Prioritizing and Strengthening Graduate Education at UC Davis

A report by the Joint Administration / Academic Senate Special Task Force on Graduate Education

May 18, 2012

CONTENTS

Acknowledgements
The task force gratefully acknowledges the contributions of Stacey Pasco, who provided steadfast support and expertise in organizing the activities of the task force; Seija Vertanen and Helen Frasier who provided invaluable contributions by researching and summarizing pertinent information; and, Stacey Bianco and Mary McLaughlin who coordinated key meetings of the task force. We also thank Ken Burtis and Christopher Sindt for their valuable input during our process. We appreciate our visitors, Frances Leslie, Carol Lynch, Steve Matson, and Joel Michaelsen who stimulated valuable conversation and provided important perspective for our deliberations. Thank you to all members of the university community who contributed perspectives for our consideration.

VISION

The Graduate Education Task Force envisions UC Davis as one of the top five public research universities in the country, achieving its vision of excellence[1]. Graduate education is recognized as an integral and vital part of the university's mission, is given high priority and is central to the processes of strategic planning and resource allocation.

The task force envisions graduate education at the heart of this university. Graduate students contribute to the superior education of our undergraduates and collaborate with faculty to produce cutting edge research, propelling UC Davis into the top tier of research institutions. There is a **synergistic effect** when outstanding faculty attracts talented graduate students and when having the most capable students attracts the best faculty. Likewise, the ability of graduate students to thrive and succeed in their programs is a necessary component of excellent graduate education.

This university has internationally recognized faculty in a range of fields, a reputation as a leader in interdisciplinary education and research, and a strategically beneficial geographical location. Given these qualities, UC Davis is well positioned to recruit, educate, mentor, and graduate highly accomplished scholars who advance both their chosen fields and the interests of society. Graduate students educated at UC Davis today will become the next generation of scholars, becoming leaders in academia and the public and private sectors. Investing in graduate education will ensure that UC Davis graduates are well prepared to take on these leadership roles and to solve complex problems through interdisciplinary engagement, addressing issues of importance to the sciences, humanities, arts, and to society.

Implementation of the Vision

In order to achieve this vision of the task force, UC Davis must **strengthen** graduate education and make it a **priority**. Graduate education should be **integral** to UC Davis' strategic planning, resource allocation, and faculty development. The current restructuring of the UC Davis budget model provides an opportunity to recognize, through allocation of resources, the contribution of graduate education to the vision of the university. Implementing this vision requires strong leadership commitment to both graduate education and the excellence of UC Davis. At the core of this report is the self-evident statement that **excellence of a research university without excellence of graduate education is not possible**.

Enactment of the vision hinges on the following critical elements and actions, elaborated further in subsequent sections of this report:

[1]UC Davis. (2011). *A Vision of Excellence.* Retrieved May 1, 2012 from http://vision.ucdavis.edu/

1. **Commit to graduate education as a strategic priority, integrated into UC Davis's overall planning and resource allocation.** Value graduate education because it builds strength within a discipline and also capitalizes on the rich array of research collaborations at UC Davis, expanding the application of core knowledge to innovative partnerships. Ensure that responsibility for graduate education is shared among faculty and the Graduate Council, the Office of Graduate Studies, the Office of Research, and all colleges and schools. Invest and strengthen infrastructure that supports graduate education. The funding model for graduate education should be transparent and flexible enough to facilitate effective execution of the charge and should support both graduate groups and department-based graduate programs. Increase accountability by using appropriate metrics to track success. Broaden fund-raising and advocacy for graduate education to build support for this endeavor.

2. **Enhance the environment for graduate student success as integral to UC Davis excellence.** Graduate students' ability to achieve their highest potential is dependent on access to financial support, to opportunities for both scholastic mentorship and professional advisement on their career choices, and to social and professional networking in a vibrant graduate student and campus community. Graduate students both contribute to and benefit from the quality of graduate education at UC Davis. In order to recruit and graduate students among the best in the country, we must bolster commitments of campus resources, provide superior academic and professional opportunities, and cultivate a satisfying graduate student experience. A commitment to excellence in graduate education also includes efforts to increase diversity, expand student voice in program and policy decisions as part of university governance, and promote global experiences for graduate students.

3. **Engage and recognize faculty participation in graduate education in a manner that energizes faculty and advances their academic accomplishments.** Faculty involvement in graduate education builds visibility and capacity of the faculty and yields opportunities for leadership and innovative collaborations. Faculty effort in graduate education must be recognized and incentivized by the university. Faculty engaged in graduate education need to embrace the principle of mentorship as both a privilege and responsibility. They must be prepared and willing to mentor *and* advise graduate students to become critical thinkers and informed citizens; to contribute creative solutions to important societal problems; to undertake leadership roles in their chosen disciplines; and to actively participate and contribute to interdisciplinary collaborations.

4. **Value societal relevance of graduate education at UC Davis**. As a leading Land Grant institution, UC Davis is positioned to enrich graduate education through the application of

research and teaching to inform solutions to pressing social problems. Use innovative models of research and engaged public scholarship to encourage graduate students in all disciplines to explore the implications for their research and training for improving the lives of people across the state and around the world.

Fulfillment of these goals will require an acceptance of our responsibilities as a top university to graduate education. We must be willing to commit the necessary resources and effort to strategically prioritize graduate education in the overall mission of the university.

CHARGE OF THE TASK FORCE

The Joint Administration / Academic Senate Special Task Force on Graduate Education at UC Davis was appointed by the Provost and Executive Vice Chancellor, in partnership with the Chair and Executive Committee of the Academic Senate in May 2011 to take stock of the various ways our institution supports graduate education and how this might be further improved (see Appendix A for charge). The task force was charged to engage in a visioning process aimed to articulate what we want graduate education at UC Davis to be or become as we approach 2020. It aimed to answer the questions "why" and "what" much more than the question "how." It was not charged with a standard review of either the existing Graduate Studies unit or our many graduate and professional degree programs, nor was it charged with creating a budget model. The task force included faculty, staff, and students from departments, colleges and schools across the campus (see Appendix B for membership). This report is intended to provide an overview of the issues that warrant attention as further strategic planning occurs (such as the 2020 Initiative[2], the graduate education budget model, our next comprehensive campaign, annual academic planning) with suggestions for potential avenues for implementation.

GROUP PROCESS FOR TASK FORCE

In gathering information about graduate education at the university, the task force cast a wide net, aiming to be as inclusive as possible of all constituents of the university while becoming knowledgeable about trends in graduate education beyond UC Davis as well. To inform the process, the task force hosted meetings to gather perspectives from expert consultants, campus leadership, faculty, students, and staff; as well as task force meetings with invited guests. The task force reviewed previous UC Davis commissioned reports on graduate

[2] UC Davis. (2011). *The 2020 Initiative: A Path to Academic Excellence & Economic Opportunity.* Retrieved May 1, 2012 from http://chancellor.ucdavis.edu/initiatives/2020_Initiative/index.html

education and gathered pertinent data at both the campus and UC system-wide levels. The task force held regular meetings from Fall 2011 through Spring 2012 and also worked via email and on a dedicated SmartSite.

To begin the process, several expert consultants who have been involved in transformations in graduate education at other universities visited campus. The visits brought external and national perspectives on graduate education and stimulated discussion among a variety of stakeholders at UC Davis about crucial topics. The expert consultants, invited by the Provost and the Chair of the Academic Senate, included:

Joel Michaelsen, PhD, Professor, Department of Geography, Chair Academic Senate 2006 – 2008; 2008 – 2010, University of California, Santa Barbara
Steve Matson, PhD, Dean, The Graduate School; Professor, Department of Biology, University of North Carolina, Chapel Hill
Frances Leslie, PhD, Dean, Graduate Division; Professor of Pharmacology, School of Medicine, University of California, Irvine
Carol Lynch, PhD, Senior Scholar in Residence and Co-Director, Professional Science Master's Initiatives, Council of Graduate Schools

In addition to meeting as a group with the expert consultants, the task force hosted a series of roundtable discussions with various other groups invested in graduate education at UC Davis. The expert consultants acted, effectively, as sounding boards for the audiences who attended these events and stimulated engaged discussions.

To assess the core components of excellence from the perspective of graduate students, the task force listened to graduate students. The two graduate student representatives on the task force organized a listening session in conjunction with meetings with our expert consultants, where at least 17 [marked as attended, more offered input] graduate students provided focused comments to several questions.

There were also sessions with the Council of Deans, Graduate Group and Program Chairs, as well as a public forum that was publicized through campus media outlets and targeted email alerts. In total, more than 150 individuals participated directly in the dialogues with the expert consultants. At the conclusion of their visit, the expert consultants summarized their observations in reports to the task force (see Appendix C).

Additionally, the task force received information from graduate faculty and staff, reviewed system wide and UC specific data, studied previous UC Davis reports on graduate education and engaged in numerous conversations formally at task force meetings and informally with colleagues and students.

After seeking external input, the task force met with a series of informants who shared perspectives and experiences, including:

- Graduate Studies Dean Jeffrey Gibeling, who outlined his perspective on the major issues facing graduate education at UC Davis;
- Provost Ralph Hexter and Kelly Ratliff, Associate Vice Chancellor, Budget and Institutional Analysis, who spoke on the general approach to the new budget model and possible financial impacts for graduate education;
- Graduate Council Chair Andre Knoesen, who provided perspective on behalf of the graduate council;
- Members of the Self Supporting Degree Programs task force, including Chair Harold Levine and members Jana Katz Bell and Sarah Mangum, who reviewed the group's initial findings on professional masters programs and discussed commonalities in the work of both task forces.

To assure full opportunity for input about graduate education, the task force set up a public e-mail address where individuals could post comments to the task force, and the task force publicized the address widely – both at the public forum, in campus media materials and in emails to various groups at two different cycles in the task force's work. E-mail input was submitted from graduate students, faculty, chairs and associate deans.

In addition to seeking input from these sources, the task force engaged in its own deliberations. The driving question for those conversations was "**what is excellence in graduate education**?" This question generated multiple meanings from different perspectives. Thus further brainstorming addressed excellence in graduate education from the perspective of (1) the university; (2) faculty; (3) students, and (4) the wider community. After the initial scan of ideas, the task force engaged in a SWOT (strengths /weaknesses /opportunities / risks) analysis to begin to isolate key emerging themes from the discussions, followed by refinement of prominent themes and generation of recommendations. Diverse perspectives were voiced and the task force engaged in thoughtful discussion to achieve consensus on recommendations.

Because the task force was charged with envisioning the future of graduate education rather than identifying the tactics to achieve it, this report includes broad recommendations and illustrative possibilities for enactment. Full implementation will require thoughtful deliberations and decisions by the appropriate bodies. Appendices D and E include summaries of brainstorming around specific recommendations, for graduate education metrics and graduate students respectively, to be used as a basis for further consideration.

UC Davis is characterized by a diverse graduate education portfolio. **It is highly unlikely that a single solution will benefit all graduate groups or programs in all disciplines.** At the same time, there are several overarching issues that are addressed in this report, worthy of collective

deliberation. Committed faculty, staff and administrators working in collaboration with graduate students could engage in critical discussions to develop creative solutions that meet both overall needs and the needs of specific programs and groups.

BACKGROUND REVIEW

This task force joins others who have worked to consider the strength, direction and/or vision of graduate education at UC Davis. The task force reviewed several previous reports by committees of the Academic Council, specifically *Enhancing Graduate Education at UC Davis* (2006)[3], *The Report on Graduate Education at UC Davis* (2008)[4], *Report of the Task Force on the Future of UC Davis* (2010)[5] and the *Proposal to Reconstitute the Office of Graduate Studies as The Graduate School at UC Davis* (2011)[6]. Some focused more on the structural details of graduate education delivery and others sought to enhance the role of graduate scholarship at UC Davis. Under Provost Hexter's and Academic Senate Chair Robert L. Powell's charge, the task force was asked to develop the "what" of a vision for graduate education rather than "how." With that in mind, previous efforts informed our recommendations. Several themes and specific recommendations from previous documents emerged as central in the current deliberations. The following components of previous reports resonate most with the proposed recommendations and are briefly reviewed.

Previous reports called for attention to the need for a clearer platform for strategic planning and metric-based resource allocations. Underlying concerns that have been repeatedly considered are: 1) the complexity of the graduate department and graduate group structure and 2) the lack of a strategic planning mandate for graduate education by either Office of Graduate Studies or other appropriate bodies.

---

[3]Academic Planning and Development – A Committee of the Graduate Council at UC Davis. (2006). *Enhancing Graduate Education at UC Davis***.** Retrieved May 1, 2012 from http://www.gradstudies.ucdavis.edu/gradcouncil/APDReport.pdf

[4]Academic Planning and Development – A Committee of the Graduate Council at UC Davis. (2008). *The Report on Graduate Education at UC Davis.* Retrieved May 1, 2012 from http://www.gradstudies.ucdavis.edu/gradcouncil/APD%20Report%20Grad%20Educdation%202008.pdf

[5]University of California, Academic Senate, Davis Division. (November 2010). *Report of the Task Force on the Future of UC Davis.* Retrieved May 1, 2012 from http://academicsenate.ucdavis.edu/documents/FUTURES_Task_Force_Recommendations_110310_EC.pdf

[6] UC Davis Office of Graduate Studies (January 2011). *Proposal to Reconstitute the Office of Graduate Studies as The Graduate School at UC Davis.* Retrieved May 1, 2012 from http://academicsenate.ucdavis.edu/rfc/view.cfm?or&id=37

The 2006 Academic Planning & Development report acknowledges that in terms of graduate education, there is a potential benefit in recognizing programmatically connected clusters as a way to preserve the uniqueness of graduate group offerings and provide adequate, yet appropriately directed support to faculty and students. Data were gathered on the clustering of graduate programs based on the faculty involved. Perhaps this method needs updating but the sentiment aligns with recommendations from the Task Force on the Future at UC Davis to:

1. Review current practices for funding graduate groups. The Task Force maintained that there needs to be on-going discussions as to how to improve upon our current model to give firmer footing for the resource base of graduate groups.
2. Provide incentives for graduate groups to form larger graduate group "umbrellas" or "clusters" wherever useful, independent of current lead dean affiliations.

The 2008 Academic Planning & Development report takes up several issues related to the internal structures of new graduate program development and funding. Our committee sees the importance of realistic planning and suggests that the recommendations from the 2008 report, particularly related to graduate group administration and support, be revisited with attention to:

1. Encouraging program clusters and umbrella structures.
2. Improving information flow from graduate programs to Graduate Studies.
3. Creating transparent metrics and a data repository.
4. Strengthening internal program reviews.

In January 2011, the Office of Graduate Studies made a proposal to establish a Graduate School that would focus on academic activities that enhance the excellence of graduate education and postdoctoral training at UC Davis. While this task force is not making recommendations for major structural change, the academic emphasis of that proposal is reflected in the recommendations of this task force. The 2011 proposal included the following major organizational themes:

- Enhancing Program Success through Student Success
- Engaging Faculty in Reflection on and Creativity in Graduate Education and Postdoctoral Training
- Disseminating Innovative Practices in Graduate Education
- Enhancing Diversity and Fostering a Sense of Community
- Promoting Excellence through Increased Student Support

In the last weeks of deliberation, the Council of Graduate Schools and the Educational Testing Service released a report, *Pathways Through Graduate School and Into Careers*[7]. This report highlighted many of the issues identified by this task force, particularly the multiple career paths made possible by graduate education and the importance of understanding demand for programs during strategic planning. Specific recommendations of this document would be useful for further campus discussion.

UC DAVIS GRADUATE ENROLLMENT

In addition to reviewing previous reports, the task force identified background data that would be useful for deliberation. The Office of Budget and Planning, in collaboration with the Office of Graduate Studies compiled relevant data from a variety of sources. Detailed information and its analyses are included in Appendix F. Highlights are summarized below.

UC Davis offers 95 graduate programs, including 38 department-based graduate programs, 49 graduate-groups, and 8 professional degree and self-supporting programs. Enrollment at UC Davis in graduate education has grown over 35% from 2000 to 2011, with 6,533 graduate students registered in Fall 2011 (51.1% PhD, 15.3% academic masters, 1.9% academic self-supporting, 16.6% professional degree, and 15.2% health sciences). These numbers do not include the 898 medical interns or residents who do not pay graduate tuition. International students constituted about 15% of the total graduate student body in 2011.

The total number of applicants in 2010 was 9,487, with 29% of these applicants offered admission to graduate school, and 44% of these choosing to enroll. Costs (tuition and fees) of graduate education have increased by about 58% since 2007 to $15,271 annually for California residents. Costs of professional graduate education range from $19,273 to $46,485. Support for graduate education varies widely across disciplines and programs. In 2009, across colleges and schools, the average loan amount for graduate students taking loans ranged from $9,088 to $33,605 annually. There is great variability across schools and colleges in the percent of students requiring loans, ranging from 15.3% in Engineering to 42.3% in HArCS during 2009. During the same time period, professional graduate student loan participation ranged from 46.8% in the Graduate School of Management to 92.7% in Medicine. While some professional graduate students will readily achieve enough income in the future to offset loans, others who seek public service positions or who practice in underserved communities can face daunting

[7] Council of Graduate Schools and the Education Testing Board. (2012). *Pathways Through Graduate School and Into Careers.* Retrieved May 1, 2012 from http://pathwaysreport.org

financial challenges. Financial aid and employment opportunities are also summarized in Appendix F.

Diversity of the graduate student body has improved over the past decade, but does not yet reflect the demographics of the state of California. In 2011, our graduate student community included the following students: 2.2% African American, 24.3% Asian-Pacific Islander, 8.6% Chicano-Latino, 1.0% Native American, 50.1% White, and 13.8% other/unknown. Since 2000, diversity has increased at UC Davis, from 1.6% African American, 13.6% Asian-Pacific Islander, 5.4% Chicano-Latino, 0.7% Native American, 54.1% White, and 24.4% other/unknown. Underrepresented minorities (by federal definition, including African Americans, Chicano-Latino, and Native American groups) compose about 11.9% of the graduate student population. This figure is comparable to UC Berkeley (11.6%). Total enrollment by gender is almost equal, with 50.4% women and 49.6% men. However, women are underrepresented in Engineering (26.1%), Mathematics and Physical Sciences (36.5%) and the Graduate School of Management (30.4%).

The time to degree varies significantly across graduate programs. Using three year averages (2008-2011), for PhD degrees, the average is 6.01 years, with a range of 3.44 to 8.17 years. For Master's degrees, the average is 2.61 years, with a range of 1.29 to 5.98 years.

CRITICAL ISSUES/RECOMMENDATIONS

The following sections elaborate the major issues and recommendations for this report, including committing to graduate education as a strategic priority, improving the graduate student experience, engaging and rewarding faculty, and valuing the contributions of graduate education to society.

I. COMMIT TO GRADUATE EDUCATION AS A STRATEGIC PRIORITY

The vision for graduate education is core to the mission of UC Davis as a comprehensive research university, dedicated to the generation, advancement, dissemination and application of knowledge to advance the human condition throughout our communities and around the world[8]. Graduate education advances the vision of UC Davis to be known for its diverse, educational opportunities; its innovative, interdisciplinary and collaborative research endeavors; and its distinction in leading enterprises that support social responsibility and

[8] UC Davis Office of the University Registrar (n.d.) *UC Davis Mission statement; Philosophy of Purpose*. Retrieved May 1, 2012 from http://registrar.ucdavis.edu/UCDWebCatalog/mission.html

sustainable global efforts. And yet, graduate education as a whole is not an explicit part of overall strategic planning at UC Davis, and the campus does not currently perform a simultaneous comprehensive review of the quality and effectiveness of all graduate programs. While the Office of Graduate Studies provides central support for admissions, core funding, and student affairs, and the Graduate Council oversees academic planning including program quality, the collective knowledge and wisdom about graduate programs is not applied to the annual academic and budget planning process undertaken in colleges and schools. **We recommend that graduate education be more explicitly considered in all aspects of strategic planning to ensure appropriate infrastructure, including funding, is in place.**

Concurrent efforts are underway that require integration with the recommendations of this report. They include 1) implementation of a new incentive-based budget and the development of methodologies to address resource allocation for graduate education; 2) deliberation by task forces addressing the 2020 Initiative including recommendations on enrollment (California, national and international students), programs, and facilities; and 3) review of the role of professional master's programs and self-supporting programs as both applied academic offerings and potential revenue sources to support PhD programs. [9]

Several structures support graduate education, including annual budget and planning, the graduate group structure, fund raising and advocacy. These structures must be strengthened to actualize the vision for graduate education.

IMPROVE STRATEGIC PLANNING AND BUDGET PROCESS

Strategic planning processes must integrate graduate education explicitly into priority-setting at the college/school and campus levels. Current deliberative bodies exist, including administrative and Academic Senate groups as well as the graduate program/groups themselves, but it is not clear whether the framework in which they are currently operating enables them to cooperate effectively and base decisions on current information about the quality and effectiveness of graduate education across the campus. Such cooperation and access to information is essential to address potential challenges and opportunities, develop plans in a timely fashion, and set appropriate strategic priorities. Additionally, new institutional stakeholders in graduate education are emerging, as exemplified by the Research Investments in Science and Engineering (RISE) and Interdisciplinary Frontiers in the Humanities and Arts (IFHA) programs launched in 2012 and managed by the Office for Research. Such programs have the potential to singlehandedly establish new graduate groups and research units by providing them with medium-term funding. While these are important investments that will

[9] Office of the Provost and Executive Vice Chancellor, UC Davis. (n.d.) *Initiatives.* Retrieved May 1, 2012 from http://provost.ucdavis.edu/initiatives-and-activities/initiatives/index.html

enable UC Davis to quickly move into new areas of research and graduate education and training, their longer-term impact should be addressed and integrated in a coherent plan, in concert with the other bodies engaged with various aspects of graduate education at Davis.

A related, more general question concerns the best model for planning, administering, and staffing graduate education. This is not limited to whether centralized structures are preferable to distributed ones or vice versa, but whether, rather than pursuing a one-fits-all strategy, different models may be needed to best address the varied dimensions and needs of graduate education. It may or may not be the case that bodies in charge of monitoring the quality of existing graduate programs would be necessarily best equipped to evaluate actual program quality or make recommendations on future trends in graduate education. Administering and monitoring are different sorts of tasks from evaluating and planning. One may find good reasons for either aggregating or separating them, but those reasons should be identified and openly discussed. Similarly, there is fragmentation between providing resources through the annual budget to existing programs/groups and introducing new programs. It may be that the task of mapping future areas of graduate and undergraduate education and research could be better served by a centralized body including representatives of all campus stakeholders that looks at the overall picture of the present state and future directions of all aspects of the university. Conversely, many of the administrative aspects of graduate education may be more efficiently distributed toward departments and groups that have fine-grained knowledge of the specific professional requirements of their fields and the pedagogical needs of their students.

We believe there is a need for extensive, regularly updated information about the state and performance of all graduate programs/groups. Ideally, this information should be updated as part of each budget and planning cycle to provide a reliable basis for planning and budgeting decisions. In order to promote transparency, the committee feels strongly that this information must be accessible to the campus community in an easy, timely fashion so that it can be reviewed, used, challenged, and amended by all interested parties. The campus community should also have extensive and intensive input in determining and updating the metrics to be employed in this ongoing evaluation process, since the types of metrics most appropriate will vary by field, program and discipline.

While it is not the purview of this committee to make specific proposals on these matters, we recommend that strategic planning regarding graduate education abide by the following principles:

Recognition of graduate education. Graduate education should be an essential element of all planning processes. College/school plans should address graduate education conducted through departments and through graduate groups. At the campus-wide level, graduate

education should be included as an explicit priority in resource allocation, and student support across colleges and schools.

Integration of academic planning and assessments. Academic planning conducted by Graduate Council on behalf of the Academic Senate, including assessments of program/group quality, should be integrated into the strategic planning process.

Attention to optimal program/group size. Academic planning not just for new but also established programs/groups should attend to the optimal size of incoming classes, taking into account the opportunities for graduates' employment after graduation. Programs/groups should be transparent about the career paths for which they train students, as well as their record of placement of graduates in these positions.

Shared governance. Shared governance enables coordination of academic planning and resource allocation and facilitates transparency. The faculty is responsible for the curriculum. Respecting shared governance for graduate education requires that Academic Senate committees focused on graduate education should be consulted at the college/school and campus levels, and their input should be incorporated into strategic planning. Implementation procedures should recognize the role of shared governance, including compliance with the processes detailed in the Compendium. Graduate students should have an active role in informing policies that affect their success and well-being.

Accountability. Strategic planning and resource allocation processes must hold all levels accountable for their performance in advancing graduate education and the quality of graduate education. Planning documents should report prior goals, measures of performance, and actual performance.

Transparency. All strategic planning and resource allocation processes should be transparent and communicated to stakeholders.

ENHANCE STRUCTURAL AND FINANCIAL SUPPORT FOR GRADUATE GROUPS

As other research universities come to recognize the importance of interdisciplinary education and research, UC Davis is in a privileged position because the university has already established a strong reputation and structures for interdisciplinary collaboration through the flexible graduate group model and research centers that span departments, colleges and schools. The university must stabilize the innovative interdisciplinary structure that is UC Davis' trademark. Graduate groups must be better supported and their performance more carefully monitored if they are to remain the exemplars in research and education that they are. In addition to supporting its innovative interdisciplinary structures, the university must also continue to build

its strengths in traditional disciplinary areas, which are important in and of themselves as well as being a foundation for students engaged in interdisciplinary studies.

INCREASE ACCOUNTABILITY FOR GRADUATE EDUCATION BY USING APPROPRIATE METRICS AT PROGRAM AND UNIVERSITY LEVELS TO TRACK SUCCESS

With a renewed focus on the value and quality of graduate education, the importance of assessing the status of graduate education on our campus as a whole, as well as the status of individual graduate programs/groups seems obvious. Additionally with the new incentive-based budget model being implemented on our campus, the task force recommends developing formal assessments of graduate education at the campus and college/school levels and enhancing existing assessments of program quality to promote use of data to drive improvements in programs.

Assessing the status of graduate education at UC Davis as a whole obviously is a challenging task and requires new ideas. However, the ability of a research university to assess, for instance, whether as a whole the quality of its graduate education is on an upward or a downward trajectory is crucial. Such global assessments will support the evaluation of certain novel incentives (or disincentives) that will be implemented on our campus; they will be crucial tools for strategic planning; and they might also become valuable tools for advocating the importance of graduate education in our outreach and fundraising initiatives. In the opinion of the task force, not implementing such a high-level assessment will make steering our campus along an upward trajectory much more difficult. The assessment process should involve all major constituents: administration, faculty, staff and graduate students.

In these times of an incentive-based budget model, annual resource allocations to graduate programs/groups should be informed by some quantitative data. However, the fact that information contained in such quantitative data about graduate programs/ groups has certain limits and that evaluating this information is time consuming have to be taken into account when implementing such a process. It is also important to point out that the annual production and dissemination of quantitative evidence about the life of our graduate programs/groups should not be seen to conflict with the multi-annual reviews of graduate programs performed by the Graduate Council but to serve as an additional evidentiary tool available to them.

One proposal that has been positively discussed by the task force is to conduct an annual, anonymous graduate student survey. This survey could include questions on the academic as well as the student experience aspects of a successful graduate education. The positive effects of such a (simple) survey are that:

1. Graduate programs/groups are provided performance indicators of certain important aspects of their program;
2. Such performance indicators can be used to implement adjustments, if necessary, and they can also be used to support a request for an incentive-based budget allocation;
3. These performance indicators have the potential to inform a more global, campus-wide assessment of graduate education (see above);
4. Graduate students are more visibly and continuously involved.

In what follows we provide some more concrete details as a basis for initiating further discussion, and consideration by graduate groups/programs and Graduate Council. Appendix D describes a potential template that could be adjusted to the features of specific fields and disciplines. Some of the parameters may not apply to all fields, while others may need to be added. Because of the importance of the decisions that may be affected by any of these metrics that are collected and reported, we strongly believe that programs/groups should be directly involved, and largely control, the determination of their specific version of the metrics that will be adopted to assess their progress. During her visit to UC Davis, external consultant Frances Leslie shared her experience about a pilot method she used at UC Irvine to solicit appropriate metrics directly from a trial selection of programs. The initiative included financial incentives that encouraged programs to participate in an initial effort to gather information for making strategic decisions. At UC Davis, any such data collected by these means should be made available to all programs/groups, which may use it to inform the development of their policies and strategies, and to learn from the experience of other programs/groups.

Implementing the use of any metrics in resource allocation has three prerequisites. First, the measurement of success for each metric and program must be defined clearly. Second, the use of the metrics collectively and/or individually in resource allocation should be defined clearly and administered in a transparent way. Finally, multiple years of data should be collected before they are used for resource allocation. We believe that the interpretation of such data and the fine-tuning of the parameters would take time, and will become more reliable as the data set grows over the years, making patterns more visible. The availability of these data to all programs would enable broad participation by campus stakeholders in the process.

We present an expanded version of the “Graduate Program Evaluation Metrics” already approved by Graduate Council in Appendix D, primarily to gather finer grained evidence about the graduate students’ professional success during their enrollment in our programs and in the first five years after graduation. Based largely on data collected by the Office of Graduate Studies on an annual basis, the first part of the metrics draws a picture of our programs based on institutional data: student and faculty productivity; grants and awards, time to completion,

student/faculty ratios, etc.[10] We also identify indicators that may capture effort, not only success, as well as some of the graduate students' intellectual, scientific, and social contributions that are not captured by more traditional indicators.

The evidence for the second part of the metrics comes not from the institution but from the students themselves. We feel that their experience is not adequately represented by the data that programs produce as they administer themselves, and therefore should be collected annually through an anonymous quantitative questionnaire about the quality and structure of training, mentorship, advising, resources for professional and intellectual growth, and quality of graduate life in general. It is important to note that this procedure then also provides a means for more active participation of graduate students in their education.

DEVELOP COMPREHENSIVE, STRATEGIC FUNDRAISING PLANS

Funding for graduate education was raised as an issue in almost every conversation held by the Graduate Education Task Force, both externally and internally. Concurrent efforts are underway to restructure the budget model for graduate education and to evaluate and potentially expand professional and self-supporting masters programs, providing additional revenue sources for graduate education. As state support shrinks and tuition and fees increase, current models of funding for graduate education are no longer viable. These issues are exacerbated further with the higher costs of supporting international students, a force that runs counter to the vision for enriching UC Davis with a more diverse and international student body. Finally, development of a graduate student center (which we recommend below) requires funding.

Reallocation of current funds alone is inadequate and new sources of funds will be necessary to actualize the vision for graduate education at UC Davis. As highlighted by our external consultants, nationally, there is growing recognition of the importance of fundraising for graduate education specifically, reflected by the inclusion of fundraising workshops at the annual meeting of the Council of Graduate Schools. Some universities within the UC System incorporate explicit, measureable goals for graduate studies as part of their larger campaigns. UC Berkeley's capital campaign includes a goal of $340,000,000 for graduate fellowships, 11.4% of the overall $3 billion campaign goal. Similarly, at UCLA, the $500 Million Bruin Scholars Initiative seeks to raise $300 million in graduate student support. In the current UC Davis Comprehensive Campaign, graduate education is not identified as a specific goal. Yet, to date, of the total campaign fundraising at approximately $776 million, $104 million is designated for

[10]Graduate Council, UC Davis. (May 20, 2009). *Graduate Program Evaluation Metrics.* Retrieved on May 1, 2012. http://gradstudies.ucdavis.edu/gradcouncil/Program%20Evaluation%20Metrics%20approved%205-2009.pdf

student support, with $81.7 million already donated to support graduate education, indicating a significant interest in graduate education among donors. UC Davis fundraising efforts would be more successful if they capitalized explicitly on this interest.

Because the costs of graduate education are prohibitive for both the university and for students, scholarships and fellowships are essential. Further funding will be needed for implementing improvements of the graduate student experience, such as developing the graduate student center desired by graduate students, which would build community and provide a gathering place for scholarly and social exchange (to be discussed further below). We therefore recommend that UC Davis examine the feasibility of adopting specific, measureable goals in the next comprehensive campaign for graduate support in the form of 1) a graduate fellowship endowment and 2) capital donations for a graduate student center. During the planning for the campaign, we recommend that graduate education and funding for a graduate center be tested with potential donors so that a specific goal can be established.

In addition to individual donors, we recommend that UC Davis engage potential employers to gain input to enhance graduate education and to cultivate their interest in providing financial support to graduate students. As indicated in the recent *Pathways through Graduate School and Into Careers*[11] report, mutually beneficial partnerships could result in graduate student scholarships, faculty endowments, collaborative research, and internships.

Actualization of this goal will require both central and unit-level coordination and effort. At the campus level, campaign messages should reflect the value of graduate education for UC Davis and for society and the ways that financial support enables actualization of that value. The general case for graduate education should form a key theme for fundraising and should be incorporated into the overarching development strategy. Graduate programs/groups can contribute specific strategies to identify, cultivate and solicit donors appropriate to support their particular areas of expertise, and can execute fundraising efforts in the context of their colleges and schools. In addition to a specific goal for endowment, we recommend explicit strategies that link support for graduate students to other fund-raising opportunities, such as faculty endowments and research investments.

ASSESS CURRENT ADVOCACY EFFORTS AND DEVELOP NEW PLANS WHERE NEEDED

The value of education in general and of graduate education in California in particular is a matter of public debate with significant consequences for the public funding and support for UC Davis. Rather than assuming that this value is self-evident, it is incumbent upon UC Davis to

[11] Council of Graduate Schools and the Education Testing Board. (2012). *Pathways Through Graduate School and Into Careers.* Retrieved May 1, 2012 from http://pathwaysreport.org

make the case for continued and increased public and private funding of graduate education. External consultant Steve Matson advised UC Davis to increase advocacy to "tell the story" of how graduate education is of vital importance to the people of the state.

We recommend several strategies to advance advocacy. We recommend the formation of a graduate education advocacy committee, with representatives of faculty, students, staff, and administrators from across the colleges/ schools with an interest strategic communications to work with campus communications and government affairs to assess current efforts and develop new plans where needed. We also recommend specific steps to improve advocacy efforts for graduate education. First, we need to understand broader public perceptions of graduate education and identify the key decision-makers and thought leaders with influence over direct funding. This would include legislators and public agency leaders at the state and federal levels as well as important business and civic leaders. Discussions with these key stakeholders should gather their perspectives on graduate education and its value, their thoughts on its most important challenges and opportunities, and the prospects for increasing public and private support. Second, based on an understanding of these perspectives, we need to develop core messages to be used in communicating the ways graduate education is worthy of public and private investment. Third, we must develop strategies to infuse these messages into the policy arena as well as the media and other influential settings. Fourth, we must continually assess the effectiveness of these messages and refine them based on this feedback.

The following are some potential messages based on the findings of the Task Force and related materials.[12]

<u>Graduate Education is Vital to California's Future</u>

- In the coming years, graduate studies will play an increasingly vital role in building the brain trust California needs to maintain a leading economy.
- Our graduate students will go on to become the professors who will inspire the next generation of Californians to think critically, to question, to explore, to discover and to lead.
- Problems important to society require advanced solutions integrating contributions of many disciplines – A major strength of UC Davis is its research collaborations that address food, water, energy, health, technology, the arts, and society.
- Over the next 10 to 15 years, California's public and private universities will need to hire an estimated 25,000 new faculty. UC Davis graduate programs will be an important

[12] University of California Office of the President. (2012). *Office of Research and Graduate Studies*. Retrieved on May 1, 2012 from http://www.ucop.edu/research/ ; Feeling, N. (2012, March 14). Students Take Their Research to the Capitol. *UC Newsroom*. Retrieved May 1, 2012, from http://www.universityofcalifornia.edu/news/article/27323

source of this talent.

- A robust graduate research program is critical to creating the brainpower the 21st century economy requires. By 2018, the number of jobs in the United States that require a graduate degree is expected to grow by 2.5 million. UC Davis's leadership in graduate education ensures California will be well-poised to meet this demand, producing a workforce that will keep our economy innovating, attracting industry and investment from around the world.
- UC Davis's successful recruitment and training of undergraduate students for this workforce is inextricably connected to the strengths of its graduate education. Strong graduate programs/groups attract high caliber faculty, who, in turn, deliver excellent instruction to both graduate and undergraduate students.

Graduate education at UC Davis offers unique value

- UC Davis's Land Grant heritage emphasizes producing knowledge for the benefit of the people of the state.
- UC Davis's innovative graduate groups promote interdisciplinary teaching and research, resulting in new approaches to complex problems.

UC Davis graduate students contribute in important ways to undergraduate education through service as teaching assistants, mentors, and role models.

II. ENHANCE ENVIRONMENT FOR GRADUATE STUDENT SUCCESS AS INTEGRAL TO UC DAVIS EXCELLENCE

Graduate students play a multi-faceted role in the university's pursuit of excellence in graduate education. While they obviously benefit from strong faculty, staff, programs and facilities, they are also integral to making all education excellent at UC Davis. We recruit highly motivated students of both skill and aptitude into our graduate programs/groups, aiming for them to accomplish their scholarly, professional and personal goals. Our students represent a range of experience, talents, interests and expectations. They come to UC Davis to become a part of a vibrant learning environment, engage in innovative research and excel as scholars. As these goals are central to the mission of graduate education, ensuring that students have every chance to prosper in these areas should be a high priority. As the products of our graduate programs/groups, graduate students are the foremost indicators of the quality of graduate education at UC Davis. Their scholarly achievements and success during and after earning their degrees are a direct result of the opportunities and resources available to them during graduate school. In this context, the university must address ways to enhance the environment for graduate student success ensuring that students are able to benefit fully from the knowledge and opportunities made available to them in our programs/groups.

In preparation of this report, with leadership from our two graduate student members, we listened to the thoughts and concerns of our graduate students via a focused graduate student roundtable and open forums featuring visiting expert panels. Capturing three main themes heard from graduate students themselves, the Graduate Education Task Force recommends that the administrative and faculty leadership of the university undertake efforts to ensure appropriate levels of financial support, foster a vibrant graduate student community, and promote superior mentorship and professional development. The Task Force also supports efforts to increase diversity within the graduate student body, continue support of current and expanded avenues for including graduate student representation in university governance, and promote graduate students' global experience. In addition to the broader recommendations below, in Appendix E we have provided a more complete list of suggestions for enhancing graduate education shared with us by those we listened to and spoke with throughout this process.

ADDRESS GRADUATE STUDENT FUNDING AND OTHER FINANCIAL ASPECTS

The level of support for graduate students over the course of their studies is a critical factor in attracting and retaining the best, brightest graduate students. Sustained funding, low bureaucratic hurdles in processing student funding, and ease of access to information about funding opportunities all promote excellence in graduate education by ensuring that students can focus primarily on their scholarship. University fees, tuition, and cost of living continue to rise. Between 2005 and 2010, resident academic graduate student tuition increased 70%, but during the same time period available financial support (i.e. state, federal or private fellowships, loans, university aid) increased by only 29%. Competition for limited resources is growing and is highly variable across graduate programs/groups. Detailed information about student financial support is available in Appendix F.

As part of administrative and strategic planning, the university must address how best to ensure adequate resources to attract and sustain top quality graduate students and their research activities. Some graduate students spend an inordinate amount of time searching for and securing funds. Some level of this activity is certainly good for future career experience; however excess time spent in this area distracts students from their studies and leads to unwarranted stress and frustration. Even small administrative changes in this area could lead to large improvements in graduate student productivity and quality of life.

Increase fellowship support: In order to promote successful graduate student research, students need to be sufficiently funded at levels competitive with UC Davis's peer and competitor institutions. In 2009 – 2010 UC Davis was the lowest among the UC system for total grant and fellowship support at 19% versus a system-wide average of 32% (see Appendix F).

Fellowship support at critical junctures in PhD students' careers is especially important for students whose funding comes primarily through employment (teaching or GSRs) unrelated to their research. These students' longer time-to-degree is often a function of not having sufficient time to devote to completing coursework in a timely fashion, conducting their research, and writing strong dissertations. We would thus support the expansion of recent fellowship initiatives, such as the Provost Fellowships for doctoral students in the Humanities and Social Sciences.

Increase summer funding opportunities: For students who are only employed during the academic year, summers present a real financial challenge. Many students take out loans or work in jobs unrelated to their career aspirations in order to make ends meet. In 2009, across colleges and schools, the average loan for graduate students ranged from $9,088 to $33,605 annually. Among academic graduate students, 42.3% of graduate students in HArCS, as an example, took out loans in 2009. For students unable to secure employment soon after graduation, these loans are an onerous burden. More opportunities for summer support would help students maintain momentum in their research and writing during the summers and to shorten their time to degree.

Improve access to information. In order to promote successful graduate student research, students need to have information about funding options, including clear (potentially uniform) explanations of funding packages offered at admissions. Other potential improvements include establishing a single point of access for student financial support (whether physical and/or virtual) that consolidates information from Graduate Studies, Student Accounting, Services for International Students and Scholars, and Financial Aid, and assistance in finding job opportunities, such as teaching and research assistantships. We would advocate for an improved central web registry.

Invest in grant writing skills. The need to secure funds does not end in graduate school. Our graduate programs should encourage graduate students to write grants, and, in conjunction, should facilitate student learning of skills in grant source research and grant writing. Faculty should be incentivized to include students in their grant securing activities, when applicable. Graduate programs/ groups (i.e. Ecology and Anthropology) with existing programs for training students in grant writing could serve as models for best and preferred practices across campus.

Increase fundraising for graduate student support. While already in place in the current comprehensive campaign, development and fundraising efforts to increase graduate student financial support should be an ongoing priority.

IMPROVE MENTORSHIP AND PROFESSIONAL ADVISING

Graduate students are professors and professionals in training and the graduate school experience is modeled on the apprentice or intern tradition. Excellence in this tradition is achieved through mentorship: the master transfers knowledge and skills to the student, who then develops new knowledge and skills through work on independent and joint projects. It is also achieved through the master's effective and informed career advising so that the student is well supported in his or her pursuit of career objectives. Comprising both mentorship and advising, this theme identified by graduate students dovetails with upcoming recommendations in the faculty engagement section of this report.

Facing a new reality. More so than in the past, our graduate students will enter careers outside of academia. This is a fact highlighted by the report by the Commission on the Future of Graduate Education, entitled "The Path Forward: the Future of Graduate Education in the United States."[13] Given this shift, university services and faculty need the knowledge and means to prepare graduate students aspiring to a variety of potential career paths. It is imperative that there are systems in place to provide graduate students with the skills and knowledge needed to excel in environments both within and outside of academia. Attention should be given to identify and match the desired skills in the various disciplines against the growing number of potential career paths and to identify examples of successful efforts (i.e. best practices) both within and beyond the university relating to the professional development of graduate students. The task force recommends beginning efforts in this area by reviewing the report by the "Commission on Pathways through Graduate Education and into Careers" [14]and by developing a concrete plan to facilitate ideas for adoption at UC Davis.

Promote shared responsibility. Strengthening professional development requires shared responsibility and engagement at the program, graduate group, division, school, college and campus wide levels. It is necessary that the university respond and support graduate student success by improving communication between programs, Graduate Studies, centers such as the Center for Excellence in Teaching and Learning and the Internship and Career Center, and graduate students so that information on multiple career paths can be better distributed and accessed, and so that professional development activities can be better developed and aligned with the needs of the students. Faculty and administrative partnership and involvement in student-initiated and student-centered activities such as the Interdisciplinary Graduate and

[13] Council of Graduate Schools and the Education Testing Board. (2010). *The Path Forward: the Future of Graduate Education in the United States.* Retrieved May 1, 2012 from http://www.fgereport.org
[14] Council of Graduate Schools and the Education Testing Board. (2012). *Pathways Through Graduate School and Into Careers.* Retrieved May 1, 2012 from http://pathwaysreport.org

Professional Research Symposium and Week of Welcome should be encouraged, supported, acknowledged, incentivized and evaluated.

Support graduate program coordinators. Often bureaucratic and administrative processes interrupt graduate student attention to scholarly/research activities. As such, graduate students rely heavily on Graduate Program Coordinators for help and support. From admission and orientation to administering and facilitating student funding and filing for graduation, Graduate Program Coordinators assume a vital role and provide critical assistance and service to graduate students, faculty and other staff. There appears to be wide variation in the job functions, supervision, expectations and training of these staff, however, resulting in an equally wide variation in the classification, and perhaps under-classification, of these positions across programs/groups. In addition to acknowledging and recognizing their important contributions, coordinators across all graduate programs should be supported and empowered to develop and possess the consistent knowledge, skills and experience necessary to effectively support graduate student success and address the complex intricacies of graduate administration.

FOSTER GRADUATE STUDENT COMMUNITY

A positive and strong sense of campus community is central to the quality of graduate student life and supports excellence in scholarship. According to the UC Davis Graduate Student Association, representatives request that the officers engage in efforts to build community more than any other item.[15] Our campus is large and graduate students are often physically, scholastically and/or socially isolated within their respective buildings, laboratories and facilities. Excellent scholarship grows out of dynamic physical and social environments, ecosystems where students from many different backgrounds and with many different interests find themselves in conversation over coffee, sharing intellectual insights about a speaker outside of their discipline, or engaging in joint and/or interdisciplinary projects. The university should foster graduate community, with particular sensitivity to the unique experience of graduate students – the related pressures, challenges and joys.

Explore the development of a graduate student center. Such a facility strategically situated in an accessible and centralized location on campus and combined with appropriate scholarly and social programming would foster a stronger sense of graduate community and improve the UC Davis graduate student experience. Additionally, consolidating relevant graduate student services can ease the burden students currently face trying to find several offices just to get an appropriate signature or vital piece of information. Such a center could also make accessible

[15] Graduate Student Association. (November 3, 2010 and December 1, 2010). *Graduate Student Association Assembly Meeting Agenda Meetings.* Retrieved May 1, 2012 from http://gsa.ucdavis.edu/GSA_Agendas_and_Minutes/2010-11

relevant technology and services, such as teleconferencing or a video classroom as central resources that are vital to world-class education in the 21st century. It could also increase access to services and programs for those graduate and professional students whose programs are not located on or near campus.

Support improved communication among graduate students. Whether enhanced by a physical facility or not, communication between and among graduate students and graduate student services could be improved through a variety of means (e.g. publicize central graduate student support services and staff resources; facilitate disciplinary and interdisciplinary forums for sharing scholarship; formalize graduate student social events; encourage professional development activities; establish more formal and ongoing contact with key graduate studies staff and administrators; coordinate advocacy and communication about matters affecting graduate students).

Assess the need for graduate student housing and child care resources. A suitable living situation for graduate students and (in many cases) their families, is crucial to students' academic and social success. Especially in light of growth objectives for our campus, relevant campus constituencies should carefully assess the current use and need for campus housing for graduate students and graduate student families, attending as well to child care resources.

INCREASE GRADUATE STUDENT DIVERSITY

Diversity of the student body has been widely discussed as an important measure of excellence in graduate education. Enhancing diversity in graduate education should be made explicit by encouraging California-resident, domestic and international graduate students alike to apply to the university all the while communicating the positive relationship between diversity and academic excellence. Attracting and retaining diverse students is challenging and our university's current initiatives reinforce this essential task. UC Davis should be doing more to draw and retain California residents with diverse backgrounds. In particular, many California residents receive their undergraduate degrees from the UC and California State University systems. Developing further initiatives to seek out the most promising of these students and to prepare them to attend graduate programs at UC Davis will bolster our status as an excellent university.

Be deliberate about diversity goals and utilize existing planning. Diversity is essential to a top research university and encourages contributions from students from a variety of cultures, with various backgrounds and life experiences that enrich the entire institution's pursuit of new and important knowledge. UC Davis' current diversity plan reinforces our commitment and should be made more central to overall strategic planning, as well as distributed widely to ensure active adoption by all graduate programs.

There must be shared responsibility at all levels in taking the necessary steps to expand graduate student diversity through strategic and intentional outreach, recruitment and retention efforts. Examples of such steps include, but are not limited to: increasing international recruitment for graduate students; considering using other criteria in making admission decisions including non-cognitive indicators; developing strong partnerships with institutions that attract diverse populations of students including California State Universities; Hispanic-Serving Universities, Tribal Colleges and Universities; and Historically Black Colleges and Universities; and continuing our commitment to pipeline programs for members of under-represented minority groups pursuing graduate education.

Additionally, a concerted effort must be made to attract and retain a diverse graduate student body and university community with input from the widest and most inclusive range of constituencies. Existing programs and resources that promote increased diversity in graduate education at UC Davis include: the Student Recruitment and Retention Center, the Graduate Ally Coalition and Alliance for Graduate Education and the Professoriate.

ASSURE GRADUATE STUDENT VOICE IN POLICY DECISIONS

There are currently several graduate student positions on campus that exist to give graduate students an opportunity to contribute to campus priorities and decision-making. These positions include, but are not limited to, Graduate Student Association (GSA) officers, the Chancellor's Graduate and Professional Student Advisory Board (CGPSA), and the Graduate Student Assistant to the Dean and Chancellor (GSADC). There are also graduate student positions at the various student centers -- such as the Student Recruitment and Retention Center (SRRC), Women's Resources and Research Center (WRRC), Cross Cultural Center (CCC), Lesbian, Gay, Bisexual, Transgender Resource Center, (LGBTRC) -- that, in practice, are often called upon by the administration to inform future policies. In addition, many campus committees have membership space for graduate student participants, including the Executive Committees of several graduate groups. The level of potential involvement and the value placed at UC Davis of including graduate students in governance is a particular strength of our campus. What has been built up over time; however, must be maintained and appreciation of student voice must be consistently demonstrated. This strength may also be extended at the graduate program/group level by engaging graduate students in ongoing improvement and planning efforts.

Broaden communication about service positions. Since service is a fundamental component to professional careers in academia, graduate student involvement in service committees is beneficial training. Often these positions are filled by members of the independent Graduate Student General Assembly, which serves as the primary recruiter for involvement. Sometimes

advisory committee slots remain unfilled, however. Coordinated advertisement and promotion in partnership with Graduate Studies could improve the involvement of graduate students in a range of decisions that affect their welfare and that of the campus as a whole.

Develop leadership skills. Graduate students often lead initiatives that support the graduate student experience, such as interdisciplinary seminars or campus-wide projects. Therefore, information should be made more available on how to organize seminars, workshops, student groups, and lecture series; how to secure university facilities and resources; and how to connect with other efforts. Additionally, workshops and/or programs to develop graduate student leadership skills should be considered as well as expanding funding and access to the few campus programs that currently support this mission, such as the Professors for the Future program and the Graduate Ally Coalition.

Solicit student feedback regularly. In line with recommendations of the previous section, (Increase Accountability for Graduate Education by Using Appropriate Metrics at Program and University Levels to Track Success), including students in on-going evaluation and assessment of the quality of graduate education and the graduate student experience at the program/group and broader campus level (e.g., through an annual student survey) is vital to students' continued success at UC Davis.

PROVIDE GLOBAL EXPERIENCES AND SUPPORT INTERNATIONAL STUDENTS

Educating the next generation of leaders and scholars requires preparing them to contribute to a global society. Our graduate students need deep exposure to peoples, cultures, and ideas from around the world. UC Davis must continue to recruit the best international students while recognizing that a global university is a function not only of how far students travel to get there but of the kinds of opportunities available within the organization as a whole. With this in mind, we look forward to reading the recommendations of the International Advisory Committee, which has been taking this sort of holistic approach to issues of internationalization.

Recruit and attend to special needs of international students. Currently, it is not cost-effective for graduate programs/groups to recruit many international students because (due to Non-resident Supplemental Tuition), international students cost significantly more than out-of-state students, who are eligible to become residents in their second year of study. As a result, graduate programs/groups often cannot admit some of their top applicants. It is important that we find ways to level the field of competition for international graduate students who apply to UC Davis. It is also important that we level the playing field for our international students in cultural, linguistic, and social ways, attending to their particular needs as graduate students.

Increase support for international conference and research travel: When students travel abroad, their work is circulated among and they develop relationships with international colleagues. The payoffs of such travel are both intellectual and professional (universities abroad are often very interested in hiring students who receive their doctorates at American institutions). In addition to more support for student travel to international conferences, we would advocate for more support for student dissertation research abroad. Many of our current graduate students choose projects with a local focus, even restricting themselves to California, simply because they know they will not have the funds to pursue projects with a more extensive national, let alone an international, reach. By supporting student research abroad, we can develop more globally oriented graduate students and provide them further post-graduation job opportunities. Support for international travel by graduate students must recognize the variety of activities and destinations that student research can involve. Currently there are funding incentives for graduate students to travel to "third world" countries to do research with practical applications but fewer opportunities for students who need to pursue their research in, for instance, major European cities, and/or whose work does not have immediate application.

Develop exchange programs with universities abroad: These might involve GSR or TA employment, where UC Davis hosts a student from a country at the same time that one of our students is hosted in that other country. This can be done at the department or the school level. Such exchange programs—because they are exchanges—are less expensive and can yield positive outcomes with a small investment of resources.

III. ENGAGE AND RECOGNIZE FACULTY PARTICIPATION

Through its discussions, interviews, invited guests, reviews of past reports, and interactions with faculty and students, it is clear that there is a high level of commitment to graduate education among faculty, who represent a wide diversity of interests and possess unique and internationally recognized strengths. As evidenced in a 2010 Report by the UC Davis Division of the Academic Senate[16], our faculty actively participate in graduate education. This role is "critical to the scholarship of university faculty who must be recognized for the contributions that they make to the campus." In this context, the university must address ways and means to facilitate such participation so as to maximize faculty scholarly pursuit and enhance the graduate education enterprise at UC Davis. The Graduate Education Task Force recommends

[16] University of California, Academic Senate, Davis Division. (November 2010). *Report of the Task Force on the Future of UC Davis.* Retrieved May 1, 2012 from http://academicsenate.ucdavis.edu/documents/FUTURES_Task_Force_Recommendations_110310_EC.pdf

that the administrative and faculty leadership of the university undertake efforts to enhance the engagement of faculty in graduate education; to provide development opportunities for faculty so that they may better fulfill their responsibility as advisors and mentors to graduate students; and to offer incentives to faculty that recognize and value their contribution to the mission of graduate education.

ENGAGE FACULTY IN GRADUATE EDUCATION

UC Davis faculty members are committed to graduate education. However, mentoring and advising graduate students and teaching graduate classes requires a large investment of faculty time and effort, and faculty must balance these activities with undergraduate teaching, research, and service within and outside the university. In addition, there are many formal and informal activities associated with developing and maintaining a successful graduate program/group that are often not fully recognized.

Redesign curricula content and delivery. Especially in the graduate groups, administrative inefficiencies often exist due to duplication of effort between groups and minimal allocated financial support. For example, in some broad disciplinary areas, multiple separate admissions committees engage in graduate student selection for areas that some faculty may consider having very similar criteria of excellence and competence. Continuing this practice may be more costly to the faculty involved than undertaking an effort to streamline admission and basic education in those areas. For instance, a letter from three Graduate Group Chairs, N. Baumgarth, DVM, PhD, Immunology; P. Lein, PhD, Pharmacology & Toxicology; D. Borjesson, DVM, Phd, Comparative Pathology (personal communication, January 30, 2012), suggested the creation of a large "UC Davis Biological and Biomedical Sciences" umbrella to enable faculty to maximize their efforts in support of graduate education and teaching by working together on a first-year combined and streamlined graduate program, increasing their competitiveness for extramural training grant support, and becoming a cohesive voice for their faculty stakeholder community in higher, campus level strategic planning. The taskforce presents this as an example, not a specific endorsement; it is the prerogative and responsibility of the faculty in the Biological and Biomedical Sciences to assess the educational value of such a proposal.

Thought and consideration should be given to the establishment of such academic umbrellas by the faculty involved in naturally-related groups. There is the potential for voluntary faculty action that will not only facilitate the education process itself but also entice broader and more enthusiastic faculty engagement in graduate education across campus. However, resource allocation should not be used as a means of coercing reorganization of delivery of the graduate curriculum.

Consider administrative efficiencies. One possible means of increasing faculty's ability to engage in core activities is to explore redesigning administration of graduate education in order to mitigate the overall burden of program delivery and administration on the faculty.

Due to its complexity, graduate education is not included in the new budget model scheduled to go into effect July, 2012. As budget models for graduate education are explored, possibilities for administrative efficiency should be explored as well. Dean of Graduate Studies Jeffery Gibeling introduced one such proposal in early 2011[17]. Many of the faculty and staff concerns regarding this proposal were related to its single "clustered" model of graduate program administration. Some graduate groups have chosen already to pool resources; their experiences may serve as a measure of the effectiveness of voluntary administrative "clustering" efforts.

However, it is unlikely that a one-size-fits-all approach will support continued and increased excellence in graduate education. Mandating clustering may have many negative effects, including demoralizing faculty, graduate students, and staff by undermining a sense of community and, reducing staff's ability to develop expertise in the specific programs/groups they manage. From an administrative perspective clustering graduate program staff may exacerbate workload difficulties rather than aid in workload management. For example, graduate programs undertake admissions at the same time. Thus, all graduate program administrators face this periodic (and predictable) increase in workload at the same time. Administrative efficiencies may be better obtained by clustering graduate and undergraduate program administration activities. Still, the complexity and efficiency of administering graduate student support will need to be addressed since this is an area unique to graduate students (i.e. different than undergraduate student financial aid).

Recognize faculty service effort in support of graduate education. Graduate education is very time-intensive. There are many activities beyond the classroom and mentoring and advising that require faculty effort in order to develop and maintain excellence in graduate education. Faculty members devote a great deal of time to admitting graduate students and recruiting them to come to campus. They devote a great deal of time to academic advising other than chairing dissertation and thesis committees, and to managing graduate curricula. One source of faculty burnout is the time spent on such activities on top of other regular duties. Even when faculty members do not chair a graduate program/group, or chair a dissertation or thesis committee, the time commitment can be considerable. Greater recognition of the time-consuming nature of these activities when assessing the service component of a faculty member's merit case, and recognition of their importance to the university could aid in

[17] UC Davis Office of Graduate Studies (January 2011). *Proposal to Reconstitute the Office of Graduate Studies as The Graduate School at UC Davis.* Retrieved May 1, 2012 from http://academicsenate.ucdavis.edu/rfc/view.cfm?or&id=37

mitigating burnout. It could also enhance awareness of the essential role of graduate education for the university's mission.

PROMOTE FACULTY DEVELOPMENT

UC Davis' pursuit of excellence in fulfilling its mission as one of the major land-grant universities in the nation is reflected in the diversity of its faculty from a broad variety of backgrounds, education, and training. In order to achieve excellence while at UC Davis, faculty work constantly to achieve success in their scholarly activities. To facilitate this effort, faculty must be afforded opportunities to enhance their skills as mentors, teachers and researchers. For example, mentorship and advising, including preparing students for multiple career paths, is considered a critical element of excellence in graduate education. Another aspect of faculty development that affects excellence in graduate education is success in securing research funding. However, little guidance is available to faculty members who wish to develop and improve their skills in these areas. Therefore, our committee strongly encourages the university to expand resources for research and researcher support and provide development opportunities for its faculty so as to ensure the success of our graduate education mission.

Development of mentoring competencies. A 2011 international survey conducted by Nature magazine[18] revealed that graduate students dissatisfaction with guidance received from faculty mentors ranged from 37%-57% depending on the number of years of time spent as a graduate student. Our discussion with faculty and students alike reflected the sentiment of this survey, and indicated a desire and need for faculty to continue to strive for excellence as effective graduate student mentors. The range in mentoring skills is a reflection of the various backgrounds of faculty members, especially how they themselves were mentored. But the art of mentoring is important in all fields, and not limited or restricted to one field more than another. Therefore, formal and continuous training of faculty, in particular at the beginning of their career, in the fundamentals of mentorship is essential. Effective mentoring skills vary by field, so senior members of graduate programs/groups must be encouraged to engage with their junior colleagues regarding their development as mentors.

Mentorship should be viewed from a holistic perspective and include advice on the substance of the student's academic program and on issues related to professional and career development. Addressing such issues is particularly important to guide graduate students toward the completion of their degree and their launching of a career. The best mentors often continue to provide guidance and support throughout a student's career, even decades after the student has graduated. The task force recognizes current efforts by the Office of Graduate

[18] Russo, G. (2011). Aspirations and Anxieties, Nature's international student survey reveals changing career preferences — and a need for inspiring mentors. *Nature*, *475*:533-535

Studies as well as by some graduate programs/groups to provide workshops on mentoring and on advising students about a range of career paths. Efforts to improve mentoring must be broadened to become an important part of the UC Davis campus culture. For example, consideration should be given to canvassing our students on their perception of the qualities of mentorship that would be most beneficial to them, and to continuing to seek feedback from students on a regular basis. Also, there may be value to creating a system with the intent of defining and then analyzing indicators that objectively measures faculty mentorship. Such a system could serve as a catalyst for strengthening areas of greatest need in mentoring competencies, and also allow faculty to individually gauge their development as mentors.

Training to advise students on a range of career paths. While also a part of mentorship, the task force feels compelled to highlight this particular aspect for special emphasis. The ultimate outcome of a graduate education is no longer limited to a professorship at an academic institution. Today, graduate students have opportunities not only in academia but in public and private industry (e.g., the pharmaceutical industry and non-governmental organizations), local and national government (i.e. government research agencies and K-12 education), and elsewhere. Faculty cannot limit their professional guidance of graduate students to "cloning" themselves. However, during the town hall meetings, students expressed discomfort in accessing general career planning guidance through the Internship and Career Center when their career goals seemed to contradict the expectations of their faculty advisor. Active referral from faculty may ease this discomfort. Advisers can minimize stress for their students by helping them to map out possible career aspirations. To do so, faculty themselves need to be informed about the range of career options, including (if applicable) the non-academic landscape and help their student navigate a path which will help them to meet their personal as well as scholarly goals. In support of this opinion, Joel Michaelsen, one of our expert consultants, noted that since many faculty have little experience outside of academia, there is some need for "re-training" in the broader range of career paths open to and compelling for graduate students. Concomitantly, it is up to faculty in each graduate program/group to define what constitutes a successful outcome of the program/group and to communicate this information to students at the time of recruitment/admission. If programs/groups choose a narrower set of career options for their students, then they need to adjust their program size so that their graduates can secure employment in the fields for which they have been trained.

Facilitate efforts to seek research funding. Research costs, including salaries, supplies, equipment, and other costs, continue to rise and place significant strains on the ability of faculty to maintain an active research program. Further, the flattening of budgets for a number of research agencies (e.g., National Institutes of Health, National Endowment for the Humanities, National Science Foundation) reduces the likelihood that even the most meritorious grant applications will be funded at all, or even at reduced levels. Therefore, it is

imperative that the university continues to invest in its research enterprise, including the development of faculty competitiveness for external funding. This can be accomplished by providing support for new and innovative research programs (e.g., Research and Investigation in Science and Engineering, "RISE", issued by the Office of Research; the Mellon Research Initiatives in the Humanities), and for mid-career faculty with promising ideas in new research areas.

In some fields, where the primary means of funding research is through competitive extramural grant competitions or other non-university sources, faculty should receive support in developing their skills in order to enhance their competitiveness in obtaining outside grants. However, in many areas, such as the Humanities and Fine Arts, relatively little extramural research funding is available. The university's investment in its research enterprise must recognize the value of excellent research and graduate education in these areas as well. Faculty in these areas should be provided with resources to pursue their research so they may effectively mentor graduate students. For faculty in fields where relatively little funding is available for their own research, one possible technique for supporting faculty research is the practice of automatically "topping off" the stipends offered by funding agencies: the university makes up the difference between the salary offered by a competitive extramural grant and the faculty's regular annual salary. Faculty should not have to take a pay cut in order to devote time to the research that a competitive fellowship is designed to support. A policy of this sort would encourage faculty to apply for grants that bring resources and prestige to the university and its graduate programs. Fund-raising efforts could target establishment of such an endowed fund.

Align efforts between research and graduate education. The Graduate Education Task Force recognizes the important and essential linkage between research success and graduate education and training. Scholarly activity includes both teaching and research, and there is a natural relationship and interdependency between them. Faculty who conduct research activities that contribute new knowledge and advance their field of study are perfectly suited to mentor and advise graduate students in developing and/or applying these research advances so that they may, ultimately, reveal new insights and open new avenues for research and discovery. In kind, graduate students who are sufficiently supported and appropriately mentored are better prepared to substantively engage and contribute to research programs that contribute new knowledge and advance a field of study. Yet, despite this clear, fundamental and necessary interaction between research and education, there is still much that UC Davis can and should be doing to align its efforts in these areas. For example, many of the large granting opportunities to establish centers of research excellence have a large graduate education and training component. Applications for training grants are most often successful when they demonstrate an environment of research excellence that seamlessly supports graduate students. Therefore, announcements for research opportunities that include

graduate training should be coordinated between the Office of Graduate Studies and the Office of Research. The task force strongly urges greater dialogue between both offices to ensure we capitalize on ways to strengthen both our research and graduate education efforts.

PROVIDE FACULTY INCENTIVES

Providing faculty members with incentives to engage in core graduate education activities will promote excellence in graduate education. Current structures for research funding and graduate teaching provide faculty members with perverse incentives. Increasing tuition and fees and the requirement that non-resident tuition must be paid from the funding source supporting graduate student researchers are making it more cost-effective for faculty members to employ post-doctoral scholars instead of graduate students. Additionally graduate teaching is not treated uniformly across campus units. In some cases faculty members must teach graduate courses on an overload basis.

Costs of graduate students verses post-doctoral scholars. The rising costs for graduate student tuition, fees, and stipends coupled with the increasing limitations placed by extramural funding agencies on fee remission and training support is placing a significant strain on the ability of faculty to employ graduate students. Often, the first year of funding provided by the faculty mentor does not result in very much measurable research productivity. Graduate students' need to balance subsequent course work, studying for qualifying exam, training in techniques, etc, with part-time research employment, especially in light of the rising costs, makes graduate students a burden too great for some faculty. Instead, faculty often prefer to hire more experienced, albeit more costly, post-doctoral scholars who, by their nature, generate more "bang for the buck" when compared to a graduate student. After all, post-doctoral scholars are full-time employees who do not face the competing demands and tuition/fee costs that graduate student researchers do. This trend is worrisome, and must be addressed by the university so as to incentivize more faculty to engage in training graduate students for the next generation. The university's 25% "buy-down" of tuition and fees, including non-resident tuition, of graduate students funded from extramural sources is an illustration of a policy that mitigates the disincentive to employ graduate students. UC Davis policies resulting in disparate tuition and fees between resident and non-resident graduate students should be revisited in the context of our overall mission.

Recognize faculty participation in graduate courses. Although counting graduate courses in faculty workloads should be a relatively straightforward exercise, apparently it is not consistently performed campus wide. External consultant Steve Matson noted the problem of equitably recognizing faculty time for teaching graduate courses. This is particularly challenging for graduate groups which do not hire directly and have limited to no voice ensuring that

departmental faculty hires consider the need for teaching of appropriate courses as part of the graduate group. Regardless of whether a graduate course is taught for a group or a departmentally based program, another challenge is that the amount of faculty time per student credit hour (SCH) is much greater for graduate courses than for undergraduate courses yet, the SCH/student full-time equivalent (FTE) for graduate student is 20% lower. Current measurements of faculty workload that rely on SCH or student full-time equivalents (FTE) do not represent the time spent. Therefore, it is important that extant academic policies be clarified and articulated at departmental levels, and/or revised (e.g., UCD APM210 to accompany UC APM 210) to ensure that all faculty teaching effort is treated equitably. Specifically, graduate courses should not be routinely taught on an overload basis but should be recognized as part of a faculty member's normal teaching load. The greater faculty time per graduate SCH must be recognized as well, and reflected in resource allocation rules for academic units. Failing to recognize the time dedicated to teaching results in faculty members having less time to devote to research, service, and mentoring. This imbalance undermines the overall excellence of the university as well as its graduate programs/groups.

Reward faculty efforts to support graduate education. It is essential that we change the campus culture to recognize the contributions graduate education makes to the university's mission. Changing culture can be facilitated by pairing the adoption of a shared vision with small, concrete steps that reward faculty efforts to support graduate education without requiring changes in policies or increases in resources. While the task force does not propose a specific set of items, during the course of its meetings and its internal discussions a number of concrete actions emerged. Here are a few examples that relate to the concepts discussed earlier in this section.

- Count faculty instruction of graduate group courses, particularly core courses, as part of a faculty member's normal teaching assignment. This will encourage departments to invest in the success of graduate groups. Particularly if the funding were allocated to the graduate groups themselves, it could encourage close and healthy relationships between graduate groups and departments by providing them with an incentive to undertake academic planning jointly.
- Clarify and perhaps revise procedures for faculty "credit" for team-taught courses. For intellectual and practical reasons, graduate courses are team taught more frequently than undergraduate courses. Although team-taught courses can be immensely beneficial to graduate students and to faculty, sometimes faculty are discouraged from team teaching such courses because they don't "get credit" for doing so. There is no clear, commonly recognized reason why this would be the case. One possibility is that departments and graduate groups are not completing records correctly so that instructor teaching activity reports do not reflect actual teaching efforts. Another is that

faculty members are not educated regarding how to report guest lectures and partial course responsibilities in a way that gains them credit. These two possibilities can be addressed with simple clarifications/education efforts. A third is that the "credit" in question is not the credit that accrues to the individual but the financial resources that accrue to the unit offering the course. Whether or not this is a disincentive depends on the budgeting model at the campus and college level. For all three possibilities, there should be sufficient transparency for faculty members, department chairs, and graduate group chairs to be able to understand the benefits and costs to team teaching.

- Examine incentives for enhancing capacity for supporting graduate students as GSRs. Specifically, consider reducing the revenue stream tax on research dollars used to support graduate students. Under the current version of the funding streams model, all revenues are taxed at the same rate. Funds used to fund GSRs support the university's research and teaching missions. Rebating part of the tax would recognize the role that faculty who obtain grants play in both. Under the current system there is no recognition of the cost to faculty members of mentoring graduate students. Additionally, consider expanding the budget for the Senate Small Grants in Aid of Research program, perhaps earmarking additional funds to be used for the hiring of graduate student researchers. The current Small Grants program prioritizes funding to assistant professors and, as a result, more senior faculty – who may be especially well qualified to mentor GSRs – cannot afford to hire them.
- Provide supports for faculty who spearhead and/or administer efforts to obtain large training grants that employ graduate students. Such efforts take an enormous amount of effort and providing some relief (e.g. in the form of course buyout) might help to involve more faculty members in the process.

IV. VALUE SOCIETAL RELEVANCE OF GRADUATE EDUCATION AT UC DAVIS

Leading public universities such as UC Davis have historically contributed to the social good in four broad ways. First and foremost, this has been achieved through their education function, as public universities have served as a critical pathway to opportunity for poor and otherwise disadvantaged populations unable to access private higher education institutions, and helped educate a broad and critical citizenry that is important for preserving a dynamic democracy. Second, public universities have been important sites of social critique and contributors to movements for social change. This function has been achieved through university research on structures of inequality that have contributed to a changed understanding of our society and because universities have served as an important site for social movement formation. Third,

public universities have served as generators of new knowledge, technological innovations and economic development. Finally, public universities have been large public employers.

As a public Land Grant institution, UC Davis has a historical commitment to producing knowledge for the benefit of the people of the state.[19]UC Davis is unique in its dynamic location at a crossroads where global flows of people, ideas, good, and economic value converge, in close proximity to the state capitol, and as a campus linking both urban and rural regions of the state. UC Davis is ideally positioned to provide its world-class research as a resource to inform public policy at state, national and international scales. Innovative practices of engaged scholarship, translational research, and university-community partnerships represent important approaches to manifest this vital Land Grant mission.[20]

The UC Davis Vision of Excellence calls out the challenge to "expand our Land Grant mission, so that our pursuit of knowledge and our engagement with partners will serve the state and nation, and address the emerging challenges of an interdependent global society." Likewise, these values are recognized in rankings such as the *Washington Monthly* which places UC Davis as 6th in the US based on our contribution to the "public good" in three broad categories: "Social Mobility (recruiting and graduating low-income students), Research (producing cutting-edge scholarship and PhDs), and Service (encouraging students to give something back to their country)."

Building on these strengths, UC Davis can provide powerful learning and professional development opportunities for graduate students. Examples of strategies to achieve these goals could include the following.

---

[19]The Kellogg Commission on the Future of State and Land-Grant Universities. (2001, January). *Returning to Our Roots: Executive Summaries.* Retrieved May 1, 2012 from http://www.aplu.org/page.aspx?pid=305 ; The Kellogg Commission on the Future of State and Land-Grant Universities. (1999, February). *Returning to our Roots: The Engaged Institution.* Retrieved May 1, 2012 from http://www.aplu.org/page.aspx?pid=305 . The Kellogg Commission on the Future of State and Land-Grant Universities emphasized the importance of community engagement, outlining seven characteristics of an engaged institution – responsiveness, respect for partners, academic neutrality, accessibility, integration, coordination, and resource partnerships. Moreover, the reports noted that lack of stable funding for engagement was a critical problem.

[20]For some of the earliest calls for publicly engaged scholarship, see, Boyer, E. L. (1990). *Scholarship Reconsidered: Priorities of the Professoriate*. San Francisco, Calif.: Jossey-Bass; Glassick, C. E., Huber, M. T., Maeroff, G. I. (1997). *Scholarship Assessed: Evaluation of the Professorate*. San Francisco, Calif.: Jossey-Bass

CAPITALIZE ON GEOGRAPHIC IDENTITY

First, at the level of the university's identity as a whole, it may be beneficial to embrace the unique geographic positioning of the campus. Geographical location is a key resource that Davis can mobilize to achieve excellence across the disciplines. Since its inception, UC Davis has been able to maximize the benefits deriving from its place in the central valley, developing a remarkably close and advantageous connection to the agricultural industry that has traditionally framed the identity of our campus and built capacity for relevant research globally. The excellence of the graduate programs in agriculture-related life sciences is a testament to that. But if the campus' location has not changed since 1905, transportation and mobility has -- by orders of magnitude. It is now time to acknowledge that Davis is not only the premier UC campus in the Central Valley, but also the northern-most university of the San Francisco Bay Area, literally located where the Valley meets the Bay.

More importantly, the most successful US universities have thrived in extremely successful geographies of innovation that bring together academia, industry, and culture in the Bay Area, Boston, and in the Durham, NC area.[21] All these ecologies involve more than one university – Harvard-MIT-Tufts, Stanford-Berkeley-UCSF, Duke-UNC -- each with specific strengths. Not only is Davis well placed to contribute to the Bay Area's ecology of innovation and to become its northern node -- Davis is as close to Berkeley as Berkeley is to Stanford -- but it can do so without in any way weakening the connection to the Valley that has proven so central to its success.

UC Davis should be able to have it both ways: reinforce its status as the premier research and graduate training center for agriculture-related techno sciences while also boosting the attractiveness and excellence of its full range of graduate programs in the sciences, social sciences, humanities and the arts by taking full advantage of the intellectual, industrial, and cultural resources found in the Bay Area. These connections can be developed in a variety of ways: 1) Internships, summer schools, and conferences at Bay Area industries and universities can introduce our science, health, and engineering students into biotech, IT, and pharma research networks, as much as our campus' location connects our agriculture and environmental science students to California's agricultural research and business communities; 2) Pedagogical complementarities could be identified to establish opportunities for teaching and training collaborations between Davis and Bay Area universities (Harvard and MIT have recently synchronized their academic schedules to allow students to cross-register with virtually no hindrance, and teaching collaborations are increasing between Duke and UNC as well); 3) In

[21] C.f.: Grimaldi, R., Kenney, M., Siegel, D.S., Wright, M. (2011). 30 years after Bayh–Dole: Reassessing academic entrepreneurship. *Research Policy*, *40*, (8) 1045-1057; Adams, S.B. (2003). Regionalism in Stanford's Contribution to the Rise of Silicon Valley. *Enterprise & Society, 4* (3)*:* 521-543.

addition to having access to museums and cultural programs in Sacramento, our graduate programs in the arts and humanities are one hour away from top-notch museums, galleries, art schools, and a large cosmopolitan artistic community with which they can and should interact and collaborate (New York's academic excellence in the arts and humanities is directly tied to extra-academic resources, such as the city's many vibrant artistic and cultural institutions and communities).

The opportunities offered by Bay Area networks and resources would attract the best graduate students who are interested in a top education but also in accessing the best professional networks of innovation. Conversely, Davis should recognize that our graduate students are our ambassadors. The networks and collaborations they will establish, with our help, within the Bay Area ecology of innovation and culture will demonstrate UC Davis' excellence while opening up further partnerships venues for other elements of the campus community -- not unlike MIT's reliance on its foreign students to develop global research collaborations.

By acknowledging and further establishing itself as a member of the Bay Area ecology of innovation rather than adopting a more limiting self-representation as a specialized Valley-oriented campus, Davis should appear as a desirable partner for the kind of collaborations that Google, BP, and Intel have already developed with Stanford University and UC Berkeley, or those that Pfizer has established with UC San Francisco. These collaborations hinge on the quality and quantity of the research resources of these specific institutions, but also on a clear acknowledgment of the vast amount of talent residing, circulating, and flocking to the Bay Area.

USE ENGAGEMENT AS OPPORTUNITY FOR GRADUATE EDUCATION TRAINING

The practices of engaged scholarship can provide powerful learning experiences for graduate students that can both enrich their academic training and prepare them for a range of careers, both within and beyond the academy. Supporting and sustaining such functions in the university will require making this an institutional priority. Developing specialized graduate training programs such as the internationally renowned Atmospheric Aerosols and Health program, organized through the UC Toxic Substances Research and Training Program (with funding from the UC Office of President) drew on an interdisciplinary team of faculty from the social sciences, natural sciences from both UC Davis and UC Merced for a two-year sequence of workshops, guest lectures with professionals in the air quality arena, collaborative projects, and individual research projects that integrated the science and policy of air quality. While the program has since been closed due to funding, it remains a positive example of how the inter-disciplinary, collaborative, and policy-relevant research can offer unique learning experiences. Similar training programs could be developed on a range of themes cutting across the sciences, social sciences, humanities, and the arts. Even more ambitious programs, such as University of

Oregon's Sustainable Cities Initiative that orients multiple courses around a collaborative effort to improve sustainability in a given city each year offer a campus-wide model to consider.[22] Developing a faculty-graduate student mentorship program that would pair graduate students with a faculty mentor with expertise in engaged scholarship related to the student's area of study are another, lower resource, possibility.

RECOGNIZE AND REWARD ENGAGED SCHOLARSHIP

Formal awards are an important element of articulating and reproducing the organizational culture of any institution. The Academic Senate currently recognizes engaged scholarship by faculty through its Distinguished Public Service Award. A Graduate Student Award for Engaged Scholarship to bestow special recognition on students who apply their research to make significant contributions to the public good would help signal and celebrate this value in the University. The award could be offered by the Chancellor and a representative of the relevant community partner. This would be complementary to the current Chancellor's Achievement Awards for Diversity and Community that focuses internally on campus climate by extending this to university-community partnerships. Award recipients could also have a public version of their research published through a university imprint and/or posted on the university website.

Recognition of excellence in engaged scholarship can also enhanced through supporting the participation of graduate students in specialized conferences on this theme, such as those of Imagining America.[23]

PROMOTE PUBLIC POLICY APPLICATIONS OF GRADUATE EDUCATION

As the UC campus in closest proximity to the state Capital, UC Davis has unparalleled access to

[22]The University of Oregon. (n.d.) *Sustainable Cities Initiative.* Retrieved May 1, 2012 from http://sci.uoregon.edu/programs/ The Sustainable Cities Initiative is a cross-disciplinary effort that integrates research, education, service, and public outreach around issues of sustainable city design. SCI works at a variety of scales, from regions to individual buildings actively seeking, through multiple perspectives and disciplines, solutions to sustainable city design problems.

[23] Imagining America Conference. (April 20, 2012). Conference theme retrieved May 1, 2012 from http://imaginingamerica.org/syracuseengagedgrads/annual-conference/
Imagining America's 2012 graduate student conference is framed as follows. "Recognizing that public scholarship takes many forms and engages a variety of different communities and disciplines, we invite proposals that animate intellectual, community-based, and/or arts projects within and across all disciplines that consider the collaborative knowledge-making process with, by, and for publics. What forms does public scholarship take in your discipline? What kinds of connections across disciplines and with diverse communities are available? How do collaborative projects with the community inform your discipline? What types of methods cultivate cross-disciplinary and cross-community engaged scholarship?

the political heart of the state and an opportunity to serve as a “go-to” source of cutting edge research to inform the wide range of state public policy. While UC Davis has made some important investments in capitalizing on this asset, including the recent incorporation of the UC Sacramento Center, there remains additional potential for graduate education to make best use of this opportunity. Developing a graduate level public-policy program (the UC Sacramento Center currently serves primarily undergraduates) would offer to our graduate students from across the disciplines advanced training in public policy analysis and the application of their research to informing public policy. A similar program could be developed through the UC DC program in the nation’s capital. Shorter-term policy internships and workshops, policy mentors, and other programs can help promote UC Davis graduate education as a valuable resource for the public good.

V. CONCLUSION

This report has outlined a series of recommendations to increase visibility of graduate education in the strategic and budget planning processes of the university, to strengthen the environment for student success, to engage and reward faculty, and to increase the social relevance of our work. These recommendations range from general principles to specific suggestions for improvement. The task force was charged with envisioning what graduate education should be at UC Davis. Moving forward from this report, the task force hopes that these themes will be employed in a larger conversation about practical implementation. Similarly, this report addresses graduate education as a whole and the recommendations raised should be addressed as such. To focus on one section of the report without considering how all of the critical recommendations are interrelated would impede a successful outcome. It is the hope of the task force members that these ideas will be taken in the spirit with which they were generated, as a collective effort to discuss, debate, and act to assure that our efforts in graduate education result in the outcomes that our campus values and desires.

APPENDIX A: CHARGE FOR THE TASK FORCE

Charge letter for the Joint Administrative Academic Senate Special Task Force on Graduate Education at UC Davis follows.

UNIVERSITY OF CALIFORNIA, DAVIS

BERKELEY • DAVIS • IRVINE • LOS ANGELES • MERCED • RIVERSIDE • SAN DIEGO • SAN FRANCISCO SANTA BARBARA • SANTA CRUZ

RALPH J. HEXTER
Provost and Executive Vice Chancellor

OFFICE OF THE PROVOST AND EXECUTIVE VICE CHANCELLOR
ONE SHIELDS AVENUE
DAVIS, CA 95616
TEL: (530) 752-4964
FAX: (530) 752-2400
INTERNET: http://provost.ucdavis.edu

May 12, 2011

Professor Mario Biagioli, Science and Technology Studies
Professor Gina Bloom, Department of English
Mr. Ethan Evans, Doctoral Candidate/Sociology
Professor Rachael Goodhue, Department of Agricultural and Resource Economics
Professor M (Lev) Kavvas, Department of Civil and Environmental Engineering
Associate Dean Kent Lloyd, School of Veterinary Medicine
Ms. Cassandra Paul, Doctoral Candidate/Physics
Professor Wolfgang Polonik, Department of Statistics
Assistant Dean Richard Shintaku, Graduate Studies
Professor Andrew Sih, Department of Environmental Science and Policy
Professor Alan Taylor, Department of History
Dean Heather Young, School of Nursing (chair)

RE: The Joint Administration /Academic Senate Special Task Force on Graduate Education at UC Davis

Dear Colleagues:

We are writing to invite your participation on a joint Senate-Administration Task Force to provide advice and recommendations to the Provost and Executive Vice Chancellor and to the Chair of the Academic Senate regarding various ways our institution supports graduate education in all its forms, and the strategic process that aims to articulate what we want graduate education at UC Davis to be or become as we approach 2020. The task is ambitious and the primary focus should be on the vision itself, rather than the path to reaching it.

We have attached a detailed description that describes the Task Force and the role of the Task Force in this broad visioning effort. We look forward to discussing the process and our goals at the first meeting of the Task Force.

The Budget and Institutional Analysis Office will provide staff support for the committee and make detailed background information and analysis available to members prior to the initial meeting. Staff will contact you shortly to schedule the committee's first meeting. You need not respond to this letter unless you are unable to serve.

We very much appreciate your participation in this important task force, which will support the design of the future of our graduate education.

Sincerely,

Ralph J. Hexter
Provost and Executive Vice Chancellor

Robert L. Powell
Academic Senate Chair

Attachment

c: Chancellor Katehi
Analyst Sarah Mangum

APPENDIX B: TASK FORCE MEMBERS

CHARGING AUTHORITIES
Ralph J. Hexter, Provost and Executive Vice Chancellor

Robert L. Powell, Academic Senate Chair (through June, 2011)

Linda Bisson, Academic Senate Chair (July, 2011 - Present)

TASK FORCE
Heather M. Young, Associate Vice Chancellor, Dean and Professor, Nursing (Chair)

Mario Biagioli, Distinguished Professor, Law and Science and Technology Studies

Gina Bloom, Associate Professor, English

Ethan Evans, Doctoral Candidate, Sociology

Rachael Goodhue, Professor, Agricultural and Resource Economics

M (Lev) Kavvas, Professor Civil and Environmental Engineering

Kent Lloyd, Associate Dean, Professor Veterinary Medicine

Jonathan London, Assistant Professor, Human & Community Development

Cassandra Paul, Doctoral Candidate, Physics

Wolfgang Polonik, Professor, Statistics

Richard Shintaku, Assistant Dean, Graduate Studies

Alan Taylor, Professor, Department of History

APPENDIX C: EXPERT CONSULTANT REPORTS

UC-Davis Graduate Studies Task Force
Comments from external consultant committee
Visit on October 27-28, 2011

Steve Matson, Dean of The Graduate School, University of North Carolina at Chapel Hill
Frances Leslie, Dean, Graduate Division, University of California at Irvine
Joel Michaelsen, Professor of Geography, University of California at Santa Barbara

The graduate education task force invited three outside visitors with expertise in graduate education to visit the UC-Davis campus and speak with several groups about the future of graduate education both at UC-Davis and nationally. We met twice with the task force – once over dinner when we arrived and then again at the end of our visit. The task force is fully engaged in the process, is widely representative of the university and seems genuinely willing to think creatively about graduate education at Davis. Dean Heather Young is an excellent leader of this group and was present at several of our meetings throughout the day. The dinner represented an opportunity to talk broadly and although we were broken into two groups, there appeared to be lively conversation focused on graduate education at both tables. The last meeting with the task force centered on providing some overarching thoughts regarding graduate education at Davis and each visitor shared some of their thinking that may help the task force complete its mission.

In addition, the visiting team met with the Dean of Graduate Studies, the chair of the Graduate Council, several academic deans, a group of departmental and graduate group chairs, and a group of students. We also participated in an open forum with faculty and students. We finished the day with a dinner hosted by the Provost and the Chair of the Faculty Senate. In each case there was active discussion and interest in graduate education.

During the final session with the task force each visitor spent 5-7 minutes providing general comments on what they had learned during the day and their sense of what is important in graduate education for the future.

Professor Michaelsen suggested that a significant trend in graduate studies involves movement toward more interdisciplinary and multidisciplinary programs, and that UC-Davis' graduate group model seems to have already moved effectively in this direction. Furthermore, the model should be able to adapt relatively quickly to future trends. On the other hand, it does present challenges to resource planning that need to be carefully addressed. He also suggested that, in this era of shrinking resources for UC, it might be worthwhile to think about how multi-campus graduate groups might be developed. Of course, the issues the UC-Davis is struggling with would become much more challenging for programs spanning several campuses. Finally,

Professor Michaelsen noted that graduate programs will need to prepare students for a broader range of career paths beyond the traditional research/academic realm. This will not only require new programs for students, but also some re-training of faculty, many of whom have little experience outside of academia.

Dean Leslie highlighted the value of the interdisciplinary graduate groups and their unique place within the UC system. Whereas other campuses, such as UC-Irvine, struggle to break down barriers between individual disciplines, UC-Davis has a long tradition of fostering interdisciplinary research and education through the graduate group structure. These groups are clearly facing challenges in the current environment, however. The decentralized structure of these groups makes it more difficult for them to secure adequate resources in these difficult budgetary times. Furthermore, although the groups foster collaboration at the faculty level, they may result in greater isolation of the graduate students. Dean Leslie viewed these issues as resolvable, however, and urged that the visioning initiative find ways to protect their interdisciplinary structure at a time when collaborative research that spans boundaries is increasingly essential.

Dean Matson suggested the committee find a way to discuss the funding of graduate education separate from other issues impacting graduate education. There is little doubt that graduate education at Davis is underfunded; both the faculty and the students made this abundantly clear. And finding adequate financial support for graduate education is something the task force must address. However, if the funding issue is allowed to cloud all other conversations then other aspects of graduate education will never be fully addressed.

On a national level, the incorporation of extensive professional development opportunities for graduate students in graduate training is an important role for a graduate school. Dean Gibeling has done a marvelous job and the offerings are extensive. This takes the pressure off academic units to provide training in areas where they are not familiar with the needs and have no basis for providing the appropriate training. This is now viewed as a central role of a graduate school and has taken on an added urgency with the decline in available tenure-track positions at research universities. Interestingly, students at Davis seem unaware of these offerings as evidenced when we met with the students. This may be due to lack of advertising, to lack of interest (this does not seem the case) or to a sense that faculty don't want the students to engage in these activities. In any event, these offerings should be widely publicized and extensively utilized by the students. If the faculty are resistant to students receiving this training this must be addressed by the graduate dean and provost.

Matson noted that no one we met with seemed to place much value on fundraising for graduate education. Matson repeatedly raised this issue but without much response. Perhaps this is not important. However, the last CGS national meeting devoted a plenary session to

fundraising and each annual CGS meeting has a workshop focused on fundraising. Matson also talked about advocacy for graduate education within the institution, outside the institution and with the legislature. This appeared to resonate with some groups. This has become a more important part of the role of the graduate school for public institutions that rely on public support.

Student concerns:

Students are very concerned about funding, community and mentorship. They spoke very clearly about these issues and the external group shared several thoughts. Creating community among graduate students is an issue at all of our institutions. UC-Irvine may have made the most progress here with on campus housing for graduate students and a Division of Student Affairs that is more directed toward graduate students and more collaborative with their Graduate Division than is the case at most institutions. UCSB has also built housing for graduate students that has been helpful in recruiting students and in building community among new students. Nonetheless, there is no simple solution to this problem and it is worth the task force taking time to discuss the issue thoroughly. Dean Gibeling's view of a graduate student center is a viable option that has been used successfully elsewhere. The students noted that a new student center was being opened but that no space in it was to be designated for graduate student use. This has left the graduate students feeling marginalized. The students' concern about mentorship and their suggestions should also be taken quite seriously. This is an issue than can be addressed, although it may be somewhat more challenging in graduate groups than in departmental programs. There will always be poor mentors but a strong effort to make good mentorship important and valued will go a long way. As noted above, the funding issue is a concern of all parties.

Faculty concerns:

The faculty seem to be primarily focused on funding for graduate education and the issue of counting teaching of graduate courses in a way that recognizes faculty time and allows graduate groups to function as they have for the past two decades. This is related to the FTE issue where graduate groups do not have FTEs and do not have any real voice in determining where FTEs will go while needing to ensure teaching of appropriate courses as part of the graduate group. The issue of counting graduate courses in faculty workloads should be straightforward, so possibly policies on this need to be clarified and articulated at departmental levels.

Dean Gibeling's proposal:

We do want to share some comments on Jeff's plans for Graduate Studies. In our view his goal of creating a graduate school to focus on more academic issues is right on target. This will allow

a broader view of the mission of the Graduate School on campus which will be needed as graduate schools across the country work to collect data on completion rates, time to degree and various other parameters of graduate education that are now under the microscope. In addition, this provides him with greater opportunity to advocate both internally and externally for graduate education and to raise private monies to support graduate students. The two deans are not in favor of moving the transactional aspects of graduate education out of the graduate school. We believe these activities need centralized oversight to ensure high quality and that accreditation standards are being met in all disciplines, and for graduate education in general. Graduate education is receiving increasing scrutiny by national accreditation boards.

Conclusion:

In general, the Office of Graduate Studies has been very successful at UC-Davis. The graduate groups function well in their ability to provide cross disciplinary training to graduate students without the complication of being a jack of all trades and master of none. The professional development program is well conceived and should be serving students and faculty alike. This will help job placements for graduate students as tenure-track faculty appointments become more difficult to secure. Funding for graduate education is a significant concern for the faculty, the students and the administration. There is no simple solution to this problem in light of decreasing state and federal support for students. All possibilities need to be pursued vigorously, including fundraising, which is one of the few sources that has the potential to offset declining governmental support.

UC-Davis Graduate Studies Task Force
Comments from external visit committee
Visit on November 1, 2011

Carol Lynch, Senior Scholar in Residence and Director, Professional Master's Programs, Council of Graduate Schools

Over the course of my visit, these are my overarching impressions:

Council of Deans and VCs

Asked to enumerate the top issues facing graduate education nationally, I listed (in no particular order of relative importance):

- Collecting accurate data on completion, time to degree and student placement.
- Tying funding more to metrics and outcomes.
- Recruiting and retaining more diverse students, including supporting pathways into graduate education.
- More emphasis on fundraising for graduate programs and students (especially crucial in light of severe budget cuts).
- Professional development for graduate students, such as Preparing Future Faculty, Preparing Future Professionals, and Research Integrity (and increased professionalism of graduate education in general).
- Expanded international experiences for students, including dual and joint degree options.
- Bringing on the faculty as critical partners in all these areas.

I was surprised (and pleased) at the interest shown (with almost no antagonism) to the development of quality professional programs and with more attention in general to providing students at all levels with appropriate professional (as well as academic) skills to lead to satisfying careers. Although there was interest, there was also concern from the Management and Law deans about how to incorporate students from other programs into their courses.

Graduate Education Task Force

I was impressed with the thoughtfulness of this group and the willingness to engage hard questions. Topics discussed in this meeting included:

- How to tie funding to appropriate metrics.
- Are PhDs, especially the dissertation, a waste of time for students who end up in careers that don't require a PhD? (This led into a brief discussion of advancing alternative types of professional education.) My feeling in thinking about this is that we should perhaps

work on ways for students to move more easily into and out of degrees if/when their career goals change.

- What are the strengths and weaknesses at UCD? (I would add here that SWOT analysis is always helpful for this sort of task force.)

Strength: graduate groups. (There was some discussion of why this model had not been widely adopted nationally if it was so admired. My impression is that UCD was fortunate in the historical relationships which led to the groups, as they are difficult to form, especially without strong funding incentives – the NSF IGERT program would be an example of such an incentive.)

Weakness: relatively weak graduate "office" vs. a stronger graduate "school."

Question: is there any danger that a stronger central unit would increase administration, add to bureaucracy and create insensitivity to departmental differences? (This appeared to be a minor view, but always worth guarding against. In my conversations and review of the UCD documents I saw no indication that this was likely to occur, in fact would conclude the reverse, with more faculty participation in graduate academic support and planning.)

In Summary

I was very impressed with the apparent engagement of much of the campus faculty (and administrators) in the conversation about the future of graduate education at UCD. I believe the right questions are being asked, although even more attention could be paid to the impacts of the new budget on graduate education and the office of the Graduate Dean. I was impressed with the leadership in these discussions from the Chancellor, Provost and Graduate Dean. If I can be of any further help, please don't hesitate to contact me.

APPENDIX D: PRELIMINARY SUGGESTIONS FOR GRADUATE EDUCATION METRICS

This appendix includes some of the Graduate Education Task Force's thoughts regarding metrics for evaluating the performance of graduate groups and programs. We offer it only as material for future discussions, not as a recommendation. We want to preface these suggestions with a few clarifications:

1. The Task Force believes that appropriate metrics should be considered in discussions about resources allocation to graduate programs and groups, and not only as part of academic quality reviews of graduate programs like those currently performed by Graduate Council on behalf of the Academic Senate. However, these academic quality reviews should be considered in the resource allocation process. Any annual metrics should not be considered a replacement for substantive review.
2. We believe that, consequently, these metrics should be applied and tracked annually, not every few years as with the academic quality program review schedule. For this to be feasible, the tracking procedure needs to be simple so as to avoid undue workload to faculty and staff.
3. At this time we offer no suggestions as to how to use the various performance indicators of one specific program to produce summary statistics encapsulating the overall quality of that program. That issue may be better tackled after a few years of evidence gathering. However, the aggregation of such program-specific summaries might allow us to compute an overall campus graduate education quality indicator.
4. The development and implementation of metrics should be a transparent campus-wide effort with extensive and direct participation of all stakeholders. It should not be the result of a top-down policy. The definition of success for each metric and its role in resource allocation should be clear and transparent.

Our proposal involves two different data-gathering procedures. Taken together, Parts 1 and 2 could provide us with an annually updated snapshot of the state of all our graduate programs.

Part 1

This part offers some thoughts about possible extensions of the "Graduate Program Evaluation Metrics" (developed by Graduate Dean Gibeling and Graduate Council, and approved by Graduate Council on May 20, 2009 – please see citation on page 14.). Because these draft metrics already cover many key issues that are easily quantifiable, the Graduate Education Task Force focused on additional questions to produce finer grained evidence, in particular about graduate students' professional progress and success during their enrollment in our programs

and in the first five years after graduation. Most, though not all, of this evidence can be gathered by information routinely available to the Office of Graduate Studies. The additional data gathering – especially that related to the students' post-graduation progress – will be somewhat time consuming, but this might be crucial for gauging the quality of our students' training and the likelihood of their future success.

As for student characteristics of a program, the gathered evidence might be more informative if the following is included:

- Attrition rates by year (how many students left the program during the first year, second year, etc.), with sensitivity to the difference between intended and unintended attrition.
- Distinguishing between internal and external student fellowships.
- Gathering information about the research productivity of graduate students from admission to five years post graduation might be broken down into several elements, such as:
    - Co-authored and single-authored peer-reviewed publications (divided by articles, book chapters, reviews, short notes, conference abstracts, etc). Texts accepted for publication but not yet published should be counted.
    - Number of submissions to journals, independent of outcome.
    - Number of grant applications as PI, independent of outcome. List amounts.
    - Publications citations.
    - Grants (research, travel, campus activities, etc – give amount).
    - Patents (as either inventor or co-inventor).
    - Talks and conferences (divided by local, national, international)
    - Participation in international activities (exchange programs, summer schools, international conferences).
    - Outreach programs participation (e.g., internships in governmental agencies, NGOs, museums, or other extra-university entities, socially conscious activities (e.g., prison teaching, etc), volunteering in degree-related activities, etc).
    - Awards and other forms of recognition.

Faculty characteristics could be enhanced by including, for instance,

- Number of faculty in program divided between those having FTEs, zero-FTE appointments, or MOUs;
- Percentage of faculty with more than one other affiliation with a department or program/group;
- Information on faculty diversity;

- Faculty awards (prizes, fellowships, visiting professorships, etc) and media presence (interviews, etc).

Part 2

The second part of this appendix discusses a possible graduate student questionnaire that might be taken anonymously at the end of each academic year. The Task Force thought of it as a complement to the data collection addressed in Part 1. It would provide evidence of the students' own assessment of their programs, the quality of training and mentorship, and their overall experience as graduate students. We have avoided questions requiring qualitative answers, so that the results of the questionnaire can be integrated with the numerical evidence produced by Part 1). The expectation of the Task Force is that this data is mainly processes/evaluated by the graduate programs and graduate groups themselves. It can be used to inform enhancements of the program, and in times of a short budget, this data might perhaps also for making a case for the program. Another positive effect seems to be that this would make it obvious that graduate students are taken seriously, as they are continuously and actively involved in the evaluation of their program.

Once again, this is to be understood as a basis for a serious discussion by the relevant campus stakeholders rather than as a recommendation of the Task Force. Some of the parameters listed here may not apply to all fields. Conversely, we may have overlooked indicators that are instead important to some disciplines. We believe the responsibility for these adaptations rests primarily with the departments, programs, graduate groups, and of course the students themselves.

The survey might be taken anonymously at the end of each academic year (perhaps via a simple web-based survey) with questions to be answered on the following scale:

5	4	3	2	1	0
Strongly Agree	Agree	Unsure	Disagree	Strongly Disagree	N/A

1. I feel that after completion of my graduate program I will possess the skills and the expertise necessary to advance the career I am interested in.

2. I feel well informed about possible careers in my field (both academic and non-academic).

3. (For those students considering a non-academic career): I feel that my advisor and/or dissertation committee are supportive of my career choices, even though they may not be theirs.

4. The overall atmosphere in my program is positive and is supportive of my career goals.

5. I was provided adequate professional training, such as how to present my work at a conference, how to write a publishable article, how to handle myself during an interview, etc.

6. The course offerings are adequate to allow me to progress through the program at a normal pace.

7. My program provides adequate advising on the coursework to take.

8. My program provides adequate information on and preparation for the exams I have to take as part of my degree requirements.

9. I am satisfied with relevant resources made available by my program (e.g. IT support, copy machines, printer etc.)

10. I was given adequate information regarding the process of choosing an adviser, or changing one.

11. I was given clear and adequate information about funding provided by the program and funding I was responsible to secure.

12. I meet my thesis advisor regularly.

13. I feel my advisor is invested in my research and is doing his/her best to enable me to pursue it.

14. I meet **all** members (individually or collectively) of my dissertation committee regularly.

15. I feel that all members of my dissertation committee (minus my main advisor) take their role seriously and give me useful research and professional advice.

16. I feel that the expectations set by my advisor for progress are clear.

17. I feel that the expectations set by my advisor for progress are reasonable.

18. There are enough occasions during which I can interact with my fellow graduate students, both intellectually and socially.

19. There are enough social occasions during which I can interact with faculty who are not my advisor or dissertation committee members.

20. I feel that I have adequate information about upcoming seminars, conferences, job opportunities, summer schools, exchange programs, and funding opportunities.

APPENDIX E: GRADUATE STUDENT FEEDBACK

Specific Suggestions from Students to Enhance Environment for Graduate Student Success

FOSTERING GRADUATE STUDENT COMMUNITY:

Explore the development of a graduate student center and specifically explore the prospect of including relevant graduate student services as part of this building/center to align services with the graduate student community.

Support improved communication between and among graduate students by promoting and supporting the development of more formalized graduate student events.

Assess the need for graduate student housing that should include the needs of graduate student families (including child care resources).

IMPROVE MENTORSHIP AND PROFESSIONAL DEVELOPMENT:

Improve communication between programs, Graduate Studies/CETL/ICC/Centers and graduate students, to allow students to acquire the information and support they need to explore alternative career paths.

Increase faculty and administrative involvement in student-initiated activities such as the Interdisciplinary Graduate and Professional Research Symposium and Week of Welcome.

Acknowledge the role and importance of Graduate Program Coordinators and support them in developing the knowledge, skills and experiences necessary to effectively support students across all graduate programs.

Provide resources and incentives for faculty involvement in programs intended to improve mentorship skills such as the Mentoring at Critical Transitions program in Graduate Studies.

Identify and develop opportunities externally and/or internationally in order to expose graduate students to a greater variety of possible professional venues.

Develop programs to enhance the professional development of students in exploring diverse career paths.

Identify and match the desired skills in the various disciplines against the growing number of potential career paths both in and outside academia.

Research and identify examples of successful efforts (i.e. best practices) both within and beyond the university relative to the professional development of graduate students.

ADDRESS GRADUATE STUDENT FUNDING AND OTHER FINANCIAL ASPECTS:
Increase fellowship support in order to promote successful graduate student research.

Clarify student funding in admission decisions and in written/oral communication to applicants.

Increase development and fundraising efforts for graduate programs and graduate students.

More funding opportunities should be provided for graduate students; programs should emphasize the importance of hiring graduate student researchers.

Create a permanent advocate for graduate student financial issues modeled after the short-term trial position currently in place at Graduate Studies.

Develop discipline specific grant writing workshops for students. Ecology has a very successful grant writing workshop program with high success rates and Anthropology requires a grant writing class of first year graduate students. Both can be used as models.

Re-envision the online accounting system from the perspective of the student. Help students understand which part of their bill they are responsible for, and which part their employer is responsible for depending on their appointment type.

Centralize a physical and/or virtual location for graduate students to access financial support information. This would include Graduate Studies, Student Accounting, SISS, & Financial Aid.

Emphasize use of a central web location for programs to post TA-ships and GSRs. Graduate Studies has allocated space for this but it is underutilized.

Explore expanding summer education programs and other summer funding opportunities.

ASSURE GRADUATE STUDENT VOICE IN POLICY DECISIONS:
Broaden communications that would increase involvement of the general graduate student body.

Provide workshops and/or programs to develop graduate student leadership skills.

Consider expanding funding and access to the few campus programs that currently support this mission such as the Professors for the Future program, and the Graduate Ally Coalition.

Continue to involve graduate students to participate in university governance opportunities and advertise these opportunities more widely

INCREASE GRADUATE STUDENT DIVERSITY:
Be more intentional and explicit about diversity goals relative to graduate education and graduate students.

Take the necessary steps to expand graduate student diversity through strategic and intentional outreach, recruitment and retention efforts. Examples include but are not limited to increasing international competition for graduate students; develop strong partnerships with institutions that attract diverse populations of students including California State Universities; Hispanic-Serving Universities; Tribal Colleges and Universities; and Historically Black Colleges and Universities; and continuing our commitment to pipeline programs (e.g. UC LEADS, McNair Scholars) for members of under-represented minority groups pursuing graduate education.

Develop and implement strategies, programs and resources to both attract and retain a diverse graduate student body with input from the widest and inclusive range of constituencies (students, faculty, staff and community). Examples of programs and resources include: the Student Recruitment and Retention Center, the Graduate Ally Coalition and AGEP.

Ensure that support services are delivered with sensitivity to language and cultural differences.

Consider using other criteria in making admission decisions including non-cognitive indicators and other holistic graduate admission measures.

PROVIDE GLOBAL EXPERIENCES AND SUPPORT INTERNATIONAL STUDENTS:
Recruit and attend to the many special needs of international graduate students.

Increase support for international study, conference participation and research travel.

Develop exchange programs with universities abroad and relevant international funding sources.

APPENDIX F: BUDGET AND INSTITUTIONAL ANALYSIS OFFICE DATA

Reports include:

Graduate Enrollment Working Paper, fall 2011

Overview of Graduate Student Aid

Academic Graduate Studies Time to Degree

Graduate Student Ethnicity at all UC Campuses, 2010

UCDAVIS
BUDGET AND INSTITUTIONAL ANALYSIS

WORKING PAPER FALL 2011

UC Davis Graduate Enrollment

In fall 2011 Chancellor Katehi announced the 2020 Initiative, an ambitious plan that involves strategic growth of UC Davis students and faculty to move UC Davis toward the Vision of Excellence goals. Advancing graduate education is a critical component of this initiative. The Joint Administration and Academic Senate Special Task Force on Graduate Education at UC Davis has been asked to recommend a roadmap for advancing graduate education. In support of the Task Force's charge, this working paper provides data and analysis about graduate student enrollment trends and financial support.

UC DAVIS GRADUATE ENROLLMENT

Table 1

UC Davis Graduate Student Enrollment by Headcount

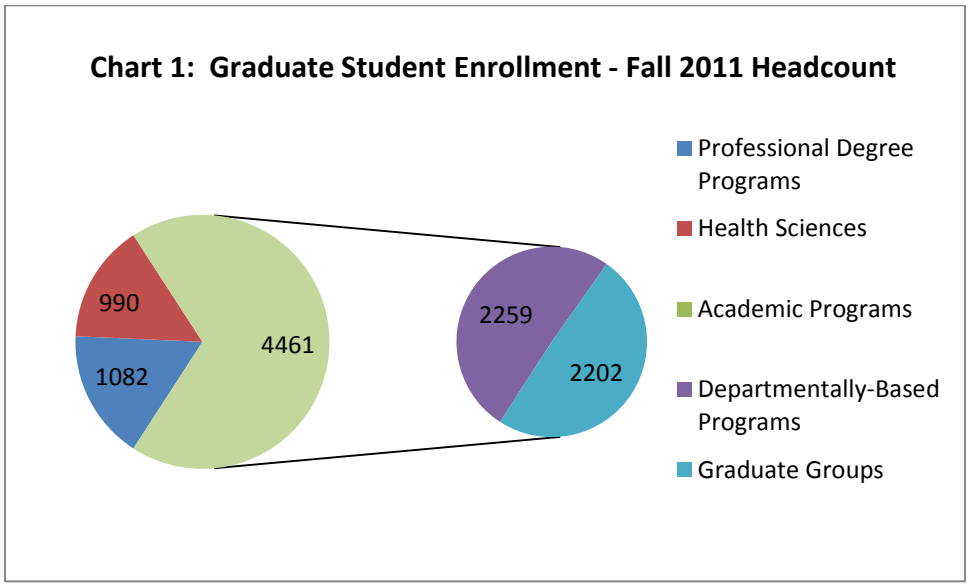
Graduate Student Type	Fall 2007	Fall 2008	Fall 2009	Fall 2010	Fall 2011	% Change from 2007 to 2011
PhD 1	2,084	2,104	2,086	2,102	2,114	1.4%
PhD 2	1,174	1,170	1,247	1,253	1,227	4.5%
Academic Masters[1]	821	804	870	966	998	21.6%
Academic Self-Supporting[2]	115	109	121	120	122	6.1%
Professional Degree	1,038	1,082	1,153	1,108	1,082	4.2%
Health Sciences[3, 4]	940	969	985	976	990	5.3%
Total Degree Seeking	**6,172**	**6,238**	**6,462**	**6,525**	**6,533**	5.8%
Non-Degree Seeking	251	257	274	308	251	0.0%
Education Credential	*126*	*136*	*144*	*177*	*139*	10.3%
Coursework Only	*20*	*6*	*15*	*21*	*31*	55.0%
Family Nurse Practitioner[5]	*105*	*115*	*115*	*110*	*81*	-22.9%
Total, All Graduate	**6,423**	**6495**	**6736**	**6,833**	**6,784**	5.6%

[1]Academic Master's degree programs identified by the Academic Senate. Includes Masters in Nursing and Health Informatics.
[2]Academic degree programs that pay professional degree fees and are self-supporting. Includes Master of Laws, Forensic Science, Clinical Research, and Maternal and Child Nutrition.
[3]Includes Master of Preventative Vet Med, Veterinary Medicine (DVM), Master of Public Health, Medicine (MD). PhD and Masters in health sciences are included in the PhD and Academic Masters categories.
[4]There were an additional 898 medical interns and residents in 2010-11, but they do not pay tuition so they are not included in this chart.
[5]Students in this program pay undergraduate tuition.
Source: Budget and Institutional Analysis Enrollment Reports; Student Information System Decision Support Academic Personnel and Human Resources Trend Reports - PILOT, Report Code 220

FALL 2011 GRADUATE ENROLLMENT FACTS

UC Davis graduate enrollment includes students with different degree objectives, length of enrollment, and financial support levels. This section provides the basic graduate enrollment facts during fall 2011.

- The majority of the 6,533 graduate students at UC Davis are in academic programs, with approximately one-third of the graduate students enrolled in professional degree and health sciences programs.
- Over one-half of all degree-seeking graduate students are PhD students (3,341 total, or 51 percent).
- Degree-seeking non-resident international students constituted about 15 percent of the total degree-seeking graduate student body in fall 2011, with 994 students. Of the academic graduate students, 889, or about 20 percent, were degree-seeking non-resident international students in fall 2011. By comparison, in fall 2010, 18 percent of UC Berkeley's and 22 percent of UC Irvine's academic graduate students were degree-seeking international non-residents.
- Self-supporting programs had an enrollment of 496 graduate students in fall 2011, of whom 122 were in academic self-supporting programs. This enrollment figure is included in the academic and professional degree programs' enrollment. Self-supporting program include Clinical Research, Forensic Science, Working Professional Business Administration (Sacramento and Bay Area), International Commercial Law, Master of Laws, and Maternal and Child Nutrition.



Note: Self-supporting program enrollments are included in the professional degree programs and the academic programs

GRADUATE ENROLLMENT TRENDS 2000 TO 2011

Enrollment in graduate academic and professional degree programs at UC Davis has grown over 35 percent since 2000. The majority – about 79 percent – of this growth was in academic graduate programs. The remaining 21 percent of the total growth was in professional degree programs and health sciences, which combined comprise approximately a third of the campus total enrollment.

Current program enrollment numbers provide only a brief look at graduate programs. To understand how the present enrollment mix developed, this section provides key trends in graduate enrollment.

- Graduate academic and professional program enrollment grew from 4,818 to 6,533 headcount students between fall 2000 and fall 2011, an increase of 1,715 students, or 35.6 percent. This number does not include medical interns or residents.
- Graduate academic programs alone grew by about 43 percent during the last decade. During the same time period, professional degree programs without health sciences grew by just over 26 percent, and health sciences alone grew by nearly 16 percent.

- PhD student enrollment grew from 2,271 to 3,341 headcount students between fall 2000 and fall 2011, an increase of 1,070 students or about 47 percent. Over three-fourths of academic graduate students are PhD students.
- Academic Master's student enrollment grew from 851 to 1,120 headcount students between fall 2000 and fall 2011, an increase of 269 students or nearly 32 percent.
- Professional degree student enrollment, including health sciences, grew from 1,710 to 2,072 headcount students between fall 2000 and fall 2011, an increase of 362 students or about 21 percent.
- Degree-seeking non-resident international graduate student enrollment has grown by 279, or about 39 percent, from 715 to 994. About 90 percent, or 889, of the degree-seeking non-resident international graduate students are in academic programs.
- Domestic non-resident graduate students become California residents for tuition purposes after one year. First-year domestic non-resident graduate students grew by 43, or nearly 15 percent, during the last decade from 294 to 337 headcount students.
- Over the past decade there has been a shift in the ratio of new and continuing graduate students. Each year between 2001 and 2011, the percentage of continuing students relative to first year students has increased slightly, with continuing students representing 69 percent of students in 2001 and increasing to 75 percent of students in 2011. During the decade from 2000 to 2011, the number of continuing graduate students also grew from 3,559 to 4,895 (growth of 1,336 continuing students). Not all of the growth in continuing students has been in the PhD programs; about 23 percent of the continuing student growth has been in the professional degree programs. Further research is needed to determine if this shift is due to students taking longer to complete their programs.
- Over the last decade, selectivity for graduate academic programs has improved with number of applicants to admitted students falling from 44 percent in 2000 to 29 percent in 2010. In addition, the percentage of students who are admitted and choose to enroll increased slightly from 41 percent in 2000 to 44 percent in 2010. During this time, the number of applications has increased greatly from 5,147 in fall 2000 to 9,487 in fall 2010.
- Since 2000, academic graduate student matriculation rates have varied between 39 and 46 percent. For 2010-11, the academic graduate student matriculation rate was 45 percent, which included both PhD and Master's students.

Table 2

Total Graduate Enrollment by Lead Dean

College	2000	2007	2008	2009	2010	2011	Growth in College from 2000 to 2011
CA&ES	823	935	879	941	981	994	20.78%
Biological Sciences	371	461	447	434	408	402	8.36%
Engineering	691	918	931	941	985	995	43.99%
L&S: HArCS	252	339	362	357	345	342	35.71%
L&S: Math and Physical Sciences	364	534	515	562	567	550	51.10%
L&S: Social Sciences	336	434	464	475	483	482	43.45%
Education	63	257	256	261	299	284	350.79%
Graduate School of Management	355	459	506	547	516	483	36.06%
Law	512	597	589	623	613	622	21.48%
Medicine	454	501	510	524	514	536	18.06%
Veterinary Medicine	597	671	699	713	703	703	17.76%
Nursing					33	66	
OGS - Forensic Science		65	76	82	75	72	12.50%
Total - All Graduate Programs	4,818	6,172	6,238	6,462	6,525	6,533	35.60%

Please see Appendix 4 for a listing of departmentally-based programs and graduate groups by lead dean

Source: Student Information System Decision Support, Student Trend Reports

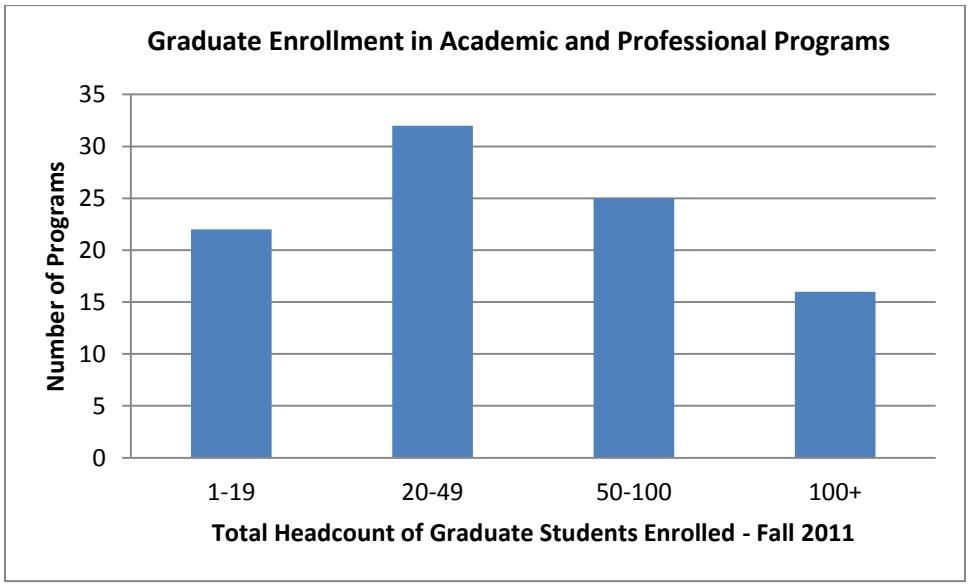
GRADUATE PROGRAMS 2010-11

UC Davis offers 95 graduate programs. These include:

- 38 – Academic graduate department-based programs.
- 49 – Academic graduate groups, three of which are currently suspended.
- 8 – Professional degree and self-supporting programs.

As Chart 2 below shows, 22 graduate programs (23 percent) have fewer than 20 students enrolled. The 16 graduate programs with over 100 students enrolled include nine academic and seven professional degree programs.

Chart 2



See Appendix 4 for program enrollment detail.
Source: Student Information System Decision Support, Student Trend Reports, Fall Enrollment

GRADUATE GROUPS

Academic graduate groups are interdisciplinary programs that provide graduate students with unique intellectual freedom to transcend traditional academic departmental boundaries in disciplines and areas of research.

The interdisciplinary structure of graduate groups creates some administrative complexities. For example, administratively graduate groups are based in the Office of Graduate Studies, but are also under the sponsorship of a lead dean in an academic college or division. Faculty involvement in graduate groups is complicated by the administrative structure. Graduate groups do not constitute academic home departments for faculty members. Instead, faculty members from a various home departments may affiliate with a graduate group by agreeing to mentor and instruct students in the group. Faculty may also be involved with a graduate group by participating in committees, writing research papers with graduate students from the group, or other means that are not tracked centrally by the campus. However, faculty members are paid and evaluated for merit and promotion in their academic home departments, not in graduate groups with which they may be affiliated. Moreover, their primary instructional and service obligations remain to undergraduate programs (and sometimes graduate programs) in their home departments. This has implications for the availability of faculty to teach the courses for the graduate groups, as well as funding for the groups and tracking faculty effort.

Since the faculty's primary obligation is to their home departments, many graduate groups use team teaching because of the difficulty in getting faculty to commit to teaching a full course.

Faculty mentoring of students in graduate groups does not appear to be as constrained by the administrative structures as is teaching. Data for 2010-11, suggest a significant amount of faculty engagement across college/school boundaries, especially between the Health Science Schools (SOM and SVM) and the general campus science disciplines (in CAES, CBS, COE and DSS). However, the substantial majority of graduate groups—42 of 49 – had half or more their students mentored by faculty from the college where the graduate group is housed, based on Graduate Student Inventory (GSI) faculty metrics. The GSI is developed by assigning each student a faculty mentor, who could be the Chair of the Dissertation Committee, the Major Professor, or the Faculty Advisor. For the purposes of the GSI, first year students without a lead faculty mentor are assigned to the Chair of the graduate group.

As the campus develops a new budget model, particular attention will need to be given to the implications for funding Graduate Groups.

GRADUATE STUDENT FINANCIAL SUPPORT

The cost of supporting graduate students is important to examine as UC Davis contemplates the 2020 Initiative, which calls for recruitment of additional graduate students consistent with growth of faculty. The ability of the campus to support graduate students financially will impact the decision of students to attend UC Davis, and will influence the ability of UC Davis to attract top tier graduate students.

The cost of advanced education has dramatically increased over the last five years as state support for the University has decreased. California residents who are academic full-time resident graduate students have seen their total tuition, student service fee, campus based fees, and health insurance increase by about 58 percent since 2007-08 (from $9,651 annually to $15,271 annually). The increases are even steeper for some professional degree programs: since 2007-08, the combined resident tuition, student fees, campus based fees, professional degree fees, and health care for resident students at the School of Law, for example, have increased by 82 percent.

The affordability of graduate academic and professional degree programs is heavily influenced by the net cost of attending the University (i.e., total educational expenses less fellowships, grants, and teaching and research assistantships) relative to that at comparable institutions. Since costs and support levels at other research institutions vary widely according to field of study, a single measure of affordability that is applicable across disciplines and programs is inappropriate. A variety of factors, including length of degree program, typical level of remuneration for program graduates, market demands, and the need for diversity all need to be considered. The configuration of support also varies across programs. In some cases (for example, Ph.D. programs) fellowship and assistantships are most critical. In others (e.g., professional degree programs), need-based grants and/or some form of loan assistance repayment program may be more appropriate.

Table 3
2011-2012 UCD TUITION AND STUDENT FEES SUMMARY[1]
(Annual fees)

	2011-12 Total Tuition & Fees		% Change for Residents from 2007-08 to 2011-12
	Resident	Nonresident	
GRADUATE ACADEMIC			
Full Time Graduate	$ 15,271	$ 30,373	58%
In Absentia[2]	$ 4,909	$ 20,011	NA
GRADUATE PROFESSIONAL			
Graduate School of Management	$ 37,447	$ 49,692	56%
School of Law	$ 46,485	$ 54,622	82%
School of Nursing	$ 21,001	$ 33,246	NA
School of Veterinary Medicine			
1st thru 3rd Year Students	$ 32,975	$ 45,220	47%
4th Year Students	$ 36,599	$ 48,844	50%
Master of Preventive Veterinary Medicine	$ 21,013	$ 33,714	84%
School of Medicine	$ 38,020	$ 50,265	48%
Master of Public Health	$ 23,729	$ 36,430	58%
Health Informatics	$ 21,271	$ 33,516	NA
Educational Leadership	$ 19,273	$ 31,518	NA

[1]Includes tuition, student services fee, campus based fees, professional degree fee, international supplemental tuition, and health insurance.

[2]Policy passed by UC Regents in 2009 allows graduate students conducting research and studies outside of California to pay a reduced fee.

Source: ARM, Budget and Institutional Analysis, UC Davis Student Fees

RETURN TO AID

The UC Regents have adopted a return-to-aid (RTA) policy that dedicates a share of the paid tuition to financial aid. The Regents' policy calls for a designated percentage of all increases in tuition revenue to be added to base funding for the University Student Aid Program (USAP). The percent returned to aid differs by degree type. The RTA rate for increases in tuition and student service fee revenue paid by graduate academic students is 50 percent, while the RTA rate for students in graduate professional degree programs is 33 percent. The campus allocates graduate USAP funding in three different ways:

- For students in graduate academic programs a portion of the USAP funding is allocated to the Office of Graduate Studies, which then combines this funding with other resources and provides Graduate Program Fellowship Allocations (formerly called Block Grant allocations) to campus units for graduate student support in the form of tuition and fee remission, fellowships, grants and other support.
- A portion of USAP funding is designated for each professional degree program and awarded as grant or fellowship support for students in that program.
- Additional funding is used to support TA tuition and partial fee remission.

Graduate students who receive University employment as a TA at a 25 percent or greater appointment also receive tuition and Student Services Fee remission as part of their employment compensation. The campus covers the TA tuition and partial fee remission through its Central Benefits Pool. A portion of USAP revenue is used to help offset the cost of TA tuition and partial fee remission, although this offset amounts to about half the total cost of TA tuition and partial fee remission. It should be noted that domestic non-resident and international students who serve as TAs do not have their non-resident supplemental tuition covered by the TA tuition remission.

RTA funds should not be viewed as a separate revenue source for the University even though they are used to cover tuition costs. When calculating the cost of increasing graduate enrollment and offering additional graduate student support, it is important to note that RTA funds are internally redirected funds rather than a new funding stream.

SOURCES OF FINANCIAL AID FOR GRADUATE STUDENTS

Table 4

Type of Financial Support to UCD Graduate Academic and Professional Students, Excluding Earnings

dollars in thousands (not adjusted for inflation)

Source of Award	2005-06	2006-07	2007-08	2008-09	2009-10
State Government	$ 135	$ 240	$ 375	$ 448	$ 249
University Aid[1]	$ 54,550	$ 54,421	$ 57,463	$ 60,470	$ 67,657
Federal Government[1]	$ 42,991	$ 50,557	$ 51,771	$ 58,561	$ 69,285
Other Gov/Outside Agency	$ 6,224	$ 6,528	$ 8,577	$ 8,930	$ 7,919
Total	$ 103,900	$ 111,746	$ 118,186	$ 128,409	$ 145,110

[1]Does not include TA and GSR fee remission or salaries, which are considered earnings.
Source: Student Information System Decision Support, Student Support Trend Report, Report Code 240

- In 2009-10 the university-based scholarship, fellowship and grant aid to graduate academic and professional students was about $67 million, which does not include salaries from employment or fee remission.
- Loans have increased as a source of graduate academic and professional student support more than any other single category. This is due to the fact that between 2005 and 2010 resident academic graduate student tuition increased 70 percent, but during the same time period available financial support increased by 29 percent. Also, the available fellowship and scholarship funds had to cover more students as enrollment of graduate students increased by 8.4 percent between 2005 and 2009.
- The $69 million in federal government funding includes $8.6 million in grants and $60.4 million in loans. This amount does not include graduate student employment on federally funded faculty grants. Professional degree program graduate students accounted for 81 percent of the $62 million in loans utilized by UC Davis graduate students in 2009-10.

FINANCIAL AID FOR GRADUATE STUDENTS

- In 2009-10, about 94 percent of all graduate students received some amount of support, if loans and employment are included.
- The majority of financial support for graduate students is from employment.
- At just over $100 million in 2009, university employment and tuition and fee remission make up the largest category of support by dollars.
- At $62 million, loans are the second largest category of support by dollars to graduate students. The majority of graduate students (and student in general) do not consider loan to be a form of aid, because the student must repay these funds with interest.
- Tuition and fee remission for TAs and GSRs was over $35 million in 2009 (from all funding sources), with 51 percent of the total graduate student population, and 76 percent of the academic graduate student population receiving this form of support.

Table 5
Financial Support to UC Davis Graduate Academic and Professional Students - By Type of Support
dollars in thousands (not adjusted for inflation)

Award Type	2005-06	2006-07	2007-08	2008-09	2009-10	2009-10 % of Total
Scholarships/Fellowships/ Traineeship/Grants	$34,383	$36,820	$36,490	$36,756	$40,966	19.5%
Loans	$39,209	$44,831	$46,906	$54,167	$62,342	29.6%
Campus Employment	$59,296	$61,780	$65,210	$64,435	$65,468	31.1%
Remission/GSHIP	$27,792	$27,355	$29,656	$32,138	$35,271	16.7%
Other Aid	$2,518	$2,740	$5,133	$5,347	$6,532	3.1%
Total	$163,197	$173,526	$183,394	$192,844	$210,578	100%

Source: Student Information System Decision Support, Student Support Trend Report, Report Code 240

CAMPUS-BASED EMPLOYMENT FOR GRADUATE STUDENTS

Employment and associated fee remission comprise almost 50 percent of the total financial support provided to graduate students. This employment includes both teaching assistant (TA) and graduate student researcher (GSR) positions.

Teaching Assistants

- Students with a 25 percent of greater appointment as a teaching assistant receive tuition and partial fee remission on the in-state portion of their tuition. The tuition and partial fee remission for a student paid on general funds is covered by the central campus using graduate academic RTA and other funds. Over 98 percent of teaching assistants in general campus academic units receive their salary and tuition and partial fee remission from general funds.
- As the 2020 Initiative begins to draw more undergraduate students to the University, an increased number of TA positions must be offered to graduate students to meet undergraduate course teaching needs. The source of funding to support the tuition and fee remission for increased number of TAs needs to be considered as part of the recruitment planning.
- There has been some concern that students from graduate groups are disadvantaged in the assignment of teaching assistant positions. The data indicates that this may be the case: during Fall Quarter 2010, 87 percent of all TAs taught within the same department as they are enrolled. Since graduate groups do not offer undergraduate courses, and graduate students in graduate groups compose about 44 percent of the UC Davis academic graduate student population, the data imply that these students are not getting their share of teaching assistant appointments. It is possible that graduate students in graduate groups have more access to GSR positions or financial aid funds to substitute for the lack of teaching assignments, but further research is required on this topic.

Graduate Student Researchers

- Students with a 25 percent or greater appointment as a graduate student researcher (GSR) receive tuition and fee remission on the in-state portion of their tuition as well as their non-resident supplemental tuition. Beginning in 2003, faculty grants have been required to share the cost of non-resident supplemental tuition for students paid on grants; researcher pay 75%, with central campus funds supporting the remainder. Beginning in 2006, this buy-down policy was extended to resident graduate student GSRs. Please see Table 7.
- Only 14 percent of GSRs are paid from general funds. For these students, the employing department must identify funds to cover the non-resident tuition, often using block grants funds allocated to the graduate program.

- Grants provide employment and tuition and fee remission for the graduate students that allow those students to continue their studies and gain research experience. Disciplines in the humanities and social sciences have the least opportunities for grant support. HArCS has the largest percentage of GSRs of any college paid from general fund and tuition. Faculty in the physical, biological, and health sciences have more opportunities for grant funding. CBS, COE, MPS, for example, each support ten percent or less of their GSRs from general funds.

Table 6
Graduate Student Employees - Three-Quarter Average FTE[1] by College[2] and Funding Source

	2008-09		2009-10		2010-11	
	General Fund & Tuition	Other Funds	General Fund & Tuition	Other Funds	General Fund & Tuition	Other Funds
CA&ES - Total	128.5	134.3	122.1	125.9	126.0	135.6
TA	89.8	0.4	89.5	1.3	89.6	0.6
GSR	38.7	133.9	32.6	124.5	36.4	135.0
CBS - Total	58.1	55.2	53.0	52.1	47.6	51.6
TA	46.2	0.0	43.3	0.0	41.5	0.5
GSR	11.9	55.2	9.7	52.1	6.1	51.1
COE - Total	72.8	148.9	58.5	175.0	60.9	176.6
TA	45.1	0.0	43.0	0.2	44.4	0.1
GSR	27.7	148.9	15.5	174.8	16.5	176.5
HArCS - Total	94.1	6.9	109.8	7.6	103.3	7.3
TA	86.9	0.0	102.9	0.0	97.8	0.0
GSR	7.2	6.9	6.9	7.6	5.5	7.3
MPS - Total	147.9	60.8	140.3	78.0	143.7	79.9
TA	137.2	0.0	133.2	0.0	135.4	0.2
GSR	10.7	60.8	7.1	78.0	8.3	79.7
DSS - Total	136.8	24.9	128.9	34.1	134.7	21.2
TA	126.8	0.2	118.7	8.7	125.9	8.7
GSR	10.1	24.7	10.2	25.4	8.7	12.5
TA - All Units	531.9	0.6	530.6	10.3	534.6	10.0
GSR - All Units	106.2	430.4	81.9	462.5	81.5	462.1
Total General Campus	638.1	431.0	612.5	472.7	616.1	472.1

[1]Typical graduate student appointments are between 0.25 Full-Time Equivalents (FTE) and 0.5 FTE, so the headcount of student employees is greater than the numbers represented here by at least a factor of two.
[2]Listed by the hiring college. FTE are based on the average of the October, January, and April employment counts.
Source: PPS Data Warehouse

Table 7
Graduate Student Fee Remission - Source of Payment

	Resident	Non-Resident
Teaching Assistant	Campus covers tuition, student services fee, and health insurance.	Campus covers tuition, student services fee, and health insurance; campus also covers $136 per quarter non-resident supplemental tuition (student covers remaining $4,898).
GSR - General Fund	Campus covers tuition, student services fee, campus-based fees, and health insurance.	Campus covers tuition, student services fee, campus-based fees, and health insurance. The hiring department or graduate program home covers non-resident supplemental tuition.
GSR - Research Grant	Faculty grant covers 75% of tuition, student services fee, campus-based fees, and health insurance. The remaining 25% is covered by the campus.	Faculty grant covers 75% of tuition, student services fee, campus-based fees, health insurance, and non-resident supplemental tuition. The remaining 25% is covered by the campus.

RESEARCH FUNDING AND GRADUATE STUDENT EMPLOYMENT

- Academic graduate student tuition has increased 58 percent from 2007 to 2011. GSRs on faculty research grants thus cost faculty more. Since 2007, the research expenditures on campus have also increased, indicating that faculty are successfully competing for more grant funding. If tuition continues to increase, to support graduate students on grants faculty must spend more. If additional graduate student researchers are added to the campus the faculty would either have to acquire more grants or spend more of their grant amount on GSR salaries and fee remission. This raises questions as to how many graduate student researchers the campus has the means to accommodate.
- Post-doctoral scholars can compete with graduate students for grant-funded assistant positions, and if tuition rises too much post-doctoral scholars may become more affordable than their counterpart graduate students. The number of post-doctoral scholars at UC Davis has increased by over 50 percent in five years from 544 in fall 2006 to 819 in fall 2010.
- General Fund (state-supported) research dollars will most likely decrease in the long-term.

- The 2020 Initiative envisions recruitment of a number of new faculty to the campus. It will be important to consider strategies to assist those faculty in attracting extramural research funding to support graduate students and their research.

ROLE OF LOANS IN GRADUATE EDUCATION

For graduate students who are not able to secure TA or GSR positions, or receive scholarships, there are few possibilities for covering the cost of attendance outside of loans. Also, some employed students may choose to take out loans because a TA or GSR salary does not cover their needs.

In addition to tuition and campus fees, graduate students must pay for their living expenses. Annual off-campus living expenses are estimated to be $17,012 per student; this amount is used for financial aid need calculations for academic graduate students. The School of Law, which calculates its own financial aid, estimates off-campus living expenses for law students at $16,866 ($1,014 for books; $14,187 for off-campus housing and food; and $1,665 for transportation). Graduate students (as well as undergraduates) can use loans to cover these expenses if they are not able to secure other means of financial assistance.

Table 8

Average Loan Amount and the Number of Students Awarded Loans - By Lead Dean

College	2007-08		2008-09		2009-10		2009 % Students in College Taking Loans
	Average Loan	Students[1]	Average Loan	Students[1]	Average Loan	Students[1]	
CA&ES	$11,010	177	$10,500	169	$11,246	233	24.8%
Biological Sciences	$9,546	48	$11,228	40	$9,088	53	12.2%
Engineering	$9,632	93	$11,482	120	$11,904	144	15.3%
L&S: HArCS	$11,513	130	$11,292	150	$11,579	151	42.3%
L&S: MPS	$9,927	71	$10,158	75	$10,339	81	14.4%
L&S: Social Science	$6,367	119	$10,200	129	$10,514	140	29.5%
Education	$11,678	98	$11,814	113	$12,948	128	49.0%
Graduate School of Mgt	$18,589	182	$20,580	211	$21,492	256	46.8%
Law	$26,076	472	$29,387	490	$33,605	510	81.9%
Medicine	$25,619	451	$26,122	478	$26,972	486	92.7%
Vet Med	$27,637	425	$30,522	452	$31,565	490	68.7%

[1]Number of students in College taking out loans

Source: Student Information System Decision Support, Student Financial Support Trend Reports, RC 240

GRADUATE STUDENT DEMOGRAPHICS

Graduate student demographic data is provided voluntarily at the time of application to the graduate program. If a student chooses not to disclose their ethnicity, that student is recorded as "other/unknown".

Enrollment of all ethnic groups has increased during the last decade. However, it is difficult to pinpoint exactly when this growth took place because the number of "other/unknown" increased steadily from 1,218 in 2000 to 1,907 in 2007, until dropping off again to a eleven-year low of 901 in 2011. Changes in the way student can report ethnicity make the interpretation of this data complicated.

Table 9

Graduate Student Ethnicity

Total Campus	2000	%	2007	%	2011	%	% growth from 2000 to 2011
African American	78	1.6%	103	1.7%	146	2.2%	87.2%
Asian-PI	677	13.6%	974	15.8%	1,590	24.3%	134.9%
Chicano-Latino	269	5.4%	377	6.1%	565	8.6%	110.0%
Native American	34	0.7%	36	0.6%	68	1.0%	100.0%
White	2,697	54.1%	2785	45.1%	3,281	50.1%	21.7%
Other/Unknown	1,218	24.4%	1907	30.8%	901	13.8%	-26.0%
Total[1]	4,983		6,182		6,551		31.5%

[1]Total includes students taking graduate-level course-work only

Source: Student Information System Decision Support, Student Trend Reports

ETHNICITY BY COLLEGE

- According to the federal definition, underrepresented minorities include African Americans, Chicano-Latino, and Native American populations. Underrepresented minorities compose about 11.9 percent of the graduate student population, or 779 students, despite these ethnic groups as a whole composing about 44 percent of California's population in the 2010 U.S. Census.
- Between 2003 and 2010 first year graduate students who self-identified on their admissions applications as white were less than 50 percent of the campus graduate students, but in fall 2011 first year graduate students who self-identified as white in the applications exceeded 50 percent of all first-year students. At 9 out of 14 colleges students who are self-identified white are still over 50 percent of the total student population.
- Asian-Pacific Islanders are the second largest ethnic group on campus.
- Almost 14 percent of graduate students do not disclose their ethnicity at the time of application to a graduate program.
- At 23.6 percent, the Graduate School of Management has the highest number of "unknown" ethnicity.
- At 5.6 percent, School of Education has the lowest number of "unknown" ethnicity.

Table 10
2011 Fall Headcount of Graduate Students by Ethnicity and College (Lead Dean)

	African American	Asian-PI	Chicano-Latino	Native American	White	Other/ Unknown	Total
CA&ES	11	184	102	12	550	134	993
Biological Sciences	9	90	40	6	219	38	402
Engineering	17	364	57	4	417	140	999
OGS - Forensic Science		20	12		34	6	72
Education	20	45	40	5	158	16	284
L&S: HArCS	7	39	48	18	184	46	342
L&S: MPS	13	141	32		275	89	550
L&S: Social Sciences	10	83	33	4	277	75	482
Graduate School of Management	8	141	24	5	204	118	500
Law	12	153	43	7	322	82	619
Veterinary Medicine	9	141	55	7	369	122	703
Medicine	27	178	68	0	235	31	539
Nursing	3	11	11		37	4	66
Total - All Colleges	146	1,590	565	68	3,281	901	6,551

Source: Student Information System Decision Support, Student Trend Reports

ENROLLMENT IN GRADUATE PROGRAMS BY GENDER

Students voluntarily report their gender on graduate program applications and on financial aid applications. Gender reporting does not have the same opt-out rates as ethnicity reporting. The analysis below excludes all "unknown" students, who numbered fewer than ten for all colleges combined.

The total campus enrollment of women and men in graduate programs is almost equal, with women at 50.4 percent and men at 49.6 percent.

- The percentage of female enrollment has grown in seven of the eleven colleges over the last decade (excluding Nursing). The colleges with decreases in female enrollment are Biological Sciences, HArCS, Social Sciences, and Law.
- Engineering is still mostly male students, and Nursing and Veterinary Medicine are mostly female students.

Table 11
Graduate Students by Gender and College - By Lead Dean

	2000		2011	
	Female	Male	Female	Male
CA&ES	57.4%	42.6%	61.6%	38.4%
Biological Sciences	52.6%	47.4%	49.5%	50.5%
Engineering	23.7%	76.3%	26.1%	73.9%
L&S: HArCS	69.2%	30.4%	57.9%	42.1%
L&S: MPS	34.0%	66.0%	36.5%	63.5%
L&S: Social Sciences	48.2%	51.8%	47.1%	52.9%
Education	69.8%	30.2%	71.8%	28.2%
Graduate School of Management	29.5%	70.5%	30.4%	69.6%
Law	50.6%	49.4%	47.2%	52.8%
Veterinary Medicine	72.9%	27.1%	76.0%	24.0%
Medicine	52.1%	47.9%	57.6%	42.4%
Nursing			80.3%	19.7%

Source: Student Information System Decision Support, Student Trend Reports

APPENDIX 1 – GRADUATE PROGRAM LIST:

Department-Based Graduate Programs:

CA&ES – Agricultural Sciences

1. Entomology (GENT)
2. Plant Pathology (GPLP)

Agronomy (GAGR) – Merged into Horticulture & Agronomy (graduate group)
Animal Science (GANS) – Renamed Animal Biology (graduate group)
Horticulture (GHRT) – Merged into Horticulture & Agronomy (graduate group)
Plant Protection & Pest Mgmt (GPPP) – Renamed Integrated Pest Management

CA&ES – Environmental Sciences

Earth Sciences & Resources (GESR) – Renamed Hydrologic Sciences

CA&Es – Human Sciences

3. Agricultural & Resource Econ (GARE)
4. Maternal & Child Nutrition (GMCN) – Self-Supporting Program

Agricultural Economics (GAGE) – Renamed Agricultural & Resource Economics
Nutrition (GNUT) – Renamed Nutritional Biology (graduate group)

Biological Sciences

Endocrinology (GEDO) – Currently Suspended

Engineering

5. Biological Systems Engineering (GBSE)
6. Chemical Engineering (GECH)
7. Civil & Environ Engineering (GECE)
8. Electrical & Computer Engr (GEEC)
9. Engineering - Applied Science (GEAC)
10. Materials Sci & Engineering (GEMS)
11. Mechanical & Aeronautical Engr (GEMA)

Biological & Agricultural Engr (GEBA) – Renamed Biological Systems Engineering
Chemical Engr & Material Sci (GECM) – Split into Chemical Engineering and Materials Science &Engineering

Education

12. Education - (M.A.-General) (GEDA)
13. Education-Credential/Masters (GEMC)

Education-M.A. Pract.Teachers (GEDT) – Zero enrollment

L&S: HArCS
14. Art (GART)
15. Art History (GAHI)
16. Comparative Literature (GCOM)
17. Design (GDES)
18. Dramatic Art (GDRA)
19. English (GENL)
20. French (GFRE)
21. German (GGER)
22. Music (GMUS)
23. Native American Studies (GNAS)
24. Spanish (GSPA)

History of Art (GHIA) – Renamed Art History
Textile Arts & Costume Design (GTCD) – Renamed Design

L&S: Math and Physical Sciences
25. Chemistry (GCHE)
26. Geology (GGEL)
27. Mathematics (GMAT)
28. Physics (GPHY)
29. Statistics (GSTA)

L&S: Social Sciences
30. Anthropology (GANT)
31. Communication (GCMN)
32. Economics (GECN)
33. History (GHIS)
34. Philosophy (GPHI)
35. Political Science (GPOL)
36. Psychology (GPSC)
37. Sociology (GSOC)

Nursing
38. Nursing Science (M.S.) (GNRS)

Other

Individual Program (GINP)

Graduate Groups

CA&ES – Agricultural Sciences

1. Animal Biology (GABG)
2. Avian Sciences (GAVS)
3. Horticulture & Agronomy (GHAG)
4. Viticulture and Enology (GVEN)
5. Integrated Pest Management (GIPM) – Currently Suspended

CA&ES – Environmental Sciences

6. Agricultural & Environ Chem (GACH)
7. Atmospheric Science (GATM)
8. Ecology (GECL)
9. Geography (GGEO)
10. Hydrologic Sciences (GHYS)
11. Joint Program Ecology SDSU (GESD)
12. Pharmacology & Toxicology (GPTX)
13. Soils and Biogechemistry (GSBG)
    Soil Science (GSSC) – Renamed Soils and Biogeochemistry
    Water Science (GWSC) – Renamed Hydrologic Sciences

CA&Es – Human Sciences

14. Child Development (GCHD)
15. Community Development (GCMD)
16. Food Science (GFSC)
17. Human Development (GHDE)
18. International Ag Dev (GIAD)
19. Nutritional Biology (GNUB)
20. Textiles (GTEX)

Biological Sciences

21. Animal Behavior (GANB)
22. Bio, Molec, Cell, DevBioGG (GBCB)
23. Biophysics (GBPH)
24. Exercise Science (GEXS) – Currently Not Accepting New Enrollments
25. Genetics (GGEN)
26. Molecular, Cell & Int Physio (GMCP)
27. Neuroscience (GNES)

28. Physiology (GPHS)
29. Plant Biology (GPBI)
30. Population Biology (GPOP)

Biochem & Molecular Biology (GBMB) – Merged into Bio, Molecular, Cell, and Dev Biology

Cell & Developmental Biology (GCDB) – Merged into Bio, Molecular, Cell, and Dev Biology

Education

31. Education - PH.D. (GEDP)
32. Jt. Pro Ed Leadshp Sonoma/CSUS (GDEL)

Joint Prgrm Ed Leadership CSUF (GEDD) – Currently Suspended

Education (MA & PHD) (GEDU) – Split into the Education MA and Education PhD

Engineering

33. Biomedical Engineering (GBIM)
34. Computer Science (GCSI)
35. Transportation Tech & Policy (GTTP)

L&S: HArCS

36. Cultural Studies (GCLT)
37. Performance Studies (GPFS)

L&S: Math and Physical Sciences

38. Applied Math (GAPM)
39. Biostatistics (GBST)

L&S: Social Sciences

40. Linguistics (GLIN)

Law

41. Law - Master of Laws (WLLM)

Nursing

42. NurSci/Health Care Leadership (GNSL)

School of Medicine

43. Clinical Research (GCLR) – Self-Supporting Program
44. Health Informatics (GMHI) – Self-Supporting Program
45. Microbiology (GMIC)

Medical Informatics (GMDI) – Renamed Health Informatics

School of Veterinary Medicine

46. Comparative Pathology (GCOP)
47. Epidemiology (GEPD)
48. Immunology (GIMM)

Other

49. Forensic Science (GFOR) – Self-Supporting Program

Professional Degree Programs:

Graduate School of Management

1. Bus Admin - Full-Time (SMBA)
2. Bus Admin-Working Professional (SMBE)
3. Bus Admin-WorkProf/Bay Area (SMBB)
   Bus Admin-Working Prof CWO (SMBL) – Program has had zero enrollment for the time period analyzed

Law

4. Law (WLAW)

Medicine

5. Master of Public Health (MMPH)
6. Medicine (MMED)

Veterinary Medicine

7. Preventive Vet Med (VPRM)
8. Veterinary Medicine (VMVM)

APPENDIX 2 – SOURCES FOR THIS PAPER:

Student Information System Decision Support (SIS DS), UC Davis Office of the Registrar Student Trend Reports. Search Parameters: Enrollment at Census, Fall, Graduate Students, College with Divisions, Primary Majors Only

Student Information System Decision Support (SIS DS), Academic Personnel and Human Resources Trend Reports – PILOT, Report Code 220

Student Information System Decision Support (SIS DS), Student Financial Support Trend Reports – PILOT, Report Code 240

PPS Data Warehouse

UC Davis Student Free Schedules, http://budget.ucdavis.edu/studentfees

Office of Graduate Studies, Enrollment by Degree Objective, http://gradstudies.ucdavis.edu/publications/start.cfm?type=html&rptno=4

Budget and Institutional Analysis, Enrollment Reports, Student Population Summary – Fall, http://budget.ucdavis.edu/data-reports/enrollment-reports

APPENDIX 3 – ADDITIONAL RESOURCES:

Reports

Final Committee Report and Recommendations to the Provost, University of California Competitive Graduate Student Financial Support Advisory Committee, June 2006

Chancellor's Blue Ribbon Committee on Research, Final Report, August 12, 2010, http://chancellor.ucdavis.edu/initiatives/FINAL_Blue_Ribbon_Committee_on_Research_Report.pdf

The Path Forward: The Future of Graduate Education in the United States. This report gives a broad perspective on graduate education in the US. http://www.fgereport.org/

The 2008 Report on Graduate Education at UC Davis from the Graduate Council (http://www.gradstudies.ucdavis.edu/gradcouncil/N.1.%20APD%20Report%20Grad%20Education%202008.pdf) and the related 2006 report on Enhancing Graduate Education at UC Davis (http://www.gradstudies.ucdavis.edu/gradcouncil/APDReport.pdf). Both provide a local view of issues of concern.

Catalyzing Action in 2011: Top 10 Areas of Leadership for Graduate Deans by Debra Stewart, President of the Council of Graduate Schools. This article provides a current view of the role of graduate schools in US universities.
http://www.cgsnet.org/portals/0/pdf/comm_JanFeb2011.pdf

Report on the task force of the future of UC Davis:
http://academicsenate.ucdavis.edu/documents/FUTURES_Task_Force_Recommendations_110310_EC.pdf

Proposal to Reconstitute the Office of Graduate Studies as the Graduate School at UC Davis:
http://academicsenate.ucdavis.edu/rfc/view.cfm?or&id=37 (new as of 9/23/11)

THE FOLLOWING REPORTS ARE AVAILABLE THROUGHT THE EDUCATION ADVISORY BOARD (PLEASE NOTE, YOU WILL NEED TO SIGN UP USING YOUR @UCDAVIS.EDU EMAIL ADDRESS TO GAIN ACCESS):

Engaging Transfer, Commuter, and Graduate Students through Technology and Targeted Programming How do schools with large commuter, transfer, and graduate student populations engage these students using social media, coordinated communications, and innovative programming?

Calculating Cost of Living for International Graduate Students Do institutions try to ensure that the stipend for international graduate students meets the cost of living as stated on the I-20? Have institutions encountered formal issues in the cost-of-living accounting process?

Graduate Student Data Collection and Reporting How do other institutions manage graduate student data collection and reporting across different graduate programs?

Strategic Allocation of Graduate Student Funding How can institutions use graduate student funding most effectively?

Supporting the Graduate Student: Programs, Services, and Offerings What types of programs, student organizations, and support services do universities offer to graduate students? What office administers these graduate student services?

Housing Opportunities for Graduate Students: A Review of Housing Options at Seven Universities Do universities provide housing on- or off-campus for PhD students? How is profitability ensured for university-provided graduate student housing?

Graduate Student Advising Structures at Selective Research Universities As prospective graduate students are becoming increasingly concerned with their quality of life at a university, institutions are placing a greater emphasis on providing an engaging experience for their graduate student population. This brief examines non-academic advising services for

graduate students at six highly selective research universities, focusing on the extent to which students receive support.

ALSO AVAILABLE IN HARDCOPY THROUGH THE COUNCIL OF GRADUATE SCHOOLS:

The 2004 publication Organization and Administration of Graduate Education.

The 2009 publication Graduate Education in 2020. This short book contains 4 reflective essays by key thinkers in higher education.

OTHER DATA SOURCES:

UC Davis Facts: http://facts.ucdavis.edu/

University of California Office of the President Statistical Summary of UC Students, Faculty, and Staff: http://www.ucop.edu/ucophome/uwnews/stat/

University of California Office of the President Student Financial Support Reports: http://www.ucop.edu/sas/sfs/reports_data.html

APPENDIX 4 – Fall Graduate Student Enrollment (By Lead Dean)

Please see Appendix 1 for history of program name changes, suspended programs, merged programs, etc.

	Program[1]	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	Growth in Program from 2000[2] to 2011
	CA&ES - Agricultural Sciences													
1	Animal Biology (GABG) [GG]						36	47	36	40	49	50	51	64.52%
2	Animal Science (GANS)	31	30	30	25	38	14							Name change to #1
3	Avian Sciences (GAVS) [GG]	5	7	8	12	12	16	17	12	9	8	11	9	80.00%
4	Entomology (GENT)	22	24	20	22	29	31	35	31	29	29	33	31	40.91%
5	Horticulture & Agronomy (GHAG) [GG]	38	43	46	43	43	46	48	46	53	66	79	92	131.58%
6	Agronomy (GAGR)													Merged into #5
7	Horticulture (GHRT)	4												Merged into #5
8	Integrated Pest Management (GIPM) [GG]						3	3						Suspended
9	Plant Protection & Pest Mgmt (GPPP)	11	10	8	6	4								Name change to #8
10	Plant Pathology (GPLP)	31	32	32	30	35	29	38	36	33	33	34	34	9.68%
11	Viticulture and Enology (GVEN) [GG]			22	29	24	18	19	18	15	13	20	18	-18.18%
	Total - Agricultural Sciences	**142**	**146**	**166**	**167**	**185**	**193**	**207**	**179**	**179**	**198**	**227**	**235**	**59.86%**

	Program[1]	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	Growth in Program from 2000[2] to 2011
	CA&ES - Environmental Sciences													
12	Agricultural & Environ Chem (GACH) [GG]	48	52	47	48	44	48	49	45	36	36	43	41	-14.58%
13	Atmospheric Science (GATM) [GG]	17	13	16	17	19	21	26	29	25	18	19	16	-5.88%
14	Ecology (GECL) [GG]	174	188	187	191	180	169	169	161	154	161	164	158	-9.20%
15	Geography (GGEO) [GG]	25	32	38	43	51	54	59	68	63	58	52	52	108.00%
16	Hydrologic Sciences (GHYS) [GG]	39	36	31	31	24	16	15	23	22	24	28	32	-17.95%
17	Earth Sciences & Resources (GESR)													Name change to #16
18	Water Science (GWSC) [GG]													Name change to #16
19	Joint Program Ecology SDSU (GESD) [GG]	5	3	4		5	4	4	5	6	6	4	7	40.00%
20	Pharmacology & Toxicology (GPTX) [GG]	47	49	51	59	48	52	56	52	49	69	61	58	23.40%
21	Soils and Biogechemistry (GSBG) [GG]						13	12	18	20	27	34	34	61.90%
22	Soil Science (GSSC) [GG]	21	22	31	40	40	19	14	12	8	6			Name change to #21
	Total - Environmental Sciences	**376**	**395**	**406**	**432**	**412**	**398**	**405**	**414**	**384**	**406**	**407**	**398**	**5.85%**
	CA&ES - Human Sciences													
23	Agricultural & Resource Econ (GARE)	53	70	80	79	90	82	80	77	73	82	78	87	47.17%
24	Agricultural Economics (GAGE)	3												Name change to #23
25	Child Development (GCHD) [GG]	14	17	13	17	12	17	15	15	9	8	7	7	-50.00%
26	Community Development (GCMD) [GG]	25	31	37	42	42	44	37	30	26	28	31	40	60.00%
27	Food Science (GFSC) [GG]	67	69	41	51	52	43	42	43	37	42	53	54	-19.40%

	Program[1]	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	Growth in Program from 2000[2] to 2011
28	Human Development (GHDE) [GG]	25	17	27	27	29	31	28	26	31	32	33	33	32.00%
29	International Ag Dev (GIAD) [GG]	34	30	38	38	38	39	23	33	32	31	34	38	11.76%
30	Maternal & Child Nutrition (GMCN)						6	17	14	9	9	12	10	66.67%
31	Nutritional Biology (GNUB) [GG]						88	91	95	92	99	91	82	3.80%
32	Nutrition (GNUT)	79	76	87	93	93	14	5	4					Name change to #31
33	Textiles (GTEX) [GG]	4	6	8	11	10	9	6	5	7	6	8	10	150.00%
	Total - Human Sciences	**304**	**316**	**331**	**358**	**366**	**373**	**344**	**342**	**316**	**337**	**347**	**361**	**18.75%**
	Total CA&ES	**822**	**857**	**903**	**957**	**963**	**964**	**956**	**935**	**879**	**941**	**981**	**994**	**20.92%**
	Biological Sciences													
34	Animal Behavior (GANB) [GG]	34	30	29	25	24	26	27	28	24	27	27	30	-11.76%
35	Bio, Molec, Cell, DevBioGG (GBCB) [GG]											11	36	54.17%
36	Biochem & Molecular Biology (GBMB) [GG]	50	66	68	84	84	92	95	82	74	82	74	53	Merged into #35
37	Cell & Developmental Biology (GCDB) [GG]	21	20	27	33	40	46	54	50	44	46	27	21	Merged into #35
38	Biophysics (GBPH) [GG]	7	13	14	15	21	20	22	24	23	22	16	17	142.86%
39	Endocrinology (GEDO)													Suspended
40	Exercise Science (GEXS) [GG]	5	7	8	10	13	9	11	13	13	10	5	3	Suspended
41	Genetics (GGEN) [GG]	64	63	70	68	74	79	75	70	74	67	69	68	6.25%

	Program[1]	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	Growth in Program from 2000[2] to 2011
42	Molecular, Cell & Int Physio (GMCP) [GG]				40	40	42	44	50	50	45	50	48	4.35%
43	Physiology (GPHS) [GG]	46	40	42	13	10	4							Name change to #42
44	Neuroscience (GNES) [GG]	24	25	28	37	37	34	39	43	45	41	40	39	62.50%
45	Plant Biology (GPBI) [GG]	83	88	81	76	72	65	59	58	62	57	54	51	-38.55%
46	Population Biology (GPOP) [GG]	36	37	37	38	34	34	39	42	38	37	35	36	0.00%
	Total - Biological Sciences	**370**	**389**	**404**	**439**	**449**	**451**	**465**	**460**	**447**	**434**	**408**	**402**	**8.65%**
	Education													
47	Education (MA & PHD) (GEDU) [GG]	50	44	51	59	66	62	83						-100.00%
48	Education - (M.A.-General) (GEDA)								9	6	6	5	3	-66.67%
49	Education - PH.D. (GEDP) [GG]								77	75	82	80	78	1.30%
50	Education-Credential/Masters (GEMC)				73	106	106	106	105	102	95	131	129	76.71%
51	Education-M.A. Pract.Teachers (GEDT)								4	5	8	7		
52	Joint Prgrm Ed Leadership CSUF (GEDD) [GG]	13	12	12	13	10	11	14	10					Suspended
53	Jt. Pro Ed Leadshp Sonoma/CSUS (GDEL)						21	35	51	68	70	76	74	252.38%
	Total - Education	**63**	**57**	**63**	**145**	**182**	**200**	**238**	**257**	**256**	**261**	**299**	**284**	**350.79%**

	Program[1]	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	Growth in Program from 2000[2] to 2011
	Engineering													
54	Biological Systems Engineering (GBSE)			22	34	31	30	30	33	33	38	38	33	-10.81%
55	Biological & Agricultural Engr (GEBA)	37	47	28	20	11	7							Name change to #54
56	Biomedical Engineering (GBIM) [GG]	55	56	61	72	78	85	88	97	92	89	104	109	98.18%
57	Chemical Engr & Material Sci (GECM)													Split into #58 & #59
58	Chemical Engineering (GECH)	41	35	38	46	48	54	49	45	57	59	58	57	39.02%
59	Materials Sci & Engineering (GEMS)	24	27	32	39	35	42	40	37	38	42	42	44	83.33%
60	Civil & Environ Engineering (GECE)	119	117	143	161	173	146	169	173	182	208	224	226	89.92%
61	Computer Science (GCSI) [GG]	92	120	159	167	163	158	153	164	158	162	169	173	88.04%
62	Electrical & Computer Engr (GEEC)	142	154	179	185	180	169	166	161	159	153	144	139	-2.11%
63	Engineering - Applied Science (GEAC)	71	64	68	66	61	54	45	43	49	44	46	32	-54.93%
64	Mechanical & Aeronautical Engr (GEMA)	90	104	119	150	151	134	121	125	118	106	119	142	57.78%
65	Transportation Tech & Policy (GTTP) [GG]	20	16	31	32	33	44	40	40	45	40	41	40	100.00%
	Total - Engineering	**691**	**740**	**880**	**972**	**964**	**923**	**901**	**918**	**931**	**941**	**985**	**995**	**43.99%**
	Graduate School of Management													
66	Bus Admin - Full-Time (SMBA)	114	121	116	118	117	109	106	112	110	116	109	109	-4.39%
67	Bus Admin-WorkProf/Bay Area (SMBB)						44	93	165	211	242	227	213	384.09%
68	Bus Admin-Working Professional (SMBE)	241	262	265	262	274	231	208	182	184	189	180	161	-33.20%
	Total - GSM	**355**	**383**	**381**	**380**	**392**	**385**	**407**	**459**	**506**	**547**	**516**	**483**	**36.06%**

	Program[1]	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	Growth in Program from 2000[2] to 2011
	L&S: HArCS													
69	Art (GART)	14	17	17	16	14	14	16	12	14	16	14	14	0.00%
70	Art History (GAHI)		6	12	14	14	12	14	13	10	14	13	13	-7.14%
71	History of Art (GHIA)	14	8	4										Name change to #70
72	Comparative Literature (GCOM)	20	18	21	19	19	20	22	22	25	24	22	23	15.00%
73	Cultural Studies (GCLT) [GG]	8	15	19	29	25	34	34	36	38	35	36	32	300.00%
74	Design (GDES)										3	4	4	-42.86%
75	Textile Arts & Costume Design (GTCD)	7	9	6	5	4								Name change to #74
76	Dramatic Art (GDRA)	30	24	25	28	29	30	26	17	23	20	19	18	-40.00%
77	English (GENL)	90	105	113	117	115	108	115	119	122	117	109	107	18.89%
78	French (GFRE)	15	19	13	17	21	15	15	15	16	17	14	13	-13.33%
79	German (GGER)		5	6	6	7	7	8	11	13	10	10	9	80.00%
80	Music (GMUS)	11	13	13	14	17	16	21	18	20	20	19	19	72.73%
81	Native American Studies (GNAS)	13	19	20	18	21	19	17	19	19	15	15	21	61.54%
82	Performance Studies (GPFS) [GG]							5	8	13	18	19	20	Split from #76
83	Spanish (GSPA)	30	38	35	42	48	43	49	49	49	48	51	49	63.33%
	Total - L&S: HArCS	**252**	**296**	**304**	**325**	**334**	**318**	**342**	**339**	**362**	**357**	**345**	**342**	**35.71%**

	Program[1]	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	Growth in Program from 2000[2] to 2011
	L&S: Math and Physical Sciences													
84	Applied Math (GAPM) [GG]	26	33	30	35	39	47	53	50	56	60	53	50	92.31%
85	Biostatistics (GBST) [GG]			7	11	14	19	19	19	16	18	18	19	171.43%
86	Chemistry (GCHE)	144	143	147	175	182	166	177	187	192	208	223	220	52.78%
87	Geology (GGEL)	33	36	29	31	38	44	43	43	46	45	41	37	12.12%
88	Mathematics (GMAT)	42	43	50	59	62	76	67	70	51	51	56	52	23.81%
89	Physics (GPHY)	78	92	91	103	121	135	121	130	126	144	138	129	65.38%
90	Statistics (GSTA)	41	42	43	45	38	37	36	35	28	36	38	43	4.88%
	Total - L&S: Math and Physical Sciences	**364**	**389**	**397**	**459**	**494**	**524**	**516**	**534**	**515**	**562**	**567**	**550**	**51.10%**
	L&S: Social Sciences													
91	Anthropology (GANT)	43	38	41	40	44	50	48	51	50	42	54	52	20.93%
92	Communication (GCMN)							4	10	11	13	10	10	150.00%
93	Economics (GECN)	67	65	74	71	75	81	83	85	85	90	83	80	19.40%
94	History (GHIS)	63	58	58	75	77	80	76	56	54	66	81	81	28.57%
95	Linguistics (GLIN) [GG]	13	18	20	19	19	21	24	24	30	33	34	37	184.62%
96	Philosophy (GPHI)	22	22	21	25	21	20	19	18	24	21	24	22	0.00%
97	Political Science (GPOL)	42	38	33	41	48	50	50	47	53	61	52	51	21.43%
98	Psychology (GPSC)	38	44	51	58	66	76	70	81	93	88	89	89	134.21%
99	Sociology (GSOC)	48	48	61	57	61	61	63	62	64	61	56	60	25.00%
	Total - L&S: Social Sciences	**336**	**331**	**359**	**386**	**411**	**439**	**437**	**434**	**464**	**475**	**483**	**482**	**43.45%**

	Program[1]	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	Growth in Program from 2000[2] to 2011
	Law													
100	Law (WLAW)	499	522	540	543	559	577	578	579	575	606	592	599	20.04%
101	Law - Master of Laws (WLLM) [GG]	13	10	4	4	11		21	18	14	17	21	23	76.92%
	Total - Law	**512**	**532**	**544**	**547**	**570**	**577**	**599**	**597**	**589**	**623**	**613**	**622**	**21.48%**
	Medicine													
102	Clinical Research (GCLR) [GG]							11	18	10	13	12	17	54.55%
103	Health Informatics (GMHI) [GG]							3	6	12	22	24	26	23.81%
104	Medical Informatics (GMDI) [GG]	21	16	15	8									Name change to #103
105	Master of Public Health (MMPH)			5	13	9	14	12	20	26	26	20	29	480.00%
106	Microbiology (GMIC) [GG]	49	48	47	50	50	55	55	61	61	56	55	56	14.29%
107	Medicine (MMED)	384	388	386	386	390	378	370	396	401	407	403	408	6.25%
	Total - Medicine	**454**	**452**	**453**	**459**	**450**	**447**	**451**	**501**	**510**	**524**	**514**	**536**	**18.06%**
	Nursing													
108	NurSci/Health Care Leadership (GNSL) [GG]											8	16	100.00%
109	Nursing Science (M.S.) (GNRS)											25	50	100.00%
	Total - Nursing											**33**	**66**	**100.00%**

	Program[1]	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	Growth in Program from 2000[2] to 2011
	Veterinary Medicine													
110	Comparative Pathology (GCOP) [GG]	76	84	87	78	72	77	76	74	81	83	75	68	-10.53%
111	Epidemiology (GEPD) [GG]	31	37	35	34	39	34	37	33	36	37	38	44	41.94%
112	Immunology (GIMM) [GG]	18	25	33	41	40	43	43	40	40	42	38	38	111.11%
113	Preventive Vet Med (VPRM)	15	17	15	29	20	27	31	25	35	30	27	21	40.00%
114	Veterinary Medicine (VMVM)	457	475	490	488	495	482	491	499	507	521	525	532	16.41%
	Total - Veterinary Medicine	**597**	**638**	**660**	**670**	**666**	**663**	**678**	**671**	**699**	**713**	**703**	**703**	**17.76%**
	Office of Graduate Studies													
115	Forensic Science (GFOR) [GG]			11	27	39	60	64	65	76	82	75	72	554.55%
	TOTAL - All Programs[3]	**4,820**	**5,066**	**5,362**	**5,769**	**5,916**	**5,952**	**6,056**	**6,171**	**6,238**	**6,462**	**6,525**	**6,533**	**35.54%**

[1]Graduate Groups are marked with [GG]

[2]Or start of program

[3]Each year there are between 1-3 students in individual PhD programs

Overview of Graduate Student Aid

Introduction

In the University of California (UC) system, graduate student aid is typically provided in four general categories defined by UCOP as:

- **Fellowships or Grants—**This aid is "free" support to the student which does not need to be paid back and is not in exchange for any work. It can be need or merit based and the source of fellowships and grants can vary. This category includes awards categorized as: fellowships, scholarships, traineeships, and grants.
- **Research Assistant Support—**Support provided to graduate students through an appointment to a Research Assistant position. This support takes the form of wages and/or tuition remission.
- **Teaching Assistant Support—**Support provided to graduate students through an appointment to a Teaching Assistant or Reader position. This support takes the form of wages and/or tuition remission.
- **Loans/Work Study—**Support provided through loan programs or access to work-study funds. The vast majority of funding in this category comes through loans.

Within each of these categories, aid can come from a variety of fund sources. The UC reporting system includes the following fund source categories: federal government, state government, other government, UC Office of the President (UCOP), UC campus (campus-based), and outside agencies (for-profit, non-profit, and individual).

UC SystemwideComparisons of Graduate Student Aid

Comparison of the "Net Stipend"
When comparing the level of aid provided to students in different disciplines and between UC campuses, the measure that is typically used is the *"net stipend"*. Net stipend is defined as the amount remaining in a student's aid package after the amount of tuition/fees is deducted from the "competitive aid" provided to the student. "Competitive aid" means all types of aid excluding loans and work study (i.e. although in reality some of this aid may be need-based and not "competitive" in the typical sense). The result is the amount of the award remaining that is available to students for other expenses (books & supplies, living expenses, etc.) A negative net stipend represents the amount of tuition/fees that a student will need to cover from personal resources, including loans.

Tables 1-4 below provide a comparison of the net stipend by UC campus and discipline for graduate academics and professional students as well as a ranking for this measure by campus. In order to appropriately weigh the value of this comparison, it important to note the following information and caveats about this data:

- Thesedata come from the UCOP, Student Financial Support, Graduate Student Support Tables, for 2009-10. The 2010-11 data are not yet available.
- Each campus annually submits financial aid information to UCOP where it is consolidated into a corporate data system that reports on systemwide metrics. When this occurs the data is categorized by UCOP in a standardized way to allow for comparisons between campuses. In some

cases, the categorization methodology used may result in comparing data for programs that are actually quite different. As these data are summarized this problem is compounded. The following are examples of the types of issues that may be present in these data as a result of this categorization:

  - Data summarized for "graduate academic" students will include students at both the Master's and PhD levels. The amount of aid for students in Master's programs is typically much lower than that available to PhD students. As a result the relative proportion of PhD and Master's students at a campus or by discipline could result in a skewed comparison.[1] At UC Davis, PhD students constituted 77 percent of the academic graduate student body during Fall 2011.
  - Discipline categories may include a wide variety of programs that are not truly comparable.

- Graduate academics across disciplines pay the same basic tuition and fees, however, professional students are subject to differential tuition levels due to the professional degree supplemental tuition that is applied on a program by program basis. The annual cost of the degree is significantly higher for many professional students compared to graduate academics. Professional schools can also provide return-to-aid from the professional degree supplemental tuition for their students.
- While there is variation between disciplines, the average net stipend for graduate academics at UC Davis is $13,411 compared to a negative net stipend of $17,834 for professional students; a difference of $31,245.

[1] UCOP data is available separately for Master's and PhD, however for this purpose the summary data was used.

Table 1: Comparison of Net Stipend for Graduate Academic Students by Campus and Discipline (UCOP, 2009-10)

Campus	Engineering/ Comp. Sci.	Health Sciences *	Humanities	Life Sciences	Physical Sciences	Social Sciences	Total Graduate Academic
Systemwide	$9,716	$9,859	$15,336	$18,362	$20,320	$14,752	$14,472
Berkeley	$13,949	$15,230	$18,424	$22,629	$22,207	$18,048	$17,849
Davis	$10,165	($24,498)	$15,245	$15,613	$18,384	$14,344	$13,622
Irvine	$2,612		$13,599	$19,602	$18,433	$14,379	$11,713
Los Angeles	$6,896	$9,429	$14,475	$22,503	$22,095	$16,835	$14,413
Merced	$19,460			$19,220	$16,582	$15,166	$18,721
Riverside	$12,508		$15,571	$16,444	$19,121	$10,577	$13,411
San Diego	$7,934		$16,306	$20,924	$20,356	$17,596	$14,485
San Francisco	$14,962	$10,574		$15,865		($391)	$12,864
Santa Barbara	$16,487		$11,404	$7,167	$20,144	$10,343	$12,272
Santa Cruz	$9,606		$13,458	$17,811	$19,269	$11,143	$14,351

*The amount listed for UC Davis is based on 11 students for which no aid is indicated. It is unclear what this represents.

Table 2: Rank of Net Stipend Level for Graduate Academic Students by Campus and Discipline (UCOP, 2009-10)[2]

Campus	Engineering/ Comp. Sci.	Health Sciences	Humanities	Life Sciences	Physical Sciences	Social Sciences	Total Graduate Academic
Berkeley	4	1	1	1	1	1	2
Davis	6 of 10	4 of 4	4 of 8	9 of 10	8 of 9	6 of 10	6 of 10
Irvine	10		6	4	7	5	10
Los Angeles	9	3	5	2	2	3	4
Merced	1			5	9	4	1
Riverside	5		3	7	6	8	7
San Diego	8		2	3	3	2	3
San Francisco	3	2		8		10	8
Santa Barbara	2		8	10	4	9	9
Santa Cruz	7		7	6	5	7	5

[2]Ranked as 1 having the highest net stipend and 10 having the lowest

Table 3: Comparison of Net Stipend for Professional Students by Campus and Discipline (UCOP, 2009-10)

Campus	Business	Law	Medicine	Other Health Sci.	Other Professional Fee Programs	Teacher Credential	Total Professional Degree
Systemwide	($27,076)	($26,298)	($16,076)	($15,990)	($7,752)	($7,400)	($16,303)
Berkeley	($28,097)	($27,166)	($16,057)	($18,149)	($5,091)	($4,119)	($16,436)
Davis	($17,244)	($23,696)	($18,160)	($18,060)	($2,267)	($4,998)	($17,834)
Irvine	($23,217)	$332	($23,865)	($11,602)	($13,923)	($8,027)	($16,986)
Los Angeles	($30,964)	($28,748)	($14,838)	($16,355)	($9,323)	($9,692)	($18,072)
Riverside	($24,094)		($19,479)			($6,054)	($16,885)
San Diego	($18,432)		($13,502)	($17,868)	($7,325)	$6,089	($12,344)
San Francisco			($12,898)	($14,256)			($13,465)
Santa Barbara						($6,409)	($6,409)
Santa Cruz						($9,773)	($9,599)

Table 4: Rank of Net Stipend Level for Professional Students by Campus and Discipline (UCOP, 2009-10)[3]

Campus	Business	Law	Medicine	Other Health Sci.	Other Professional Fee Programs	No PDST Professional Programs	Teacher Credential
Berkeley	5	3	4	6	2	3	2
Davis	1 of 6	2 of 4	5 of 7	5 of 6	1 of 5	6 of 8	3 of 8
Irvine	3	1	7	1	5	8	6
Los Angeles	6	4	3	3	4	7	7
Riverside	4		6			5	4
San Diego	2		2	4	3	1	1
San Francisco			1	2		2	
Santa Barbara							5
Santa Cruz						4	8

[3]Ranked as 1 having the highest net stipend and 10 having the lowest

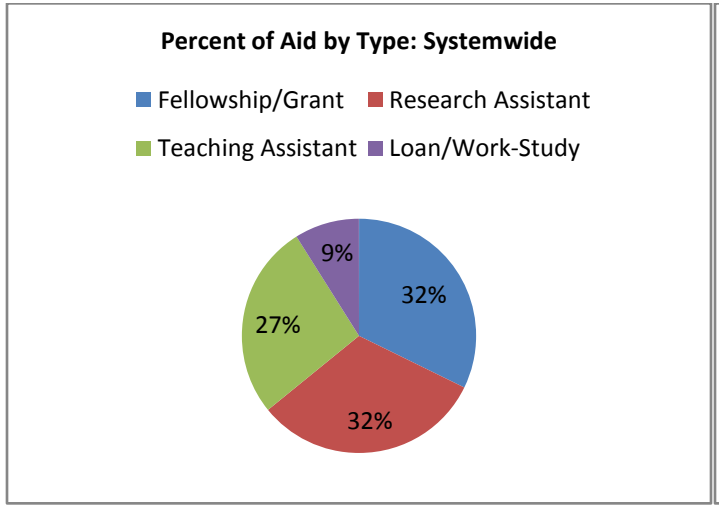
Comparison of the Type of Aid Provided
Another comparison of interest is the type of aid that graduate students receive. The various types of aid include fellowships, grants, scholarships, federal financial aid, university employment, and loans.

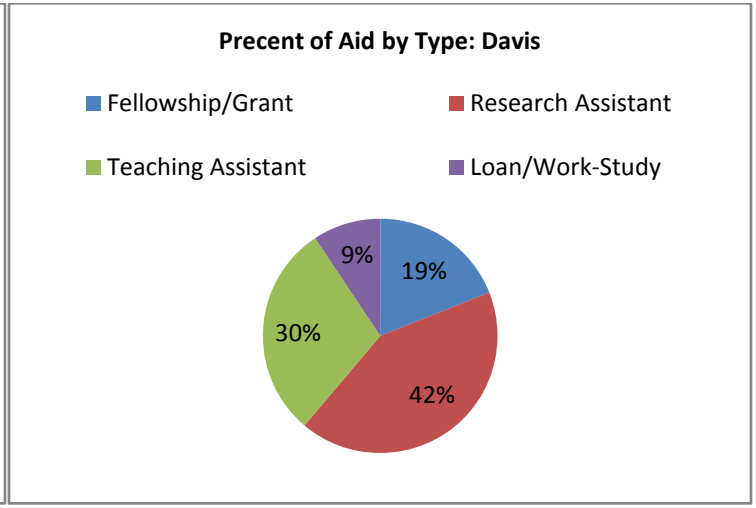
Systemwide data are available to compare how campuses and disciplines differ in the type of aid provided to students. Exhibits 1 and 2 show how the UCOP systemwide data reflect this information and highlights some key comparisons with other campuses. In order to appropriately weigh the value of this comparison, it important to note the following information and caveats about these data:

- This data shows the type of aid provided but cannot be linked to the funding source of that aid. For example, campus-based University Student Aid Program (USAP) funds generated based on the return-to-aid component of tuition could be distributed between the aid categories of "Fellowship/Grant", "Research Assistant," and "Teaching Assistant." Similarly, the "Fellowship/Grant" category could include USAP funding as well as federally funded fellowships and privately funded fellowships, grants, or scholarships.
- Future analysis of the types of aid completed by UC Davis would be limited to the UC Davis source data, as we do not have access to the source data for the other campuses and therefore would not be able to make systemwide comparisons.
- The campuses are diverse in their ability to access certain funding types for student aid and may make different choices about the distribution of types of aid based on their need to have graduate students support their research and teaching missions. This may also vary by discipline. As a result, the differences in types of aid should not be viewed as differing levels of commitment to graduate students but may simply reflect differences in campus needs and available funding. For example:
    - Some campuses/disciplines may have higher levels of "Fellowship/Grant" aid due to greater access to private funds and endowments.
    - Some campuses/disciplines may have higher levels of "Research Assistant" funding by virtue of having greater research activity than other campuses/disciplines. This may also be a function of the value placed on graduate students having research experience as part of their education in a particular discipline.
    - Some campuses/disciplines may have higher levels of "Teaching Assistant" funding by virtue of having more undergraduate instruction that is supported by teaching assistants.
- Professional degree students have very limited access to funding from research grants, graduate student researcher appointments, and teaching assistantships. Recent changes in policy that favor academic graduate students for employment positions have further limited access to these positions for professional students.
- The level of indebtedness of professional students is significantly higher than that of graduate academics. Loans make up 68 percent of the total aid provided systemwideto professional students compared to just under9 percent for graduate academic students.
- To the extent that USAP funds are a factor in the type and distribution of aid, it should be noted that the amount of base tuition returned to aid from graduate academics averages 45% systemwide and for professional degree students averages 29% systemwide. This is a function of UC policy regarding the return to aid rate applied to these students. Professional students also receive the benefit of a return to aid requirement on their professional degree supplemental tuition. This additional component of aid helps mitigate the higher total tuition levels that professional students pay.

Percent of Aid by Type, Graduate Academics (UCOP, 2009-10)

Program	Systemwide	Berkeley	Davis	Irvine	Los Angeles	Merced	Riverside	San Diego	San Francisco	Santa Barbara	Santa Cruz
University Fellowship/Grant	24%	32%	13%	24%	27%	22%	25%	15%	61%	18%	18%
Federal Fellowship/Grant	7%	9%	4%	4%	9%	1%	1%	9%	0%	5%	4%
Outside Agency Fellowship/Grant	2%	1%	2%	1%	1%	1%	0%	5%	0%	1%	1%
Total Fellowship/Grant	**32%**	**43%**	**19%**	**29%**	**38%**	**23%**	**26%**	**29%**	**61%**	**24%**	**23%**
Total RA Earnings*	21%	20%	25%	18%	19%	21%	18%	24%	27%	19%	19%
Total RA Fee Remission*	8%	7%	12%	8%	6%	9%	6%	10%	7%	7%	9%
Total RA Tuition Remission*	2%	2%	2%	1%	1%	1%	0%	3%	0%	2%	2%
Total RA GSHIP*	1%	1%	2%	2%	1%	2%	1%	0%	0%	2%	2%
Total Research Assistant*	**32%**	**29%**	**42%**	**29%**	**28%**	**32%**	**26%**	**38%**	**34%**	**30%**	**31%**
Total TA Earnings*	16%	12%	18%	19%	15%	23%	23%	16%	1%	18%	20%
Total TA Fee Remission*	9%	9%	9%	11%	8%	14%	11%	10%	0%	10%	11%
Total TA GSHIP*	2%	1%	2%	2%	1%	2%	2%	1%	0%	2%	3%
Total Teaching Assistant*	**27%**	**22%**	**29%**	**32%**	**24%**	**39%**	**36%**	**27%**	**1%**	**30%**	**34%**
Total Loan/Work-Study	**9%**	**5%**	**9%**	**10%**	**10%**	**5%**	**11%**	**6%**	**4%**	**17%**	**11%**

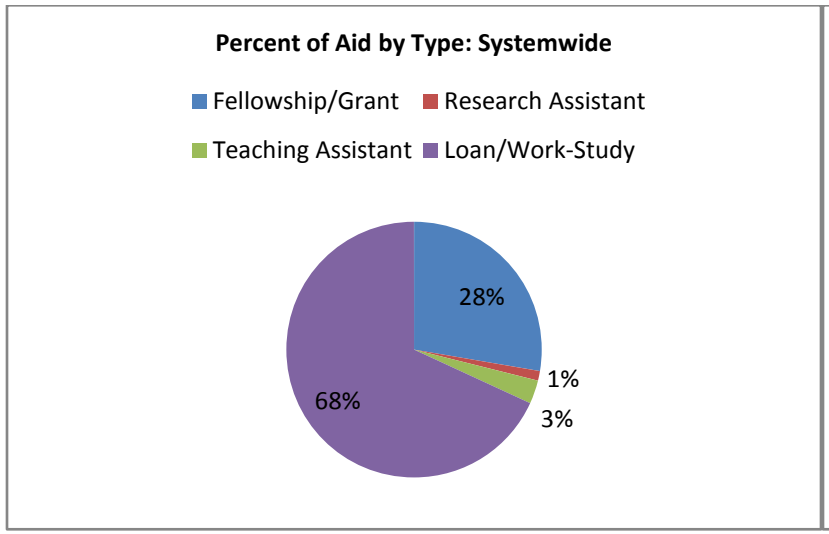


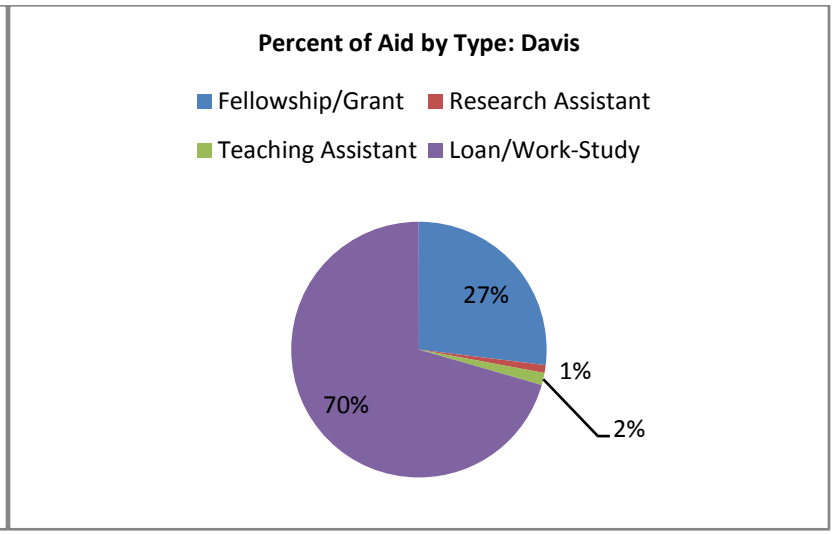


Source: UC Office of the President, Student Financial Support, Graduate Student Support Tables, 2009-10

Percent of Aid by Type, Professional Students (UCOP, 2009-10)

Program	Systemwide	Berkeley	Davis	Irvine	Los Angeles	Riverside	San Diego	San Francisco	Santa Barbara	Santa Cruz
University Fellowship/Grant	24%	25%	22%	26%	20%	17%	31%	28%	11%	11%
Federal Fellowship/Grant	2%	1%	1%	1%	2%	2%	7%	1%	10%	2%
Outside Agency Fellowship/Grant	2%	3%	4%	2%	2%	4%	3%	1%	3%	5%
Total Fellowship/Grant	28%	29%	27%	29%	23%	23%	41%	31%	24%	17%
Total RA Earnings*	1%	2%	1%	0%	1%	0%	1%	0%	1%	0%
Total RA Fee Remission*	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Total RA Tuition Remission*	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Total RA GSHIP*	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Total Research Assistant*	**1%**	**3%**	**1%**	**1%**	**1%**	**1%**	**1%**	**0%**	**2%**	**1%**
Total TA Earnings*	1%	3%	1%	1%	1%	9%	2%	0%	0%	0%
Total TA Fee Remission*	1%	4%	1%	1%	1%	4%	1%	0%	1%	0%
Total TA GSHIP*	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%
Total Teaching Assistant*	**3%**	**7%**	**2%**	**2%**	**2%**	**15%**	**3%**	**0%**	**1%**	**0%**
Total Loan/Work-Study	**68%**	**62%**	**71%**	**69%**	**74%**	**62%**	**55%**	**68%**	**73%**	**82%**





Source: UC Office of the President, Student Financial Support, Graduate Student Support Tables, 2009-10

UCOP Graduate Student Support Survey: Trends in the Comparability of Graduate Student Stipends

Every three years, the UC Office of the President releases a report on the comparability of graduate student stipends. The most recent report was issued in December 2010. The information in this report compares financial support offers to graduate students from UC compared to the non-UC competitors for graduate students. The report is largely based on a survey of applicants to UC graduate programs. The following are some key points from this report.

- The 2010 report found that whilesystemwide at UC there was a decrease in competitiveness of graduate student stipend offers compared to non-UC graduate institutions, UC Davis was one of three campuses that increased in competitiveness compared to 2007.
- The general decline of UCs in competitiveness in graduate student stipends was generally due to higher offers from non-UC competitors, although the amount of offers from UCs increased, non-UCs increased at a greater rate.
- The level of competitiveness (and general decrease) varied by discipline as well as resident type. The two least competitive disciplines were Engineering/Computer Science and Social Sciences.
- UC offers to international students showed the biggest decline. For the first time UC offers to California residents were lower than non-UC offers to these students.
- This report also takes into account the effect that cost of living has on the competitiveness of student support offers. Typically the high cost of living in California has a negative effect on the competitiveness of UC offers. However, the recent economic situation has mitigated this effect for certain campuses. At UC Davis, a decrease in the cost of living was a significant factor in increasing the competitiveness of recent offers.
- The report also shows that the number of multi-year award offers at UC declined compared to non-UC competitors. UC Davis has one of the lowest rates of multi-year offers in the system. In addition, UC Davis is second to least competitivewhen compared to its non-UC graduate institutions.

Available Data and Reports

The following are links to the sources of data and reports used in this paper, as well as other information on this topic that may be of interest.

UCOP Student Financial Support, Reports and Data: http://ucop.edu/sas/sfs/reports_data.html

Graduate Student Support Survey: Trends in Comparability of Graduate Student Stipends: http://ucop.edu/sas/sfs/docs/gradsurvey_2010.pdf

UCOP Statistical Summary of Students and Staff: http://www.ucop.edu/ucophome/uwnews/stat/

Program Name	Academic Year	PhDs Awarded	Avg PhD Time to Degree	Master's Awarded	Avg Master's Time to Degree
CA&ES: Animal Biology	2008-2009	1	6.21	17	3.16
	2009-2010	1	2.95	7	2.49
	2010-2011	4	5.58	10	2.04
Animal Biology Average	*2008-2011*	*6*	*4.91*	*34*	*2.56*
CA&ES: Agricultural &	2008-2009	8	6.86	3	3.21
Environ Chem	2009-2010	5	5.66	1	3.47
	2010-2011	8	5.24	1	6.69
Ag & Env Chem Average	*2008-2011*	*21*	*5.92*	*5*	*4.46*
HArCS: Art History	2008-2009			5	2.66
	2009-2010			4	1.83
	2010-2011			6	1.87
Art History Average	*2008-2011*			*15*	*2.12*
Bio Sci: Animal Behavior	2008-2009	7	5.89	3	2.80
	2009-2010	1	11.69	1	4.70
	2010-2011	3	5.94	1	1.71
Animal Behavior Average	*2008-2011*	*11*	*7.84*	*5*	*3.07*
SS: Anthropology	2008-2009	4	6.03	8	2.03
	2009-2010	5	6.85	6	1.87
	2010-2011	4	9.33	6	3.25
Anthropology Average	*2008-2011*	*13*	*7.40*	*20*	*2.38*
MPS: Applied Math	2008-2009	9	5.63	5	3.26
	2009-2010	5	4.91	4	3.33
	2010-2011	5	5.60	2	3.58
Applied Math Average	*2008-2011*	*19*	*5.38*	*11*	*3.39*
CA&ES: Ag & Resource Econ	2008-2009	12	7.75	16	1.64
	2009-2010	9	6.15	22	2.00
	2010-2011	10	5.98	20	1.35
Agricult & Resource Econ Avg	*2008-2011*	*31*	*6.62*	*58*	*1.67*
HArCS: Art	2008-2009			6	1.87
	2009-2010			10	1.73
	2010-2011			7	1.71
Art Average	*2008-2011*			*23*	*1.77*
	2008-2009	2	6.09		
CA&ES: Atmospheric Science	2009-2010	3	6.21	6	2.50
	2010-2011	2	6.07	2	4.70
Atmospheric Science Avg	*2008-2011*	*7*	*6.12*	*8*	*3.60*
CA&ES: Avian Sciences	2008-2009			3	2.46
	2009-2010			9	2.65
	2010-2011			2	3.20
Avian Sciences Average	*2008-2011*			*14*	*2.77*
Bio Sci: Bio, Molec, Cell,	2009-2010	3	5.47		
DevBio	2010-2011	4	5.26		
Bio, Molec, Cell, Dev Bio Avg	*2008-2011*	*7*	*5.37*		
Eng: Biomedical Engineering	2008-2009	7	6.17	11	3.00
	2009-2010	8	6.11	9	2.68

	2010-2011	14	5.88	4	3.26
Biomedical Engineering Avg	*2008-2011*	*29*	*6.06*	*24*	*2.98*
Bio Sci: Biochem & Molecular	2008-2009	16	5.59	1	3.47
Biology	2009-2010	12	5.96	1	5.47
	2010-2011	11	5.59	1	3.47
Biochem & Molec Bio Avg	*2008-2011*	*39*	*5.71*	*3*	*4.14*
Bio Sci: Biophysics	2008-2009	3	5.63		
	2009-2010	4	5.27		
	2010-2011	7	6.35	2	3.33
Biophysics Average	*2008-2011*	*14*	*5.75*	*2*	*3.33*
Eng: Biological Systems Eng	2008-2009	2	5.59	5	2.61
	2009-2010	2	5.09	4	2.51
	2010-2011	6	7.70	5	2.45
Biological Systems Engin Avg	*2008-2011*	*10*	*6.13*	*14*	*2.52*
MPS: Biostatistics	2008-2009	2	3.34	1	1.21
	2009-2010	2	6.20	3	1.89
	2010-2011	3	6.11		
Biostatistics Average	*2008-2011*	*7*	*5.22*	*4*	*1.55*
Bio Sci: Cell & Dev Bio	2008-2009	9	5.55	1	2.48
	2009-2010	5	6.01	3	2.04
	2010-2011	4	5.89	2	1.83
Cell & Developmental Bio Avg	*2008-2011*	*18*	*5.82*	*6*	*2.12*
CA&ES: Child Development	2008-2009			10	3.33
	2009-2010			7	3.06
	2010-2011			9	3.48
Child Development Average	*2008-2011*			*26*	*3.29*
MPS: Chemistry	2008-2009	29	5.00	5	4.46
	2009-2010	30	5.27	4	3.52
	2010-2011	28	5.56	6	3.04
Chemistry Average	*2008-2011*	*87*	*5.28*	*15*	*3.67*
Medicine: Clinical Research	2008-2009			23	2.00
	2010-2011			18	1.76
Clinical Research Average	*2008-2011*			*41*	*1.88*
HArCS: Cultural Studies	2008-2009	2	7.71		
	2009-2010	4	6.02		
	2010-2011	5	7.41		
Cultural Studies Average	*2008-2011*	*11*	*7.04*		
CA&ES: Community Develop	2008-2009			17	2.65
	2009-2010			11	3.11
	2010-2011			7	1.96
Community Development Avg	*2008-2011*			*35*	*2.57*
SS: Communication	2008-2009			1	1.96
	2009-2010			6	2.58
	2010-2011			6	2.58
Communication Average	*2008-2011*			*13*	*2.37*
HArCS: Comparative Lit	2008-2009	5	7.91		
	2009-2010	2	8.34	1	3.70

	2010-2011	2	7.70		
Comparative Literature Avg	*2008-2011*	*9*	*7.98*	*1*	*3.70*
Vet Med: Comp Pathology	2008-2009	15	5.77	2	2.34
	2009-2010	10	5.62	4	1.79
	2010-2011	16	5.67	3	1.47
Comparative Pathology Avg	*2008-2011*	*41*	*5.68*	*9*	*1.86*
Eng: Computer Science	2008-2009	17	6.00	22	3.16
	2009-2010	25	5.11	27	3.21
	2010-2011	25	5.21	14	3.35
Computer Science Average	*2008-2011*	*67*	*5.44*	*63*	*3.24*
Education: Joint Progr Ed	2008-2009	7	2.81		
Leadership CSUS	2009-2010	7	3.39		
	2010-2011	11	4.11		
Ed Leadership CSUS Average	*2008-2011*	*25*	*3.44*		
HArCS: Design	2010-2011			2	1.71
Design Average	*2008-2011*			*2*	*1.71*
HArCS: Dramatic Art	2008-2009			7	1.66
	2009-2010			13	1.76
	2010-2011			8	1.71
Dramatic Art Average	*2008-2011*			*28*	*1.71*
Eng: Applied Science Eng	2008-2009	6	5.01	7	3.06
	2009-2010	5	6.36	6	2.00
	2010-2011	5	6.05	9	2.60
Applied Science Engineer Avg	*2008-2011*	*16*	*5.81*	*22*	*2.56*
Eng: Civil & Environ Eng	2008-2009	22	5.79	49	2.27
	2009-2010	16	5.55	42	1.92
	2010-2011	20	5.28	52	2.15
Civil & Environmental Eng Avg	*2008-2011*	*58*	*5.54*	*143*	*2.11*
Eng: Chemical Engineering	2008-2009	10	5.11	3	2.55
	2009-2010	10	5.30	14	1.56
	2010-2011	8	5.42	7	1.25
Chemical Engineering Average	*2008-2011*	*28*	*5.28*	*24*	*1.79*
CA&ES: Ecology	2008-2009	31	6.24	7	2.82
	2009-2010	25	6.29	7	2.75
	2010-2011	19	6.02	9	4.18
Ecology Average	*2008-2011*	*75*	*6.18*	*23*	*3.25*
SS: Economics	2008-2009	9	6.09	17	1.56
	2009-2010	11	5.45	5	1.11
	2010-2011	15	5.63	8	1.21
Economics Average	*2008-2011*	*35*	*5.73*	*30*	*1.29*
Education: Education MA	2008-2009			4	2.33
	2009-2010			6	3.16
	2010-2011			1	1.71
Education MA Average	*2008-2011*			*11*	*2.40*
Education: Joint Progr Ed	2008-2009	12	2.77		
Leadership CSUF	2009-2010	9	4.26		
	2010-2011	4	6.57		

Ed Leadership Average	*2008-2011*	*25*	*4.53*		
Education: Education PhD	2008-2009	8	5.52		
	2009-2010	9	6.40		
	2010-2011	10	6.33		
Education PhD Average	*2008-2011*	*27*	*6.08*		
Education: MA Practical Teach	2008-2009			4	7.73
	2009-2010			2	1.71
	2010-2011			2	1.71
MA Practical Teacher Average	*2008-2011*			*8*	*3.72*
Education: Education PhD & M	2008-2009	2	6.82		
Education PhD & MA Average	*2008-2011*	*2*	*6.82*		
Eng: Electrical & Comp Eng	2008-2009	16	6.10	21	2.56
	2009-2010	19	5.40	36	3.05
	2010-2011	18	5.24	23	2.89
Electrical & Comp Eng Averag	*2008-2011*	*53*	*5.58*	*80*	*2.83*
Eng: Mechanical &	2008-2009	7	5.32	27	2.12
Aeronautical Engr	2009-2010	8	5.43	30	2.31
	2010-2011	8	6.46	23	3.56
Mech & Aeronautical Eng Avg	*2008-2011*	*23*	*5.74*	*80*	*2.66*
Education: Credential	2008-2009			86	1.94
	2009-2010			93	1.80
	2010-2011			129	1.71
Credential Average	*2008-2011*			*308*	*1.81*
Eng: Materials Sci & Eng	2008-2009	7	5.32	2	2.32
	2009-2010	6	6.57	1	2.20
	2010-2011	8	4.76	1	1.45
Materials Sci & Engineering Av	*2008-2011*	*21*	*5.55*	*4*	*1.99*
HArCS: English	2008-2009	15	6.89	15	1.96
	2009-2010	10	7.71	16	2.21
	2010-2011	7	6.77	16	1.88
English Average	*2008-2011*	*32*	*7.12*	*47*	*2.01*
CA&ES: Entomology	2008-2009	8	5.82		
	2009-2010	1	5.69	4	2.27
	2010-2011	3	5.53	1	2.70
Entomology Average	*2008-2011*	*12*	*5.68*	*5*	*2.49*
Vet Med: Epidemiology	2008-2009			1	2.48
	2009-2010	7	4.71	1	1.48
	2010-2011	7	6.06	1	2.20
Epidemiology Average	*2008-2011*	*14*	*5.39*	*3*	*2.05*
CA&ES: Jnt Prog Ecology SDSU	2008-2009	3	7.54		
	2009-2010	2	4.95		
	2010-2011	1	6.69		
Joint Prog Ecology SDSU Avg	*2008-2011*	*6*	*6.39*		
Bio Sci: Exercise Science	2008-2009			3	1.79
	2009-2010			5	3.11
	2010-2011			3	2.79
Exercise Science Average	*2008-2011*			*11*	*2.56*

Forensic Science	2008-2009			21	3.01
	2009-2010			7	3.60
	2010-2011			15	3.45
Forensic Science Average	*2008-2011*			*43*	*3.36*
HArCS: French	2008-2009			1	3.20
	2009-2010	3	6.79	3	2.37
	2010-2011	1	4.70		
French Average	*2008-2011*	*4*	*5.74*	*4*	*2.79*
CA&ES: Food Science	2008-2009	4	5.53	11	2.43
	2009-2010	3	5.20	7	3.35
	2010-2011	5	5.41	6	2.26
Food Science Average	*2008-2011*	*12*	*5.38*	*24*	*2.68*
MPS: Geology	2008-2009	6	6.99	7	3.71
	2009-2010	4	5.88	4	2.52
	2010-2011	8	7.11	7	2.74
Geology Average	*2008-2011*	*18*	*6.66*	*18*	*2.99*
Bio Sci: Genetics	2008-2009	13	6.39	2	3.95
	2009-2010	11	6.41	4	2.16
	2010-2011	17	5.86	4	2.15
Genetics Average	*2008-2011*	*41*	*6.22*	*10*	*2.75*
CA&ES: Geography	2008-2009	3	6.46	8	3.14
	2009-2010	10	6.21	5	3.11
	2010-2011	8	6.58	2	3.33
Geography Average	*2008-2011*	*21*	*6.41*	*15*	*3.19*
HArCS: German	2008-2009	1	6.21	2	1.70
	2009-2010	4	6.10	1	1.21
German Average	*2008-2011*	*5*	*6.15*	*3*	*1.46*
CA&ES: Horticulture &	2008-2009			11	3.33
Agronomy	2009-2010	1	3.95	16	3.03
	2010-2011	1	4.95	8	2.36
Horticult & Agron Avg	*2008-2011*	*2*	*4.45*	*35*	*2.91*
CA&ES: Human Development	2008-2009	4	6.90		
	2009-2010	5	9.91		
	2010-2011	5	5.95		
Human Developement Avg	*2008-2011*	*14*	*7.59*		
SS: History	2008-2009	10	7.21		
	2009-2010	7	9.42	5	3.66
	2010-2011	9	7.01	2	2.21
History Average	*2008-2011*	*26*	*7.88*	*7*	*2.94*
CA&ES: Hydrologic Sciences	2008-2009			7	3.17
	2009-2010			3	2.71
	2010-2011	1	4.20	2	2.83
Hydrologic Sciences Average	*2008-2011*	*1*	*4.20*	*12*	*2.90*
CA&ES: International Ag Dev	2008-2009			9	3.35
	2009-2010			16	2.40
	2010-2011			11	2.21

Internat Ag Dev Average	*2008-2011*			*36*	*2.65*
Vet Med: Immunology	2008-2009	4	5.71	1	1.21
	2009-2010	5	6.34	3	2.04
	2010-2011	7	6.27	1	2.48
Immunology Average	*2008-2011*	*16*	*6.10*	*5*	*1.91*
SS: Linguistics	2008-2009	3	5.87	5	2.11
	2009-2010	6	5.24	10	3.11
	2010-2011	1	7.70	4	2.09
Linguistics Average	*2008-2011*	*10*	*6.27*	*19*	*2.44*
MPS: Mathematics	2008-2009	10	5.23	8	3.14
	2009-2010	4	4.89	3	3.20
	2010-2011	8	5.17	7	2.15
Mathematics Average	*2008-2011*	*22*	*5.10*	*18*	*2.83*
CA&ES: Maternal & Child	2008-2009			6	2.29
Nutrition	2009-2010			7	2.21
	2010-2011			2	1.71
Maternal & Child Nutrit Avg	*2008-2011*			*15*	*2.07*
Bio Sci: Molecular, Cell & Int	2008-2009	10	5.28	3	2.29
Physio	2009-2010	7	6.10	3	3.13
	2010-2011	5	6.15	1	2.48
Molecular, Cell & Int Physio Av	*2008-2011*	*22*	*5.85*	*7*	*2.63*
Medicine: Health Informatics	2008-2009			2	1.71
	2009-2010			2	2.82
	2010-2011			4	5.46
Health Informatics Average	*2008-2011*			*8*	*3.33*
Medicine: Microbiology	2008-2009	7	6.74		
	2009-2010	12	6.12		
	2010-2011	8	6.35	2	5.98
Microbiology Average	*2008-2011*	*27*	*6.40*	*2*	*5.98*
HArCS: Music	2008-2009			7	2.89
	2009-2010	1	7.21	1	1.96
	2010-2011	1	4.20	7	2.63
Music Average	*2008-2011*	*2*	*5.70*	*15*	*2.49*
HArCS: Native American	2008-2009	6	7.29		
Studies	2009-2010	1	4.95	1	2.21
	2010-2011			4	3.15
Native American Studies Avg	*2008-2011*	*7*	*6.12*	*5*	*2.68*
Bio Sci: Neuroscience	2008-2009	7	5.72	1	3.20
	2009-2010	8	5.72	1	4.95
	2010-2011	7	6.13		
Neuroscience Average	*2008-2011*	*22*	*5.86*	*2*	*4.08*
CA&ES: Nutritional Biology	2008-2009	15	6.28	6	3.37
	2009-2010	16	5.86	6	2.29
	2010-2011	11	6.24	6	3.96
Nutritional Biology Average	*2008-2011*	*42*	*6.13*	*18*	*3.21*
Bio Sci: Plant Biology	2008-2009	9	7.79	3	2.70
	2009-2010	8	6.02	2	3.45

	2010-2011	10	6.18	4	2.77
Plant Biology Average	*2008-2011*	*27*	*6.66*	*9*	*2.98*
HArCS: Performance Studies	2008-2009	7	6.21		
	2009-2010	1	5.20		
	2010-2011	3	3.27		
Performance Studies Avg	*2008-2011*	*11*	*4.89*		
SS: Philosophy	2008-2009	1	5.21	2	2.95
	2009-2010	4	8.84	1	1.96
	2010-2011	1	5.94		
Philosophy Average	*2008-2011*	*6*	*6.67*	*3*	*2.45*
MPS: Physics	2008-2009	9	6.55	15	1.96
	2009-2010	11	5.84	14	2.87
	2010-2011	16	6.00	23	2.20
Physics Average	*2008-2011*	*36*	*6.13*	*52*	*2.34*
CA&ES: Plant Pathology	2008-2009	4	5.47	4	2.64
	2009-2010	5	6.06	6	2.83
	2010-2011	5	5.70	1	3.47
Plant Pathology Average	*2008-2011*	*14*	*5.74*	*11*	*2.98*
SS: Political Science	2008-2009	7	6.67	2	4.34
	2009-2010	6	7.08	3	1.63
	2010-2011	10	7.11	7	3.21
Political Science Average	*2008-2011*	*23*	*6.95*	*12*	*3.06*
Bio Sci: Population Biology	2008-2009	7	6.21	2	1.58
	2009-2010	3	6.38	1	2.21
	2010-2011	5	6.05	2	3.84
Population Biology Average	*2008-2011*	*15*	*6.21*	*5*	*2.54*
SS: Psychology	2008-2009	4	5.09	18	2.32
	2009-2010	17	5.64	23	2.27
	2010-2011	7	6.38	18	2.25
Psychology Average	*2008-2011*	*28*	*5.70*	*59*	*2.28*
CA&ES: Pharmacology &	2008-2009	7	5.78		
Toxicology	2009-2010	9	5.54		
	2010-2011	14	7.13	4	2.64
Pharmacology & Toxicol Avg	*2008-2011*	*30*	*6.15*	*4*	*2.64*
CA&ES: Soils and Biogechemis	2008-2009	5	8.10	6	3.54
	2009-2010	4	7.27	1	1.21
	2010-2011	3	6.37	2	2.21
Soils & Biogechemistry Avg	*2008-2011*	*12*	*7.25*	*9*	*2.32*
SS: Sociology	2008-2009	4	7.52	10	2.31
	2009-2010	9	8.21	5	1.62
	2010-2011	6	8.79	3	1.87
Sociology Average	*2008-2011*	*19*	*8.17*	*18*	*1.93*
HArCS: Spanish	2008-2009	3	5.46	7	1.81
	2009-2010	5	7.01	3	2.04
	2010-2011	8	5.95	2	1.71
Spanish Average	*2008-2011*	*16*	*6.14*	*12*	*1.85*
MPS: Statistics	2008-2009	8	5.02	5	3.01

	2009-2010	3	5.13	2	2.09
	2010-2011	3	5.12	7	2.67
Statistics Average	*2008-2011*	*14*	*5.09*	*14*	*2.59*
HArCS: Textile Arts & Costume Design	2008-2009			1	1.96
Textile Arts & Costume Design Average	*2008-2011*			*1*	*1.96*
CA&ES: Textiles	2008-2009			4	1.76
	2009-2010			3	1.69
	2010-2011			2	1.46
Textiles Average	*2008-2011*			*9*	*1.64*
Eng: Trans Tech & Policy	2008-2009	5	4.96	9	2.71
	2009-2010	4	5.26	4	2.02
	2010-2011	5	5.51	9	2.57
Trans Tech & Policy Average	*2008-2011*	*14*	*5.24*	*22*	*2.43*
CA&ES: Viticulture & Enology	2008-2009			9	2.57
	2009-2010			11	2.16
	2010-2011			5	2.66
Viticulture & Enology Avg	*2008-2011*			*25*	*2.46*
UCD Average	*2008-2011*	*1479*	*6.01*	*1864*	*2.61*

Academic Graduate Students Time to Degree

Program Name	Academic Year	PhDs Awarded	Avg PhD Time to Degree	Master's Awarded	Avg Master's Time to Degree
CA&ES: Animal Biology	2008-2009	1	6.21	17	3.16
	2009-2010	1	2.95	7	2.49
	2010-2011	4	5.58	10	2.04
Animal Biology Average	*2008-2011*	*6*	*4.91*	*34*	*2.56*
CA&ES: Agricultural &	2008-2009	8	6.86	3	3.21
Environmental Chemistry	2009-2010	5	5.66	1	3.47
	2010-2011	8	5.24	1	6.69
Ag & Env Chem Average	*2008-2011*	*21*	*5.92*	*5*	*4.46*
CA&ES: Ag & Resource Econ	2008-2009	12	7.75	16	1.64
	2009-2010	9	6.15	22	2.00
	2010-2011	10	5.98	20	1.35
Agricult & Resource Econ Avg	*2008-2011*	*31*	*6.62*	*58*	*1.67*
CA&ES: Atmospheric Science	2008-2009	2	6.09		
	2009-2010	3	6.21	6	2.50
	2010-2011	2	6.07	2	4.70
Atmospheric Science Avg	*2008-2011*	*7*	*6.12*	*8*	*3.60*
CA&ES: Avian Sciences	2008-2009			3	2.46
	2009-2010			9	2.65
	2010-2011			2	3.20
Avian Sciences Average	*2008-2011*			*14*	*2.77*
CA&ES: Child Development	2008-2009			10	3.33
	2009-2010			7	3.06
	2010-2011			9	3.48
Child Development Average	*2008-2011*			*26*	*3.29*
CA&ES: Community Develop	2008-2009			17	2.65
	2009-2010			11	3.11
	2010-2011			7	1.96
Community Development Avg	*2008-2011*			*35*	*2.57*
CA&ES: Ecology	2008-2009	31	6.24	7	2.82
	2009-2010	25	6.29	7	2.75
	2010-2011	19	6.02	9	4.18
Ecology Average	*2008-2011*	*75*	*6.18*	*23*	*3.25*
CA&ES: Entomology	2008-2009	8	5.82		
	2009-2010	1	5.69	4	2.27
	2010-2011	3	5.53	1	2.70
Entomology Average	*2008-2011*	*12*	*5.68*	*5*	*2.49*
CA&ES: Jnt Prog Ecology SDSU	2008-2009	3	7.54		
	2009-2010	2	4.95		
	2010-2011	1	6.69		
Joint Prog Ecology SDSU Avg	*2008-2011*	*6*	*6.39*		
CA&ES: Food Science	2008-2009	4	5.53	11	2.43
	2009-2010	3	5.20	7	3.35
	2010-2011	5	5.41	6	2.26
Food Science Average	*2008-2011*	*12*	*5.38*	*24*	*2.68*
CA&ES: Geography	2008-2009	3	6.46	8	3.14
	2009-2010	10	6.21	5	3.11

	2010-2011	8	6.58	2	3.33
Geography Average	*2008-2011*	*21*	*6.41*	*15*	*3.19*
CA&ES: Horticulture &	2008-2009			11	3.33
Agronomy	2009-2010	1	3.95	16	3.03
	2010-2011	1	4.95	8	2.36
Horticult & Agron Avg	*2008-2011*	*2*	*4.45*	*35*	*2.91*
CA&ES: Human Development	2008-2009	4	6.90		
	2009-2010	5	9.91		
	2010-2011	5	5.95		
Human Developement Avg	*2008-2011*	*14*	*7.59*		
CA&ES: Hydrologic Sciences	2008-2009			7	3.17
	2009-2010			3	2.71
	2010-2011	1	4.20	2	2.83
Hydrologic Sciences Average	*2008-2011*	*1*	*4.20*	*12*	*2.90*
CA&ES: International Ag Dev	2008-2009			9	3.35
	2009-2010			16	2.40
	2010-2011			11	2.21
Internat Ag Dev Average	*2008-2011*			*36*	*2.65*
CA&ES: Maternal & Child	2008-2009			6	2.29
Nutrition	2009-2010			7	2.21
	2010-2011			2	1.71
Maternal & Child Nutrit Avg	*2008-2011*			*15*	*2.07*
CA&ES: Nutritional Biology	2008-2009	15	6.28	6	3.37
	2009-2010	16	5.86	6	2.29
	2010-2011	11	6.24	6	3.96
Nutritional Biology Average	*2008-2011*	*42*	*6.13*	*18*	*3.21*
CA&ES: Plant Pathology	2008-2009	4	5.47	4	2.64
	2009-2010	5	6.06	6	2.83
	2010-2011	5	5.70	1	3.47
Plant Pathology Average	*2008-2011*	*14*	*5.74*	*11*	*2.98*
CA&ES: Pharmacology &	2008-2009	7	5.78		
Toxicology	2009-2010	9	5.54		
	2010-2011	14	7.13	4	2.64
Pharmacology & Toxicol Avg	*2008-2011*	*30*	*6.15*	*4*	*2.64*
CA&ES: Soils and Biogechemistry	2008-2009	5	8.10	6	3.54
	2009-2010	4	7.27	1	1.21
	2010-2011	3	6.37	2	2.21
Soils & Biogechemistry Avg	*2008-2011*	*12*	*7.25*	*9*	*2.32*
CA&ES: Textiles	2008-2009			4	1.76
	2009-2010			3	1.69
	2010-2011			2	1.46
Textiles Average	*2008-2011*			*9*	*1.64*
CA&ES: Viticulture & Enology	2008-2009			9	2.57
	2009-2010			11	2.16
	2010-2011			5	2.66
Viticulture & Enology Avg	*2008-2011*			*25*	*2.46*
CA&ES for 2008-2011		**306**	**5.95**	**421**	**2.8**

Academic Graduate Students Time to Degree

Program Name	Academic Year	PhDs Awarded	Avg PhD Time to Degree	Master's Awarded	Avg Master's Time to Degree
Bio Sci: Animal Behavior	2008-2009	7	5.89	3	2.80
	2009-2010	1	11.69	1	4.70
	2010-2011	3	5.94	1	1.71
Animal Behavior Average	*2008-2011*	*11*	*7.84*	*5*	*3.07*
	2009-2010	3	5.47		
Bio Sci: Bio, Molec, Cell, DevBio	2010-2011	4	5.26		
Bio, Molec, Cell, Dev Bio Avg	*2008-2011*	*7*	*5.37*		
Bio Sci: Biochem & Molecular	2008-2009	16	5.59	1	3.47
Biology	2009-2010	12	5.96	1	5.47
	2010-2011	11	5.59	1	3.47
Biochem & Molec Bio Avg	*2008-2011*	*39*	*5.71*	*3*	*4.14*
Bio Sci: Biophysics	2008-2009	3	5.63		
	2009-2010	4	5.27		
	2010-2011	7	6.35	2	3.33
Biophysics Average	*2008-2011*	*14*	*5.75*	*2*	*3.33*
Bio Sci: Cell & Dev Bio	2008-2009	9	5.55	1	2.48
	2009-2010	5	6.01	3	2.04
	2010-2011	4	5.89	2	1.83
Cell & Developmental Bio Avg	*2008-2011*	*18*	*5.82*	*6*	*2.12*
Bio Sci: Exercise Science	2008-2009			3	1.79
	2009-2010			5	3.11
	2010-2011			3	2.79
Exercise Science Average	*2008-2011*			*11*	*2.56*
Bio Sci: Genetics	2008-2009	13	6.39	2	3.95
	2009-2010	11	6.41	4	2.16
	2010-2011	17	5.86	4	2.15
Genetics Average	*2008-2011*	*41*	*6.22*	*10*	*2.75*
Bio Sci: Molecular, Cell & Int	2008-2009	10	5.28	3	2.29
Physio	2009-2010	7	6.10	3	3.13
	2010-2011	5	6.15	1	2.48
Molecular, Cell & Int Physio Avg	*2008-2011*	*22*	*5.85*	*7*	*2.63*
Bio Sci: Neuroscience	2008-2009	7	5.72	1	3.20
	2009-2010	8	5.72	1	4.95
	2010-2011	7	6.13		
Neuroscience Average	*2008-2011*	*22*	*5.86*	*2*	*4.08*
Bio Sci: Plant Biology	2008-2009	9	7.79	3	2.70
	2009-2010	8	6.02	2	3.45
	2010-2011	10	6.18	4	2.77
Plant Biology Average	*2008-2011*	*27*	*6.66*	*9*	*2.98*
Bio Sci: Population Biology	2008-2009	7	6.21	2	1.58
	2009-2010	3	6.38	1	2.21
	2010-2011	5	6.05	2	3.84
Population Biology Average	*2008-2011*	*15*	*6.21*	*5*	*2.54*
Biological Sciences 2008-2011		**216**	**6.13**	**60**	**3.02**

Academic Graduate Students Time to Degree

Program Name	Academic Year	PhDs Awarded	Avg PhD Time to Degree	Master's Awarded	Avg Master's Time to Degree
Eng: Biomedical Engineering	2008-2009	7	6.17	11	3.00
	2009-2010	8	6.11	9	2.68
	2010-2011	14	5.88	4	3.26
Biomedical Engineering Avg	*2008-2011*	*29*	*6.06*	*24*	*2.98*
Eng: Biological Systems Eng	2008-2009	2	5.59	5	2.61
	2009-2010	2	5.09	4	2.51
	2010-2011	6	7.70	5	2.45
Biological Systems Engin Avg	*2008-2011*	*10*	*6.13*	*14*	*2.52*
Eng: Computer Science	2008-2009	17	6.00	22	3.16
	2009-2010	25	5.11	27	3.21
	2010-2011	25	5.21	14	3.35
Computer Science Average	*2008-2011*	*67*	*5.44*	*63*	*3.24*
Eng: Applied Science Eng	2008-2009	6	5.01	7	3.06
	2009-2010	5	6.36	6	2.00
	2010-2011	5	6.05	9	2.60
Applied Science Engineer Avg	*2008-2011*	*16*	*5.81*	*22*	*2.56*
Eng: Civil & Environ Eng	2008-2009	22	5.79	49	2.27
	2009-2010	16	5.55	42	1.92
	2010-2011	20	5.28	52	2.15
Civil & Environmental Eng Avg	*2008-2011*	*58*	*5.54*	*143*	*2.11*
Eng: Chemical Engineering	2008-2009	10	5.11	3	2.55
	2009-2010	10	5.30	14	1.56
	2010-2011	8	5.42	7	1.25
Chemical Engineering Average	*2008-2011*	*28*	*5.28*	*24*	*1.79*
Eng: Electrical & Comp Eng	2008-2009	16	6.10	21	2.56
	2009-2010	19	5.40	36	3.05
	2010-2011	18	5.24	23	2.89
Electrical & Comp Eng Average	*2008-2011*	*53*	*5.58*	*80*	*2.83*
Eng: Mechanical & Aeronautical	2008-2009	7	5.32	27	2.12
Engr	2009-2010	8	5.43	30	2.31
	2010-2011	8	6.46	23	3.56
Mech & Aeronautical Eng Avg	*2008-2011*	*23*	*5.74*	*80*	*2.66*
Eng: Materials Sci & Eng	2008-2009	7	5.32	2	2.32
	2009-2010	6	6.57	1	2.20
	2010-2011	8	4.76	1	1.45
Materials Sci & Engineering Avg	*2008-2011*	*21*	*5.55*	*4*	*1.99*
Eng: Trans Tech & Policy	2008-2009	5	4.96	9	2.71
	2009-2010	4	5.26	4	2.02
	2010-2011	5	5.51	9	2.57
Trans Tech & Policy Average	*2008-2011*	*14*	*5.24*	*22*	*2.43*
Engineering 2008-2011		**319**	**5.64**	**476**	**2.51**

Academic Graduate Students Time to Degree

Program Name	Academic Year	PhDs Awarded	Avg PhD Time to Degree	Master's Awarded	Avg Master's Time to Degree
HArCS: Art History	2008-2009			5	2.66
	2009-2010			4	1.83
	2010-2011			6	1.87
Art History Average	*2008-2011*			*15*	*2.12*
HArCS: Art	2008-2009			6	1.87
	2009-2010			10	1.73
	2010-2011			7	1.71
Art Average	*2008-2011*			*23*	*1.77*
HArCS: Cultural Studies	2008-2009	2	7.71		
	2009-2010	4	6.02		
	2010-2011	5	7.41		
Cultural Studies Average	*2008-2011*	*11*	*7.04*		
HArCS: Comparative Lit	2008-2009	5	7.91		
	2009-2010	2	8.34	1	3.70
	2010-2011	2	7.70		
Comparative Literature Avg	*2008-2011*	*9*	*7.98*	*1*	*3.70*
HArCS: Design	2010-2011			2	1.71
Design Average	*2008-2011*			*2*	*1.71*
HArCS: Dramatic Art	2008-2009			7	1.66
	2009-2010			13	1.76
	2010-2011			8	1.71
Dramatic Art Average	*2008-2011*			*28*	*1.71*
HArCS: English	2008-2009	15	6.89	15	1.96
	2009-2010	10	7.71	16	2.21
	2010-2011	7	6.77	16	1.88
English Average	*2008-2011*	*32*	*7.12*	*47*	*2.01*
HArCS: French	2008-2009			1	3.20
	2009-2010	3	6.79	3	2.37
	2010-2011	1	4.70		
French Average	*2008-2011*	*4*	*5.74*	*4*	*2.79*
HArCS: German	2008-2009	1	6.21	2	1.70
	2009-2010	4	6.10	1	1.21
German Average	*2008-2011*	*5*	*6.15*	*3*	*1.46*
HArCS: Music	2008-2009			7	2.89
	2009-2010	1	7.21	1	1.96
	2010-2011	1	4.20	7	2.63
Music Average	*2008-2011*	*2*	*5.70*	*15*	*2.49*
	2008-2009	6	7.29		
HArCS: Native American Studies	2009-2010	1	4.95	1	2.21
	2010-2011			4	3.15
Native American Studies Avg	*2008-2011*	*7*	*6.12*	*5*	*2.68*
HArCS: Performance Studies	2008-2009	7	6.21		
	2009-2010	1	5.20		
	2010-2011	3	3.27		
Performance Studies Avg	*2008-2011*	*11*	*4.89*		
HArCS: Spanish	2008-2009	3	5.46	7	1.81

	2009-2010	5	7.01	3	2.04
	2010-2011	8	5.95	2	1.71
Spanish Average	*2008-2011*	*16*	*6.14*	*12*	*1.85*
HArCS: Textile Arts & Costume Design	2008-2009			1	1.96
Textile Arts & Costume Design Average	*2008-2011*			*1*	*1.96*
HArCS 2008-2011		**97**	**6.32**	**156**	**2.19**

Program Name	Academic Year	PhDs Awarded	Avg PhD Time to Degree	Master's Awarded	Avg Master's Time to Degree
SS: Anthropology	2008-2009	4	6.03	8	2.03
	2009-2010	5	6.85	6	1.87
	2010-2011	4	9.33	6	3.25
Anthropology Average	*2008-2011*	*13*	*7.40*	*20*	*2.38*
SS: Communication	2008-2009			1	1.96
	2009-2010			6	2.58
	2010-2011			6	2.58
Communication Average	*2008-2011*			*13*	*2.37*
SS: Economics	2008-2009	9	6.09	17	1.56
	2009-2010	11	5.45	5	1.11
	2010-2011	15	5.63	8	1.21
Economics Average	*2008-2011*	*35*	*5.73*	*30*	*1.29*
SS: History	2008-2009	10	7.21		
	2009-2010	7	9.42	5	3.66
	2010-2011	9	7.01	2	2.21
History Average	*2008-2011*	*26*	*7.88*	*7*	*2.94*
SS: Linguistics	2008-2009	3	5.87	5	2.11
	2009-2010	6	5.24	10	3.11
	2010-2011	1	7.70	4	2.09
Linguistics Average	*2008-2011*	*10*	*6.27*	*19*	*2.44*
SS: Philosophy	2008-2009	1	5.21	2	2.95
	2009-2010	4	8.84	1	1.96
	2010-2011	1	5.94		
Philosophy Average	*2008-2011*	*6*	*6.67*	*3*	*2.45*
SS: Political Science	2008-2009	7	6.67	2	4.34
	2009-2010	6	7.08	3	1.63
	2010-2011	10	7.11	7	3.21
Political Science Average	*2008-2011*	*23*	*6.95*	*12*	*3.06*
SS: Psychology	2008-2009	4	5.09	18	2.32
	2009-2010	17	5.64	23	2.27
	2010-2011	7	6.38	18	2.25
Psychology Average	*2008-2011*	*28*	*5.70*	*59*	*2.28*
SS: Sociology	2008-2009	4	7.52	10	2.31
	2009-2010	9	8.21	5	1.62
	2010-2011	6	8.79	3	1.87

Sociology Average	*2008-2011*	*19*	*8.17*	*18*	*1.93*
Social Sciences 2008-2011		**160**	**6.85**	**181**	**2.35**

Program Name	Academic Year	PhDs Awarded	Avg PhD Time to Degree	Master's Awarded	Avg Master's Time to Degree
MPS: Applied Math	2008-2009	9	5.63	5	3.26
	2009-2010	5	4.91	4	3.33
	2010-2011	5	5.60	2	3.58
Applied Math Average	*2008-2011*	*19*	*5.38*	*11*	*3.39*
MPS: Biostatistics	2008-2009	2	3.34	1	1.21
	2009-2010	2	6.20	3	1.89
	2010-2011	3	6.11		
Biostatistics Average	*2008-2011*	*7*	*5.22*	*4*	*1.55*
MPS: Chemistry	2008-2009	29	5.00	5	4.46
	2009-2010	30	5.27	4	3.52
	2010-2011	28	5.56	6	3.04
Chemistry Average	*2008-2011*	*87*	*5.28*	*15*	*3.67*
MPS: Geology	2008-2009	6	6.99	7	3.71
	2009-2010	4	5.88	4	2.52
	2010-2011	8	7.11	7	2.74
Geology Average	*2008-2011*	*18*	*6.66*	*18*	*2.99*
MPS: Mathematics	2008-2009	10	5.23	8	3.14
	2009-2010	4	4.89	3	3.20
	2010-2011	8	5.17	7	2.15
Mathematics Average	*2008-2011*	*22*	*5.10*	*18*	*2.83*
MPS: Physics	2008-2009	9	6.55	15	1.96
	2009-2010	11	5.84	14	2.87
	2010-2011	16	6.00	23	2.20
Physics Average	*2008-2011*	*36*	*6.13*	*52*	*2.34*
MPS: Statistics	2008-2009	8	5.02	5	3.01
	2009-2010	3	5.13	2	2.09
	2010-2011	3	5.12	7	2.67
Statistics Average	*2008-2011*	*14*	*5.09*	*14*	*2.59*
Math and Physical Sciences 2008-2011		**203**	**5.55**	**132**	**2.77**

Program Name	Academic Year	PhDs Awarded	Avg PhD Time to Degree	Master's Awarded	Avg Master's Time to Degree
Education: Joint Progr Ed	2008-2009	7	2.81		
Leadership CSUS	2009-2010	7	3.39		
	2010-2011	11	4.11		
Ed Leadership CSUS Average	*2008-2011*	*25*	*3.44*		
Education: Education MA	2008-2009			4	2.33
	2009-2010			6	3.16
	2010-2011			1	1.71

Education MA Average	*2008-2011*			*11*	*2.40*
Education: Joint Progr Ed	2008-2009	12	2.77		
Leadership CSUF	2009-2010	9	4.26		
	2010-2011	4	6.57		
Ed Leadership Average	*2008-2011*	*25*	*4.53*		
Education: Education PhD	2008-2009	8	5.52		
	2009-2010	9	6.40		
	2010-2011	10	6.33		
Education PhD Average	*2008-2011*	*27*	*6.08*		
Education: MA Practical Teacher	2008-2009			4	7.73
	2009-2010			2	1.71
	2010-2011			2	1.71
MA Practical Teacher Average	*2008-2011*			*8*	*3.72*
Education: Education PhD & MA	2008-2009	2	6.82		
Education PhD & MA Average	*2008-2011*	*2*	*6.82*		
Education: Credential	2008-2009			86	1.94
	2009-2010			93	1.80
	2010-2011			129	1.71
Credential Average	*2008-2011*			*308*	*1.81*
Education 2008-09		**79**	**5.22**	**327**	**2.64**

Program Name	**Academic Year**	**PhDs Awarded**	**Avg PhD Time to Degree**	**Master's Awarded**	**Avg Master's Time to Degree**
Medicine: Clinical Research	2008-2009			23	2.00
	2010-2011			18	1.76
Clinical Research Average	*2008-2011*			*41*	*1.88*
Medicine: Health Informatics	2008-2009			2	1.71
	2009-2010			2	2.82
	2010-2011			4	5.46
Health Informatics Average	*2008-2011*			*8*	*3.33*
Medicine: Microbiology	2008-2009	7	6.74		
	2009-2010	12	6.12		
	2010-2011	8	6.35	2	5.98
Microbiology Average	*2008-2011*	*27*	*6.40*	*2*	*5.98*
Medicine 2008-2011		**27**	**6.40**	**51**	**3.73**

Program Name	**Academic Year**	**PhDs Awarded**	**Avg PhD Time to Degree**	**Master's Awarded**	**Avg Master's Time to Degree**
Vet Med: Comp Pathology	2008-2009	15	5.77	2	2.34
	2009-2010	10	5.62	4	1.79
	2010-2011	16	5.67	3	1.47
Comparative Pathology Avg	*2008-2011*	*41*	*5.68*	*9*	*1.86*
Vet Med: Epidemiology	2008-2009			1	2.48
	2009-2010	7	4.71	1	1.48
	2010-2011	7	6.06	1	2.20

Epidemiology Average	*2008-2011*	*14*	*5.39*	*3*	*2.05*
Vet Med: Immunology	2008-2009	4	5.71	1	1.21
	2009-2010	5	6.34	3	2.04
	2010-2011	7	6.27	1	2.48
Immunology Average	*2008-2011*	*16*	*6.10*	*5*	*1.91*
Veterinary Medicine 2008-2011		**71**	**5.72**	**17**	**1.94**

Program Name	Academic Year	PhDs Awarded	Avg PhD Time to Degree	Master's Awarded	Avg Master's Time to Degree
Forensic Science	2008-2009			21	3.01
	2009-2010			7	3.60
	2010-2011			15	3.45
Forensic Science Average	*2008-2011*			*43*	*3.36*
Other 2008-2011		**0**	**0**	**43**	**3.36**

Table 7a: Enrollment by Ethnicity, Gender, and Level: Berkeley

	Fall 2009			Fall 2010			One-year change		
	Ug	Gr	Total	Ug	Gr	Total	Ug	Gr	Total
International	**1,401**	**1,868**	**3,269**	**1,844**	**1,912**	**3,756**	**32%**	**2%**	**15%**
Female	668	582	1,250	887	562	1,449	33%	-3%	16%
Male	733	1,286	2,019	957	1,350	2,307	31%	5%	14%
Unknown	0	0	0	0	0	0			
American Indian	**129**	**112**	**241**	**145**	**94**	**239**	**12%**	**-16%**	**-1%**
Female	69	51	120	82	43	125	19%	-16%	4%
Male	60	61	121	63	51	114	5%	-16%	-6%
Unknown	0	0	0	0	0	0	n/a	n/a	n/a
African American	**923**	**330**	**1,253**	**874**	**326**	**1,200**	**-5%**	**-1%**	**-4%**
Female	577	203	780	538	196	734	-7%	-3%	-6%
Male	346	127	473	336	130	466	-3%	2%	-1%
Unknown	0	0	0	0	0	0	n/a	n/a	n/a
Chicano/Chicana	**2,190**	**364**	**2,554**	**2,166**	**394**	**2,560**	**-1%**	**8%**	**0%**
Female	1,271	181	1,452	1,265	202	1,467	0%	12%	1%
Male	919	183	1,102	901	192	1,093	-2%	5%	-1%
Unknown	0	0	0	0	0	0	n/a	n/a	n/a
Latino/Latina	**857**	**339**	**1,196**	**844**	**352**	**1,196**	**-2%**	**4%**	**0%**
Female	467	188	655	450	185	635	-4%	-2%	-3%
Male	390	151	541	394	167	561	1%	11%	4%
Unknown	0	0	0	0	0	0	n/a	n/a	n/a
Filipino/Pilipino	**837**	**114**	**951**	**824**	**118**	**942**	**-2%**	**4%**	**-1%**
Female	486	66	552	496	71	567	2%	8%	3%
Male	351	48	399	328	47	375	-7%	-2%	-6%
Unknown	0	0	0	0	0	0	n/a	n/a	n/a
Chinese	**5,263**	**744**	**6,007**	**5,079**	**764**	**5,843**	**-3%**	**3%**	**-3%**
Female	2,737	391	3,128	2,657	404	3,061	-3%	3%	-2%
Male	2,526	353	2,879	2,422	360	2,782	-4%	2%	-3%
Unknown	0	0	0	0	0	0	n/a	n/a	n/a
Japanese	**421**	**119**	**540**	**423**	**111**	**534**	**0%**	**-7%**	**-1%**
Female	211	65	276	216	54	270	2%	-17%	-2%
Male	210	54	264	207	57	264	-1%	6%	0%
Unknown	0	0	0	0	0	0	n/a	n/a	n/a
Korean	**1,204**	**179**	**1,383**	**1,205**	**176**	**1,381**	**0%**	**-2%**	**0%**
Female	618	103	721	627	97	724	1%	-6%	0%
Male	586	76	662	578	79	657	-1%	4%	-1%
Unknown	0	0	0	0	0	0	n/a	n/a	n/a
Other Asian	**1,519**	**199**	**1,718**	**1,442**	**259**	**1,701**	**-5%**	**30%**	**-1%**
Female	897	126	1,023	844	153	997	-6%	21%	-3%
Male	622	73	695	598	106	704	-4%	45%	1%
Unknown	0	0	0	0	0	0	n/a	n/a	n/a
Pakistani/East Indian/Other	**1,443**	**818**	**2,261**	**1,143**	**403**	**1,546**	**-21%**	**-51%**	**-32%**
Female	737	354	1,091	561	145	706	-24%	-59%	-35%
Male	706	464	1,170	582	258	840	-18%	-44%	-28%
Unknown	0	0	0	0	0	0			
White	**7,783**	**4,195**	**11,978**	**7,730**	**4,122**	**11,852**	**-1%**	**-2%**	**-1%**
Female	3,936	1,923	5,859	3,915	1,896	5,811	-1%	-1%	-1%
Male	3,847	2,272	6,119	3,815	2,226	6,041	-1%	-2%	-1%
Unknown	0	0	0	0	0	0			
Not Stated/Unknown	**1,560**	**932**	**2,492**	**1,821**	**1,267**	**3,088**	**17%**	**36%**	**24%**
Female	836	410	1,246	975	606	1,581	17%	48%	27%
Male	724	522	1,246	846	661	1,507	17%	27%	21%
Unknown	0	0	0	0	0	0			
Campus Total	**25,530**	**10,313**	**35,843**	**25,540**	**10,298**	**35,838**	**0%**	**0%**	**0%**
Female	13,510	4,643	18,153	13,513	4,614	18,127	0%	-1%	0%
Male	12,020	5,670	17,690	12,027	5,684	17,711	0%	0%	0%
Unknown	0	0	0	0	0	0			

Graduate student headcounts include health sciences residents. Students with ethnicity of 'Other' grouped with Pakistani/East Indian for 2009 reporting. Students with ethnicity of 'Other' grouped with Not Stated/Unknown for 2010 reporting.

Table 7b: Enrollment by Ethnicity, Gender, and Level: Davis

	Fall 2009			Fall 2010			One-year change		
	Ug	Gr	Total	Ug	Gr	Total	Ug	Gr	Total
International	**557**	**1,027**	**1,584**	**623**	**1,033**	**1,656**	**12%**	**1%**	**5%**
Female	300	439	739	320	416	736	7%	-5%	0%
Male	257	588	845	303	617	920	18%	5%	9%
Unknown	0	0	0	0	0	0			
American Indian	**171**	**49**	**220**	**205**	**63**	**268**	**20%**	**29%**	**22%**
Female	111	20	131	125	30	155	13%	50%	18%
Male	60	29	89	80	33	113	33%	14%	27%
Unknown	0	0	0	0	0	0			
African American	**727**	**143**	**870**	**759**	**156**	**915**	**4%**	**9%**	**5%**
Female	451	95	546	441	96	537	-2%	1%	-2%
Male	276	48	324	318	60	378	15%	25%	17%
Unknown	0	0	0	0	0	0			
Chicano/Chicana	**2,528**	**258**	**2,786**	**2,807**	**284**	**3,091**	**11%**	**10%**	**11%**
Female	1,535	134	1,669	1,699	157	1,856	11%	17%	11%
Male	993	124	1,117	1,108	127	1,235	12%	2%	11%
Unknown	0	0	0	0	0	0			
Latino/Latina	**825**	**199**	**1,024**	**869**	**211**	**1,080**	**5%**	**6%**	**5%**
Female	502	118	620	497	120	617	-1%	2%	0%
Male	323	81	404	372	91	463	15%	12%	15%
Unknown	0	0	0	0	0	0			
Filipino/Pilipino	**958**	**115**	**1,073**	**991**	**110**	**1,101**	**3%**	**-4%**	**3%**
Female	554	65	619	549	60	609	-1%	-8%	-2%
Male	404	50	454	442	50	492	9%	0%	8%
Unknown	0	0	0	0	0	0			
Chinese	**4,354**	**534**	**4,888**	**4,227**	**505**	**4,732**	**-3%**	**-5%**	**-3%**
Female	2,286	269	2,555	2,217	266	2,483	-3%	-1%	-3%
Male	2,068	265	2,333	2,010	239	2,249	-3%	-10%	-4%
Unknown	0	0	0	0	0	0			
Japanese	**413**	**81**	**494**	**397**	**80**	**477**	**-4%**	**-1%**	**-3%**
Female	235	47	282	217	46	263	-8%	-2%	-7%
Male	178	34	212	180	34	214	1%	0%	1%
Unknown	0	0	0	0	0	0			
Korean	**629**	**91**	**720**	**633**	**94**	**727**	**1%**	**3%**	**1%**
Female	328	53	381	328	55	383	0%	4%	1%
Male	301	38	339	305	39	344	1%	3%	1%
Unknown	0	0	0	0	0	0			
Other Asian	**2,379**	**278**	**2,657**	**2,353**	**284**	**2,637**	**-1%**	**2%**	**-1%**
Female	1,393	152	1,545	1,347	158	1,505	-3%	4%	-3%
Male	986	126	1,112	1,006	126	1,132	2%	0%	2%
Unknown	0	0	0	0	0	0			
Pakistani/East Indian/Other	**1,470**	**477**	**1,947**	**1,117**	**247**	**1,364**	**-24%**	**-48%**	**-30%**
Female	816	250	1,066	616	122	738	-25%	-51%	-31%
Male	654	227	881	501	125	626	-23%	-45%	-29%
Unknown	0	0	0	0	0	0			
White	**8,727**	**3,453**	**12,180**	**8,523**	**3,477**	**12,000**	**-2%**	**1%**	**-1%**
Female	4,881	1,803	6,684	4,705	1,824	6,529	-4%	1%	-2%
Male	3,846	1,650	5,496	3,818	1,653	5,471	-1%	0%	0%
Unknown	0	0	0	0	0	0			
Not Stated/Unknown	**1,032**	**678**	**1,710**	**1,343**	**899**	**2,242**	**30%**	**33%**	**31%**
Female	546	350	896	705	421	1,126	29%	20%	26%
Male	486	328	814	638	478	1,116	31%	46%	37%
Unknown	0	0	0	0	0	0			
Campus Total	**24,770**	**7,383**	**32,153**	**24,847**	**7,443**	**32,290**	**0%**	**1%**	**0%**
Female	13,938	3,795	17,733	13,766	3,771	17,537	-1%	-1%	-1%
Male	10,832	3,588	14,420	11,081	3,672	14,753	2%	2%	2%
Unknown	0	0	0	0	0	0			

Graduate student headcounts include health sciences residents. Students with ethnicity of 'Other' grouped with Pakistani/East Indian for 2009 reporting. Students with ethnicity of 'Other' grouped with Not Stated/Unknown for 2010 reporting.

Table 7c: Enrollment by Ethnicity, Gender, and Level: Irvine

	Fall 2009			Fall 2010			One-year change		
	Ug	Gr	Total	Ug	Gr	Total	Ug	Gr	Total
International	**562**	**940**	**1,502**	**603**	**980**	**1,583**	**7%**	**4%**	**5%**
Female	271	301	572	290	303	593	7%	1%	4%
Male	287	639	926	310	677	987	8%	6%	7%
Unknown	4	0	4	3	0	3			
American Indian	**94**	**16**	**110**	**108**	**35**	**143**	**15%**	**119%**	**30%**
Female	56	7	63	65	18	83	16%	157%	32%
Male	38	9	47	43	17	60	13%	89%	28%
Unknown	0	0	0	0	0	0			
African American	**502**	**87**	**589**	**522**	**76**	**598**	**4%**	**-13%**	**2%**
Female	295	48	343	301	33	334	2%	-31%	-3%
Male	207	39	246	221	43	264	7%	10%	7%
Unknown	0	0	0	0	0	0			
Chicano/Chicana	**2,262**	**225**	**2,487**	**2,520**	**223**	**2,743**	**11%**	**-1%**	**10%**
Female	1,315	119	1,434	1,418	117	1,535	8%	-2%	7%
Male	947	106	1,053	1,101	106	1,207	16%	0%	15%
Unknown	0	0	0	1	0	1			
Latino/Latina	**792**	**160**	**952**	**849**	**139**	**988**	**7%**	**-13%**	**4%**
Female	442	71	513	491	65	556	11%	-8%	8%
Male	350	89	439	358	74	432	2%	-17%	-2%
Unknown	0	0	0	0	0	0			
Filipino/Pilipino	**1,699**	**89**	**1,788**	**1,639**	**64**	**1,703**	**-4%**	**-28%**	**-5%**
Female	953	40	993	907	29	936	-5%	-28%	-6%
Male	745	49	794	732	35	767	-2%	-29%	-3%
Unknown	1	0	1	0	0	0			
Chinese	**4,032**	**492**	**4,524**	**3,909**	**407**	**4,316**	**-3%**	**-17%**	**-5%**
Female	2,028	203	2,231	2,035	166	2,201	0%	-18%	-1%
Male	2,003	289	2,292	1,870	241	2,111	-7%	-17%	-8%
Unknown	1	0	1	4	0	4			
Japanese	**625**	**64**	**689**	**584**	**71**	**655**	**-7%**	**11%**	**-5%**
Female	343	31	374	336	33	369	-2%	6%	-1%
Male	282	33	315	247	38	285	-12%	15%	-10%
Unknown	0	0	0	1	0	1			
Korean	**1,497**	**116**	**1,613**	**1,400**	**110**	**1,510**	**-6%**	**-5%**	**-6%**
Female	792	64	856	754	50	804	-5%	-22%	-6%
Male	704	52	756	645	60	705	-8%	15%	-7%
Unknown	1	0	1	1	0	1			
Other Asian	**3,006**	**262**	**3,268**	**2,930**	**193**	**3,123**	**-3%**	**-26%**	**-4%**
Female	1,666	118	1,784	1,614	89	1,703	-3%	-25%	-5%
Male	1,339	144	1,483	1,314	104	1,418	-2%	-28%	-4%
Unknown	1	0	1	2	0	2			
Pakistani/East Indian/Other	**1,371**	**456**	**1,827**	**995**	**146**	**1,141**	**-27%**	**-68%**	**-38%**
Female	720	209	929	539	55	594	-25%	-74%	-36%
Male	649	247	896	455	91	546	-30%	-63%	-39%
Unknown	2	0	2	1	0	1			
White	**5,039**	**2,091**	**7,130**	**4,793**	**1,888**	**6,681**	**-5%**	**-10%**	**-6%**
Female	2,594	889	3,483	2,516	796	3,312	-3%	-10%	-5%
Male	2,444	1,200	3,644	2,275	1,092	3,367	-7%	-9%	-8%
Unknown	1	2	3	2	0	2			
Not Stated/Unknown	**872**	**441**	**1,313**	**1,219**	**1,273**	**2,492**	**40%**	**189%**	**90%**
Female	414	183	597	571	590	1,161	38%	222%	94%
Male	359	256	615	520	681	1,201	45%	166%	95%
Unknown	99	2	101	128	2	130			
Campus Total	**22,353**	**5,439**	**27,792**	**22,071**	**5,605**	**27,676**	**-1%**	**3%**	**0%**
Female	11,889	2,283	14,172	11,837	2,344	14,181	0%	3%	0%
Male	10,354	3,152	13,506	10,091	3,259	13,350	-3%	3%	-1%
Unknown	110	4	114	143	2	145			

Graduate student headcounts include health sciences residents. Students with ethnicity of 'Other' grouped with Pakistani/East Indian for 2009 reporting. Students with ethnicity of 'Other' grouped with Not Stated/Unknown for 2010 reporting.

Table 7d: Enrollment by Ethnicity, Gender, and Level: Los Angeles

	Fall 2009			Fall 2010			One-year change		
	Ug	Gr	Total	Ug	Gr	Total	Ug	Gr	Total
International	**1,280**	**1,950**	**3,230**	**1,522**	**2,079**	**3,601**	**19%**	**7%**	**11%**
Female	643	685	1,328	710	741	1,451	10%	8%	9%
Male	637	1,265	1,902	812	1,338	2,150	27%	6%	13%
Unknown	0	0	0	0	0	0			
American Indian	**121**	**61**	**182**	**128**	**58**	**186**	**6%**	**-5%**	**2%**
Female	71	36	107	75	30	105	6%	-17%	-2%
Male	50	25	75	53	28	81	6%	12%	8%
Unknown	0	0	0	0	0	0			
African American	**986**	**457**	**1,443**	**1,076**	**489**	**1,565**	**9%**	**7%**	**8%**
Female	610	289	899	659	310	969	8%	7%	8%
Male	376	168	544	417	179	596	11%	7%	10%
Unknown	0	0	0	0	0	0			
Chicano/Chicana	**3,031**	**577**	**3,608**	**3,008**	**636**	**3,644**	**-1%**	**10%**	**1%**
Female	1,876	344	2,220	1,857	373	2,230	-1%	8%	0%
Male	1,155	233	1,388	1,151	263	1,414	0%	13%	2%
Unknown	0	0	0	0	0	0			
Latino/Latina	**1,072**	**502**	**1,574**	**1,118**	**443**	**1,561**	**4%**	**-12%**	**-1%**
Female	628	285	913	663	254	917	6%	-11%	0%
Male	444	217	661	455	189	644	2%	-13%	-3%
Unknown	0	0	0	0	0	0			
Filipino/Pilipino	**1,047**	**206**	**1,253**	**1,069**	**198**	**1,267**	**2%**	**-4%**	**1%**
Female	622	123	745	644	112	756	4%	-9%	1%
Male	425	83	508	425	86	511	0%	4%	1%
Unknown	0	0	0	0	0	0			
Chinese	**4,246**	**1,091**	**5,337**	**3,962**	**1,137**	**5,099**	**-7%**	**4%**	**-4%**
Female	2,269	534	2,803	2,034	537	2,571	-10%	1%	-8%
Male	1,977	557	2,534	1,928	600	2,528	-2%	8%	0%
Unknown	0	0	0	0	0	0			
Japanese	**584**	**157**	**741**	**582**	**191**	**773**	**0%**	**22%**	**4%**
Female	300	74	374	306	86	392	2%	16%	5%
Male	284	83	367	276	105	381	-3%	27%	4%
Unknown	0	0	0	0	0	0			
Korean	**1,471**	**350**	**1,821**	**1,390**	**368**	**1,758**	**-6%**	**5%**	**-3%**
Female	782	196	978	757	202	959	-3%	3%	-2%
Male	689	154	843	633	166	799	-8%	8%	-5%
Unknown	0	0	0	0	0	0			
Other Asian	**1,910**	**469**	**2,379**	**1,804**	**556**	**2,360**	**-6%**	**19%**	**-1%**
Female	1,093	268	1,361	1,019	289	1,308	-7%	8%	-4%
Male	817	201	1,018	785	267	1,052	-4%	33%	3%
Unknown	0	0	0	0	0	0			
Pakistani/East Indian/Other	**1,413**	**1,798**	**3,211**	**905**	**471**	**1,376**	**-36%**	**-74%**	**-57%**
Female	741	877	1,618	451	180	631	-39%	-79%	-61%
Male	672	921	1,593	454	291	745	-32%	-68%	-53%
Unknown	0	0	0	0	0	0	n/a	n/a	n/a
White	**8,879**	**5,228**	**14,107**	**8,467**	**5,170**	**13,637**	**-5%**	**-1%**	**-3%**
Female	4,891	2,435	7,326	4,631	2,392	7,023	-5%	-2%	-4%
Male	3,988	2,793	6,781	3,836	2,778	6,614	-4%	-1%	-2%
Unknown	0	0	0						
Not Stated/Unknown	**647**	**451**	**1,098**	**1,131**	**1,635**	**2,766**	**75%**	**263%**	**152%**
Female	312	189	501	592	797	1,389	90%	322%	177%
Male	335	262	597	539	838	1,377	61%	220%	131%
Unknown	0	0	0						
Campus Total	**26,687**	**13,297**	**39,984**	**26,162**	**13,431**	**39,593**	**-2%**	**1%**	**-1%**
Female	14,838	6,335	21,173	14,398	6,303	20,701	-3%	-1%	-2%
Male	11,849	6,962	18,811	11,764	7,128	18,892	-1%	2%	0%
Unknown	0	0	0	0	0	0			

Graduate student headcounts include health sciences residents. Students with ethnicity of 'Other' grouped with Pakistani/East Indian for 2009 reporting. Students with ethnicity of 'Other' grouped with Not Stated/Unknown for 2010 reporting.

Table 7e: Enrollment by Ethnicity, Gender, and Level: Merced

	Fall 2009			Fall 2010			One-year change		
	Ug	Gr	Total	Ug	Gr	Total	Ug	Gr	Total
International	**34**	**74**	**108**	**46**	**74**	**120**	**35%**	**0%**	**11%**
Female	19	25	44	18	23	41	-5%	-8%	-7%
Male	14	49	63	27	51	78	93%	4%	24%
Unknown	1	0	1	1	0	1			
American Indian	**22**	**1**	**23**	**28**	**2**	**30**	**27%**	**100%**	**30%**
Female	13	1	14	13	1	14	0%	0%	0%
Male	9	0	9	15	1	16	67%	n/a	78%
Unknown	0	0	0	0	0	0	n/a	n/a	n/a
African American	**229**	**3**	**232**	**305**	**6**	**311**	**33%**	**100%**	**34%**
Female	141	0	141	189	2	191	34%	n/a	35%
Male	88	3	91	116	4	120	32%	33%	32%
Unknown	0	0	0	0	0	0	n/a	n/a	n/a
Chicano/Chicana	**868**	**25**	**893**	**1,207**	**23**	**1,230**	**39%**	**-8%**	**38%**
Female	494	8	502	680	9	689	38%	13%	37%
Male	374	17	391	526	14	540	41%	-18%	38%
Unknown	0	0	0	1	0	1			
Latino/Latina	**160**	**5**	**165**	**226**	**4**	**230**	**41%**	**-20%**	**39%**
Female	78	1	79	123	1	124	58%	0%	57%
Male	82	4	86	103	3	106	26%	-25%	23%
Unknown	0	0	0	0	0	0	n/a	n/a	n/a
Filipino/Pilipino	**205**	**3**	**208**	**264**	**2**	**266**	**29%**	**-33%**	**28%**
Female	99	2	101	132	1	133	33%	-50%	32%
Male	106	1	107	132	1	133	25%	0%	24%
Unknown	0	0	0	0	0	0	n/a	n/a	n/a
Chinese	**318**	**8**	**326**	**396**	**9**	**405**	**25%**	**13%**	**24%**
Female	128	2	130	154	2	156	20%	0%	20%
Male	190	6	196	242	7	249	27%	17%	27%
Unknown	0	0	0	0	0	0	n/a	n/a	n/a
Japanese	**42**	**3**	**45**	**46**	**2**	**48**	**10%**	**-33%**	**7%**
Female	17	1	18	18	1	19	6%	0%	6%
Male	25	2	27	28	1	29	12%	-50%	7%
Unknown	0	0	0	0	0	0	n/a	n/a	n/a
Korean	**65**	**1**	**66**	**74**	**2**	**76**	**14%**	**100%**	**15%**
Female	30	0	30	29	0	29	-3%	n/a	-3%
Male	35	1	36	44	2	46	26%	100%	28%
Unknown	0	0	0	1	0	1			
Other Asian	**298**	**3**	**301**	**370**	**6**	**376**	**24%**	**100%**	**25%**
Female	154	1	155	185	0	185	20%	-100%	19%
Male	144	2	146	184	6	190	28%	200%	30%
Unknown	0	0	0	1	0	1			
Pakistani/East Indian/Other	**198**	**8**	**206**	**150**	**3**	**153**	**-24%**	**-63%**	**-26%**
Female	92	2	94	80	0	80	-13%	-100%	-15%
Male	98	6	104	70	3	73	-29%	-50%	-30%
Unknown	8	0	8	0	0	0	-100%	n/a	-100%
White	**699**	**75**	**774**	**856**	**91**	**947**	**22%**	**21%**	**22%**
Female	271	36	307	350	45	395	29%	25%	29%
Male	428	39	467	505	46	551	18%	18%	18%
Unknown	0	0	0	1	0	1			
Not Stated/Unknown	**52**	**15**	**67**	**170**	**19**	**189**	**227%**	**27%**	**182%**
Female	18	4	22	63	8	71	250%	100%	223%
Male	31	11	42	82	11	93	165%	0%	121%
Unknown	3	0	3	25	0	25			
Campus Total	**3,190**	**224**	**3,414**	**4,138**	**243**	**4,381**	**30%**	**8%**	**28%**
Female	1,554	83	1,637	2,034	93	2,127	31%	12%	30%
Male	1,624	141	1,765	2,074	150	2,224	28%	6%	26%
Unknown	12	0	12	30	0	30			

Graduate student headcounts include health sciences residents. Students with ethnicity of 'Other' grouped with Pakistani/East Indian for 2009 reporting. Students with ethnicity of 'Other' grouped with Not Stated/Unknown for 2010 reporting.

Table 7f: Enrollment by Ethnicity, Gender, and Level: Riverside

	Fall 2009			Fall 2010			One-year change		
	Ug	Gr	Total	Ug	Gr	Total	Ug	Gr	Total
International	**258**	**713**	**971**	**261**	**704**	**965**	**1%**	**-1%**	**-1%**
Female	101	310	411	106	299	405	5%	-4%	-1%
Male	156	403	559	154	405	559	-1%	0%	0%
Unknown	1	0	1	1	0	1			
American Indian	**63**	**9**	**72**	**76**	**12**	**88**	**21%**	**33%**	**22%**
Female	35	6	41	39	9	48	11%	50%	17%
Male	28	3	31	37	3	40	32%	0%	29%
Unknown	0	0	0	0	0	0			
African American	**1,338**	**68**	**1,406**	**1,432**	**76**	**1,508**	**7%**	**12%**	**7%**
Female	852	35	887	918	34	952	8%	-3%	7%
Male	486	33	519	514	42	556	6%	27%	7%
Unknown	0	0	0	0	0	0			
Chicano/Chicana	**3,903**	**124**	**4,027**	**4,462**	**143**	**4,605**	**14%**	**15%**	**14%**
Female	2,380	74	2,454	2,675	74	2,749	12%	0%	12%
Male	1,522	50	1,572	1,785	69	1,854	17%	38%	18%
Unknown	1	0	1	2	0	2			
Latino/Latina	**1,022**	**63**	**1,085**	**1,146**	**63**	**1,209**	**12%**	**0%**	**11%**
Female	614	29	643	669	28	697	9%	-3%	8%
Male	408	34	442	477	35	512	17%	3%	16%
Unknown	0	0	0	0	0	0			
Filipino/Pilipino	**1,022**	**30**	**1,052**	**1,030**	**37**	**1,067**	**1%**	**23%**	**1%**
Female	503	10	513	523	14	537	4%	40%	5%
Male	519	20	539	507	23	530	-2%	15%	-2%
Unknown	0	0	0	0	0	0	n/a	n/a	n/a
Chinese	**2,397**	**85**	**2,482**	**2,607**	**86**	**2,693**	**9%**	**1%**	**9%**
Female	1,059	43	1,102	1,175	36	1,211	11%	-16%	10%
Male	1,338	42	1,380	1,431	50	1,481	7%	19%	7%
Unknown	0	0	0	1	0	1			
Japanese	**202**	**14**	**216**	**211**	**17**	**228**	**4%**	**21%**	**6%**
Female	87	5	92	96	6	102	10%	20%	11%
Male	114	9	123	115	11	126	1%	22%	2%
Unknown	1	0	1	0	0	0	-100%	n/a	-100%
Korean	**971**	**30**	**1,001**	**1,012**	**32**	**1,044**	**4%**	**7%**	**4%**
Female	421	14	435	438	14	452	4%	0%	4%
Male	550	16	566	574	18	592	4%	13%	5%
Unknown	0	0	0	0	0	0			
Other Asian	**1,615**	**67**	**1,682**	**1,744**	**66**	**1,810**	**8%**	**-1%**	**8%**
Female	815	33	848	846	33	879	4%	0%	4%
Male	800	34	834	898	33	931	12%	-3%	12%
Unknown	0	0	0	0	0	0			
Pakistani/East Indian/Other	**913**	**151**	**1,064**	**620**	**40**	**660**	**-32%**	**-74%**	**-38%**
Female	431	74	505	273	20	293	-37%	-73%	-42%
Male	481	77	558	347	20	367	-28%	-74%	-34%
Unknown	1	0	1	0	0	0	-100%	n/a	-100%
White	**2,895**	**831**	**3,726**	**2,935**	**866**	**3,801**	**1%**	**4%**	**2%**
Female	1,372	381	1,753	1,372	371	1,743	0%	-3%	-1%
Male	1,521	450	1,971	1,562	495	2,057	3%	10%	4%
Unknown	2	0	2	1	0	1			
Not Stated/Unknown	**443**	**212**	**655**	**757**	**311**	**1,068**	**71%**	**47%**	**63%**
Female	182	105	287	322	157	479	77%	50%	67%
Male	228	107	335	381	154	535	67%	44%	60%
Unknown	33	0	33	54	0	54			
Campus Total	**17,042**	**2,397**	**19,439**	**18,293**	**2,453**	**20,746**	**7%**	**2%**	**7%**
Female	8,852	1,119	9,971	9,452	1,095	10,547	7%	-2%	6%
Male	8,151	1,278	9,429	8,782	1,358	10,140	8%	6%	8%
Unknown	39	0	39	59	0	59			

Graduate student headcounts include health sciences residents. Students with ethnicity of 'Other' grouped with Pakistani/East Indian for 2009 reporting. Students with ethnicity of 'Other' grouped with Not Stated/Unknown for 2010 reporting.

Table 7g: Enrollment by Ethnicity, Gender, and Level: San Diego

	Fall 2009			Fall 2010			One-year change		
	Ug	Gr	Total	Ug	Gr	Total	Ug	Gr	Total
International	**861**	**1,063**	**1,924**	**1,075**	**1,147**	**2,222**	**25%**	**8%**	**15%**
Female	401	315	716	507	338	845	26%	7%	18%
Male	460	748	1,208	568	809	1,377	23%	8%	14%
Unknown	0	0	0	0	0	0			
American Indian	**92**	**48**	**140**	**117**	**52**	**169**	**27%**	**8%**	**21%**
Female	40	19	59	54	24	78	35%	26%	32%
Male	52	29	81	63	28	91	21%	-3%	12%
Unknown	0	0	0	0	0	0			
African American	**366**	**97**	**463**	**419**	**108**	**527**	**14%**	**11%**	**14%**
Female	212	60	272	241	61	302	14%	2%	11%
Male	154	37	191	178	47	225	16%	27%	18%
Unknown	0	0	0	0	0	0			
Chicano/Chicana	**2,317**	**243**	**2,560**	**2,536**	**255**	**2,791**	**9%**	**5%**	**9%**
Female	1,313	119	1,432	1,408	124	1,532	7%	4%	7%
Male	1,004	124	1,128	1,128	131	1,259	12%	6%	12%
Unknown	0	0	0	0	0	0			
Latino/Latina	**652**	**161**	**813**	**687**	**160**	**847**	**5%**	**-1%**	**4%**
Female	355	76	431	370	83	453	4%	9%	5%
Male	297	85	382	317	77	394	7%	-9%	3%
Unknown	0	0	0	0	0	0			
Filipino/Pilipino	**1,031**	**70**	**1,101**	**981**	**75**	**1,056**	**-5%**	**7%**	**-4%**
Female	544	38	582	488	40	528	-10%	5%	-9%
Male	487	32	519	493	35	528	1%	9%	2%
Unknown	0	0	0	0	0	0			
Chinese	**4,750**	**585**	**5,335**	**4,934**	**562**	**5,496**	**4%**	**-4%**	**3%**
Female	2,456	286	2,742	2,507	279	2,786	2%	-2%	2%
Male	2,294	299	2,593	2,427	283	2,710	6%	-5%	5%
Unknown	0	0	0	0	0	0			
Japanese	**463**	**72**	**535**	**465**	**78**	**543**	**0%**	**8%**	**1%**
Female	248	31	279	227	28	255	-8%	-10%	-9%
Male	215	41	256	238	50	288	11%	22%	13%
Unknown	0	0	0	0	0	0			
Korean	**2,044**	**114**	**2,158**	**2,070**	**117**	**2,187**	**1%**	**3%**	**1%**
Female	1,087	64	1,151	1,073	67	1,140	-1%	5%	-1%
Male	957	50	1,007	997	50	1,047	4%	0%	4%
Unknown	0	0	0	0	0	0			
Other Asian	**2,247**	**224**	**2,471**	**2,192**	**246**	**2,438**	**-2%**	**10%**	**-1%**
Female	1,288	113	1,401	1,230	128	1,358	-5%	13%	-3%
Male	959	111	1,070	962	118	1,080	0%	6%	1%
Unknown	0	0	0	0	0	0			
Pakistani/East Indian/Other	**1,150**	**334**	**1,484**	**821**	**191**	**1,012**	**-29%**	**-43%**	**-32%**
Female	580	135	715	408	77	485	-30%	-43%	-32%
Male	570	199	769	413	114	527	-28%	-43%	-31%
Unknown	0	0	0	0	0	0			
White	**5,968**	**2,701**	**8,669**	**5,853**	**2,695**	**8,548**	**-2%**	**0%**	**-1%**
Female	2,895	1,131	4,026	2,814	1,131	3,945	-3%	0%	-2%
Male	3,073	1,570	4,643	3,039	1,564	4,603	-1%	0%	-1%
Unknown	0	0	0	0	0	0			
Not Stated/Unknown	**1,202**	**255**	**1,457**	**1,513**	**550**	**2,063**	**26%**	**116%**	**42%**
Female	585	132	717	741	268	1,009	27%	103%	41%
Male	617	123	740	772	282	1,054	25%	129%	42%
Unknown	0	0	0	0	0	0			
Campus Total	**23,143**	**5,967**	**29,110**	**23,663**	**6,236**	**29,899**	**2%**	**5%**	**3%**
Female	12,004	2,519	14,523	12,068	2,648	14,716	1%	5%	1%
Male	11,139	3,448	14,587	11,595	3,588	15,183	4%	4%	4%
Unknown	0	0	0	0	0	0			

Graduate student headcounts include health sciences residents. Students with ethnicity of 'Other' grouped with Pakistani/East Indian for 2009 reporting. Students with ethnicity of 'Other' grouped with Not Stated/Unknown for 2010 reporting.

Table 7h: Enrollment by Ethnicity, Gender, and Level: San Francisco

	Fall 2009			Fall 2010			One-year change		
	Ug	Gr	Total	Ug	Gr	Total	Ug	Gr	Total
International	**0**	**153**	**153**	**0**	**166**	**166**	**n/a**	**8%**	**8%**
Female	0	94	94	0	100	100	n/a	6%	6%
Male	0	59	59	0	66	66	n/a	12%	12%
Unknown	0	0	0	0	0	0			
American Indian	**0**	**27**	**27**	**0**	**29**	**29**	**n/a**	**7%**	**7%**
Female	0	17	17	0	18	18	n/a	6%	6%
Male	0	10	10	0	11	11	n/a	10%	10%
Unknown	0	0	0	0	0	0	n/a	n/a	n/a
African American	**0**	**163**	**163**	**0**	**177**	**177**	**n/a**	**9%**	**9%**
Female	0	113	113	0	116	116	n/a	3%	3%
Male	0	49	49	0	61	61	n/a	24%	24%
Unknown	0	1	1	0	0	0			
Chicano/Chicana	**0**	**170**	**170**	**0**	**205**	**205**	**n/a**	**21%**	**21%**
Female	0	94	94	0	106	106	n/a	13%	13%
Male	0	76	76	0	99	99	n/a	30%	30%
Unknown	0	0	0	0	0	0			
Latino/Latina	**0**	**131**	**131**	**0**	**150**	**150**	**n/a**	**15%**	**15%**
Female	0	84	84	0	97	97	n/a	15%	15%
Male	0	46	46	0	53	53	n/a	15%	15%
Unknown	0	1	1	0	0	0			
Filipino/Pilipino	**0**	**119**	**119**	**0**	**108**	**108**	**n/a**	**-9%**	**-9%**
Female	0	77	77	0	66	66	n/a	-14%	-14%
Male	0	42	42	0	42	42	n/a	0%	0%
Unknown	0	0	0	0	0	0			
Chinese	**0**	**480**	**480**	**0**	**479**	**479**	**n/a**	**0%**	**0%**
Female	0	331	331	0	325	325	n/a	-2%	-2%
Male	0	149	149	0	154	154	n/a	3%	3%
Unknown	0	0	0	0	0	0			
Japanese	**0**	**53**	**53**	**0**	**56**	**56**	**n/a**	**6%**	**6%**
Female	0	31	31	0	36	36	n/a	16%	16%
Male	0	22	22	0	20	20	n/a	-9%	-9%
Unknown	0	0	0	0	0	0			
Korean	**0**	**96**	**96**	**0**	**94**	**94**	**n/a**	**-2%**	**-2%**
Female	0	58	58	0	51	51	n/a	-12%	-12%
Male	0	37	37	0	43	43	n/a	16%	16%
Unknown	0	1	1	0	0	0			
Other Asian	**0**	**331**	**331**	**0**	**369**	**369**	**n/a**	**11%**	**11%**
Female	0	193	193	0	228	228	n/a	18%	18%
Male	0	131	131	0	141	141	n/a	8%	8%
Unknown	0	7	7	0	0	0			
Pakistani/East Indian/Other	**0**	**429**	**429**	**0**	**223**	**223**	**n/a**	**-48%**	**-48%**
Female	0	267	267	0	125	125	n/a	-53%	-53%
Male	0	161	161	0	98	98	n/a	-39%	-39%
Unknown	0	1	1	0	0	0			
White	**0**	**1,884**	**1,884**	**0**	**1,951**	**1,951**	**n/a**	**4%**	**4%**
Female	0	1,104	1,104	0	1,128	1,128	n/a	2%	2%
Male	0	770	770	0	823	823	n/a	7%	7%
Unknown	0	10	10	0	0	0			
Not Stated/Unknown	**0**	**457**	**457**	**0**	**629**	**629**	**n/a**	**38%**	**38%**
Female	0	259	259	0	366	366	n/a	41%	41%
Male	0	188	188	0	263	263	n/a	40%	40%
Unknown	0	10	10	0	0	0			
Campus Total	**0**	**4,493**	**4,493**	**0**	**4,636**	**4,636**	**n/a**	**3%**	**3%**
Female	0	2,722	2,722	0	2,762	2,762	n/a	1%	1%
Male	0	1,740	1,740	0	1,874	1,874	n/a	8%	8%
Unknown	0	31	31	0	0	0			

Graduate student headcounts include health sciences residents. Students with ethnicity of 'Other' grouped with Pakistani/East Indian for 2009 reporting. Students with ethnicity of 'Other' grouped with Not Stated/Unknown for 2010 reporting.

Table 7i: Enrollment by Ethnicity, Gender, and Level: Santa Barbara

	Fall 2009			Fall 2010			One-year change		
	Ug	Gr	Total	Ug	Gr	Total	Ug	Gr	Total
International	**270**	**536**	**806**	**277**	**552**	**829**	**3%**	**3%**	**3%**
Female	110	180	290	117	182	299	6%	1%	3%
Male	160	356	516	160	370	530	0%	4%	3%
Unknown	0	0	0	0	0	0			
American Indian	**174**	**13**	**187**	**179**	**23**	**202**	**3%**	**77%**	**8%**
Female	105	10	115	110	17	127	5%	70%	10%
Male	69	3	72	69	6	75	0%	100%	4%
Unknown	0	0	0	0	0	0			
African American	**641**	**54**	**695**	**665**	**54**	**719**	**4%**	**0%**	**3%**
Female	405	37	442	422	34	456	4%	-8%	3%
Male	236	17	253	243	20	263	3%	18%	4%
Unknown	0	0	0	0	0	0			
Chicano/Chicana	**3,287**	**136**	**3,423**	**3,320**	**151**	**3,471**	**1%**	**11%**	**1%**
Female	1,961	69	2,030	1,979	85	2,064	1%	23%	2%
Male	1,326	67	1,393	1,341	66	1,407	1%	-1%	1%
Unknown	0	0	0	0	0	0			
Latino/Latina	**1,012**	**92**	**1,104**	**1,002**	**96**	**1,098**	**-1%**	**4%**	**-1%**
Female	574	48	622	560	47	607	-2%	-2%	-2%
Male	438	44	482	442	49	491	1%	11%	2%
Unknown	0	0	0	0	0	0			
Filipino/Pilipino	**574**	**17**	**591**	**567**	**23**	**590**	**-1%**	**35%**	**0%**
Female	327	14	341	307	16	323	-6%	14%	-5%
Male	247	3	250	260	7	267	5%	133%	7%
Unknown	0	0	0	0	0	0			
Chinese	**1,192**	**89**	**1,281**	**1,277**	**81**	**1,358**	**7%**	**-9%**	**6%**
Female	587	51	638	603	45	648	3%	-12%	2%
Male	605	38	643	674	36	710	11%	-5%	10%
Unknown	0	0	0	0	0	0			
Japanese	**302**	**29**	**331**	**294**	**34**	**328**	**-3%**	**17%**	**-1%**
Female	169	15	184	163	20	183	-4%	33%	-1%
Male	133	14	147	131	14	145	-2%	0%	-1%
Unknown	0	0	0	0	0	0			
Korean	**383**	**41**	**424**	**414**	**37**	**451**	**8%**	**-10%**	**6%**
Female	203	22	225	220	21	241	8%	-5%	7%
Male	180	19	199	194	16	210	8%	-16%	6%
Unknown	0	0	0	0	0	0			
Other Asian	**764**	**48**	**812**	**755**	**53**	**808**	**-1%**	**10%**	**0%**
Female	402	30	432	390	32	422	-3%	7%	-2%
Male	362	18	380	365	21	386	1%	17%	2%
Unknown	0	0	0	0	0	0			
Pakistani/East Indian/Other	**533**	**150**	**683**	**259**	**42**	**301**	**-51%**	**-72%**	**-56%**
Female	246	75	321	104	18	122	-58%	-76%	-62%
Male	287	75	362	155	24	179	-46%	-68%	-51%
Unknown	0	0	0	0	0	0			
White	**9,794**	**1,396**	**11,190**	**9,061**	**1,478**	**10,539**	**-7%**	**6%**	**-6%**
Female	5,084	649	5,733	4,604	685	5,289	-9%	6%	-8%
Male	4,710	747	5,457	4,457	793	5,250	-5%	6%	-4%
Unknown	0	0	0	0	0	0			
Not Stated/Unknown	**888**	**435**	**1,323**	**1,129**	**395**	**1,524**	**27%**	**-9%**	**15%**
Female	463	198	661	547	186	733	18%	-6%	11%
Male	425	237	662	582	209	791	37%	-12%	19%
Unknown	0	0	0	0	0	0			
Campus Total	**19,814**	**3,036**	**22,850**	**19,199**	**3,019**	**22,218**	**-3%**	**-1%**	**-3%**
Female	10,636	1,398	12,034	10,126	1,388	11,514	-5%	-1%	-4%
Male	9,178	1,638	10,816	9,073	1,631	10,704	-1%	0%	-1%
Unknown	0	0	0	0	0	0			

Graduate student headcounts include health sciences residents. Students with ethnicity of 'Other' grouped with Pakistani/East Indian for 2009 reporting. Students with ethnicity of 'Other' grouped with Not Stated/Unknown for 2010 reporting.

Table 7j: Enrollment by Ethnicity, Gender, and Level: Santa Cruz

	Fall 2009			Fall 2010			One-year change		
	Ug	Gr	Total	Ug	Gr	Total	Ug	Gr	Total
International	**62**	**218**	**280**	**62**	**216**	**278**	**0%**	**-1%**	**-1%**
Female	35	82	117	29	89	118	-17%	9%	1%
Male	27	136	163	33	127	160	22%	-7%	-2%
Unknown	0	0	0	0	0	0			
American Indian	**142**	**7**	**149**	**176**	**9**	**185**	**24%**	**29%**	**24%**
Female	86	2	88	106	4	110	23%	100%	25%
Male	56	5	61	70	5	75	25%	0%	23%
Unknown	0	0	0	0	0	0			
African American	**413**	**26**	**439**	**436**	**34**	**470**	**6%**	**31%**	**7%**
Female	240	13	253	249	18	267	4%	38%	6%
Male	172	13	185	187	15	202	9%	15%	9%
Unknown	1	0	1	0	1	1			
Chicano/Chicana	**2,039**	**84**	**2,123**	**2,339**	**97**	**2,436**	**15%**	**15%**	**15%**
Female	1,240	45	1,285	1,418	48	1,466	14%	7%	14%
Male	798	39	837	920	49	969	15%	26%	16%
Unknown	1	0	1	1	0	1			
Latino/Latina	**725**	**54**	**779**	**803**	**55**	**858**	**11%**	**2%**	**10%**
Female	410	25	435	464	23	487	13%	-8%	12%
Male	314	29	343	339	32	371	8%	10%	8%
Unknown	1	0	1	0	0	0			
Filipino/Pilipino	**517**	**15**	**532**	**521**	**15**	**536**	**1%**	**0%**	**1%**
Female	293	10	303	280	11	291	-4%	10%	-4%
Male	224	5	229	241	4	245	8%	-20%	7%
Unknown	0	0	0	0	0	0			
Chinese	**1,446**	**53**	**1,499**	**1,529**	**49**	**1,578**	**6%**	**-8%**	**5%**
Female	716	26	742	753	27	780	5%	4%	5%
Male	730	27	757	776	22	798	6%	-19%	5%
Unknown	0	0	0	0	0	0			
Japanese	**305**	**17**	**322**	**321**	**24**	**345**	**5%**	**41%**	**7%**
Female	149	9	158	145	14	159	-3%	56%	1%
Male	156	8	164	176	10	186	13%	25%	13%
Unknown	0	0	0	0	0	0			
Korean	**220**	**13**	**233**	**222**	**13**	**235**	**1%**	**0%**	**1%**
Female	117	10	127	114	9	123	-3%	-10%	-3%
Male	103	3	106	108	4	112	5%	33%	6%
Unknown	0	0	0	0	0	0			
Other Asian	**615**	**23**	**638**	**887**	**40**	**927**	**44%**	**74%**	**45%**
Female	347	12	359	501	20	521	44%	67%	45%
Male	268	11	279	386	20	406	44%	82%	46%
Unknown	0	0	0	0	0	0			
Pakistani/East Indian/Other	**486**	**112**	**598**	**89**	**8**	**97**	**-82%**	**-93%**	**-84%**
Female	262	65	327	43	3	46	-84%	-95%	-86%
Male	223	47	270	46	5	51	-79%	-89%	-81%
Unknown	1	0	1	0	0	0			
White	**7,375**	**721**	**8,096**	**7,003**	**756**	**7,759**	**-5%**	**5%**	**-4%**
Female	3,781	338	4,119	3,519	337	3,856	-7%	0%	-6%
Male	3,593	383	3,976	3,483	419	3,902	-3%	9%	-2%
Unknown	1	0	1	1	0	1			
Not Stated/Unknown	**914**	**173**	**1,087**	**1,280**	**203**	**1,483**	**40%**	**17%**	**36%**
Female	428	76	504	588	90	678	37%	18%	35%
Male	440	97	537	627	113	740	43%	16%	38%
Unknown	46	0	46	65	0	65			
Campus Total	**15,259**	**1,516**	**16,775**	**15,668**	**1,519**	**17,187**	**3%**	**0%**	**2%**
Female	8,104	713	8,817	8,209	693	8,902	1%	-3%	1%
Male	7,104	803	7,907	7,392	825	8,217	4%	3%	4%
Unknown	51	0	51	67	1	68			

Graduate student headcounts include health sciences residents. Students with ethnicity of 'Other' grouped with Pakistani/East Indian for 2009 reporting. Students with ethnicity of 'Other' grouped with Not Stated/Unknown for 2010 reporting.

Table 7k: Enrollment by Ethnicity, Gender, and Level: University Total

	Fall 2009			Fall 2010			One-year change		
	Ug	Gr	Total	Ug	Gr	Total	Ug	Gr	Total
International	**5,285**	**8,542**	**13,827**	**6,313**	**8,863**	**15,176**	**19%**	**4%**	**10%**
Female	2,548	3,013	5,561	2,984	3,053	6,037	17%	1%	9%
Male	2,731	5,529	8,260	3,324	5,810	9,134	22%	5%	11%
Unknown	6	0	6	5	0	5			
American Indian	**1,008**	**343**	**1,351**	**1,162**	**377**	**1,539**	**15%**	**10%**	**14%**
Female	586	169	755	669	194	863	14%	15%	14%
Male	422	174	596	493	183	676	17%	5%	13%
Unknown	0	0	0						
African American	**6,125**	**1,428**	**7,553**	**6,488**	**1,502**	**7,990**	**6%**	**5%**	**6%**
Female	3,783	893	4,676	3,958	900	4,858	5%	1%	4%
Male	2,341	534	2,875	2,530	601	3,131	8%	13%	9%
Unknown	1	1	2	0	1	1			
Chicano/Chicana	**22,425**	**2,206**	**24,631**	**24,365**	**2,411**	**26,776**	**9%**	**9%**	**9%**
Female	13,385	1,187	14,572	14,399	1,295	15,694	8%	9%	8%
Male	9,038	1,019	10,057	9,961	1,116	11,077	10%	10%	10%
Unknown	2	0	2	5	0	5			
Latino/Latina	**7,117**	**1,706**	**8,823**	**7,544**	**1,673**	**9,217**	**6%**	**-2%**	**4%**
Female	4,070	925	4,995	4,287	903	5,190	5%	-2%	4%
Male	3,046	780	3,826	3,257	770	4,027	7%	-1%	5%
Unknown	1	1	2	0	0	0			
Filipino/Pilipino	**7,890**	**778**	**8,668**	**7,886**	**750**	**8,636**	**0%**	**-4%**	**0%**
Female	4,381	445	4,826	4,326	420	4,746	-1%	-6%	-2%
Male	3,508	333	3,841	3,560	330	3,890	1%	-1%	1%
Unknown	1	0	1	0	0	0			
Chinese	**27,998**	**4,161**	**32,159**	**27,920**	**4,079**	**31,999**	**0%**	**-2%**	**0%**
Female	14,266	2,136	16,402	14,135	2,087	16,222	-1%	-2%	-1%
Male	13,731	2,025	15,756	13,780	1,992	15,772	0%	-2%	0%
Unknown	1	0	1	5	0	5			
Japanese	**3,357**	**609**	**3,966**	**3,323**	**664**	**3,987**	**-1%**	**9%**	**1%**
Female	1,759	309	2,068	1,724	324	2,048	-2%	5%	-1%
Male	1,597	300	1,897	1,598	340	1,938	0%	13%	2%
Unknown	1	0	1	1	0	1			
Korean	**8,484**	**1,031**	**9,515**	**8,420**	**1,043**	**9,463**	**-1%**	**1%**	**-1%**
Female	4,378	584	4,962	4,340	566	4,906	-1%	-3%	-1%
Male	4,105	446	4,551	4,078	477	4,555	-1%	7%	0%
Unknown	1	1	2	2	0	2			
Other Asian	**14,353**	**1,904**	**16,257**	**14,477**	**2,072**	**16,549**	**1%**	**9%**	**2%**
Female	8,055	1,046	9,101	7,976	1,130	9,106	-1%	8%	0%
Male	6,297	851	7,148	6,498	942	7,440	3%	11%	4%
Unknown	1	7	8	3	0	3			
Pakistani/East Indian/Other	**8,977**	**4,733**	**13,710**	**6,099**	**1,774**	**7,873**	**-32%**	**-63%**	**-43%**
Female	4,625	2,308	6,933	3,075	745	3,820	-34%	-68%	-45%
Male	4,340	2,424	6,764	3,023	1,029	4,052	-30%	-58%	-40%
Unknown	12	1	13	1	0	1			
White	**57,159**	**22,575**	**79,734**	**55,221**	**22,494**	**77,715**	**-3%**	**0%**	**-3%**
Female	29,705	10,689	40,394	28,426	10,605	39,031	-4%	-1%	-3%
Male	27,450	11,874	39,324	26,790	11,889	38,679	-2%	0%	-2%
Unknown	4	12	16	5	0	5			
Not Stated/Unknown	**7,610**	**4,049**	**11,659**	**10,363**	**7,181**	**17,544**	**36%**	**77%**	**50%**
Female	3,784	1,906	5,690	5,104	3,489	8,593	35%	83%	51%
Male	3,645	2,131	5,776	4,987	3,690	8,677	37%	73%	50%
Unknown	181	12	193	272	2	274			
University Total	**177,788**	**54,065**	**231,853**	**179,581**	**54,883**	**234,464**	**1%**	**2%**	**1%**
Female	95,325	25,610	120,935	95,403	25,711	121,114	0%	0%	0%
Male	82,251	28,420	110,671	83,879	29,169	113,048	2%	3%	2%
Unknown	212	35	247	299	3	302			

Graduate student headcounts include health sciences residents. Students with ethnicity of 'Other' grouped with Pakistani/East Indian for 2009 reporting. Students with ethnicity of 'Other' grouped with Not Stated/Unknown for 2010 reporting.