

The University of Texas at Austin
College of Natural Sciences

Community, Discovery and Impact at Scale

Our strategic plan progress and a new chapter in The University of Texas at Austin's College of Natural Sciences



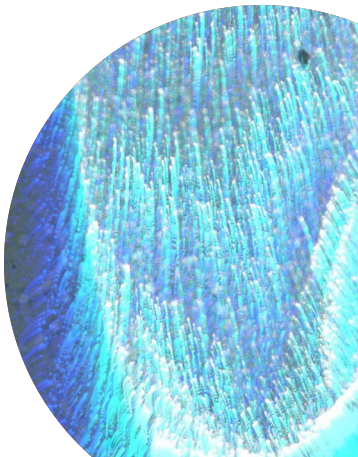
MISSION

The College of Natural Sciences advances discovery through world-class research and education; prepares a community of skilled, curious, responsible leaders; and delivers science-based impact at scale that benefits the public we serve.



VISION

The College of Natural Sciences at The University of Texas at Austin is committed to providing a research-based education and advancing scientific discoveries that solve pressing challenges, improve lives and uncover new knowledge; to strengthening public trust in science; and to creating a healthier, more informed future.



Texas and the world need...	*So our college aims to deliver...*
Educated leaders able to ground their problem-solving in the confidence that science and scientific thinking can provide	**Education that prepares skilled, curious, responsible leaders for our times** · All students in our majors will participate in experiential learning; connect their education with career preparation; and learn to leverage emerging technologies like AI with an eye to their future. · Our teaching, advising and curricular approaches will support students' learning in our majors and beyond, including with a core education that provides foundational experiences in STEM for all students.
Frontiers science breakthroughs in medicine, foundational discovery and technological advances that make people's lives better	**A research climate conducive to delivering impact** · Our college is advancing discovery where our strengths meet opportunity, in fundamental and applied science alike, and generating results aided by new partnerships, interdisciplinary collaborations and strategies to ensure sustainability. · Our facilities, on the main campus and at remote sites around Texas, will be fully utilized and will empower researchers to advance understanding of pressing challenges.
Public engagement with science anchored in experiences, benefiting many, where the joys of discovery and knowledge get widely shared and new generations find inspiration in STEM	**Welcoming spaces, programming and possibilities for all in STEM** · We will engage with the public and with our alumni through compelling visitor experiences, events, communications and opportunities, while lifting up our community and the way its science is accessible and relevant for everyday life. · We will inspire the next generation of STEM students through work in STEM education and programming, spanning from pre-K children through high-school and college-going years.

And because we know these plans require...	*CNS is further prioritizing...*
Energized staff, faculty and students equipped to tackle challenges, both collaboratively and independently	**A thriving Texas Science community today and in the future** · Our students, faculty and staff will feel supported, welcomed, engaged, informed and well connected to resources and one another. · Our focus will be on recruiting, retaining, developing and fostering success for talented people across the college.
Thoughtful stewardship and planning of space, investments and other resources	**Effective systems, processes and partnerships** · Our efforts will address inefficiencies, reduce friction, draw on data and modernize outdated systems and processes, enabling progress across the college. · We are coordinating in our decisions related to space, from renovations to management to capital priorities, and planning for responsible growth, while seeking opportunities to sustain quality, effectiveness and impact.

THE NEW PLAN AT A GLANCE



Education for Our Time

Texas and the world need educated leaders who understand science, can evaluate evidence and have the curiosity and judgment to navigate a changing world.

Where We Started.

We set out to help more students secure their degrees in four years, expand opportunities to learn by doing, strengthen teaching and mentoring, and prepare students for careers in a changing world, including fields shaped by data, computing and AI.

What We've Accomplished

- **More students are graduating on time.** Four-year graduation rates have risen to 79.7%—the highest in the college's history.



- **More are engaging in hands-on science.** Our signature Freshman Research Initiative works with more than 1,700 students annually, and we redesigned an introductory biology course to provide authentic research experiences to another 1,500 undergraduates each year. Overall, hands-on experiences are up 18% in the last three years.

- **Demand in new areas is being met.** Our statistics and data science major grew from 50 to nearly 500 students; a new robotics program for undergrads launched alongside new minors and interdisciplinary degree options; and a suite of fully online master's programs includes a popular master's degree in artificial intelligence.



- **Foundational preparation launched.** A new seminar series for health-focused undergraduates is helping thousands of our undergrads explore career paths and prepare for future careers in the health professions. We also launched CNS Foundations for first-year students, an AI fundamentals course for campus, our reimagined "Impact Lab" for real-world problem-solving and the Hello Maker Studio—all ways for students to link learning to tangible applications, problem-solving and preparation for their future.

- **Teaching and mentoring excellence accelerated.** We supported hundreds of instructors in redesigning courses for greater impact, trained faculty in departments college-wide to be more effective mentors and helped more than 3,000 teaching assistants build skills for the classroom.

What's Next:

Within five years, we aim for every student in our majors to benefit from meaningful experiential learning. We also want our students to connect with a career ecosystem of courses, mentors and professional opportunities throughout their time in the college and for more upper-division students to be able to earn credit towards their degrees through project-based courses. We aim to help students in and out of our majors in developing the judgment to use emerging technologies like AI purposefully and responsibly. Our faculty will help strengthen foundational scientific and computational literacy, critical thinking, communication and the skills of inquiry across UT.

Early steps include plans to work with faculty in planning for AI education and project-based learning, at the same time that we are continuing to incorporate career preparation more fully into courses, expand internship credit opportunities and develop new ways for students to continue gaining more hands-on learning. We will also support faculty in developing new courses for the core curriculum that help students develop scientific ways of thinking and a grounding in technologies that shape our world.



Research and Discovery

Texas and the world need frontier discoveries that advance knowledge, enable new technologies and improve lives.

Where we started.

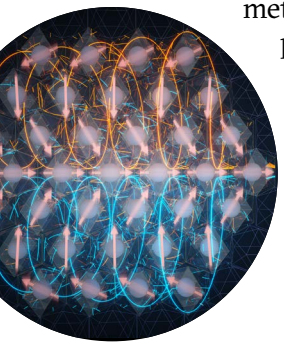
We sought to strengthen the college's standing among leading research institutions by recruiting exceptional faculty, investing in emerging scientific opportunities, encouraging interdisciplinary research in areas of strength and providing the infrastructure and support needed to meet bold goals.



What we accomplished

- **A growing, highly accomplished research enterprise.** Annual research expenditures increased from $151 million in FY 2020–21 to $200 million in FY 2024–25. Over five years, five CNS faculty were elected to the National Academies of Sciences and Engineering, four to the American Academy of Arts and Sciences, and more than three dozen received notable early-career research awards.

- **Major investments in AI, quantum technologies and materials science.** CNS helped establish the Center for Generative AI and Texas Quantum Institute, coordinating university-wide strengths that went on to attract significant new support to UT. This included significant state allocations for expanded GPU computing resources, along with major multi-investigator awards, a new quantum metrology facility, and an NSF training award to prepare graduate students for the quantum workforce. These efforts complement a renewed NSF Materials Research Science and Engineering Center and a new NSF Science and Technology Center focused on human and robot co-adaptation. UT is now #1 nationally for National Science Foundation support.



- **Research connecting disciplines and advancing human health.** Texas Biologics has advanced 20 interdisciplinary seed projects, enabled five new patent applications and resulted in two startup companies in development. New collaborations are bringing advanced technologies to health and biomedical discovery, including in our new OriGen Health Research Center and Texas Institute on Dementia, Aging and Longevity.

- **New frontiers across the sciences.** Our researchers are advancing understanding of the early universe through the new Cosmic Frontier Center, Weinberg Institute for Theoretical Physics, NSF-Simons AI Institute for Cosmic Origins and major international astronomy collaborations. CNS also recently strengthened research in fusion energy and in biodiversity and marine science. It has expanded its field station network and launched a Texas Gulf Coast Research Center with state backing.

- **More support for ambitious ideas.** College seed-funding programs have helped researchers pursue high-potential projects and compete for external awards. Associate professors who received Spark Grants from the college report that more than $5.5 million in subsequent external funding followed those early infusions of funding, while Catalyst Grant recipients report $13.8 million in external awards over the program's history.

What's next:

With a new School of Computing and with new research efforts related to everything from the intersection of foundational mathematics with AI to the development of new materials, our focus increasingly is on creating a research environment that attracts exceptional talent, encourages bold ideas and makes collaboration across disciplines and institutions easier.

Early priorities include targeted research investments and faculty recruiting, expanded interdisciplinary partnerships, stronger use of our field stations, telescopes and other facilities, and support for faculty pursuing competitive grants and emerging sources of research funding. In a changing federal funding environment, we will work to diversify research support and strengthen the resilience of our research enterprise without losing sight of the value of discovery for its own sake.



Science for the Public Good

Texas and the world need meaningful connections with science—experiences that inspire discovery, improve lives and help new generations see their place in STEM.

Where we started.

We set out to strengthen public engagement with science by connecting previously separate outreach efforts, revitalizing scientific destinations and expanding opportunities for people of all ages to encounter discoveries and ideas with roots in the college.

What we accomplished

- **A revitalized museum and scientific destinations.** The Texas Science and Natural History Museum reopened in 2023 with new exhibits connecting natural history and current university research. It welcomed more than 215,000 visitors and more than 500 school and community tours since reopening. Across the museum, Lady Bird Johnson Wildflower Center, McDonald Observatory and Marine Science Institute visitor facilities, annual attendance is estimated at approximately 450,000.

- **More people engaging with science.** The expanded Texas Science Festival now draws thousands of attendees annually, and other college-led programming—including AI LIVE, eclipse-themed events and partnerships with the Long Center and Austin Film Society—brought researchers and scientific ideas to large audiences on and off campus.

- **Stronger connections across existing programs.** CNS brought together outreach teams and public-facing institutions to share expertise, coordinate programs and make opportunities – some 300 university STEM events and offerings throughout the year – easier to discover.

- **Building pathways into STEM.** Through established programs in the National Center for STEM Education (formerly UTeach Institute) and the Charles A. Dana Center, the college is strengthening coordination of STEM education efforts reaching learners and teachers across Texas and beyond.

What's next:

We are deepening public connections to science through welcoming spaces, engaging programs and compelling stories that make research accessible and relevant. We intend to strengthen STEM pathways for young learners and educators, inspiring a new generation to explore our disciplines.

Early priorities include building on our coordinated outreach efforts, expanding connections among P–20 education programs, creating more opportunities for scientists and students to communicate their work effectively, and extending our reach with our alumni. Through these efforts, we aim to strengthen the public's connections with science and its understanding of the value of scientific discovery.



THE NEW PLAN AT A GLANCE



A Thriving Texas Science Community

Great science and education depend on exceptional people who are supported, connected and equipped to do their best work.

Where we started.

We sought to build a college where students, faculty and staff could thrive, with stronger mentoring, professional development, community connections, well-being resources and recognition. We also aimed to recruit and retain outstanding talent across the college.





What we accomplished

- **Attracting and developing outstanding faculty.** CNS recruits almost two dozen research faculty annually, and these experts are strengthening departments and expanding the college impact in strategically important disciplines. New professional development resources helped support researchers and educators at different career stages working to be outstanding in their teaching, research and mentorship.

- **Better starting experiences.** The college launched a more coordinated faculty onboarding and development program, with hundreds of faculty participating. Also offered were evidence-based workshops for faculty to help them be more effective in guiding and working with trainees and junior faculty.

- **More opportunities for staff development.** Staff recognition, cross-college training initiatives and emerging leader opportunities helped strengthen connections and professional growth across units.

- **Greater attention to well-being and community.** The college launched the CNS Wellness Center, expanded access to counseling services and developed new offerings like a food pantry for students. New surveys, listening opportunities and exit interviews have also provided information to guide decisions about supporting college staff and students.

What's next:

We will strengthen the Texas Science community by developing more opportunities to bring together and recognize our outstanding students, faculty and staff. Our goal is to be a place where people feel welcomed, informed, connected and recognized; where mentoring and professional growth are accessible throughout careers; and where talented individuals choose to build their futures.

Early priorities include continuing to strengthen faculty and staff onboarding and expand mentoring and peer networks, improving recognition and professional development opportunities, and making resources easier to find and use.



Stewardship for the Future

Delivering on our ambitions requires thoughtful stewardship of resources, effective systems and investments that sustain excellence.

Where we started.

We identified a need for stronger financial planning and leveraging of endowments, more coordinated facilities planning and improvements to the systems and processes that support the college's education, research and public service missions.

What we accomplished

- **More strategic financial planning.** CNS developed improved systems for tracking financial commitments, accessing budget information and coordinating the use of endowment funds. A new three-year faculty advancement plan created a more deliberate approach to aligning endowment resources with strategic faculty hiring and departmental priorities, while honoring the intent of gifts to the college and amplifying our impact.

- **Investing in infrastructure that benefits many.** CNS and its departments helped invest in university core research facilities, supporting the establishment of new instruments, research capabilities and upgrades across nine facilities. These investments serve more than 95 CNS principal investigators, eight CNS departments and researchers across the university.

- **Using resources to attract additional support.** Strategic investments and partnerships in recent years have repeatedly helped to attract substantial external research funding. Philanthropic and state investments have also expanded research capacity in areas such as AI, biotechnology and materials science.

- **Improving efficiency and long-term planning.** A new faculty research mentoring approach is projected to reach faculty six times faster and at approximately one-quarter of the cost of relying entirely on outside training. The college has also upgraded teaching and research spaces, completed facilities improvements and undertaken detailed assessments of aging buildings to inform decisions about renovations and future capital investments.

What's next:

We will align growth and investment more deliberately with the college's priorities, strengthen financial and operational planning and modernize processes that create unnecessary friction. This includes improving access to useful data, reducing administrative barriers and preserving effective local decision-making, while also taking a more coordinated approach to facilities and space.

Early priorities include improving systems for tracking resources and commitments, exploring responsible uses of technology to reduce burdens in administrative work, coordinating college-level efforts with the broader campus Master Space Plan and advancing towards a proposed Frontiers of Science Building. We will also deepen philanthropic, industry and community partnerships and seek growth opportunities that sustain quality, effectiveness and impact.



The next chapter of Texas Science will be shaped by the people who teach, learn, discover, serve and invest here. Together, we can help build a future in which scientific inquiry and discovery continue to improve lives in Texas and beyond.



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