

# REPORT OF THE COMMITTEE ON PHD COMPLETION

## June 6, 2006

### BACKGROUND

Data from the Office of Institutional Research and Planning show that 48% of students entering PhD programs at the University of Maryland between 1992 and 1995 completed the PhD in ten years. Approximately 17% left with a Master's degree. Most of those who did not complete are no longer enrolled.

Minorities and women completed at lower rates while international students were the most successful group. Only 40.4% of minority students and 46.9% of female students completed the PhD in 10 years while 53.5% of international students did so. Another 21% of international students earned a Master's degree before leaving the University. The percentages of minority and female students leaving with a Master's degree were close to the institution average at 17.8% and 16.8% respectively.

Students who begin the PhD program as full-time students are much more likely to complete the degree than those who do not. For students entering in 1994, only 34% who began the program as part-time students completed the degree in ten years, compared to 49% of those who began as full-time students. In some colleges, the completion percentage of those beginning as full-time students was more than double that of part-time students.

The most recent data from the Council of Graduate Schools suggest that the national average for 10-year completion of all PhD students is about 60%.

In light of these facts, Provost Destler appointed a committee composed of faculty and graduate students and charged it with examining the issues that affect PhD completion and time to degree. (The committee membership is given in Appendix I.) The committee was asked to make recommendations to increase the proportion of PhD students who complete the PhD in ten years.

### COMMITTEE RESOURCES

Several recent books and a number of articles have been written on the topic of PhD completion. Most notable are *Leaving the Ivory Tower: The Causes and Consequences of Departure from Doctoral Study* by Barbara Lovitts and *Three Magic Letters: Getting to PhD*, by Michael Nettles and Catherine Millett, both of which included data from the University of Maryland in their analyses. Several other universities have undertaken programs to improve degree completion and have shared their experiences. The Council of Graduate Schools is in the middle of a multi-year project to study degree completion and the effects of intervention strategies and has published preliminary data. At the University of Maryland, the College of Engineering established a committee to address PhD completion that shared findings and recommendations with the committee. Other

programs and departments have published information helpful to PhD students. The committee members were guided by their review of the literature, the experiences of programs at the University, and by their personal experiences as graduate students, teachers, advisors, mentors, and graduate directors. The Committee and the Graduate School have created new web pages for students and faculty at <http://www.gradschool.umd.edu/phdcompletion> that include tips for PhD completion as well as references for recommended papers, books, and guides on the topic.

The committee also conducted a work-life survey of graduate students working as full-time Graduate Assistants (GAs) during the fall semester, 2005. The survey explored satisfaction with the work experience, conformance with the 20-hour per week work maximum, and the time Teaching Assistants (TAs) spent in each of a variety of work responsibilities. An overview of findings from this survey is found in Appendix II.

## FINDINGS AND RECOMMENDATIONS

Both the graduation rates and the factors that affect them vary across the University. The experiences of PhD students across programs are also quite different. The recommendations that the committee has put forth in this document should be considered individually for their appropriateness. It is also recognized that many PhD programs across the university have matured and are now quite excellent. In these programs PhD completion is at a high level or is improving rapidly, and many of the suggestions and recommendations contained in this report are already in place.

While there are many complex factors that may influence completion of the PhD, they can be grouped into general categories. The committee was divided into subgroups that individually addressed the following areas: academic best practices, climate and other intangibles, financing graduate education, work requirements, Graduate School programs and publications, and recruitment for success. The recommendations from each subcommittee were discussed by the entire committee and are included in their entirety in Appendix III of the report.

In addition to the many specific recommendations put forward by the subcommittees, the committee offers the following recommendations and goals for the improvement of graduate education at the University of Maryland. The goals are ambitious, and in some cases may take a number of years to implement, but improvement of doctoral programs is essential if the University is to reach its goal of national eminence.

### 1) **The importance of mentoring.**

Students who have a mentor are more likely to complete the dissertation than those who do not. Although the mentor is usually the dissertation advisor, this is not always the case. Students who are well-mentored feel that their work is important and feel encouraged to complete it. Effective mentoring is so essential to the success of graduate

education that it should be an important component of merit salary and promotion considerations. The University, colleges, and departments should also consider establishing faculty awards for outstanding mentoring of PhD students.

However, mentoring is not just the responsibility of an individual mentor; it is also the responsibility of the graduate program faculty as a whole. Graduate students must be treated as future colleagues and included in department academic and social functions. Every PhD student should have a desk and a mail box even if the student works outside the university and the desk is shared. Graduate students should be expected to attend departmental seminars and to talk with academic visitors. Peer mentoring may also be an effective strategy to build program cohesiveness and encourage degree completion. Programs should make a special effort to keep students who have been admitted to candidacy engaged in department life, since this is the time that graduate students often feel isolated and forgotten.

Departments may wish to consider formal training programs in mentoring for faculty. Some specific recommendations to improve student mentoring include: allot regular times each week to meet with students, walk through the lab everyday (if applicable), consider office hours part of your teaching load, read and return student work promptly, formalize career guidance, increase awareness about non-academic jobs, and ensure that students have a wide variety of experiences including teaching, presenting research results, and attending national meetings.

The Graduate School can assist in the enhancement of mentoring by developing Best Practices in Mentoring that include the responsibilities of faculty advisors and by developing guidelines for encouraging and rewarding team mentoring. The Graduate School may work with programs in the development of training programs for mentors. The Graduate School website provides information for doctoral students about establishing and maintaining mentoring relationships.

## **2) Universal Financial support.**

A top PhD program should grant every PhD student in good standing adequate financial support to cover basic living costs for a time period appropriate for PhD completion. This time will range from about 5 to 7 years depending on the discipline. If the expected time to degree of a fully funded student exceeds 7 years, a review of degree requirements may be appropriate.

To meet the goal of full funding, programs must be the “right size.” Each program must determine the length of time that is reasonable for completion of degree requirements and the average number of students that can be supported each year. Programs should use these data to identify the target number of new, fully-funded students they can admit annually.

Offers of full financial support must be accompanied by a clear set of reasonable expectations for satisfactory progress toward degree completion, and student progress

should be reviewed annually. These expectations should provide a timeline and inform new students about when coursework should be completed, when comprehensive exams should be completed, and when the dissertation proposal should be defended. With well-defined benchmarks for satisfactory progress, students will have a good sense of what is expected from them to remain eligible for continued support, and, recognizing that there are many factors that affect student progress, the graduate program will have a reasonable basis for an annual review.

Occasionally, students apply to a PhD program expecting to continue to work outside the University after they are admitted. The criteria for full financial support could be met under these circumstances, but before these students are accepted, the program should be sure that the employer is fully supportive and will allow the student to attend classes, seminars, departmental colloquia and the like. Keeping such students engaged is very difficult, and they drop out at a much higher rate than those who begin programs as full-time students.

### **3) Resources for Graduate Student Support**

Attracting and graduating top PhD students is a measure of the success of the University. Increasing resources to support PhD students will be necessary if the University is to move into the upper echelon of public research universities. The committee suggests that directing some portion of overhead generated from research assistant salaries directly to graduate student support be considered as one possible revenue stream. This would encourage support of graduate students from research funds. When the University receives enhancement funds from the State, allocation to graduate student support should be one of the highest priorities. Revenue from the Professional Master's programs may be a very important source of financial support for PhD programs, and the units should account for the expenditure of these revenues annually to the Provost.

One important target for new resources is the recruitment of exceptional students. It may be difficult to predict with certainty which individuals from a group of qualified applicants will and will not complete the PhD. However, experience tells us that from a variety of qualitative and quantitative measures, faculty can identify a subset of admitted students who are highly likely to complete the degree. Such superior students can enhance the intellectual environment of a program in a way that influences all graduate students and encourages completion. However, such students are highly sought after, particularly when they are from minority groups, and attracting them will require redirection of institutional resources.

The timing of fellowships can be important for degree completion. In some programs, fellowships are more useful when students first enter a doctoral program so that they can take time to find an appropriate advisor. In others, many first-year graduate students are employed as teaching assistants so fellowship funds might be more usefully spent toward the end of the program, during the writing stage, or when research requires the student to travel. Five to seven-year packages can be designated as containing Fellowship offers as long as there is a defined Fellowship experience in the offer. (Fellowships must be given

without requiring work unrelated to the dissertation.) Programs should consider carefully how fellowship funds can be used to enhance completion. Future allocation of fellowship funds to colleges from the Graduate School and to programs from the colleges should not be based on the size of the programs, but rather on the success of the programs and the number of degrees awarded.

#### **4) Programs, Departments and Colleges**

Graduate programs, working with their colleges, should review the PhD program, examine why and when students leave the program, and determine the appropriate time to degree. A vision for the programs (the “ideal program”) should be established and a plan for reaching that goal developed. The plan should include both long-range and short-term steps and benchmarks by which a program’s success can be measured. The plan should include specific time to degree and completion goals. Graduate students should be involved in this process, and the Graduate School should provide assistance by providing examples of best practices, by assisting in gathering data as requested, and by facilitating inter-departmental discussion. These plans should be reviewed at the College level and provided to the Provost and the Graduate Dean by the end of FY07.

Identifying students who will be successful requires more information than GPA and GRE scores. Programs should develop guidelines for recruiting students who will be successful. Guidelines might include greater consideration of students’ research experience, personal phone calls to undergraduate advisors, plans for providing campus visits to candidates, and care in matching student interests with UM faculty interests and availability. Recruitment of minority students must be part of a “recruitment for success” plan. Programs must also offer financial support that is competitive so that they can enroll their most outstanding applicants.

The Graduate Assistant Survey demonstrated that more than 40% of TAs work more than 20 hours per week during the semester when classes are in session. Departments need to review work assignments to find ways of bringing this down to the maximum of 20 hours per week in keeping with Graduate School policy, and they should develop clear, reasonable, and well-publicized expectations for TA workload. Plans should be made to reduce the workload of graduate students to match that of our peer institutions. Programs may also consider work assignments that enable students to “graduate” to less teaching once they begin working on dissertations. Reallocation of resources will be necessary to meet work reduction goals.

Graduate students who do not have a satisfactory relationship with their advisors may choose to leave their PhD programs. If these students can change advisors without penalty, especially if they make this change early in their matriculation, they are more likely to finish. Programs should ensure that students know how to go about changing advisors without penalty. It is helpful for students to have time at the beginning of their programs to choose an appropriate advisor, rather than be assigned an advisor from the beginning.

## 5) **The Graduate School**

The Graduate School should review college/program plans for improving the experience of PhD students and increasing completion. The allocation of resources, particularly fellowship allocations, should not penalize planned reductions in program size if they result in an improved success rate among students. Ultimately, such program size reductions should not affect the number of graduates, but until a steady state is reached, stability in fellowship allocations may be necessary for Colleges to move forward.

The Graduate School must continue to be a resource to assist programs, departments and colleges by providing information on best practices, assisting in the recruitment and retention of underrepresented students, holding and promoting workshops for graduate students, providing analysis of institutional data, allocating fellowship resources wisely, and providing assistance to programs as requested.

The literature suggests that some students leave doctoral programs because they decide that they do not want to be professors, or have little chance of finding jobs in the professoriate. The Graduate School, either alone or in collaboration with colleges and schools, should offer programs to assist doctoral students interested in pursuing non-academic professions by providing information on alternative careers. Involvement of alumni/ae working successfully in industry, government, and the nonprofit sector may be very helpful in making alternate career paths known to doctoral students and in providing assistance in finding employment.

One of the University's major goals is to ensure diversity among its faculty, staff, and students. The Graduate School is a leader not only in assisting in the recruitment efforts but also in providing programming and support to ensure that underrepresented students succeed. These efforts should continue to be a major objective of the Graduate School. Expansion of the program that develops faculty partnerships between faculty at UM and faculty at minority-serving institutions is recommended.

## CONCLUSION

National attention is now focusing on PhD completion. In addition to the study by the Council of Graduate Schools, the National Research Council will be gathering these data and making them public. From the data now available, as limited as it is, it appears that the University's rates do not compare favorably to national norms. While some important steps can be taken through policy change, others will require new resources. This report is designed to bring forward a number of ideas for consideration, and the committee hopes that the institution will respond and make improvement of the doctoral programs a major institutional priority in the coming years.

## **APPENDIX I. Committee Members**

Chair: Ann Wylie, Assistant President and Chief of Staff, 1101 Main Administration Building. [awylie@umd.edu](mailto:awylie@umd.edu) x56848

Gay L. Gullickson, Associate Dean, Graduate School, 2123 Lee Bldg. [glg@umd.edu](mailto:glg@umd.edu) x54205

Jhonna G. Davis, Associate Dean, Graduate School, 2122 Lee Bldg. [jgdavis@gradschool.umd.edu](mailto:jgdavis@gradschool.umd.edu) x54183

Sally Koblinsky, Professor and Chair, Family Studies, and Acting Associate Dean, College of Health and Human Performance, 1204A Marie Mount Hall. [koblinsk@umd.edu](mailto:koblinsk@umd.edu) x54009

Elizabeth Loizeaux, Associate Dean, College of Arts and Humanities. 1102 Francis Scott Key Hall. [eb1@umd.edu](mailto:eb1@umd.edu) x55646

Janet Robertson, Assistant Dean, College of Arts and Humanities, 1102 Francis Scott Key Hall. [jhrobert@umd.edu](mailto:jhrobert@umd.edu) x52101

Larry Davis, Professor and Chair, Computer Science, 3361 A.V. Williams Bldg. [lsdavis@umd.edu](mailto:lsdavis@umd.edu) x52662

John Shea, Director of Graduate Studies, Economics, 4121A Tydings Hall. [jshea1@umd.edu](mailto:jshea1@umd.edu) x53491

Sharon Fries-Britt, Assistant Professor, Education, Policy and Leadership, 3113 Benjamin Bldg. [sfries@umd.edu](mailto:sfries@umd.edu) x50186

Lawrence Sita, Professor, Chemistry and Biochemistry, 4101 Chemistry Bldg. [lsita@umd.edu](mailto:lsita@umd.edu) x55753

Norman Wereley, Professor, Aerospace Engineering, 3180 Martin Hall. [wereley@umd.edu](mailto:wereley@umd.edu) x51927

Angela Hamlin, Senior Research and Policy Analyst, Office of Institutional Research and Planning, 1101 Mitchell Bldg. [ahamlin@umd.edu](mailto:ahamlin@umd.edu) x55632

Laura Moore, Graduate Student, Entomology, 4112 Plant Sciences Bldg. [lauracat@umd.edu](mailto:lauracat@umd.edu)

Saroja Ringo, Graduate Student, Curriculum and Instruction, 2311 Benjamin Bldg. [saroja\\_ringo@hotmail.com](mailto:saroja_ringo@hotmail.com)

Amy Hobbs, Coordinator, Graduate School, 2123 Lee Bldg.  
[ahobbs@gradschool.umd.edu](mailto:ahobbs@gradschool.umd.edu) x50814

## **APPENDIX II. Survey of GA Workload**

A survey of all Graduate Assistants (GAs) employed full time during Fall 2005 was conducted by the Graduate School and OIRP. The survey was designed to determine what percentage of graduate assistants worked less than 20 hours per week, 20 hours per week, and more than 20 hours per week on average, and if they were satisfied with the work experience. For those who were Teaching Assistants (TAs), the survey also provided information on how their work hours were distributed among a variety of possible responsibilities.

The response rate to the survey was 42%. This is an extremely high response rate, indicating that this is a topic of significant interest to graduate assistants on the campus. The information contained in the responses to the survey will be reviewed carefully by the Student Affairs Committee of the Graduate Council. What follows is an overview of general findings.

### **Research Assistants**

Research Assistants (RAs) on average spend about 30 hours per week working on projects that are directly related to their research and 14 hours on work that is not. There is some statistically significant variation among the colleges, with BSOS students working more hours on unrelated work and Life Sciences students working fewer. The range of hours unrelated to the respondent's research is 17 to 11.5 hours. Approximately 12% of RAs overall report being dissatisfied or very dissatisfied with the number of hours worked. The more the work was related to the RA's own dissertation/thesis, the more satisfying was the experience.

### **Administrative Assistants**

Administrative Assistants (AAs) are also fairly well satisfied with their work hours. Although 22% report working on average more than 20 hours per week, 12% report being dissatisfied or very dissatisfied with their hours. While classes are in session, 20% of AAs report working more than 20 hours; during the period before classes start, 31% report working more than 20 hours. These data suggest that there is some flexibility in AAs' work assignments.

### **Teaching Assistants**

The experience of TAs is quite different from that of RAs and AAs. Approximately 23% report being dissatisfied or very dissatisfied with the hours they work, almost double that of the other two groups. Only 8% report being very satisfied, while 21% of RAs and 17% of AAs are in this category.

During the semester when classes are in session, 40% of TAs report working more than 20 hours per week, while only 21% of AAs so report. (Many RAs also work more than 20 hours, but much of this work is directly related to the RAs own research.) For the whole semester, 36% of TAs report working on average more than 20 hours per week. There were significant variations in TA responses across colleges. For example, 48% of TAs in ARHU report working more than 20 hours weekly, as compared to 16% of those from CMPS.

There is also a variation in the percentage of TAs who report being dissatisfied or very dissatisfied. In Education, only 13% fall into one of these two categories, compared to 30% of the TAs from ARHU. Across the campus, about a third of students are neutral about their time as TAs. From the comments that were provided by respondents (and there were many pages of comments), at least some were neutral about their hours because while they are not happy with their hours, they are grateful for the opportunity. In general, level of satisfaction with work correlates negatively with the reported hours of work. Those who work less than 20 hours a week report a higher level of satisfaction, while those who work more than 20 hours a week report a lower level of satisfaction.

### **APPENDIX III. Charges to Subcommittees and Subcommittee recommendations**

#### **Subcommittee on Best Practices**

What are the best practices for Graduate Programs to follow to ensure degree completion? Should there be progress requirements and can there be actions that will decrease the time to degree? How might the number of graduate students in a program be determined? Mentoring is known to be an important factor in ensuring degree completion. What should be expected of mentors and is there a right sizing of programs that considers the number of available mentors? How might the Graduate School be involved in improving completion and reducing time to degree? How might graduate students also assist in improving completion? The Committee was asked to review these issues and to make recommendations for the University, Graduate School, Colleges, and Departments.

#### **Recommendations for the Graduate School**

1. The Graduate School should continue to host workshops and seminars for the campus on tips for getting through graduate school.
2. The Graduate School should do more to promote those workshops across campus.
3. The Graduate School should post the following List of Best Practices for PhD Completion on the Graduate School website with links to other supporting documents and useful sites.

4. The Graduate School should develop Best Practices in Mentoring (building on the existing mentoring booklet and work done by Saroja Ringo in the College of Education). This might be similar to the list developed by Stanford and posted on their website as part of their graduate school handbook (<http://gsh.stanford.edu/Sec3f.html>). This list should include the responsibilities of advisors and a set of best practices for students.

5. The Graduate School should develop guidelines for splitting 899 credits among co-mentors to encourage and reward the team mentoring that is becoming increasingly common and necessary. As the Woodrow Wilson Foundation initiative on “The Responsive Ph.D.” recommends: “Doctoral programs urgently need to expand their approaches to mentoring, such as through team mentoring, particularly for attracting and retaining a diverse cohort of students.”

### **Recommendations for the Colleges**

1. Colleges should provide leadership for change.
2. To facilitate change, Colleges should facilitate the flow of information: colleges should communicate research on best practices to departments, and collect and communicate departmental and college data and initiatives to the Graduate School.
3. To facilitate change, Colleges should ask each department to examine its PhD program and develop a vision of its program (the “ideal program”) and what it would take to get there. This last should include both long-range and short-term steps for the department, college, and university.
4. Colleges, working in conjunction with the Graduate School (the graduate student survey), should examine graduate student workloads in each department.
5. Colleges should promote programs for their departments on preparing future faculty and teaching excellence.
6. Colleges should provide support to departments for gathering data.

### **Recommendations for Programs**

1. Programs should involve graduate students and faculty in discussions about how to improve completion and time-to-degree rates.
2. Each program, working with its college (above) should review its PhD program, examine why and when students leave the program, and develop a vision of that program (the “ideal program”) and what it would take to get there. This last should include both long-range and short-term steps for the department, college and university. (See the discussion the College of Engineering recently undertook.) It should also involve a calculation of the right size of the graduate program to assure sufficient financial and human resources to support and mentor students for timely degree completion.

3. Programs should develop guidelines for recruiting for success a diverse student body. This might include creating a meaningful list of criteria on which to judge applicants (useful also to potential students) and greater consideration of students' research experience. It should include a plan for providing campus visits to admitted candidates to help them make the most informed decisions they can. The emphasis should be on articulating what is special about UMD and the particular program, and recruiting students who are a good fit. To do that, departments will need to review other programs to understand where UMD fits in the array of programs available to potential students.
4. Programs should develop a clear set of reasonable expectations (including a time line for satisfactory progress) for students. This should be well-publicized to prospective students, current students, AND faculty. We recommend it be posted on departmental and college websites.
5. Programs should provide and require regular advising on progress toward the degree, e.g. a yearly mandatory meeting with the director of the program or with a program-wide graduate committee. This responsibility should not be for the advisor alone.
6. Programs should foster consistent, responsive mentoring. This includes developing a clear, well-publicized set of expectations for faculty mentors, based on the guidelines developed by the Graduate School (see above).
7. Programs should develop clear, reasonable, and well-publicized expectations for TA workload, with an eye on reducing that workload to match that of our peer institutions. (In their effort to improve completion rates, Duke, for example, has reduced TA loads to no more than one course or section per semester.) Programs should consider the demands of degree requirements when deciding at which points in their careers TAs teach different courses.
8. Programs, with the aid of the Graduate School, should work creatively to provide full funding for the duration of the Ph.D. (4-6 years), using a judicious combination of fellowships, TA-ships, and partial TA-ships. (Fellowships are especially effective for the final year of the dissertation. TA-ships are important toward the beginning of the Ph.D. to get students involved in the intellectual community of the program.) All programs should examine its funding practices and the associated completion rates of its students to figure out the best mix of funding. All programs should consider providing teaching experience as part of a student's funding package.
9. Programs should adopt the M. Phil. degree option and adapt it to their programs to acknowledge the work of students who have advanced significantly toward the Ph.D., but chosen not to go on to the thesis.
10. Programs should develop procedures for students to change direction without fear of penalty.

### **Subcommittee on Financing Graduate Education**

What changes might be made in the financial support for graduate students that would enhance completion? Are there recommendations on the timing of fellowship expenditures and awarding of fellowship funds that might be recommended? How should fellowship funds be allocated among colleges to recognize success in Ph.D. completion?

### **Recommendations**

1. Departments should think of fellowships as a tool for retention rather than recruitment. Students on assistantships are often more integrated into the department and providing fellowships early may not provide the opportunity to integrate the student into the department culture. Departments may want to consider offering fellowship money later in the program or using funds to top off assistantship stipends.
2. Students must be held accountable for progress toward the degree in order to receive continued funding.
3. Colleges should report fellowship allocations and statistics to the Graduate School annually.
4. Colleges should move away from allocation formulas based on the number of students in a department. Instead, they should use graduation rate and number of degrees awarded annually.
5. Each department should provide measurable goals for advisors and students for fellowship years. Increased structure would help students stay focused on their dissertations.
6. The Graduate School should investigate the fringe benefits now awarded to TAs and RAs. What is comparable at peer institutions for benefits such as health insurance, housing, and childcare? Would it be more effective to define fellows as Research Graduate Assistants for tuition remission?
7. The university leadership should decide the mission for graduate education at the university and put the appropriate emphasis on funding graduate education.
8. Part of the overhead generated on RA positions over the summer (especially the overhead on appointment levels over 20 hours a week) should be used to fund fellowships. While most of this money would go back to the originating departments, some of it could be placed into a general fund for allocations to departments that do not have significant amounts of sponsored research.

### **Subcommittee on Work Requirements**

What are the work obligations of Graduate Assistants and do they vary if their assignments are primarily teaching, research, or administration? Do work obligations

vary across colleges and for RA's, what percentage of time does the RA spend on work directly related to the dissertation? Should every PhD student be a TA at least once?

### **Teaching Assistants (TA)**

The subcommittee felt that there was a sufficient lack of hard information regarding 'required' vs. 'actual' work load requirements for TAs and that disparity most likely exists across campus by discipline. Accordingly, the subcommittee makes the following recommendations at the various unit levels.

### **Recommendations for the Graduate School**

- (1) Send out workload survey to all graduate students who have had TA and / or RA experience. (This task was completed and the summary of findings is included in Appendix II.)
- (2) Hold 'town hall' meetings to discuss workload issues, either perceived or real, with graduate students with representation from across several disciplines.
- (3) Review current 20-hr / week TA requirement and compare existing policy relative to those of other peer and non-peer institutions.

### **Recommendations for the Colleges**

- (1) Hold town hall meeting with graduate students with representation from across departments of the college unit. Identify issues, perceived or real, and how these differ amongst departments and graduate programs of college unit.
- (2) Survey or hold town hall meeting with faculty from across college unit. Identify issues, perceived or real, and how these differ amongst departments and graduate programs of college unit.
- (3) Review current use of TA positions within the college unit. Identify any inequities or potential abuses that might exist among different departments and graduate programs.

### **Recommendations for Departments**

- (1) Structure TA appointments so that students "graduate" to less teaching once they begin working on dissertations.
- (2) Investigate use of 'term limits' on total number of TA appointments per student and faculty member.
- (3) Investigate nature of TA assignments relative to a student's area of expertise. How many "preps" does each student have? How often do students teach the same course?

### **Research Assistants (RA)**

The subcommittee felt that there currently exists a lack of hard data regarding the nature and culture for RA workloads within different disciplines across campus. It was generally agreed that identifying potential abuse at different unit levels was of critical importance. It is recommended that the Graduate School start with a comparison of time

to degree for a particular graduate program relative to similar data obtained for peer institutions.

### **Subcommittee on Recruitment for Success**

The Committee was asked to provide guidance on how to improve recruiting so that a higher proportion of those students who enroll will graduate. Things for the committee to consider include: research experience, personal interviews, career objects, use of GPA and GRE, and assessment of other admission factors that would indicate potential for success.

#### **Recommendations**

1. Recommend that the Graduate School offer web consultations for departments. The web site is often the first view a prospective student has of a department. Ideally, offering professional web consultations on design and effectiveness could help departments.
2. Recommend that the Graduate School offer financial assistance to departments to sponsor an Admitted Graduate Student Visit Day. Perhaps by offering matching funds, the Graduate School could help departments develop this important recruitment tool.
3. Recommend that departments research stipend offers of peer institutions including 4-6 years of support as appropriate for the applicant's background and program requirements.
4. Recommend that the Graduate School expand its role in recruitment for diversity.
5. Offer workshops for Directors of Graduate Studies on building relationships and partnerships with faculty at undergraduate institutions.
6. Graduate School should make supplemental fellowship funds available to help recruit highly qualified students who are heavily recruited by other institutions, particularly students from underrepresented groups.
7. Graduate School should work with the colleges to prepare written material to send to targeted institution, particularly minority-serving institutions and top international institutions.

### **Subcommittee on Programs and Publications**

The Subcommittee was asked to suggest the nature and frequency of workshops that might be helpful to completions, and to provide guidance on other programs and publications that would be helpful to doctoral students and to faculty mentors.

#### **Recommendations for the Graduate School**

- The Graduate School (GS) should continue to offer workshops on Ph.D. completion, dissertation writing, and related topics and advertise them on the GS website. Graduate Directors should receive the schedule of workshops each semester so they can promote them in their departments.
- The Graduate School should continue to support teaching preparation programs, working with the Center for Teaching Excellence to offer programs in a variety of different formats (seminars, retreats, summer *Preparing Future Faculty* programs).
- The Graduate School should offer workshops/programs to assist doctoral students interested in pursuing non-academic professions (e.g., workshops on marketing your degree for non-academic positions; career options in the social sciences; humanities and foreign languages; math, physical sciences and engineering).
- The Graduate School should consider adding the following resources for Graduate Students to its website:
  - Graduate School workshops (e.g. completing your dissertation, teaching portfolios, making professional presentations, publishing your work, job interviewing)
  - Campus teaching preparation programs (e.g., Center for Teaching Excellence)
  - Guidelines for mentors and mentees
  - Tips for completing the dissertation
  - Plagiarism and academic integrity
  - Graduate School fellowships (external awards)
- The Graduate School should consider adding the following resources for Graduate Faculty on its website:
  - National programs/initiatives addressing doctoral education and Ph.D. completion (e.g. *Ph.D. Completion Project, Preparing Future Faculty, Responsive Ph.D.*)
  - Guidelines for mentors and mentees
  - Graduate School workshops
  - Best practices for Ph.D. completion, teaching preparation, and related topics
  - Resources for Graduate Faculty (e.g., publications, conferences)
- The Graduate School should offer presentations on mentoring, doctoral student success, teaching preparation, dissertation completion, and doctoral exit surveys for Graduate Directors; these sessions could be included in meetings held for Graduate Directors each semester.
- The Graduate School should survey UMCP Graduate Directors about “best practices” in areas such as mentoring, research, teaching preparation, progress to

degree, and career preparation; these “best practices” should be showcased on the Graduate School website and shared with Graduate Directors for potential replication in other programs.

- The Graduate School (or colleges/departments) should consider developing an awards program for doctoral mentors.
- The Graduate School should increase its involvement in national doctoral education initiatives (e.g., *Ph.D. Completion Project*, *Preparing Future Faculty*, *Preparing Future Professionals*).

### **Recommendations for Graduate Programs/Departments**

- Departments should make information about their doctoral programs, requirements, student expectations, and career prospects clear to students from the time they first begin to consider a Ph.D. degree. (Ideally, this information should be posted on department/program websites).
- Programs should prepare interested students for teaching by collaborating with CTE, developing departmental programs, or adopting national models (e.g., *PFF*).
- Programs should explore ways to increase doctoral student involvement in Center for Teaching Excellence (CTE) programs (e.g., University Teaching and Learning Programs, Help on Teaching Program).
- Programs should employ varied strategies to help students develop as researchers, offering opportunities to work with multiple mentors, present research ideas/proposals in departmental seminars (early in the program), make presentations at professional conferences, co-author and review journal articles, and assist with grant proposal writing.
- Departments/colleges should consider developing partnerships with agencies/institutions that fund and hire their students, including government, business/industry, nonprofits, foundations, public education, and colleges/universities of various types. Some universities have developed university/community advisory boards in disciplinary areas that provide internships, sources for dissertation research, seminar speakers, potential employer contacts, and potential donors.
- Programs should explore ways to involve Ph.D. alumni more substantively in doctoral training.
- Programs should consider developing peer mentoring programs, pairing new graduate students with those who are more advanced. (Some universities make these peer mentoring duties part of the advanced student’s assistantship duties.)

Departments should also consider offering bulletin boards or chat rooms where students can post questions and exchange information.

- Departments/programs should track Ph.D. graduates to evaluate their satisfaction with the doctoral experience, to obtain information on graduates' careers/career paths, and to assess their effectiveness in preparing students for these careers.

### **Subcommittee on Climate**

The subcommittee was asked to examine ways that the climate for doctoral students might be improved to encourage completion.

#### **Recommendations:**

**Departments:** Recommend that departments formalize training programs for faculty to faculty mentoring. Some specific recommendations to improve student mentoring include: allot regular times each week to meet with students, walk through the lab everyday (if applicable), consider office hours part of your teaching load, read and return student work promptly, formalize career guidance, increase awareness about non-academic jobs, and ensure communication when traveling or on sabbatical.

Recommend that departments examine the physical space available to graduate students. Are desks available for every graduate student? Is there lounge space for graduate students? Are there social events to incorporate new students into the department? Is there informal space where graduate students and faculty can interact?

Recommend that departments examine issues related to professionalization. Is there money available for graduate student travel to conferences? Are the faculty available (at least via e-mail) during summer months when research is happening? The committee supports the enhancement of the Goldhaber travel and research grant fund to support student travel.

Recommend that departments formalize and regularize their process for nominating students for fellowships (especially external).

**Housing:** Recommend that the Graduate School monitor housing issues for graduate students. Gather information on housing for international students, especially first-year students. Possibly investigate ways to improve graduate student housing supply. The committee endorses making special housing opportunities available for highly recruited graduate students.

**Equity Issues:** Recommend that the Graduate School mandate annual workshops on sexual harassment for all new students.

**Grievances:** Recommend that the Graduate School publicize the office of the ombudsman for both faculty and students.

**Publications:** Recommend that the Graduate School print and distribute the Handbook for Graduate Students to all Graduate Faculty.

**Surveys:** Recommend that the Graduate School continue and expand its exit survey to all students who graduate or withdraw from the university.

### **Subcommittee on Creative Financing**

The committee was asked to examine the relative costs of full-time lecturers and graduate students and to examine the implications of using some portion of DRIF generated from RA salaries for direct support of PhD students.

#### **Findings**

The committee examined the costs of lecturers and graduate assistants in five large departments. A comparison was made between the cost of two graduate students and the cost of a full-time lecturer. The study found that while the cost for health insurance and tuition remissions was greater for the two graduate students, the cost of FICA, salary and other benefits was greater for lecturers. The net result was that there was effectively no difference in cost to the University between hiring one full-time lecturer and two graduate students. There may be educational reasons to exchange a lecturer for two graduate students, but there is no monetary justification for doing so.

A study was made to determine the relative costs to various parts of the University in diverting some of the DRIF gained from RA salaries directly back to the Colleges that generated it to be used for graduate student support. The reason that this approach might be helpful for PhD completion is that these funds could be used to support first-year students so that they might be able to pick an appropriate mentor, rather than being assigned as an RA during the first year. It is known that a good match between the interests and personalities of students and faculty advisors is important for completion and that this is more likely to happen if both have a say in the process. Students admitted directly to an RA position have no such say.

To understand the effect of diverting some DRIF funds associated with wages and benefits from RA salaries directly back to the colleges prior to campus formula DRIF distribution, the change in DRIF allocation to the various recipients was calculated by assuming a \$500K direct return to generating colleges for graduate student support. All but three colleges would receive some funds for graduate student support from this reallocation, ranging from a low of \$500 to a high of \$209,000. Because the total DRIF pot available for formula distribution would be reduced by taking the \$500K off the top, only five colleges would have their net DRIF allocation increased. The net allocation increase ranged from \$116 to \$135,462. Eight colleges would have their net DRIF allocation decreased, ranging from a reduction of \$12,637 to \$479. This approach would have the overall effect of increasing DRIF to those colleges with the largest external research base, and decreasing it to those with little external funding. It would have the positive effect of requiring all but a few colleges to increase the funds spent directly on graduate students since this return of DRIF would be an earmark.

The committee was not willing to make a specific recommendation because of the many consequences associated with its implementation. However, it is worth considering if other methods of raising GA stipends are not forthcoming.

TA's have multiple responsibilities, that range quite a bit in hours spent from individual to individual. However, the average hours per week reported in specific categories are as follows:

- a. conducting class: 5.0 hours,
- b. preparing for class: 5.0 hours,
- c. office hours: 2.6 hours,
- d. answering emails: 2 hours,
- e. grading: 5.6 hours,
- f. attending lectures/meeting with professor/proctoring: 2.7 hours,
- g. advising and supervising students: 2.4 hours,
- h. other: 3.7 hours, and
- i. average of the above: 29 hours.

About three quarters of students did not know where in the Graduate School to go to complain about work hours or other unfair treatment. About two thirds knew where to go in their departments or programs. About a third of the respondents thought they spent too much time being a TA or were unfairly treated in some other way, but of these only about a quarter actually sought help.

