GRADUATE SCHOOL

Graduate education defines elite universities and is the essence of a productive research institution contributing in a multifaceted manner to a vibrant scholarly community. In particular, graduate education:

- Educates the next generation of global leaders.
- Expands knowledge and enhances self directed, lifelong learning skills.
- Promotes societal literacy and the public good.
- Prepares the future workforce for sustained competitive success in the globally oriented, rapidly changing 21st century knowledge society.
- Contributes to sustained institutional research and economic development.
- Fosters the recruitment and retention of talented faculty.
- Bolsters the institutional teaching mission.
- Provides opportunities to enhance undergraduate student learning outcomes through participation in research activities and in undergraduate teaching.

Although talented faculty create and sustain quality graduate programs, the Graduate School coordinates and provides a guiding vision for recruitment and retention, development of cohesive and contemporary programs, implementation of explicit and rigorous standards, and for meaningful assessment of student learning outcomes. These components are embedded in the Graduate Schools response to AP3 key motifs of access, excellence and leadership.

I. ACCESS

Recruitment of the best and brightest graduate students is increasingly competitive and global in scope. Success in recruiting high quality graduate students is crucially dependent upon the ability to provide graduate assistantships at competitive stipend levels, and aggressively pursuing every opportunity to maximize access by all populations.

Action Item 1. Recruitment of high quality graduate students. *Each graduate program will develop a defined recruitment plan.* Program plans should focus on proactive recruiting practices to expand the quantity and quality of the applicant pool, establish defensible admissions benchmarks and processes, and institute program strategies to enhance applicant matriculation. The Graduate School will provide guidance and training to enhance recruitment efforts. The Graduate School also will coordinate collaborative agreements with domestic and international institutions. Although many effective recruiting practices are resource independent, a comprehensive recruiting enterprise requires resources. For example, in an increasingly competitive environment it is a standard practice at elite research universities to provide funding for campus visits, recruiting events, and for development of effective marketing resources. The return on investment in defined, accountable recruitment initiatives is significant and a combination of state and other funding is essential.

Action Item 2. Increase the number of graduate assistantships. *The Graduate School will coordinate efforts to expand the pool of state and externally*

funded graduate assistantships. Aggressive efforts at the program level are necessary but not sufficient to bolster recruiting and retention of talented students. Centralized initiatives are required in the highly competitive environment typified by the global graduate education enterprise. Graduate assistantships are a fundamental prerequisite to build a dynamic graduate student population. Assistantships are also an extremely cost effective method to enhance institutional research and instruction objectives.

A comprehensive approach that exploits all possible sources of support for graduate assistantships is necessary to address deficiencies in the UW assistantship pool. It is incumbent upon graduate programs to boost the number of assistantships by directed fundraising efforts and through externally funded grants, contracts and sponsored research. In addition, an increase in state funded graduate assistantships, allocated on a defined performance and accountability basis in support of building program depth, also would contribute to leveraging opportunities from external sources.

Action Item 3. Increase the stipend for Graduate Assistants. A significant outcome from AP2 was connecting GA salary increases to faculty-staff raises. This policy change has been very beneficial; however in general, UW GA salaries still significantly lag comparators (average 0.83 based upon recent OSU data).

An additional complicating factor with the current stipend level is that, in order to remain competitive, many programs are forced to combine several GAs stipends into one, effectively decreasing the number of GAs available for student recruitment. The current master's and doctoral level GA stipends are $11,072/AY and $15,408/AY, respectively.

Action Item 4: Development of international partnerships. In order to strengthen the international student pipeline and to increase domestic student exchange and research opportunities, partnerships will be developed with targeted international universities, governmental and non-governmental entities. These collaborations will include but are not limited to development of joint undergraduate-graduate degree programs, recruitment of international students sponsored by governmental and non-governmental fellowships, and mutually beneficial short term exchanges. One potential model that will be explored is the 3 + 3 joint undergraduate-graduate program. This model entails a three year undergraduate program at one partner institute followed by a three year graduate program at the other partner. At completion, the student receives an undergraduate degree from the initial three year partner and a master's degree from the 2nd three year partner.

Action Item 5: Establishing collaborations with Historically Black Colleges and Universities. Increasing diversity in the graduate student population is a central goal of the Graduate School. Various initiatives will be directed toward this goal including collaborations with HBCU's through funding by the Graduate School Science Posse. The Posse program will fund and administer efforts to recruit HBCU students in STEM fields into UW graduate programs and provide summer research experiences and joint degree opportunities.

II.   **LEADERSHIP**

U.S. graduate education trains the future leaders at the local, national and international levels. It also significantly contributes to the generation of new discoveries vital for sustained economic and social prosperity. Increasingly a graduate degree is the entry level educational requirement in the skills-based workforce.

Essential outcomes of the graduate experience include specialized discipline knowledge as well as competency in creativity, entrepreneurship, interdisciplinary thinking, problem solving, project management and critical analysis. Thus, the graduate experience not only prepares students to be stewards of the profession but positions them to respond to changing dynamics in the workforce through life-long, independent and self-directed learning.

> **Action Item 6. Development of new graduate programs.** *Faculty coalitions are invited to submit proposals for new programs that are founded on strong critical mass and faculty expertise, student demand, demonstrated commitment, cost effectiveness, and a relevant, cohesive and coherent curriculum.* New programs should be attentive to building institutional depth and expertise. Proposals for new graduate programs should strongly consider exploiting interdisciplinary opportunities to maximize synergy between departments and enhance student outcomes. Although the Graduate School will provide guidance in the development of proposals, new graduate programs must originate from the faculty and have support from departments and colleges.

> **Action Item 7. Building depth in existing interdisciplinary life science doctoral programs.** *Interdisciplinary graduate programs will submit specific plans focused on attaining national distinction and building research and scholarship collaborations across the institution.* Plans should include realistic and defensible resource requirements, defined outcome expectations, benchmarks and performance standards, and a detailed plan to address current challenges, opportunities, and deficiencies.

III.   EXCELLENCE

Graduate education contributes directly to institutional reputation and is a magnet for talented students and faculty. Graduate programs should evaluate their form and function on a regular basis to ensure successful student outcomes. Specific practices related to collective mentoring, student-faculty engagement, scholarly culture, collective responsibility, and quality of unscripted discovery experiences are central components of the successful graduate experience.   Establishing transparent expectations, high standards and defined assessment of student progress also ensures accountability and promotes student learning outcomes.

> **Action Item 8. Graduate Faculty Requirements.** Mentoring graduate students is a vital faculty responsibility and central to high quality graduate education. Appointment to the graduate faculty currently requires service as a co-chair and tenure track faculty status. Exceptions are considered on a case by case basis by the Graduate Council. The goal of co-chairing a committee is to provide appropriate training in mentorship skills and graduate program processes. However, these goals can be met more directly by participation in a mentoring workshop, and student learning can be assured by a formal consideration of thesis and dissertation outcomes. The Graduate School will develop a workshop to be delivered once per semester on "Best Practices in Graduate Student Mentoring". Attendance at this workshop and tenure track faculty status will be

required for appointment to the Graduate Faculty. In addition, all departments will establish defensible quality criteria for master's theses. Dissertations will be required to have the depth and breadth appropriate to be publishable.

Action Item 9. *The Graduate School, in cooperation with the Research Office and Ellbogen Center for Teaching and Learning, will develop a series of annual workshops for graduate faculty and students to foster professionalism and effective graduate education.* These may include but are not limited to "Ethical decision making and responsible conduct of research", "Effective recruitment and retention practices", "The formation of scholars", and "Intellectual property development and tech transfer".

Action Item 10. Department mentoring practices. *Graduate programs should review mentoring practices and establish outcome goals consistent with excellence in their respective disciplines.* These may include but are not limited to defined dual or collective mentoring, time limits for state GA funding, time-to-degree and specific performance requirements.

When students clearly understand learning outcomes required for graduation, they are empowered and become more engaged to self-assess progress and correct deficiencies. Development of transparent standards requires programs to articulate the essential characteristics, competencies, and behaviors that define a master's and doctoral graduate and to assess the degree to which those expectations have been achieved.

Action Item 11. Recognition of outstanding faculty contributions to graduate education. *The Graduate School will establish a pool of 3-5 graduate assistantships to be competitively awarded to recognize outstanding faculty contributions to graduate education.* The Graduate Council will develop criteria, evaluate faculty proposals and annually recommend to the Dean nominees to receive a 2 year GA award.

Action Item 12. Replacing non-thesis, Plan B masters degrees with Professional Masters. *Each graduate program will submit an explicit plan to substitute the non-thesis, plan B masters option with a defined professional master's degree option.*   Growth in the graduate enterprise is focused at the master's level; over 90% of graduate students in the US are in masters programs and enrollment is increasing approximately 3% per year. Only 15% of masters student are on a doctoral pathway; for the remainder the master's degree is a terminal, workforce oriented degree. For these students a traditional research focus may not be appropriate. Currently, these students enter non-thesis, Plan B programs and approximately 60% of UW master's students graduate from Plan B programs. Unfortunately in practice, many plan B programs are simply course intensive programs that ignore key elements of a contemporary graduate education.   Recognizing that authentic, inquiry-based experiences are fundamental in the transition from novice to expert thinker, **Professional Master's** options that include integrative experiences will replace Plan B options. Integrative experiences may include, but are not limited to, capstone courses, internships, discovery experiences, and international experiences that focus on independent thinking, problem solving, creativity, and intellectual curiosity. The nature of the experience may be shaped by the student based upon workforce goals and are discipline dependent. However, each program should establish

clear learning outcomes and accountability measures associated with the integrative experience.

Action Item 13. Prepare an institution-wide accounting of contributions to graduate education. *The Graduate School will annually coordinate a summary of student outcomes for each graduate program.* Tracking student outcomes is essential to assess program performance, to publicize student outcomes and to establish sustained relationships between UW and its graduates. Trackable outcomes may include but are not limited to total graduate students, number of section 1 and 2 GAs, professional achievements of graduate students (journal articles, abstracts, presentations, performances, shows, internships, service learning products, and other discipline specific achievements), degrees awarded/faculty FTE, time-to-degree, attrition and workforce placement.

Action Item 14. Graduate program evaluation. *The Graduate School will assist in the coordination of college based assessment of graduate programs.* Maximum engagement in a graduate assessment process evolves most effectively from a decentralized process supervised by colleges. The Graduate School will provide coordination, guidance and administrative assistance as appropriate. Departments should appraise the status of their graduate components to ensure that experiences that promote independent, self-directed, life-long learning are explicitly entrenched in the program of study and that transparent performance rubrics are communicated to students and faculty.