

Brilliant Horizons

A College of Natural Sciences Impact Report





The University of Texas at Austin's College of Natural Sciences aims to be the world's highest-impact public research college for science, mathematics and computing. These pages summarize recent work to support the people at the heart of our mission — our community of students, staff, faculty and alumni. We also aim to lead as a place of discovery, shepherding breakthroughs in science and curiosity-driven advances. Finally, we have set our sights on changing the world through our pursuits of education, research and experiences.

In the following pages, you will find photos, facts and QR codes that invite a deeper dive into related stories and resources online.



Our People

Ensuring a community of excellence and belonging are central to our college plan. With a series of new initiatives, we are working to support our extraordinary people: the students, faculty, staff, alumni and friends who are at the heart of all we do. Providing opportunities for learning and connection, embedding messages of welcome throughout the college and meeting people's needs to continually grow and thrive are central to this work.

11,501 undergraduate students

1,422 graduate students in residence

2,166 master's students in 100% online degree programs

391 tenured/tenure-track faculty

370 professional-track faculty

1,388 staff

84,391 alumni



Culture & Well-being

Offerings to help students and everyone in Texas Science feel valued, seen and appreciated for who they are continue in Natural Sciences. The college recently established a new student wellness center to help students easily access supportive services, ranging from mental health counseling to a food pantry.




TEXAS
SCIENCE
GOING TO
TEXAS
Reuse or Recycle me!
It's the cool thing to do.



Affordable, Accessible Education

Students of limited financial means have benefited from record fundraising for scholarships and fellowships recently. New options for learning affordably are in play, too, including in science master's degree programs available 100% online.



Faculty & Staff Excellence

A college Office of STEM Education Excellence advances the very best in teaching throughout the sciences. Recently launched initiatives support staff and faculty leadership and professional development, alongside investments that are catalyzing innovative research and teaching college-wide.





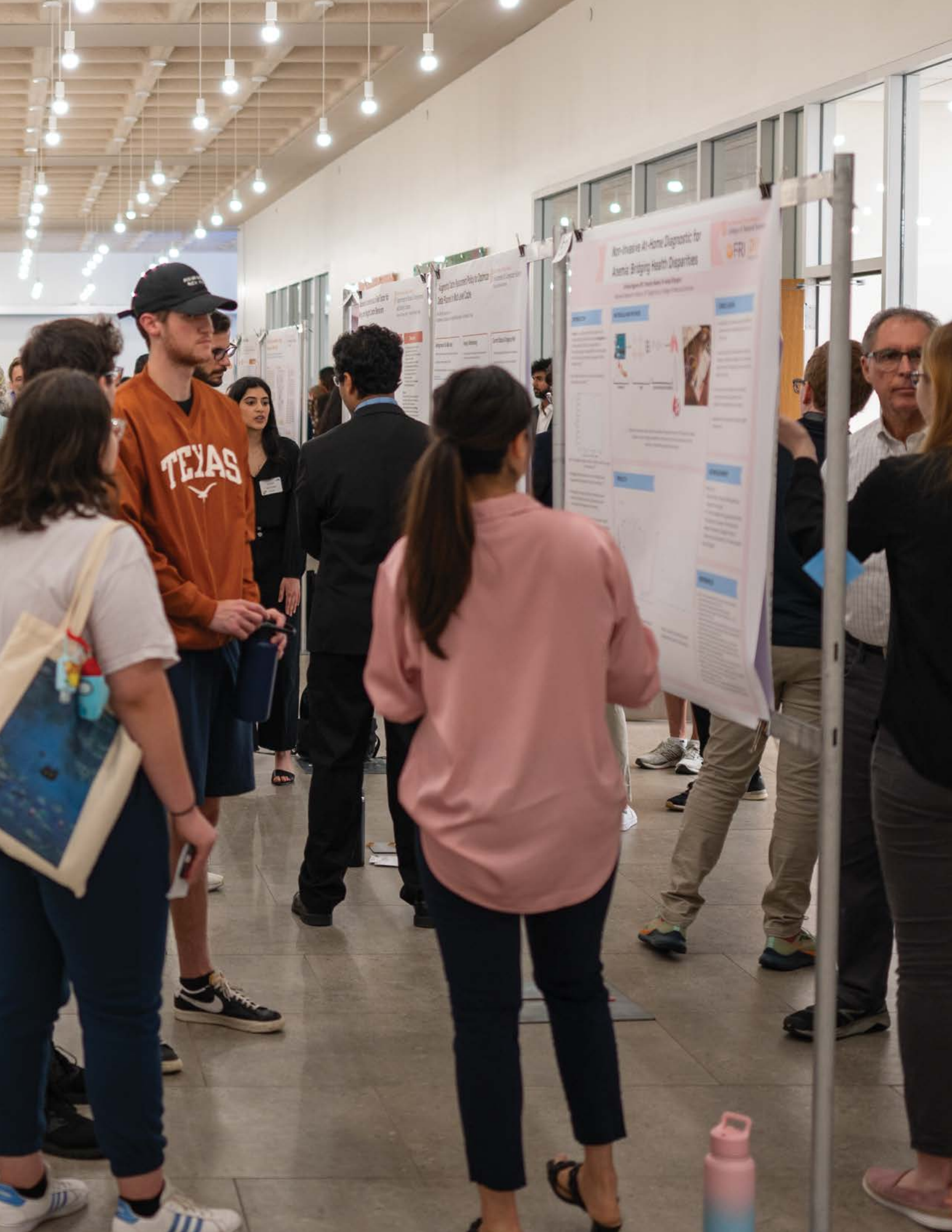


Mentorship & Leadership

A series of new mentoring initiatives has launched to help develop the next generation of scientific leaders. Graduate students, postdoctoral scientists and other early-career researchers are all at the forefront.



Alumni Engagement
Opportunities for alumni to connect and engage abound. Volunteer events, Hall of Honor alumni awards and special events provide opportunities year-round for reconnecting on and off the Forty Acres.


TEXAS
Non-Invasive At-Home Diagnostic for Anemia: Bridging Health Disparities



Our Place

Amplifying what is uniquely Austin and Texas means making the most of our place. This is as true in tech-friendly Austin as it is at our other campuses and sites, such as in Port Aransas, in the West Texas mountains or in the piney forests of Bastrop County. We are forming partnerships in industry and the communities when it comes to issues that range from robotics to public health to mathematics readiness. We also are engaging the public in meaningful experiences with science and discovery.

5 cities across Texas with at least one UT field station for biodiversity and conservation research

12 departments & 1 School of Human Ecology

$18 million allocated by the 88th Texas Legislature for the Texas Science & Natural History Museum and for the Gulf Coast Research Center at the Marine Science Institute

18,000+ participants in the college's Texas Science Festival

240,000+ annual visitors to the Lady Bird Johnson Wildflower Center

80,000+ annual visitors to the McDonald Observatory in West Texas

15,000+ visitors to Texas Science & Natural History Museum in its first six weeks after reopening

23,800+ visitors to UT Patton Center for Marine Science Education and Bay Education Center





Research Partnerships

The college has forged research relationships with private and public partners to advance studies of the Texas Gulf Coast, better prevent future disease outbreaks in local communities and help ensure greater U.S. defense readiness in robotics.



Education Partnerships

The college has collaborated with state and local education agencies, ranging from the Higher Education Coordinating Board to local schools and community colleges, to build a strong pipeline of STEM learners, workers and teachers.




Welcome!



Outreach & Engagement

Several college outreach gems reached tens of thousands of Texans, including the Lady Bird Johnson Wildflower Center, McDonald Observatory and community science talks, including at the Texas Science Festival. Both the Patton Marine Science Education Center and the Texas Science & Natural History Museum reopened with new exhibits and revitalized space.



Environmental Exploration

Researchers and students use field stations to study the drivers of healthy ecosystems and ensure sustainable natural resources. The Texas Field Station Network has recently grown, with support from historic philanthropic investments in sustainability and biodiversity research.





Our Pursuits: *Experiences, Education & Research*

We are offering transformative experiences, education and research as only UT Austin's College of Natural Sciences can. This means working with learners from many different backgrounds in ways that promote their success; providing memorable, firsthand experiences with science; and conducting boundary-breaking research. The Texas Science experience for students continues to be defined in part by programs such as our award-winning Freshman Research Initiative, as well as summer research offerings made possible by generous donors. Students and faculty are also tackling emerging problems and opportunities in classrooms and in their research, while making lasting contributions to the study of communities, the environment, health, technology, space and our understanding of the world.

37% of undergraduates participate in the Freshman Research Initiative (FRI)

3,268 degrees are awarded annually in the college

77% of undergraduate students graduate in four years

354,933 class credit hours are taught annually

5 interdisciplinary research centers launched since 2021

16 programs or specializations are ranked in the top 10 by U.S. News & World Report

$182.8 million in estimated advertising value equivalency for coverage of ten leading faculty researchers in outlets like CNN, Forbes, The New York Times and others

$160.7 million in annual research expenditures across Natural Sciences



Experiential Learning
UT's award-winning undergraduate experiential learning programs help connect students to research, often in their very first year. International study, internships and entrepreneurial offerings are also areas of focus.

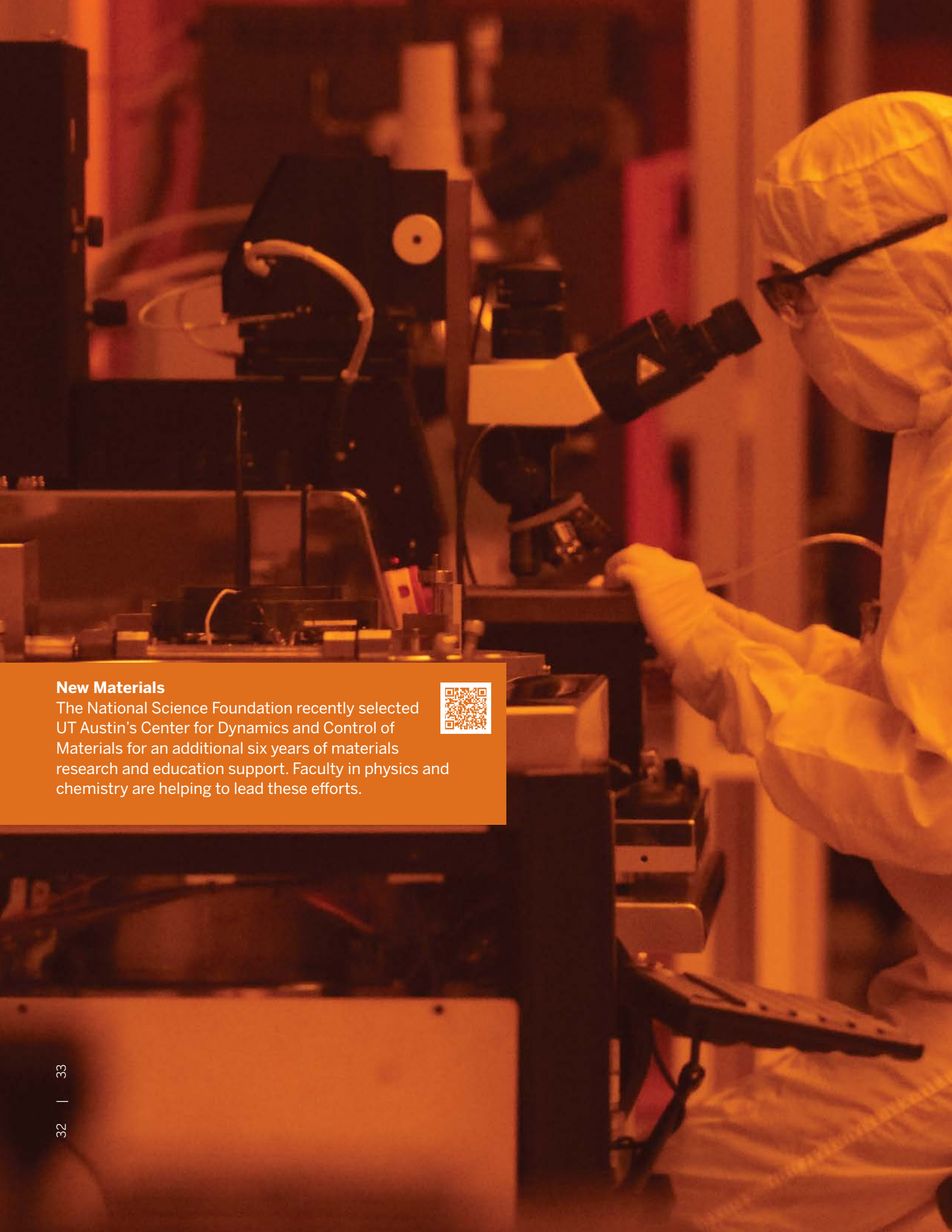

Jamaica





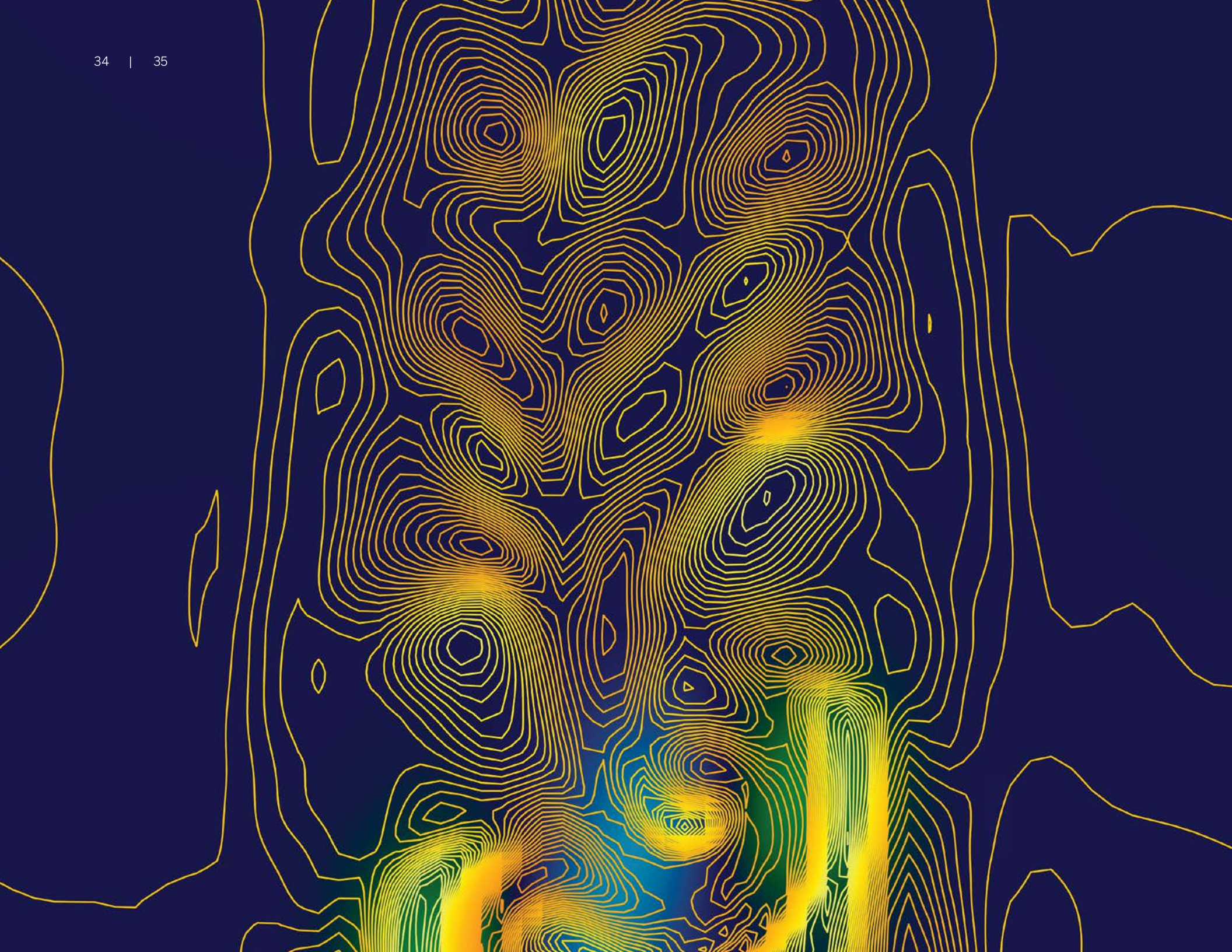
Technology & Innovation

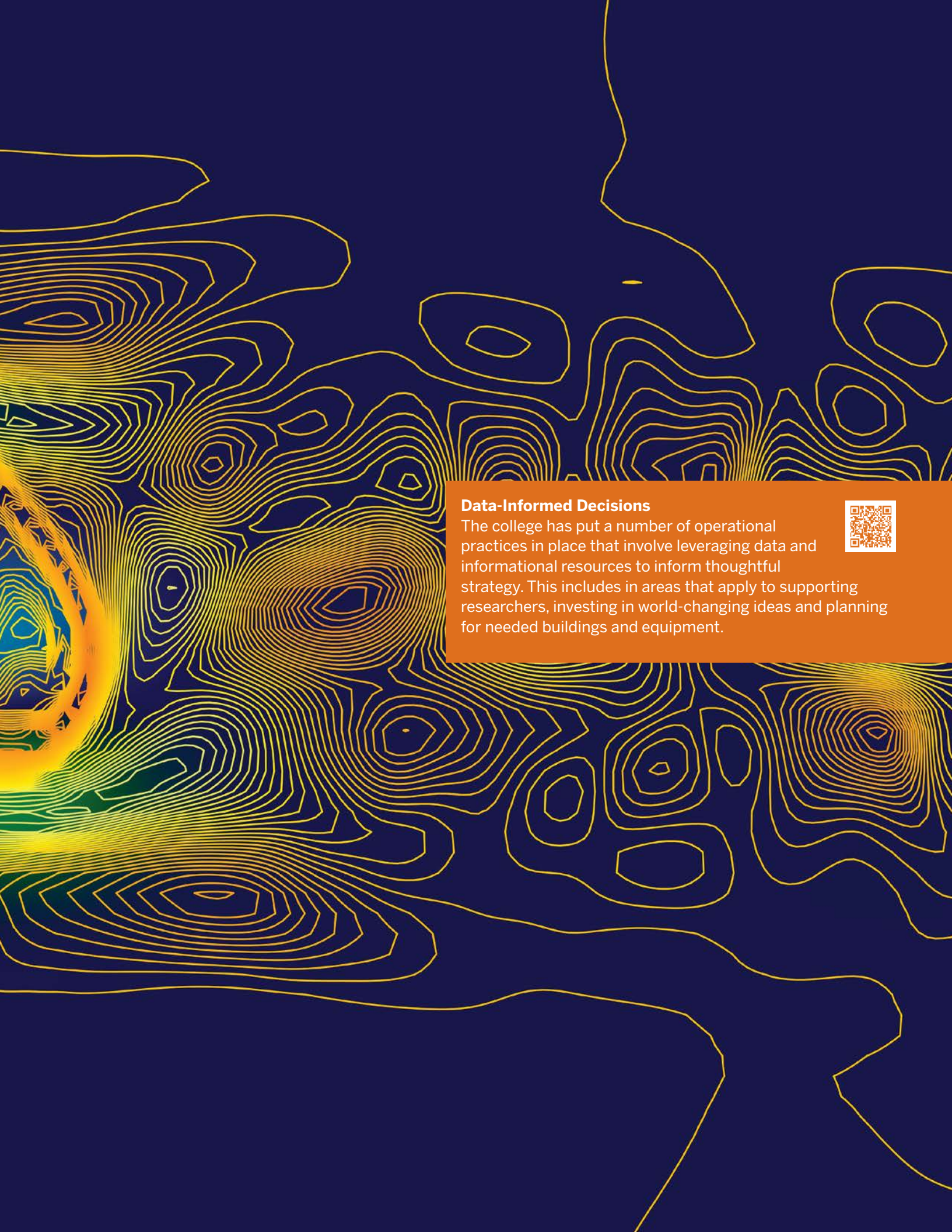
With involvement from our Machine Learning Lab, researchers across disciplines have made key advances in everything from therapeutics discovery to galaxy research. A new interdisciplinary robotics credential for undergraduates and an AI master's degree have launched, along with a new large-scale course, focused on AI fundamentals.



New Materials
The National Science Foundation recently selected UT Austin's Center for Dynamics and Control of Materials for an additional six years of materials research and education support. Faculty in physics and chemistry are helping to lead these efforts.



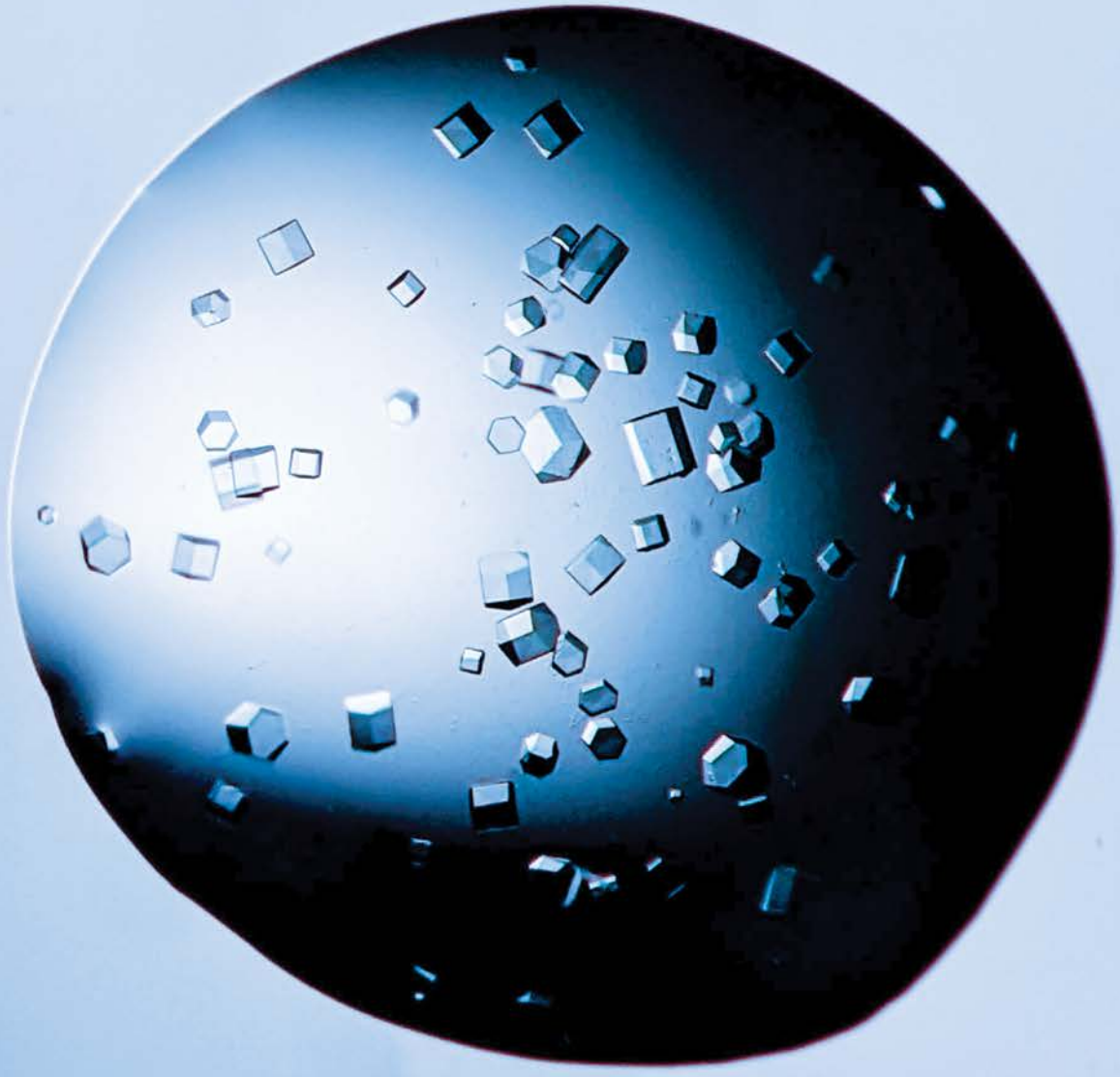




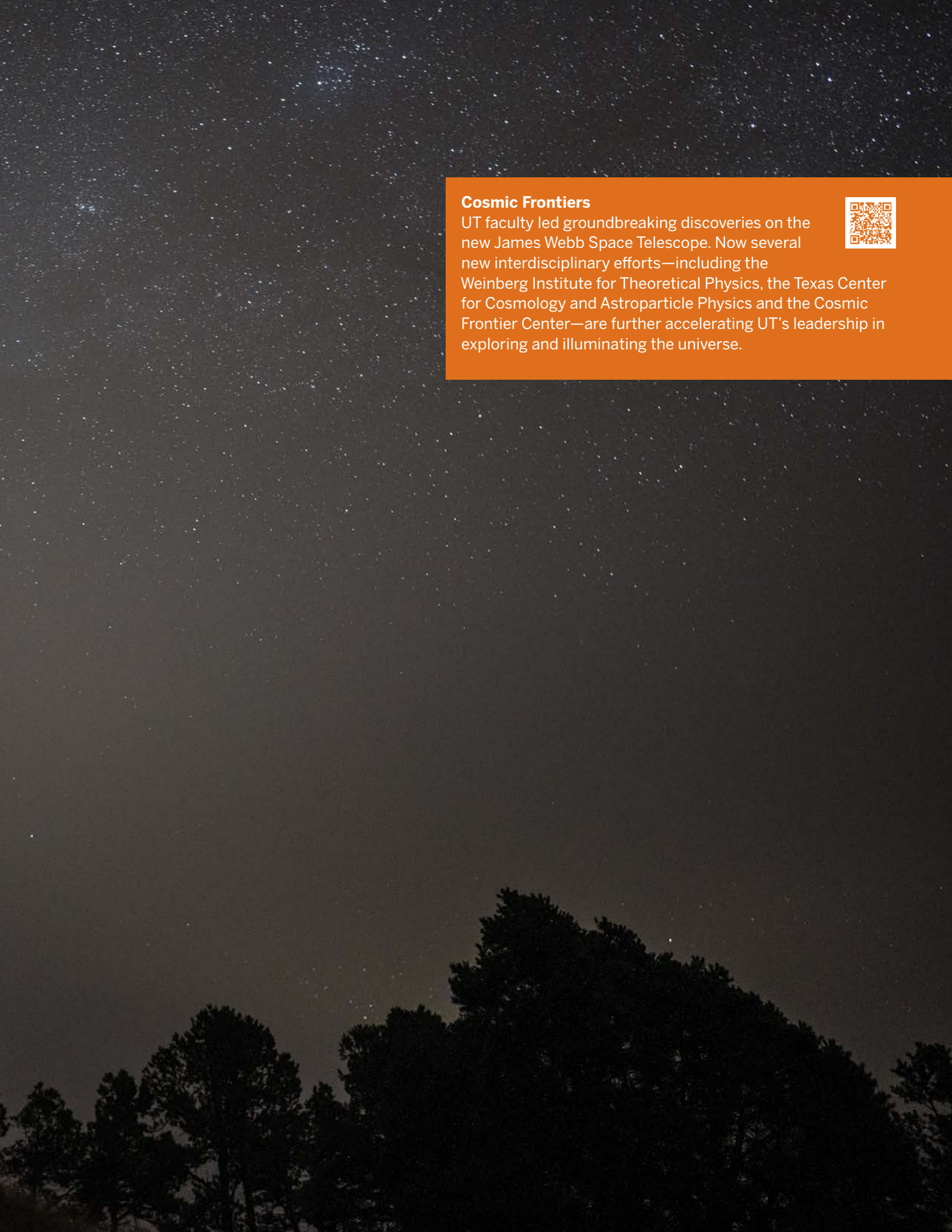
Data-Informed Decisions

The college has put a number of operational practices in place that involve leveraging data and informational resources to inform thoughtful strategy. This includes in areas that apply to supporting researchers, investing in world-changing ideas and planning for needed buildings and equipment.

Biologics & Therapeutics
The college and partners across campus announced the launch of Texas Biologics, a therapeutics research initiative involving faculty across campus. Among its leaders is a winner of UT's first research impact award, honoring work that led to both the COVID-19 vaccines and the new RSV vaccines.




Face shield



Cosmic Frontiers

UT faculty led groundbreaking discoveries on the new James Webb Space Telescope. Now several new interdisciplinary efforts—including the Weinberg Institute for Theoretical Physics, the Texas Center for Cosmology and Astroparticle Physics and the Cosmic Frontier Center—are further accelerating UT's leadership in exploring and illuminating the universe.


MAKE
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Driving Impact Together

UT has one of the largest and highest-impact colleges of natural sciences in the country. In the business of empowering future leaders and advancing research that will change the world, the college is also in the business of sharing the power of science, mathematics and computing with the world through its faculty, students and staff. Behind each of these amazing individuals is the generosity of philanthropic supporters and the dedicated service of loyal friends. Thank you for the impact *you* make possible.

Our Impact in Philanthropy in 2022–2023

$124.1 million in new donations to support student scholarships, fellowships, faculty research and our programs

20,568 gifts to the college

17,470 alumni and friends gave to the college

1,203 Natural Sciences students received philanthropic support through scholarships and fellowships for their studies

134 students received summer undergraduate research fellowships

11 new Texas Challenge scholarships established*

12 new endowments established for the college

731 total endowments

- **$323.1 million** book value
- **$582 million** market value
- **$26.1 million** payout projected next year from endowments

**Texas Challenge Scholarships are a top priority for the university and college, and dedicated entirely to students. The scholarships are managed by the Office of Student Financial Aid.*

Endowments & Scholarships established in 2022–2023

Marjorie Morales Endowed Excellence Fund for Computer Science Education and Outreach
Herman and Joan Suit Endowed Excellence Fund in Astrophysics
J.J. Lagowski Excellence Fund in Chemistry
Phillip and Karen Kelton Fellowship in Astronomy
Julia Ye Shen and Steven E. Ayers Family Scholarship
Velpuri Family Endowed Excellence Fund for Machine Learning
Sassen-Hollinger Undergraduate Innovation Research Fund
Sridhar Family Endowed Scholarship for Undergraduate Research
L. Leon Campbell, Ph.D. Distinguished Professorship in Microbiology
L. Leon Campbell, Ph.D. Distinguished Professorship in Biochemistry
Dean W. Chandler and Gail L. Peek Endowed Fund for Mt. Locke
Salhotra Family Turing Scholarship in Computer Science
Goldie Horton Porter Scholarship
Dr. Melvin R. Platt Family Scholarship
Surya Karkada Memorial Scholarship
J. Kenneth and Jackie C. Vaughan Scholarship
Usha S. Patel Endowed Scholarship
Richard and Alison Rao Scholarship
Shashidhar and Smita Thakur Endowed Scholarship
Janice Luskey Miller and Bruce Miller Endowed Scholarship
S.L. Cheung & W.K. Lui Endowed Scholarship
Koppel Family Endowed Scholarship
Cummings Family Scholarship





Our Donors Make the Difference

Gifts of all sizes have brought transformative impact to the College of Natural Sciences.

Texas Field Station Network

With support from Steve Winn (B.S., '69), his wife Melinda and members of the Winn family, The University of Texas at Austin is making significant strides in the study of biodiversity and sustainability. Field stations allow for long-term research by scientists and provide a place for students to explore and learn from the natural world. The newly launched Texas Field Station Network is leading to coordinated, interdisciplinary research, new learning experiences for students and outreach activities across a diverse catalog of unique ecosystems. The Winn Family Foundation provided $50 million for the network and related biological and environmental research, educational programs, public outreach and even a new UT field station, the Hill Country Field Station.

Kushner Summer Fellows

Students whose families have limited incomes too often miss out on opportunities over the summer that often make all the difference for future career paths and decisions about graduate school. Having to work to earn money each summer for these students can mean missing out on experiential learning. Fortunately, Wendi and Brian Kushner, a CNS advisory council member, stepped forward to make an investment that helped to expand students' access to experiences outside of the traditional classroom environment. Ten undergraduates in Natural Sciences last summer benefited from these opportunities to participate in research, accepted coveted internships and studied abroad. Because of the Kushners' gift, Natural Sciences students spent their summer months traveling the world, delving into research and learning alongside industry leaders — important experiences that set them on a path to lifelong leadership in science and mathematics.





Photography by Nolan Zunk, unless otherwise noted below.

Cover: Nestled in the urban hub of Austin, the "Forty Acres" at The University of Texas at Austin serve as a hub for world-changing research and learning.

2. Sunset at the Marine Science Institute.
3. A night at McDonald Observatory.
4. Professor and Amy Johnson McLaughlin Administrative Chair/Director in Human Ecology Stephen Russell meets with students in his research group.
6. Two students in the Behavioral Neuroscience FRI Stream conduct experiments.
8. A scene from Gone to Natural Sciences, kicking off the academic year.
10. Clinical Assistant Professor Marilyn Felkner teaches Global Health in Action.
12. Assistant Professor of Practice Aleah Henderson-Carter supports learning in the X Plants FRI Stream.
14. Students present their research at the Undergraduate Research Forum.
16. The Tower, formally the Main Building, can be viewed from sites across Austin.
18. Justin Hart and a fellow researcher in Texas Robotics test their work.
20. Jack Coker and Mayfer Rodriguez prepare a lesson on surface tension for a fourth-grade class. *Mark Tway.*
22. Texas Science and Natural History Museum celebrates its grand reopening.
24. Researchers conduct studies at the future site of the Hill Country Field Station.
26. Two students identify native plant species in the Hill Country.
28. Assistant Professor of Practice Tom Devitt guides students in using instruments in the Biodiversity Discovery FRI Stream.
30. Professor Steven Finklestein identifies Massie's galaxy in one of the first images from the James Webb Space Telescope.
32. Frances Camille Wu, a graduate research assistant in the Microelectronics Research Center, uses a microscope to study electronic devices in a clean room at the Pickle Research Campus in Austin, Texas. *Jack Myer.*
34. A computer simulation of a phenomenon involving solar winds called switchbacks. *Maile Marriott.*
36. Microscope image of RSV fusion (F) glycoprotein crystals in P6 space group in a hanging drop. *Ajit Ramamohan and Jason McLellan.*
37. Samples being processed at the High Throughput Testing Core (HTTC) on the UT campus. *Vivian Abagiu.*
38. Stars fill the sky on a quiet evening at McDonald Observatory.
40. Speedway pedestrian corridor through campus.
41. Marine Science Institute.
42. Alumnus Poppy Northcut and Department Chair of Statistics and Data Sciences Kate Calder with members of Women in Natural Sciences.
45. The facade of Gates Dell Complex.
46. A field of bluebonnets at the Lady Bird Johnson Wildflower Center, one of six current field stations in the Texas Field Station Network. *Bruce W Leander.*
48. 2023 Graduation at the new UT Moody Center. *Christian Benavides.*
51. Austin as seen from Brackenridge Field Laboratory.

The University of Texas at Austin
College of Natural Sciences

Find more about the outstanding research, education and experiential advances from the College of Natural Sciences online.

Read our full strategic plan and its latest updates:
cns.utexas.edu/about-the-college/strategic-plan

Explore our Texas Scientist magazine:
texasscientist.cns.utexas.edu

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