STRATEGIC PLAN FOR RESEARCH

The University of Texas at Austin

April 1, 2025

[Prepared for submission to the Texas Higher Education Coordinating Board as required by Texas Education Code 51.358]

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Vision Statement

The mission of The University of Texas at Austin is to achieve excellence in undergraduate education, graduate education, research, and public service. The University offers superior and comprehensive educational opportunities from the baccalaureate to doctoral and special professional levels.

The University advances society through research, creative activity, scholarly inquiry, and the development and dissemination of new knowledge, including the commercialization of university discoveries. It preserves and promotes the arts, benefits the state's economy, serves citizens through public programs, and provides other public services.

The core purpose of the University is to transform lives for the benefit of society. The core values of the University are:

- Learning: A caring community, all of us students, helping one another grow.
- Discovery: Expanding knowledge and human understanding.
- Freedom: To seek the truth and express it.
- Leadership: The will to excel with integrity and the spirit that nothing is impossible.
- Individual Opportunity: Many options, diverse people and ideas, one university.
- Responsibility: To serve as a catalyst for positive change in Texas and beyond.

Current Position

In fall 2024, the University enrolled 53,864 students (43,165 undergraduate, 9,193 graduate, 440 professional, 867 law and 199 medical) in 227 baccalaureate, 137 master's, and 90 doctoral programs. During academic year 2023- 2024, the University conferred 10,539 baccalaureate, 3,402 master's, and 873 doctoral degrees. There were also 573 doctoral degrees conferred that qualify recipients for entry into professional practice (e.g., JD, MD, etc.) for a total of 15,387 degrees granted.

The University has more than 45 graduate programs among the top 10 in the nation and four programs ranked #1, according to U.S. News & World Report (2025 "Best Graduate Schools"). It has top 10 programs in 12 of its colleges and schools, including such disciplines as business, communication, education, engineering, Earth sciences, humanities, information, law, natural sciences, pharmacy, social work, and the social sciences.

The University is ranked #30 in Best Global Universities by U.S. News (2025), #56 in the Nature Index for Scientific Research (2025), #30 by the Center for World University Rankings (2025), and #49 in the World University Rankings by Times Higher Education (2025).

UT Austin is a "Research University" as defined by the Texas Higher Education Coordinating Board (THECB). In the current Carnegie Classification system, UT Austin is classified under "Doctoral Universities: Highest Research Activity." In FY 2024, the University had $1.14 billion in research expenditures. UT Austin was ranked 14th out of 749 universities in 92 countries for the Times Higher Education's inaugural Interdisciplinary Science Rankings in 2024.

This 2025 Strategic Plan for Research describes how the University is enhancing its research activities and graduate programs to better serve the state and nation. The University's research mission continues

to focus on advancing society through the development and dissemination of new knowledge and bringing university discoveries to the market for the benefit of society.

Plan to Elevate Research Enterprise

Goals and Priorities

The University of Texas at Austin aims to be the world's highest-impact public research university. To achieve this goal, we will continue expanding and connecting our ambitious scholarly and creative pursuits. We plan to equip and embolden our faculty and students to push the boundaries of knowledge, respond to societal challenges, and enrich lives globally. We encourage our students, faculty and staff to pursue bold fundamental and applied research in cutting-edge scholarship across all segments of campus, including the sciences, engineering, social sciences, arts, and humanities. Our focus includes translating academic research into practical applications that benefit society.

We understand such pursuits require both traditional and innovative methods of inquiry that cut across disciplinary boundaries and leverage the University's excellence and unique resources at scale. To expand research and scholarship and elevate the University's impact, we will focus on the following goals or initiative areas:

- *Leveraging the breadth of faculty excellence and increasing interdisciplinary collaboration*: to solve complex problems and advance knowledge, the University must leverage its scale, breadth, and exceptional faculty to lead interdisciplinary research and serve as a model globally. The University aims to address societal challenges by fostering additional cross-campus connections, creating an incubator and removing barriers for collaboration, and integrating interdisciplinary concepts into graduate education.

- *Incubating and celebrating bold and creative inquiry*: to become the world's highest-impact public research University, faculty must lead in research and scholarship, exploring new areas and leveraging the University's unique assets. This includes pursuing fundamental, applied, and translational research, as well as excellence in the creative arts and humanities. The University aims to support curiosity-driven inquiry, foster innovative partnerships, identify emerging research areas, recognize achievements, and partner with leading global institutions to amplify the reach and impact of its research.

- *Building the best research infrastructure and support:* to pursue high-impact research, university scholars need access to top-tier infrastructure, technology, resources, and collections. The University is renowned for its assets like the Texas Advanced Computing Center, Harry Ransom Center, Benson Latin American Collection, McDonald Observatory, and Briscoe Center. Enhancing these assets and building new ones will attract top researchers and global partners. The University plans to leverage its scale to develop impactful research infrastructure, create a culture of shared facilities and digital assets, invest in emerging technology and equipment, and broaden global access to its resources.

In addition to driving impact through these ambitious research capacity-building initiatives, the University has established a few priority areas for research, development, and innovation. The following priorities are intertwined with the State of Texas' vast assets and the University's existing expertise, giving UT Austin a distinct advantage as we generate world-changing research and address critical societal challenges:

- *Energy and Environment:* the University will build on the state's and flagship's generations-long leadership in energy and environment and forge strong cross-campus connections spanning the technical, scientific, social, health, legal, political, and economic expertise needed to understand and manage these complex systems. In doing so, the University will enhance and expand energy strategies and policies and ensure a more sustainable future for the nation and world.

- *Technology and Society:* the University will lead at the interface of technology innovation and society, elevating our already world-class portfolio of research in computing and artificial intelligence while building strong bridges to the humanities, social sciences, and health disciplines. The University will become a global leader in understanding and developing technologies that meet the needs and uphold the values of a dynamic society.

- *Health and Well-Being:* the University will become known for pioneering revolutionary, comprehensive research around health, leveraging the capabilities of our innovative medical school and other strengths across campus. The University will conduct fundamental, applied, and clinical research that integrates physical and mental health, education, socioeconomics, technology, and the natural and built environment. In doing so, the University will advance health outcomes, reduce disparities, and drive Austin to become a model healthy city of the future.

To advance these priorities, several strategic initiatives are planned or are in motion. These initiatives include programming to: foster development and skill-building of University faculty and graduate students, promote interdisciplinary research collaborations and build impactful cross-department teams, and increase research commercialization and intellectual property impact.

Several of these initiatives are already in place. For example, the Bridging Barriers Research Grand Challenges initiative promotes interdisciplinary research collaborations to tackle societal grand challenges and engages a network of more than 300 faculty and staff researchers campus-wide. The University also has numerous interdisciplinary research centers and institutes, from Texas Robotics and the Center for Generative AI, to the Energy Institute, Oden Institute for Computational Sciences and the Population Research Center. With over 100 research organized research units, the University supports cutting-edge research across all disciplines, fostering interdisciplinary collaborations that align with the University's research and innovation goals.

Faculty development and graduate education programs also play a crucial role in advancing the University's priorities. Faculty development programs focus on research leadership and collaboration to enhance faculty competitiveness in grant seeking. Faculty and graduate student entrepreneurship programs offer a continuum of support for creators, inventors, and entrepreneurs, from funding and training to licensing and startup management. By leveraging these strategic initiatives, centers, and

support programs, UT Austin aims to create a robust ecosystem that drives innovation and addresses critical global challenges.

Collaborations and Partnerships

The University fosters cooperative efforts among faculty and researchers across disciplines through several strategic initiatives and programs. As previously mentioned, the Bridging Barriers program promotes interdisciplinary research collaborations to tackle grand challenges. This initiative encourages faculty from different disciplines to work together on complex societal problems that require diverse expertise. Additionally, UT Austin's Discovery to Impact strategic plan focuses on research commercialization, bridging the gap between academia and the private sector, and fostering collaboration across disciplines.

UT Austin also collaborates extensively with other Texas institutions to push the boundaries of research and benefit the state economy. For example, the University has a strategic collaboration with the MD Anderson Cancer Center, promoting joint research projects that accelerate the translation of scientific discoveries into tangible health outcomes. This collaboration includes the Collaborative Accelerator for Transformative Research Endeavors, which supports groundbreaking research initiatives in areas relevant to cancer research. Another notable partnership is through the Texas Institute for Electronics (TIE), which supports advanced research in semiconductors and artificial intelligence through collaborations with several Texas public and private educational institutions as well as industry leaders in chip design and manufacturing.

Additionally, UT Austin has formalized partnerships with the City of Austin and with Sandia National Laboratories. The work with the City draws on the research capabilities of academia and addresses real-life challenges faced by municipal government. This strategic relationship cultivates an innovative ecosystem between the two organizations, fostering collaborative research projects supported by dedicated staff at both UT Austin and the City of Austin. Fortified by a master Interlocal Agreement (ILA), which streamlines research agreements and standardizes terms regarding data sharing and intellectual property, millions of city department funds are provided to UT Austin principal investigators for research directly benefiting the local community.

The formal partnership between the University and Sandia National Laboratories, part of the Sandia National Laboratories University Partnerships Network (SUPN), allows university researchers to navigate Sandia’s many resources, facilitate new research connections, and strengthen the Sandia-UT student researcher talent pipeline. These teams solve significant problems that neither institution could address alone through combined key academic disciplines, relevant research capabilities, and a strong commitment to national security.

These partnerships and collaborative efforts are designed to leverage the strengths of each institution, enhance research capabilities, and drive innovation. By fostering interdisciplinary collaboration and forming strategic partnerships, the University aims to address critical global challenges and advance its mission of research, development, and innovation.

Economic Impact

The University stands as an example of innovation and research excellence, significantly contributing to the economic vitality of the local Austin community and the broader State of Texas. Studies from the

University's Bureau of Business Research indicate UT Austin has an annual economic impact of approximately $7.4 billion on the Texas economy. Much of this impact is attributable to the activities of the research enterprise. With research expenditures exceeding $1 billion annually, the University is a powerhouse of scientific inquiry and technological advancement. The robust research enterprise not only drives academic progress but also fuels economic growth through job creation and the commercialization of innovations.

One of the most profound impacts of the University's research is its contribution to the local economy. The University's research initiatives create numerous job opportunities, both directly and indirectly. Research projects require a skilled and varied workforce, including faculty, research assistants, and lab technicians. Additionally, the influx of research funding supports local businesses that provide goods and services to the University. Large research initiatives like the Texas Institute for Electronics and the Leadership-class Computing Facility not only push the frontiers of knowledge in computer engineering and computational science, they also drive federal and private funding through the local economy, creating new high-paying jobs, and contributing to an ecosystem of commercial development.

The commercialization of research innovations at the University continue to lead to the formation of numerous startups, further bolstering the local and state economy. Through initiatives like the Texas Innovation Center and the Austin Technology Incubator, the University provides essential support to entrepreneurs, helping them transform groundbreaking research into viable businesses. Over the past decade, UT Austin has seen the creation of more than 90 companies by its entrepreneurs. These startups not only generate new jobs but also attract investment, fostering economic vitality.

The impact of the University's research extends beyond the local community to the entire state of Texas. Research activities conducted across campus address critical challenges in various fields, including healthcare, energy, and technology, leading to advancements that benefit society at large. For instance, the University's research in renewable energy and energy storage contributes to the development of sustainable energy solutions, which are crucial for the state's economic and environmental future. Additionally, the University's research in public health and social sciences informs policy decisions that improve the quality of life for Texans.

Furthermore, the University's research enterprise enhances the state's economy through the development and dissemination of new knowledge. The University's efforts in technology transfer and intellectual property management ensure that innovations are effectively brought to market, generating licensing revenues and attracting corporate partnerships. This not only provides a financial return on research investments but also positions Texas as a leader in technological innovation.

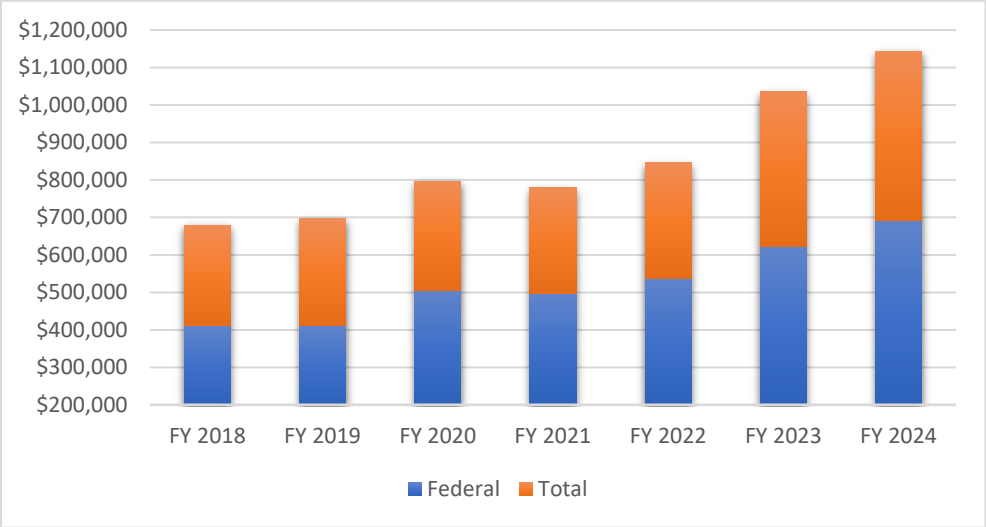
The economic impact of research at the University is multifaceted and far-reaching. The University's substantial research expenditures drive job creation, support local businesses, and foster the growth of new startups. The commercialization of research innovations further amplifies this impact, contributing to the economic vitality of both the local Austin community and the State of Texas.

Plan to Increase Research Funding and Productivity

External Funding

In fiscal year 2022-23, UT Austin surpassed $1 billion in annual research expenditures for the first time, indicating a significant increase in research activity. This growth was sustained in fiscal year 2023-2024, as the University hit $1.14 billion in research expenditures. Largely driven by grants awarded to researchers by federal agencies, the University has experienced notable increases in total research funding since fiscal year 2017-2018.

Figure 1. Research Expenditures by Fiscal Year



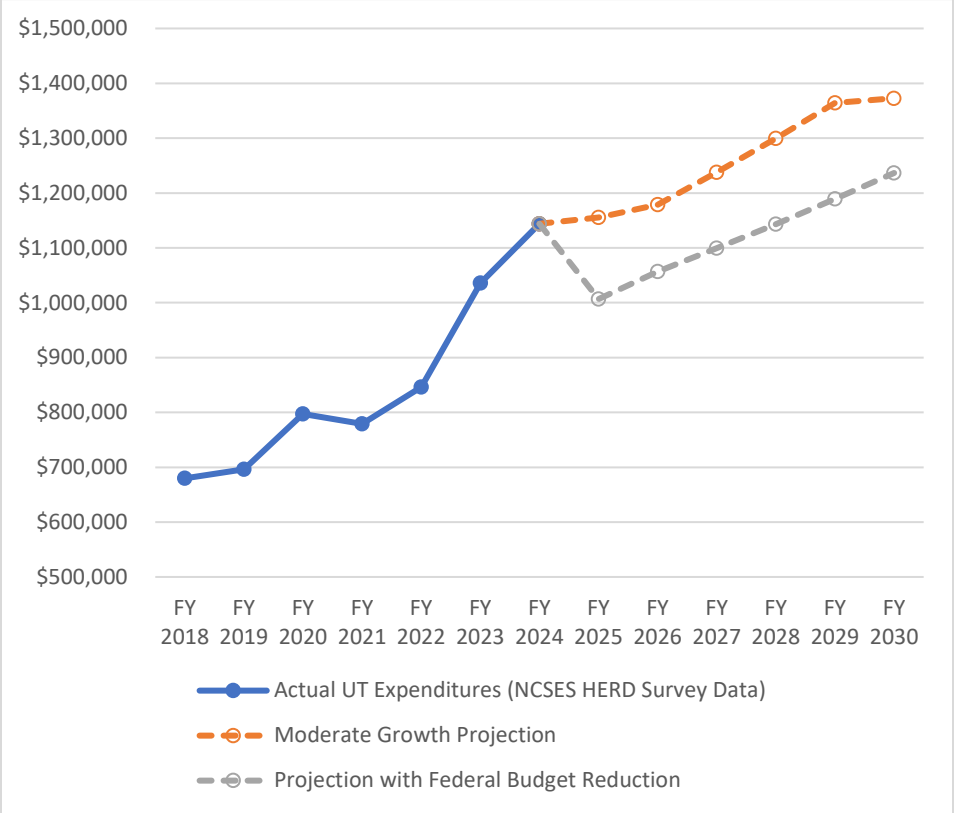
UT Austin's growth in research expenditures among federal agencies, in particular, has far surpassed the overall agency budget increases during the same time period. Looking closely at the three federal agencies that contribute the most to UT's federal expenditures – Department of Defense (DoD), the National Institutes of Health (NIH, part of Health and Human Services), and the National Science Foundation (NSF) – we found that these three agencies' overall federal budgets grew by 19% over the five-year period spanning FY 2019 – FY 2023. To compare, UT Austin's research expenditures for those same three agencies increased by 51% over the same 5-year period (from $310M in FY19 to $468M in FY23) – a factor of ~2.6x greater increase than the agencies' overall budgets.

Surpassing the $1 billion mark in annual research expenditures as a single institution (without adding a standalone academic medical center or other UT System institution to the expenditures tally) is a major accomplishment – only 33 of the more than 650 institutions canvassed in the NCSES Higher Education R&D (HERD) benchmarking survey expended $1 billion or more in FY23. While UT Austin will continue to climb in expenditures, the YoY rate of growth should not be expected to remain as aggressive as it has been, given that benchmarking data show that fewer than 2% of FY23 HERD survey respondents (11 institutions) reported >$1.5 billion in expenditures, and only two institutions (Johns Hopkins and UCSF) reported >$2 billion in expenditures. We therefore propose a more moderately aggressive growth target for the next five-year period (FY 2025-FY 2030), beginning with our most recent (and not yet nationally benchmarked) data of $1.14B in research expenditures for FY 2024. If we assume five-year total growth

of 20%, or roughly half the rate observed from FY 2020 – FY 2024 (43%; see Figure 1 Total line above), as well as presumed federal agency budget growth at a similar rate observed for the same time period, then our target expenditures for FY30 would be approximately $1,372,700.

At the time of this writing, much remains unknown about FY 2026 federal agency budgets, and major overhauls to federal funding for academic research are being considered in Washington. For example, a major decrease in facilities and administrative (F&A) costs reimbursed by the NIH was proposed in February 2025, and reconsolidation or even elimination of some NIH Institutes and Centers has been outlined in various advisory reports. Similar cuts to NSF research budgets have also been proposed. These factors may contribute to an overall decrease in federal funds, and we have projected possible impacts on UT Austin's research expenditures here as well by comparing to the most recent national event that resulted in a decrease to expenditures – the FY 2013 federal sequestration (government shutdown). As reported in our 2018 THECB Strategic Research Plan, UT Austin saw a 12% decrease in its federal research expenditures from FY 2013 to FY 2014, and did not reach its FY 2013 federal funding level again until FY 2017 (i.e., it took four FYs to fully recover position from before the sequestration). If we adopt a similar rough model for FY 2025 – FY 2030, then UT's expenditures might decrease from FY 2024 – FY 2025, and recover to FY 2024 levels (see Figure 1 above) in ~FY 2028. Under this agency-budget-reduction model, our target expenditures for FY30 would be approximately 10% higher than they are today, or $1,236,516 (based on FY 2024 expenditures and assuming a slump followed by recovery from FY 2025 – FY 2028).

Figure 2. Actual and Projected UT Research Expenditures



Regardless of which federal funding scenario plays out, a productive and well-supported faculty are the largest contributor to increasing research expenditures. OVPR's Research Development unit is dedicated to providing tactical support to faculty pursuing major center-of-excellence scale grants, and to providing skill-building opportunities and seed funding to position faculty teams more competitively for such grants (see *Faculty Research*, below, for more details on Research Development programming). To further increase federal research expenditures, the University is focusing on strengthening its relationships with federal agencies and enhancing its research infrastructure. The University is also actively pursuing new funding opportunities and expanding its research capabilities in dynamic fields such as energy, life sciences, artificial intelligence, and robotics.

UT Austin is also committed to increasing industry-sponsored research through strategic partnerships and collaborations. A recent example includes the $8.5 million partnership with Emerson, a global tech company. This partnership will fund research in artificial intelligence, automation, energy, semiconductors, and other scientific disciplines. As part of the agreement, Emerson will donate equipment and technology to modernize UT's Montopolis Research Center and support the launch of a new Semiconductor Science and Engineering master's program. The University plans to continue forming similar partnerships with industry leaders to increase the number of industry collaborations and associated sponsored research funding.

These efforts to increase private, federal, and industry-sponsored research expenditures are part of UT Austin's broader strategy to enhance its research capabilities and economic impact.

Research Facilities

The University boasts several key research facilities that support its mission of advancing knowledge and innovation. Among these are the Texas Advanced Computing Center (TACC), which houses some of the world's most powerful supercomputers, the Microelectronics Research Center, which supports semiconductor research and development, the Texas Materials Institute, known for its interdisciplinary research in materials science, and the Center for Biomedical Research Support, which provides access to cutting-edge technology and expert advice to enhance research across the biomedical disciplines.

To improve and expand its research facilities, UT Austin has several construction and renovation initiatives underway. One significant effort is the Texas Institute for Electronics (TIE), a major initiative aimed at advancing semiconductor research and development. The University, on behalf of TIE, has received substantial investments from both state and federal government. In 2022-2023, the Texas Legislature allocated $552 million to TIE, propelling TIE to successfully secure $840 million from the Defense Advanced Research Projects Agency (DARPA) to establish a national R&D and prototyping fabrication facility. This facility is located at the University's Montopolis Research Center and the J.J. Pickle Research Campus, enhancing the nation's capabilities in semiconductor manufacturing and innovation and bringing jobs to the State of Texas. In addition to TIE's substantial government collaboration, the University's recent private partnership with Emerson Electric Company will also contribute to modernization of the Montopolis Research Center, the former Sematech facility in South Austin. This $8.5 million partnership will support advanced research in semiconductors, artificial intelligence, and other scientific disciplines.

Another major development is the construction of the Leadership-Class Computing Facility (LCCF) through the Texas Advanced Computing Center (TACC). Supported by a new $457 million dollar grant from the National Science Foundation (NSF), this cutting-edge facility will house Horizon, the largest academic supercomputer dedicated to open-scientific research in the NSF portfolio. Horizon will provide a tenfold performance improvement for simulations over the current NSF Leadership-Class Computing system, Frontera, and a hundredfold improvement for artificial intelligence applications. The LCCF will also include large-scale data storage systems and interactive computing capabilities, significantly advancing computational research and development.

The Center for Biomedical Research Support provides essential resources and expertise to university researchers, including access to cutting-edge technology and expert advice in areas such as light and electron microscopy, cell-sorting, sequencing, mass spectrometry, and molecular structure analysis. Additionally, CBRS provides high-performance computing infrastructure and bioinformatics consultation to help researchers turn data into new discoveries and insights. Through recent internal investments, CBRS will continue to improve its equipment and service offerings to campus, resources that are crucial for advancing biomedical research and enhancing the University's research capabilities.

In addition to these major facilities, the University has a number of other construction and renovation projects underway or planned that will contribute to enhanced research production across the campus (see Tables 1 & 2).

Table 1. Research Space Renovations Under Development

Building Name	Cost	Gross Square Foot (GSF)	Occupancy Date
Montopolis Research Center (MRC)	$198,000,000	300,684	Fall 2025
Engineering Discovery Building (EDB)	$332,000,000	231,094	Summer 2026
L. Theo Belmont Hall (BEL)	$118,750,000	425,729	Fall 2026
Microelectronics Research (MER)	$394,123,084	157,069	Fall 2026
Leadership Class Computing Facility (LCCF)	$91,000,000	20,000	Fall 2026
Robert A.Welch Hall (WEL) 1 & 5	$40,000,000	430,256	Spring 2027
Ernest Cockrell Jr. Hall (ECJ) 7&8	$20,000,000	240,246	Fall 2027
Total	**$1,102,873,084**	**1,785,078**	

Source: Office of Facilities Planning and Construction (OFPC), UT Austin

Table 2. Research Space Renovations Being Planned

Building Name	Cost	Gross Square Foot (GSF)	Occupancy Date
Physics, Math and Astronomy (PMA)	$810,000,000	384,215	TBD
Animal Resources Center (ARC)	$250,000,000	110,235	TBD
Health Discovery Building (HDB) Vivarium	$7,630,000	9,800	TBD
Total	**$1,067,630,000**	**504,250**	

Source: Office of Facilities Planning and Construction (OFPC), UT Austin

These efforts to improve and expand research facilities are part of the University's broader strategy to enhance its research capabilities and drive innovation. By leveraging strategic partnerships and investing in state-of-the-art infrastructure, the University aims to create a robust ecosystem that supports cutting-edge research and addresses critical global challenges.

Commercialization

The role of technology transfer at The University of Texas at Austin is to facilitate the transition of academic research into marketable products, services, and treatments that benefit society. This process is managed by the Discovery to Impact team, which oversees the University's technology transfer and corporate-sponsored research functions. The team works closely with campus innovators, industry partners, and investors to ensure that research discoveries are effectively commercialized.

In fiscal year 2023-2024, UT Austin experienced tremendous growth in patenting and licensing activity, with more than 260 new invention disclosures from University researchers, 139 new patents issued on University inventions and 104 new intellectual property licenses executed. The University now has more than 820 active licenses generating revenue for reinvestment into the research enterprise, more than 70 startup companies in the pipeline, and 8 funded startups via the UT Seed Fund. To continue to increase this commercialization impact, the University has developed a strategic plan that focuses on several key areas:

- *Building a Culture of Innovation:* The University of Texas at Austin is committed to fostering a campus culture that values, rewards, and celebrates innovation and entrepreneurship. This involves institutional support from university leadership, including the president, deans, and senior officers, to advocate for and promote research commercialization.

- *Optimizing Outcomes:* Discovery to Impact is streamlining its processes to minimize administrative delays and maximize deal flows for the University. This includes developing efficient procedures for patent filing, prosecution, and maintenance, as well as facilitating the licensing of university discoveries to businesses. The business development team of Discovery to Impact cultivates relationships with industry and startups to develop and commercially launch products and services based on university intellectual property. The UT Seed Fund, an early-stage venture fund, bridges the funding gap between initial launch and VC funding for startups based on university intellectual property.

- *Launching New Programs:* Through programs tailored to entrepreneurs, such as TEXAS Entrepreneurship, the University is fostering a culture of innovation, economic development, and real-world impact. These programs empower students with critical problem-solving leadership, and business development skills, while offering faculty opportunities to translate research into viable ventures. By providing structured support – such as mentorship via Texas Venture Mentoring Services (TEXVMS), funding pathways via Proof-of-Concept awards and SBIR/STTR bridge grants, and experiential hands-on learning opportunities – entrepreneurship programs bridge the gap between academia and industry, encouraging the creation of startups and technological advancements.

- *Opening New Entrepreneurship Facilities:* Opening new spaces for entrepreneurs – such as the 16th floor of Innovation Tower and the Innovation Labs for the convergence of computation, AI

and life sciences – is crucial for advancing scientific discoveries and for offering students real-world exposure and pathways to participate in emerging industries. These facilities provide vital resources, including state-of-the-art equipment, collaborative work environments, and mentorship opportunities, enabling startups and researchers to accelerate innovation, attract investment, and bring cutting-edge solutions to market.

- *Supporting Startups:* The University encourages the formation of startups as a pathway to bring products to market. The University provides a continuum of support to ensure the long-term viability of these startups, including resources from the Kendra Scott Women's Entrepreneurial Leadership Institute (KS WELI), which offers interdisciplinary opportunities in leadership, management, design, and entrepreneurship through specialized courses, mentorship programs, and community-building events, and the Jon Brumley Texas Venture Labs (TVL), a campus-wide initiative that works across disciplines to accelerate startups, take innovations to market, and transform students into entrepreneurs and business leaders.

By focusing on these strategic areas, the University aims to increase the number of patents, licenses, industry-sponsored research projects, and startups ultimately enhancing its commercialization impact and contributing to the economic development of the region, state and nation.

Doctoral Programs

Summary of Existing Programs

The University administers 88 doctoral degree programs and five professional degree programs in 15 colleges and schools – the College of Liberal Arts, the College of Natural Sciences, Moody College of Communication, McCombs School of Business, the College of Education, the College of Fine Arts, Cockrell School of Engineering, Jackson School of Geosciences, the School of Architecture, the School of Nursing, the College of Pharmacy, Steve Hicks School of Social Work, the School of Information, Lyndon Baines Johnson School of Public Affairs, and the Dell Medical School. As we look to the future, the University aims to support efforts to build innovative doctoral programs as new areas of inquiry emerge, particularly in interdisciplinary spaces.

Excellence in doctoral education is achieved by recruiting and retaining outstanding faculty members and graduate students and fostering a thriving academic and research ecosystem. Our goals are to provide the myriad supports graduate students need to be successful, ensure an appropriate cohort size to build robust communities of thought, and position the University to recruit and retain the best students. Our focus is on laying the groundwork to enable graduate education of the future, striving for operational excellence in the administrative aspects of doctoral education, and providing co-curricular resources to students and programs to enhance the student experience and outcomes.

Program Assessment & Enhancement

Assessment is an integral part of our efforts to build a culture of continual improvement. The University assesses graduate programs according to multiple metrics. Rankings are a highly visible statement of how UT Austin is perceived compared to its peers. While there is always room for improvement, the University's graduate programs continue to rank highly compared to peer institutions. At the graduate

level, more than 40 programs and disciplines are among the top 10 in the nation, according to U.S. News & World Report's "2024 Best Graduate Schools." UT Austin is also ranked as the No. 4 public university in the U.S. according to the 2024 QS World Rankings.

Every graduate program at UT Austin is rigorously assessed on a seven to ten-year cycle through the review process mandated by the Texas Higher Education Coordinating Board (THECB). These reviews begin with an extensive self-study and culminate with a visit by an external review committee composed of highly regarded faculty members from peer institutions. The strengths and weaknesses of programs are evaluated with the goal of improving quality to meet near- and long-term goals of the programs, college, and university. During the current review cycle (2020-2029), external review teams have consistently praised the outstanding quality of the University's faculty and graduate degree programs.

Individual colleges and schools that administer doctoral degrees have taken a number of steps to raise the stature of PhD programs. These include the following initiatives and goals – reduce time to degree, increase completion rates, publicize the academic accomplishments of students, and enhance professional development opportunities to facilitate and support a high rate of placements following graduation. The Graduate School is currently developing better mechanisms to track relevant data regarding graduate student outcomes to support these efforts and promote data-informed decision making.

The University seeks to enhance the quality of its graduate programs through continuous improvement assessment activities similar to those for undergraduate programs. This approach is also required for accreditation by the Southern Association of Colleges and Schools Commission on Colleges (SACSCOC) and many professional accrediting bodies. Assessment serves to guide program-level innovation and excellence. Faculty and staff receive periodic training in the theory and practice of assessment. They construct strategic plans to identify significant elements of their programs and the relationships among goals, outcomes, and activities. In addition, they ensure that identified changes are made, disseminated, and reviewed. Assessment efforts result in action on curricula, pedagogy, operations, processes, or services.

The University of Texas System also mandates that each academic component improve advising of PhD students by implementing a "Milestones Agreement." UT Austin has developed an online advising tool to identify the specific degree requirements for all PhD programs, grouped into sections marked by milestones along with a timeline estimate as to when each milestone should be met. This information helps students understand what is required for completing the degree and the timeline for making satisfactory progress to do so.

In addition to ensuring that programs are well-designed and expectations are clear, a key component of doctoral student success is quality mentorship. Positive mentorship is strongly correlated with positive graduate student outcomes from time to degree to self-efficacy. UT Austin offers a wide range of mentoring resources for graduate students and faculty. These include a faculty guide to mentoring graduate students, examples of surveys and self-evaluations in use at UT Austin, a list of mentoring organizations, links to information pertaining to career mentorship, and workshops on how to be a strong mentor or mentee. These resources are designed to help programs and faculty formalize mentoring initiatives that enhance graduate student success.

UT Austin recently launched the Office of Career and Life Design (OCLD) housed within the Graduate School to provide holistic graduate-level career and professional development to further enhance the

graduate education experience. OCLD programming is open to the entire graduate education community and includes career exploration and advising, opportunities for internships and experiential learning, awards, career and job search preparation, mentoring and a variety of wellness resources. In addition to its own offerings, the OCLD partners with graduate programs to develop programming tailored to specific disciplines and serves as the campus hub to bring together other stakeholders with interests in this space. This office gives students the tools to launch successful career journeys whether they choose to stay in the academy or pursue careers in other sectors.

Support for Graduate Students

The Graduate School Fellowships Office distributes approximately $30 million in fellowships from internal funds and endowments as well as from external entities. The office supports many external fellowships such as the NSF Graduate Research Fellowship Program (GRFP) and Fulbright Hays awards. The Graduate School also allocates several different recruitment awards to attract graduate students to UT Austin and continuing fellowships to assist current students in completing their degrees. Funds are allocated in flexible ways so that colleges and schools can decide how best to strategically use funds to meet their unique needs. In addition, each college, school, or department administers additional funds for teaching assistantships, research assistantships, and fellowships.

The Office of the Executive Vice President and Provost provides resources for tuition benefits for graduate students on assistantships and fellowships. While more than half of all graduate students receive some kind of financial support, the percentage of doctoral students receiving support is much higher. Financial support includes employment as a teaching assistant or assistant instructor (which entails a tuition assistance benefit), employment as a graduate research assistant, graduate school fellowships, and external fellowships.

The Graduate School continually monitors the level of funding provided by peer and aspirational peer institutions and endeavors to exceed or match these levels. In recent years, the University has emphasized making multi-year commitments to be more competitive with peers and to recruit the very best students to UT Austin. Additionally, in recent years, many graduate programs have reduced the size of their programs, allowing them to offer fewer fellowships at more competitive levels. The Graduate School is implementing minimum salary expectations for teaching and assistant instructor assistantship.

Access to health insurance benefits is an important consideration for graduate students and their families. Following the Texas Legislature's passage of SB-29 in 2011, graduate students with fellowships of more than $10,000, who elect to pay the premium, may access the University's group employee health benefits. Graduate Students on assistantships are also eligible for the student health insurance with 100% premium support.

Areas of Emphasis

As a tier-one research institution, UT Austin maintains a full array of graduate programs, offering approximately 131 master's degrees, 88 doctoral degrees, and five professional degrees. This array of graduate programs reflects the development over time of well-established fields of study and, also, the creation of new interdisciplinary programs through which some of the most exciting research, scholarly activity, and learning is taking place. Proposals for new areas of study emerge from the faculty in the colleges and schools and through the Graduate School and the Office of the Executive Vice President and Provost for consideration.

A careful assessment of program need and market demand is conducted prior to the development of each new degree program. Among other things, the preliminary program assessment includes careful consideration of the associated job market, related graduate programs offered within Texas, demonstrated student demand, and industry needs. The University assesses the impact of its graduate programs through surveys of alumni and industry partners in addition to conducting regular assessment and external program reviews. New degree programs and research opportunities developed at UT Austin enable the university to meet the needs of our region in a variety of ways. For example:

- The Doctor of Nursing Practice (DNP), created in 2015, prepares individuals to function at the most advanced level of nursing practice using evidence-based research and scientific knowledge to implement and direct care, as well as to serve as administrative leaders and faculty in schools of nursing. In 2024 UT Austin added a BSN-to-DNP pathway to meet evolving accreditation requirements and the need for DNP-certified nurses in the state of Texas. The DNP degree in Texas helps address both the immediate and long-term healthcare needs of the state by improving access to care, promoting health equity, leading healthcare improvements, and expanding the capacity of the nursing workforce to meet regional needs. DNP nurses are key players in shaping the future of healthcare in Texas, particularly in rural and underserved areas, where their expertise can significantly impact the quality of care and patient outcomes.

- The Dell Medical School (DMS) and its associated Doctor of Medicine (MD) were created in 2014 in unprecedented partnership with the citizens of Austin and Travis County. As a result, DMS relies heavily on locally generated tax revenue which creates a significant relationship between the school and the community. DMS has both the responsibility to help create a vital, inclusive health ecosystem in Austin and Travis County, but also the opportunity to create truly innovative healthcare models in partnership with the community.

- A recently approved PhD in Rhetoric and Writing Studies prepares students to examine how people argue, deliberate, and persuade or fail to persuade each other, especially but not exclusively in written and digital media. Their training includes (inter)disciplinary perspectives that facilitate a multi-dimensional understanding of rhetoric and rhetorical approaches to academic, practical, and community problems. The program provides students with specialized knowledge about rhetoric and skills that will allow them to pursue an academic career; conduct field, archival, and community research; publish scholarly papers; design, develop, teach, and assess rhetoric and writing curricula; and use rhetoric and writing skills to solve nonacademic problems, including through field investigations, recommendations, and digital artifacts. Given the broad application of the knowledge and skills garnered through the rigorous academic training, graduates are prepared for careers in academic departments as well as nonacademic jobs. This PhD program will provide Texas with a highly trained workforce capable of addressing diverse communication challenges across both academic and nonacademic sectors. By equipping graduates with advanced skills in persuasion, research, digital media, and problem-solving, the program will contribute to meeting the state's workforce demands in education, business, public service, and community engagement, helping Texas to thrive in an increasingly complex and digital world.

- Frequently doctoral research programs in new fields of study originate with a master's-level degree. UT Austin's recently approved Master of Science in Engineering (MSE) degree in Semiconductor Science and Engineering will promote energy-related interactions among graduate students and faculty from several schools and colleges. By providing students with advanced training in semiconductor materials, energy systems, and interdisciplinary research, the program will contribute to Texas's leadership in clean energy innovation, energy efficiency, and semiconductor technology development. Graduates will be well-prepared to address the state's current and future workforce demands in these critical industries.

- A new interdisciplinary portfolio program in PharmacoEngineering aims to cultivate a new generation of "pharmacoengineers" capable of leading the development of therapeutics and diagnostics from conception to translation and commercialization, using modern scientific and engineering approaches. This cross-disciplinary training, not available in a single graduate program at UT or elsewhere, will arm students with proficiency in: 1) Data-driven and machine learning methodologies for drug design and delivery, 2) Modeling drug-target interactions across molecular, cellular, and tissue levels, 3) Innovating drug delivery strategies, and 4) Techniques for monitoring delivery and evaluating therapeutic efficacy.

Plan for Faculty Development

New Faculty

The execution of innovative and impactful research is only possible with the leadership and ingenuity of outstanding faculty. The University is committed to the ongoing recruitment of stellar faculty who can further the institution's research goals and priorities. Recruiting world class faculty requires intentional programs and collaboration between the colleges and schools as well as the Provost's Office, Office of the Vice President for Research, Scholarship and Creative Endeavors, and other units. The University continues to build internal recruitment programs as well as leverage state resources like the Governor's University Research Initiative which has facilitated the hiring of key faculty in the engineering and biomedical areas.

The programs listed in the Faculty Research section below also support recruitment by providing clear evidence of the university's investment in faculty development. In response to the fast-paced development of technology, the University is driving programs and policies to facilitate faculty opportunities for industry collaborations. These programs benefit from connections with the University's Office of the Vice President for Research, Scholarship and Creative Endeavors as well as the University's Discovery to Impact team to safeguard intellectual property, support IP development and associated protections while also offering students access to cutting edge technology. These industry collaboration programs should help us compete for and retain highly technical faculty in a highly competitive job market.

Faculty Research

Faculty Affairs within the Office of the Executive Vice President and Provost and the Office of the Vice President for Research, Scholarship and Creative Endeavors collaborate to provide strategic support for faculty throughout their careers at the University from their first days on campus to their transition from early- to mid-career and on to becoming research leaders. In 2021, the University created a new strategic plan for faculty development, which led to the launch of several new programs aimed at advancing faculty research and scholarship:

- *New Faculty Launch*: the University expanded programming for faculty onboarding from a 2-day event to a full year of academic workshops. This new program helps accelerate faculty's integration into the University and introduces them to key resources and strategies for launching their research program at the University. Key research-related topics covered include how to find funding opportunities for research, how to craft successful proposals for external funding, and how to take a book from an idea to a finalized published project.

- *Provost's Mentored Faculty Scholars*: the University has broadened offerings for faculty mentorship, including interdisciplinary mentorship programming for both new faculty at the start of their faculty careers and experienced faculty, through which faculty are grouped with experienced peer mentors outside of their home departments or units. The faculty mentors are selected based on their successful productivity and standing in their field. All participants in our programs receive training on best practices for faculty mentorship, and we also offer this training to college/school and department leadership to help individual units establish their own faculty mentorship programs.

- *Faculty Writing Communities:* the University has created a Faculty Writing Communities program to help provide faculty with dedicated time and space each week to advance their writing projects whether that be journal articles, conference proceedings, proposals for external funding, or book projects. Approximately 80 faculty of all ranks participate in these groups each semester, promoting accountability for each other's research dissemination.

- *Research Leaders Academy:* the University has developed new programming for tenured professors making the transition to academic and research leadership through the launch of the Research Leaders Academy in 2023. The Research Leaders Academy is led by Research Development in the Office of the Vice President for Research, Scholarship, and Creative Endeavors and appoints 15 faculty fellows who are leading or aspire to lead large interdisciplinary research projects and pursue federal funding for those endeavors. This program seeks to build the University's capacity for federal research center grants, as the faculty fellows work closely with the Research Development team over two years to craft their proposals. Additional faculty leadership development is also available through the Provost's Aspiring Leaders Academy, which enables faculty fellows interested in academic leadership to work on a leadership project under the mentorship of an existing university leader, and the Southeastern Conference Academic Leadership Development Program.

- *Associate Professor Experimental (APX):* developed by the Office of the Vice President for Research, Scholarship and Creative Endeavors and the University's School for Design and Creative Technologies in 2018, APX is a design thinking and flash funding faculty retreat that gives newly tenured associate professors dedicated funds and focused time to envision new

research directions with colleagues in diverse academic disciplines. APX has brought together new interdisciplinary research teams who have been successful in securing external federal funding to tackle innovative research challenges that span disciplines. This faculty retreat provides a valuable entry point for Research Development to build relationships with mid-career faculty in a much more time-efficient way than more traditional, time-intensive faculty development programming (e.g., year-long programs with monthly gatherings).

- *Proposal Development Skill-Building Series:* designed for faculty and permanent staff researchers at all stages of their career, this skill-building series includes activities spanning the proposal development work cycle, from gaining competitive intelligence to writing pieces of a proposal in real time. Program workshops include practical, hands-on components to help faculty and researchers move closer to their proposal development goals.

In addition to these new programs and initiatives, the University also provides opportunities for faculty to develop professionally and drive their research through professional leave and travel. The Office of the Executive Vice President and Provost coordinates the Faculty Development Leave (FDL) program for tenured faculty. Faculty members must apply for this program, and applications are competitively reviewed. This program provides a limited number of tenured faculty members with paid leave from teaching and service responsibilities to allow them to focus on research, scholarship, and creative endeavors. The University also supports a Faculty Travel Grant (FTG) program, which provides funding for tenure-track and tenured faculty to present their research at conferences and professional meetings.