose of research, and all the embryos that are unused would otherwise be destroyed.

Professor Thomson outlined three reasons why human embryonic cells are so important. First, embryonic and fetal tissue have special characteristics of scientific interest. Specifically, they have the ability to develop into multiple kinds of tissue as they “differentiate” during the developmental process. Embryonic and fetal tissue are immunologically naive and therefore of special value for transplantation. Special cells derived from fetal tissue and embryos (called “embryonic germ cells” or “embryonic stem cells,” respectively, have unique ability to become virtually any cell in the body and thus may become the basis for the field of regenerative medicine, in which the body regrows damaged or missing tissue. Second, human embryonic stem cells will provide purified populations of specific differentiated cells for drug discovery and testing. Third, human embryonic stem cells could provide a potentially unlimited source of cells for transplantation therapies.

Professor Thomson gave five examples of diseases that could potentially be treated using the research of human embryonic stem cells. First, heart disease afflicts 1 in 5 people, kills 960,000 United States citizens each year, and leads to healthcare costs of \$274 billion a year (1997). Currently, there is a severe shortage of heart donors. Second, juvenile onset diabetes, caused by the death of specific pancreatic cells, afflicts one million people in the United States. Currently, 15% of healthcare dollars are spent on diabetes and its complications. At this time, it is not possible to sustainably culture adult pancreatic stem cells, but Professor Thomson projects that it will be possible within 10 years. Third, Parkinson’s disease is caused by the death of a specific type of neuron (dopaminergic neurons). In the United States, 1.5 million people are affected, and total healthcare costs are \$5.6 billion. Fetal tissue transplants have been successful, but the source of tissue is inadequate. At present, adult stem cells cannot sustainably give rise to dopaminergic neurons, but embryonic stem cells can. Fourth, leukemia is a disease that can only be cured through bone marrow transplants. Unfortunately, because of the lack of appropriate donors, only about one-third of patients who require bone marrow from an unrelated, matched donor can

actually obtain a transplant. The remaining two-thirds who do not receive a bone marrow transplant will die. Finally, hematopoietic differentiation of human embryonic stem cells could result in the elimination of the need for blood transfusions.

Professor Thomson discussed the reasons why adult stem cells are not as useful as embryonic stem cells. Adult stem cells do not provide any clues about the earliest events in human development. Many adult stem cells cannot yet be sustainably cultured, and they are mortal, meaning the cells will only divide a set number of times before stopping. Some adult tissues, such as the heart, lack a stem cell. Finally, although there is increasing evidence of adult stem cell “plasticity”, the ability to differentiate adult stem cells efficiently to clinically useful tissues is currently limiting.

Professor Thomson noted some of the consequences of not pursuing human embryonic stem cells. Human embryonic stem cell based therapies would not be developed. Also, the earliest events in human development, with consequences for infertility, miscarriage, and birth defects, will remain a mystery. Adult stem cell therapies will take much longer to develop without embryonic stem cell research. Finally, he noted that no embryos would be saved by discontinuing human embryonic stem cell research.

Regent Barry asked why it is still not possible to get a sufficient quantity of stem cells for therapeutic purposes. Professor Thomson responded that the amount of labor involved in getting therapeutic cells from stem cells is great, and improving this process is the focus of embryonic stem cell research over the next ten years.

Alta Charo, Professor of Law and Medical Ethics, noted two reasons why people become upset over human embryonic stem cell research. First, they are concerned about encouraging the act of abortion or destruction of embryos. Second, they are concerned about encouraging an increase in the frequency of abortion, and complicity with the underlying act. Ms. Charo went on to say that by thinking the issue through a step further, it would be possible for people to be pro life and pro research.

Fetal tissue research will be funded only if certain conditions are met. Most importantly, a woman’s decision to have an abortion cannot be affected by the prospect of donating fetal remains to research. Only after someone has decided to have an abortion can she be approached to ask if the remains can be donated. Thus, using fetal tissue in no way constitutes a moral position on the acceptability of abortion. This is parallel to the practice of organ donation, where a family must first decide whether to discontinue resuscitation efforts, and only then may be approached for permission to use organs and tissue from the deceased. This is also parallel to a murder victim donating their organs, where the use of the body for research in no way condones or encourages the act of murder. In these cases, it is simply taking advantage of an opportunity to help others in need.

Publicly funded research with stem cells will be done only with the cells derived from embryos that were in the process of being legally destroyed at the behest of the progenitors. This means that stem cell research will not increase the number of embryos destroyed. Instead, embryos that are about to be destroyed will be destroyed by one of two methods – either they will be discarded in a way that permits stem cells to be obtained or they will be discarded in a way that prevents stem cells from being obtained. Either way, there is no net change in the number of embryos that will be lost. Thus, as with fetal tissue research, support of stem cell work does not imply support of the underlying choice to discard embryos.

In the early 1980s through early 1990s, the Reagan and former Bush administrations halted all federal funding for either fetal tissue research (through a moratorium on funding) or embryo research (through non-staffing of special ethics advisory board). In 1993, President Clinton removed obstacles to fetal tissue and embryo research.

Regent Barry asked whether there is an adequate supply of human embryos for research. Ms. Charo responded that there is a large quantity of embryos that will not be used by people who have created them.

Regent Gottschalk asked Ms. Charo to comment on the UW-Madison Bio-Ethics Advisory Committee. Ms. Charo responded that Graduate School Dean Hinshaw created the UW's own bio-ethics committee to analyze these types of research issues. The UW-Madison Bio-Ethics Advisory Committee has determined that stem cell research on campus should not in any way risk the health of children; thus, none of the work will be used for reproductive applications that might result in the birth of a child, as the risks to the child's health are impossible to assess at this time. Also, the Advisory Board will not allow embryos to be shipped from UW-Madison to parties who may perform these kinds of experiments, or to parties who may perform cross species experiments.

Regent De Simone commented that once the general public sees results from human embryonic stem cell research, and realize the benefits from this type of research, the public will support stem cell research in the future. Professor Thomson noted that the general public wants to see results and therapeutic benefits from human embryonic stem cell research in the present. He reminded the Committee that it might take a decade before any benefits are seen, so the public needs to have patience with this type of research.

Upon the motion of Regent Gottschalk and the second of Regent Barry, the Committee approved Resolution I.2.b.

### **Resolution I.2.b.**

Research on human embryonic stem cells has enormous potential to improve human health and is critical to finding treatments and cures for diseases such as Parkinsons, Juvenile Diabetes and Alzheimers. Researchers associated with the University of Wisconsin-Madison and supported by the Wisconsin Alumni Research Foundation are on the cutting edge of developing this research and are leaders in the nation in advancing the promise held by these cells.

Therefore, the Board of Regents of the University of Wisconsin System strongly supports the continuation of human embryonic stem cell research that is conducted according to the highest ethical standards. The Board further supports continued federal funding that will enable research on human embryonic stem cells to move forward rapidly and, at the same time, ensure public access to such advances. Further, the Board strongly opposes state or federal legislation or administrative action that would have the effect of slowing or banning research in this area.

### **I.2.c. Discussion on Private Capital Investing**

Thomas Reinders, Investment Analyst, gave a summary of private capital presentations to date from the UW-Foundation, Wisconsin Alumni Research Foundation (WARF), and Commonfund Capital, Inc. Private capital is part of the "alternative" asset class and includes venture capital investments (seed, start-up, early stage) and private equity investments (expansion, growth, later-stage), and international private equity (venture capital and private equity outside the United States).

Mr. Reinders noted the advantages and disadvantages of private capital:

Private Capital Advantages:

- Potential for higher returns (20-22% over the last 30 years)
- Increased portfolio diversification (not correlated with traditional stock market)
- Participation in new technologies
- Favorable long-term horizon for endowments

Private Capital Disadvantages:

- Direct investment constraints (difficult to invest with the best managers, labor intensive resulting in the need to consider a fund-to-fund method of investing)
- Market saturation
- Higher costs/fees
- Risk of loss (one in five private capital firms fail, however one in three are very successful which offset those losses)
- Longer realization of returns (6-7 years)
- Large discrepancy between top and bottom managers (resulting in the need to consider a fund-to-fund method of investing)
- Long-term commitment (5-10 years)

Regent De Simone asked whether there is the possibility of steering private capital investments towards Wisconsin based companies. Mr. Reinders responded that this has been considered and could be pursued, but there are complications with trying to steer the UW System endowment towards Wisconsin based companies due to fiduciary responsibilities and a commitment to the bottom line.

Regent Marcovich, noting that WARF has its own set of well established and successful private capital managers, asked about the merits of the fund-to-fund approach versus the option of investing in conjunction with either WARF or UW Foundation. Mr. Reinders mentioned that the UW System Trust Funds has pursued this type of arrangement with WARF, however WARF has shied away from the idea in order to maintain separation between the UW System Trust Funds and WARF. Regent Marcovich noted that the opportunity to invest with either WARF or UW Foundation should be pursued further.

Regent Gottschalk noted that it would be beneficial to the Committee if Madison based Venture Investors could give a presentation of the Committee. Vice President Debbie Durcan noted that they have been approached to give a presentation to the Committee, however, next month, Chicago based Arch Venture Capital will be presenting.

**I.2.d.(1). Revision of Small Fraction Spending Plan**

Upon the motion of Regent Barry and the second of Regent Gottschalk, the Committee approved Resolution I.2.d.(1).

**Resolution I.2.d.(1).**

That, upon the recommendation of the Regent Business and Finance Committee, the following revision of the Small Fraction Spending Plan be approved.

"...The fraction will be applied to a three year moving average of endowment valuations (~~36 monthly valuations~~ 12 quarterly valuations)."

"...The formula for determining the ~~annual~~ quarterly amount for the Stabilization Reserve is: . . ."

**I.2.d.(2). Revision of Statement of Investment Objectives & Guidelines**

Upon the motion of Regent Gottschalk and the second of Regent Barry, the Committee approved Resolution I.2.d.(2).

**Resolution I.2.d.(2).**

That, upon the recommendation of the Regent Business and Finance Committee, the following revision of the Statement of Investment Objectives & Guidelines be approved.

Investment Objectives and Guidelines  
Statement of Purpose & Responsibility

**Principal-Long Term Fund**

This fund represents the "endowment" portion of the University of Wisconsin System Trust Funds. The accounts invested in this fund include all true endowments, quasi-endowments and designated endowments. The asset allocation for this fund includes significant commitments to equity securities to enhance return and protect purchasing power. ~~An annual~~ **quarterly** distribution is executed based on the small fraction spending plan adopted by the Board of Regents in 1990. ~~Each year~~ **Participant** accounts receive a distribution equal to five percent (5%) of the average market value of the prior three-year period.

**Principal-Intermediate Term Fund**

This fund is used to invest unspent income from previous years' distributions. It is also used for funds that will be withdrawn for spending within one to three years. The asset allocation for this fund is 100% fixed income securities. All income **is distributed to participants quarterly and capital gains are reinvested in the fund.** ~~and investment gains/losses are distributed to participants annually.~~

**Income Fund**

This fund is used to invest the cash balances available for spending. The State Investment Fund (managed by the State of Wisconsin Investment Board) ~~and the Common Trust – Cash Investment Fund (managed by Mellon Trust Company)~~ **are is** utilized. All income is distributed to participants **monthly annually.**

**I.2.e. Report of the Vice President**

Vice President Debbie Durcan presented the UW-Madison Contractual Agreement with Pharmacia & Upjohn AB, and noted that, upon acceptance of the latest payment, total receipts for the work on this project will exceed \$500,000. Board of Regent Policy requires Regent approval when a contractual agreement with a private for-profit organization exceeds \$500,000.

Upon the motion of Regent Marcovich and the second of Regent Barry, the Committee approved Resolution I.2.e.(1).

**Resolution I.2.e.(1).**

That upon recommendation of the President of the University of Wisconsin System and the Chancellor of the University of Wisconsin-Madison, the Board of Regents accepts the agreement with Pharmacia & Upjohn AB to be the coordinating and pathology center for the Latanoprost Ocular Pathology Study.

The Business and Finance Committee recessed and the Audit Subcommittee convened at 3:15 p.m. Present were Regents Marcovich, De Simone, and Gottschalk. Regent Barry was also present.

### **I.2.f. Audit Subcommittee**

Internal Audit Director Ron Yates discussed outside audit activities, and major projects of the Office of Internal Audit. In the area of outside audit activities, the Legislative Audit Bureau (LAB) will complete work on the annual A-133 financial compliance audit by April 30, 2001, and LAB recently issued a management letter of UW-Madison's Division of Information Technology. A statutorily-required five-year management review of the lease and affiliation agreements between the Board of Regents and the University of Wisconsin Hospitals and Clinics is expected to be issued next month. In February, LAB issued a letter report describing UW-Madison Tobacco Research and Intervention Center operations and budget information. A legislative hearing on the report is to be held March 13<sup>th</sup>.

Mr. Yates discussed two projects that the Office of Internal Audit has been reviewing. First, the Office is reviewing policies concerning the safeguarding of art collections and donated items of value throughout the UW System. Second, outsourcing issues are being reviewed, to determine whether there are national models that could be followed to make operations more efficient and cost effective.

Mr. Yates also presented the report on Student Health and Safety in UW international education programs. The report noted that over 130,000 students nationwide, and 3,100 UW System students participated in international education programs in the last academic year. This number is expected to increase significantly in the future with both the U.S. Department of Education and the State of Wisconsin setting ambitious goals for having more students participate. In September of 1997, former Governor Thompson announced an international education initiative. As a result of this initiative, during the last biennial budget, grants totaling \$1.5 million supported Wisconsin students in their efforts to study abroad.

There are three ways that UW System students are currently studying abroad. First, students can attend international institutions for a semester or academic year. Second, students take short study trips up to a few weeks in length. Third, students enroll in an exchange program with another country.

The UW System has put together an instruction manual called the Academic Information Series #7, which include health and safety guidelines for students studying abroad. These guidelines, in conjunction with a national set of guidelines, were used to identify best practices. The report made recommendations in three areas:

- Developing protection strategies
- Defining responsibility for managing emergencies and addressing problems
- Improving the overall program administration

Mr. Yates listed several examples of the report's recommendations. First, the UW System should evaluate program locations through site visits. Second, the UW System should mandate that students either purchase health, medical evacuation and repatriation insurance or demonstrate that they have coverage. Mr. Yates recommended that the cost of insurance be included in the cost of the program fees (roughly \$21-\$40 per month). Third, the UW System should establish emergency plans for managing crises before they arise. Fourth, UW System institutions should ensure that students sign release forms. Fifth, the UW System should provide international safety orientation and training for students and faculty. Finally, the UW System should use international student evaluation forms to improve international program health and safety.

Regent Gottschalk and the Audit Subcommittee asked Mr. Yates to review coverage for University of Wisconsin System faculty in international education programs.

Upon the motion of Regent Gottschalk and the second of Regent De Simone, the Committee approved Resolution I.2.f.

**Resolution I.2.f.**

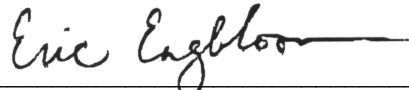
The Board of Regents of the University of Wisconsin System strongly supports measures that protect the health and safety of all University of Wisconsin students in international education programs. The Board adopts the recommendations in the Office of Internal Audit's *Program Review on Student Health and Safety in UW International Education Programs*, including the development of standard guidelines for assessing program sites and the availability of a systemwide insurance policy to provide accident, health, medical-evacuation and repatriation coverage for all international education students.

The Audit Subcommittee adjourned and the Business and Finance Committee reconvened at 3:40 p.m.

**I.2.g. Closed session to consider trust fund matters, as permitted by s.19.85(1)(e), Wis. Stats.**

Upon the motion of Regent Gottschalk and the second of Regent Barry, the Business and Finance Committee adjourned to Closed Session at 3:45 p.m. Present were Regents Marcovich, Gottschalk, De Simone, and Barry.

The Business and Finance Committee adjourned at 4:35 p.m.



Eric Engbloom, Recording Secretary