

Provost's Committee on the Future of the American University Preliminary Framework on Graduate and Professional Education

Subcommittee

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Introduction

The disruptive forces confronting higher education today present both challenges and opportunities for graduate and professional programs. The erosion of trust in higher education among some segments of the American public, in part symptomatic of rising populism and suspicion of expert knowledge, necessarily creates substantial pressure on post-baccalaureate education whose reason for being is the cultivation of deep expertise. Yet the rapid changes to our world brought on by sophisticated technologies, demands on sustainability, and complex societal influences require experts equipped with the judgment needed to arrive at innovative, creative, and ethical solutions. Meeting these demands will require an openness to experimentation with everything from programs and credentials to structures and modes of delivery. In a future defined by abiding uncertainty, post-baccalaureate education can find a principled way forward not by retreating from risk, which is unavoidable, but by proceeding with deliberate action, learning from failure, and treating both as necessary conditions for meaningful innovation.

The disruption of work driven by generative artificial intelligence (AI) poses profound challenges and opportunities for professional training, especially in fields like law and business where the substitutive and complementary roles of the technology are becoming clearer. Studies from [AI developers](#) also point to vulnerabilities in disciplines like computer science, math, and finance. Profound uncertainty [reigns](#), as some sources even predict [growing](#) labor demand resulting from technological advance. And the ongoing renegotiation of the implicit contract between the university research apparatus and the federal government has already upended the financial and scholarly foundations for graduate training. These forces are not merely passing disruptions. They are harbingers of an extended era of uncertainty that will define the environment for post-baccalaureate education for years to come. How can we identify a constructive way forward amidst so many disruptive pressures?

It is important to keep in mind that many of the challenges facing graduate and professional education predate the disruptions of the last year. Concerns over the cost of both research and professional master's degrees have for years now spotlighted the return on investment (ROI) for graduate programs. While many master's degrees deliver real returns — [median earnings](#) for master's degree holders in 2022 ran roughly 20% higher than for those with only a bachelor's degree — these aggregate figures conceal wide variation across fields and institutions, and the overall picture is complicated by upward pressures on credentials that threaten to raise the costs for students to reach the entry points that a bachelor's degree formerly opened. But there are also signs of stability. As Jordan McGillis recently [noted](#), "The median pay for an American with a bachelor's degree is more than 60 percent higher than the median pay for an American high school graduate. This gap has hardly budged over the past 25 years." And we must always be mindful that there are many non-economic rationales for obtaining both undergraduate and graduate degrees, including the pursuit of knowledge, public service, and the chance to engage in intrinsically worthwhile studies in the company of fellow students and scholars. Indeed, this commitment to learning in all its forms, from the online learner acquiring new skills to the researcher at the lab bench pushing the boundaries of knowledge, reflects a shared dedication to cultivating judgment, fostering pluralism, and supporting education as a lifelong endeavor at the

heart of the university's purpose. The value of such pursuits can never be captured in as crude a metric as degree premiums.

[National analyses](#) suggest that, taken together, private nonprofit and public universities added 13,683 new masters programs between 2004 and 2022, a growth rate of almost 69%. More than half of the new programs were developed by private institutions. These trends are reflected locally at Cornell where between just 2020 and 2025, the university added roughly 70 new master's programs, nearly matching the total number of programs accumulated over the prior two decades. This local growth echoes national trends in the supply of master's programs.

At the same time, downward pressure on demand arising from (a) demographic decline in the number of 25- to 44-year-olds with bachelor's degrees, (b) concerns over debt burdens in some areas of advanced training, and (c) growing suspicion of the value of education amongst some segments of the public, in general, threatens to leave some master's programs at a loss for students. Exclusively online programs appear to be especially vulnerable to AI-assisted internet resources that are widely accessible and essentially free. Nevertheless, as the future of work continues to change at a blistering pace, additional post-baccalaureate opportunities to hone skills or develop new ones at the master's level as well as microcredential- or certificate-bearing courses that deliver well-recognized and respected credentials are likely to be in high demand. Indeed, as universities commit to providing advanced training for students over the course of their lifetimes rather than a single degree, students in the future will likely move in and out of a range of educational settings. This vision of lifelong learning — of the university as a sustained partner in ongoing discovery, creativity, and professional development — is not merely aspirational. It is a strategic response to a future defined by uncertainty. And it requires building durable, trust-based relationships with learners that extend well beyond any single degree. Achieving this at scale suggests the need for a new kind of coordinating institutional unit, one capable of holding together the full arc of post-baccalaureate learning, from first credentials to lifelong engagement.

Transformations in the academic job market have reshaped the career pathways opened by PhD training. In 1992, almost 52% of new PhD graduates went into academic jobs. In 2022, it was just under 33%, according to the [Chronicle of Higher Education](#) and the NSF's Survey of Earned Doctorates. The majority of the loss to academia was absorbed by industry, which more than doubled from absorbing just over 20% of the PhD graduates minted in 1992 to employing over 48% of those awarded in 2022. From the perspective of the workforce, there are reasons to celebrate the dispersal of PhD graduates outward from academia into an array of private industries. More highly trained PhD graduates in industry is a good thing. And yet we should also recognize the consequences of sending a larger share of our best specialists into the private sector instead of retaining them to help train the next generation. This is not a matter of choosing one or the other but of finding the right balance in a sustained conversation between industry and graduate education that builds new productive ties between them. Building those ties — thick, trust-based relationships between universities and the industries, communities, and public institutions they serve — is among the most important investments universities can make in realizing their purpose in an uncertain era.

The predicted decline in undergraduate enrollments, often referred to as the demographic cliff, clearly signals an ebb tide for faculty employment and, as a consequence, graduate training for academia. And yet there are also emerging areas of expertise and arenas where advanced skills in the liberal arts will increasingly be called upon to augment traditional deep discipline-based skills that have long been the focus of graduate education. In a future of deep uncertainty, advanced training in areas that cultivate capacities for judgment will be critical. How graduate and

professional training advances the cultivation of judgment as a quality of expertise, and the degree to which industry recognizes the value of such training, will be important measures of their success in the coming decades.

Professional education appears in one sense to be the most coherent form of post-baccalaureate education, thanks to the tight feedback loops between educational curricula and workforce demands. Yet we see uncertainty ahead for professional education as generative AI presents new requirements for training and shifts workforce demands. Transformations in professional work reverberate quickly and powerfully in law, business, public health, veterinary and human medicine, and other areas of professional training, presenting both opportunity and peril to university partners that provide responsive curricula.

With an uncertain future, the most stable strategy across all domains of graduate and professional education is to lower silo walls, reassert ties to the wider campus, and foster meaningful connection among students. Across the highly diverse fields of advanced study, there is shared intellectual, pedagogical, and vocational value in lowering the walls of disciplinary silos and re-engaging post-baccalaureate education in the advanced cultivation of core human skills, including critical thinking, problem solving, creative exploration, communication, and rhetoric. These are the skills that contribute not to the attainment of advanced expertise — those are conveyed in advanced study programs — but rather the cultivation of judgment as to how to deploy expertise. This whole-campus commitment to cultivating judgment, fostering meaningful collaboration across institutional sectors, and maintaining the university's global reach and responsibilities reflects the strategies by which our mission frameworks can best realize the university's central purpose. Enlisting the full campus in cultivating judgment in graduate and professional students contributes to their formation as experts capable of balancing uncertainty with knowledge, communicating persuasively, and advancing constructive solutions. Moreover, embracing a whole campus approach to graduate and professional education would address one of the most vocal concerns raised in stakeholder conversations: a lack of integration with fellow post-baccalaureate students and the wider Cornell campus. What form that coordination might take, including the possibility of a unified institutional home for all post-baccalaureate education, is a question this framework addresses directly.

Challenges and Approaches

A [2016 Mellon Foundation Report on Doctoral Education](#) reviewed 25 years of reform efforts and concluded that redesigning advanced graduate education proved "harder than imagined at the outset" and that actual improvements in practice over the long term have been "modest and generally disappointing." As the report notes: "graduate school is conservative even by academic standards. So little about it has changed that we might rightly describe it as rigid, not conservative." Graduate education, in large measure, has been shaped by the entrepreneurialism of the faculty, whether through the pursuit of grants or the development of master's programs. But the result has been a system that is well-managed but only marginally led as decision-making is often highly distributed. In the absence of leadership empowered to define strategic goals and effect change, there is a discernible lack of agreement on the core principles that should shape graduate and professional education.

Over the last decade there have been a number of thoughtful efforts to reform graduate education, each articulating slightly different visions of the core principles that should shape the future of post-baccalaureate education. [Yale's 2021 blueprint](#) for modernizing humanities doctoral education emphasized innovation, inclusion, and interdependence — pushing intellectual frontiers while building communities open to the world. [Brown's 2022 task force](#) foregrounded student-centered

values: diversity as a condition of excellence, interdisciplinarity as a driver of collaboration, and student autonomy within a multigenerational scholarly community. The Mellon Foundation's reports, spanning its ambitious 2016 overview to the more focused [2023 report on interdisciplinary programs](#) at Columbia University, evolved from a stewardship model emphasizing disciplinary responsibility and broader social applicability toward a more structural focus on cohort-based learning, cross-disciplinary engagement, and accountability through student outcomes. Each framework offers genuine insight — Yale's emphasis on innovation and inclusion, Brown's commitment to student autonomy, and Mellon's insistence on accountability all represent hard-won lessons that any responsible vision for graduate education must carry forward. But each envisions a future shaped primarily by forces internal to universities. The future of graduate and professional education envisioned by this framework, in contrast, is shaped not only by transformations within universities, but also by powerful forces outside them — the erosion of public trust, the disruptions of AI, and the transformation of the federal relationship with universities — which together create conditions of radical uncertainty that demand a new openness to experimentation.

Principles of Advanced Study for an Uncertain Future

From this vision, the committee has outlined a framework for the future university centered around the **cultivation of judgment** and the suite of skills that prepare students to navigate a future defined by uncertainty. Judgment is not one thing. It is a composite capacity — analytic and imaginative, critical and creative — that equips experts not just to decide better but to see more fully, and act with both wisdom and invention. At the graduate and professional level, this means promoting the capabilities that can sharpen advanced expertise by focusing attention on issues of epistemic reliability, contextual understanding, ethical reasoning, data literacy, and effective, trustworthy public communication. The subcommittee's analysis of learning outcomes across 84 of Cornell's graduate fields reveals that these capacities are already recognized as shared priorities across a remarkable range of programs, a finding that points toward the coordinating vision developed later in this framework.

Graduate and professional education provides universities with a **barometer of public needs**. While undergraduate education trains students in the broad skills of citizenship and their application to a wide array of issues, post-baccalaureate education is the arena where universities respond to wider societal calls for expertise. Such calls may arise in the arena of professional training, where market and societal needs for doctors, lawyers, and skilled workers help shape a range of credentialing programs from the master's degree to the MD. But demands have also traditionally emerged from state and federal governments that power the research and extension agendas through control over key funding sources.

Even as post-baccalaureate education is sensitive to public needs, the university's abiding commitment to discovery requires that graduate and professional education retain a **commitment to scholarly independence**. Advanced training is central to the autonomy of the university, providing a space where research areas can be preserved and advanced even when they are ignored, or repressed, by external political and economic forces. It is vital, for example, that graduate and professional education **retain its global vision**, drawing the world to the United States in what has for decades been a remarkable migration of intellectual acumen to American universities. Graduate and professional education thrives in the world examining issues, problems, and challenges that are not just national, but global in scope.

The advent of generative AI portends significant changes to graduate and professional education. Most notably, as generative AI transforms access to knowledge, deep expertise remains essential. But its purpose may shift, from mastering what is known toward a capacity to synthesize, connect,

and critically evaluate across an expanding field of available knowledge. In this light, the committee anticipates that **the advanced cultivation of the skills of judgment, creativity, and communication** will become central to the mission of education. For graduate and professional education, this suggests we must advance the refinement of skills initiated as undergraduates: critical thinking, argumentation, persuasion, ethics, teaching, and effective communication. The difference from undergraduate training is one of range and intentionality. For example, a graduate student should not just learn to write clearly, but to write for multiple audiences, from a narrow disciplinary audience to the general public. Moreover, the advanced research skills sharpened in post-baccalaureate programs should enable not just critical thinking, but the constructive imagination of pathways forward and solutions to problems. To professionalize is to not simply gain a credential but to enter into a form of thought characterized by cultivated judgment which can discern the best among multiple paths forward.

In this context, graduate and professional education must take responsibility for designing learning environments that deliberately cultivate these capacities rather than assuming that they will emerge incidentally through disciplinary immersion alone. Accordingly, structured opportunities for interdisciplinary exchange, public-facing scholarship, and collaborative problem solving would help students learn how to translate expertise into judgment that matters beyond the academy, goals that align well with the committee's goals for translational collaborations with external stakeholders such as K-12 education. Such designs reinforce the idea that advanced education will generate value not only through specialized knowledge, but also through the formation of scholars and professionals who can think creatively, evaluate evidence, communicate significance, and act responsibly in complex, uncertain environments. As generative AI reshapes access to information, the enduring return on investment of graduate and professional education will increasingly lie in its ability to develop human-centered capacities for interpretation, ethical reasoning, critical reasoning, and creativity that resist over-automation.

In looking to the future, the committee envisions graduate and professional training as an open forum, providing skills and training as needed over **the long course of an extended career**. The pace of social, economic, and technological change makes it clear that universities cannot provide a lifetime of skills in the course of just two to six years of a post-baccalaureate career. Instead, graduate and professional education can be understood as fully aligned with the continuing education mission of the university. By opening our doors to students at all stages and encouraging a culture of continuous learning and reinvention, universities can become vital hubs for acquiring new skills, advancing techniques, and indeed enhancing our own areas of expertise. Investing in post-baccalaureate education across a lifetime of learning enables universities to open new lanes for entry that are not possible at the undergraduate level, dramatically expanding access to the institution. Graduate and professional education in this vision becomes the foundation for lifelong learning within an open, porous institution. In extending our commitments to our students across their lifetimes, graduate and professional education becomes **not just a credential but a relationship**, thick, durable, and capable of sustaining both learners and institutions through decades of uncertainty.

Speculative Scenarios: Envisioning Four Futures

Any responsible vision for the future of graduate and professional education must reckon with our dawning era of profound disruption and change. The principles and structural reforms proposed in this framework represent our best thinking about how to navigate a period of radical uncertainty. But the conditions under which our proposals will be tested remain genuinely unknown. The committee was charged with examining the most consequential pressures facing universities today, and two of these bear most directly upon the future of post-baccalaureate education: the

pace and character of AI development and the renegotiated relationship between universities and federal government. The scenarios below trace the most consequential combinations of those variables, exploring what each means specifically for graduate and professional education. **These scenarios are not recommendations and do not imply support from the committee.** Rather, they are illustrations of the wide range of options that these principles could open in practice and a way to play devil's advocate around some of the concerns articulated both inside and outside of Cornell.

Pressures	Disruptive AI Development	AI as Normal Technology
Federal Withdrawal	1. University as Community of Connections	2. University as Multinational Corporation
New Federal Partnership	3. University as Innovation Hub	4. University as Opportunity Accelerator

Scenario 1: The University as Community of Connections (Rapid AI Advance + Federal Withdrawal)

This is the most challenging scenario for graduate and professional education, and, in many respects, the one that the current moment most urgently prefigures. In an environment of rapid AI advances combined with sustained government hostility — the withdrawal of federal research funding, the threat of accreditation as a regulatory weapon, the erosion of student loan support — the elaborate infrastructure of doctoral and professional training would face existential pressure. Most PhD programs depend on federal grants to fund graduate students; without that support, cohort sizes would shrink dramatically, or programs would collapse entirely. Professional schools, already facing disruption from AI's encroachment on legal, medical, and business activities, would find themselves simultaneously deprived of the public legitimacy and financial architecture that sustains them.

In this environment, the temptation would be to retreat toward the transactional model of graduate education that this framework has argued against — positioning master's degrees and professional credentials purely as consumption goods, valued less for the depth of training they provide than for the thick networks and social experiences they facilitate. The risk is that the university becomes, at the post-baccalaureate level, little more than a branding vehicle for AI-driven content delivery and certification, with the richness of genuine advanced training hollowed out. A dedicated coordinating structure for post-baccalaureate education of the kind this framework envisions (described more fully below) would matter most in precisely this scenario. An institutional home with a clear mandate to defend the quality, rigor, and intellectual coherence of graduate and professional education would be far better positioned to resist these pressures than scores of individual programs each negotiating the crisis alone. The cultivation of judgment — critical thinking, ethical reasoning, effective communication — would become, paradoxically, both harder to sustain institutionally and more urgently needed in a world where AI has assumed many of the technical functions formerly reserved for trained professionals. By establishing a culture that supports lifelong learning, a more unified institutional home for post-baccalaureate training could provide continuity across educational programs, provide guidance toward a wider range of careers, and establish more robust networks of alumni that allows students to navigate and thrive within an increasingly accelerated climate of technological advancement.

Scenario 2: The University as Multinational Corporation (AI as Normal Technology + Federal Withdrawal)

If AI development proceeds more incrementally — becoming a powerful but assimilable tool rather than a wholesale replacement for professional expertise — graduate and professional education retains more of its traditional rationale. The deeper threat in this scenario is governmental. Detached from federal support and facing a regulatory environment hostile to academic independence, universities would be driven increasingly toward private sector partnerships to sustain their research and training missions. Such a turn would require the development of a new bureaucratic ecosystem that could support such collaborations. Graduate education would feel this pressure acutely: doctoral programs would reorient toward industry-defined research agendas, and the pipeline of PhD graduates into academia — already diminished, as noted above — would narrow further as the distinction between university research and corporate research and development blur.

The global vision for graduate education articulated in this framework would simultaneously become both more important and more difficult to realize. Top international scholars and students, confronted with an American university system operating under conditions of constrained academic freedom, would increasingly look to institutions in other jurisdictions — a reversal of the brain drain that has for decades been one of American higher education's most significant competitive advantages. Universities that survived and thrived in this scenario would likely do so by conceiving of themselves as genuinely multinational enterprises, pursuing an optimal blend of research output, tuition revenue, and scholarly impact across multiple national contexts. This is not an entirely dystopian outcome — global reach and diverse funding streams have genuine intellectual benefits — but it would represent a profound transformation of the public mission that has historically animated graduate and professional education in the United States. The sunset provisions and quality oversight mechanisms proposed in this framework would be critical tools for ensuring that programs surviving in this leaner environment are those that genuinely serve students rather than merely those that have found the most reliable revenue streams.

Scenario 3: The University as Innovation Hub (Disruptive AI Development + New Federal Partnership)

A renewed federal partnership with universities, combined with rapid AI advance, would create conditions of significant opportunity for graduate and professional education — but opportunity of a particular and potentially distorting kind. Federal investment would likely flow disproportionately toward fields deemed critical to national security and technological competitiveness: AI itself, quantum computing, advanced manufacturing, biotechnology, energy. Doctoral programs in these areas would expand, potentially dramatically, while programs in the humanities, interpretive social sciences, and fundamental natural sciences would face a stark choice: justify their existence in terms legible to national security or economic development priorities or migrate toward intellectual problems that center AI disruption.

This scenario underscores the importance of the scholarly independence principles articulated in this framework. A university that allows government partnership to become government coercion risks losing precisely the capacity for independent inquiry that makes its research valuable in the first place. The challenge for graduate and professional education in this scenario is to accept the resources that a renewed federal partnership would provide while insisting on institutional autonomy — including the freedom to pursue research orthogonal to current national priorities — that distinguishes a university from a government laboratory. A central unit for academic leadership

of post-baccalaureate education (see below) would play a vital role here, providing a coordinating structure that can engage with industry as a partner in curriculum and research while ensuring that the shared learning outcomes identified across programs — communication, research competence, ethical reasoning, teaching — are not sacrificed to a narrowly technical vision of what advanced training is for. To solidify these new partnerships, it will be imperative to convey the innovation that academically driven research, scholarship, and development historically has achieved. The cultivation of judgment, in this scenario, becomes the counterweight to the cultivation of mere technical capability.

Scenario 4: The University as Opportunity Accelerator (AI as Normal Technology + New Federal Partnership)

This is the scenario most hospitable to the vision of graduate and professional education developed in this framework, both because clarity about the conditions for success is strategically useful and because the scenario, while hopeful, is not without its own challenges. If AI develops as a powerful but manageable tool rather than a wholesale disruptor of professional work, and if a renewed government partnership provides stable support for both research and training, graduate and professional education retains the institutional conditions necessary to pursue the reforms proposed here in full.

In this environment, the master's degree can be genuinely reformed — made more rigorous, more clearly tied to defined learning outcomes, more accessible through reduced tuition, better financing, and increased support — rather than merely proliferated in response to market pressure. The PhD, in turn, can be reimagined in ways that more turbulent conditions would not allow, creating the opportunity for a considered rethinking of everything from degree pathways to capstone scholarship. Questioning taken-for-granted traditions, like the proper form, medium, and audience for dissertations, can be undertaken amidst a considered sense of technological change. And the MPhil, or similar intermediate credential, would provide meaningful off-ramps for students whose interests lie in expertise but not the independent conduct of research. It is the stability of this scenario that creates the space for reform to be deliberate rather than reactive. A central unit for coordinating all areas of post-baccalaureate education (discussed further below) can be established not as a crisis response but as a genuine institutional innovation, integrating continuing education with traditional graduate programs and extending the university's relationship with its students across a lifetime of learning. And the global vision articulated in this framework — a genuinely diverse international student cohort, reciprocal exchange programs, research agendas that are global in scope — can be pursued with the institutional confidence that comes from secure domestic foundations.

Yet even in this most favorable scenario, the core argument of this framework retains its force. The cultivation of judgment — the advanced development of critical thinking, creative projection, ethical reasoning, and effective communication — remains the right organizing principle for graduate and professional education not because circumstances demand it as a survival strategy, but because it represents the deepest and most enduring answer to the question of what advanced training in a democratic society is for. Whatever scenario universities face, that answer will not change.

Example Next Steps: From Principles to Action

The principles and imagined possible futures outlined above suggest several concrete directions for reform. What follows is not a comprehensive blueprint, but an initial mapping of ideas gathered from extensive stakeholder feedback that are most likely to strengthen graduate and professional education in a period of radical uncertainty. These ideas are offered in a spirit of humility that

arises out of the myriad futures opened by our scenarios. Each recommendation provides an opportunity for innovation and experimentation, a starting point to be tested, refined, and where necessary abandoned as conditions evolve.

Ensure scholarly independence.

Securing the scholarly independence of graduate and professional education requires both institutional commitment and structural innovation. Universities must be willing to incubate research that is vital to their intellectual mission even when it runs orthogonal to current trends, maintaining long-term commitments to core fields that underpin education at every level. But scholarly independence should not become a shield for stagnation. Professional, master's, and doctoral programs alike should be actively encouraged to experiment, since the culture of graduate education has for too long treated innovation as a risk rather than a responsibility. The freedom to experiment must be matched by a serious commitment to assessment. Regularly evaluating programs against learning outcomes, workforce conditions, and institutional priorities is not a bureaucratic obligation but a condition of responsible innovation. Scholarly independence, experimentation, and rigorous assessment are not competing values — they are the mutually reinforcing conditions of a culture in which heterodox thinking can routinely flourish.

Provide a sensitive barometer of public needs.

Responsiveness to public priorities and the preservation of scholarly independence are not in tension — they are complementary obligations. The proliferation of master's degrees, documented both at Cornell and across American higher education, demands ongoing attention to academic quality and ROI. Reducing tuition, where possible, can expand participation and signal that advanced education is a public good rather than a private transaction. AI-enabled efficiencies should make more affordable degrees and credentials possible, but paradoxically they will also put an added premium on high-touch, in-person experiences that build the thick relationships no algorithm can replicate. Those relationships depend, in turn, on the quality of teaching students receive. But graduate and professional education has a second pedagogical obligation: training its own students to teach, treating pedagogy not as an afterthought but as a core competency they will carry into every professional setting. The same logic extends to public communication: if expertise is to matter beyond the academy, graduate and professional students must learn to convey it to audiences well beyond their disciplines. Knowledge is a public good that has value beyond near-term earnings, which is why post-baccalaureate education includes conserving, advancing, and communicating knowledge responsibly for audiences beyond the academy.

Expand global reach.

American universities have built remarkable international student cohorts, yet those cohorts remain surprisingly narrow in their geographic origins, drawn predominantly from a small number of countries. According to the Institute of International Education's Open Doors reports, for the 2024–2025 academic year, 53% of all international graduate students at U.S. institutions came from just two countries: China and India. Although both are internally diverse in ways that already enrich American campuses, extending the engagement of universities with a wider array of nations would significantly deepen the range of intellectual traditions, research priorities, and perspectives that define the graduate and professional learning environment. Broadening the diversity of international students will require deliberate effort: establishing new feeder programs, securing funding for advanced training from a wider range of nations, and building on reciprocal exchange opportunities that benefit both students and faculty, such as the approach taken by Cornell's [Global Hubs](#) initiative. A genuinely global vision for graduate education is not merely an equity imperative; it is a strategic one, ensuring that the experts we train are formed in dialogue with the full complexity of the world they will be asked to navigate.

Center advanced learning on the cultivation of judgment.

The cultivation of judgment as a defining goal of graduate and professional education has several practical implications for program design. Microcredentials and certifications in advanced skills — research communication, undergraduate teaching, data literacy, and others — can provide stackable credentials that build toward a flexible array of career outcomes. Investing the wider university campus in the training of graduate and professional students can help break down the silos that isolate post-baccalaureate learners from the broader intellectual life of the institution. Creating connections across fields can sustain cohort effects even as individual program sizes shrink, and inter-institutional mechanisms for cohort building can enhance the robustness of both disciplinary and interdisciplinary networks. Underlying all of these design principles is a commitment to pluralism — the conviction that judgment cannot be cultivated in intellectual monocultures — and that exposure to different disciplines, traditions, perspectives, and ways of knowing is not a distraction from advanced expertise but one of its essential conditions.

The contraction of PhD cohorts carries consequences that extend well beyond graduate education itself. At Cornell, as at many research universities, graduate students provide the teaching labor that makes undergraduate education possible at scale — currently instructing 65% of the First-Year Writing Seminars and the majority of undergraduate laboratories that are graduation requirements for every entering student. As doctoral cohorts shrink while undergraduate enrollments hold steady, this relationship becomes increasingly difficult to sustain. Addressing it will require deliberate investment in alternative teaching models, such as expanded postdoctoral teaching positions (potentially as extensions on PhD training) and a larger role for full-time teaching faculty. The relationship between graduate enrollment and undergraduate teaching capacity is not a peripheral concern: it is one of the central structural couplings that any serious consideration of the future of graduate education must address.

The research mission of the university depends on graduate students in ways that go beyond their role as future faculty and beyond their development as researchers. Immersion in original inquiry is among the most powerful contexts in which judgment is formed: where the ability to evaluate evidence, tolerate uncertainty, and imagine new possibilities is practiced rather than merely taught. Doctoral and advanced professional students are among the most active contributors to the discovery, creative work, and knowledge production that give the research university its distinctive purpose. Sustaining that contribution as many cohort sizes shrink and funding landscapes shift will require deliberate strategies to keep graduate students at the center of the research enterprise through new models of collaborative funding, expanded research partnerships with industry and government, and a clearer articulation of the value that graduate researchers bring to every dimension of university life.

Perhaps the most consequential implication of centering graduate education on judgment is the challenge it poses to the dissertation as the capstone of doctoral training. The traditional dissertation form faces genuine pressure from generative AI, which complicates longstanding assumptions about individual authorship and original contribution. But the challenge runs deeper: universities have been slow to embrace the wide array of media and forms through which knowledge can now be shared and explained. Different disciplines will find different answers here — a multimodal capstone may be right for some fields, a public-facing project for others, a traditional monograph for still others — and that disciplinary variation should be welcomed rather than flattened into a single institutional standard. What matters is that any new form demands the same depth of knowledge and rigor that the dissertation has always required: judgment, after all, is not a substitute for deep expertise but its highest expression. Any serious revision of the

dissertation will likely reverberate into revised expectations for hiring, tenure, and promotion, which is precisely why the conversation must involve faculty governance from the outset. Ultimately, if generative AI makes information ubiquitous, graduate education will secure its future by making judgment precious.

Provide skills and training over an extended career.

The demographic pressures facing American higher education — most visibly the so-called demographic cliff in undergraduate enrollments — invite a broader rethinking of who graduate and professional education is for and across what span of a life it operates. Spreading post-baccalaureate education across a much longer arc than the traditional model of students in their twenties can both serve learners better and protect institutions against enrollment volatility. This means providing multiple on- and off-ramps to graduate education, including pathways that students can enter and exit without stigma. One concrete mechanism worth serious consideration is the reintroduction of the MPhil or a similar intermediate degree, positioned between the MA and the PhD. Such a credential would allow students who reach the post-coursework stage — currently designated ABD ("all but dissertation") — to leave with meaningful recognition of their investment, a reform that universities in Britain and Canada have long embraced. Such an intervening credential would formalize the distinction between the advanced ability to engage in scholarly judgment — to read, digest, collate and evaluate arguments — and the ability to actively discover new knowledge — to design, implement, and communicate original advanced research.

This extended vision of graduate education also raises the question of how continuing education relates to the graduate school. In a meaningful sense, all post-baccalaureate education that falls outside the residential undergraduate experience is continuing education. Exploring how these functions might be more formally integrated (see below) deserves sustained attention. Across all of these extended pathways, there is also an opportunity to reinforce the diversity of the faculty models that students encounter, embracing professors of practice, clinical faculty, and engaged-learning experts who can offer students career models that reflect the full range of outcomes a graduate education can open, not only the academic positions that will be available to a shrinking minority. Graduate education has historically been defined by fixed entry points, linear progressions, and terminal endpoints. A more elastic vision, one that stretches across a lifetime of learning, would make entry, pause, and return normal trajectories, fostering attention to outcomes across decades rather than the moment of credentialing.

Create thick, lifelong relationships with students.

The crisis of public trust in higher education has thrown into relief how much the relationship between universities and their students has frayed. At the post-baccalaureate level this fraying takes a particular form: education and credentialing come to be seen as purely transactional, a matter of tuition paid in exchange for augmented salary, status, or opportunity. Reversing this tendency requires deliberate investment in the kinds of sustained relationships that make universities something other than credential factories. If graduate and professional education can be reconceived as part of a lifetime of learning rather than a discrete episode, the relationship between institution and student can be correspondingly thickened — maintained and renewed across decades rather than concluded at commencement. This is not only a matter of institutional loyalty or alumni engagement, though both matter. It is a vision of the university as a permanent intellectual home, one whose value to its students deepens rather than depreciates over time. The recent unionization of graduate students at Cornell and across American research universities is, in this light, best understood as part of the same broader renegotiation of the university's relationship with its students. Whatever disagreements may arise over wages, benefits, or working conditions, the interests of graduate student unions and the interests of universities now converge

powerfully on one fundamental point: federal investment in research and graduate training flows directly to the students whose labor, learning, and career prospects depend on it. Graduate student unions are among the constituencies with the most immediate and concrete stake in defending public support for universities — and universities, in turn, have every reason to welcome that advocacy as part of a broader coalition making the case that graduate and professional education is a public good worth sustaining.

More Ambitious Steps: Enhanced Strategic Coordination

In a future defined by uncertainty, as well as diminishing resources that pressure bottom lines in units across the institution, universities need to ensure that post-baccalaureate education has the structural agility and financial authority to make strategic investments. Cornell's field system provides one example of how to create structural agility in post-baccalaureate education, allowing cross-pollination to take hold without impacting the underlying architecture of home departments. But the field system on its own does not make possible the kind of strategic coordination that can bring all areas of post-baccalaureate education into strategic alignment. To realize this kind of integrated, porous, structure of lifelong learning and training requires a top-level academic unit, typically a school or college depending on the university. This unit would bring the academic, co-curricular, extracurricular, and financial structures of post-baccalaureate training under one roof, providing strategic leadership for an advanced learning commons. This unit, perhaps a school or college of advanced study, would coordinate post-baccalaureate education across its full range of obligations: to disciplines, to learners, to cross-disciplinary communities, and to the cultivation of a durable commitment to learning that extends beyond any single degree.

The case for tighter integration of post-baccalaureate education rests on three convergent arguments developed throughout this framework. The uncertainties of the coming decades, the shared need to cultivate the core skills of human judgment across all forms of graduate and professional education, and the ambition to build thick, enduring relationships with students across a lifetime of learning all point in the same direction: toward a coordinating unit charged with ensuring the quality, value, rigor, and coherence of all post-baccalaureate education.

Building the structures required for strategic alignment of all post-baccalaureate programs would need to be done with care. It would need to preserve the core strengths of existing approaches to graduate and professional education rather than flatten them into uniformity. The goal is not to constrain diversity but to enhance integration. The professional schools must retain their responsive ties to their industries even as they lean into a broader shared commitment to cultivating judgment. Master's programs would need to remain nimble while also maintaining the rigor that connects advanced skills training to the full diversity of student trajectories. And the PhD should remain the capstone degree, training students in the design, implementation, and execution of the original research that advances human understanding. What a top-level unit for post-baccalaureate education adds to these existing strengths is: (a) centralized curricular and co-curricular support capable of mobilizing the entire campus in the service of all post-baccalaureate students; (b) vertical integration across the full range of credentials from certificates and microcredentials through the master's degree to the PhD, and horizontally across the administrative units that have historically operated in isolation from one another; and (c) a single institutional interlocutor capable of enabling new initiatives without requiring approval from multiple competing units, reducing friction, accelerating innovation, and returning meaningful autonomy to programs and fields; and (d) a focal point for cultivating thick relationships with our post-baccalaureate students that can be tended, maintained, and strengthened over decades. The organizational benefits of enhanced strategic coordination would be felt most acutely by interdisciplinary and cross-cutting fields, which currently must negotiate their initiatives across a

series of administrative units whose jurisdictions were never designed with them in mind. Moreover, a school or college coordinating advanced study would be empowered to direct resource flows, both revenues and costs, toward a unified strategic vision.

The benefits of an organizational unit focused on all levels of advanced study would extend well beyond post-baccalaureate education. At the undergraduate level, the cross-disciplinary programs and shared learning infrastructure developed for graduate and professional students would create new opportunities for advanced undergraduates to engage with graduate-level inquiry, enriching their education while deepening the intellectual community that surrounds it. For the research enterprise, a more coordinated approach to graduate training, interdisciplinary exchange, and industry partnership would strengthen the connective tissue between disciplines, creating conditions for the kind of cross-cutting discovery that neither programs nor research centers can easily generate alone. And for public engagement missions, a coordinating unit for post-baccalaureate training with a clear mandate to connect expertise to public needs would provide a coherent institutional vehicle for translating the university's knowledge into impact, making the case, in concrete and visible ways, that the cultivation of judgment at the graduate and professional level is inseparable from the university's obligations to the world beyond its gates.

The empirical case for such coordination is strong. An examination of graduate program learning outcomes across Cornell reveals that a remarkable range of advanced skills — precisely those most critical to the cultivation of judgment — are already shared by a majority of programs. Communication skills are identified as a learning outcome by 84.5% of programs, encompassing scientific and academic writing workshops, presentation skills training, grant and proposal writing support, and public and science communication. Research competence appears in 73.9% of programs, including research methodology courses, data analysis and statistics support, and best practices in literature review. Professional ethics is a stated outcome in 57.0% of programs, addressed through responsible conduct of research training and research integrity workshops. Teaching and mentoring skills appear in 55.6% of programs, supported through graduate teaching certificate programs and mentoring best practices workshops. As the preliminary framework on Research and Scholarship makes clear, advanced training in public engagement also looms large as vital to the future of the academic mission.

Our analysis of graduate field learning outcomes reveals that beneath the extraordinary diversity of today's post-baccalaureate programs lies a broad unity of educational purpose — one that is currently being pursued independently across a vast array of individual programs. A unified organizational home for advanced study would provide the coordinating infrastructure to develop these shared outcomes with the depth and coherence they deserve, rather than leaving each program to address them idiosyncratically with whatever resources it can muster.

Nowhere is coordinated action more urgently needed than in the university's response to generative AI. The implications of AI touch every one of the shared learning outcomes identified above — transforming what it means to write, conduct research, maintain ethical standards of integrity, and teach. Addressing those implications program by program, across separate units, risks producing a fragmented and inconsistent response at precisely the moment when the university most needs to speak with a coherent institutional voice. A college or school focused on all domains of advanced study would set the conditions under which judgment, integrity, and public value become teachable and durable in a world of rapid technological change. Efforts to move in this direction could involve providing incentives to faculty and students to propose and find new connections among traditionally disparate fields and perspectives. Such an approach would be

highly responsive to the needs of those working at the frontiers and allow an aspect of grass-roots advocacy for innovation to balance increased centralization.

At Cornell, an academic unit centered on the coordination of all domains of post-baccalaureate education would be uniquely positioned to develop a unified approach to AI — establishing shared principles, supporting faculty in redesigning curricula, and ensuring that the university's response to one of the most consequential technological shifts in the history of higher education is something more than the sum of its parts. Realizing this vision will require confronting the financial and governance complexity that Cornell's existing financial structure poses, and careful thought will need to be given to providing the unit with genuine coordinating authority rather than merely advisory capacities.

A unit centered on the strategic coordination of all areas of advanced study is, at its core, a structural answer to a substantive problem. Graduate and professional education at Cornell — and at American research universities more broadly — has for decades been organized around the entrepreneurialism of individual programs and the autonomy of discrete units. That organization has produced genuine excellence, but it has also produced a system that is well-managed at the local level and underled at the institutional level, one that struggles to respond coherently to challenges that cut across every field and every form of advanced training. The disruptions now facing higher education — the erosion of public trust, the transformation of work by AI, the renegotiation of the federal research compact — are not disciplinary-specific problems. They are arguably the most consequential challenges universities have faced in generations, and they demand a university capable of responding with commensurate ambition and coordination. Creating the institutional structure required for strategic coordination across post-baccalaureate education would not replace the strengths that graduate and professional programs have built. It would provide the institutional architecture needed to bring those strengths to bear on a future that no single program, however excellent, is positioned to navigate alone.

Looking Forward

The vision presented here represents neither a beginning nor a conclusion, but an intermediate step in an ongoing conversation. The Graduate and Professional Education Subcommittee has already drawn extensively on the insights of faculty, staff, students, alumni, trustees, and administrators — as well as supporters and critics both on and off campus — whose testimony shaped the analysis and proposals in this framework. We now return these draft findings to that same community for response, refinement, and challenge. We invite reactions that complicate our assumptions, deepen our analysis, and propose alternatives we have not imagined.

The challenges facing graduate and professional education are too consequential, and the decisions ahead too far-reaching, for any single committee to navigate alone. But they are also too urgent to await the arrival of certainty that will never come. The proposals in this framework are offered in the same spirit we have recommended for graduate and professional education itself — as experiments, advanced with conviction but held with humility, open to revision as conditions evolve and understanding deepens. If we have argued throughout that judgment is not a substitute for knowledge but its highest expression, we must apply that same standard to our own work: remaining willing to learn, to adapt, and to be proven wrong.

It is in that spirit of shared inquiry — which is, after all, the animating spirit of the university itself — that we offer this draft framework not as a final argument but as an invitation to continued dialogue. The enduring value of graduate and professional education will be determined by our willingness to revisit our approach together as conditions change and our understanding deepens.