

# Report of the Graduate School Envisioning Committee

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## **A. Overview**

The University of Cincinnati is entering a new phase in the 200-year history that has led its development from a municipal college to a world-class, Research 1 institution. Spurred on by significant growth in every facet of its educational mission, and buoyed by the [Next Lives Here strategic direction](#), the university is reinventing itself as one of the premiere urban institutions in the country.

As a premiere, public, urban research university, the University of Cincinnati has a long-standing commitment to academic excellence, diversity, and innovation. Commitment to research, as a core part of UC's mission to serve Ohio, the nation, and the world, underlies UC's ranking as an R1 Doctoral University with a very high research activity. UC's research focus can be illustrated through the rich history of scientific inventions. In its ranks, amongst others, the University of Cincinnati has the likes of Joseph Strauss, whose greatest accomplishment was the design of the Golden Gate Bridge, George Rieveschl – the inventor of Benadryl, and Albert Sabin – the inventor of the oral vaccine for polio. Additionally, as the home of the co-op program, the University of Cincinnati has paved the way for other universities in the nation and the world to provide experience-based learning opportunities to their students and prepare them for competitive job markets.

The Graduate School represents one of the central pillars of the University of Cincinnati's research mission. We train graduate students to become the leaders of tomorrow, and we prepare them to interact extensively with national and international educational and research enterprises. More recently, due to new market opportunities, we also ask them to engage and participate in careers that are outside of traditional academic fields. Therein lies one of the most significant challenges that our graduate school faces in the coming years: how to improve,

reassess, and transform its structures to support the overall ambitions of the 'new' University of Cincinnati in the areas of innovation, inclusion, and urban impact, while being mindful that the teacher-scholar model remains central to the model of graduate education that we have sustained in the previous century. In addition, as we focus on the student experience more broadly, we face the additional challenge of recruiting new students and providing support for those already here under the strain of limited resources that belie our objective of being broadly inclusive and supportive of our geo-political environment in the Tri-State area.

To address these challenges the President and the Provost tasked this Committee (henceforth GSEC) with determining where the Graduate School stands currently; and how it can adapt and prepare itself to support the evolution of the university in the coming years. Our analysis reveals that while, overall, the Graduate School provides graduate students with adequate support in some areas, there are many areas that need to be improved to help the mission of Next Lives Here. As higher education and many of its original goals are shifting, including the training of graduate students, the model to which our Graduate School ascribes also needs to be updated. We see great opportunities for growth in terminal academic degrees and in the professions, as well as in interdisciplinary work across multiple colleges, fields of knowledge and with industry, but these will need extensive re-imagining and a collaborative mindset for us to achieve our goals.

### **B. Charge:**

Following the unsuccessful conclusion of the search for the new Dean of the Graduate School, Provost Kristi Nelson asked the search committee to become a working group that would:

- 1) Conduct an environment scan of the graduate school and determine strengths and weaknesses of the current model;
- 2) Investigate and benchmark the current graduate school model vis-à-vis aspirational and comparable graduate programs across the country, as well as summarize national trends in graduate education;
- 3) Assess data and reports about the graduate student experience in our programs and provide summaries and recommendations.

We should note that, as opposed to reviews that other institutions have undertaken of their Graduate School modeling, this review does not address specific procedural and practical bottlenecks (e.g., admission and graduation processes, implementation and use of IT software, etc.) if not in the most general terms.

### **C. Membership:**

The membership of the GSEC was provided by the search committee for the Dean of the Graduate School (closed without an appointment). Following the new charge, one additional member, Dr. Mark Baccej, was added to provide representation for the College of Medicine.

### Committee Composition

Chair: Xuemao Wang, Vice Provost for Digital Scholarship and Dean of the Libraries  
 Baccei, Mark, Professor of Anesthesiology, College of Medicine  
 Dick, Gary, Professor of Social Work, College of Allied Health  
 Fathman, Amy, Associate Professor of Clinical Nursing, College of Nursing  
 Ferme, Valerio, Dean, College of Arts and Sciences  
 Lee, Joo-Youp, Professor of Chemical Engineering, College of Engineering and Applied Science  
 Lewis, Christopher, Vice Provost for Academic Programs  
 Mockabee, Stephen, Associate Professor of Political Science, College of Arts and Sciences  
 Palazzo, Danilo, Director, School of Planning, DAAP  
 Tassell, Regina, Associate to the Dean, Libraries  
 Tischner, Megan, Program Manager for the Graduate School  
 Vičić, Jelena, Graduate Student Representative, Department of Political Science (A&S)

### **D. Timeline:**

The GSEC met as a whole and in sub-committees from May 2020 until September 2020 to analyze and discuss its findings. In early September it was determined that most of the work analysis was completed and that we were ready to provide our general observations and recommendations. Two members of the committee (Valerio Ferme and Jelena Vičić) volunteered to summarize the report and share it with the other members of the group for approval, corrections, and completion.

### **E. Methodology:**

The GSEC met initially to define and summarize the scope of its research. It was agreed that the committee would work through the summer to address the charge, and that it would ask for additional time, as many members of the committee were adapting to the impact of the COVID-19 pandemic on their schedules.

As a result of the internal definition of its scope, the GSEC divided into three subgroups charged with assessing, collecting data, and providing summaries for the three main areas of investigation covered by the Provost's request. What follows is a summary of that methodology, which can be accessed more completely in the attached.

#### **E.1. Subgroup 1** (Landscape/Aspirational Peers/Best Practices—external focus, members: Danilo Palazzo—Coordinator, Valerio Ferme, Megan Tischner):

This group was charged with providing an overview of how peer institutions approach national trends in graduate education and recommend ways in which UC might address old and new challenges in our educational landscape.

We approached 10 peer and aspirational institutions, identified by the Provost's Office, to explore trends and innovations in the field. The initial request was sent by email from the Provost's Office and produced a mixed response from the deans and Vice-Provosts for Graduate Education at these schools. In total 7 agreed to respond to six follow up questions agreed upon by the entire membership of the GSEC (available now in Appendix A), some via email, and some in person. In the end, we conducted two live interviews with deans at The Ohio State University and the University of California at San Diego, and received 5 additional responses, as well as further clarifications, via email.

We then followed up by redacting an initial report on the variety of answers to the questions we received, before distilling general observations and initial recommendations we shared with the larger group (again, for a full report on our activities, please see Appendix A).

### E.2. Subgroup 2 (Structure/Function/Unique Strengths/Identity—internal focus, members: Joo-Youp Lee-Coordinator, Dick Gary, Stephen Mockabee)

Subgroup 2 was assigned the task of evaluating the current structure and functioning of the UC Graduate School, identifying strengths and weaknesses as well as opportunities for future improvement. To gather input from graduate program directors and administrators we developed an online survey that was administered using the Qualtrics platform. We solicited participation by sending an email with a link to the survey to the Graduate Program Directors list-serv and the Associate Deans list-serv.

The survey was comprised primarily of open-ended questions asking respondents about their perceptions of the Graduate School's mission, what it does well, and what it needs to improve (see Appendix B for the questions in the survey, as well as a complete review of responses). We also asked about how the Graduate School could best support the enhancement or development of PhD programs and the development of interdisciplinary programs.

Eighty-four people responded to the survey, ranging in time at UC from two to thirty years. The subgroup members coded these open-ended responses to identify major themes, and then shared recommendations with the rest of the committee based on the major themes identified by the survey.

### E.3. Subgroup 3 (Student Needs/Development/Career Path, members: Amy Fathman-Coordinator, Mark Baccei, Chris Lewis, Jelena Vičić):

The Subgroup examined student satisfaction surveys from UC and multiple benchmark institutions (see Appendix C for complete information about UC and benchmark institution surveys), as well as relevant information from those university websites, to focus on three key

aspects of the graduate student experience: (1) Finances; (2) Mentorship and Career Development; and (3) Mental and Physical Health.

Like Subgroup 2, we then distilled our observations according to how they addressed the key aspects of the graduate student experience we analyzed. We then provided an abridged summary and major recommendations that we shared with the entire committee.

#### **E.4. Summary**

The final task was for the GSEC to meet and evaluate how each group's recommendations fit into a more concise Executive Summary that we shared with the provost (superseded by the recommendations in this document).

### **F. Findings:**

The analysis conducted by the GSEC revealed, across all levels of inquiries, significant dissatisfaction with the role that the Graduate School and its Dean play in the administration of graduate education on the University of Cincinnati campus.

Even though the three subgroups investigated different areas of graduate education at UC, the study of our data evinces a lack of trust in the current graduate school model, as well as in the processes and procedures it oversees. As other universities have embraced a model of the dean as *facilitator* and supporter of innovation, interdisciplinarity, and transformation, our graduate school needs yet to evolve in this direction. The new Dean of the Graduate School needs to be an innovator, who is an interpersonal leader that is adept at creating innovative programs while fostering community and consensus across the university and with our external constituents. In addition, because we need to remove institutional barriers for this evolution to occur, the dean and the graduate school must evolve their relationship with our ruling bodies so as to eliminate and change policies that currently slow down the pace of adaptation and innovation in graduate education at UC.

What follows is a summary of the findings from the three Sub-Groups after they assessed their areas of coverage. The findings below are not presented in a hierarchical order.

#### **F.1. General Findings from Benchmarking with Other Institutions**

For a complete list of the information provided by other institutions, refer to Appendix A for more information. Here we summarize some of the most salient findings as they relate to the Provost's charge.

##### ***F.1.1 Staffing.***

With one exception, benchmarking institutions have 1½ times to 3 times more staff dedicated to the graduate school (for the same size as well as sizes that are slightly larger than ours). It is

difficult to overlook this imbalance in our analysis. The graduate school does a remarkable job in servicing its constituents; however, the short-handedness of its staff emerges when it comes to providing ancillary services, especially to students. Our benchmarking reveals that a number of institutions have substantial investments in Career Services and Diversity staffing, which our graduate school does not have.

#### *F.1.2. Diversity.*

Increasing diversity representation is the leading objective of every graduate school in the country. The strategic plan of every benchmark or aspirational peer contains a segment on diversifying faculty and graduate student bodies. Very few provide specific examples of how to do so that is not dependent on cluster hires for faculty and/or recruitment of minority students. The Rackham Graduate School at the University of Michigan has created a Diversity, Equity, and Inclusion Certificate that is available to graduate students and post-graduates. What is lacking currently are ideas for how to develop pipelines of new graduate students according to new research that shows that URM students shy away from graduate degrees, especially those traditionally tied with academic outcomes.

#### *F.1.3. Diversifying curricula and professional development.*

Graduate programs are bent on diversifying curricula and promoting professional development toward Alt-Academic careers and interdisciplinary degrees outside of the traditional norms (and across colleges). In a number of graduate schools, there is an interest toward interdisciplinary programs (especially in the more traditional PhD areas) that might give students greater opportunities to seek employment outside of academia.

#### *F.1.4. Collaboration with industry via internships and start-up modeling seems also popular. Entrepreneurship is taking hold as a way to connect degrees with professions and careers.*

As per the previous point, a number of graduate programs are starting to explore opportunities for paid internships and partial co-op models.

#### *F.1.5 Some graduate programs are claiming to be student-centric in the application of experiential models to theoretical acquisition of knowledge in traditional fields.*

While it is unclear how the programs who claim to be doing this are performing this task, it suggests that students are working on their own to find opportunities in alternative fields (Alt-Academia) that employ many of the skills and knowledge students have gained in graduate school.

#### *F.1.6. How to support all students pursuing terminal degrees (PhDs, EdDs, MFAs, AuDs, DMPs, DNPs, etc.) is becoming an important concern for several universities. Stipends for graduate students, generally speaking, are seen as inadequate at most institutions.*

Though some of the graduate school deans we interviewed represent many financially 'rich' institutions (Ohio State University, University of Michigan, University of California—San Diego), every dean laments the paucity of funding to support terminal degrees that are not professional or pre-professional.

*F.1.7. Mental health is a growing concern for all graduate programs.*

Mirroring undergraduate mental health issues, graduate students' mental health is severely affected by: finances, pressures caused by requirements on their time by faculty, the power-dynamic of mentor/student relationships; and, to a lesser degree and limited to some fields, the narrowing opportunities of the post-graduation job market.

## F.2. General Findings of the Structure, General Functioning and Strengths/Weaknesses Subgroup

*F.2.1. Graduate directors and administrators repeatedly evinced the rigid policy obedience of the current Graduate School and invoke a more inclusive style of leadership.*

Many respondents pointed to the need for a leadership style that was relational and collaborative that could transition the Graduate School toward policies of inclusion and partnership with the colleges. While the Graduate School has oversight of policy and procedures for graduate education at UC, the findings revealed the need for more inspiring, visionary, and strategic focus. The Graduate School should become a flexible, strategic partner that helps current programs grow according to their specific needs; and develop nationally competitive interdisciplinary programs across colleges.

*F.2.2. The current model of one-size-fits-all is not working.*

The Graduate School should recognize the different needs of professional and research degree programs. Since 40% of directors/administrators mentioned that they were not considering developing a PhD program at this time, the Graduate School needs to assess where the need lies internally for developing degree programs that are geared toward a professional market and how existing programs can advance at a regional and national level.

*F.2.3. Exploring structural changes to the Graduate School.*

To achieve these goals, changes to the Graduate School's administrative structure should be seriously considered. It may be possible to devolve some of the Graduate School's centralized administrative functions to the colleges, thereby providing greater autonomy and flexibility to individual programs. However, care should be taken that sufficient resources remain for centralized support functions like IT.

*F.2.4. Exploring changes to the administrative structure of the Graduate School.*

The Graduate School and its leadership should consider reconfiguring administrative positions or creating one or more positions that are focused on student well-being and professional growth, respectively, and which spur students' competitiveness in the market by creating supportive and innovative programming.

*F.2.5. Better support for graduate students.*

Graduate directors and administrators indicated the desire for significant progress in the professional and personal support of the students, with concerns about their mental well-being and overall success at UC and beyond being a critical focus of the analysis.

### F.3. General Findings of the Student Support Subgroup

The University of Cincinnati and the Graduate School are well-positioned to champion graduate education for the future. In line with the NLH mission's focus on research, the UC community, including administrators, faculty, staff, and students need to be socialized into understanding the importance of graduate education and research for accomplishing UC's mission as an R1 urban university. With a strong local industry base, UC can capitalize on preparing its graduate students for following both traditional and alt-academic career pathways. In order to achieve its institutional goals, UC should focus on the success of graduate students both during their Bearcat journey at UC, as well as post-graduation by positioning them for success while they are at UC and providing them with a support network after they leave.

However, graduate education today presents a high-risk, high-cost investment with uncertain benefits down the line. Doctoral and master students at UC today face several life-quality and career stressors, which makes their existence and experience at UC precarious. These stressors include: stagnating stipends, short supply of guaranteed funding, rising housing costs, policies that require students to carry debt while awaiting reimbursement, poor health insurance access with limited coverage and high costs, scarce research funds, delays in administering graduate stipends and other funding, departmental isolation, mental health challenges, rising demands of the job market to produce more journal publications while at graduate school, and overall shrinking of the academic job market. All these factors serve to decrease life-quality of graduate students at UC while increasing time-to-degree. In order to maintain its place in Carnegie's Classification of Institutions of Higher Education, to recruit the best prospective students, and to provide its current graduate students with the support they need, the University of Cincinnati needs to draw on its resources, as well as expertise, with the goal to provide its graduate students with tailored support.

As a historic guardian and producer of knowledge, to live up to its mission, the University of Cincinnati must expand its student focus to include graduate students, for graduate students and doctoral education are the core that makes the University of Cincinnati what it is – a very high research activity university. Graduate students and their success, health, and well-being should not be an afterthought. Rather, graduate students at UC should be treated with respect and consideration, as future leaders in their respective fields, and a core part of UC's Next Lives Here strategic plan. The Bearcat Promise needs to be extended to graduate students. The Graduate School at UC should have a central role in being the champion of graduate students, graduate research, and graduate education across the university.

In order to evaluate the graduate student experience at the University of Cincinnati, this subgroup examined student satisfaction surveys from UC and multiple benchmark institutions, as well as relevant information from those university websites, to focus on three key aspects of the graduate student experience: (1) Finances; (2) Mentorship and Career Development; and (3) Mental and Physical Health.

### F.3.1. *Finances.*

Finances represent a primary concern amongst graduate students, with only about half of all UC students receiving financial support for their education in the form of assistantships, scholarships or fellowships. Despite a recent increase, minimum stipend levels for graduate students at UC remain lower than many benchmark institutions competing for the same applicants. Similarly, the levels of financial assistance available to students to cover the costs associated with health insurance or other aspects of their training (such as conference travel) are lower than those seen at comparable institutions across the nation.

### F.3.2. *Mentorship and Career Development.*

The available evidence suggests that the majority of students, both at benchmarked institutions and at UC, are satisfied with the discipline-specific training that they receive in their graduate programs, as well as with the advice and guidance obtained from their primary mentor, although it should be noted that few surveys specifically queried the experiences of students from underrepresented minority (URM) backgrounds. However, students are much less satisfied with the professional development opportunities and career services offered by their programs and the respective Graduate Schools, particularly in the case of those students interested in pursuing non-academic career tracks.

### F.3.3. *Mental and Physical Health.*

With regards to student health, serious mental health issues are highly prevalent in the graduate student population. While faculty may ultimately be best positioned to recognize the signs and symptoms of mental health challenges and refer students to appropriate support services, these faculty often fail to receive adequate training in the detection of mental health issues.

## **G. Recommendations:**

### The Dean

*Recommendation 1: At this time, we believe the University and Academic Affairs still need a Dean who is fully devoted to graduate studies at the university.* While some universities have eliminated their graduate schools, transferring the responsibility for graduate education in the colleges; and others have coalesced the function of the graduate school dean with that for the Vice-President or Vice-Provost for Research, we believe the University of Cincinnati, *for the time being*, would be best served by preserving a unique role for this position in the Graduate School. Though in time this could be revisited, based on our recommendations and the overall status of the Graduate School at this time, we believe the university should search for a new Dean of the Graduate School.

*Recommendation 2: The new Dean and the Graduate School as a whole need to align themselves with the vision of the President and of NLH.* The paradox created by the current

Graduate School is that we have a rigid and policy-focused structure that is at odds with the future-looking and innovation-centered vision of the presidential mandate of *Next Lives Here*. The dean's first task, once a hire is made, is to align the graduate school immediately with NLH: in particular, it should seek open collaborations with the *Research 2030*, *Urban Futures*, *Urban Health*, and *1819* entrepreneurial vision espoused by the initiative. While we do not advocate abandoning or rejecting traditional models of graduate education, the new Dean and the Graduate School need to modernize, collaborate, and bring our graduate degrees into dynamic relationship with the strong innovative and interdisciplinary models favored by the President's vision.

*Recommendation 3: Recommendations 1 and 2 require that the recruitment of the new Dean of the Graduate School be purposeful to secure a visionary leader who thinks outside the box and shows the ability to move across disciplinary boundaries as well as outside the traditional frameworks of academia.* It is essential that, during the recruitment phase, the search committee and anyone involved in the recruitment process eschew solely posting the advertisement via traditional channels. In addition, a different model of recruiting the new Dean might be implemented, to be agreed upon well in advance of the call going out. This might require targeting unusual candidates and/or preparing a targeted questionnaire upon application by candidates. Careful consideration should also be given to the ranking and distribution of the 'highly desired' characteristics for the new dean (e.g., fundraising acumen, listening skills, etc.), so they are evaluated purposefully and uniformly at all levels of the recruitment process.

*Recommendation 4: The new Dean needs to be a facilitator; a problem-solver; and a catalyst for interdisciplinary and extradisciplinary partnerships.* It is imperative that, in selecting the new dean, the university prioritizes the role as a facilitator of collaborations. The new dean should not be stuck on observing policy but, whenever possible, should look for solutions that remove obstacles to innovation and to the success of students. The dean should remove old-standing barriers to innovation by working with the institution and the Board of Trustees to recalibrate and eliminate outdated policies and processes that currently hold back innovation and entrepreneurial possibilities. Problem-solving should be automatic in the DNA of the new dean. In addition, the new dean should be eager to listen to the constituents' concerns (especially the students), while comfortably advancing and promoting creative solutions among departments and with communities and collaborators beyond the university that lead to new degrees, solutions, and enrollments.

*Recommendation 5: The new Dean needs to be well-versed and espouse the mission of the University of Cincinnati as a leading urban educational institution, historically grounded in the Co-op model.* It should be clear that, in making this recommendation, we are not advocating the hire of an internal dean. We are advising that the Dean of the Graduate School be someone who understands the history of the University of Cincinnati as a research institution with nationally ranked graduate programs in numerous colleges, which is grounded in its tradition of civic service and partnerships. As such, the university and its graduate programs will thrive under the leadership of a forward thinker who can grow the Graduate School by incorporating

the city's creative and entrepreneurial environments, and its wonderful philanthropic milieu, into any re-organization of its educational mission.

## The Graduate School

*Recommendation 1: Revisit the current staffing and structure of the Graduate School.* The current administrative model and programming of the Graduate School are antiquated, as they are too traditional and top-down. From all angles, the request is that the Graduate School and graduate programming become *student centric*. This request takes on different shapes and forms. The new dean should consider restructuring the leadership team. Among possible solutions are the following: a) removing/reassigning the Director of Graduate Studies position and defining this role as more student-centric; b) re/investing in an Associate Dean for Strategic Partnership and/or Program Development; c) separating Vice-Provost and Dean of Students' functions (the latter centered on the current Associate Dean position?), allowing the latter to focus on listening and creating the premises for *graduate student success*; d) reconfiguring the duties of the current staff according to any programmatic changes that might occur, and judiciously adding or changing the job descriptions of staff members when expansion of or significant changes in programming occur; e) collaborate with Enrollment Management to adopt new models of recruiting and admissions that are more agile and in line with competitors; f) non-traditional staffing in support of graduate education and professional development should be considered: the role of the task-specific Visiting Scholar could be utilized to contribute to program development and creation of connections with the industry locally; alternately, one might envision greater collaboration with the Bearcat Promise Career Studio, which already operates at the undergraduate level, by sharing resources.

*Recommendation 2: The Graduate School will benefit from a deep analysis and conversation with colleges, upper administration and the Board of Trustees about current Board of Trustees' rules which many see as an impediment and challenge in implementing flexible, agile, and transformative programming that could give our traditional and professional programs advantages in the current higher education panorama.* The new dean and his staff should make this a priority during their first year of operation. By engaging all stakeholders in an open and cooperative manner, the hope is that the graduate school can streamline some of its rules and adapt them to more flexible and responsive models better suited for the fast-changing pace of graduate educational requirements.

*Recommendation 3: Transform the Graduate School's relationship with colleges and other university partners.* At all levels of our analysis, the exploration of college autonomy and mixed modeling in graduate education surfaced. The new Graduate School leadership needs to be trained and open to empathetic listening to the needs of individual programs, directors, associate deans and colleges. The old "one-size fits all" model where everyone gets treated the same does not work anymore. In this model of understanding co-participation, the Graduate School, the Provost's Office, and the colleges should explore the benefits that come from centralizing and/or decentralizing programs. While we understand that the current Graduate

School has invested in technological structures that allow it to process all, there should be consideration given to alternative models. The benefits of any decentralization and nimbleness of programs should be balanced against the costs of additional investments in personnel and technology.

*Recommendation 4: Expand the Co-op Model throughout Graduate Education.* The Graduate School should work with the Office of Experienced-Based Learning and Career Education (ELCE) to find ways to expand Co-op opportunities to appropriately positioned graduate degree programs, since the Co-op model of undergraduate education is one of the distinctive features of the University of Cincinnati. While scaling up the enterprise from its already very robust undergraduate opportunities might seem arduous, it would distinguish many of our graduate programs. Clearly, we already have such ‘co-op’ structures in place for a few professional degrees, but it behooves the university to think about a broader application for those disciplines still anchored to traditional modeling in producing advanced degrees. Where Co-op opportunities are not available or not feasible, paid and unpaid internships should be explored. In addition to allowing students to receive more financial support, the Co-op model would grant them opportunities to seek Alt-Ac careers more readily.

*Recommendation 5: Seek transformative ways to increase graduate student diversity that leverage local and regional needs.* Diversity is a national mandate of graduate programs, but there is no indication of a growing pool of URM graduate students. The Graduate School should consider hiring one DE&I enrollment specialist. Systemic change that draws on internal, homegrown pipelines of students might be proposed. With university enrollment management and the dean of undergraduate programs, new 4+1s, 5+1s, and 3+2s degrees might be conceived that lead, in some areas, to 3+3s (see Law School) as well as 4+2s (terminal degrees) aimed at URM students. Given that current choices of graduate URM students trend outside of academia (<https://elifesciences.org/articles/48774>), a robust system of mentoring might be encouraged (as well as strong support for a crossover into professional graduate degrees). The Graduate School, in coordination with the Office of Development and the Deans of Colleges, should launch a campaign to increase the number of scholarships and fellowships specifically oriented to URM groups (such as the existing Albert C. Yates Fellowship Program) and to apply for funds such as those offered by LSAMP/NSF (LSAMP)/NSF: <https://www.nsf.gov/pubs/2020/nsf20590/nsf20590.htm>).

*Recommendation 6: The Graduate School needs to maximize its access, interpretation, and leveraging of data banks.* The new dean/graduate school should regularly survey current graduate students to maintain a pulse on their needs, satisfaction levels, and experiences. Moreover, the graduate school should employ data banks and exit assessments (as well as future data probes) to establish the career success of its students after graduation, as a way to inform public conversations with other deans and Heads of units about opportunities for growth or retrenchments.

*Recommendation 7: Create new revenue streams by incentivizing Professional Degrees.* The Graduate School should promote the creation of professional graduate degrees that are

revenue producing, especially in the online markets (masters and terminal). In line with the dean's role as a facilitator, the Graduate School should take the lead in bringing together programs and units across the campus and explore multiple collaborations internal to the university and external to it. For example, it might stimulate the creation of advanced degrees in collaboration with industry partners in the greater Cincinnati area (P&G, General Electric, etc.), via a mixed model that allows students to gain both theoretical knowledge in the classroom and practical experience in their chosen industry. The Provost's and CFO's offices should seek ways to incentivize the growth of such programs by maintaining the revenue streams outside of the Performance Based Budgeting (PBB) model, and allow units that are proposing them to reinvest in new faculty and programming that support the growth of these programs.

## The Students

*Recommendation 1: The Graduate School should expand the professional development and career guidance resources for graduate students.* The focus of the professional development work in the Graduate School should be balanced between providing graduate students with support for how to best prepare for traditional academic markets *and* training them for non-academic careers. There should be robust investment in Alt-Academic career preparation, including opportunities for interdisciplinary credentialing and certification. As a side note, the Graduate School, in partnership with other university entities and offices dedicated to inclusive practices, needs to provide training for both faculty and students in how to avoid the endemic issues of mentor/mentee abuses and bullying that have become central to much of our current graduate education. Professionally, the Graduate School should work to build a community of student-scholars that promotes values of inclusion and diversity. It should champion graduate students and graduate education and concentrate our efforts on helping graduate students have a holistic experience on the UC campus. As part of its career-preparation efforts, it should apply the Bearcat Promise to train successful scholars, researchers, and professionals. This goal can be advanced by creating additional competitive, internal research fellowships for students; and by establishing an office to help students find external fellowships as well as socialize students to use institutional research support, and career advising and career support, such as those already available on campus, like the Bearcat Promise Career Studio (see "The Graduate School," Recommendation 1.f). In promoting and collaborating in the implementation of the Bearcat Promise, the Graduate School should have a central role in being the champion of graduate students, graduate research, and graduate education across the university.

*Recommendation 2: Students need better financial and medical support to address their Health needs.* While the university has supported Graduate Student Health Insurance (GSHI) Award coverage at the rate of 70% of the cost of the single-student health insurance premium, and recently made an investment to do so for full-time students with a graduate assistantship appointment or certain fellowships, our support leaves us still trailing other universities. GSHI coverage should be expanded to be on par with benchmark institutions. In addition, a solution should be found to enable students, who have completed their coursework and are on reduced

student credit hours because they are dissertating, to be eligible for the health insurance subsidy provided by the Graduate School. On a different but related front, the Graduate School and the university must provide better mental health support to graduate students. The Graduate School like the rest of our institution needs to prioritize and invest in the mental health needs of our students. Ongoing surveys, needs assessments, investment, and action should center around the unique challenges to mental health and well-being faced by our graduate student population. The university should strongly consider funding mental health counselors embedded in the Graduate School who have expertise with the educational and professional challenges facing graduate students in all professional fields. Finally, the Graduate School itself needs to create new programming that: a) trains faculty to support better the mental health and success of students; b) recognizes the unique mental health challenges faced by graduate students and ensures that the appropriate resources are in place to facilitate student wellbeing; c) promotes a sense of community among graduate students and provides strong support for students' overall quality of life.

*Recommendation 3: Graduate Assistantship Stipends need to become competitive with peer and regional competitors.* The issue of student stipends is one that continues to loom large for our graduate students. While this year's adjustment was a welcome step forward, the current stipends are not competitive to attract the best students to our programs, and force departments and colleges into difficult balancing acts between the competing interests of graduate program growth advocated by the President and the pooling of scarce resources to give a more select group of students better financial incentives to come to UC. The Graduate Dean, the Provost, and the President should come together and rank the priorities that will allow UC to balance the desire for more expansive graduate programming, the creation of new revenue-producing support for our graduate programs, and the recruitment of top graduate student talent. If maintaining (and possibly raising) the talent-acquisition of graduate students ranks high, the Graduate School should consider cost-of-living adjustments annually and should address how to find new revenue streams for graduate students in non-conventional areas (industry partnerships, government grants, etc.).

*Recommendation 4: Create a physically distinct Graduate Student Center.* A center that operates as the magnet for graduate student activities should be a priority for graduate life at UC. The establishment of a Graduate Student Center would address many of the issues outlined in the report. It would provide interdisciplinary socialization and community-building; it also would allow for workshops addressing a variety of needs for our graduate students. Alternately, by placing the administrative leadership and staffing in the center, it would provide a "one-stop" home for students to address a variety of their concerns in a holistic way to further their studies and careers (e.g., internal and external grant funding, Co-op and internship opportunities, financial aid and health benefits, mental health consultations, etc.).

*Recommendation 5: Increased collaboration and coordination with the Office of the Vice-President for Research.* Defined by academic integrity, rigor, and commitment to exploration and problem-solving, graduate education at UC should be embedded in traditional research orientation, even as it continues to explore the future and alt-academic career pathways. This

requires direct partnerships with the Office of the Vice-President for Research. We recommend, for example, that as the VP for Research continues expansion of the Research 2030 initiatives, funding be devoted to incorporate graduate students in its sponsoring activities, such as those related to the Digital and Urban Futures goals (e.g., create the opportunity for graduate students to compete in interdisciplinary research proposals with space assigned in the new building). In addition, the Graduate School should help create pathways for graduate students to increase their academic job market competitiveness by helping Colleges open opportunities for interdisciplinary work – in the form of interdisciplinary degrees and/or opportunities for obtaining supplemental credentials in the form of certificates (data science, languages, IT, legal studies, and others), as well as helping Colleges promote creation of interdisciplinary research teams, to give students hands on research experience early on in their graduate careers.

## **H. Conclusion:**

Throughout our investigation of the different levels of membership in the affairs of the graduate school, we found great enthusiasm for the work being undertaken to redefine graduate education at UC, in line with the principles of Next Lives Here, but also generally as a foundational aspect of who we are as a Research-1 institution. From upper to middle administration, from faculty to graduate students and staff, constituents engaged vigorously with our charge. Equally obvious was a general dissatisfaction with the Graduate School as it currently represents itself.

The Graduate School needs a visionary dean who breaks barriers and works collaboratively to create interdisciplinary degrees and opportunities for students, as well as lead units into rethinking how they prepare students for a future after graduation that includes non-academic pathways. And the Graduate School, as a whole, needs to eliminate barriers and diminish roadblocks for students as they work on their degrees. Essential for the latter are conversations with the Board of Trustees to simplify the byzantine tangle of policies and constraints faculty, students, and colleges much confront while attempting to modernize graduate education at the university.

On the positive side, we felt great enthusiasm especially on the part of graduate students and faculty for the work we were doing in providing the opportunity to speak about visionary and transformational opportunities for how we do graduate education on campus. While the current budgetary and societal crises that are affecting the university as well as our communities might seem like an impediment to fulfilling these optimistic goals, we believe that our university community is ready to embrace an overhaul of our graduate education via a minimal amount of investments and the creation of a leadership structure that is cooperative and open to interdisciplinary and inter-community partnerships.

## **APPENDIX A: SUB-GROUP ANALYSIS OF BENCHMARK INSTITUTIONS**

# Inquiry into Benchmarking Institutions

## Introduction

The Graduate School Re-Envisioning Committee was charged with providing an overview and recommendations that might guide innovative approaches to graduate education at UC for the foreseeable future. As part of this task, our sub-group consulted with benchmark institutions to explore trends and innovations in the field.

The Provost's Office indicated that the following ten institutions function as benchmarks:

1. Georgia Tech, Atlanta, Georgia
2. Ohio State University, Columbus, Ohio
3. Temple University, Philadelphia, Pennsylvania
4. University of California San Diego, San Diego, California
5. University of Illinois at Chicago, Chicago, Illinois
6. University of Minnesota, Minneapolis, Minnesota
7. University of Pittsburgh, Pittsburgh, Pennsylvania
8. University of South Florida, Tampa, Florida
9. University of Washington, Seattle, Washington
10. University of Michigan, Ann Arbor, Michigan

Our initial inquiries produced a series of names and addresses for Deans and/or Vice-Provosts for Graduate Education at each of the above-mentioned universities, which we decided to contact with an initial set of requests for communication and exchanges that included the following 6 questions we developed in consultation with the whole Re-Envisioning Committee:

1. Can you share with us an organizational chart of your unit, as well as the number of employees (full-time, part-time, and others, ex. student workers and graduate assistants)?
2. Does your unit have a strategic plan or strategic directions? If yes, what are the most important topics and metrics adopted? What's the length (year span) of the plan? Can you share the document with us?
3. Given the current panorama for graduate education in this country (as a mix of traditional and professional degrees), what are unique strategies your institution, particularly your Graduate School, has implemented that distinguish your graduate education regionally, nationally and globally?
4. Where do you think the greatest transformations lie in how graduate education will move forward in the coming decades? Given your experiences, how do offices of graduate studies need to adapt to get there?
5. Can you share with us a whole picture of your graduate education funding base? What's your role in augmenting funding bases, and how do you deal with potential fundraising conflict between academic colleges?
6. With regards to student support, which of the following does your unit prioritize: a) finances, b) mental and physical health, c) mentoring/professional development, 4) academics?

To ensure that our request be taken seriously and given the appropriate consideration, we asked Provost Kristie Nelson to send the following message to the selected contacts at these institutions on July 1, 2020:

*Dear Dean \*\*\*\*,*

*The University of Cincinnati is searching for a Dean of the Graduate School. As part of the process, I have established a committee chaired by Vice Provost for Digital Scholarship, Dean, and University Librarian Xuemao Wang. The committee, composed of faculty and staff from various University of Cincinnati colleges, has been charged with creating an inspirational new graduate education framework, which will guide UC's graduate education for the next 5-10 years.*

*Your university is considered a benchmark institution by UC, and has a reputable graduate program, which is why I am writing to ask for your insight and opinions regarding important issues facing graduate education.*

*Your time is extremely valuable, but if you could please take a few moments to answer six planning questions listed below, I would be most appreciative. Please copy [danilo.palazzo@uc.edu](mailto:danilo.palazzo@uc.edu) with your responses. If you prefer to share your thoughts via phone, we can schedule a 30-minute conversation with a committee member. Please reach out to [danilo.palazzo@uc.edu](mailto:danilo.palazzo@uc.edu) to schedule time. If you are not able to personally help us answer the questions, I would request that you please delegate the task to someone who can help.*

*Thank you in advance for your partnership and guidance as we work to enhance graduate education at UC.*

*Regards,*

*Kristi Nelson*

*Kristi A. Nelson  
Executive Vice President for Academic Affairs and Provost  
University of Cincinnati  
210 Van Wormer Hall  
Cincinnati, Ohio 45221-0097  
Phone: 513-556-2588*

Those who did not initially respond to our request were sent a reminder on July 17<sup>th</sup>  
The table that follows accounts for responses as of 09/06/2020:

<b>University</b>	<b>Did they answer the invite?</b>	<b>Mode of interaction with the Dean of the Grad School</b>	<b>Did they provide other materials and documents?</b>
Georgia Tech	No		
Ohio State University	Yes	In person interview	Yes
Temple University	Yes	Email	Yes
University of California San Diego	Yes	In person interview	No

University of Illinois at Chicago	No		
University of Minnesota	Yes	Email	Yes
University of Pittsburgh	Yes	Email	
University of South Florida	Yes	Email	Yes
University of Washington	No		
University of Michigan	Yes	Email	

In summary, seven out of ten institutions responded. Two Deans accepted to be interviewed via WebEx: UCSD Graduate Division Dean [REDACTED] and OSU Vice Provost for Graduate Studies and Dean of the Graduate School [REDACTED]. The interviews lasted 30-minutes and were recorded with the deans' permission. OSU Dean [REDACTED] followed the in-person interview with additional answers via email and supporting documentation. Five Deans responded via email to our questions, occasionally providing links to documents or attaching them with their replies.

The exception was the University of Pittsburgh, which replied to our request as follows:

*From: Graduate Email <graduate@pitt.edu>  
Sent: Monday, July 6, 2020 2:31 PM  
To: Nelson, Kristi (nelsonka) <nelsonka@ucmail.uc.edu>  
Subject: RE: Grad School Peer Survey*

*The University of Pittsburgh does not have a centralized graduate school, our graduate programs are varied and are run by each school or department independently. As such, we will not be able to provide a response to the questions below.*

*Best Regards,*  
[REDACTED]

Therefore, we didn't follow up or included the University of Pittsburgh in this report.

The response of the Senior Vice Provost & Dean of Graduate Studies at the University of South Florida, [REDACTED], is also worth including because it refers to a model of decentralization in progress:

*Hello to You All –*

*I fear that you may find my response less than useful in many respects, given the questions posed below. In Fall 2013, the then Graduate School at the University of South Florida was reorganized into an Office of Graduate Studies (OGS). My duties as Senior Vice Provost was expanded to include being the Dean of this office. (Let me say that this has worked only because I have a wonderful Associate Dean.) Graduate Admissions was moved to our general Admissions Office with a unit dedicated to Graduate Admissions work. Accelerating a trend that was already under way, much of the day to day operations of graduate education were shifted to the Colleges, and in many cases, to the departmental level. Graduate tuition waivers that had been distributed by the Graduate School were made the domain of the Colleges, each of which was left with determining how many they could afford to award. Hence, graduate education at*

*USF is quite decentralized. The mission of OGS was transformed into a service organization responsible for assisting and facilitating the efforts of those delivering graduate programs. Important to our mission, we became de facto gatekeepers ensuring that all university policies and regulations are being followed in the administration of those programs. Our task in that regard has been made even more complicated (some would say challenging) as of the first of this month when two previously separately accredited branch campuses (in St. Petersburg and Sarasota), on the basis of a legislative directive, gave up their separate accreditations and consolidated with the main campus in Tampa of USF. Each of those programs had graduate offerings, so we have had to merge them with the existing programs in Tampa. As a last note, OGS has domain over all graduate programs at USG except the MD program that is wholly administered and overseen by the College of Medicine.*

*Interestingly, the current structure has recently come under some critical appraisal, and there is some advocacy for reestablishing the office to “School” level (we don’t use the term “College” because that specifies a degree granting entity). However, there is a concession that a number of aspects of decentralization, with OGS providing oversight, has actually worked quite well, so I’m skeptical that there will be a wholesale restoration of the previous structure. I provide this context because it will help account for some of the paucity of information provided in response to the questions you pose.*

*My best to you in your efforts and search.*

Despite [REDACTED] premise, he offered answers to some questions and therefore we included his answers, when pertinent, in the report.

## Answers to questions

In the following paragraphs, we analyze separately the answers to the six questions, providing an overall analysis at the end of the report.

Question 1. Can you share with us an organizational chart of your unit, as well as the number of employees (full-time, part-time, and others, ex. student workers and graduate assistants)?

### UC Graduate School

For context, the [University of Cincinnati Graduate School staff](#) currently comprises:

- Dean
- Associate dean (half-time appointment in Graduate School, half-time faculty appointment in Department of Chemistry)
- 12 full-time staff who are 100% dedicated to the Graduate School (not listed: recent hire for graduation/certification)
- 3 full-time staff who support multiple provostial offices, including the GS
- 7 GA positions (20 hours/week)
- 2 student workers (10-15 hours/week)

### [Unofficial org chart for Graduate School](#)

As of Fall 2019, UC had 9,827 enrolled graduate students (21.2% of the UC student population).<sup>1</sup> At UC, “graduate student” currently refers to students with “GRAD career” in Catalyst, which includes all master’s students; graduate certificate students; doctoral students in PhD, AuD, DMA, DMP, DNP, DPT, EdD, and PharmD programs; and non-matriculated students who have already earned a bachelor’s degree and therefore have a “GRAD career.”

The number does not include MD students (“MED career”) or JD students (“LAW career”), and UC’s Graduate School has no authority nor oversight over the MD and JD programs. For the purpose of accurately comparing UC with other institutions where these graduate/professional students are included, in the Fall of 2019 UC had 1,063 professional students (2.3% of the UC student population) for a total of 10,890 graduate/professional students (23.5%) enrolled for Fall 2019.

The definition of “professional student” itself varies from institution to institution. Among the institutions we examined, the distinction is often drawn between “academic doctorates”/“doctoral-research” and “professional doctorates”/“doctoral-practice.” The AuD, DMP, DNP, DPT, and PharmD, which are included in our “GRAD career,” are considered “professional” programs by some other institutions.

### **Ohio State University ([OSU’s Graduate School organizational chart \(January 2020\)](#) attached).**

In addition to Dean [REDACTED], OSU’s graduate school lists 23 staff positions (including one associate dean and three assistant deans), 1 graduate assistant, and 2 student workers. Separate, but reporting to the Graduate School, are the interdisciplinary graduate programs, which are overseen by the Graduate School, which are supervised by 5 program directors and run by 5 corresponding program coordinators. The chart also lists 8 partners that are independent of the Graduate School hierarchical structure.

In Fall 2019, OSU reported 11,305 graduate students (16.6% of the OSU student population) and 3,288 professional students (4.8%), for a total of 14,593 graduate/professional students (21.4%).<sup>2</sup>

### **Temple University**

See [Temple’s GS organizational chart](#) and [Temple’s GS staff directory](#). Not including VP [REDACTED], the chart and staff directory list 9 Graduate School staff members. No GAs nor student workers are listed.

For Fall 2019, Temple University reported 6,753 graduate students (17.3% of the student population) and 3,448 professional students (8.8%), for a total of 10,201 graduate/professional students (26.1%).<sup>3</sup> Temple University has professional schools for Dentistry, Law, Medicine, Pharmacy, and Podiatric Medicine, hence their large number of professional students in relation to their graduate students.

### University of California San Diego

In our interview with Dean [REDACTED], he explained that the UCSD Graduate Division executive team includes him, and 2 assistant deans. Then, “underneath the associate deans fall the academic affairs functions of the graduate division and the student affairs functions of the graduate division.”

However, the grad.ucsd.edu website’s [staff directory](#) lists Dean [REDACTED] 2 assistant deans, an associate dean, 32 staff, and 8 student workers. The dean explained that the staff are organized into four general groups: recruitment/admissions, advising/academic affairs, professional development, and graduation.

For Fall 2019, UCSD reported a total of 6,333 graduate (master’s and doctoral) students (16.3% of the student population) and 1,605 professional students (clinical residents, and MD and pharmacy students) equal to 4.1%. Non-degree-seeking students are not listed as their own category but are presumably included in the total count for graduate/professional students of 8,037 (20.7%).<sup>4</sup>

### University of Michigan

Per Dean [REDACTED], “Please see the following link for an organizational chart: <https://spg.umich.edu/org-charts/490000>. The full-time staff of the graduate school is about 70.”

For Fall 2019, U of M reports a total of 16,824 graduate/professional students at its Ann Arbor main campus (35% of the campus student population).<sup>4</sup> Across all U of M campuses, the Fall 2019 enrollment was 17,587 graduate students (27.2% of the entire U of M student population) and 2,953 professional students (4.6%), for a total of 20,540 graduate/professional students (31.8%).<sup>5</sup>

### University of Minnesota

See the [University of Minnesota Graduate School organizational chart](#). In addition to Dean [REDACTED], the org chart lists 11 “leadership team members,” 18 staff, 4 graduate administrative fellows, and 2 undergrad administrative assistants.

For Fall 2019, UMinn reported across all of their campuses 12,726 graduate students (19.0% of the student population) and 4,214 professional students (6.3%), for a total of 16,940 graduate/professional students (25.3%).<sup>6</sup> All non-matriculated students are counted separately from undergrad/grad/professional, regardless of education history.

### University of South Florida

Dean [REDACTED] directed us to the [USF Office of Graduate Studies Organizational Charts webpage](#) and provided the following additional context: “[The first link found here](#) demonstrates the administrative complexity of the current arrangement. The other two links show the actual staffing at the [Tampa](#) and [St. Petersburg](#) campuses. The Sarasota campus has a single Associate Campus Dean for Graduate Studies. All told, there are 20 persons assigned to Tampa (one position has been added since this chart was constructed), 8 in St. Petersburg, and 1 in Sarasota.”

For Fall 2019, USF reported a total of 11,358 graduate students (22.3%) and 719 MD students (1.4%), for a total of 12,077 graduate/professional students (23.7%).<sup>6</sup>

Question 2. Does your unit have a strategic plan or strategic directions? If yes, what are the most important topics and metrics adopted? What's the length (year span) of the plan? Can you share the document with us?

### Ohio State University

Dean ██████ in her interview with us, reported that the Provost created a document called *Campus Conversation* (August 2017) with “the purpose [...] to develop a collective vision for graduate education over the next decade at Ohio State, to align stakeholders along common goals, and to produce a document that will provide direction to the next leader of the Graduate School. Stakeholders in this effort also included administrators and support units such as the Graduate School, career services offices, the Office of International Affairs, the Office of Diversity and Inclusion, the Office of Student Life, and University Center for the Advancement of Teaching.” *Campus Conversation* was followed by an *Implementation Report* (issued on December 2018).

The Graduate School hired a facilitator to help structure the Campus Conversation process and to identify the best methods for engaging the graduate community.

The document identifies three main areas:

- Diversity and Inclusion.
- Professional Development; and
- Funding Environment.

Each of these is presented through: Goal description; Context (how to interpret the topic); Themes (some synthetic sentences to frame the topic); Direction (what the accomplishment of the goals might produce); Roadmap (the process to reach the goal).

An Implementation Report provides updates on the pathways. The Implementation Report, signed by the new Dean of the Graduate School ██████, includes three new initiatives:

- *Leadership*: Several hires and realignments of job responsibilities within the Graduate School were, in part, stimulated by needs identified in the Campus Conversations.
- *Funding*: new endowment and new goals for graduate students, including a commitment “to enhance the Campus Conversation 10-year goal to fund 100% of incoming doctoral students and the majority of masters students for all years they are at Ohio State.”
- *Activities for advancement, an inclusive environment, and sense of community for graduate students at Ohio State*: Many of the issues identified within Campus Conversations and at the Forums contained elements centered on greater communication, clarity, guidance and leadership from the Graduate School to programs; and a mechanism for continued interaction and input from programs.

The OSU Graduate School also has a Vision and Mission Statement, with the Mission of the Graduate school being described as follows:

The Graduate School exists to provide a central resource to prepare and sustain graduate programs for excellence, ensure the integrity and quality of the graduate programs, share knowledge and best practices to support the advancement of graduate students and programs, nurture career development and a positive culture for the next generation of learned scholars, such that our alumni value their education, and appreciate the importance of their graduate colleagues and programs.

### Temple University

As stated in an email reply, the mission of Temple University's Graduate School is to provide outstanding education and training to its students in preparation for their academic and professional careers in the regional, national, and global arenas. The Graduate School aims to recruit superior students; to provide them with excellent teaching and training as well as research opportunities; and to prepare them to become part of the next generation of domestic and global academic and professional leaders. To accomplish this mission, the Graduate School recognizes that, like all major components of the University, it must value excellence, integrity, collaboration, inclusiveness, and innovation while fostering a creative environment that keeps graduate programs innovative, vibrant, and forward-thinking.

There is no reference to a strategic plan for the Graduate School in the email answer or in the Temple University Graduate School website.

### University of California San Diego

During our interview on July 15<sup>th</sup>, [REDACTED], UC San Diego Graduate Division Dean, said the UC San Diego does not have a Strategic Plan, not because they "are allergic to it" but because he has been a Dean for less than a year. However, they do have Strategic Directions for the entire university. Two of these directions are very important to the Graduate School:

1. *The Graduate Funding Reform*: The goal is to have all incoming PhD and MFA students fully funded by Fall 2021 (5-year funding for PhD students, and 3-year for MFA ones). They have started conversations with Deans and Program Directors to understand the potential revenue and streams necessary to make this a reality. They are also looking at TAships and their allocations, program by program. They are looking at all the undergraduate programs to understand the different need for Teaching Assistantships. The funds will come from different sources (fellowships, grants, and different forms of research and teaching assistantships).
2. *Breaking Down the Structural Barriers*: A comprehensive analysis of how students are recruited and retained to encourage more underrepresented students to apply. One area of analysis is the use of standardized tests as barriers to URM enrollment (the Grad School is in conversation with departments about allowing them to decide if to use or not standardized tests...almost twenty departments have already decided not to use the GRE test). The analysis is also reviewing mentoring practices and programs, and how to train faculty to be better mentors for students. Finally, the review is exploring how to prepare the students for traditional and new professional markets. The objective is to modernize their approach in each of these areas.

## University of Michigan

Dean [REDACTED] said in his email reply that the school has a Strategic Vision for Graduate Education (available at <https://rackham.umich.edu/about/strategic-vision/>). According to the document, the mission of the School is:

“...to partner with University of Michigan graduate faculty and programs to advance excellence in graduate education, to cultivate a vibrant and diverse student community, and to impact the public good through the scholarship and discoveries of its students and degree recipients.”

The vision is:

“...that all of the graduate school’s partners—faculty, students, alumni, and staff—will embrace their membership in the Rackham community and collaborate to promote excellence, diversity, innovation, and a student-centered academic experience in graduate education. To realize a student-centered experience, faculty members incorporate the educational, scholarly, and professional goals and potential of individual students into the design of curriculum, research, and mentoring.”

In order to achieve the vision, the document has four goals each one with more fine-grain objectives:

1. *Goal 1: Reimagined Academic Experience:* Rackham and the graduate faculty will continue to advance high academic standards while reimagining the graduate academic experience as student-centered.
2. *Goal 2: Strengthened Diversity:* The vitality of the graduate student community will be strengthened through increased accessibility to graduate education, thereby expanding the diversity and inclusion of student viewpoints and backgrounds in graduate programs.
3. *Goal 3: Enhanced Partnerships and Community:* Members of the Rackham community will recognize, value, and capitalize on their community membership.
4. *Goal 4: Strengthened Organizational Culture and Climate:* The Rackham organization will be configured to promote staff learning, recognition, collaboration, informational transparency, and empowerment.

## University of Minnesota

[REDACTED], Vice Provost and Dean of Graduate Education attached to his answers to the questions via email the Graduate School Strategic Plan 2020-2025.

The mission of the Graduate School is:

“To facilitate and advocate for excellence in graduate education and postdoctoral training.”

The strategic objectives are four:

1. *Diversity:* Increase the diversity of students receiving graduate degrees & postdoctoral training.
2. *Advocacy:* Advocate for, recognize, support and reward excellence in graduate education & postdoctoral training.
3. *Service:* Provide consistently exceptional service to graduate students, postdoctoral scholars, graduate programs, colleges and campuses.
4. *Best practices:* Increase innovation of best practices in graduate education & postdoctoral training.

The two pages summary document also provides brief descriptions of Strategic Initiatives to be developed to fulfill the vision and the strategic objectives and a list of ongoing strategic initiatives.

## University of South Florida

██████████, Senior Vice Provost & Dean, Office of Graduate Studies replied in his email: “No, we do not have a strategic plan. I have linked here our annual report because it provides a more detailed look at our activities...” (<https://www.usf.edu/graduate-studies/documents/usf-graduate-studies-annual-report-2019-2020.pdf>.)

The annual report, dated May 2020, reports about Graduate Enrollment Trends, Students Diversity, Graduate Assistantships, Annual Graduate Fellowships awarded, Degrees conferred, Postdoctoral Affairs, Professional Development, and other initiatives such as luncheons and competitions.

Question 3. Given the current panorama for graduate education in this country (as a mix of traditional and professional degrees), what are unique strategies your institution, particularly your Graduate School, has implemented that distinguish your graduate education regionally, nationally and globally?

## Ohio State University

The Dean, in her interview, said that the most important strategies are the following two:

1. *Inclusive Excellence* and,
2. *The Development of budget model for PhD interdisciplinary programs* (full cross-disciplinary programs), that adds up to interdisciplinary specializations already available at the Master level (that are not managed by the Grad school but directly within home Colleges). OSU has currently six Interdisciplinary programs (one is Molecular Cellular Development Biology) and they are working on another one. The Graduate School manages the budget of these interdisciplinary programs. Central [administration] has contributed funds to these initiatives (and this is one reason why Colleges want to be involved). Graduate School and Colleges sign an MOU to define the budget model for these programs. Grad school operates as a neutral territory. Five programs are managed this way. The sixth is different, since the program is managed by an Institute [Translational data and analytics] that owns a program. There is another program that is under development that involves the Sustainability Institute. These last two programs will probably need a specific arrangement to get them to work.

## Temple University

Dean ██████████ did not offer an answer to this question in the email he provided.

## University of California San Diego

In the interview ██████████ said that UCSD is largely oriented toward traditional research graduate education. University of California university system consider itself one of the Premiere Research Institute in the world. Students know that they can access premiere research facilities and that they can work with internationally renowned experts. Therefore, the model is rooted in research in

order to prepare the next cadre of researchers and providing them the necessary skills to be successful in their fields.

Unfortunately, the dean added, our schools are too embedded in this model that worked well in the past decades, when there were more tenure track jobs, which is not the case anymore. For this reason, UCSD is challenging all units to think differently about their programs: while maintaining the previous rigor, the goal is to prepare the students with skill sets that will allow them to work with private firms outside of academia (for example, they have thousands of bio-tech firms in the Greater San Diego area, and UCSD is in partnerships with some companies to place the students during their graduate years). The Grad School is also challenging the Social Sciences programs to think around the same model.

██████████ thinks (and he added, “I can be proved wrong”) that most PhD students in Science-related fields come with no expectations or desire to work in traditional academic jobs. They are looking to private firms and/or organizations, or to create start-ups, where salaries are much more lucrative than in academia. The dean pointed out that many of the faculty have their own companies, so students come in and see a combination of research rigor and entrepreneurship that can work. This model is less evident in the humanities and social sciences fields, where the expectations from the PhD students are to find positions in traditional academic roles. The latter expectation causes issues about how to control admittance into these programs so as to not overflow the market. Ideally, enrollment management needs to be applied to these situations. These trends are equally distributed for national and international students at UCSD.

In term of professional programs, UCSD is relatively young (the campus is 60-years old) so they are still in a growth mindset. They have fairly new schools (business, public policy) and they just received a large donation to name their brand-new School of Public Health. They are in growth mode.

## University of Michigan

Rackham Graduate School Dean ██████████ provided a link to a video recorded in 2019 about his remarks upon the launch of the graduate school's strategic vision. In the video he summarized his thinking about the nature of the transformation.

Dean ██████████ highlighted “few of the most pressing dynamics” that should inform the Grad school vision of the future (our Italics):

- I think perhaps the most important pressure is that there's a *mismatch between the idea of this apprenticeship model and what our students are actually doing with their degrees.*”

Our data show that more than *half of Michigan doctoral recipients pursue careers that are not on the tenure track*. This, to me, represents a tremendous source of success. The skills and understanding that our students are developing can contribute in a variety of sectors, in the private sector, in nonprofits, in government service, and indeed in academia.

It's true that *the number of PhD's produced each year outpaces the number of available academic positions in some fields*. And furthermore, I think it's fair to say that attaining an academic position has become extremely competitive in nearly all fields. I think there's another dimension however, to consider as well, which is that many of our students already arrive here tending to seek careers outside the academy. Of course, they come here to perform excellent research and scholarship with faculty, but their desired career paths are not in academia. And even in cases where they are seeking roles in a university setting, students might well be drawn to roles that are different than the ones that we ourselves as faculty hold.

- *Master's training has struggled to keep up with the changing needs for society* and to develop new programs in emerging fields as well as to accommodate the growing number of students

who want to seek research-based master's degrees. We can really ask the question: do we have the educational methods and systems that can keep up with the pace of change of master's education?

There is *increased public skepticism about the benefits of evidence-based research*. There are growing *concerns about the affordability of graduate education*. There are reports about *challenges around the mental health of graduate students* that have been appearing with increasing frequency in the national and trade quest. And in fact, some of our own data here at the University of Michigan find instances of depression and anxiety presenting at a very high rate among graduate students. And finally, *there are rare but unacceptable instances of misuse or abuse of the faculty student relationship* that is really central and core to this model.

- We can respond to these pressures by *seeking to transform the model of graduate education*.

How will we address the complex society problems now in 2020 and 2030 and 2050 without the deep advanced training that we provide our students that we mentor and train?

The University of Michigan itself is a unique place to undertake this work. We understand the nature of the pressures we are facing. *We have good data* that identifies them.

We see our role at Rackham as *supporting this movement*. It's consistent with *our mission, which is to support the graduate student experience and the discoveries of our students*. It's consistent with our values of intellectual exchange, innovation, and evidence-based practices.

So, in rethinking graduate education in this way, we have three beliefs:

The first is that *graduate education should be student centered*. The key point is that students have the space for their own aspirations to be incorporated into their curriculum and their education goals as they work with faculty. I think placing students at the center in this way recognizes the changing circumstances and challenges that our students face in pursuing their scholarly interests and their career pathways.

Second, I think *this innovation to support the graduate academic enterprise should be faculty-led*.

Emphasizing the importance of faculty leadership recognizes the disciplinary diversity of our campus, the fact that curriculum is best tailored to the specific needs of students by the faculty members who create, work, innovate, and collaborate with students in those fields.

Third, I think *this work should be supported by Rackham*. This support is so that faculty can have the assistance and partnership to develop ideas and move them forward. This is indeed Rackham's mission and one that we pursue collaboratively around the university.

The Dean then offered some examples of these initiatives such as:

a faculty-led collaboration that is bringing together teams of students from environmental engineering and the Taubman College of Architecture and Urban Planning to collaborate on the technical and societal challenges of planning, building, and managing wastewater and storm water system and urban environments.

As another example, in the Ford School, teams of public policy master's students are participating in what is called the strategic public policy consulting course. In the course, they apply classroom knowledge to work on projects with partners in real-world settings as well as gain new skills and experiences that employers value. So, this kind of work has included collaborations with the City of Ann Arbor, the Washtenaw Intermediate School District, and the downtown Detroit partnership. And the Ford School has recently opened up this course to graduate students and other UM professional programs, and here as well, there's tremendous opportunity which is to connect research-based degree students, doctoral students, research-based Master's students with professional schools. Both of these communities have something to learn from each other and the Ford's program is an example of that.

As a final example, (I would like to talk about) the neuroscience graduate program, which collaborates with CRLT players, and these are two players that you're seeing acting here, they recently implemented

a new workshop that implements a requirement that faculty and doctoral students undergo directed training to address issues related to gender harassment. They learn how to recognize gender harassment, how to change behaviors related to it, and how to intervene in instances in which it occurs.

So, now, I would like to take a moment to highlight two current Rackham efforts [...]. The first is Rackham has longstanding interest in making internship experiences available to graduate students across campus and also to offer a variety of models that meets the needs of students and programs because the academic experience varies across the academy.

So, in an early phase with support from the Mellon Foundation, Rackham funded internships for professional development in the humanities and the social sciences. Rackham works with partner organizations, for example, museums, community foundations, and nonprofits to create intellectually interesting and rigorous and mutually beneficial projects where organization value the contributions of these graduate students as they participate during internships. Starting this year, Rackham is extending support for students doing this internship into the biological sciences, and we're also experimenting with ideas about offering them during the academic term so that these opportunities can be regularly available and incorporated into the flow of the curriculum and the academic progress of students. We think these internships can be particularly valuable to individuals seeking a PhD in the biosciences, because in those fields, there's a broad range of careers available but graduation rates outpace the growth of tenure-track positions.

As a second example, I like to mention our diversity equity inclusion certificate. We've heard from all sectors, academia, industry, nonprofits, about the value of training, fluency, experience in the issues of diversity, equity, and inclusion. We've created a certificate here at Rackham that responds to those national trends and those institutional needs. We've developed co-curriculum that operates along a number of tracks in which students, graduate students, and post-graduate fellows can explore D, E, and I. This has been a really tremendously successful and very popular program. To date, 314 graduate students and post-doctoral fellows from 17 schools and colleges have rolled in the program, and 108 have completed the certificate. And this is a program that is just beginning its third year.

So, again, this is another example, I think, in which we see that in addition to the deep disciplinary training that is offered to our students, there's this additional interest for complementary coeducational activities of a variety of kinds that augment the experience of students.

The strategic vision for graduate education has been already described before in this document ([see Question 2, University of Michigan.](#))

Here some examples of programs that have grown out of our planning in the last year are launching now.

The first are a set of *M-cube diamond projects*. We held a symposium in May about research-based innovation and graduate education. As a result of that, we stood up a call for M-cubed diamond projects, which are fully supported by Rackham to engage in research-based innovation and graduate education. We've just funded the first four proposals within that call. This will be, the aim of this work will be to augment curriculum and academic experience from research-based ideas for both master's and doctoral students.

A second project that's launching now is our *Graduate Student Mental Health Task Force*. This is a project conducted by a team comprised of graduate faculty, graduate students, and mental health professionals. It's led by [REDACTED] from ecology and evolutionary biology, and its goal is to

develop actionable ideas that can be used to support graduate students in their mental health and their academic progress as they undergo their degrees.

Our third initiative that is launching now is a review of the *Rackham Merit Fellowship Program*. The RMF program is our premier recruiting fellowship, it has materially affected the diversity of the Rackham student population. It's been a program that has been successful for 20 years. We think it's an opportune time now to review this program and align its goals with our current efforts and interests in needs and D, E, and I, so that it stood up now for success for the next 20 years.

## University of Minnesota

██████████, Vice Provost and Dean of Graduate Education, answered via email to this question. Here is his answer:

Note that at the University of Minnesota, the Graduate School has responsibility only for the research master's and PhD programs (about 7500 students). The professional programs (about 9000 students) are managed primarily by the individual Academic Colleges.

The Graduate School's top priority is to increase the diversity of students receiving graduate degrees. To that end we are focused on the following broad goals:

1. *Better align graduate experiences with the career aspirations of students* – students get discouraged by news of the terrible job market (meaning low number of tenure-track faculty positions). This “news” is frequently delivered by faculty who seem convinced that they are only training students to be faculty. But the reality is that few graduate programs produce alumni all of whom will become faculty. Ten years after graduating, the majority of our alumni are not employed in higher education but the vast majority of our alumni are employed using their degree and are happy with their careers.  
The more transparent we can be about career outcomes, the more motivated students will be and the better we can align their graduate experience with their career aspirations. This is especially important as a means of supporting our efforts to diversify graduate education since a smaller percentage of students of color are interested in becoming faculty.
2. *Reduce the power differential between advisor and advisee* – Faculty have tremendous power as advisors. A small proportion actively abuse that power and the majority of the remaining faculty underestimate the magnitude of the power differential and make incorrect assumptions as a result. The smaller this power differential, the better the experience for graduate students.
3. *Improve the quality of graduate advising* – The majority of graduate faculty care deeply about their advisees but have never received any guidance on how to be an effective advisor. Indeed, most faculty confuse mentoring and advising – they think of themselves as mentors and students understand that they are actual advisors. The more effective the advisor/advisee relationship the more successful students will be.
4. *Improve the graduate education climate* – Increasing the diversity of students receiving graduate degrees is our highest priority. This means not only focusing on recruiting students from under-represented communities but also providing a climate of equity and inclusivity that maximizes their opportunity to be successful.

The following ten action steps have been or are being implemented to accomplish these four goals:

	align grad experience with career aspirations	Reduce power differential	Improve advising	Improve climate
PhD Career Outcomes Project	X			
GEAR	X			
IDP	X	X		
Mentors	X	X		X
Advisor statement		X	X	
Advisor training			X	X
Revoking privilege of advising		X	X	X
Build local communities				X
Creating Inclusive Cohorts				X
gradSERU	X		X	X

**PhD Career Outcomes Project** – *Goal is to educate faculty and prospective students about the career paths followed by alumni with each of our degrees and to better align the graduate experience with each student’s chosen career path.*

**Phase I** was contracting with Academic Analytics to find all of our PhD alumni from the last ten years, their geographic location, their title, their employer, and their employment sector. We now have those results.

**Phase II** will be contacting those alumni to ask them what advice they have for their graduate program and the university about how to better prepare students to follow the career path that they took.

**Graduate Education Resources (GEAR)** – *Goal is to use online resources to help graduate students be successful*

GEAR1 – an online orientation that consists of modules that are accessed by incoming graduate students as soon as they accept our offer and throughout their first year. Intended to help students make the transition into graduate school as efficiently and effectively as possible.

GEAR+ - an online series of modules and framework to support graduate student efforts to obtain professional development experiences of their own choosing.

**Individual Development Plans (IDP)** – *Goal is to encourage graduate students to take responsibility for thinking about their career aspirations and to develop a plan to prepare for those careers.*

**Mentors** – *Goal is to ensure that graduate students recognize the importance of having mentors and are encouraged to do so.* Graduate students need mentors (ideally selected by the student following construction of their IDP) who can provide insights that their advisor is unqualified to provide and who the student can talk with about topics that would be inappropriate with and advisor.

**Advisor Statement of Expectations** – *Goal is to encourage all graduate faculty to prepare and make available a statement of their expectations for their graduate students.* The majority of conflict between

advisors and advisees ultimately can be traced back to a poor communication of expectations – students failed to meet an expectation of which they were unaware.

**Advisor Training** – *Goal is to provide all faculty with the tools they need to be successful as advisors. We are now providing training to all new faculty and we’ve developed an online toolkit for current faculty.*

**Revoking Privilege of Advising** – *Goal is to make it clear that the institution will not tolerate abusive advisors and that graduate advising is a privilege. We are working with governance and administration to develop policies and procedures.*

**Building Local Communities** – *Goal is to provide guidance to colleges and graduate programs on how to create equitable and welcoming communities when the programs are themselves not very diverse. The Graduate School Diversity Office provides a range of consultations to individual programs.*

**Creating Inclusive Cohorts** – *Goal is to help programs quickly increase diversity with the hope that those programs will be able to continue to recruit students from diverse backgrounds as a result. The Graduate School provides recruiting fellowships to programs who can recruit multiple students from under-represented populations and can support such a cohort through graduation.*

**gradSERU** – *Goal is to provide program-level data regarding student experiences with respect to career training, power differentials, advising, and climate. This is a comprehensive survey of the student experience that we administer every other year the results of which can be compared between years and between the various SERU consortium members.*

## University of South Florida

██████████, Senior Vice Provost & Dean answered:

I think we’re just coming to grips with the reality that traditional models of graduate education are fading and that newer ones are absolutely necessary to keep us competitive and relevant. It will be the function of our office to promote and stimulate those discussions.

Question 4. Where do you think the greatest transformations lie in how graduate education will move forward in the coming decades? Given your experiences, how do offices of graduate studies need to adapt to get there?

## Quick Summary

Ohio State University	Where are we going with online PhDs? And “we need to create the student of the future”
Temple University	[not answered]
UC San Diego	“What are [graduate programs] doing to equip their students for the entrepreneurial world that these students are going to be inheriting?”

University of Michigan	Model of graduate education under many pressures & public criticisms; transformation needed in career advising (esp. for careers outside of the academy), master's training, and discussion around value of grad education.
University of Minnesota	Alt-ac career development
University of South Florida	"traditional models of graduate education are fading"

In identifying the most significant challenges/pressures currently facing graduate education, the most common theme was career development/training for the current and future job market. However, there does not seem to be a clear sense as to how *the graduate school office itself* needs to adapt to address these challenges/pressures.

For the deans who proceeded to discuss how to address these challenges/pressures, their focus is mostly on how the individual graduate programs and their graduate faculty need to adapt; they believe that the graduate school's role is to facilitate and support that change at the graduate program level. However, in these institutions, their graduate school is already operating within the framework of facilitator/supporter (or at least, that is how their deans are presenting their office's role), and work on addressing these challenges/pressures is underway, even if it is at an early phase.

Of particular note, the University of Michigan Rackham Graduate School is currently working to "rethink graduate education"; Rackham is leading the charge in this "rethinking," but the actual work is being done through partnerships with individual graduate programs, university units, and external organizations.

### Ohio State University

Dean [REDACTED]'s answer begins at 17:01 in [recorded interview video](#) with a discussion of how OSU defines distance learning ("fully online programs") and distance education ("technically under the online category, but often has fairly significant face-to-face and in-person experiences that are managed online"). She then poses the question, "where are we going with online PhDs?"

I think we have to be really cautious about this, we need to do this right. I think we don't want to accelerate this and leap and go too fast and lose any kind of dilution of what it means to have a PhD degree, and I think fundamentally, we just really need to do this right. Ohio State doesn't even have one online PhD. So, I think that we must really think this through. **We don't want PhD "Post-2020," "Post-COVID," and PhD "Before-COVID" meaning anything different—in terms of quality of what that individual knows, learns, can do for the employers (whether that is academe or industry).**

[...] I do think this is something that as both a nation, a state, and each university is going to need to really think through, as we're going to have programs want to move some of their PhDs programs to online formats. We're seeing if anything it would be through DE, definitely, not fully online. That's more the professional doctorate. But even our professional doctorates frequently have significant clinical experiences, for example, for our DNP, significant experiences for social work in the field, and they're a part of that, and they're critically reviewed and evaluated. But

most of those experiences are not happening at Ohio State, most of those experiences are happening in the community or in the field.

But what do we do about PhDs? And how does this look and what's the menu? What's the menu in terms of what it actually does as an outcome? So I see that as something we need to address in the near future. We're being pushed harder than ever to accelerate that by COVID.

In terms of other really broad educational things, I really do believe in the [convergent degree](#) [...] [Note: see video starting at 20:50 for discussion.]

[Also] we need a global education—unfortunately this is really not good times for the United States in regards to that—but we need to be well-integrated, very inclusive. We need to be world-wide [...]

Other things I think is to try to work within our own units to limit siloing—I know this is always very hard. But looking at university funding models for graduate education at a very high level and saying, what do we need to do different to try to fund graduate education? [...] Are there other things we should be looking at that will integrate graduate education in ways that is a win-win for partnerships? [Note: discussion continues at 24:45 in video.] [...] How do we partner with these other groups without losing the ability to be the central hub for education? I think that we can do that though.

*Follow up question from Danilo Palazzo:* Are you witnessing a sort of change in the PhD students looking not just for academic jobs but also being prepared to work for industries and for other players outside? Not just the usual PhD students that come into university to then stay in the academia?

*Dean [REDACTED]:* Absolutely. This is a given nationally, this is a given in the state—I will say this, we're doing well. We are part of this NSF thing where they send us our data every year. We are always several percentage points above our peers, even our aspirational peers, in getting people employed right after their degree. Not just Ohio State, but the State of Ohio! So we tend to be fairly workforce oriented, I think, in our state—I don't know if this is because we're Midwest or exactly what that is—but within our state, we are quite workforce-development oriented already. We're ahead of the curve there.

And absolutely that this concept of having to feed—it stems in certain groups. We have certain programs where this is persistent in their culture and they're resisting this change. But even they—now over the last year or two they really are understanding that we must prepare our students for where they need to go and get, whatever that is, and we need to be adaptable, and that **this is our job, as faculty, that we need to create the student of the future**. And that as academe positions—you know, we're filling them, that's great, and we do need to create top-quality academically prepared students. But we also need to prepare students that are ready to be employed at jobs that use their skills and need that high-level of understanding and that ability to know how to become an expert. That's one of the biggest things that people learn as a PhD is that, I can do this myself, I can wrap my head around this problem, I can study until I really know it at every level, and then I know who has to be pulled to the table, and I can actually get that answered, done, and disseminated. And that's really what a PhD teaches every student in terms of the fundamental core. And **our obligation as faculty, and as a Graduate School, is to facilitate all forms of education and filling the market**.

There was a statement [...] of a concept that we're really only there to feed—to replace ourselves, or something like this. And there was also that term: underemployed. Well, when I first saw that term, it was at the National Graduate Education Meeting, dare I say what university it came out of, and they had this massive, big placard/graph about how, doom and gloom! We are sending out all these PhDs students, and they're all underemployed. And I thought to myself, You gotta be kidding me. You are shooting yourself in the foot. And what I would propose is that, forget that term. There is no "underemploy." Push the students to get the degree—get quality degree—push the student out there and let them find a position. And if they have to walk their way around to get where they want go, they will do it. [Example of a comparable situation that occurred in the veterinarian profession 10 years.] And they actually expanded the world of veterinarians, and I believe this to be true for PhDs as well. You've got a motivated individual that clearly, you have to be passionate about what you're doing to finish a PhD. I mean, it's a grind. And to get through it is an amazing thing. And that's what I hope we don't lose. **That is what I hope, when we go online, that's what we don't want to lose: what a graduate student that has a PhD represents when they walk out the door to an employer. It means something.**

### Temple University

Question 4 is not addressed in the materials provide by VP [REDACTED].

### University of California San Diego

Dean [REDACTED]'s answer begins at 22:10 in [recorded interview](#):

I think the most important thing as we as universities can do is encourage our graduate programs to have the most rigorous traditional training, that's absolutely necessary for building foundations of knowledge in their respective disciplines, but then simultaneously thinking out of the box as they develop their training approach in their program. **What are they doing to equip their students for the entrepreneurial world that these students are going to be inheriting?** And that comes both through formal ways of reconfiguring the curriculum, of embedding internships and fieldwork, but also professional development opportunities targeting towards helping these students broadening their skillset.

Now where does a Graduate School come in? Look, it's really clear that you hear my philosophy: A Graduate School or an Office of Graduate Studies or whatever is not an island unto itself. It does not do graduate education, right. We facilitate graduate education where it really happens, which is locally in the departments, between faculty like you and me and our students. **So a well-functioning Graduate School facilitates all of that.** It provides the necessary support, the necessary infrastructure, the back-office operations, the resources and money, etc., etc.

A big danger that some universities get into is when they have a Graduate School, in my opinion, that is confused by that. Like, it thinks it's doing graduate education, you know, so it becomes the guardian of policy and the creator of bureaucracy and all this crazy stuff. Graduate schools need to get out of the way. They need to facilitate, and they need to be OK with the role of that facilitation. And I think that's really, really crucial. I've seen that go badly at a lot of places [...]

## University of Michigan

Dean [REDACTED]: “[My remarks](#) upon the launch of the graduate school's strategic vision summarize our thinking about the nature of the transformation.”

These remarks are shared via a YouTube video, “Rackham Symposium: State of the Graduate School,” recorded Sept. 18, 2019, and published by the U of M Rackham Graduate School on Sept. 27, 2019. The video description: “In an address titled ‘It’s Time to Rethink Graduate Education,’ Rackham Dean [REDACTED] shared strategic thinking on reimagining the graduate academic experience and invited questions and thoughts from the audience about the challenges and opportunities in graduate education today.”

In the video, Dean [REDACTED] discusses the pressures currently facing graduate education both at U of M (“Rackham”) and at large, as well as the three foundational beliefs that are guiding Rackham’s process of “rethinking graduate education,” during his prepared presentation. [Emphasis all mine.]

Dean [REDACTED] begins:

If you think about it, our model of graduate education at its core relies on a deep intellectual connection between the faculty member and the student. It's often called the apprenticeship model of graduate education, and it's been tremendously successful. It's more than a century old [...] I think despite the many contributions of this model that it's inspired both in the past and even today, we know that today there are current pressures that are building up in it, that have been building up in it over time.

After explaining the process by which Rackham has identified these pressures, he continues:

I'd like to highlight just a few of the most pressing dynamics that I think should inform our vision of the future. And I think perhaps the most important pressure is that there's a mismatch between the idea of this apprenticeship model and what our students are actually doing with their degrees. Our data show that **more than half of Michigan doctoral recipients pursue careers that are not on the tenure track**. This, to me, represents a tremendous source of success.

The skills and understanding that our students are developing can contribute in a variety of sectors, in the private sector, in nonprofits, in government service, and indeed in academia. So, this is really a strength, but at the same time, these career pathway stats have complex explanations. It's true that the number of PhD's produced each year outpaces the number of available academic positions in some fields. And furthermore, I think it's fair to say that attaining an academic position has become extremely competitive in nearly all fields. I think there's another dimension however, to consider as well, which is that many of our students already arrive here and tending to see careers outside the academy.

Of course, they come here to perform excellent research and scholarship with faculty, but their desired career paths are not in academia. And even in cases where they are seeking roles in a university setting, students might well be drawn to roles that are different than the ones that we ourselves as faculty hold. These might be positions of primarily undergraduate institutions or other professional roles at the university. So, I think in this way, **the literal idea of an apprenticeship model as one in which the apprentice assumes the role of a teacher and mentor is under increasing pressure here** at the University of Michigan.

Dean [REDACTED] then discusses additional pressures facing graduate education:

Master's training has struggled to keep up with the changing needs for society and to develop new programs in emerging fields as well as to accommodate the growing number of students who want to seek research-based master's degrees. We can really ask the question: **do we have the educational methods and systems that can keep up with the pace of change of master's education?**

There is increased **public skepticism** about the benefits of evidence-based research. There are growing concerns about **the affordability of graduate education**. There are reports about challenges around the **mental health of graduate students** that have been appearing with increasing frequency in the national and trade quest. And in fact, some of our own data here at the University of Michigan find instances of depression and anxiety presenting at a very high rate among graduate students.

And finally, there are rare but unacceptable instances of **misuse or abuse of the faculty/student relationship** that is really central and core to this model.

Dean [REDACTED] continues that Rackham intends to “respond to these pressures by seeking to transform the model of graduate education.” His vision for rethinking graduate education is rooted in three core beliefs: (1) student-centered, with the “key point is that students have the space for their own aspirations to be incorporated into their curriculum and their education goals as they work with faculty,” (2) faculty-led, and (3) graduate school supported, with Rackham committing resources, which are “our staff expertise, our research-based data and understanding, our cross-campus connectivity, and our funding.”

Two initiatives are already underway at Rackham in line with this re-envisioning: (1) “making internship experiences available to graduate students across campus,” with current emphasis on the humanities and the social sciences and a plan to extent this initiative to the biological sciences, and (2) their diversity-equity-inclusion certificate.

More information was provided in [Question 3, University of Michigan](#), on his three core beliefs underpinning his vision for rethinking graduate education and the two initiatives already underway at U of M.

## University of Minnesota

Dean [REDACTED]’s response:

Alumni are pursuing a diversity of career paths with their graduate degrees but faculty are generally knowledgeable only about the academic career path. **We need much better alignment between career paths and graduate education.** However, no program can design a curriculum that would prepare students for all career paths. Therefore, we are promoting the idea that delivery of a graduate education is a shared responsibility of the graduate program and the larger university. That the graduate faculty dictate the disciplinary knowledge, skills and experiences that should be in the curriculum, the university provides a range of professional

development opportunities by which students could obtain transferable skills, alumni identify which transferable skills are most relevant to different careers, and the student selects those professional development opportunities in which they wish to participate. ([See attached summary of student centered graduate education concept](#))

### University of South Florida

Dean [REDACTED]: "I think we're just coming to grips with the reality that traditional models of graduate education are fading and that newer ones are absolutely necessary to keep us competitive and relevant. It will be the function of our office to promote and stimulate those discussions."

Question 5. Can you share with us a whole picture of your graduate education funding base? What's your role in augmenting funding bases, and how do you deal with potential fundraising conflict between academic colleges?

### Ohio State University

The following is the answer provided by Dr. [REDACTED]:

The Graduate School receives central funding from the OAA [Office of Academic Affairs] budget for annual PBA [Present Budget Allocation] allotted for fellowships or operational budget. We have both college allocated fellowships that we award to colleges to distribute and we have a central competition that we distribute. the budget for GA appointments all go[es] to the colleges directly.

### Temple University

Dr. [REDACTED] did not provide an answer to this question in his reply.

### University of California San Diego

The Graduate School distributes around \$150M annually for student support. The money is distributed through the Financial Team of the Grad School. The Financial team works with every departments. They also manage all the TA appointments. Locally the Deans provide their support to the students and the Grad School collaborate with them. In general, there's not just one entity that control all the money but it's a collaboration among different parts.

In terms of raising funds Dr. Antony said that he raised money for the Grad School, but it does that for the different programs. The money, once acquired, goes to colleges and departments. He can deploy the Grad School development team to help a specific Dean to acquire the gift. They are never in competition with colleges and department in acquiring gift but they are always ready and open to collaborate. His role, and that of the Grad School is basically to support the colleges and departments.

### University of Michigan

Dean [REDACTED] provided the following answer to this question:

The administrative budget of the graduate school is available here:

<https://obp.umich.edu/budget/budget-book/>. The graduate school also administers some graduate financial aid.

The document at page 49 shows that the General Fund Budget for Fiscal Year 2019-20 is: \$10,492,990.

### University of Minnesota

Dean [REDACTED] in his email reply answered:

At the University of Minnesota, the Graduate School does not engage in fund-raising at all. The Graduate School receives a budget approximately 80% of which is distributed across the system either in the form of competitive fellowships for which students apply, recruiting fellowships for which programs apply, or recurring support to colleges to advance their graduate education diversity initiatives.

### University of South Florida

Dr. [REDACTED], replied in his email:

Addressing the latter question first, we stay out of funding squabbles between colleges! There's a concession that graduate education is significantly underfunded at USF in terms of scholarships and fellowships beyond that provided through state allocations.

The overall budget for OGS is approximately \$4.2 million. That includes operational expenses and a number of fellowships/scholarships that are administered through our budget.

In terms of graduate-related expenses, in 2019, USF Colleges issued graduate stipends in the amount of \$37,150,000 to 2,254 students. We also provided approximately \$4 million to provide a 94% subsidy to health insurance premiums for GAs.

Question 6. With regards to student support, which of the following does your unit prioritize: a) finances, b) mental and physical health, c) mentoring/professional development, 4) academics?

### Quick Summary

Ohio State University	Academics top priority (inferred)
Temple University	Academics top priority (inferred)
UC San Diego	Finances top priority; the rest carry equal priority
University of Michigan	"We have investments in all these areas. The areas of new emphasis for us are (b) and (c)"

University of Minnesota	Mentoring/professional development "a major focus" and top priority
University of South Florida	Academics and mentoring/professional development top priorities

### Ohio State University

Dean [REDACTED] – directed us to [mission and vision statement – 11 mission goals listed](#):

- Deliver an excellent comprehensive graduate course curriculum that educates students in broad and multidisciplinary areas and can be flexibly applied to reflect the desires of the new generation of students and the needs of our evolving world. [ACADEMICS]
- Maintain and develop high quality graduate programs to provide knowledge, innovation and creativity. [ACADEMICS]
- Partner with faculty, chairs, and coordinators to be proactive in normalizing the expression of academic freedom and corresponding responsibilities to best serve the graduate student and program. [ACADEMICS]
- Provide leadership in graduate education standards, strategies, valuation, and best practices. [ACADEMICS]
- Provide governance to ensure integrity, fairness and a base-level standard of consistency in the management of graduate students and programs. [ACADEMICS]
- Efficient administrative services and guidelines that facilitate the graduate student experience and program success in the recruitment, retention and graduation of the best and most diverse graduate students.
- Strong interaction of the Graduate School, Student Life, mental health and mentoring resources for professional career development and self-care that enhance experiences and expose the student to the social, network, culture, and broader practice norms and requirements associated with their selected discipline. [HEALTH/DEVELOPMENT]
- Deliver awards and Scholarship programs to recognize, recruit and retain a diverse group of outstanding student scholars, programs, staff and faculty graduate student mentors. [FINANCE]
- Support programs that will nurture students from intersectional, underserved backgrounds or with special circumstances that may require some flexibility for initial success.
- Raise the visibility of the graduate school and serve as a conduit to agencies and organizations relevant to graduate students.
- Create alumni that have had a positive graduate studies experience at The Ohio State University, would recommend our graduate program, and serve as advocates for the Graduate School.

Multiple mission goals directly address academics (“Deliver an excellent comprehensive graduate course curriculum that educates students in broad and multidisciplinary areas and can be flexibly applied to reflect the desires of the new generation of students and the needs of our evolving world,” “Maintain and develop high quality graduate programs to provide knowledge, innovation and creativity,” *and more*). Only one goal addresses finances (“Deliver awards and Scholarship programs to recognize, recruit and retain a diverse group of outstanding student scholars, programs, staff and faculty graduate student mentors”), and mental/physical health and mentoring/professional development *for the general graduate student community* are combined into a single mission goal (“Strong interaction of the Graduate School, Student Life, mental health and mentoring resources for professional career

development and self-care that enhance experiences and expose the student to the social, network, culture, and broader practice norms and requirements associated with their selected discipline”).

As presented in this document, OSU’s Graduate School prioritizes academics as #1. The 30-minute video call we had with Dean [REDACTED] also suggested that the OSU Graduate School focuses its efforts on graduate academics, as much of our conversation focused on academics and innovation in program development.

### Temple University

VP [REDACTED] - Did not provide answers to our 6 questions, but instead provided materials. Organizational chart and 2019 Revised Matrix of Responsibility focus on academic oversight, administrative processes, and graduate education governance. Their Graduate School does not appear to be directly involved in supporting graduate student mental and physical health, and it appears to have very limited direct involvement in mentoring/professional development (Goal: “Enhance mentoring of graduate students through the creation of summer research fellowships”). Furthermore, [Temple’s Graduate School site](#) does not seem to include any mention of health services nor professional development resources/programs.

The financial roles of this Graduate School all regard establishing procedures for awarding various scholarships and awards and tracking fellowship recipients’ progress. Their Graduate School staff appears to spend a great deal of their time dealing with academic and administrative matters.

### University of California San Diego

Dean [REDACTED] – Practically speaking, finances need to be #1: “We have to do all of them simultaneously, but if we had to crudely prioritize [...] if the students can’t eat, if they don’t have anywhere to live, etc., etc., it’s Maslow’s hierarchy [of needs], we’ve got to take care of basic needs. So the graduate funding needs to be stable, and we need to know that when we’re admitting these students, we are going to take care of them. Then it becomes very much about the experience, what happens while they’re graduate students with us. So that’s where we’re paying attention to professional development, to mentoring, to mental health, those sorts of things. But honestly, **if the funding is not there, that’s an enormous source of stress for a lot of our students.**” [emphasis mine]

### University of Michigan

Dean [REDACTED]: “We have investments in all these areas. The areas of new emphasis for us are (b) and (c).”

These areas of new emphasis (mental & physical health and mentoring/professional development) are clearly reflected on their website. U of M’s Rackham Graduate School provides an extensive collection of [Professional Development resources and programs](#); [“Personal Well-Being” is one of their 8 “core skills.”](#) Their other core skills are: Career Development; Diversity, Equity, and Inclusion; Collaboration;

Leadership; Communication; Content Expertise; and Teaching. The pages for these core skills list both Rackham resources and campus resources. Additional student support includes [student communities for various groups](#) such as graduate students with children, students with disabilities, LGBTQ+ students, students of color, and more.

### University of Minnesota

Dean [REDACTED]'s response:

- a) finances - graduate programs/colleges are responsible for supporting their students and their program. The Graduate School's support is not to be viewed as an essential part of core support.
- b) mental and physical health - The Graduate School does not provide any mental or physical health services. We see our role as promoting the adoption of best practices that eliminate unnecessary sources of bad stress on graduate students and postdocs. We also administer the gradSERU\* every other year which provides program-level information regarding graduate student perspective on their mental and physical health.
- c) mentoring/professional development - this is a major focus of the Graduate School. Our GEAR+ initiative, our effort to promote Student Centered Graduate Education, the use of digital badges (see attached), and our effort to document grad outcomes through a partnership with Academic Analytics to find our PhD alumni and their employment are all focused on this issue.
- d) academics - gradSERU documents student satisfaction with their academic experiences and the Academic Analytics study demonstrates degree outcomes. The Graduate School's role is to collect this data, to make sure that programs are aware, and to encourage programs to make improvements as necessary.

\*This is a comprehensive survey of the student experience that we administer every other year the results of which can be compared between years and between the various [SERU](#) consortium members

Their website showcases a robust [professional development portfolio](#).

### University of South Florida

Dean [REDACTED]: "Academics and mentoring/professional development would fall into our domain. To a lesser extent, we do oversee some fellowship and scholarship programs as well as serve as an administrative liaison to the USF negotiating team in relation to collective bargaining with or Graduate Assistants Union (finances)."

View their [2019-2020 annual report](#) for more information on their academic and professional development initiatives.

## General Observations and Comparisons

Our analysis of the benchmark institution allows us to provide general observations that pertain to the specific questions we asked, as well as some initial comparisons that might inspire future actions about the graduate school.

### General observations:

- With the exception of Temple University, each of the benchmark institutions have significant more staff assigned to the graduate school. One goes from the 9 staff members at Temple to the 16 at UC, to 29 for the University of South Florida, 30 for the Univ. of Minnesota, 33 at The Ohio State University (23 plus 10 affiliated), up to 70 for the University of Michigan. Even given the sizes of the graduate schools, UC has fewer staff/graduate student than most of its competitors.
- Where strategic plans are present, they almost always include the following two objectives: 1) Increase the diversity of the graduate student body; 2) Diversifying the training and professional development of graduate student to adapt to market trends and a life-outside-of-academia future.
- Most graduate schools replicate modeling that is fairly standard across the board. The University of Pittsburgh and University of South Florida have moved toward a decentralized model for how they provide graduate education. When asked what differentiates them from their peers, most graduate deans provide limited examples of such differentiation. A few do provide food for thought both in practical and theoretical opportunities. The Ohio State University has created semi-autonomous interdisciplinary PhD programs that combine different disciplines in offering opportunities in new fields like Sustainability and Biomedical fields. UCSD is exploring the idea of creating entrepreneurial opportunities via internships and start-up modeling for graduate students in certain fields. The University of Michigan, in claiming the development of a student-centric model, seems to be applying design thinking practices across areas of knowledge that allow students to lead the way in experiential learning. Minnesota looks at leveraging graduate alumni to create professional development activities outside of traditional employment careers.
- In response to our question about how graduate education will transform itself and move forward in the coming decades, the deans seemed to agree that graduate degrees should move toward entrepreneurship and what the U. of Minnesota dean called Alt-Careers. No deans have faith in traditional model of graduate education, though OSU maintains a fairly traditional view of it, even as its dean starts thinking of fully online PhDs.
- Financial models for the universities vary, but most of the funding is centrally allocated, and varies according to the 'wealth' of the school. At least two of the deans rely on potent endowments and strong fundraising for supplemental income that is not tuition and state-based (U. Michigan and OSU). Two other deans admitted being involved in fundraising though they work collaboratively with the colleges, but it is clear that the majority of the funding is centrally allocated. Only one dean claimed not to be involved in fundraising.

- Concerns about student support seem to center mostly on Academic Success, though two Big 10 universities (Univ. of Minnesota and Michigan) now see mental health of students as very important to their mission. For most, having fully supported terminal graduate degrees (PhDs and MFAs) is an imperative of their current mission, maybe by redistributing resources and reducing the size of some less marketable graduate programs.

## **APPENDIX B: SUB-GROUP ANALYSIS OF CURRENT GRADUATE SCHOOL**

# Inquiry into Structure, Function, Unique Strengths and Identity

### **1.0 Survey Questions for Graduate Directors and Administrators**

Sub-group 2 was assigned the task of evaluating the current structure and functioning of the UC Graduate School, identifying strengths and weaknesses as well as opportunities for future improvement. To gather input from graduate program directors and administrators we developed an online survey that was administered using the Qualtrics platform. We solicited participation by sending an email with a link to the survey to the Graduate Program Directors list-serv and the Associate Deans list-serv. Access to both list-servs was provided by the Graduate School staff. The survey questionnaire was comprised primarily of open-ended questions (follows in 1.1) asking respondents about their perceptions of the Graduate School's mission, what it does well, and what it needs to improve. We also asked about how the Graduate School could best support the enhancement or development of PhD programs and the development of interdisciplinary programs. We received 84 responses to the survey. The time respondents had spent at UC ranged from 2 to 30 years, with a mean of 13.1 years. The time spent in an administrative role ranged from one year to 27 years, with a mean of 5.6 years. This experienced group of faculty produced a large amount of data in response to open-ended questions, offering a total of 846 distinct comments. Sub-group members Lee, Dick, and Mockabee coded these open-ended responses to identify major themes.

#### *1.1 Raw Survey Questions:*

Q1 - How many years have you worked at the University of Cincinnati?

Q2 - How many years have you served in your current role as a graduate program director or administrator?

Q3 - We are interested in your views about the roles and responsibilities of the Graduate School at UC. (For this first question we are interested in your thoughts about the scope of the Graduate School's mission. Later we will ask about how well you think the Graduate School is performing). Please explain your understanding of the Graduate School's role at UC.

Q4 - Are there things the Graduate School is not currently doing that you think should be added to its responsibilities? Please explain.

Q5 - Are there things the Graduate School is currently doing that it should not be doing? Please explain.

Q6 - What do you think the current Graduate School does well?

Q7 - What do you think the current Graduate School needs to improve?

Q8 - Please list your top three suggestions for the Graduate School

Q9 - Do you think the current organizational structure of the Graduate School at UC needs to be changed?

Q10 - Please explain why you think the current organizational structure of the Graduate School needs to be changed.

Q11 - How can the Graduate School help enhance your graduate program?

Q12 - What resources would you need to increase the quality of graduate students in your program?

Q13 - What do you think is the role of the Graduate School at UC for interdisciplinary graduate education?

Q14 - Do you have administrative responsibilities for a PhD program?

Q15 - In what ways could the Graduate School assist you in increasing the number of PhD students graduating from your program?

Q16 - In what ways could the Graduate School assist you in developing a PhD program?

Q17 - Are there any other comments you would like to make about the Graduate School or graduate education at UC? If so, please enter below. If not, please advance to the next question.

Q18 - If there is anything else in regard to your program that you would like to add please do so.

Q19 - Would you be willing to participate in a small group discussion with task force members about the future of graduate education at UC?

## 2.0 Analysis of Responses

**Q1 - How many years have you worked at the University of Cincinnati?**

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	How many years have you worked at the University of Cincinnati?	2.00	30.00	13.12	7.71	59.49	84

**Q2 - How many years have you served in your current role as a graduate program director or administrator?**

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	How many years have you served in your current role as a graduate program director or administrator?	1.00	27.00	5.56	4.77	22.71	82

### Q3 - Please explain your understanding of the Graduate School's role and responsibility at UC.

- 1) **Policy:** Set and implement policies, procedures, standards (29, 25%)
- 2) **Administrative functions:** program review, grievances, admissions/graduations, providing financial resources (UGA), promotion of recruitment (53, 46%)
- 3) **Student:** Provide student support and professional development (14, 12%)
- 4) **Program:** Promote program development (17, 15%)
- 5) **Collaboration:** Promote partnerships and collaborations across the campus (2, 2%)

Response summary:

- Total 115 comments made by 81 respondents
- Prevalent top three themes from most common to least common:
  - i. Administrative functions: 53 comments, 46%
  - ii. Policy: 29 comments, 25%
  - iii. Program: 17 comments, 15%

### Q4 - Are there things the Graduate School is not currently doing that you think should be added to its responsibilities? Please explain.

Added responsibilities

- 1) **Strategy:** strategic planning for programs; identify new areas for education and growth; leadership of vision around the institution's research agenda; opportunities for cross-disciplinary programs; ideas to increase enrollment or enhance grad student experience; diversity; marketing; under-represented minority students; education of researchers; clinical fields, non-traditional students, and online programs (18, 25%)
- 2) **Graduate education:** Advocate for graduate students and education (7)
- 3) **Support:** for graduate students, faculty, and programs. (16, 22%)
- 4) **Engagement, autonomy, and service:** Seeking inputs from program and faculty; autonomy; flexibility; development of integration; communications; engagement; diversity in recruitment; marketing; transparent decision-making process; training about rules for new GPDs (22, 31%)
- 5) **Funding:** solidify permanent funding structure (or fundraising) to recruit high quality students (9, 13%)

Response summary:

- Total 72 comments made by 81 respondents
- Prevalent top three themes from most common to least common:
  - i. Engagement, autonomy and service: 22 comments, 31%
  - ii. Strategy: 18 comments, 25%
  - iii. Support: 16 comments, 22%

**Q5 - Are there things the Graduate School is currently doing that it should not be doing? Please explain.**

Major Themes (number of comments in red):

1. **Enforcement of Policies.** Rules enforcement is excessive and rigid; Grad School over-steps in making policy that should be left to faculty in program- or college-level; micromanagement; policy enforcement is too “one-size-fits-all”; G.S. acts as “police” rather than strategic partner; emphasis on rule enforcement is not student-centric; G.S. too involved in decisions such as adding outside dissertation committee members, or approving advanced standing credit; trust program directors; remove reinstatement fees. **(28)**
2. **New program approval process.** Approval of new programs is too slow, too bureaucratic; G.S. should not have central control over new program creation; departments can create new undergrad programs and similar process should exist for grad programs; G.S. new program process slows innovation. **(4)**
3. **Graduate Program Review process.** Program reviews occur too frequently; program reviews are redundant to accreditation reviews and should be combined; for programs without accreditation, graduate program reviews should be combined with undergraduate reviews; program reviews do not seem to result in substantive changes. **(5)**
4. **Administration of admissions and recruitment processes.** G.S. is too slow in processing transcripts; Slate needs to be better supported; programs do not have enough say in application process and configuration of Slate. **(8)**
5. **Administration of graduation processes.** Deadlines for thesis and dissertation submissions are too early; online waiver process for graduation certification is cumbersome and time consuming; decisions about whether program requirements have been fulfilled should be left to program directors; use of major maps and degree audits does not work well, particularly for interdisciplinary programs; graduation checklists are not accurate, helpful. **(8)**
6. **Support and Advocacy.** Change the way GA stipends are allocated so excellent programs get more; fight for more resources from central administration; fight for student health insurance coverage. **(5)**
7. **Nothing.** Current G.S. involvement is about right; G.S. was too invasive for a while but is now found an equilibrium; nothing comes to mind. **(7)**

Response summary:

- Coded 65 total comments made by 58 respondents
- Prevalence of themes, from most common to least common:
  - i. Enforcement of policies: 28 comments, 43%
  - ii. Administration of admissions and recruitment policies: 8 comments, 12%
  - iii. Administration of graduation processes: 8 comments, 12%
  - iv. Nothing to change: 7 comments, 11%
  - v. Graduate Program Review process: 5 comments, 8%
  - vi. Support and advocacy: 5 comments, 8%
  - vii. New program approval process: 4 comments, 6%

**Q6 - What do you think the current Graduate School does well?**

Major Themes (number of comments in red):

1. **Enforcement of policies.** Overseeing policy; treats everyone the same; protects integrity of degrees, accreditation; maintaining handbook and other online resources. **(16)**
2. **Administration of admissions and recruitment processes.** Supporting Slate software; entering transcripts; support for recruitment. **(16)**
3. **G.S. Staff are helpful.** Staff are responsive to questions; various mentions of individual staff members and anecdotes about their helpfulness. **(21)**
4. **Funding for students.** Provides GA funding; Yates fellowship; other scholarships. **(6)**
5. **Support and Advocacy.** Student life issues such as housing, health insurance; professional development workshops; advocating for graduate education at UC. **(6)**
6. **Administer program review and approval processes.** G.S. does a good job of reviewing programs; helps facilitate interactions with approval bodies; manages new program approval. **(2)**
7. **Nothing.** At the present time G.S. is failing in its duties; nothing except annual GPD lunches; nothing comes to mind. **(7)**

Response summary:

- Coded 74 total comments made by 61 respondents.
- Prevalence of themes, from most common to least common:
  - i. Staff are helpful: 21 comments, 28%
  - ii. Administration of admissions and recruitment processes: 16 comments, 22%
  - iii. Enforcement of policies: 16 comments, 22%
  - iv. Nothing done well: 7 comments, 9%
  - v. Funding for students: 6 comments, 8%
  - vi. Support and Advocacy: 6 comments, 8%
  - vii. Administer program review and approval processes: 2 comments, 3%

**Q7: What do you think the current Graduate School needs to improve?**

Major Themes (number of comments in red):

1. **Communication, collaboration, and leadership.** Need better communication with programs and colleges; elitist attitude from G.S. leadership; trust has eroded between G.S. and programs; communication from G.S. is often turgid and confusing; more clarity on requirements for scholarships, fellowships; more collaboration instead of adversarial attitude; rigidity in policy enforcement; need to be more student-centered; hard to know whom to contact for assistance. **(45)**
2. **Administration of admissions, graduation, and recruitment processes.** Inefficiency; lack of staff support; too slow in processing transcripts; eliminate reinstatement fees; more support for Slate software; more support for recruitment; Grad Tracker and Certify sites are not helpful; devolve more control to colleges/programs. **(15)**
3. **Funding for students.** Increased funding for graduate assistantships; rethink the way GA funds are allocated; stipend support not competitive. **(5)**
4. **Support and Advocacy.** Student life issues such as housing, health insurance; leadership role in advocating for graduate education at UC. **(8)**

5. **Administer program review and approval processes.** New program approval process is too slow; G.S. is barrier rather than partner; data supplied for graduate program reviews not accurate. (5)

Response summary:

- Coded 78 total comments made by 65 respondents.
- Prevalence of themes, from most common to least common:
  - i. Communication, collaboration, leadership: 45 comments, 58%
  - ii. Administration of admissions, graduation, recruitment: 15 comments, 19%
  - iii. Support and Advocacy: 8 comments, 10%
  - iv. Funding for students: 5 comments, 6%
  - v. Administer program review and approval processes: 5 comments, 6%

**Q8: Please list your top 3 suggestions for the Graduate School.**

### Content Analysis

Coded 144 comments made by 64 respondents.

- 1) Leadership: 28 comments, (50%)
- 2) Procedures: 28 comments, (50%)
- 3) Student Centered: 22 comments (39%)
- 4) Flexibility 18 & Autonomy 9: 27 comments, (48%)
- 5) Team Approach 12, Communication 16 & Listening: 39 comments, (70%)

### Themes Emerging

Five overarching themes emerged:

#### 1) Collaborative Team Approach (39)

Of the 56 responses to Q. 8, (39) content areas indicated the need for a more **collaborative team approach** which was combined with **better communication** and **listening** since they are characteristics of a collaborative teach approach. Of the total suggestions of the 64 respondents, 70% indicated one of a combination of these suggestions.

*“Have top decision makers engage in more informal opportunities to meet and get to know students and staff.”*

*“Let us get to know you better so we feel more comfortable coming to you to work out solutions.”*

*“To listen better to the programs and students it serves.”*

*“More listening within the colleges and less policy setting from the marble offices.”*

*“Communicate in a way that doesn't belittle a person. I have been at UC for 20 years and have never had an email from someone that was so unconscionable as the one I received from a person in the graduate school.”*

*“Work to better understand the structures, conditions, needs of the individual colleges.”*

## 2) Leadership (28)

Fifty Percent of the respondents three suggestions clearly mentioned a change in leadership.

*"Hire a Dean with a collaborative leadership style"*

*"Hire visionary, inclusive, and inspirational leadership."*

*"Lead effort to support collaboration around innovation."*

*"Aim to be more "bottom-up" in decision making. The culture is very "top-down."*

*"New leadership- I think many issues could be addressed by replacing the current leadership team with a new team that views the Graduate School as a supportive, service unit and values input from faculty and programs"*

## 3) Procedures: (28)

Fifty percent of the responses mentioned recommendations for how to streamline procedures to make the Graduate School more responsive to the various programs including professional degrees, master programs, and not just the PhD. Programs

*"Do more than offer one scholarship per college for a student of color."*

*"The concept of the Graduate School needs to be updated in a way that relates to the reality of the graduate programs at UC. There are professional degrees (master and doctorate) and there are academic/research degrees (master and doctorate) - they should have different policy approaches that recognize the different realities and desired outcomes. Forcing the two different worlds to live under the same set of policies and rules is creating too much dissonance and the senior leaders in the GS can't manage it."*

## 4) Flexibility (include autonomy) (27)

The theme of rigidity emerged again and again in the content analysis. Flexibility and autonomy were combined to reflect the participants views of the Graduate School as rigid and controlling account for 48% of the top 3 suggestions.

*"Establish guidelines, not hard-and-fast rules, that promote uniformity and consistency."*

*"Creation of learning communities to support interdisciplinary collaboration for faculty and student."*

*"Ask for input from GPDs about how programs work and what they need before making decisions that affect everybody."*

*"Allow more flexibility for different programs and different colleges to do things differently, as suits the size and design of their program."*

*"Stop being the unreasonable and hardheaded entity that prevents programs and students from what they want/need to do, forces them to spend time learning new software, training, and processing bureaucratic nonsense that doesn't improve student outcomes and start being a unit that facilitates graduate student and graduate program success."*

### 5) Student Centered (27)

39% of the suggestions mention putting students at the center of the Graduate School.

*“Support student health insurance adequately.”*

*“Continue and expand support programming for students.”*

*“Do a systematic study of how students fare once they graduate with a PhD. Assess the ethics of continuing to accept large numbers of students in areas that have difficult job markets (creative writing comes to mind--lots of talented students here but very few full-time jobs for them once they graduate).”*

*“Graduate stipends could increase to be competitive with peer institutes.”*

**Q9 - Do you think the current organizational structure of the Graduate School at UC needs to be changed?**

Yes: 36, 47%

No: 11, 14%

Not sure: 30, 39%

Total: 77

**Q10 - Please explain why you think the current organizational structure of the Graduate School needs to be changed.**

- 1) **Inefficiency:** lack of efficient operations, autonomy (shared governance), communications, innovations, and vision; punitive culture; too much oversight; too hierarchical, centralized, too many layers, and one-directional; empowerment; top-down approach (21)

**Suggestions:** (1) self-governance by individual colleges with centralized IT for better interface with program, department and college; (2) absorbed into Office of Research; (3) separate the positions of Vice Provost and Dean for Grad School

- 2) **Lack of strategy, vision, and leadership:** myopic, outdated approach (4)
- 3) **Non-student centered approach (5)**
- 4) **Lack of diversity (1)**

Response summary:

- Total 27 comments made by 27 respondents
- Prevalent top three themes from most common to least common:
  - i. Inefficiency: 22 comments, 78%
  - ii. Non-student centered approach: 5 comments, 19%

- iii. Lack of strategy, vision and leadership: 4 comments, 15%

#### Q11 - How can the Graduate School help enhance your graduate program?

- 1) **Strategy:** clinical degree vs. PhD; strategic planning for programs; identify new areas for education and growth; leadership of vision around the institution's research agenda; opportunities for cross-disciplinary programs; strategy to increase enrollment or enhance grad student experience; strategy to attract high quality students; diversity; marketing; under-represented minority students; education of researchers; clinical fields, non-traditional students, and online programs (10)
- 2) **Graduate education:** Advocate for graduate students and education; professional career development (5)
- 3) **Support:** for graduate students, faculty, and programs. (8)
- 4) **Engagement, autonomy, and service:** Seeking inputs from program and faculty; autonomy; flexibility; development of integration; communications; engagement; diversity in recruitment; marketing; transparent decision-making process; training about rules for new GPDs (21)
- 5) **Funding:** solidify permanent funding structure (or fundraising) to recruit high quality students (12)

Response summary:

- Total 56 comments made by 47 respondents
- Prevalent top three themes from most common to least common:
  - i. Engagement, autonomy, and service: 21 comments, 45%
  - ii. Funding: 12 comments, 26%
  - iii. Strategy: 10 comments, 21%

#### Q12 - What resources would you need to increase the quality of graduate students in your program?

- 1) **Funding:** solidify permanent funding structure (or fundraising) to recruit high quality students (44)
- 2) **Support:** admissions/graduations; development and promotion of program; (15)
- 3) **Strategy:** recruitment of high quality students; national- and international-level marketing; diversity (6)

Response summary:

- Total 65 comments made by 59 respondents
- Prevalent top three themes from most common to least common:
  - i. Funding: 44 comments, 68%
  - ii. Support: 15 comments, 23%
  - iii. Strategy: 6 comments, 9%

#### Q13: What do you think is the role of the Graduate School at UC for interdisciplinary graduate education?

##### Content Analysis:

Coded 57 comments made by 57 respondents

- 1) Good Idea: 19 comments, (34%)
- 2) Graduate School is not equipped to take on this role: 12 comments, (21%)
- 3) Interdisciplinary Education is very Important 12 comments, (21%)
- 4) Graduate School is not equipped to take on this role: 12 comments, (12%)
- 5) Unsure if Graduate School should take on this role: 8 comments, (14%)
- 6) Facilitating Role: 6 comments, (11%)

### **Themes Emerging:**

In general, the idea of **interdisciplinary education is important** and vital to the educating graduate students. Fifty-five percent of the respondents indicated that interdisciplinary education is vital to the university, and of those 34% thought that it would be a good idea for the Graduate School, but with some reservation. Out of the 55 responses to this question 21% indicated that the Graduate School is not equipped to take this on. Of the 55 respondents, 11% indicated that if the Graduate School were to take on this role, it should only be in a facilitating role.

*“There are many opportunities for the Graduate School to link programs, fostering an attitude of collaboration and collegiality.”*

*“The Graduate School can serve as a facilitator for interdisciplinary education by identifying and supporting interdisciplinary research and practice. They should simply serve as a facilitator, not an enforcer.”*

*“I don't think the Graduate School is needed for this. Colleges know how to interact with each other. The graduate school serves no purpose in this.”*

*“This seems like it would require more thought, but on the surface it seems like the only structure that is set up in a fashion that would allow it to facilitate degrees that cross over college boundaries. It seems like there are a number of benefits and potential efficiencies that can be gained by opening up certain structural barriers.”*

*“It would be nice for it to be more of a facilitator.”*

*“Very important to support this but do not know if the Grad School is the home for this. Many universities have an IPE office which would make more sense to me.”*

### **Q14 - Do you have administrative responsibilities for a PhD program?**

#	Field	Choice Count
1	Yes, a PhD program	52.17% 36
2	No, not a PhD program	47.83% 33
		69

### **Q15: In what ways can the Graduate School assist you in increasing the number of PhD students graduating in your program?**

Coded 44 comments made by 27 respondents.

### **Content Analysis:**

- 1) Funding: 20 Comments, (45%)

- 2) Support: 7 Comments, (16%)
- 3) Flexibility: 2 Comments, (5%)
- 4) Communication & Collaboration: 1 Comment, (2%)
- 5) Policy Change: 6 Comments, (14%)
- 6) Minority Students: 2 Comments, (5%)
- 7) No Help: 6 Comments, (14%)

### **Themes Emerging:**

There were 44 responses to Q. 15. The major theme to emerge from the analysis was that 45% of the respondents mentioned financial support to increase the number of PhD's graduating in the doctoral programs. Another theme to emerge from content analysis of the responses was support (16%); (14%) specifically recommended policy or procedural changes as being helpful to increase the number of PhD's graduating from their programs. Some respondents (16%) reported that they were doing well in the number of PhD students in their programs and did not need help from the Graduate School.

*"More fellowships. The other needs are likely beyond the reach of the Graduate School - more faculty lines and investments in infrastructures."*

*"More money for GAS."*

*"Our retention rates have been consistently strong. But the number of matriculants has decreased for financial reasons, as the UGA funds have been fairly flat while stipends rise periodically."*

*"Put funding in the programs within a discipline where students actually get jobs instead of into flashy ones where students win lots of prizes but don't get jobs in the numbers they should."*

*"Being more flexible when students need exceptions or have life emergencies."*

### **Q16: In what ways can the Graduate School assist you in developing a PhD program?**

Coded 25 comments made by 21 respondents.

### **Content Analysis:**

- 1) PhD is not applicable currently: 10 Comments, (40%)
- 2) Resources: 4 Comments, (16%)
- 3) UC is over focused on PhD Programs: 2 Comments, (8%)
- 4) Flexibility & Coordination: 5 Comments, (20%)
- 5) Developing an Interdisciplinary PhD: 1 Comment, (4%)
- 6) Conduct a Needs Assessment: 3 Comments (12%)

### **Themes Emerging:**

There were 25 responses to Q.16. The major theme from 40% those responding indicated that assistance for developing a PhD currently was not applicable to their program. Flexibility and serving in a coordinating role were identified by 20%; providing resources 16%; and 4% indicated providing guidance for developing an interdisciplinary PhD. There were 8% who stated they felt UC is overly focused on PhD programs, and does not focus enough on professional master's degree programs and no research PhD programs. Conducting a needs assessment to determine the need for PhD programs was identified by 12% of the respondents.

A significant number of respondents reported that the question was not applicable to them, indicating possibly that they had no current plans to develop a PhD program. The overarching theme centered around funding and release time for faculty to oversee a successful PhD program. The Graduate School would need to be flexible and provide a coordinating role during the development phase of a program developing a PhD program. The other major theme to emerge was that UC at this time is overly focused on developing PhD programs and a broad needs assessment needs to be undertaken to determine the following: a) does the State of Ohio want more PhD programs?; b) conduct a needs assessment to determine the need for new PhD programs; c) realize that professional PhD programs are in demand across the country, not just research PhD programs; and d) do not prey on students who haven't decided what they want to do with their careers as a way to make money.

*"Do you really only care about PhD programs? I oversee professional graduate programs, and they are just as valuable to advancing UC's mission. Please expand your understanding of graduate education."*

*"We would need enough GTA funding to recruit and support PhD students. Help convincing the provost's office to let us enough faculty members to staff a PhD program well would also be welcome."*

*"Offer best practices, share documents and materials from those programs that do it well."*

*"Examine other programs and conduct a needs assessment."*

*"My understanding is that the State of Ohio isn't interested in adding another PhD program in my field in the state, as there are PhD programs at Ohio State, Indiana University, and University of Kentucky. It would be helpful for the Graduate School to ascertain if that is indeed the case."*

**Q17 - Are there any other comments you would like to make about the Graduate School or graduate education at UC? If so, please enter below. If not, please advance to the next question.**

- 1) **Funding:** low budget; solidify permanent funding structure (or fundraising) to recruit high quality students (1)
- 2) **Support:** students and program; (5)
- 3) **Strategy:** graduate certificate and masters programs; interdisciplinary collaborative culture (4)
- 4) **Leadership, Flexibility, Engagement (9)**

Response summary:

- Total 19 comments made by 19 respondents
- Prevalent top three themes from most common to least common:
  - i. Lack of leadership, flexibility, and engagement: 9 comments, 47%
  - ii. Lack of support: 5 comments, 26%
  - iii. Lack of strategy: 4 comments, 21%

**Q18 - If there is anything else in regard to your program that you would like to add, please do so.**

- 1) Non-PhD Programs: Professional practice degrees and certificates
- 2) Admissions website management
- 3) New administration
- 4) Funding
- 5) Direct communications between GS and programs

## **APPENDIX C: SUB-GROUP ANALYSIS OF STUDENT SUPPORT**

### Inquiry into Student Needs, Development, Career Paths

Data obtained from UC Graduate Student Satisfaction Survey and GRAAD report were included in this report, with the latter report limited to demographics such as ethnicity, gender, part time/full time status, international and domestic, overall satisfaction, and time to degree. Data were also obtained from outside services including the Council on Graduate Schools (CGS) and student survey data from the following benchmark institutions: Georgia Institute of Technology (Georgia Tech), Ohio State University (OSU), Temple University, U. of California San Diego (UCSD), Oklahoma State, U. of Pittsburgh (UPITT), and U. of South Florida (USF). No current data was available for U. of Illinois at Chicago, U. of Minnesota – Twin Cities, and U. of Washington Seattle Campus (UWS). Additional information was obtained from the review of websites from the above benchmark institutions.

#### **1.0 Student Finances**

##### *1.1 Models and trends of graduate school from national benchmarking*

The information about models and trends in the financial support offered to graduate students from national benchmarking are based on the review of the websites of graduate schools at the benchmarking institutions listed above. Overall, the review shows that the graduate schools serve as a major hub for providing students with core information relevant to their graduate education, including education and research support. Importantly, the institutions listed offer significant financial support to its students for their successful completion of their studies. The support comes in the form of generous assistantships, coverage of health insurance costs, and various fellowships, including Presidential, Provost, and Dean dissertation fellowships. Transparency and general availability of relevant information regarding finances and funding relevant to graduate students plays a big role in the schools that were reviewed. For example, information about how fees are calculated, as well as what funding opportunities (both internal and external) are readily available without much difficulty to find online.

Despite these available sources of financial assistance, financial concerns appeared consistently across the various student surveys, with this rated as the top concern by USF students. At UCSD, only about half of surveyed students were confident in their financial situation with the lowest level of confidence amongst those in Arts and Sciences (30%). Fewer URM students reported confidence in their finances (43%) compared to their peers. Meanwhile, 64% of Georgia Tech students financed their education at least in part via personal funds or loans. Approximately 32% of Temple students said that finances represented an obstacle to their graduate education, and delays in graduation were linked to full-time employment of Oklahoma St. students. At OSU, more than 70% of students had >\$100,000 in debt at graduation.

##### *1.2 Observation with strengths and weaknesses*

According to the recent GSSS survey, half of UC graduate students receive either an assistantship or scholarship, which includes Graduate Incentive Awards and Graduate Assistant Scholarships. These assistantships vary across programs and departments, both in duration and amount. Some programs pay for up to 5 years with summer stipends included, while there are others that guarantee only 3 years of doctoral funding and no summer pay. Fellowships are also available in the form of Dean's Dissertation Completion Fellowships, Yates Fellowships, Provost Graduate Fellowships and Graduate Dean's Excellence Scholarships. UC minimum stipends for graduate students vary considerably across colleges ranging from \$23/hr (CEAS) to the minimum \$16/hr (A&S, CECH and COP). The minimum

stipend for PhD students is \$21/hr. Financial assistance for students to travel to conferences is currently limited to \$500 per year, available through the Graduate Student Government (GSG).

Student health insurance costs \$1180 per semester for those students eligible for a Graduate Student Health Insurance (GSHI) award (i.e. enrolled in 10 credit hours and are paid at least \$2,560 per term). The GSHI currently provides \$826 per semester to defray the costs of health insurance to full-time students. Students who have completed their coursework and are working on their dissertations are not eligible for this support. The available health insurance does not include dental coverage or vision care.

### *1.3 Gap analysis*

An analysis conducted by the UC Graduate Student Government suggests that the minimum stipend at UC (\$16 per hour non-PhD, \$21 per hour PhD) is significantly lower than at comparable institutions in the Midwest including Univ. of Michigan (\$34.10), SUNY Buffalo (\$25.30) and OSU (\$24.00), which might help explain the finding that these three schools are the top destinations for students who choose not to accept an offer to enroll at UC. Unlike the situation at UPITT where stipends have increased by 13.3% over the last five years (faster than the rate of inflation), the minimum graduate stipend at UC remained flat for several years before being slightly increased for fall semester 2020, although this was followed by a 3% tuition increase. In terms of student health insurance, UC students face higher relative costs compared to several of the benchmark institutions examined. For example, individual health insurance is offered to graduate students at no cost at UPITT and UCSD (for associates and teaching assistants), while the graduate health insurance subsidies at USF and OSU are 94% and 82%, respectively. The absence of dental and vision coverage at UC also differs from the situations at institutions such as OSU, UCSD and Georgia Tech.

## **2.0 Graduate Student Mentorship and Career Development**

### *2.1 Models and trends of graduate school from national benchmarking*

We were unable to find any comparison data among benchmark institutions specifically addressing graduate student mentorship and career development. Additionally, services and survey questions related to graduate student mentorship and career development varied greatly among schools making comparison inferences difficult. Nonetheless, several trends were apparent from the available data.

Overall, the majority of surveyed students appeared satisfied with the mentorship they received. For example, 97% of Temple respondents, as well as >70% of students at Georgia Tech and UCSD, were satisfied with the relationship with their primary mentor. While mentorship was not directly addressed by the OSU survey, more than 80% of students were “Satisfied” or “Somewhat Satisfied” with their overall graduate school experience and 82% of student respondents from the 2018-2019 survey felt that OSU prepared them “Very well” or “Generally well” for the job market, with similar level of overall satisfaction (77%) reported by Oklahoma State students.

In terms of professional development, the surveys also yielded evidence to support a growing interest of graduate students in careers outside of academia. As one example, at Temple, when compared to the results of the 2016 GSS administration, there was a statistically significant decline in the average rating of “I plan to pursue a career in academia after graduation” but a significant increase in the rating for “I plan to pursue a position in industry after graduation”. Furthermore, the students see a need for additional support in the areas of professional development and career services. Only 23% of the surveyed Oklahoma State students reported the career counseling as “Above Average” or better, with a mere 18% giving these same ratings for the preparation for non-academic careers. At OSU, just 33% of

those surveyed thought that the university helped them find a job after graduation. Finally, in a CGS survey of graduate school deans, STEM faculty and staff responsible for professional development, only 44% of respondents reported the existence of formal programs to promote the acquisition of skills needed for non-academic careers.

Unfortunately, very few surveys directly addressed the experience of underrepresented minority (URM) students in their graduate program. However, in a 2015 CGS survey of 21 institutions and 1640 STEM doctoral students from URM backgrounds, only 31% agreed with the statement “Faculty are aware of issues facing URMs”, while just 43% agreed with the statement “This program is doing a good job helping URM students succeed”.

### *2.2 Observation with strengths and weaknesses*

The UC Graduate Student Satisfaction Survey (GSSS, see appendix) was conducted from summer semester 2019 to spring 2020, and involved posing 38 questions to approximately 3,900 students. Approximately 97% of respondents were “Satisfied” or “Very satisfied” with their relationship to their primary mentor and the level of support received from the mentor. In contrast, the four highest dissatisfiers were directly related to professional development. Over 15% of respondents reported being either “Dissatisfied” or “Very dissatisfied” with program sponsored opportunities for career path exploration prior to graduation, while 14% were either dissatisfied or very dissatisfied with the help received from their program in pursuit of appropriate employment. A further 12% were either dissatisfied or very dissatisfied with information and encouragement received for pursuing professional development activities, and over 11% were either dissatisfied or very dissatisfied with the advice received about their professional development. Strikingly, 0% were “Very satisfied” with the professional development advice received.

### *2.3 Gap analysis*

Inconsistencies with data collection and gaps in information obtained from UC and benchmark institutions make it difficult to analyze gaps in the standard practice for student mentorship and professional development services provided by the Graduate School at UC. Questions about satisfaction are geared mainly toward programs and not the centralized graduate school. Data about the role of the Graduate School in terms of mentorship and professional development are non-existent. This could be due to the lack of differentiation of research- and professional-based programs by the Graduate School when it comes to policy development. The outdated Board of Trustee rules provide another barrier to accommodating the diverse needs of students in research- and professional-based programs. Currently, graduate student mentorship and professional development support varies by program. There is little centralized programming on professional development provided by the Graduate School, and the existing programming appears mostly focused on academia and teaching effectiveness with less emphasis on non-academic career paths.

## **3.0 Graduate Student Mental and Physical Health**

### *3.1 Models and trends of graduate school from national benchmarking*

Data were predominantly obtained from student surveys and student health-related websites from the above benchmark institutions. A key theme that emerged was the prevalence of mental health issues amongst the graduate student population.

A recent survey of 2,279 graduate students across 234 institutions found that students were 6 times more likely to experience anxiety or depression compared to the general population, as 41% of students

reported moderate-to-severe anxiety and 39% reported moderate-to-severe depression, compared to 6% of the general population for either condition (Evans et al., *Nature Biotechnology* 36(3), 2018). The student surveys at our benchmark institutions clearly confirm that mental health is a major concern for graduate students. 73% of Georgia Tech students reported significant stress ( $\geq 8$  of 10) regarding one aspect of their lives, with 53% reporting significant stress in three such areas (of 21 queried). Approximately one-third of UCSD respondents reported symptoms consistent with clinical depression, while mental health was rated as a top priority moving forward at UCSD and was also highlighted by 56% of the respondents at Pitt.

A 2018 CGS survey of graduate school deans found that “only 21% of deans reported that their institutions do an excellent or good job of informing and training graduate faculty members” on mental health issues. Interestingly, 70% of the deans surveyed “felt that when provided with adequate information and training, graduate faculty members—including faculty advisers, PIs, and dissertation/thesis chairs—should be best positioned to recognize the signs and symptoms of mental health challenges and ensure that graduate students are referred to appropriate services”. Steps taken by the benchmark institutions (such as Georgia Tech, Temple, and OSU) to improve student mental health include providing psychiatric services, individual/group counseling, wellness coaching, and mindfulness book clubs. The most impressive mental health support system of the institutions examined was at UCSD, due to their establishment of “The Zone” which is a lounge for student health that emphasizes student well-being and offers nutrition advice, yoga, therapy animals, relaxation spaces, Art and Soul DIY art, biofeedback, R&R Squad massages, and meditation. Other health-related resources such as sexual violence prevention and support services, drug and alcohol prevention resources, HIV testing and food pantries were commonly observed across the benchmark institutions.

### *3.2 Observation with strengths and weaknesses*

The UC Counseling and Psychological Services (CAPS) office provides access to mental health crisis care and consultation on a 24/7 basis. According to the CAPS website, it also provides free and confidential group therapy sessions to help students find supportive communities, learn life-enhancing skills and strategies (such as mindfulness techniques, anxiety management approaches, etc.), improve interpersonal relationships, and expand self-awareness. The office also organizes a variety of support groups to create a non-judgmental and collaborative safe space to explore topics of importance to students. Furthermore, alcohol/drug recovery services as well as sexual- and gender-based violence support services are available through CAPS.

CAPS also provides students with individual psychological counseling to help students with a variety of issues related to managing stress, anxiety, depression, family problems and academic challenges, amongst others. The CAPS assessment team also provides psychological assessments on a referral basis. The fee for this service is \$100 for students who have UC Student Health Insurance. Additional mental health resources are covered by student health insurance with a co-pay of \$35 per outpatient visit for an in-network provider.

### *3.3 Gap analysis*

It is difficult to determine the degree to which the above resources provide adequate support for our graduate students, since the recent UC Graduate Student Satisfaction Survey (GSSS) failed to ask any questions that were directly related to mental or physical health. There appears to be a lack of established programs at UC by which faculty (including mentors and program directors) or graduate program staff receive rigorous training in the detection of student mental health issues. Many faculty and staff may also be unaware of the mental health resources that are available to students, which hampers their ability to foster student well-being.