

UNIVERSITY  
OF  
CALIFORNIA

**ACADEMIC PLANNING COUNCIL**  
**Graduate Education Workgroup**

**Recommendations for Greater Support of Doctoral Education**  
June 2019

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- I. DOCTORAL EDUCATION AT UC**
  - II. DOCTORAL EDUCATION IN THE 21<sup>st</sup> CENTURY**
  - III. RECOMMENDATIONS**
    - A. Financial support**
    - B. Modern educational practices**
    - C. Mental health and well-being support**
    - D. Diversity**
    - E. Professional development**
  - IV. CONCLUSION**
  - V. WORKGROUP CHARGE AND MEMBERSHIP**
-

## I. DOCTORAL EDUCATION AT UC

Academic graduate education is the foundation of the University of California's status as a world-class research university. As the nation's leading public academic research institution and as the research arm of the State of California, UC's role in training the next generation of researchers is a centerpiece of its mission. The achievements, prestige, and renown of the University of California and its faculty are not possible without its doctoral student body. Academic graduate education produces the next generation of professors, without whom there can be no undergraduate education to both support State needs and ensure equality of opportunity for all students. UC's academic graduate training also produces the highly-skilled and analytic professionals who drive the modern economy. Finally, doctoral students are central and indispensable participants in the research that defines UC as a premier research university.

The quality of UC's academic graduate education has several important implications for the University's mission:

- Training the next generation of faculty and researchers – One of UC's unique contributions to public education in California is the peerless training it provides to academic doctoral students who will become the next generation of faculty and researchers.
- Faculty recruitment and retention – The ability to attract the best doctoral candidates from a world-wide pool is one of the most important factors in appealing to and retaining top faculty.
- International reputation – The internationally recognized productivity and quality of UC's research is impossible without the collaborative contributions of academic graduate student researchers, a key factor in UC's high international rankings.
- Creating and applying new knowledge and skills – As the economy increasingly transitions to new forms of knowledge and new analytical skills, the value of training students to carry out critical and independent research will become even more important to California's economy and quality of life.
- Contributions to civil society – The ability to constantly and reliably replenish new generations of well-educated professionals in ever larger numbers is an invaluable public service and a necessary element for the maintenance and growth of a civil society.

UC's competitiveness for attracting top doctoral students depends primarily on three factors:

- The world-wide reputation of its programs;
- Sufficient financial support for Ph.D. students to allow them to study with minimal financial burden; and
- A merit-based admission process that draws from the largest talent pool, and considers both domestic and international students equally.

Understanding the value to UC of academic doctoral education is key to grasping the impact of chronic underinvestment in doctoral education. Doctoral education at UC is inadequately funded and students are inadequately supported. Among those familiar with post-baccalaureate degrees at UC, there is substantial awareness of these inadequacies, despite repeated efforts to address them. In fact, since 2000 alone, five task forces before this one have issued recommendations on graduate education at UC: 2001 – Innovation and Prosperity at

Risk - Investing in Graduate Education to Sustain California's Future; 2003 – Commission on Growth and Support of Graduate Education; 2007 – Work Team on Graduate and Professional School Diversity; 2012 – Joint Administrative/Senate Workgroup on Academic Graduate Student Issues; and 2012 – Task Force on Competitiveness in Academic Graduate Student Support. Each committee produced a report with recommendations that echoed and amplified the previous group's efforts.

Despite all of this thoughtful attention, these perennially concerning issues persist. Put most simply, both UC leadership and the State of California need to recognize the value of academic doctoral education as distinct from undergraduate education: it is a crucial component of the continuity of the University system, and essential to the State's economy and vitality. The importance of doctoral education is recognized by emerging economies such as India, where academic research institutions are being established at remarkable rates.<sup>1</sup> Indeed, given the size of California's economy, and UC's scale and contributions to the state, nation, and world, UC should be comparing its conception of, and commitments to, doctoral education with growing nations rather than other states.

The report you are now reading is the product of yet another task force, the APC Workgroup on Graduate Education, a subcommittee of the [Academic Planning Council](#). It necessarily reflects, however, new issues that have become more urgent because of radical changes in research, technology, and society, and the cumulative effect of neglecting these issues or inadequately addressing them. Ultimately the core message is straightforward and familiar: **UC must adequately fund and support doctoral education.** Without adequate support UC cannot maintain the quality of its research and instruction. If UC is serious about protecting and building on its excellence, and continuing its role as a key contributor to California's economy, it must demonstrate its commitment to academic doctoral education. It cannot simply talk proudly about the system that previous generations created.

## II. **DOCTORAL EDUCATION IN THE 21<sup>st</sup> CENTURY**

The Workgroup's recommendations respond in part to the substantial changes taking place in the world of graduate education. These include the explosion in information technology and accessibility; new technologies and research methodologies; the growth of interdisciplinary scholarship; career opportunities beyond the Academy; greater weight given to work-life balance; and changes in the makeup of the doctoral student body. These are just a few of the developments that doctoral education grapples with today. With a new century comes the need for new best practices, and the realization that old best practices have become outdated.

The National Academy of Sciences, Engineering, and Medicine (NAEM), in a recently-issued report on graduate STEM education, calls for "a shift from the current system that focuses primarily on the needs of institutions of higher education and of the research enterprise itself to one that is student centered, placing greater emphasis and focus on graduate students as individuals with diverse needs and challenges."<sup>2</sup> Among the NAEM recommendations are: reward effective teaching and faculty mentoring; prioritize diversity and inclusivity; address

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<sup>1</sup> India has established fifty-six [Institutes of National Importance](#) since 2010, out of a total of 134 established since 1823.

<sup>2</sup> National Academy of Sciences, [Graduate STEM Education in the 21<sup>st</sup> Century](#), May 2018, pg.3.

student mental health and well-being; and expand professional development to include nonacademic careers. The Workgroup's recommendations below echo the NASEM report.

### III. **RECOMMENDATIONS**

The Workgroup focused on five key areas:

- A. Financial support;**
- B. Modern academic practices;**
- C. Mental health and well-being;**
- D. Diversity; and**
- E. Professional development.**

Below are: 1) recommendations; 2) suggestions for campuses to consider; and 3) promising practices currently under way at UC campuses in the above five key areas.

#### **A. FINANCIAL SUPPORT**

UC must do better at financially supporting its doctoral students, particularly as it seeks to diversify the graduate student body. The University cannot compete with its peers for talented candidates if it does not offer competitive support. In 2017 the gap in average net stipend between UC and its peers was nominally \$680.<sup>3</sup> In actuality the gap is much greater due to California's high cost of living - with COL factored in, the average gap in doctoral support is closer to \$3,400.<sup>4</sup> This is a huge difference but not insurmountable. The Workgroup urges UC leadership to make every effort to close the gap so that the quality of UC's doctoral programs is maintained and enhanced.

UC campuses, with planning and prioritization, *could* guarantee five-year multi-year funding to doctoral students upon admission. According to current data, about 77 percent of doctoral students across UC receive stable or increasing net stipends for five consecutive years.<sup>5</sup> (Appendix 1.) With some exceptions, this multi-year funding is relatively consistent across campuses and disciplines. However, this funding is typically not presented as a full five-year multi-year guaranteed package upon admission. Offering five-year funding upon admission would enhance recruitment of high-potential students, offer financial security, and address one of the chief stressors for doctoral students - worry over continued funding while in the program.

In addition to offering guaranteed five-year funding, the University must address the issue of graduate student housing. Graduate students, many of whom have family responsibilities, face enormous challenges in finding affordable housing. Without a targeted effort to address graduate student housing, UC's capacity to attract and retain qualified candidates is at serious risk.

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<sup>3</sup> [UC Graduate Student Support Survey: Trends in the Comparability of Graduate Support Stipends](#), Nov. 2017, pg.4

<sup>4</sup> Ibid.

<sup>5</sup> UC campuses do not collect or track doctoral funding in a systematic fashion. The data relied on here is derived from systemwide data and includes assumptions about doctoral support packages.

Doctoral funding must also address the cost-of-living differential faced by California students who choose to attend UC rather than an out-of-state institution. As noted above, the California cost-of-living premium is significant, and must be factored into doctoral student support.<sup>6</sup> Finally, doctoral education funding should be considered in all budget discussions, in particular with the Regents and the State.

**Recommendations on financial support:**

1. **Institute five-year (or normative time-to-degree) funding upon admission** – By Fall 2022, all UC campuses should offer incoming doctoral students five-year funding packages upon admission that address local living costs including housing. Alternatively, campuses should offer multi-year support upon admission through normative time to degree for the student’s academic program. Campuses should establish bridge funding programs in the event faculty grant funding is discontinued.
2. **Address housing issues** – Lack of affordable housing is a significant issue in recruitment and retention of doctoral students. According to the [2017 UC Graduate Student Well-Being Survey](#),<sup>7</sup> housing is one of the top five areas that graduate students want UC to prioritize with attention and resources. Graduate student housing should therefore have a much higher priority in all planning processes and be afforded the same attention and resources that undergraduate housing receives. On-campus housing should take the standard Ph.D. stipend into consideration when setting rent. Partnerships with private developers should be explored for off-campus housing.
3. **State action** – UCOP should better articulate to the Legislature the value of graduate education to the State. Legislators should be educated on the rewards for the state of funding doctoral education and the very real costs of continued underinvestment. The [California lottery](#), which provides resources to educational institutions, should be explored as a fund source for doctoral education.

The Workgroup considered **tuition reduction**, a recommendation made by several previous task forces. A tuition reduction plan would reduce tuition by 50 percent once the doctoral student advances to candidacy. An assessment of the financial impact reveals that this tuition reduction would result in a cut to core UC funding by decreasing external grant and fellowship funding as well as campus block fellowship funds, which receive a large component of graduate student return-to-aid derived from tuition revenue. Furthermore, once five-year funding is established, only a small number of doctoral students would benefit from this tuition decrease. (Appendix 2.) The Workgroup therefore does not recommend tuition reduction upon doctoral advancement to candidacy.

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<sup>6</sup> Separate from this Workgroup’s efforts, UCOP staff are drafting a report in response to a request from President Napolitano to examine the landscape for funding UC academic doctoral students in relation to her concern for maintaining UC’s competitiveness in recruiting and supporting doctoral students. That report will include an example of how campuses can effectively transition from current year-by-year support to five-year guaranteed funding upon admission.

<sup>7</sup> [UC Graduate Student Well-Being Survey](#), 2017, pg. 8.

In the course of Workgroup discussions, the following measures to address doctoral student funding were also discussed:

- **Degree completion within normative time** – Doctoral students should be expected to complete their degree within the program’s normative time-to-degree. Annual assessments should be undertaken to ensure adequate progress towards degree.
- **Dissertation fellowships** – Campuses should consider awarding dissertation fellowships for timely degree completion. If the candidate fails to complete their dissertation in a timely fashion, penalties may be applied to the program.
- **Philanthropic support** – Campus development staff should be consulted about prioritizing doctoral education for philanthropic support. Campuses might also consider using return-to-aid funds as matches for current-use or term-endowment philanthropic awards, or dedicating large unrestricted gifts as matches to create larger endowments that fund fellowships.
- **Research overhead** – Where permitted, research overhead for facilities and administration costs arising from academic graduate programs should be considered for redirection back to the programs.
- **Partnerships with industry** – Some industries are open to partnerships with campuses, such as scholarship or fellowship programs, particularly when there is potential for career opportunities for graduates. Industry partnerships are underutilized however, and issues surrounding intellectual property are involved, but the payoff may justify the effort of exploring professional development tracks across a variety of industry fellowships.
- **Applications for external funding** – The campuses should expect, facilitate, and incentivize doctoral students to apply for external funding even if the student has been awarded a multi-year package. Successful applications free up funds for other students, and the application process is an essential skill for Ph.Ds. In support of this, campuses should regularly offer grant application training.

**Current programs and initiatives at UC campuses for financial support of doctoral education**

- Listed below are UC campus programs and initiatives for financial support of doctoral education. The list is not exhaustive - far from it - and is offered to generate discussion and ideas for funding doctoral education.

- **Berkeley** – [Berkeley Connect](#) - graduate student philanthropic support while mentoring undergraduates; Graduate Division support for costs not covered by foundation and agency funding fellowships; dissertation completion fellowships for arts, humanities, and social sciences; travel grants for professional development; parent grants; strategic partnerships with development staff in academic units with engaged alumni support.
- **Davis** – Mandatory Student Progress Assessment report (on-line tool) to support degree completion within normative time (among other objectives); matching commitments to cover the balance of fees and tuition not paid by the external agency; degree completion metrics included in block fellowship allocations; Graduate Division matches extramural training grants.
- **Irvine** – Minimum five-year funding guarantee for all doctoral programs except Engineering; multi-year housing guarantee; degree completion metrics included in block fellowship allocations; non-resident supplemental tuition for all international doctoral students from year 2 through advancement to candidacy; extramural fellowship applications incentivized by matching funds to cover the cost of education not covered

by the fellowship; bridge funding for multi-year support if faculty loses grant funding; Graduate Division matches extramural training grants.

- **UCLA** – Graduate Division matches extramural training grants; \$1000 grant per student for research, conference, or professional development; extramural fellowship applications incentivized by offering matching funds to cover the cost of education not covered by the fellowship; donor support for Grad Slam.
- **Merced** – Fellowship and grant applications incentivized with monetary awards; matching funds to cover the cost of education not covered by fellowships; dollar match for extramural training grants; one-semester dissertation fellowships with future funding dependent upon semester completion; donor support for Grad Slam.
- **San Diego** – [Graduate Fellowship Initiative](#) - supplementary tuition/fee support to student applications for fellowships/grants; multi-year housing guarantee; degree completion metrics included in block fellowship allocations; extramural fellowship applications incentivized by [matching funds](#); Graduate Division matches extramural training grants; graduate housing at 20 percent below market value.
- **San Francisco** – [Discovery Fellows program](#) - philanthropic support for all basic science students.
- **Santa Barbara** – Extramural fellowship applications incentivized by offering [matching funds](#) to cover the cost of education not covered by the fellowship; non-resident supplemental tuition for all international doctoral students from year 2 through advancement to candidacy; Graduate Division matches extramural training grants; Chancellor-mandated reduction in graduate student housing costs; donor support for Grad Slam.
- **Santa Cruz** – Graduate Division support for costs not covered by foundation and agency funding fellowships; extramural grant applications incentivized by matching funds to cover the cost of education not covered by the grant; dissertation year fellowships for NSF GRFP students; cost sharing with the Division of Student Success (DSS) to provide fee remission and GSHIP benefits to graduate students working as on-campus interns in DSS offices.

## **B. MODERN EDUCATIONAL PRACTICES**

As noted in the [NASEM](#) report, “Our nation’s future depends on a graduate education system that continues to evolve and meet its charge to create highly trained researchers, to develop future faculty and teachers responsible for the educational enterprise, and to support national economic, social, and cultural development.”<sup>8</sup> The report noted that there was a mismatch between the incentives that underlie the priorities of faculty members and those of their graduate students, and called for graduate education to be more student-centered, transparent, and accountable. Whereas this requires changes to be made at all levels of the educational enterprise, the report particularly emphasizes the need for changes in faculty behavior. The NASEM report, although focused on STEM graduate students, provides a blueprint for modernizing doctoral education in all disciplines. Indeed, the need for greater interdisciplinary interaction is highlighted in the report. Improved faculty mentoring of graduate students and greater data transparency are needed. Enhanced mentoring, in particular, is both an individual and a collective responsibility.

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<sup>8</sup> National Academies, [Graduate STEM Education in the 21st Century](#), pg. 17.

## **Recommendations on modern educational practices**

1. **Improve faculty mentoring** - The following measures should be taken to improve faculty mentoring:
  - a. Revise Section 210 of the Academic Personnel Manual concerning appointment and promotion to include mentoring as an element of faculty review;
  - b. Require faculty to undergo in-person mentoring training, including issues of diversity, equity, and inclusivity.
  - c. Ensure that there is a balance of mentoring responsibilities across all faculty. Mechanisms should be developed to accurately determine individual mentoring loads, including those aspects that may not be easily observed or quantified, since these often have a greater impact on faculty of color and female faculty in disciplines in which they are underrepresented.
  - d. Promote use of the Individual Development Plan (IDP), in which a student works with a faculty mentor to craft a plan for course work, research, presentations, publications, annual goals, timeline for completion, and professional development. The IDP is increasingly important in multi-disciplinary programs.
  - e. Train doctoral students on mentoring so they can be better prepared in their role as mentees and as mentors for undergraduates and peers, and as faculty mentors if and or when they reach the professoriate.
  - f. Institute and broadly communicate a process for handling mentoring issues that may arise during the student's tenure at the institution.
2. **Increase data transparency** – Steps for increasing data transparency:
  - a. Campuses should clearly post on program websites data on admissions, degree completion, and financial support.
  - b. Where possible demographic breakdowns of such data should be provided at the disciplinary level.
  - c. Career outcomes data for every graduate should be shown for a 15-year period.
  - d. Where possible, alumni satisfaction data should be shown.

The Workgroup also discussed **co-mentoring**, another modern educational practice, in which two or more mentors are assigned to a student. Co-mentoring can reduce power differentials between mentor and mentee, and alleviate conflicts of interest that may arise from having a single primary advisor. Also with the increase in multi-disciplinary doctoral training programs, co-mentoring by faculty in all applicable disciplines is increasingly important and will improve the quality of academic outcomes.

## **Current programs and initiatives at UC campuses for modern educational practices:**

- **Berkeley** - Mentoring programs; mentoring awards; mandatory IDP for many doctoral students.
- **Davis** - Mentoring programs; mentoring awards.
- **Irvine** - Mentoring programs; mentoring awards; mandatory IDP for doctoral students; degree program data.
- **UCLA** – Degree program data.
- **Merced** - Mentoring programs.
- **San Diego** - Training and certificate programs in teamwork and leadership for graduate students.
- **San Francisco** - Mentoring programs; mentoring awards.
- **UCOP** – [Doctoral program dashboard](#); [doctoral experience and employment dashboard](#).

### **C. MENTAL HEALTH AND WELL-BEING**

There is a growing awareness among universities that the pressures of academic graduate education are leading to significant mental health issues among students.<sup>9</sup> Research reveals that there is a strikingly high prevalence of anxiety and depression among academic graduate students, and that students are more than six times as likely to experience depression and anxiety as compared to the general population.<sup>10</sup> UC's 2017 Graduate Student Well-Being Survey revealed that over one-third of respondents reported symptoms indicative of clinical depression, and mental health is one of the five priority areas that UC graduate students say need greater attention and resources.<sup>11</sup> The reasons for this growing scourge are several, including financial worries, inadequate mentoring, isolation, and concerns about job prospects. UC clearly must address these issues, and not only because symptoms of depression interfere with quality of work, advancement to candidacy, and degree completion.<sup>12</sup> Measures to make the doctoral experience a positive one produce short- and long-term benefits for both the student and the institution.

**The Workgroup recommends that UC undertake a campaign to address doctoral student mental health and well-being.** It is in the best interest of the entire UC community for leadership to implement measures to address the issues and deficits surrounding the mental health and well-being of its doctoral students. Central to increasing well-being within the graduate student community is improving financial support, improving faculty mentoring, cultural sensitivity, and inclusion, and improving career preparation, issues that are addressed elsewhere in this report. The Workgroup recommends that measures to improve graduate student mental health and wellness focus on prevention and targeted intervention, as recommended by the 2006 University of California Student Mental Health Committee.<sup>13</sup>

#### **Recommendations on mental health and well-being:**

1. **Promote a culture of wellness** – UC should undertake a campaign to create a culture of wellness across the UC system by embedding good health practices and greater well-being awareness in all policies and all aspects of campus culture. The Workgroup directs readers to the [Okanagan Charter](#),<sup>14</sup> issued by the 2015 International Conference on Health Promoting Universities and Colleges, which offers a general framework for integrating wellness into campus culture and creating a community of care.
2. **Create campus websites** – Establish and publicize health and wellness resources online.
3. **Involve faculty** – Encourage faculty to promote healthy behaviors.
4. **Graduate wellness coordinator** – Create a staff position to coordinate wellness services for graduate students.

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<sup>9</sup> [Evidence for a mental health crisis in graduate education](#), Proceedings of the National Academy of Sciences, submitted March 2018.

<sup>10</sup> Ibid.

<sup>11</sup> [UC Graduate Student Well-Being Survey](#), May 2017, pg. 8

<sup>12</sup> Ibid, pg. 38.

<sup>13</sup> [Student Mental Health Committee Final Report](#), September 2006.

<sup>14</sup> [Okanagan Charter](#), An International Charter for Health Promoting Universities & Colleges, 2015.

5. **Employ preventive and targeted interventions** - Currently mental health services at UC campuses focus primarily on crisis management. The Workgroup recommends that campuses implement the stepped care approach recommended by the 2006 UC Student Mental Health Committee, which involves targeted interventions through education, support, and prevention. This approach is becoming more commonly used at higher education institutions.<sup>15</sup>
6. **Institute accountability measures** – Institute accountability measures for wellness, e.g., data collection; student satisfaction surveys, exit surveys.
7. **Clarify degree completion requirements** – Make degree completion requirements clear, memorialize them in writing, and include norms and expectations.

The Workgroup discussed the following additional measures for mental health and well-being:

- **Graduate student center** – To combat social isolation, create a physical space for graduate students, separate from undergraduates, to meet and socialize.
- **Cross-disciplinary activities** - Offer opportunities for cross-disciplinary interaction, e.g., brown bag gatherings, social events, topic discussions, research presentations, etc.
- **Extracurricular activities** – Encourage students to engage in extra-curricular activities and self-care. Advise faculty to refrain from discouraging students from engaging in extracurricular activities, and from giving negative evaluations to students who do.

**Current programs and initiatives at UC campuses for supporting mental health and well-being:**

- **Berkeley** - [Be Well at Cal and Recalibrate](#).
- **Davis** - Graduate wellness counselor.
- **Irvine** - Graduate resource center; graduate wellness counselor.
- **UCLA** - Graduate resource center; graduate wellness counselor.
- **Merced** - Graduate wellness counselor; peer mentoring program for new doctoral students - [Grad EXCEL](#).
- **Riverside** – Diversity and Inclusion Academic Liaison (DIAL) coordinator who supports and educates graduate students on issues related to sexual violence and sexual harassment, as well as discrimination against protected groups.
- **San Diego** - [Social innovation](#) projects; [GradLife](#); graduate wellness counselor.
- **San Francisco** - Annual workshops for faculty on how to assist students in distress including information on Student Health and Counseling Services.
- **Santa Barbara** - Graduate wellness counselor.
- **Santa Cruz** - Collaboration with Division of Student Success to bring CAPS counseling services into graduate-student-specific spaces.

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<sup>15</sup> [Colleges Say They Don't Have Money for Mental Health. Here's What They Should Do](#). Vice. May 8, 2019.

#### **D. DIVERSITY**

**Campus leadership including faculty leaders must articulate the importance of improving the inclusion of groups historically underrepresented at UC, especially within the ranks of faculty and doctoral students.** Improving and increasing diversity means not only enrolling greater numbers of diverse students, but also incorporating inclusion when shaping curriculum, policies, and processes, including resource decisions. **Policies, processes, and resources should be aligned to support this priority.** Strategic plans, budgets, resource allocations, and incentives should all demonstrate that inclusive excellence is both a campus and a systemwide priority. Departments and programs that make notable advancements in this area should be rewarded; those that consistently fail to advance inclusive excellence should bear a consequence, as they would for other undesirable outcomes. UC should support pipeline and pathway programs that expose, equip, and support members of historically underrepresented groups to pursue their chosen careers. Particular attention should be paid to expanding pathways to the professoriate for underrepresented scholars. The University must allocate sufficient resources for summer bridge programs so students can get adequate preparation before their entry to doctoral programs. The University must also diversify pathways to faculty positions.

#### **Recommendations on diversity**

1. **Leadership** – Campus leadership, including faculty leaders, must articulate the importance of significantly improving the inclusion of groups historically underrepresented at UC, especially within the ranks of faculty and doctoral students. Leadership must be specific in communicating the priority of efforts aligned with this goal and accountability measures to incentivize notable progress and to discourage failure to improve. All annual budgets and strategic plans should be evidence of this top priority. Chancellors, EVCs, Deans, Chairs, and Academic Senate leadership, at all levels, must commit to accountability for the areas under their purview. They should also articulate clear and workable proposals for how to achieve this, since too often there is a mandate to achieve particular goals but little articulation of how the goals may should be accomplished.
2. **Pipeline** – Create and improve pipelines from minority-serving colleges and institutions to UC graduate programs, e.g., intersegmental programs, retention programs, summer bridge programs, [UC-HBCU Initiative](#).
3. **Holistic review** – Conduct holistic review of student applications rather than rejecting any application that does not come from a top-20 college or that does not meet a GRE cut score. Conduct faculty discussions, and offer training, on holistic review.
4. **Fellowship support** – UCOP should expand fellowship programs that focus on diversity in doctoral education, such as the Eugene Cota-Robles Fellowship.
5. **Retention programs** – Attention should be paid to retention and degree completion for all members of a diverse graduate student body.
6. **President’s Postdoctoral Fellowship Program (PPFP)** – Direct students from historically under-represented groups to the [PPFP](#), UC’s successful pathway to a diverse professoriate.

### **Current programs and initiatives at UC campuses for increasing diversity in doctoral education:**

- **Davis** - [Alliance for Multicampus Graduate Admissions](#) to advance holistic admissions practices.
- **Irvine** - Diverse Educational Community and Doctoral Experience [Decade; Diversity Recruitment Fellowship](#) supplements financial support packages of admitted doctoral and M.F.A. diversity students; [Cota-Robles Fellowships](#) and [Competitive Edge](#) summer bridge program.
- **UCLA** - [Alliance for Multicampus Graduate Admissions](#) to advance holistic admissions practices; [Cota-Robles Fellowships](#) and [Competitive Edge](#) summer bridge program.
- **Merced** - California HSI Alliance for Graduate Education and the Professoriate (NSF AGEP) program; [National Research Training in Interdisciplinary Computational Graduate Education](#) (supported by NSF NRT-Innovations in Graduate Education).
- **San Diego** - [San Diego, Cota-Robles, SEED, and other Fellowships](#).
- **San Francisco** – [Initiative for Maximizing Student Development \(IMSD\) fellowship at UCSF](#) (supported by NIGMS and Graduate Division).
- **Santa Barbara** - [Graduate Scholars Program](#); California HSI Alliance for Graduate Education and the Professoriate (NSF AGEP).
- **Santa Cruz** - [Expanded funding for Cota-Robles fellowship \(more and larger awards offered\)](#).

### **E. PROFESSIONAL DEVELOPMENT**

While there is a diminishing job market for faculty positions, which are the traditional career outcomes for doctoral students, a broad array of careers for doctoral graduates outside the Academy are emerging. The expansion of career prospects has a direct positive impact on student mental health and well-being as data show that confidence about future careers is a major protective factor from the risk of clinical depression.<sup>16</sup> Professional development for academic doctoral students should be addressed on two fronts: 1) devote additional resources and multipronged efforts to effect a cultural shift that expands professional development at UC campuses to include non-academic careers; and 2) actively support students exploring both academic and non-academic careers.

#### **Recommendations for professional development**

1. **Expand professional development resources** – Offer workshops, seminars, and information on the broad range of careers an academic graduate degree can lead to. Encourage faculty to support student interest in non-academic careers.
2. **Funding for conference attendance** – Establish a fund source for the cost of student attendance at professional conferences.
3. **Increase faculty involvement** – Advise faculty not to discourage students from pursuing non-academic careers, and ask them to partner with other career-service providers. Ensure faculty are aware of campus career and professional development resources.
4. **Campus career resources** – Make sure that campus career resources include services tailored to the needs of graduate students.

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<sup>16</sup> [UC Graduate Student Well-Being Survey](#), May 2017

5. **Alumni engagement** – Encourage alumni engagement in graduate student professional development.
6. **Showcase all graduate alumni on campus websites** – All alumni, not just those in academe, should be showcased on graduate program websites.

**Current programs and initiatives at UC campuses for professional development:**

- **Berkeley** - [NSF AGEP California Alliance](#); Graduate Professional Development program ([GradPro](#)); Preparing Future Faculty program; student-run [Beyond Academia conference](#)
- **Davis** - [GradPathways](#)
- **Irvine** - [Graduate Professional Success](#)
- **UCLA** - [PhD and Master's Career Services](#); [Edward A. Bouchet Graduate Honor Society](#); [NSF AGEP California Alliance](#)
- **Merced** - [NSF AGEP California Alliance](#); [Graduate Enrichment and Advancement Resources and Services \(GEARS\)](#); [Dissertation Bootcamp](#)
- **Riverside** - 'Grad Success' umbrella that provides a range of workshops/professional development trainings and mentorship to students
- **San Diego** - [grAdvantage](#)
- **San Francisco** - [UCSF MIND](#): Motivating Informed Decisions career exploration program; Training Researchers and Interns for Upcoming Professors ([TRAIN-UP](#))
- **Santa Barbara** - Annual student-run [Beyond Academia conference](#)
- **Santa Cruz** - Grad Division sponsors and administers fall quarter Graduate Student Communication Certificate program and winter quarter Graduate Student Leadership Certificate program; GradHorizons

#### IV. **CONCLUSION**

The graduate education system at UC is a signature example of research excellence - it trains new generations of contributors to civil society in myriad fields and it is an economic engine for California, the nation, and the world. The time for UC to decide whether it wants this stellar system to continue is now. The factors that currently threaten academic graduate education at UC are serious, and must be met with boldness and commitment. The Graduate Education Workgroup therefore urges campus and UCOP leaders to take the Workgroup's recommendations seriously and to take action promptly. As already stated, academic graduate education is at the core of the mission of the University of California and the chief reason for its stature as the premier public research university in the world. It is incumbent upon all of us to follow through on improving the support and conditions of academic graduate education, and to make sure that UC's position as an academic leader for the world and an economic engine for the state of California continues.

It is the Workgroup's expectation that these recommendations will be given to the Regents and to campus Chancellors, Executive Vice Chancellors, Vice Chancellors for Research, Graduate Deans, Graduate Student Associations, and Senate Divisions for review. It is also the Workgroup's expectation that the recommendations will be acted upon. In order to ensure that such action takes place, however, and to prevent the same fate as prior task force reports, the Workgroup recommends that APC establish a committee in two years to examine the extent to which the recommendations have been achieved. The plan for a follow-up committee should include metrics for measuring implementation and success in strengthening academic graduate education at UC.

## **V. WORKGROUP CHARGE and MEMBERSHIP**

**Charge** – The Graduate Education Workgroup is a subcommittee of the [Academic Planning Council](#), a systemwide committee of campus and UCOP administration and Senate leaders. The Workgroup was charged with drafting recommendations for grappling with issues facing academic doctoral education at UC today.

### **Membership**

**Frances Leslie**, Workgroup Chair, Vice Provost for Graduate Education and Dean of the Graduate Division at UC Irvine

**Michael Brown**, UC Provost and Executive Vice President

**Fiona Doyle**, Vice Provost for Graduate Studies and Dean of the Graduate Division at UC Berkeley

**Onyebuchi Arah**, Chair of CCGA, Professor of Public Health and Epidemiology at UCLA

**Scott Brandt**, Vice Chancellor for Research at UC Santa Cruz

**Sandra Brown**, Vice Chancellor for Research at UC San Diego

**Farrell Ackerman**, Professor of Linguistics at UC San Diego

**Josh Schimel**, Professor of Ecology, Evolution, and Marine Biology at UC Santa Barbara

**Devon Graves**, Student Regent and UCLA doctoral candidate

**Becky Hofstein Grady**, UC Irvine doctoral candidate

**Pamela D. Jennings**, Executive Director of Graduate Studies at UCOP