

UNIVERSITY OF MINNESOTA

BOARD OF REGENTS

Educational Planning & Policy Committee

June 12, 2008

10:15 a.m. - 11:45 a.m.

600 McNamara Alumni Center, West Committee Room

Committee Members

David Larson, Chair
Anthony Baraga, Vice Chair
Maureen Cisneros
Linda Cohen
Steven Hunter
Patricia Simmons

Student Representatives

A G E N D A

1. Board of Regents Policy: *International Education* - Action - T. Sullivan/R. Jones/M. McQuaid (pp. 2-6)
2. Update: Interdisciplinary Initiatives - T. Sullivan/S. Wolf (pp. 7-23)
3. Consent Report - Review/Action - T. Sullivan (pp. 24-26)
4. Information Items - T. Sullivan (p. 27)



**UNIVERSITY OF MINNESOTA
BOARD OF REGENTS**

Educational Planning and Policy Committee

June 12, 2008

Agenda Item: Board of Regents Policy: International Education

review review/action action discussion

Presenters: Senior Vice President/Provost Thomas Sullivan
Senior Vice President Robert Jones
Associate Vice President and Dean Meredith McQuaid

Purpose:

policy background/context oversight strategic positioning

To approve proposed amendments to Board of Regents Policy: *International Education*.

Outline of Key Points/Policy Issues:

1. The proposed policy has been rewritten in its entirety and formatted to conform to the style of Board of Regents policies.
2. The title of the proposed policy has been changed to *International Education and Engagement*, in part to reflect the ever-increasing internationalization of all of the campuses of the University of Minnesota: Twin Cities, Crookston, Morris, Rochester, and Duluth.
3. This proposed policy will more clearly and comprehensively affirm the commitment of the Board of Regents to foster international education and engagement throughout the University community.
4. The proposed policy contains three guiding principles to in part govern international education and engagement at the University.
5. The proposed policy contains four administrative elements that will be included in whole or in part in all international education and engagement initiatives or programs at the University as a whole.

Background Information:

Given the rapid expansion of international initiatives and programs on all of the University's campuses and given the University's desire for its students, faculty, and staff to engage in research, education, and service on the international stage, comprehensive revision of Board of Regents Policy: *International Education* is necessary. The last time the Board considered and revised the policy was in May 1994. The currently proposed amendments were reviewed by the Educational Planning and Policy Committee at its May 2008 meeting.

President's Recommendation for Action:

The President recommends adoption of proposed amendments to Board of Regents Policy: *International Education*.



UNIVERSITY OF MINNESOTA
BOARD OF REGENTS POLICY

Page 1 of 2

Academic

**INTERNATIONAL EDUCATION AND
ENGAGEMENT**

Adopted: July 12, 1974

Amended: May 13, 1994

DRAFT for action June 13, 2008

**INTERNATIONAL EDUCATION
AND ENGAGEMENT**

SECTION I. SCOPE.

This policy governs all international activities of the students, faculty, staff, and programs of the University of Minnesota (University).

SECTION II. GUIDING PRINCIPLES.

This policy affirms the commitment of the Board of Regents (Board) to foster international education and engagement throughout the University community. The following principles shall guide international education and engagement at the University:

- (a) In an interdependent world, the welfare of the state and the well being of its citizens are linked to the welfare of all humankind.
- (b) Through international education and engagement, a great university builds and extends its scholarly standing, its potential for research, and its contributions to the education of students and citizens of the state, the nation, and the world.
- (c) The University has a responsibility to incorporate into its educational programs international opportunities that provide students the understanding, skills, and knowledge necessary to be creative and useful citizens of the state, the nation, and the world.

SECTION III. ADMINISTRATION.

The president or delegate shall administer policies that, in compliance with all applicable laws and regulations, effectively promote and encourage a comprehensive program of international education and engagement that includes the following elements:

- (a) **International Experience for Students.** The University will encourage the participation of University students in international educational experiences and provide opportunities that afford participating students the guidance and assistance necessary to integrate these experiences into University degree curricula.



UNIVERSITY OF MINNESOTA
BOARD OF REGENTS POLICY

Page 2 of 2

Academic

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- (b) **Enrollment of International Students.** The University will enroll students from abroad in its undergraduate, professional, and graduate colleges in such numbers and with such geographic origins as to advance the University's educational goals.
- (c) **Faculty Teaching and Research.** The University will encourage international education and engagement in the teaching, research, and service of its faculty through the exchange of persons, ideas, and materials with other countries.
- (d) **Collaboration with International Institutions.** The University will build strategic international partnerships with universities and institutions worldwide, expand international scholarly exchanges, and internationalize the University community and curriculum.

NEW



UNIVERSITY OF MINNESOTA
BOARD OF REGENTS POLICY

Page 1 of 2

Academic

INTERNATIONAL EDUCATION

Adopted: July 12, 1974

Amended: May 13, 1994

INTERNATIONAL EDUCATION

SECTION I. OBJECTIVES.

Subd. 1. Encouraging Enrollment. Encouraging the enrollment of international students in the University, U.S. student enrollment in universities overseas, and the interchange of Minnesota and foreign university faculty is based on the enlightened self-interest of the University in meeting its objectives in their broadest and fullest sense.

Subd. 2. Research Studies. Basic and applied research studies of the effects of international education, especially when that education is the result of personal experience in a culture other than one's own, demonstrate both the unique results of a foreign sojourn and its motivating effect.

Subd. 3. Diverse Education. Learning about one's country and self in the context of a broader, more diverse world, while learning about other peoples and cultures, is a liberal education in its fullest meaning. The motivation to put this learning into practice is high and long-lasting. The sojourn abroad truly has lifelong effects on individuals, their families, and their society.

SECTION II. POLICY STATEMENT.

Subd. 1. Enhanced Education. The University of Minnesota recognizes that a great university ideally builds and extends its service, its potential for research, its scholarly standing, and enhances its contribution to the education of students and citizens of the state by providing an international dimension in its educational programs. This is true in all fields of study: in the professions, the sciences, the arts, the humanities, and the social sciences.

Subd. 2. International Understanding. The University recognizes that, in this interdependent world, the welfare of the state and the well-being of its citizens are linked to the welfare of all humankind. Thus, it is urgent that the teaching, research, and service of the University support the economic and social development of the state, the nation, and other countries; protect the global environment; lead individuals and groups to better understanding of themselves and others; and contribute toward international understanding, world peace, and community self-awareness.

Subd. 3. Educating Minnesota Students. The University, in serving the community, recognizes that its major responsibility is to educate students from Minnesota in a manner that provides them with the understanding, skills, and knowledge that will allow them to be creative and useful citizens of the state, the nation, and the world. In this process of education, students from other countries and Minnesota students who have studied overseas play an essential role.



**UNIVERSITY OF MINNESOTA
BOARD OF REGENTS POLICY**

Page 2 of 2

Academic

INTERNATIONAL EDUCATION

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Subd. 4. Goals. To accomplish these goals, the University of Minnesota encourages and seeks to have students from abroad enrolled in its undergraduate, professional, and graduate colleges, in such numbers and with such geographic origins as to have an impact on the achievement of the University's educational goals. It also seeks to provide opportunities for study abroad for Minnesota students and to afford them guidance and assistance in integrating these experiences with regular university study in meeting their educational objectives at the University of Minnesota. Finally, the University of Minnesota encourages the development of an international dimension in the teaching, research, and service of its faculty through the exchange of persons, ideas, and materials with other countries.



**UNIVERSITY OF MINNESOTA
BOARD OF REGENTS**

Educational Planning and Policy Committee

June 12, 2008

Agenda Item: Update: Interdisciplinary Initiatives

review review/action action discussion

Presenters: Senior Vice President/Provost Thomas Sullivan
Professor Susan Wolf

Purpose:

policy background/context oversight strategic positioning

This presentation will provide information on the University's critical initiatives in interdisciplinary research and education.

Outline of Key Points/Policy Issues:

1. International context for the development of new programs in interdisciplinary research and education.
2. Overview of the investments in new central initiatives designed to seed, nurture, and evaluate interdisciplinary initiatives.
3. Update on the progress of the University's major interdisciplinary programs.
4. Strategic directions for the future of interdisciplinary research and education.

Background Information:

In December 2006 the committee heard a report on four major interdisciplinary institutes that came about as a result of strategic positioning: the Institute on the Environment, the Institute for Advanced Study, the Institute for Translational Neuroscience, and the Institute for the Advancement of Science and Engineering.

**University of Minnesota Board of Regents
Educational Planning and Policy Committee
June 12, 2008**

Update: Interdisciplinary Initiatives

I. Introduction

The culture and conduct of research are undergoing changes that we cannot ignore. Our major sponsored research funders are shifting their emphases to multi-disciplinary, multi-institutional grants and contracts, and many of the problems research universities solve for society require new links across disciplines, institutions and even national borders.

The University of Minnesota has a long-standing and extensive commitment to interdisciplinary activity, as reflected in its research centers, academic programs, and vast number of faculty and students engaged in interdisciplinary inquiry. It ranges in form from collaborative teams, particularly in scientific and technological fields, who bring to their work insights from multiple disciplines, to individual scholars whose work crosses the boundaries between disciplines. A recent inventory identified 313 interdisciplinary research centers at the University. Among the dozens of interdisciplinary academic programs, there are examples of newly emerging fields of study as well as ones that have reached a level of intellectual maturity associated with the formation of new disciplines, from Gender Studies to Neurosciences. Innovative new approaches will raise the bar for University of Minnesota interdisciplinary endeavors, allowing the University to help solve the complex issues of the 21st century.

During the task force phase of the strategic positioning process begun in 2004, multiple task forces identified fostering interdisciplinary activity as a critical institutional priority. As a result, the University has sharpened its focus on interdisciplinary initiatives system-wide. The University is building on its tradition of focused investment in interdisciplinary activity with a new round of major initiatives as well as new efforts to transform policies and practices that impede faculty and student mobility across the disciplines.

Priorities include:

- Substantial central investment, with support from the state, to address increasingly complex intellectual, scientific, and social problems
- Opportunities to jumpstart new interdisciplinary initiatives through programs such as the President's Interdisciplinary Conference Fund, the Minnesota Futures Program, and Institute for Advanced Study Research Collaboratives
- Incentives for cross-college collaboration as part of the budget compact process that guides central investments in the colleges

- Support for selected, newly formed university-wide centers of interdisciplinary inquiry that foster collaboration, such as the Institute for Advanced Study, the Institute on the Environment, the Institute for Translational Neuroscience, and the University of Minnesota Interdisciplinary Informatics program. The Institute for the Advancement of Science and Engineering has been delayed due to the 2009 budget cuts.
- New investments to foster collaboration across research, training, and graduate education functions
- Development of an advocacy network and support for developing the distinctive skills required to lead collaborative and interdisciplinary initiatives, particularly among faculty, postdoctoral fellows, and graduate students
- Leading a consortium of ten major research universities that is working to transform institutional policies and practices to foster a climate that encourages and supports interdisciplinary research and education

II. Update on Accomplishments of Provost's Interdisciplinary Team

During the University's strategic positioning process, the importance of central oversight of interdisciplinary work was highlighted. As a result, the University is sharpening its focus on interdisciplinary initiatives system-wide. Senior Vice President and Provost E. Thomas Sullivan established the Provost's Interdisciplinary Team in 2006 with five leaders representing research, education, and senior academic administration. The Vice President for Research, the Vice Provost and Dean of Graduate Education, and the Vice Provost and Dean for Undergraduate Education are responsible for guiding and supporting interdisciplinary research and education within their portfolios, and for working closely together with the Assistant Vice Provost for Interdisciplinarity who represents the senior administration. The newest member of the team, beginning January 2008, is the Vice Provost for Faculty and Academic Affairs. Most recently she has lead a series of changes in the procedures for promotion and tenure, including specific procedures for faculty involved in interdisciplinary research and education. The Provost's Interdisciplinary Team is responsible for creating a system-wide strategy for developing, nurturing, and assessing interdisciplinary programs. The Vice President for Research has developed an Office for Collaborative Research Services within his unit, and the Vice Provost and Dean of the Graduate School has established an Office of Interdisciplinary Initiatives. Similarly, the Vice Provost and Dean for Undergraduate Education will oversee the development of integrated research and education opportunities for undergraduates. These offices work collaboratively with each other and with the interdisciplinary working group.

Specific responsibilities of the team include:

- Overseeing planning, development, and implementation of major interdisciplinary initiatives
- Conducting reviews of existing major interdisciplinary initiatives
- Encouraging affiliations to foster new interdisciplinary programs
- Monitoring interdisciplinary activities system-wide
- Developing institutional policies and procedures
- Developing priorities for fundraising
- Monitoring central investments in interdisciplinary activities

The team develops its priorities collaboratively, with team members taking the lead on particular initiatives. Among the first tasks of the team was development of policies that clearly establish guidelines for university-wide interdisciplinary centers and institutes and put in place a template for division of indirect cost recovery for interdisciplinary grants.

A. Vice Provost and Dean of the Graduate School

This past year the Graduate School has developed critical infrastructure including establishment of the Office of Interdisciplinary Initiatives, creation of a Network of Interdisciplinary Initiatives, and development of an infrastructure for review of interdisciplinary centers and institutes. New Graduate School policies were approved that lead the way toward an interdisciplinary-friendly environment including policies related to collaborative theses and dissertations, establishment of interdisciplinary graduate groups, and support of faculty initiated policy recommendations to eliminate barriers to interdisciplinarity.

New interdisciplinary initiatives in the Graduate School include a call for pre-proposals for new interdisciplinary graduate education initiatives; a call for programs that would seed best practices in interdisciplinary graduate education; calls for interdisciplinary graduate teaching fellows and doctoral fellowships; and a call to develop interdisciplinary graduate groups.

In response to a demand for interdisciplinary leadership development opportunities, the Graduate School led the creation of a collaborative leadership series that offered four workshops in spring 2008. This series will continue during the next academic year.

The Graduate School also provided key leadership for the ten-institution consortium on Fostering Interdisciplinary Inquiry with the goal of developing a new set of institutional practices and policies that will promote interdisciplinary research and education. The institutions in the consortium include: Duke University, University of North Carolina at Chapel Hill, Brown University, University of Pennsylvania, University of Washington, University of Wisconsin Madison, University of Michigan, University of California Berkeley, University of Illinois at Urbana-Champaign, and the University of Minnesota.

B. Vice President for Research

The Office of the Vice President for Research has led initiatives designed to enhance and strengthen interdisciplinary research:

- The Minnesota Futures Grants designed to encourage broad collaboration and nurture promising interdisciplinary fields
- Financial partnerships with existing interdisciplinary centers to strengthen their ability to support cutting edge projects
- A new Research and Scholarship Advisory Panel to provide advice and guidance to the Vice President for Research
- Modified policies on sharing of indirect funds and on establishing and reviewing centers

- Providing assistance as needed to prepare and submit large, intercollegiate grant proposals
- Consolidation of all the internal grant opportunities throughout the U at one website
- In partnership with the Library, training on searching international database of funding opportunities
- Facilitation of the ad hoc committee on faculty expertise data base

Several new initiatives are in the works, including provision of readily available information on research resources available at the University and tools to help in assembling training grants and program project grants.

C. Vice Provost and Dean for Undergraduate Education

A primary place where undergraduates are exposed to interdisciplinary thinking and methods is through the Freshman Seminar program. Under the leadership of the Vice Provost and Dean of Undergraduate Education a new program, called the interdisciplinary university course, will bring together faculty from 3-4 academic departments to teach a single course on a broad topic such as social justice. This course will be piloted in the University Honors Program in fall 2009 and would eventually expand so that all undergraduates can take advantage of this unique opportunity.

D. Vice Provost for Faculty and Academic Affairs

At the end of the 2006-2007 academic year, the Regents approved revisions to the Faculty Tenure policy, and in fall 2007 the University approved new Procedures for Reviewing Candidates for Tenure and/or Promotion: Tenure-track and Tenured Faculty. Both documents explicitly take into account interdisciplinary research and education in the review of faculty. During this same academic year, all departments were asked to review and revise their 7.12 statements, the departmental statement of the standards and criteria for promotion and tenure. Approved 7.12 statements address interdisciplinary work in a variety of ways, including how to assess interdisciplinary scholarship relative to the underlying disciplinary norms, expectations for authorship, reward for interdisciplinary work, evaluation of interdisciplinary work, and the definition of interdisciplinary work within a unit.

III. Major Interdisciplinary Initiative Updates

In support of the strategic positioning recommendations and goals, the University has invested in some important interdisciplinary institutes and centers. This committee heard a report in December 2006 about several of these programs.

A. Institute on the Environment

The University of Minnesota's new and unique Institute on the Environment mobilizes scholars from across disciplines and works with community partners to identify and solve problems of both local and global significance. Top researchers from the natural and social sciences, design, engineering, law, health, policy and other disciplines are working together by integrating basic and translational research, policy, implementation, and public engagement to address some of the region's and the world's most pressing environmental issues.

The Institute on the Environment organizes its solution-based research around broad themes, each focused on a major environmental issue facing humankind, and each capable of encompassing a diverse array of team-based research projects drawing on the University's exceptional breadth and depth of expertise and extensive experience in public engagement. No themes or research teams will be permanent. This is a nimble, timely, and highly focused Institute.

Minnesota's unique combination of natural and human ecosystems creates countless opportunities to address pressing environmental problems and develop creative solutions. Minnesota is at the confluence of three major biomes, the boreal forest in the north, broadleaf forest to the south and east, and the prairie to the south and west. It is at the headwaters of three of the most important drainage basins in North America: the Mississippi River, the Great Lakes, and Hudson Bay. Because of its position in the center of the continent, Minnesota lies within the region that is predicted to experience the most dramatic impacts due to climate change. Urban, agricultural, and forested regions within the state provide a natural laboratory for investigating a variety of environmental challenges related to food production, renewable energy production, water resources, land use, and climate change.

The University of Minnesota has a well-developed culture of solution-driven research and commitment to public engagement. These advantages combine to give the University a remarkably strong competitive advantage, and make it the ideal place for a world-class interdisciplinary institute focused on solving major environmental problems. The Institute on the Environment already has had a national and international impact through its path-breaking research (published in Science magazine) on the vital importance of biodiversity and the imperative need to assess the full range of economic impacts of biofuels. Which biofuels we pursue and how we pursue them have implications for every corner of our interdependent world. The Institute also is a world leader in research and outreach on ensuring safe, secure supplies of freshwater. In addition, the Institute will help lead the geoinformatics/environmental informatics revolution.

Future plans for the Institute on the Environment include development of a long-term space plan with dedicated space for the Institute, expansion of fellows from 12 to 30 by 2012, acceleration of research capacity, and private fundraising to develop an endowment.

B. Institute for Advanced Study

In November of 2007 the Institute for Advanced Study (“IAS”) and the University of Minnesota Press jointly received a major grant from the Andrew Mellon Foundation; the goal of the joint project, which we call “Quadrant,” is to increase the synergy between the intellectual agendas of the University Press and University faculty. The University Press and the IAS, in conversation with the provost, selected four areas on which to focus: Global Cultures, Design and Architecture, Environment, and Health and Society. Collaborative clusters of University of Minnesota faculty and students (Quadrant groups) have formed around each of the four topics. The funding that will come to the IAS will enable the IAS to bring in fellows from outside of the University of Minnesota for semester-long fellowships and will also permit us to bring in other scholars for shorter-term fellowships to engage with the Quadrant groups. The funding has also enabled the University Press to designate two editors as “editors-in-residence” at the IAS; they are available to work with fellows on publishing strategies. IAS has awarded the first three semester-long fellowships, and anticipates finalizing the first group of short-term visitors later this summer. When the project is fully up and running, we expect that it will produce twenty new books a year. The University of Minnesota is the first university to receive a grant under this new Mellon initiative.

The new University Symposium topic (Body & Knowing) sponsored by IAS promises to bring together exciting work from fields as diverse as neuroscience and dance, and offers the possibility of new research synergies. The fundamental questions the symposium will address are concerned with both embodied knowledge and knowing about the body. The large planning group consists of more than 100 faculty, including representatives from seven colleges (including fifteen departments from within the College of Liberal Arts) as well as community health and arts organizations. Each of the four semesters of the symposium will have a subtopic; the topic for the fall is “The Body Politic/The Political Body.” Another innovation is a faculty research seminar that will be held in conjunction with the symposium. “Body & Knowing” will be led by an anthropologist and a philosopher of biology, and “Beyond the Eye: Toward an Understanding of Non-Visual Theories and Methodologies” will be led by a group of interdisciplinary scholars whose work focuses on the early modern world.

The IAS fellows program will be expanded. In addition to three Quadrant Fellows (described above) IAS anticipates hosting a postdoctoral fellow (sponsored by the American Council of Learned Societies and the Mellon Foundation) and three graduate student fellows (provided by the Graduate School’s Interdisciplinary program). These new fellows will join our University of Minnesota faculty fellows in residence at the Nolte Center, and will participate fully in the lunch-time and coffee-hour discussions of work-in-progress that form the core of the fellowship experience. The value of these fellowships is described by Elizabeth Beaumont, one of our faculty fellows in spring 2008, who notes that her IAS fellowship:

provided me with my first opportunity for sustained, on-going intellectual exchanges with faculty outside my home department (political science). This

included the rare opportunity to ‘peek under the hood’ of other scholarly approaches and learn from the kinds of research questions, cultures, literatures, and methodologies that characterize other disciplines and departments.... Being exposed to such different research topics and strategies was fascinating on its own terms, but it also pushed me to be more reflective about how political science operates as a discipline, including its strengths and limitations for identifying and understanding various aspects of social phenomena and the human condition.

IAS programs continue to be connected to the teaching mission of the University. In the fall of 2007, Susannah Smith taught a freshman seminar based on the Thursdays at Four series; in the fall of 2008 she will teach an honors seminar based on the series. IAS also continues to host a lively series of public programs. During 2007-08 IAS sponsored 121 public events (including 14 summer events).

IAS Fellows continue to win outstanding awards. Of the seven Guggenheim fellowships awarded to the University of Minnesota in the past two years, three have been awarded to people with connections to the IAS. Another fellow won the American Academy in Rome prize.

c. Consortium on Law and Values in Health, Environment, and the Life Sciences

The Consortium on Law & Values in Health, Environment, and the Life Sciences is a unique interdisciplinary program with no peer. The Consortium has created a national model for research, scholarship, and public discussion on the societal implications of the life sciences. There is no program at the University more interdisciplinary – the program crosses all colleges at this University.

The Consortium comprises 17 top University centers and programs addressing the societal dimensions of the life sciences, including the Center for Bioethics, Stem Cell Institute, Institute on the Environment, Biomedical Genomics Center, and Center for Infectious Disease Research & Policy. We award over \$100,000 per year to graduate and professional students, faculty, Consortium members, and Joint Degree Program partner programs, in order to catalyze campus-wide work on the implications of the life sciences. Among the most important achievements of the Consortium has been securing grants to fund original work. Recent grant projects include:

- “Emerging Problems in Neurogenomics: Ethical, Legal & Policy Issues at the Intersection of Genomics & Neuroscience,” funded by the Greenwall Foundation;
- “Evaluating Oversight Models for Active Nanostructures and Nanosystems: Learning from Past Technologies in a Social Context,” funded by the National Science Foundation; and
- “Managing Incidental Findings in Human Subjects Research,” funded by the National Human Genome Research Institute at the National Institutes of Health.

The Joint Degree Program in Law, Health & the Life Sciences recruits and trains talented students to tackle the toughest problems of the 21st century—those raised by science and

biomedicine. These are problems that respect no disciplinary borders and require creative, cross-disciplinary thinking. Our students are tackling the most challenging problems in environmental and conservation policy, genetics and genomics law, health law and policy, public health, and the intellectual property dimensions of biotechnology and emerging biology. The Joint Degree Program had 36 students in fall 2007 and will have graduated 18 alumni by summer 2008. We currently offer 21 degree combinations including J.D. /PhD., J.D. /M.D., and J.D. /M.P.H.

The Consortium and Joint Degree Program co-sponsor events each year drawing top national scholars to campus. In 2007-08 our Lecture Series on Law, Health & the Life Sciences focused on the “Emerging Debates on Oversight and Policy in Biomedicine & the Life Sciences” with speakers including Professor Debora Spar (Harvard University) and Professor Patricia King (Georgetown University). The Joint Degree Program continued the Deinaud Memorial Lecture Series on Law & Medicine, co-sponsored with the Center for Bioethics, featuring Professor George Annas (Boston University) speaking on “The Legacy of the Nazi Doctors’ Trial for American Bioethics and International Human Rights Law.” The annual conference focused on “Emerging Problems in Neurenomics: Ethical & Policy Issues at the Intersection of Genomics & Neuroscience.” The Consortium hosted our second Visiting Consortium Professor, Stephen Pacala, the Frederick D. Petrie Professor of Ecology and Evolutionary Biology, Director of the Princeton Environmental Institute, and Co-Director of The Carbon Mitigation Initiative at Princeton University. Finally, the Consortium welcomed Dr. Zach Hall (formerly head of the California Institute for Regenerative Medicine) as the Oscar M. Ruebhausen Visiting Professor in Bioethics (with the Center for Bioethics and Mayo Clinic). All events are open to the public and free or low-cost, offering continuing legal and medical education credits.

The Consortium publishes the Minnesota Journal of Law, Science & Technology (MJLST), a cutting-edge and multidisciplinary journal with a focus on law, health, the sciences, and bioethics. The journal is edited by law students and faculty from across the University. MJLST publishes on issues in intellectual property, technology policy and innovation, bioethics, and law and science, while maintaining a rigorous grounding in law, values, and policy. The journal was ranked #1 in Environmental Law and #1 in Science & Technology Law Review submissions for 2006 by ExpressO, the online submission service of the Berkeley Electronic Press.

D. Institute of Translational Neuroscience

The Institute of Translational Neuroscience (ITN) was initiated with President Bruininks’ designation of neuroscience as an area for University-wide interdisciplinary development. The ITN is directed to promote and foster basic science discovery with clinical neuroscience leading to subsequent clinical trials and establishment of new therapeutic principles or tools. The ITN is to create a corridor of discovery and application that leverages the strengths in basic neuroscience, imaging and other interdisciplinary resources. To accomplish these goals a steering committee was appointed in March 2007 under the direction of Dr. Harry T. Orr. At the outset ITN consists of five founding centers: The Grossman Center for Memory Research and Care (Medical School & College of

Pharmacy), Center of Neuroengineering, Center for Neurodegenerative and Neuromuscular Diseases - including the Wellstone Center (Medical School & College of Veterinary Medicine), Center for Magnetic Resonance Research (Institute of Technology, Medical School, College of Liberal Arts, College of Education & Human Development), and the Center of Neurodevelopment and Mental Health (College of Liberal Arts & Medical School). With the current \$1.8 million recurring funds, ITN aims to attract and recruit 15-17 top scientists to be designated as ITN Scholars. Currently there are active ITN Scholar searches underway for faculty to be located in the Grossman CMRC, the Center for Neurodegenerative and Neuromuscular Diseases, and the Center of Neuroengineering. The Center of Neurodevelopment and Mental Health is in the process of activating its search for ITN Scholars.

As searches for ITN Scholars were being set in motion, ITN undertook several non-recurring initiatives to enhance and support interdisciplinary translational neuroscience research at the University. This included providing support for ongoing faculty recruitments and retentions in the CMRR, the Department of Neurosurgery, and the Department of Neuroscience. ITN supported interdisciplinary research projects in the Center for Cognitive Sciences (College of Liberal Arts & Medical School) and graduate program in Neuroengineering. ITN provided each of the five founding Centers with funds to initiate a seminar program. The goal of these seminar programs is to bring top translational neuroscientists to the University for an informal visit to let them know what is planned and perhaps interest them in applying to the Scholar Program. ITN has also provided support to improve the infrastructure needed for state-of-the-art translational neuroscience. This includes supporting the upgrade of the CMRR and providing developmental funds for four core research labs.

E. Minnesota Interdisciplinary Informatics

It is the responsibility of our nation's public research universities to seek answers to the global challenges we face. If we are to answer the most pressing questions in energy, health and the environment that lead to healthier populations and sustainable communities, we will need to harness the best tools at our disposal and develop new ones with even greater capacity. Finding solutions to these critical questions hinges on our ability to manage, model, and utilize the vast biological data that science has tapped, and train the next generation of researchers to employ these vast stores of information in their search for answers to problems.

The University of Minnesota is poised to become the world leader in informatics with the launch of a new comprehensive interdisciplinary informatics program. This will be an integrative, University-wide program encompassing health informatics, computational biology, systems biology, bioinformatics, and physical and computational sciences, as well as emerging fields. Beginning this fall, we will recruit the best faculty, postdocs, and graduate students across a broad range of disciplines. We will hire 21 new informatics faculty, including established research groups, and up to 10 postdocs. We also will offer 20 fellowships to the graduate program each year.

The launch of the University of Minnesota Interdisciplinary Informatics Program (UMII) comes with a landmark commitment of \$35 million over the next five years to build the field of informatics broadly defined. The UMII will assemble the best talent in the field among faculty, postdoctoral fellows, and graduate students. Its core will consist of an interdisciplinary intellectual community of informatics experts pursuing leading-edge research, and a novel, integrative graduate program in interdisciplinary informatics with multiple specializations.

UMII is a comprehensive, integrative University-wide program that will encompass the domains of health informatics, computational biology, systems biology, and bioinformatics, and emerging fields that may wish to join an interdisciplinary informatics setting in the future:

- **Bioinformatics:** Research, development, or applications of computational tools and approaches for expanding the use of biological, medical, behavioral, or health data, includes those to acquire, store, organize, archive, analyze, or visualize such data.
- **Computational Biology:** The development and application of data-analytical and theoretical methods, mathematical modeling and computational simulation techniques to the study of biological, behavioral, and social systems.
- **Systems Biology:** The coordinated study of biological systems by investigating the components of cellular networks and their interactions, by applying experimental high-throughput, whole proteome, whole metablome, and whole-genome techniques, and integrating computational methods with experimental efforts.
- **Health informatics:** An integrative scientific field that draws upon information sciences, systems, and related technologies to enhance the use of the knowledge base of health sciences, and the medical and health data generated therein, to improve health care, biomedical and clinical research, education, management and policy.

UMII will be home to a novel graduate program in interdisciplinary informatics with initial specializations available in systems biology, bioinformatics and computational biology, and health informatics. This integrative program will offer common admissions and recruiting, core courses, and seminars to all students across the domains, as well as specializations that provide advanced training in each domain. We will invest approximately \$4.5 million in the Interdisciplinary Informatics Graduate Program over the next five years in the form of 20 fellowships per year and core program funding. This program will build a critical mass of experts across the biological, environmental, physical, mathematical, engineering, health and agricultural sciences, who focus on the development and application of computational methods and the use of informatics in research. UMII will nurture the development of innovative methodologies, research collaboration, and will expand the use of sophisticated informatics methods in the University. Faculty will spend their time in this integrative and collaborative environment, but hold their tenure-home in one or more collegiate departments aligned with their professional expertise. Faculty, post-doctoral fellows and graduate student clusters will work collaboratively in each of the areas as part of the core strength of the program and for research purposes, and individual faculty may contribute to more than one domain. We

will invest approximately \$29 Million in new informatics faculty hires over the next five years.

F. Minnesota Population Center

The Minnesota Population Center (MPC) is a University-wide interdisciplinary cooperative for demographic research at the University of Minnesota. MPC serves 65 faculty members and research scientists from eight colleges and seventeen departments at the University of Minnesota, and employs approximately 125 research assistants, computer programmers and technicians, administrative staff, and data processing staff. As a leading developer and disseminator of demographic data, MPC also serves a broader audience of over 25,000 demographic researchers worldwide. MPC fosters connections among population researchers across disciplines and opens new opportunities for large-scale externally funded research collaborations.

The past year has been an especially exciting time of growth and development at MPC. On July 1, 2007, MPC officially became a University-Wide Center, and moved its administrative home from the College of Liberal Arts to the Office of the Vice President for Research. The new administrative environment makes it easier for MPC to forge large-scale interdisciplinary research collaborations. Since May 2007, the center has received funding for seven new cross-collegiate collaborative projects from the National Institutes of Health and the National Science Foundation. These new grants, with total costs of \$16,876,378, will expand and support the MPC collections of demographic data from around the world.

During the past year, MPC researchers have created dozens of new historical census datasets comprising almost 500 million records; improved the comparability and documentation of census and health data across time and space; preserved vast quantities of older microdata at risk of destruction or obsolescence; released a comprehensive historical geographic information system for the United States; and implemented innovative tools for the electronic dissemination of demographic and health data.

MPC researchers have published over 200 articles in the past 12 months, including prominent contributions to the top journals of demographic research. Highlights include:

- Ann Meier showed that teenage sex does not have adverse consequences for mental health.
- Changhwan Kim demonstrated that the inequality of wages within occupations has grown faster over the past two decades than has inequality between occupations.
- Carolyn Liebler and Andrew Halpern-Manners developed a method for comparing multiple-race responses of recent censuses with single-race responses in older data.
- Phyllis Moen and Erin Kelly found that flexible work time policies improve healthy behavior, reduce familial conflict, and increase worker productivity.
- Steven Ruggles and Misty Heggeness discovered that patriarchal multigenerational families are becoming more common through most of the developing world.

IV. Academic Health Center Interdisciplinary Initiatives

A. Institute for Engineering in Medicine

The Institute for Engineering in Medicine (IEM) is an interdisciplinary research organization that leverages the collective expertise, imagination, and energy of University of Minnesota faculty from engineering and health sciences and individuals from local industry toward highly collaborative, goal-oriented research to solve problems in health care. The products of this research are new concepts, procedures, devices, and materials that will enhance the University's portfolio in health care delivery and will support Minnesota's health care product industry.

B. Cancer Center

Advancing knowledge, enhancing care is the mission of the Masonic Cancer Center at the University of Minnesota. The Masonic Cancer Center fosters this mission by creating a collaborative research environment focused on the causes, prevention, detection, and treatment of cancer; applying that knowledge to improve quality of life for patients and survivors; and sharing its discoveries with other scientists, students, professionals, and the community. The Masonic Cancer Center was founded in 1991. It is part of the University's Academic Health Center, which also includes the Medical School, Dental School, College of Pharmacy, and Schools of Public Health and Veterinary Medicine. The Masonic Cancer Center's research partners include the University's Stem Cell Institute, Center for Immunology, Center for Magnetic Resonance Imaging, and the Institute of Human Genetics; and its clinical research and treatment partners include the University of Minnesota Physicians; University of Minnesota Medical Center, Fairview; and University of Minnesota Children's Hospital, Fairview.

The National Cancer Institute (NCI) designated the Masonic Cancer Center, University of Minnesota a comprehensive cancer center in 1998, and in 2003, NCI renewed this designation. The Masonic Cancer Center is one of only 39 institutions in the United States to hold this designation. It is awarded only to institutions that make ongoing, significant advances in cancer research, treatment, and education.

C. Center for Bioethics

Established in 1985, the University of Minnesota's Center for Bioethics is a nationally prominent, yet locally focused, resource that conducts important research and provides educational programs and services to help students, professionals, policy makers, and the public confront the complex ethical issues emerging in health care and the life sciences. The University of Minnesota, the state legislature, and a progressive health-care oriented community have helped make the Center one of the most respected and highly visible bioethics programs in the country. The mission of the Center is to advance and disseminate knowledge concerning ethical issues in health care and the life sciences. The Center carries out this mission by conducting original interdisciplinary research, offering educational

programs and courses, fostering public discussion and debate through community outreach activities, and assisting in the formulation of public policy.

D. Center for Spirituality and Healing

The Center for Spirituality and Healing is designed to be a world-renowned resource that enhances health and well-being by educating health professionals, empowering consumers, and fundamentally transforming the delivery of health care through the creation of interdisciplinary academic, research, clinical care, and outreach programs that advance integrative health and healing.

A part of the Academic Health Center, the Center for Spirituality & Healing draws on the rich expertise of faculty and community practitioners to advance our understanding of diverse cultures, beliefs and health practices, and builds on the University's strengths of innovation and clinical excellence. The Center has been designated by the NIH as a Developmental Center for Research on Complementary and Alternative Medicine, a distinction attained by only five institutions in the U.S.

E. The BioMedical Genomics Center

From its inception in the spring of 2000, the BioMedical Genomics Center at the University of Minnesota has been advancing genomics and proteomics research as it applies to human and animal health. The BMGC continues to maintain, upgrade, and acquire state-of-the-art instrumentation for genomics and proteomics-focused research. The BMGC is a leader in the development of genomics-related education and outreach through specialized conferences, seminars, and workshops. Through these efforts, the BMGC has helped establish entrepreneurial pathways linking genomics and proteomics discoveries to the founding of knowledge-based companies in the state of Minnesota.

F. Center for Mass Spectrometry and Proteomics

The Center for Mass Spectrometry and Proteomics facility provides support, equipment, and expertise for analyzing complex protein mixtures. Mass spectrometric data can provide intact protein molecular weight as well as protein identification by peptide mass fingerprint or MS/MS data, combined with protein database searching.

G. Office of Clinical Research

The Office of Clinical Research, founded in September 2005, creates a home for clinical and translational science that promotes collaborative, innovative research and training by bridging disciplines, institutions, and communities to advance knowledge and improve human health.

H. Center for Interprofessional Education

The Center for Interprofessional Education promotes interprofessional educational opportunities that advance teamwork and result in improved health care. Established in 2007, the Center works collaboratively with Academic Health Center schools and colleges to identify, promote, implement and evaluate interprofessional educational activities for health professions students and health professionals.

I. Center for Critical Care

The Center for Excellence in Critical Care was established in 1998 as an alliance between healthcare practitioners and researchers at the University of Minnesota, the University of Minnesota Medical Center - Fairview, the Veterans Administration Medical Center, and Regions Hospital, committed to the advancement of research, training and practice in critical care. The Center offers seminars, speakers and coursework in critical care for postbaccalaureate trainees as well as critical care practitioners. The Center faculty are involved in critical care research intent on increasing the knowledge of critical care medicine.

J. Center for Drug Design

The Center for Drug Design (CDD) is a distinctive research facility in the Academic Health Center of the University of Minnesota using cutting edge technology to develop highly effective drugs. It provides a research environment for leading scientists to share strategies and develop novel drug therapies as part of a rigorous academic research agenda.

K. Institute for Therapeutics Discovery and Development

The University of Minnesota Institute for Therapeutics Discovery and Development (ITDD) opened its doors in September 2007 as a premier resource for identifying, testing, and advancing the development of innovative molecule-based solutions to challenging medical problems.

Headed by Gunda Georg, a world-renowned medicinal chemist who joined the University of Minnesota in January 2007, the Institute brings together sophisticated technology and some of the best and brightest players in drug discovery from academia and industry. Their job: to help clinicians and biomedical researchers find compounds that produce a desired effect on a specific protein, cell, cellular system, or disease, then modify and refine those compounds so they can be used at a therapeutic level.

L. Molecular and Cellular Therapeutics Program

The Molecular and Cellular Therapeutics Program has brought together the regulatory, quality, product development, manufacturing and facilities engineering expertise to enable the translation of novel, experimental research into medicine for use in human clinical trials. The complex and rigorous regulatory requirements, quality and technical expertise,

and physical facilities needed for cGMP production of cell- and tissue-based products, monoclonal antibodies, and active pharmaceutical ingredients, have been brought together at Molecular and Cellular Therapeutics. Our technical, developmental, regulatory, and quality expertise ensure that all FDA requirements are satisfied and products are delivered to the patient in the shortest possible time.

V. System Academic Administration Interdisciplinary Initiatives

A. Urban Research and Outreach Center/University Northside Partnership

The University established the new Urban Research and Outreach/Engagement Center (UROC) in North Minneapolis, patterned after the highly successful research and outreach centers throughout rural Minnesota. The UROC will anchor the University's presence in the community, coordinate and facilitate new and existing University research, outreach and engagement activities related to North Minneapolis, and create multi-disciplinary teams and sustained partnerships. The University Northside Partnership (UNP) was created as a mechanism to convene the following partners: University representatives, community organizations and residents, and city and county government officials to see how they might leverage their resources to "build healthier families and stronger communities together" in North Minneapolis.

B. Center for Transportation Studies

The Center for Transportation Studies (CTS) addresses the need for closer cooperation between University faculty and state and federal departments of transportation by strengthening the University's role in transportation research and education.

C. Center for Urban and Regional Affairs

The Center for Urban and Regional Affairs (CURA) is an all-University applied research and technology center at the University of Minnesota that connects faculty and students with nonprofit organizations, ethnic and racial minority groups, businesses, rural towns, inner-city neighborhoods, suburban communities, local governments, and public institutions in Minnesota.

D. Children, Youth and Family Consortium

The Children, Youth and Family Consortium (CYFC) brings together the expertise of the University of Minnesota and the resources of Minnesota's communities to address critical health, education, and social policy concerns in ways that improve the well-being of Minnesota's children, youth, and families.

E. Council on Public Engagement

The Council on Public Engagement is charged with strengthening the University's public mission across the full range of University activities and making practical proposals for institutionalizing public engagement as a continuing priority.

F. Healthy Foods, Healthy Lives Institute

The Healthy Foods, Healthy Lives Institute focuses on interdisciplinary research and outreach from areas as wide-ranging as medicine, agriculture and exercise science. The institute, which grew out of one of President Robert Bruininks' initiatives, provides a way to capitalize on work already being done at the University.

G. Interdisciplinary Center for the Study of Global Change

The Interdisciplinary Center for the Study of Global Change (ICGC) is an interdisciplinary and cross-cultural community of faculty and graduate students committed to studying global change, especially as seen in the developing world; addressing issues of peace, conflict, security, social and environmental change, justice, human rights, development, and international cooperation.

H. College Readiness Consortium

The new College Readiness Consortium was initiated by President Robert Bruininks to better serve the needs of the education community. It will engage educators, school districts, state education organizations, and the business community with University faculty and staff to collaborate in addressing critical education issues. These collaborative efforts are aimed at improving the coherence, relevance and visibility of university PreK-12 activities, enhancing public and private PreK-12 education systems, preparing youth for higher education, closing the achievement gap for underrepresented groups, and ensuring access to post-secondary education opportunities.

I. University Metropolitan Consortium

The University Metropolitan Consortium was established in 2006 to link the centers, programs, and faculty and staff at the University engaged in teaching, research, and outreach concerned with understanding metropolitan change and development. Engaging the Consortium with those outside the University in the public, private, and non-profit sectors will enhance the University's ability to contribute to the analysis and discussion of important metropolitan issues.



**UNIVERSITY OF MINNESOTA
BOARD OF REGENTS**

Educational Planning and Policy Committee

June 12, 2008

Agenda Item: Consent Report

review review/action action discussion

Presenters: Senior Vice President/Provost Thomas Sullivan

Purpose:

policy background/context oversight strategic positioning

To seek Board approval of new academic programs and program additions, program deletions and discontinuations, and/or program changes, as outlined below.

Outline of Key Points/Policy Issues:

- I. Request for New Academic Programs
 - Graduate School—Deliver Extant M.S. Degree in Biostatistics at the Rochester Campus
 - College of Continuing Education (Twin Cities Campus)—Create Minor in Manufacturing Technology

- II. Request for Approval of Changed Academic Program
 - Morris Campus—Change Name of B.A. Degree in Speech Communication to B.A. Degree in Communication, Media, and Rhetoric

Background Information:

This report appears as a regular item on the Educational Planning and Policy Committee agenda. Academic program proposal review and approval is governed by University of Minnesota Policy 2.2.4: Review of Proposals for New, Changed, and Discontinued Academic Programs. Approval by the Board of Regents is required for the establishment of new academic programs; addition of formal tracks and of new sites for existing academic programs; discontinuance/merger of existing programs; and changes in program titles/degree designation.

President's Recommendation for Action:

The President recommends approval of the academic program proposals detailed in the Consent Report.

**University of Minnesota Board of Regents
Educational Planning and Policy Committee
June 12, 2008**

Consent Report

I. Request for Approval of New Academic Programs

▪ **The Graduate School—Deliver Extant M.S. Degree in Biostatistics at the Rochester Campus**

The Graduate School requests approval to deliver the extant Master of Science (B.S.) degree in Biostatistics at the Rochester campus, effective fall semester 2008. The degree program currently is offered at and will continue to be the responsibility of the Twin Cities campus while utilizing the resources of the School of Public Health and the Division of Biostatistics. Program faculty and staff seek to extend delivery of the program to the Rochester campus in order to more fully meet the needs of the large number of biostatisticians in the Rochester Area, including those at the Mayo Clinic, who seek advanced training in biostatistics.

▪ **College of Continuing Education (Twin Cities Campus)—Create Minor in Manufacturing Technology**

The College of Continuing Education on the Twin Cities campus requests approval to offer a minor in Manufacturing Technology, effective fall semester 2008. The minor will provide students an opportunity to explore systems, processes and tools integral to global enterprise. The minor will incorporate theory and application to address competencies related to technology and process in the manufacturing sector.

II. Request for Approval of Changed Academic Programs

▪ **University of Minnesota Morris—Change Name of B.A. Degree in Speech Communication to B.A. Degree in Communication, Media, and Rhetoric**

The University of Minnesota Morris requests approval to change the name of Bachelor of Arts (B.A.) degree in Speech Communication to B.A. degree in Communication, Media, and Rhetoric, effective fall semester 2008. The name change is being proposed to reflect better the program curriculum.



**UNIVERSITY OF MINNESOTA
BOARD OF REGENTS**

Educational Planning and Policy Committee

June 12, 2008

Agenda Item: Information Items

review review/action action discussion

Presenters: Senior Vice President/Provost Thomas Sullivan

Purpose:

policy background/context oversight strategic positioning

To inform members of the Educational Planning and Policy Committee of noteworthy items and policy-related issues affecting University units and departments.

To provide the committee with background information related to issues of regional, national, and international policy affecting higher education.

Outline of Key Points/Policy Issues:

There are no information items to report.

Background Information:

This report appears as a regular item on the Educational Planning and Policy Committee agenda.