Report of the College of Letters and Science Graduate Student Stipend Committee

March 1, 2007

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EXECUTIVE SUMMARY

Graduate student funding must become a priority of the UW administration. In addition, the UW partnership with the State must be based on a common vision for the nature of our institutional excellence and the central role of graduate students in our educational mission. The U.W.-Madison delivers an affordable education to Wisconsin's citizens that matches any elite institution. The educational experience depends on faculty, staff, and graduate students who have acquired or are acquiring the creativity, skills, and attitudes required to advance knowledge across all disciplines and to compete with anyone in the world. Other State and private universities have recognized the importance of delivering the strongest possible education and are now competing with the U.W.-Madison for the best faculty and graduate students. The U.W.-Madison is successfully competing for faculty but it is losing in the competition for graduate students. The primary recruiting tools for new graduate students are fellowships and graduate assistantships. Teaching assistant salaries are increasingly lower and fellowships are increasingly fewer than at competing institutions. A complicating factor is the inability of graduate students to compete for the majority of national fellowships because tuition and health care raise the costs so they exceed the fellowship. Peer institutions encourage competition for external funding by waiving tuition for graduate student appointments funded by external gifts, grants, and fellowships and allow graduate fellows to retain the same health care as other students.

The excellence of U.W. Madison graduate students is the key that lets faculty deliver a U.W. education to a large number of the State's citizens and to produce the research that translates into new opportunities. The committee urges the U.W. Madison, WARF, U.W. alumni and friends, the University of Wisconsin Foundation, and the State of Wisconsin to join in a partnership that addresses our competitiveness for graduate student recruiting immediately. Our recommendations fall into three categories.

Immediate Initiatives

- Increase Teaching Assistant Salaries.
- Provide tuition waivers for all funded graduate students.
- Provide funds over the next five years that reduce the serious negative consequences of the tuition remission rate increase.
- Help individual departments adjust to the new changes and become more entrepreneurial. Departments
 must work to adjust their programs and staff to optimize their effectiveness and decrease their time-todegree in today's competitive climate. The College of Letters and Sciences and the Graduate School
 must increase the flexibility of their policies and how departments use their funding. Graduate
 admission offers should be made earlier. The number of years for guaranteed funding should be
 increased and summer salaries should be available more widely.
- The newly created Senior Associate Dean for Graduate Education position must allow for the development of a unified plan that transcends individual administrative units. Individual administrative units should appoint representatives to work with the Senior Associate Dean in implementing these recommendations.
- Faculty and departments must seek more outside funding from agencies, alumni, departmental friends, private industries, and foundations. They also must re-examine and redirect their allocations to optimize priorities and balance for graduate student support.

Developmental Initiatives

- Institute a Graduate Student Fellowship Initiative that increases the number of fellowships. This Initiative would match gifts and donations for graduate student fellowships with money provided by WARF or the State of Wisconsin. It would also develop mechanisms that allow graduate students and faculty to compete for fellowships and grants requiring institutional support of tuition and health care.
- Increase the number of fellowships and especially work to restore previous levels of support for the competitive UW Fellowship Program.

Long Term Goals

- Raise all graduate stipends to the market value.
- Deepen the U.W.-Madison and the State commitment to graduate student recruiting and support.
- Educate the public as to the critical role that graduate students play at UW Madison.

The primary purpose of the University of Wisconsin–Madison is to provide a learning environment in which faculty, staff and students can discover, examine critically, preserve and transmit the knowledge, wisdom and values that will help ensure the survival of this and future generations and improve the quality of life for all. The university seeks to help students to develop an understanding and appreciation for the complex cultural and physical worlds in which they live and to realize their highest potential of intellectual, physical and human development.

University of Wisconsin-Madison, adopted June 10, 1988 (http://www.wisc.edu/about/administration/mission.php

INTRODUCTION

The University of Wisconsin at Madison seeks to provide an exceptional education to its undergraduate, graduate and professional students, and an environment in which faculty are able to carry out the most advanced and consequential research in their fields. The University's pursuit of excellence in its two major missions—research and teaching—has enjoyed the generous support of the people of Wisconsin, who have in turn benefited from a world-class institution committed to advancing their interests, affordably educating their children, and increasing their cultural and material well-being.

A university's excellence flows not from its physical plant, nor from its size, nor from the number and variety of its course-offerings. Excellence cannot be measured by the renown of a university's faculty, nor by the number of volumes in its library, nor by the number of patents it holds. All these are important, but the hallmark of genuine excellence is the extent to which a university cultivates a broad spirit of passionate inquiry amongst all its members: undergraduates and graduate students in dialogue with each other, with their professors, with staff; faculty testing ideas with their peers and among their students. To create and maintain an environment of lively intellectual inquiry, since its founding, the University of Wisconsin at Madison has sought out from the state, nation, and world the very brightest students, the best teachers, and the most innovative researchers in the country.

The University's great, ongoing mission is now over a century-and-a-half old, and from its inception has required the careful balancing of different claims and interests. It has derived its strength from a partnership between the University, its alumni, and the State of Wisconsin.

Balance Essential for Excellence

Like any complex organism, a great university requires balance among all of its parts — balance in its disciplines, its facilities, and particularly in its faculty, staff, graduate students, and undergraduate students. Imbalance in any part of an organism affects every other part. Graduate students are a vital part of a world-class university dedicated to teaching and research; they bring new energy and creative ideas into our classrooms and laboratories that spark learning and innovation in education and research. Not only do graduate students work with and teach our undergraduates, they are vital in the creation of an intellectual and physical infrastructure that immerses all our students in projects that address the most significant problems of our times. Just as a great university must recruit the best faculty from all over the world, it must also recruit the best graduate students. Faculty recruiting cannot be competitive without the best faculty. Without

the best faculty and graduate students, we cannot deliver the educational opportunities that Wisconsin's students have come to expect from our campus.

Despite the central role that graduate students play in teaching, research, and faculty retention, they are under-compensated compared to their counterparts at peer institutions and consequently the University is losing its ability to recruit the best graduate students. As a result of the reduced ability to recruit graduate students, all departments in the College of Letters and Science are discovering that their graduate programs are threatened, which further compromises the teaching of undergraduates as well as faculty research and retention. We are losing the competitive edge that has provided the foundation for the traditions of excellence in our research and teaching. Addressing this problem immediately is crucial, before our institution suffers further erosion.

Lack of Competitiveness

Responses to a survey of all departments in the College of Letters and Science document that the funding packages UW-Madison offers are grossly insufficient to attract the highly-qualified graduate students required for an institution of our caliber. Historically, we have competed favorably with not only large public institutions technically designated as our peers, but also the best private and public research universities such as Berkeley, Harvard, MIT, and Michigan. That is no longer the case. And what is worse, survey responses indicate an alarming trend – with increasing frequency UW-Madison is losing attractive candidates to second-tier programs. Both survey data and anecdotal evidence from faculty and departmental administrators describe the loss of desirable graduate students to institutions with weaker academic programs, but better stipends, more years of guaranteed support, more fellowships, and assistantships with lighter workloads. As our competitiveness for graduate students decreases, so also will our competitiveness for private and public research funding. Currently, U.W. Madison is one of the most successful institutions at bringing in external funding but this status will decline in the next decade if the current trends in graduate student recruiting continue.

Action Necessary

The excellence of the University of Wisconsin-Madison has resulted from a partnership between the State of Wisconsin and the University. The commitment of the citizens of Wisconsin to provide state residents an outstanding educational and research institution and the University's reciprocal commitment to deliver the best possible education and research combine to make the University of Wisconsin-Madison a world-class institution. Recent cutbacks and escalating costs have eliminated many of our support structures and have required reallocation of our resources and infrastructure. Our declining competitiveness for graduate students now threatens our future. Retaining our competitiveness requires the involvement of our students, our faculty, our administration, our alumni, our friends, our Governor, our State Representatives, and our citizenry. In order for the University to regain its ability to attract top-notch graduate students to work with our prestigious faculty and to assist in the education of our undergraduates, UW-Madison absolutely must make competitive funding of graduate students a top priority. This committee recognizes that the issues involved in increasing the competitiveness of graduate funding offers are complex, systemic, and beyond the purview of any one particular administrative office. We are heartened by the recent creation of the Senior Associate Dean for Graduate Education position in the Graduate School to assess and address the pressing and

ongoing issue of competitiveness in graduate recruiting. It is important that the person in this position be able to work with University administration at all levels in developing a comprehensive plan for changing the University's infrastructure that will restore the health and balance of our University.

Based on our year-long study of the state of graduate funding in the College of Letters & Science, we would direct attention to the following central issues:

Immediate Initiatives

- Increase Teaching Assistant Salaries.
- Provide funds over the next five years that reduce the serious negative consequences of the tuition remission rate increase.
- Help individual departments adjust to the new changes and become more entrepreneurial.
 - Departments and program should analyze their distribution of faculty, staff, and students to determine their most effective distribution of personnel and departmental/ program size.
 - o Increase flexibility in using the available funds from the College of Letters and Science and from the Graduate School.
 - o Graduate admissions offers must be made earlier.
 - o Increase the number of years for guaranteed graduate funding in the offers to new graduate students to match offers made at our peer institutions.
 - o Examine time to degree in departments and programs to see if it can be improved.
 - Re-examine and redirect current College and University fund allocations to optimize priorities and balance for graduate student support.
 - o Increase summer support for teaching assistants.
- Graduate student funding must become a priority of the UW administration. The
 committee recommends that individual administrative units appoint representatives to
 work with the Senior Associate Dean for Graduate Education in implementing these
 recommendations.

Developmental Initiatives

- Institute a Graduate Student Fellowship Initiative. Steps include:
 - Develop mechanisms that allow students to apply for the large number of external fellowships that require institutional support of the associated costs of tuition and health care.
 - Reduce or eliminate the associated costs of tuition and health care that the University or the faculty must pay for any graduate fellowship, ideally by agreement with the State of Wisconsin.
 - Launch the initiative with a campaign that highlights the importance of graduate student recruiting and graduate student stipends to the educational mission of the UW-Madison and the problems we are now facing. The UW-Foundation, the UW Alumni Association, the College of Letters and Science and University administration, and our contacts with State government all need to participate in bringing the message to the attention of Wisconsin's citizens.
 - Developing sources of matching funds for gifts, ideally in partnership with the
 State. An excellent model is the University of Minnesota's recommendation for

- the State of Minnesota to provide annual funding of \$5M for fellowships with matching funds provided from a privately raised endowment.¹
- Work with the UW-Foundation and the UW Alumni Association to present development opportunities to potential donors for graduate student fellowships and supplemental funding that raises graduate student stipends to the market values.
- The Wisconsin Alumni Research Foundation should increase support of fellowships and graduate students, and especially should work toward restoring previous levels of funding for the undesignated, competitive UW Fellowship Program.
- Faculty and departments working with the UW Foundation and the Alumni Association, should develop plans to increase the level of outside funding for graduate education they receive from agencies, alumni, departmental friends, private industries, and foundations. Departments should work together to share best practices in this regard.

Long Term Goals

- All graduate stipends need to be raised to the market value established by the individual peer departments.
- The partnership between the University and the State must be based on a common vision for the nature of our institutional excellence and the central role of graduate students in our educational mission.

BACKGROUND

Graduate student appointments vary widely between different departments. Table 1 shows how graduate students are supported in the different divisions of the University. Research Assistant (RA) appointments are the most important source of support in the physical and biological sciences. Teaching Assistant (TA) appointments are the most important source of support in the arts and humanities. Project Assistant (PA) and TA appointments are the most important source of support in the social sciences. For graduate student recruiting, TA appointments are the most important source of support for most departments although PA appointments are equally important for many social science departments. Although there are fewer fellowships available, they play a very important role in recruiting because they attract the top students. RA appointments are less common for entering graduate students and TA (29%) appointments are the most important. Since the UW-Madison's strength rests on the uniform excellence of all its programs, it is important to address the problems that have developed in all areas for each source of support.

Supported and Unsupported Graduate Students (Fall 2005)								
	Enrolled (%)	Supported (%)	Fellows	PA's	RA's	TA's	Trainees	Unsupported (%)
Biological	1912 (21)	1510 (79)	126	73	1086	107	118	402 (21)
Humanities	1287 (14)	785 (61)	117	131	3	535		502 (39)
Physical	2438 (27)	1922 (79)	136	98	1166	483	40	516 (21)
Social	3316 (37)	1686 (51)	192	676	190	570	58	1630 (49)
Totals	8953	5903	571	978	2445	1695	216	3050
Percent of Total		66%	6%	11%	27%	19%	2%	34%
Percent Supported			10%	17%	41%	29%	4%	

Table 1- Source of Graduate Student Support in Different University Divisions

¹ Financing Graduate Education Task Force Report—University of Minnesota, September 13, 2004

The Graduate Student Stipend Task Force initiated a survey of all the departments within the College of Letters and Science to understand the depth and breadth of the problems faced by the College with regard to graduate recruiting. It also initiated an external survey to compare our stipends with those at peer institutions. The surveys showed that our financial offers to potential graduate students are below (and in many cases, embarrassingly below) the offers by peer institutions. Remarkably, despite the substantial differences in how departments support graduate students, every department in the College of Letters and Sciences finds the same problem—our programs remain strong and attractive but we simply are not financially competitive. Our surveys identified four main causes for our declining competitiveness: (1) inadequate financial offers for graduate student recruitment, (2) TA salaries that are substantially lower than those at peer institutions, (3) escalating tuition remission costs for graduate assistants that strain research grants and eliminate the opportunities for many project assistantships, and (4) decreasing numbers of fellowships. Although the severity of each problem differs for each department, the problems are creating substantial hardships in all departments and threatening their ability to deliver the same quality educational experience and even their very existence.

Graduate Student Recruitment

Over the last decade, research universities in the U.S. have aggressively improved their financial packages to graduate students but UW-Madison has not. Most Letters and Science departments report that, until recently, they competed for graduate students successfully with top programs in the nation. Now, lower-ranked programs that offer dramatically better financial packages regularly lure away students. In particular, other state universities (examples mentioned in the surveys include Minnesota, Michigan, Ohio State, and the University of California-San Diego) offer such attractive financial packages that students accept offers even when they acknowledge that UW-Madison would provide them a better education. These packages include salary supplements, signing bonuses, summer salaries, no teaching responsibilities during the first year, lighter teaching loads, and even laptop computers. The committee does not embrace these add-ons but it does strongly urge that the UW-Madison must be financially competitive in the graduate student recruiting market. A comment from the Letters & Science survey illustrates the situation faced by departments in the college:

"In the last five years, schools like Rutgers, UMass Amherst, Illinois, Indiana, Penn State, Florida, North Carolina, Ohio State, and other Big Ten and major research one state schools have provided better recruitment packages to their grad students than we have, meaning we're losing more and more students to those schools as well as to Michigan et alia."

A common experience reported in our surveys is that prospective graduate students are impressed by our academic offerings, but shocked by our low financial offers. They reluctantly go elsewhere. In response, departments have attempted to supplement TA salaries and other stipends with additional funds. However, the money available to most departments from gifts, fellowships, and other resources is limited and our offers are still not competitive. Two examples from prospective graduate students include:

"...I am considering offers from U of Michigan, Irvine, Notre Dame and Pittsburgh. Just to give you some idea of how these offers compare with Madison's, all four schools are offering me 12 months of guaranteed funding each year for 5-6 years for

an amount around twice that of Madison's. To be honest, and again especially for the benefit of Madison's program, I would like to say that I was a bit surprised how low Madison's offer was. I would have liked to give more consideration to joining your program but it was not realistic in light of these other offers."

"I apologize for being blunt about this, but I am wondering whether there is any chance that I can get a 5-year package at Wisconsin like I have been offered at Cornell, Northwestern and Stanford. No matter how much I end up liking Wisconsin after my forthcoming visit, I do not think I can consider it a realistic option if I cannot secure a long-term financial package. I hope you understand, and I look forward to hearing back from you."

Although much of this report focuses on maintaining our ability to compete for the strongest graduate students, it is important to remember that the size of our graduate programs is also important. A decline in both quality and size is a particularly threatening scenario because, once a program is too small, the course offerings cannot prepare students properly. Decline in the size of graduate programs hurts both the undergraduate teaching and the opportunities for original research that are required for developing the critical thinking and creativity of future leaders.

Most programs also report declines in applications and/or acceptance rates. Several departments reported their recruiting statistics: in Economics the acceptance rate has gone down from 25.3% in 2000-2004 to 18% in 2005-2006; in Computer Science the acceptances have steadily declined from 57 in 2001 to 22 in 2006; in French and Italian the applications have declined from 75 in 1996 to 45 in 2005. Statistics reports increasing rejections from applicants. Zoology reports a decline in acceptance rates over the period 2002-2006, and also a decline in the GRE scores and GPA's of students who choose to come.

Because graduate education is in close symbiotic relationship with faculty research, it is clear that a decline in graduate programs will bring along problems in recruitment and retention of faculty and problems in research funding. Our survey suggests that such problems are beginning to appear but are not yet widespread. Several departments report demoralization of faculty because of our poor graduate student support. Classics lost three faculty members to universities that had better graduate student support. English has just lost two recently tenured members because the department is no longer able to compete successfully for the best students. History of Science reports that weakness in graduate student support may have been a factor in recent unsuccessful searches for tenure track faculty. Economics reports that the quality of graduate students was a factor in two recent departures of faculty to Northwestern University and Yale University. One department chair states:

"I can add nothing more except to say that we cannot survive as a graduate program without increased funding for our graduate students and the ability to hire more faculty."

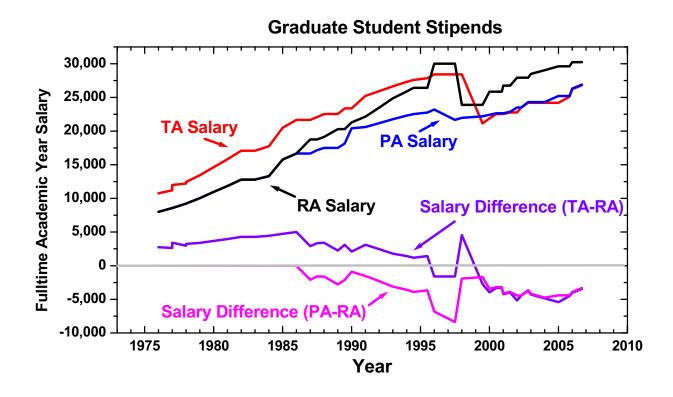
Many departments are finding that the increased costs for supporting graduate students and the fixed size of many research grants is damaging their ability to compete for grants. For example, Statistics reports that the low stipends drive away domestic graduate students. Consequently Statistics has had difficulty renewing NIH training grants that can only fund domestic students.

The positive news is that it is not too late to reverse the negative trends. Nearly all departments report that better assistantships and more plentiful fellowship support would enable them to bring stronger students to UW-Madison. Thus the potential is still there: top students will continue to come if we can simply offer the same level of graduate student support as other major research universities. As long as we safeguard the academic strengths of our programs we need not aspire to offer the most generous financial packages.

Academia is slow to change its mind about the relative ranking of institutions. This conservatism has bought us time to fix our graduate student stipends before the damage becomes permanent. However, this conservatism also means that once UW-Madison slips in the minds of prospective graduate students and their advisors, it will be very hard to reverse the decline.

Teaching Assistant Salaries

Teaching assistantships form the heart of the graduate student recruiting packages and the graduate student support of most L&S departments. The following graph shows the full time (most graduate students are appointed at 50% so their salary is ½ that shown in the graph) academic year (academic year salaries are for 9 months) salaries for teaching assistants (experienced), project assistants, and research assistants. Teaching assistant salaries were consistently higher than project assistant and research assistant salaries by ~\$3,000-5,000 over most of the time period. In 1992, the gap began to close until the TA salaries became smaller than RA salaries. The gap has widened in 2001 until now where the RA salaries are higher by ~\$4,000-5,000. This time period is also where our graduate recruiting competitiveness has diminished.



1997-98 | 1998-99 | 1999-00 | 2000-01 | 2001-02 | 2002-03 | 2003-04 | 2004-05 **UC-Los Angeles** 13,894 13,894 14,451 14,989 15,071 15,101 15,110 15,582 **UC-Berkeley** 13,367 13,367 13,884 14,339 14,388 14,380 14,383 14,814 Michigan 10,859 11,342 11,864 12,447 12,884 13,259 13,633 14,080 12,471 Illinois 10,596 11,067 11,566 13,019 12,874 13,348 13,831 Purdue 10,942 11,280 11,748 12,112 12,519 12,867 13,620 13,296 10,367 10,611 11,205 11,718 12,240 12,195 12,573 13,221 Washington-Seattle 10,725 10,759 11,072 11,405 11,554 12,206 12,552 13,004 Michigan State 10.422 10.655 10.791 11.201 11.752 11.780 12.526 Texas-Austin 10,196 13,592 10,863 11,060 11,599 11,956 12,459 Ohio State 9,876 9,582 9,017 9,382 9,988 11,529 11,998 12,228 12,455 Indiana 9,784 10,075 10,780 11,264 11,675 12,043 12,108 12,366 Minnesota **UW-Madison** 13,931 10,754 10,628 11,083 11,360 11,395 12,144 12,161 Median (w/o Madison) 10.661 10,759 11,566 11,718 12,240 12,206 12,573 13,221 Percent Increase

Table 2- Average TA Salaries for UW-Madison's Faculty Salary Peer Group

It is also important to compare teaching assistant salaries with our peer institutions. Table 2 shows the results of the AAUDE Purdue Study of Graduate salaries for teaching assistants appointed at 50% in the official faculty salary peer group of UW-Madison. The Table indicates that in 2004-2005 the average TA salary at UW-Madison is the lowest among the peer group, and an 8.7% raise is needed to bring us to the median.

8.8%

5.7%

7.7%

7.1%

3.5%

8.7%

-23.5%

0.0%

However, these conclusions are misleading because the TA salaries, fractional appointments, financial supplements, and other incentives vary widely for different departments in the same institution and between institutions and the variations are not reflected in the data. The TA salaries even vary within a department because it is common for the best graduate students to receive supplements of \$1,000-\$7,000/year depending on the institution and the perceived quality of the student. To understand the competitive environment, one must compare the same departments at competing institutions. It then quickly becomes obvious that the campus-wide averages do not reveal the entire story. Three departments have data on teaching assistant salaries from national surveys. The following summaries illustrate the problem:

(i) Chemistry

Needed

to Reach Median

Table 3 shows the salary ranges for Chemistry TA's at peer institutions, as reported by the Midwest Chemistry Chairs Meetings. The UW-Madison teaching assistant salaries include a supplement of ~\$5,840 in order to remain competitive with the other schools in the peer group. Even with that supplement, the chemistry salaries are low compared to the other peer departments. Note also that there is a range within an institution of up to \$10,000 that reflects the added supplements that some departments provide to the top students.

Table 3- Department of Chemistry Teaching Assistant Salaries

•	Chemistry Teaching Assistant Salaries					
	2003-04	-	2004-05		2005-06	
Institution	low	high	low	high	low	high
Chicago	19,394	29,394	22,000	32,000	25,464	35,464
Illinois	17,699	20,199	N.A.	N.A.	16,192	17,992
Illinois-Chicago	20,799	20,799	10,667	22,333	20,063	23,063
Indiana	19,854	21,854	20,000	25,500	25,900	34,900
lowa	11,539	19,850	16,139	20,339	17,228	21,228
Iowa State	16,800	25,200	21,075	26,075	21,203	21,203
Michigan	20,000	20,000	21,600	21,600	22,500	22,500
Michigan State	18,144	22,444	19,110	23,110	19,488	23,488
Minnesota	17,300	17,300	N.A.	N.A.	19,241	26,026
Nebraska	14,340	18,720	N.A.	N.A.	15,425	17,652
North Carolina	18,720	18,720	N.A.	N.A.	N.A.	N.A.
Northwestern	18,500	22,500	21,000	26,000	N.A.	N.A.
Ohio State	18,000	24,400	25,000	30,000	20,000	20,000
Penn State	17,637	25,637	18,897	18,897	19,260	25,260
Pittsburgh	18,600	24,600	19,740	33,744	20,332	31,331
Purdue	17,905	19,625	14,895	18,695	15,965	18,715
Wayne State	17,097	21,097	17,647	66,442	22,150	29,630
Wisconsin	17,462	18,662	18,810	21,010	19,549	20,749

(ii) Mathematics

Table 4 shows salary ranges for Mathematics TA's at peer institutions, as reported by departments to the American Mathematical Society. The gap between UW-Madison and other institutions is already noticeably larger than revealed by the campus-wide averages in Table 1.

Table 4-Salary ranges of Mathematics TA's and fees at peer institutions

INSTITUTION	2004-05	2005-06	2006-07	Fees
UCLA	14,100-16,600	14,100-16,600	15,083-17,683	
UC Berkeley	14,335-17,085	15,500	17,500-19,100	
Michigan	13,570	13,977	14,326	
Illinois	15,198	16,123	16,123	1,800
Purdue	12,600-16,000	13,500-16,300	13,800–16,500	1,422
Washington-Seattle	15,128-18,000	15,424-19,000	16,028-18,513	800
Michigan State	11,907	12,175-14,337	12,897–14,624	
U Texas-Austin	14,700-16,700	15,030-17,025	15,600-17,600	
Ohio State	15,300-16,020	15,750-16,470	16,110-16830	
Indiana	13,680-15,380	14,000-15,700	14,300–16,000	600
Minnesota	13,830-14,368	Not Available	14,672–15,241	
UW-Madison	11,262-14,100	11,262–14,100	12,609–15,138	300

Salary ranges of Mathematics TA's and fees at peer institutions, ranked according to lower bound of salary in 2006-2007. UC Berkeley and Purdue give a 10 month figure, Washington-Seattle an 11 month figure. The other salaries are for 9 months. Source: Assistantships and Graduate Fellowships in the Mathematical Sciences, American Mathematical Society, 2005 and 2006.

The relevant figure for recruitment is the lower bound for each institution which is the salary of a beginning TA. The median lower bound for Fall 2006 is \$15,083 and UW-Madison needs a 19.6% raise to catch up. Comparison of the upper bounds of the ranges (salaries of the most experienced TA's) is friendlier to UW-Madison, but even there we need a raise of 9.0% to reach the median \$16,500.

Our competitive position in mathematics is actually much weaker than suggested by Table 4, however. The reason is that to maintain the quality of its graduate program (ranked 13th in the U.S. in the most recent National Research Council ranking in 1995) and to ensure that courses are staffed with highly competent TA's, the UW-Madison Mathematics Department admits only the strongest applicants. But these applicants are recruited by all mathematics graduate programs in the nation. Consequently the financial packages offered to these applicants are far better than the average TA salaries of Table 2. As an illustration, we summarize the competing offers reported by three applicants who were among the top 25 U.S. male applicants in the Math Department's applicant pool for Fall 2006. While a maximum offer from UW-Madison was \$15,138 minus \$300 in fees,

- UC-Davis offered \$20,000 first-year fellowship plus laptop
- UC-San Diego offered \$16,800 for 9 months (5,600 fellowship plus 37% TA)
- Maryland offered a \$15,000 fellowship for first two years
- Ohio State offered a \$21,000 fellowship for first two years
- U Illinois at Chicago offered \$25,000 per year (fellowship plus 25% TA)
- Berkeley and Cornell offered \$18,000-19,000 per year for TA-ship
- Purdue and Indiana offered \$15,000-16,000 per year for TA-ship
- Cornell offered a 9-month stipend of \$22,500 for 5 years, no teaching for the first year

The last point is worth emphasizing: the students UW-Madison needs to recruit in order to maintain the stature of its programs are sought by all universities. The competition for these individuals is not accurately reflected by average TA salaries across campuses or even across departments.

(iii) English

Beginning graduate students in English are typically not asked to teach, and so the first year is funded by fellowships or PA-ships. The peer departments in English as well as lower ranked institutions are offering fellowships \$5,000-8,000 higher than our highest University Fellowships, and \$9,000-11,000 higher than our PA salaries.

Table 5 - Teaching Assistant Salaries in English

	English TA Salaries
INSTITUTION	2004-05
Columbia U.	17,044
Harvard U.	16,892
U. of Southern California	16,694
UNC	16,500
U. of Illinois	16,300
Rice U.	15,000
Brown U.	14,630
Cornell U.	14,570
U. of Florida	14,561
U. of California at Davis	14,559
U. of California at Los	14,355
Iowa State U.	14,000
U. of Michigan	13,570
U. of Pittsburgh	13,160
Pennsylvania State U.	13,000
Indiana U.	12,970
U. of Washington	12,500
U. of Illinois at Chicago	12,393
U. of Texas at Austin	11,750
UW- Madison	11,264
U. of Utah	10,170
Purdue U.	9,900

Table 5 contains a selection of English TA salaries at peer universities. All universities in the table except UW-Madison offer a first-year tuition remission to their graduate students.

(iv) Political Science

Comparison with the departments that Political Science considers its peers delivers again the same message, see Table 6. Typically students are offered a multi-year package that contains a mixture of fellowship, TA and RA support.

(v) History

Few incoming graduate students in History at UW-Madison receive any support. The first year and in many cases also the second year is funded by the students themselves, putti

Table 6- Teaching Assistant Salaries in Political Science

Political Science	TA Salaries
INSTITUTION	2005-06
Harvard	26,800
Princeton	21,500
Minnesota	21,000
Cornell	19,360
Stanford	18,968
Michigan	15,000
Indiana	14,958
UW-Madison	10,340-16,110

also the second year is funded by the students themselves, putting some students into serious debt. After the first year, there is limited support from TA-ships, fellowships and gift funds.

This support contrasts with the History Department at University of Michigan. All admitted students are guaranteed a 5-year funding package with: a stipend of \$14,000 per year plus a 4,000 summer stipend, 4-6 semesters of teaching with first year guaranteed without teaching, and an additional \$7,000 stipend and tuition waiver for a dissertation defense year beyond the fifth year.

(vi) Computer Science

In 2005-2006 when the beginning TA salary at UW-Madison was \$11,262, in Computer Science the median stipend for graduate students in the top 12 departments was about \$15,500 and at departments ranked in the 12-24 range the stipend was about \$17,700.

A common strategy for dealing with the low TA salaries is to supplement the beginning TA salaries with additional fellowships or research assistantships. Such practice was reported by Chemistry, Classics, Computer Science, French and Italian, Philosophy, Physics, Sociology, Statistics, and Zoology among others. The amounts vary from \$600 to \$4,500. But, the reality is that the salaries are still substantially below the peer market. Furthermore, only departments with strong research funding or gift funds are able to supplement salaries. Most departments simply do not have the required resources.

One department that appears to be able to supplement TA salaries is Chemistry, where all stipends are brought to a common annual amount of \$21,300 using grant funds from the research groups of the individual students. This figure puts our Chemistry Department in the middle of its competition, but it comes at a significant cost to the research groups.

The situation of UW-Madison TA's produces two further problems which should be mentioned, though they are of lesser importance than the level of salaries in comparison with peers.

(1) The difference between TA and RA salaries makes TA work less appealing. Computer Science reports difficulty in hiring competent TA's for higher-level undergraduate courses.

(2) There is a fairly widespread impression that TA workloads at UW-Madison are heavier than at competing institutions. This perspective was reported by Mathematics, Statistics, Physics, Chemistry, Afro-American Studies, Anthropology, Theater and Drama, and several other departments. Prospective students realize that heavy TA workloads will impede their progress toward degree. Together with the low salaries, teaching load is a factor that deters students from coming to UW-Madison.

A sampling of the comments from the L&S Questionnaire illustrate the problems:

- "Many of our TA's have to work second jobs in order to make ends meet. Our poor level of TA and PA support has led some students to stop their studies."
- "The inability of L&S to support new TA positions stymies our program development in the undergraduate area."
- "UW has a reputation for heavy TA loads. This year, for example, one of the prospective students chose to go to the University of Michigan because he found out our TA load is much heavier."
- "Third, all of these competitors offer substantially more fellowship money to the applicants than we do, and our TA package is no longer competitive with the offers that these universities make. Because of our comparatively low financial offers, we now lose some of our applicants to second-tier graduate programs such as the U. of Arizona or Vanderbilt U."

Tuition remission

Even though TAs provide the major funding for new graduate students, Table 1 shows that teaching assistant appointments account for less than 30% of all supported graduate students. The remaining supported graduate students are appointed as project or research assistants (58%) and fellowships or traineeships (14%). This section discusses issues surrounding the support of the largest portion of our funded graduate students: RA and PA-ships, since those appointments are most affected by the recently revised tuition remission surcharge policy. (As of now, programs are not charged a surcharge for TA tuition. For announcement of the new policy, see http://www.rsp.wisc.edu/policies/tuitionremission.html.)

Since the late 1990's, as part of the collective bargaining agreement with the Teaching Assistant Association (TAA), the University provides tuition remissions—waivers of both resident and non-resident tuition charges—to all TA and PA-ships on at least a 1/3 appointment. RAs were added to the policy as well. A limited number of these waivers are "free" to the University as part of a complicated System-wide formula for Madison's budget. The need for graduate assistants on campus far exceeds the number of "free" waivers granted, however, and the rest of the cost has been recouped in three ways. First, the University implemented a one-time base budget reduction following the collective bargaining agreement to offset the loss of resident tuition for graduate assistants paid on base budget funds. The base budget reduction was in turn offset by a reduction in graduate assistant stipends, as provided by the agreement. Tuition costs, however, have grown precipitously since the late 1990's when the number of assistants and research opportunities increased. The number of teaching assistants has remained relatively constant over this same period. In fact, the University granted over \$400 million in

graduate assistant remissions since 2000, and the annual cost of remissions increased by approximately \$34 million, from \$48 million in 1999-00 to \$82 million in 2004-05. (For more background on tuition and tuition remission costs, see http://www.secfac.wisc.edu/TRTFFinalReport.pdf).

To offset the remaining cost of remission, the campus has had to take two more steps: 1) institute a tuition remission surcharge, and 2) find monies from the base budget to cover the remainder of tuition costs. In the past, the surcharge was levied only on certain funding sources, at a level of 25% of the stipend. It recently became clear that such a policy is no longer sustainable; tuition has risen much faster than stipends and the shortfall has grown exponentially. The capital exercise funds that are generated from indirect costs on extramural grants and contracts have typically been used to cover the shortfall but the Tuition Remission Task Force of 2005-06 estimated that at the present rate of growth in excess remission costs, the capital exercise could be completely eliminated within the next four to five years.

Beginning in January 2007, a flat-fee of \$4,000/semester/RA or PA is charged to all funding sources. Although this new policy will not eliminate the need to find other monies to pay for remissions, it will at least stop the steep rise in the percentage of the capital exercise required to pay remissions. The policy, though no doubt necessary, has caused substantial problems for researchers and has been met with a tremendous amount of resistance from all sectors of campus. Indeed, many programs and individuals face new and in some cases debilitating crises because of the new surcharge. To help alleviate the sudden increase in costs, the campus and individual colleges have developed several intermediate steps to ease the transition, including exempting certain funding sources, covering a portion of the surcharge from other funding sources, and gradually increasing the amount required over the next several years.

Nonetheless, serious and sometimes inequitable consequences remain. Since RA and PAships are awarded on a variable percentage basis, those programs that traditionally appoint assistants at the 33.3% level (often in the Arts and Humanities or Social Sciences) are now faced with a huge increase in the level of the surcharge, in some cases thousands of dollars per semester. English estimates that "it will cost an additional \$6,000 per PA in our department." And these programs are the ones with the least ability to recoup those dollars from other sources. Those PA-ships awarded from sources that previously were not levied a surcharge (i.e., 101 funds) must now find sources for the full \$4,000/semester per assistant tuition remission. English, Political Science, History, Scandinavian Studies, School of Library and Information Studies (SLIS), and Social Work are among the departments reporting that the policy will force them to cut a significant portion, or even all of their PA-ships. Example remarks from the L&S survey include:

- "Formerly, we were able to fund several PA-ships off department gift funds. The new surcharge severely limits this ability and makes it a rarity rather than a norm." Scandinavian Studies
- "that means we either have to find another way to support these students, or cut in half the number of students we can support through PA-ships." English
- "A large number of our PhD and masters students depend upon PA funding from libraries and data centers on campus. The new tuition remission policy has led to the elimination of many of these PA positions." SLIS

• "The La Follette School often relies on external agencies to fund their assistantships as they prepare for careers in public affairs. The opportunities now promise to become much rarer." La Follette School

Programs with strong research funding are able to compete with peer institutions by appointing their RA's at more than 50% time. Even these programs faced challenges from the increased tuition remission. Since most research grants award fixed amounts, tuition remission increases result in funding for fewer graduate students. In fact, the increase in tuition remission now makes the cost to a grant essentially the same for a research assistant as a postdoctoral student. Many faculty intend to shift their funding from graduate students to postdoctoral students since the postdoctoral students bring more experience and skills to a program. This fact is disturbing both because doctoral students are vital to our undergraduate teaching programs and because the education of doctoral students is a core element of our mission. Example comments from the L&S questionnaire include:

- "the new policy will inevitably reduce the size of our graduate program unless the faculty continue to increase their level of outside funding at the pace of recent years." Physics
- "There will be another decrease in the number of students we can support as RAs." Chemistry

Unfortunately, the new tuition remission policy coincides with a reduction, not an increase, in available extramural funds. The number of graduate assistants will decline and our ability to compete for research grants will diminish. These effects interact and cause a spiraling decline. Both graduate student and faculty recruiting depend on our competitiveness. If our competitiveness declines, our recruiting declines, our ability to retain faculty declines, and our competitiveness is further compromised. The university budget and the State's economy depend on the UW-Madison faculty's ability to raise research funding and maintain our unique programs. These effects are only now becoming clear and their spiraling effect is frightening. World-class, research-active faculty form the life blood of the U.W. Madison. It is easy to leave the ranks of the elite but it is much harder to rejoin them. If Wisconsin's citizens are to continue having opportunities to study with the best people in the world, we must recognize and reverse these changes.

Fellowships

Deficiencies in our fellowship offerings are presenting serious challenges to our departments in recruiting and supporting graduate students, particularly students in their final year when they will be entering the job market and must concentrate on their work and publications if they are going to succeed in our highly competitive job market. Many of our departments are competing with institutions that offer more fellowships with higher stipends over longer periods than UW-Madison is able to offer. The problems related to fellowships fall into three main categories: 1) a decline in the number of certain types of fellowships available to most departments, 2) lack of flexibility in using available fellowship funding, and 3) inability to waive tuition for external and "partial" fellowships.

Decline in the number of fellowships

The number of competitive University Fellowships administered through the Graduate

School and available to departments across the campus decreased from 122 in 2000-01 to 65 in 2006-07.² The number of offers able to be extended to potential students has also declined; for example, in the Social Sciences the number of fellowship offers in the late 1990's was ~150 and it is now ~50. Additionally, these competitive fellowships are no longer available for students in masters-only programs. The decrease has occurred for three main reasons. The first is the call on Graduate School resources for other projects and needs, including funding for students through assistantships and the concomitant tuition remission surcharge. The second is that the costs of the fellowship packages (stipend, fringe, tuition) continue to increase. The third is related to the establishment of the Wisconsin Distinguished Graduate Fellowships several years ago. The WDGF Program almost doubled the number of fellowships but it also had the effect of moving many fellowships from the general university-wide competition to the control of individual departments that attracted donor funding. The WDGF's are distributed quite unevenly across departments within the University, in some cases housed in programs that did not traditionally compete for regular University Fellowships. Most of our departments, then, find themselves in an era in which they are able to provide only a very limited number of University Fellowships at a time when fellowship support (both in dollars and number of years of support available) seems to be increasing at peer institutions. Here are representative examples from some of our departments' responses to our survey:

- "The drastic decline in the number of University Fellowships awarded to Economics Ph.D. applicants directly impacted the department's ability to recruit top students (to) the University. The most talented students reasonably expect to receive fellowships for their first year in the program so they will be able to focus on their studies. As the number of Fellowships that we are awarded declines, we are able to recruit fewer numbers of top students." Department of Economics. (In 2000-01, the Economics Department had 15 fellowships in 2000-01 but this declined to six in 2006-07.)
- "Several faculty in the department identified the major barrier to recruiting the best graduate students into our program as the inability to offer these students fellowship support of any kind. We are competing with schools that can make such offers—often for multiple years of support." Department of Zoology
- "Loss of the UW Fellowship program has cost us some of the best and brightest prospects. In the past, some of those sponsored for a first year on WARF fellowships turn in the NSF pre-doctoral fellowships. Without the former, you don't get the latter." Limnology Program

As University Fellowship offerings have declined, so too have Advanced Opportunity Fellowships (AOFs). These fellowships are designed to enhance the recruitment and retention of under-represented graduate students. The number of AOF funded students in L&S has declined by 33% over the last few years because of the budget cuts and tuition and stipend increases. These same students are pursued avidly by our competitors because everyone wants to diversify their graduate student and ultimately their faculty. Our departments have used all their available resources to provide the strongest possible multi-year packages and have raised our AOF acceptance rate to 62%. However, we can now fund only 42 AOF students/year rather than our normal 60+ of previous years. In addition, the inability to waive tuition prevents AOF students

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² Graduate School data

from applying for the many external fellowships available for under-represented students since these fellowships often require the institution to pay for the tuition and fees. These disadvantages are particularly detrimental to the recruitment and retention of students severely under-represented on our campus.

Lack of Flexibility in Using Available Fellowship Funding

In graduate student recruitment, academic departments and programs nominate individual applicants for the Graduate School's University and Prize [two-year] fellowships. If the Department's nominee is awarded a fellowship, the department receives the fellowship funding only if that particular student matriculates in the graduate program. Since the Graduate School over-authorizes the number of fellowship offers based on an average of past acceptance rates, funding for declined offers reverts to the Graduate School to cover other needs, many of them student-support related. At the campus level, this system allows us to make many more fellowship offers since many of the nominees don't come. However, departments often find that none or few of their fellowship offers result in the students enrolling. Fellowship students usually receive even more attractive support packages from other institutions. If the Graduate School delegated the fellowship offers to departments and programs, fellowships could be passed to another qualified student if the initial offer is rejected. This approach would provide significantly fewer offers overall, but departments would have a firmer control of their fellowship students. One comment on the L&S survey states:

• "University Fellowships (some percentage, at least) could be passed down within the departments to other students. Consider the following: In the last 5 years we have nominated 35 prospective students for University Fellowships. We have been granted 13 fellowships. Only 3 of the 13 have decided to come here." (The Graduate School reports that the overall acceptance rate is about 30%.)

The Graduate School could use their fellowship funding to help departments in other ways. Several years ago, the Biological Sciences Fellowship Committee decided to convert its individual University Fellowship funds to fund graduate student recruiting. The committee now does not offer fellowships in the University Fellowship competition, but instead uses the funds to recruit students who will be funded from different sources, usually RA-ships on federal grants. Similarly, the Physical Sciences Fellowship Committee implemented a system where departments could "cash in" a specific amount of fellowship funding to use in flexible ways to recruit incoming graduate students. Physical Science departments still nominate candidates for fellowships but if their candidates receive a fellowship, the department has 72 hours to decide whether to offer the fellowship to their nominee or to "cash in" the award and receive a portion of the funding for other recruiting efforts. While this approach limits the number of available fellowships, the department does have the flexibility to optimize their recruiting efforts. Examples include travel funds for campus visits by prospective students, supplementing TA and RA stipends to build competitive packages, and awarding "signing bonus" scholarships to the most promising students. With this system, a department knows that it will have a set amount of funding available to recruit and retain graduate students and allows each individual department to tailor a program that best meets its competitive environment. While some other departments are able to accomplish similar ends with the use of department-level endowments and gift funding, many members of the committee expressed the desire for all departments to have this

flexibility to optimize their recruiting efforts, especially given the uncertainties of fellowship students accepting our offers.

Inability to waive tuition for external and "partial" fellowships

The University of Wisconsin-Madison is fortunate to benefit from the research funding of WARF, its strong research programs, its talented students, and its devoted alumni. Although these advantages suggest that fellowship support should be strong on our campus, it is not. Many of our peer institutions are able to waive, remit, or otherwise ignore non-resident tuition for all fellows, regardless of whether the fellowship is sponsored by the University or is a fellowship awarded through an external agency that requires some level of supplementation from the student's home institution. We are one of the institutions where the institution must pay the tuition for internal and external fellowships. UW alumni and friends wishing to donate a graduate fellowship face much higher costs than alumni from other schools. WARF money cannot provide the fellowships that are needed for our campus. Although our students can apply for the external fellowships that provide additional money for tuition and fees, they can't apply for fellowships that do not provide this additional money. Some departments even forbid students from applying for such fellowships because the costs of providing the tuition and healthcare would exceed the amount of the fellowship.

Since the majority of fellowships do not provide the required funding and since funding agencies and foundations are increasingly limiting the costs of education that they will cover, the UW-Madison is unable to allow its talented graduate students and strong research programs to take advantage of this substantial pool of untapped fellowship money. If the campus developed a plan that minimizes or eliminates the cost penalties for these external fellowships, our students would be able to compete for this large pool of fellowships. It would substantially improve our competitiveness and it would also provide well-deserved recognition for our most talented graduate students.

RECOMMENDATIONS

The committee's survey of L&S departments on graduate student education, recruitment, and support at the University of Wisconsin-Madison paints a clear picture. More competitive graduate student packages from other universities, dwindling numbers of Graduate School University fellowships, increased costs of PA- and RA-ships from the new tuition remission policy, and lower TA salaries have combined to create an emerging crisis in graduate education and research. Unless immediate steps are taken to address this crisis, the UW-Madison will find its stature as a top public research university significantly diminished and its ability to provide high quality undergraduate education compromised. Our recommendations are divided into immediate initiatives that can begin to address the problems, developmental initiatives that can bring in the financial resources required to become more competitive, and long range initiatives that must be implemented if graduate student recruiting and stipends are to remain in balance with the rest of our university.

Immediate Initiatives

1) Increasing Teaching Assistant Salaries. Teaching assistant salaries are the most important source of funding for graduate student recruiting and they have fallen far below competitive market values. Graduate student recruiting is fiercely competitive because of the importance of

having graduate students to implement university teaching and research programs. Graduate students allow large public universities to personalize large courses and work individually with undergraduate students in discussion sections, small seminars, laboratories, and research groups. Graduate students are so important that departments with adequate resources take money from their research budgets to supplement TA salaries so they can compete with other institutions. Graduate students are future stars and their involvement in undergraduate education is a remarkably cost-effective way to provide the highest quality education to Wisconsin's students. Despite the importance of teaching assistant salaries to the health of the university, the decisions on salaries lie with the State of Wisconsin. Although the university has no direct control, it **must** advocate for the connection between TA salaries and the future health of the UW-Madison teaching and research mission. Saving money on TA salaries in the short term will cost the university, the State, and UW-Madison students dearly in the long term. Raising TA salaries to meet the market demand is the most cost effective and direct approach for meeting our loss of competitiveness.

- 2) Waiver of non-resident tuition for all fellows and trainees. The University currently must pay the tuition and health care costs for all internal fellowships and traineeships and for the external fellowships that do not include allowances for tuition and health care. This committee recommends the immediate creation of a Provost-level committee to consider waiver of nonresident tuition for all fellows and trainees, bringing their cost to programs and investigators roughly into line with that of graduate assistants. Waiving, remitting, or otherwise excusing nonresident tuition for all funded graduate students is a practice of many of our peer institutions, and our failure in this area is a major cause of our lack of competitiveness. The University of California, for example, is able to declare all students "in-state" after a year of residency while enrolled in graduate school, greatly reducing the cost of tuition both for unfunded students from out of state who might otherwise not attend, and for the University, insofar as the latter is required to supplement cost of education on federal grants. Many peer universities regularly waive the out-of-state portion of tuition for any students who win fellowships, traineeships, and other external funding. Although the proposed system at the University of Wisconsin would cause some budget adjustments through the University, such a practice could well increase graduate student funding from external sources, and at the same time free up funds at the School and College level currently spent on non-resident tuition. The Graduate School, for example, currently expends a sizable percentage of its WARF gift on tuition for external grants that could be used instead for competitive fellowships and other student funding. The College currently expends sizable funds to supplement Foreign Language and Area Studies (FLAS) fellowships that would otherwise be easily affordable. And many departments find themselves in the curious position of being unable to accept outside support for their most deserving and prestigious students because the external fellowship does not come with sufficient funds to cover the high cost of our out-of-state graduate tuition.
- 3) Reduce the effects of tuition remission rate by increasing funds that can off-set the serious negative consequences over the next five years. Many departments and faculty members were hit hard by the newly-instituted tuition remission surcharge of \$4,000 per semester for project and research assistantships, but the effects have been particularly severe for those using PA appointments. Many of the humanities departments use endowment funds to fund

assistantships, which are used like fellowships in graduate student recruitment. In many cases, endowments were sufficient to cover the previous 25% tuition remission rate, but are not adequate to annually support a PA or an RA with the new surcharge. A number of departments, including English, History, and the History of Science, to name a few, noted in the survey that the number of project assistantships for incoming graduate students has been significantly curtailed because of this new policy. We strongly recommend that if the new tuition remission policy is to remain in effect, the administration increase the funding currently available to departments over the next five years to offset the serious negative consequences of the tuition remission surcharge. We also recommend that the administration work with the UW System and State legislature in trying to solve the structural accounting issues that necessitated this new surcharge.

- 4) Help individual departments adjust to the new changes and to become more entrepreneurial when possible. The most immediate adjustments are those that the individual department can make if they are allowed to make changes. There are many areas where changes can occur that will lessen the adverse effects of declining competitiveness. These recommendations do not address the real problems but they can help departments cope.
 - a) In times of declining resources, departments and programs must analyze their distribution of faculty, staff, and students to determine the most effective distribution. If the number of graduate students is small compared with the number of faculty, it may be appropriate to trade faculty positions for increased graduate student funding. Smaller may be better for some departments.
 - b) Increase flexibility in using the funds from the Graduate School. The Graduate School's Fellowship Program provides funds that can be used for other purposes, at least for some departments. It is clear that this option benefits these departments in many cases and allows them to use the money to optimize their graduate recruiting. The committee recommends that similar flexibility be granted to all departments so they have more resources to remain competitive in recruiting new graduate students. For example, at least one department would like to be able to establish a policy that they would not be outbid for graduate students.
 - c) Increase flexibility in the policies of the College of Letters and Science. The College requires course enrollments meet certain thresholds before courses can be offered. If a department or program is down-sizing, it may become difficult to meet the enrollment thresholds. The College should provide these departments with the flexibility for offering the courses required for excellence in their programs, even when their enrollment falls below threshold.
 - d) Graduate admissions offers must be made earlier. Many students are lost to other institutions because the UW-Madison is slow to respond with definite offers. Departments must have advanced knowledge of the number of offers they can make to entering graduate students in the following year. Equally important, departments must make multiple offers to prospective students by February or early March of the preceding year. Many departments reported that they are currently losing top prospects to competing institutions because UW has too few guaranteed slots and they are offered too late in the process. As one department head noted, "In the past two years, we have been authorized to make most of our TA offers only late in March," well after top applicants have already received offers from competing institutions. This problem is exacerbated by

the relatively small number of guaranteed positions that most departments are authorized to offer. Since top prospects generally have multiple offers from various universities, departments must wait for those prospects to accept or turn down offers before they can then offer a teaching assistantship to the next person on the list. Competing institutions offer five to ten teaching assistantships at a time, while UW departments are often authorized only to offer three to five. The net result is that we are poorly positioned to attract prospective graduate students using TA packages. While TA salaries and funding are a top priority, it is essential for UW-Madison to rethink its budgeting process to allow for greater *ex ante* TA commitments to fund recruitment packages.

- e) Increase the number of years for guaranteed graduate funding in the offers to new graduate students. Students are also lost because we cannot guarantee funding past the first year. We need mechanisms that will allow us to make our offers more responsive to the current market conditions.
- f) We need to increase our summer support. Most teaching assistant appointments continue only during the academic year and many students are not supported during the summer. In many cases, our peer institutions do provide summer support.
- g) Departments should examine their programs and requirements to see if the time to a degree can be lowered so support money can be used more efficiently. Time to degree statistics are an important indicator of academic success. As our students lose financial support, they seek ways to support themselves by working either in an academic capacity or in positions that simply provide income. Both approaches negatively affect a student's timely graduation. We need to heed such indicators as time to degree, both to help students and to keep our institution's good name.
- h) Since the graduate student stipend problem is a recent development, the College and the University need to re-examine their allocations of funds to see if budget adjustments can be made that can help redress the problem.
- 5) Administrative Leadership. The problems involved in graduate student recruitment and graduate student stipends are not transient and they involve the very infrastructure of our university and its relationship to the State of Wisconsin. No one solution will solve the challenges facing graduate student support at the UW-Madison. It will, instead, require a coordinated effort across the Graduate School, individual Colleges and Schools, the Chancellor's Office, WARF, and the UW Foundation. Many of the recommendations that improve our graduate student competitiveness will affect other parts of our university. There has been no person or administrative unit with all of the responsibilities and insights required for implementing an integrated program of change. Piecemeal problem solving by one administrative unit encounters problems when other administrative units fail to agree on key changes. And yet, graduate student funding must become a priority of the UW administration, since the competitiveness of the UW in recruiting the best and brightest graduate students ultimately affects faculty recruitment and retention, department morale, external research funding, and undergraduate education. The committee applauds the recent appointment of Judith Kornblatt to the position of Senior Associate Dean for Graduate **Education.** It is a concrete response to the need for a coherent strategy that transcends administrative units and that addresses the issue of competitiveness in graduate student recruiting. The committee wishes to point out that this position requires:

- a) studying the issues involved and understanding how they will affect our other programs and priorities;
- b) developing an integrated strategic plan that establishes partnerships between Colleges, the Provost, the Chancellor, the UW Foundation, WARF, the Wisconsin Alumni Association, and the State that can change our infrastructure, policies, and funding structures and restore our institutional competitiveness for graduate student recruitment;
- c) building an understanding of the problems and developing a consensus for the solutions among faculty, staff, graduate students, administrators, foundations, and the State and for the importance and priorities of graduate education and research as drivers in meeting our university's unique mission;
- d) working with the UW-Madison administrative units, the UW Foundation, WARF, and the Chancellor's office to launch a major new initiative that would target all aspects of graduate recruiting.

Developmental Initiatives

- 1) Increasing Fellowship Support through a Graduate Student Fellowship Initiative for a New Century Fund that involves a Partnership of the University, the State, and the UW-Madison alumni and friends. This recommendation is tightly linked to the previous recommendation. Fellowships are one of the most important sources of money for graduate student recruiting, particularly because they target the best students. The decreasing number of fellowships for many departments must be reversed. There are four sources available for increasing graduate fellowships—the current fellowship money from existing endowments, the fellowships from the Graduate School, gifts from UW-Madison alumni and friends, and external fellowships. All four sources could increase fellowship support dramatically if the associated costs of tuition and health care can be reduced or eliminated. The Wisconsin Distinguished Fellowship Program serves as a model for the willingness of donors to help the University when specific problems and solutions are targeted. We recommend the following parts of this initiative:
 - a) Develop mechanisms that allow students to apply for the large number of fellowships (eg. American Heart Association Fellowships) that require institutional support of the associated costs such as tuition and health care. Graduate students cannot even apply for most external fellowships because of the associated costs for tuition and health care. Access to these fellowships would provide an immediate way to increase the number of fellowships available to the university.
 - b) Reduce or eliminate the associated costs of tuition and health care from all graduate fellowships, ideally by agreement with the State of Wisconsin. Current and future fellowship gifts are compromised by the associated costs for tuition and health care and often raise the threshold for a graduate fellowship beyond the amount that a donor can give. Reducing or eliminating these associated costs also provides the most effective way for accessing the external fellowships that require institutional support of the associated costs. Since most universities provide tuition waivers to fellowship awardees, a strong argument can be made for providing waivers for our students as well. Tuition waivers and health care costs should form the basis for a coordinated initiative on Graduate Student Stipends that creates a partnership where gifts from UW alumni and friends are

- matched by contributions from the State. They also form the basis for increasing the number of fellowships that can be funded from existing endowments.
- c) Launch the initiative with a campaign that highlights the importance of graduate student recruiting and graduate student stipends to the educational mission of the UW-Madison and the problems we are now facing. The UW-Foundation, the UW Alumni Association, the College and University administration, and our contacts with State government all need to participate in bringing our need to improve graduate student recruiting and stipends to the attention of Wisconsin's citizens.
- d) **Develop sources of matching funding for gifts, ideally in partnership with the State.** An excellent model is the University of Minnesota's recommendation for the State of Minnesota to provide annually \$5M in fellowship funds that are matched by income from a privately raised endowment fund that is developed over a 10 year time period. This partnership is expected to create 400 new fellowships for the University of Minnesota.
- e) Work with the UW-Foundation and the UW Alumni Association to present development opportunities to potential donors for graduate student fellowships and supplemental funding that raises graduate student stipends to the market values. It is commonly believed that alumni prefer to donate scholarships to undergraduates rather than graduate fellowships. However, the success of the Wisconsin Distinguished Graduate Fellowship program illustrates that there are in fact individual *major* donors who would be willing to make gifts to establish graduate fellowships in their name. The School of Music, for example, has received substantial increases in fellowships thanks to a generous gift. We believe that there are prospects for very large gifts that might establish graduate fellowships in perpetuity named in accordance with a donor's wishes; fellowships can be as prominent and enduring a gift to the university as a building.
- 2) The Wisconsin Alumni Research Foundation needs to increase its support of fellowships and graduate students. WARF is a unique resource that is committed to the excellence of the UW-Madison. WARF has created our "margin of excellence" through its generous gifts to the Graduate School and its special initiatives such as its gifts for new faculty cluster hires and new buildings and institutes. It has always acted in the best interests of the UW-Madison. Traditionally, WARF resources flow into areas that will generate revenue. The University also needs to argue strongly about the value of *all* graduate education at the University, not simply those with the potential to increase revenue. Although WARF's resources are derived from the marketplace, the WARF gifts can and should be used for other purposes so the UW-Madison remains balanced and committed to its mission.

The WARF gift consists of a direct gift to the Graduate School and funding of special initiatives and projects. It appears that there is currently an imbalance between special projects and the gift to the Graduate School in favor of the former, and at this critical moment in the life of the institution, we urge the WARF trustees to shift the balance of funding between special projects and the Graduate School gift back toward a 50-50 share. While the committee recognizes the logic behind WARF decisions to invest in special projects, including the

³ Financing Graduate Education Task Force Report- University of Minnesota, September 13, 2004

construction of new buildings on campus, we are also concerned that unless something is done and done quickly to restore UW's competitiveness in recruiting graduate students, we may find ourselves with a leading edge physical infrastructure and only a second tier group of graduate researchers who will no longer be in a position to create the kind of intellectual property and production of knowledge for which the buildings are being constructed. Since graduate students are the people who will help carry out the research of our new faculty in our new buildings and institutes, it is important for the WARF Board of Directors to join in our initiatives to reverse the emerging problem of graduate student recruitment. There are many opportunities:

- Creating a new initiative on graduate student stipends;
- Attaching named graduate fellowships directly to new initiatives and buildings;
- Providing new fellowships and placing the WDGF program outside the regular gift to the Graduate School:
- Providing matching funds for new fellowship gifts;
- Providing the tuition and health care costs for external fellowships;
- Increasing the total gift to the UW-Madison, either on a temporary basis or permanently;
- Changing the proportion of the gift that goes to the Graduate School and the special initiatives, so that the Graduate School might direct more funds to fellowships.
- 3) Faculty and departments must become more entrepreneurial. Faculty can apply for more outside funding. Departments can work to engage alumni, departmental friends, private industries, and foundations to provide more support for the departmental mission. The College may help by providing leadership assistance and seed money for fund raising activities and a grants specialist charged with seeking out new opportunities.

Long Term Goals

- 1) Bring all graduate stipends up to the market value established by the individual peer departments. The teaching assistant salaries are low compared both to our peer institutions and to our own research and project assistant salaries. We cannot compete successfully until we offer competitive financial packages. An excellent model is the recent initiative announced by the University of Chicago. Chicago will allocate nearly \$50 million in additional funding over the next six years to ensure that doctoral students in the humanities and social sciences are among the most generously supported in all of higher education. In fall 2007, their base recruiting package will be 5 years of support including tuition, health insurance, a \$19,000 stipend per year, and two summers of research support at \$3,000 per summer. Chicago recognizes the importance of competing for the best graduate students if they are to remain competitive. As President Robert J. Zimmer announced, "From the founding of the University of Chicago, our graduate programs have distinguished the University and influenced graduate training across higher education. It is our obligation to support these programs at the highest level, allowing us to continue to attract emerging scholars who will shape academic fields and set the intellectual agenda in the decades to come."
- 2) Deepen the U.W.-Madison and the State commitment to graduate student recruiting and support. The importance of excellent faculty to the educational mission of UW-Madison is clear, but the importance of excellent graduate students has not been properly appreciated. Just as the UW-Madison and the State of Wisconsin have worked together to commit resources to

faculty recruiting and salaries, so also must they work together to commit resources to graduate student recruiting and salaries.

CONCLUSIONS

The outcome of the competition for excellence ultimately depends on the commitment of Wisconsin's citizens and their visions for their University. It is crucial for the citizens and their representatives to understand what excellence means for a University. The UW-Madison mission was shaped by the desire to make an elite education available to everyone who aspired to excellence. Students grow by being challenged by significant and difficult problems and they succeed by being part of a culture that is dedicated to excellence. That culture must be guided by people who have themselves succeeded at the highest levels; people who can mentor others to instill the attitudes, insights, and creativity that make an elite institution and our new leaders.

There is an increasingly competitive environment for graduate education and research in the United States and the world. Whereas only a couple of decades ago the institutions that rivaled us in stature and competed with us for talent and resources were arguably only a handful, they are now probably several times as many, and that number is growing. As "second tier" institutions succeed in attracting the leading researchers and graduate students, they grow towards "first tier" institutions. The rise of formerly "second tier" institutions not only strains our ability to compete for the best talent, it has also increases the competition for scarce research resources from private and public sources. Thus, while at present UW-Madison remains among the nation's most successful research-oriented institutions, and the dollar value of our research efforts remains appropriately high, there is no guarantee that this will be the case one or two decades from now. We need to adopt measures *today* to insure that in this more competitive environment, the talent pool represented by our faculty and graduate students will continue to rise above most others in quality and resourcefulness for decades to come. For all the reasons outlined in this report, if we fail to maintain the quality of our graduate student body, that goal may elude us.

It is also important for the citizens of Wisconsin and their representatives to recognize the importance of the multiplier effects of a university. The model for our university should not be a bureaucratic institutional model. It is not a state agency with a vital mission yet limited ripple effects on the larger economy. Neither should it be viewed as an advanced high school, teaching the information students need to know to get better jobs. Rather, the University can be viewed as an entrepreneurial institution where students and faculty work together as a collection of small private companies, each of which brings in money to finance a significant portion of its operations. On average, a faculty member brings in approximately \$250,000 yearly in external funding. This figure underlines the need to conceive of nuclei of faculty members and their students as small private enterprises, and to nurture them in the same way. Just as the State "seeds" small but hugely promising firms in fields like biotechnology and information technology, it is crucial that the State provide incentives and support to help these University "enterprises" grow throughout the arts, humanities, social sciences, natural sciences, and engineering. The basis for this approach is the large multiplier effect and backward linkages created by such "enterprises." Put in blunt terms, they bring in a great deal of money from relatively small amounts of seed money.

The success of the recommendations described above rests on engaging our traditional partnerships with our alumni and friends, WARF, the citizens of Wisconsin, and our representatives in Wisconsin's State Government. Discussions of the State's commitment and vision for the UW-Madison are catalyzed through our students, alumni, and friends. The Wisconsin Alumni Association and the University of Wisconsin Foundation are strong links to the people best able to engage in the necessary dialogue. The issues raised in this report should be explored and debated widely and these organizations can provide great help.

WARF is a treasured friend of the University and deserves much of the credit for the UW-Madison's current stature. WARF catalyzed our entry into new interdisciplinary areas through their sponsorship of the faculty cluster hires and new buildings devoted to some of the most exciting and significant research ideas. But for these initiatives to succeed, they need the students to implement the ideas. Again, balance is required between faculty, buildings, and students. New buildings and new faculty need new students. Balance in our university can be restored through help in increasing the money available through fellowships, particularly if the money is leveraged by meeting the associated costs of fellowships so our students can apply for the many external fellowships that are presently untapped resources. It can also be restored by forming a WARF-State partnership to address graduate student recruiting, much like the successful faculty cluster hiring program addressed faculty recruiting.

The most important partner is the State of Wisconsin. It is time for the citizens to reassert their commitment to a world-class institution that is accessible to Wisconsin residents. Increases in teaching assistant salaries and tuition remission for fellows are the most cost-effective way to restore our competitiveness for the best new graduate students. Unlike many peer institutions, the UW-Madison does not provide tuition remission in some form for external fellowships and broadening tuition remission would greatly assist graduate recruiting.

We must also work out a long-term solution to the tuition remission problem. Quoting from the Tuition Remission Task Force Report of February 2006, "Without a long-term solution to the causes of this budget deficit, the resulting growth in the financial burden on either the GPR component of the University budget or extramural grants, gifts, and fellowships will compromise the education, research and outreach missions of this University and erode our ability to serve the students and the citizens of Wisconsin." Their recommendations include continuing adjustments to the tuition remission ceiling or increasing other funds such as the state contribution to the University's base budget.

We are confident that UW-Madison will continue its excellence. Wisconsin is the least-populated state to have a world-class university for its students. It exists because of the Wisconsin Idea—a partnership between dedicated UW faculty, staff, and students and the citizens of Wisconsin. Our long term health depends on the health of the Wisconsin Idea. On Wisconsin!