

**UNIVERSITY OF MINNESOTA**

**BOARD OF REGENTS**

**Board of Regents Work Session**

**Thursday, February 7, 2008**

**1:30 - 3:15 p.m.**

**600 McNamara Alumni Center, Boardroom**

**Board Members**

Patricia Simmons, Chair

Clyde Allen, Vice Chair

Anthony Baraga

Dallas Bohnsack

Maureen Cisneros

Linda Cohen

John Frobenius

Venora Hung

Steven Hunter

Dean Johnson

David Larson

David Metzen

**AGENDA**

1. Graduate Education: Academic & Student Experience - T. Sullivan/  
C. Carrier/G. Dubrow/G. Rinehart (pp. 2-14)



## UNIVERSITY OF MINNESOTA BOARD OF REGENTS

**Board of Regents Work Session**

**February 7, 2008**

**Agenda Item:** Graduate Education: Academic & Student Experience

review       review/action       action       discussion

**Presenters:** Senior Vice President/Provost Thomas Sullivan  
Vice President Carol Carrier  
Vice Provost and Dean of Graduate Education Gail Dubrow  
Vice Provost for Student Affairs Gerald Rinehart

**Purpose:**

policy       background/context       oversight       strategic positioning

This presentation will highlight the breadth and depth of graduate education at the University of Minnesota and outline the role of graduate education at a major research university. The presentation will underscore critical components of a successful graduate student experience.

**Outline of Key Points/Policy Issues:**

1. Describe the organization and function of the Graduate School at the University of Minnesota.
2. Summarize major initiatives within the Graduate School.
3. Highlight facets of graduate programs (including time to degree, completion rates, and career outcomes for doctoral students) and information on graduate program development, revisions, mergers, and closures.
4. Provide an overview of the role of graduate student affairs vis-à-vis academic, financial, and social support; housing; and health and well being of graduate students.

**Background Information:**

This work session is a joint meeting of the Educational Planning and Policy Committee and the Faculty, Staff & Student Affairs Committee. The Board of Regents has endorsed the University's strategic plan to become one of the top three public research universities in the world. Because graduate education is a critical factor in achieving this aspirational goal, understanding the facets of graduate education is of paramount importance.

This item responds to the following priority of the Board of Regents 2007-2009 Workplan: Schedule regular reports on strategic positioning and other critical issues.

**University of Minnesota  
Board of Regents  
Work Session  
February 7, 2008  
Graduate Education: Academic & Student Experience**

***Introduction***

Many Board of Regents sessions on “the student experience” over the past several years have focused on undergraduate education. The Regents have reviewed initiatives to improve the undergraduate learning environment, discussed trends in undergraduate student health and well-being, and discussed survey data on student satisfaction and interests. There are two primary reasons why the graduate experience has received less attention.

First, the characteristics which many associate with the graduate student experience are often seen as the ideal toward which the undergraduate experience can only aspire:

- Students in graduate programs are almost by definition “successful.” They have found their academic/intellectual niche, and the passion and love of learning which they often bring to their disciplines represent for many the ideal outcome of an exhilarating and successful learning experience.
- Graduate programs are frequently characterized by the strong commitment of the individual academic departments to their graduate cohorts. One-to-one student-faculty interaction is often considered a staple of graduate school teaching and advising.

Second, the data needed to assess the effectiveness of efforts to improve the learning experience have been available more readily at the undergraduate level. For the past several years, for example, this data has been used to track progress in critical areas such as retention and graduation. Without relevant data, it is difficult to know where problems may exist and what progress is being made.

Efforts now are underway to gather the data needed to allow us to track graduate student progress and evaluate the effectiveness of our graduate programs. In addition, this work session includes a review of major initiatives designed to enhance the graduate student learning experience and ensure our programs are effectively preparing students for their academic and professional careers.

***Overview of the Organization and Function of the Graduate School***

***Organization***

The University of Minnesota has one of the country’s largest and most wide-ranging graduate schools, producing the 4<sup>th</sup> highest number of Ph.D.s in the country. We have over 10,000 graduate students, of whom 26% are international, and admit about 2,300 new students each year. The breadth of faculty expertise, spanning 3600 faculty in more than 180 graduate programs, provides opportunities for an enormous range of disciplinary and interdisciplinary studies.

The Graduate School is a coordinating college under the jurisdiction of the Senior Vice President for Academic Affairs and Provost E. Thomas Sullivan and the leadership of Vice Provost and Dean Gail Dubrow. It functions as an administrative and support unit for the majority of the University of Minnesota's graduate degree programs, including many professional degree programs. The Graduate School provides leadership in promoting excellence in graduate education throughout the University. Inherent in this responsibility is the development, support and review of excellent graduate programs; oversight of graduate student admissions in collaboration with the graduate faculty in each program; monitoring of Graduate School standards and requirements; and maintenance of accurate student records. The Graduate School promotes and disseminates known "best practices" in graduate education, and exercises leadership in emerging areas of intellectual inquiry, including support for interdisciplinary approaches to student-driven research, teaching and learning.

The Graduate School encourages and supports both students and faculty in disciplinary and interdisciplinary research, teaching, and service activities that solve societal problems and contribute to knowledge and discovery across a broad range of fields of study, including the natural and physical sciences, arts and humanities, social sciences and education, business and engineering. The School's organizational structure includes a Dean, four Associate Deans, and offices dedicated to student recruitment and admission, student services, fellowships, systems and data management, diversity and outreach, postdoctoral affairs, development/fundraising and interdisciplinary initiatives.

### *Mission*

The Graduate School's mission is to advance the education of graduate students. In addition, the Graduate School makes the advanced teaching and research of the University of Minnesota as effective as possible by providing efficient and innovative central services; promulgating best practices in graduate education; providing support on a competitive basis for faculty and student research, and creative activity. The Graduate School works cooperatively with the Office of the Senior Vice President for Academic Affairs and Provost to support college and intercollegiate programs of graduate education.

### *Types of Graduate Students and Degrees*

The University of Minnesota offers both graduate and professional degrees. This work session will focus on graduate degrees offered under the aegis of the Graduate School, as opposed to professional degrees, which are often housed in professional schools such as the Carlson School of Business (M.B.A), Law School (J.D.), School of Medicine (M.D.), and School of Dentistry (D.D.S). Types of graduate degrees offered at the University of Minnesota include: post-baccalaureate certificate, masters (M.A., M.S., M.P.H.), post-masters certificate, and doctoral (Ph.D). Not all programs offer masters and doctoral degrees, and some offer doctoral degrees only. Certain doctoral programs have a masters required for admission while others admit students who have only completed undergraduate degrees.

Doctoral students are divided into two major categories: humanities/social science and sciences/engineering. Students in the humanities/social science group are often on nine-month

appointments and rely on research and teaching appointments as sources of financial support during their graduate education. Ordinarily, their dissertation or thesis research is not directly supported by grants held by their faculty supervisors. Students in the sciences/engineering often hold 12-month appointments working on funded research projects directed by faculty. In these areas of inquiry, the topics students pursue in their theses and dissertations typically coincide with research appointment duties. These differences inform discipline-specific outcomes for graduate students and are reflected in the time to degree and completion-rate statistics at the University of Minnesota and for graduate education nationally.

### ***Major Initiatives of the Graduate School***

In addition to its administrative responsibilities, the Graduate School plays a leadership role in advancing best practices within graduate education. Several focused initiatives, under the leadership of Vice Provost and Dean Gail Dubrow, have brought focused attention to needed improvements at key stages of graduate education.

#### *Graduate and Professional School Admissions Initiative*

This initiative, launched in Spring 2008 with more than 20 programs of graduate and professional education who volunteered to participate, reexamines long established admissions processes and criteria to ensure that they select for the most talented and diverse body of students at the University of Minnesota. It is a joint project of the Graduate School and the Office for Equity and Diversity.

#### *Graduate Writing Initiative*

For graduate students, degree completion requires timely progress through the stages of coursework, examinations, and the capstone project: a thesis or project, for masters students, and the dissertation, for doctoral students. The dissertation, in particular, is a formidable project that must meet the standard of being an original contribution to knowledge. While progress on the dissertation is a clear reflection of a student's capabilities it also depends on a close working relationship with a single or multiple faculty mentors. The evidence suggests that student progress can be improved when they have access to a wider range of intellectual supports at the dissertation stage in the form of seminars that "jump start" the selection of research topics, peer support groups, seminars that bring together students working on related subjects, as well as counseling services for those students facing more complex life issues that hinder progress.

The Graduate School's writing initiative is weaving a web of resources to meet the needs of graduate students at the dissertation stage, promoting the development of more formal writing options within the departments, and providing new options for students working on topics that cross disciplines to convene in interdisciplinary dissertation seminars. As such, it is intended to contribute to the quality of the graduate student experience and to improvements in graduate student time-to-degree and completion, particularly in the social sciences and humanities.

### *Investment into Recruitment of Graduate Students*

The University of Minnesota's leadership clearly has recognized that a substantial new series of investments in graduate education is necessary to advance the University's goal of moving into the top ranks of public research universities. Toward that end, new investments in specific colleges and programs, such as the biological sciences, public affairs, and informatics, have been earmarked to support the recruitment of the best applicants into these programs.

The Graduate School also has been the target of new central investments, which reach students in the form of fellowships to outstanding applicants and block grants to academic programs that have increased the success of University of Minnesota graduate programs in competing with the top public and private universities for the best student talent in the world. Since FY2005, the University of Minnesota has invested \$22.3 million in graduate education, with nearly \$17 million of these funds in the form of grants and fellowships that provide direct support to graduate students and their mentors. The current recurring allocation of central funds that support the Diversity Of Views & Experiences (DOVE) fellowship pool is \$800,000. This is a 167% increase from the \$300,000 invested in FY06. In that same year the recurring state allocation for Graduate School Fellowships was \$3.6M. In FY09 that investment will have been increased to \$7.74M per year, which represents a 115% increase from FY06. During this same period, Block Grant fellowship awards provided to graduate programs for student support have been increased from \$2.4M to \$4.32M, an 80% increase. Finally, the Grant-in-Aid of Research, Artistry, and Scholarship Program has risen by \$900,000 per year, a 70% increase over FY06 support levels.

### ***Graduate Programs***

#### *The Education of Doctoral Students: Time to Degree and Completion Rates*

Issues of time to degree and rates of completion have become a national issue among graduate deans. Time to degree range from approximately three years for a masters degree to five to nine years for a doctorate, depending on field of study and teaching and research load students carry during their education.

Of greatest concern is the long time to degree in select social science and humanities fields. The University of Minnesota's medians in those areas closely correspond to national averages and we participate in efforts by the Council of Graduate Schools to identify the causes and adopt best practices in degree completion within doctoral education. The Graduate School currently is leading a series of focused conversations with academic deans and department chairs aimed at reviewing these data and developing plans for improvement where necessary.

#### *Career Outcomes for Doctoral Students*

Nationally, studies of the uses to which doctoral students put their education have begun to show more diverse career outcomes, both in terms of student aspirations and career placements. While universities and colleges across the country, including the University of Minnesota, have engaged in long-term tracking of undergraduate career outcomes and have solicited feedback from employers of undergraduates to understand key competencies that need to be mastered in

the context of an undergraduate education, less attention has been paid historically to the actual outcomes of doctoral education nationally.

National studies are beginning to provide new information on career outcomes for students in select fields. Under Provost Sullivan's leadership, the Graduate School has begun to track degree outcomes for doctoral students more closely, sharpening our understanding of where our graduates are being placed and prompting new reflection on the actual competencies that are needed for the array of career outcomes that characterize graduate education in the 21<sup>st</sup> century. In this session, we will discuss the first findings from the Graduate School's new studies of time to degree, degree completion rates, and career outcomes across the fields of graduate education.

### *Effective Stewardship of Academic Resources: Graduate Program Development, Revision, Merger, and Closure*

The role of the Graduate School in collaboration with the Office of the Senior Vice President for Academic Affairs and Provost is to manage proactively the full portfolio of graduate programs at the University of Minnesota in order to ensure outstanding quality, guarantee that best educational practices are incorporated into the development of academic programs, engage faculty in the review of new academic proposals, and where necessary, monitor the improvement or closure of programs that have outlived their relevance, demand, or where quality has become unacceptable.

The University has developed key principles for evaluating and reviewing academic programs. They include: centrality to the university's mission; quality, productivity and mission; uniqueness and comparative advantage; enhancement of academic synergies; demand and resources; efficiency and effectiveness; and development and leveraging of resources. For more information, see: [http://www1.umn.edu/systemwide/strategic\\_positioning/decision.html](http://www1.umn.edu/systemwide/strategic_positioning/decision.html) . The processes for monitoring the academic quality of graduate programs, and recent outcomes in new program development, revision, merger, and closure, will be reviewed in this session.

### ***Graduate Student Affairs***

#### *The Academic, Financial, and Social Support of Graduate Students*

This section will highlight the role of the Graduate School, in partnership with academic programs in which students are enrolled, in providing a wide range of academic supports to our students. Doctoral education encompasses both preparation in a specific field and professional socialization through a combination of services at the departmental level and the central Graduate School. Supports are provided through three distinct stages of doctoral education: gaining familiarity with subject area, largely through coursework; preparing for exams that demonstrate mastery in the chosen academic field and specializations; and a capstone project that demonstrates a student's capacity to make an original contribution to knowledge, the dissertation. As students progress through the program, they increasingly move into one-on-one or multiple mentoring relationships with the faculty. In this final stage, students work closely on research projects under their advisor's supervision.

Preparation for teaching may occur in the department or through specialized programs run by the Center for Teaching and Learning, such as the national Preparing Future Faculty Program. These elements combine to produce a distinctly different approach to education at the graduate level than students experienced in undergraduate education. For that reason, both the academic programs and the Graduate School endeavor to effectively prepare students for a model of learning that requires greater independence and increasingly more complex responsibilities in an apprenticeship that gradually leads to become the junior colleagues of, and eventually the professional peers of their faculty mentors.

A critical issue for public universities is financing graduate education, since it is a multi-year endeavor, and competing nationally for best students depends on assembling multi-year financial packages during the recruitment phase. The University of Minnesota supports its students through a combination of fellowships, employment as research assistants (RAs) and teaching assistants (TAs), and garnering outside awards and private contributions that support the degree progress of students. Recruiting the most outstanding graduate students through competitive, multi-year packages is an essential component to our goal of becoming one of the top three public research universities. This work session will include discussion of the close relationship that exists between recruiting top applicants and attracting and retaining the best faculty, two critical components of institutional excellence for the University of Minnesota.

Because undergraduate students are younger and many live on or near campus, their social lives are often centered on activities such as clubs, student organizations, and other social or co-curricular opportunities in the campus community. Graduate students are more widely dispersed in their housing choices and family arrangements. However, the intensity of their studies and employment responsibilities runs the risk of social isolation. For that reason, departmentally based social activities have been encouraged, and student organizations such as the Graduate and Professional Student Association (GAPSA) and the Council of Graduate Students (COGS) mount regular social events and encourage involvement in their organizations. Here, students can meet graduate students from other programs on the Twin Cities campus.

Programs of both social and intellectual interest are offered routinely through the aegis of various units of the Graduate School, including the Diversity Office's Community of Scholars Program, which provides social and intellectual support to graduate students who might otherwise be isolated on account of coming from underrepresented groups, families, or communities unfamiliar with the demands of graduate education. A wide range of programs offering warm and welcoming support, as well as sage advice from more experienced members of the academic community, are open to all University of Minnesota graduate students.

Leadership opportunities provide another dimension to social and professional development. As their progress through their graduate program advances, one strategy for both alleviating isolation and promoting the professional development of graduate students is to engage them actively in the governance of their programs as well as in University committees ranging from the departmental level to participation in the strategic positioning process.

### *Housing Graduate Students*

The University historically has maintained a commitment to housing a significant portion of the first year undergraduate students. University-sponsored housing for other populations, however, has been more limited. Facilities such as the Como Student Community and the Commonwealth Terrace Cooperative provide married/partner and family housing for graduate students, but overall only 5% of graduate and professional students live in University owned/operated residences. The University has recently explored the experience of graduate students gaining access to affordable housing through surveys conducted by the Graduate School, the Council of Graduate Students, and other entities of the graduate population, and it is considering the prospect of actively planning for the provision of some housing that will provide housing to those graduate students who are interested in securing affordable housing on or near campus. The work session will include discussion of recent developments on that front.

### *Supporting the Health and Well-Being of Graduate Students*

While providing health benefits to graduate students increases the cost (“fringe rates”) of their financial support, it also provides a social safety net in terms of their health and welfare during their years of study at the University of Minnesota. This work session will review graduate student health benefits and address national concerns about how the stress associated with the pursuit of advanced degrees is being addressed by the administrative units charged with providing services to graduate students.

In many of our surveys that attempt to capture “the student experience,” graduate and professional students are now included as a separate and distinct category from undergraduates, allowing us to plan more effectively for appropriate services. Going forward, we also plan to closely examine possible differences between graduate and professional students at the University of Minnesota, allowing for a more finely grained analysis of student needs and University Services.

With this limitation in currently available data kept in mind, the surveys do suggest several interesting characteristics:

1. Trends in overall satisfaction mirror the progress that has been made at the undergraduate level.

- Since 1991 graduate/professional student satisfaction with their academic experience has improved significantly. On a six-point scale, satisfaction has risen from 4.30 in 1991 to 4.95 in 2006
- 90% indicate that if they were to do it over, they would still choose to pursue their degrees at the University of Minnesota

2. Work and financing education:

- 82% are employed, with 43% working 30 hours or more per week
- Most important sources for financing their degree:

Loans	36%
Work/Assistantships	34%
Scholarships/grants	21%
Parents/relatives	8%

### 3. Demographics

- 14% are parents or guardians of dependents
- 54% plan to live in Minnesota following graduation  
(only 18% are certain they will not remain in Minnesota)

### 4. Graduate/Professional students constitute:

- 52% of Boynton Health Services visits
- 27% of University Counseling Services visits
- 33% of Student Conflict Resolution cases

The Provost's Committee on Student Mental Health has spent considerable efforts ensuring that all students, including graduate and professional students, have increased awareness of mental health resources on campus and in the community. Last year the Committee launched a Web site [www.mentalhealth.umn.edu](http://www.mentalhealth.umn.edu), which for the first time lists all of the University's various student mental health resources in one place. This site has a special page devoted to graduate and professional students. The University's primary providers of on-campus mental health assistance, Boynton Mental Health Clinic and University Counseling and Consulting Services work closely together to ensure that graduate and professional students have proper access to mental health services.

**GRADUATE SCHOOL FACT SHEET****Graduate Programs**

Number of <i>major fields</i> , Twin Cities	= 130
Number of <i>major fields</i> , Duluth	= 18
Total	= 148

Only one Duluth program grants a doctoral degree. Of the Twin Cities programs:

93	offer both master's and doctoral degrees
31	offer degrees only at the master's level
6	offer only a doctoral degree

Number of <i>free-standing minors</i> , Twin Cities	= 31
Number of <i>free-standing minors</i> , Duluth	= 1
Total	= 32

Number of *post baccalaureate certificates* (Twin Cities): 11

Number of *post-master's certificates* (Twin Cities): 1

**Graduate School Enrollment—Fall 2007**

Twin Cities	10,314	Down from 10,505 Fall 2006	Decrease:	1.8%
Duluth	546	Up from 510 Fall 2006	Increase:	7.1%
Total	10,860	Down from 11,015 Fall 2006	Decrease:	1.4%

**Graduate Faculty**

Approximately 3,600 graduate faculty members

**Distribution of Programs by Policy and Review Council**

Biological Sciences	27
Education and Psychology	14
Engineering, Physical and Mathematical Sciences	35
Health Sciences	17
Language, Literature and Arts	25
Social Sciences	30

**Degrees Awarded in 2006-07**

Doctoral	818
Master's	1,812
Certificates	61

The University of Minnesota ranks 4<sup>th</sup> in the country for the number of Ph.D.s produced yearly.

**Graduate Assistantships**

**2007-08**

9 month rate, 50% time; range \$12,650.00-\$19,710.00 plus tuition and health insurance  
 12 month rate, 50% time; range \$16,867.00-\$26,279.00 plus tuition and health insurance

Number of **2006-07** assistantships (estimated) (assuming 50% appointment)

3,075	teaching assistantships
3,205	research assistantships
<u>121</u>	administrative fellows
6,401	total

**Fellowships**

2007-08 Fellowships

Recurring Budget

Graduate School Fellowships Late January deadline	\$21,500 plus tuition and health insurance	} \$7,040,000
Doctoral Dissertation Fellowships Mid-March deadline	\$21,500 plus tuition and health insurance	
DOVE Fellowships		\$800,000
Bridging External Fellowships		\$200,000
Block Grant Fellowship Allocations		\$4,320,000
Endowed Fellowships Various Awards Early December deadline	30 (approx.) ranging from \$2,500 to \$18,000	(endowment income)
3M Fellowships		\$560,500
21 <sup>st</sup> Century Matching Fellowship Funds		\$2,400,000

**GRADUATE SCHOOL FELLOWSHIPS**  
Distribution by Policy and Review Councils  
2007-08

	Nominations Submitted	Awards Offered	Awards Accepted	2 <sup>nd</sup> Year of Two-Year Awards Taken
Biological Sciences	65	43	11	3
Education & Psychology	33	22	12	4
Engineering, Physical & Mathematical Sciences	115	78	19	9
Health Sciences	5	2	0	0
Language, Literature & Arts	37	27	11	0
Social Sciences	56	38	13	1
<b>TOTALS</b>	<b>311</b>	<b>210*</b>	<b>66**</b>	<b>17</b>

\*121 of the awards offered were 2 year offers

\*\* 29 of the awards accepted were 2 year offers

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**DOCTORAL DISSERTATION FELLOWSHIPS**  
Distribution by Policy and Review Councils  
2007-08

	Nominations Submitted	Awards Offered	Awards Accepted
Biological Sciences	36	25	22
Education & Psychology	11	8	8
Engineering, Physical & Mathematical Sciences	51	39	39
Health Sciences	5	2	2
Language, Literature & Arts	24	14	14
Social Sciences	43	26	26
<b>TOTALS</b>	<b>170</b>	<b>114</b>	<b>111</b>

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**Faculty Grant-in-Aid Research Funds, 2007-08**

<u>Fund</u>	<u>General Research Advisory Committee</u>	<u>Biomedical Research Advisory Committee</u>	<u>Funds Available to both Committees</u>
General Research State Special			\$845,377
O & M Funds			\$2,179,623
Research Funds		\$400,000	
TOTAL AVAILABLE FACULTY GRANT-IN-AID RESEARCH FUNDS: \$3,425,000			

**Faculty Summer Research Program**

2007-08 Budget: \$184,000

**Interdisciplinary Graduate Program Funds**

2007-08 Budget: \$380,000

**McKnight Land Grant Professorships, 2007-08**

11 new professorships (approximately \$1,100,000)

**Distinguished McKnight University Professorships, 2007-08**

6 new professorships (\$600,000)