

TAMEST NEWS

THE OFFICIAL PRINT NEWSLETTER OF THE TEXAS ACADEMY
OF MEDICINE, ENGINEERING, SCIENCE & TECHNOLOGY

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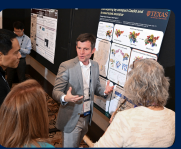


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Sold-Out Success: TAMEST 2026 Showcases Bold Solutions for Climate Innovation

TAMEST ★ 2026 ANNUAL CONFERENCE







PIONEERING CLIMATE INNOVATIONS

Thank You to Our Presenting Sponsors: [breyercapital](https://www.breyercapital.com)  [LYDA HILL PHILANTHROPIES](https://www.lydahill.org)

Leading researchers and innovators convened in San Antonio for **the sold-out TAMEST 2026 Annual Conference: Pioneering Climate Innovations**, held February 2–4, 2026, at the Kimpton Santo Hotel. Marking a milestone year with record attendance, the conference brought together cross-disciplinary experts to exchange ideas and share practical solutions to some of today's most complex environmental and energy challenges.

The program featured plenary sessions and interactive discussions exploring strategies to strengthen sustainable energy systems, reinforce infrastructure, protect public health and accelerate technological breakthroughs. The conference also celebrated TAMEST award recipients, including a special ceremony honoring the 20th anniversary of the Edith and Peter O'Donnell Awards as well as a Shell-sponsored poster challenge highlighting the work of TAMEST protégés. These events showcased the next generation of innovators and the transformative impact of medicine, engineering, science and technology in building a more resilient and forward-looking future.

CONFERENCE STATISTICS

30	SPEAKERS
18	PRIZE AND AWARD RECIPIENTS
94	TAMEST MEMBERS
58	PROTÉGÉ POSTERS
368	ATTENDEES (RECORD HIGH)



VIEW PHOTOS:

TAMEST.org/2026

TAMEST

2026 Board of Directors

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Texas A&M University

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MD Anderson Cancer Center

Kenneth S. Ramos, M.D., Ph.D. (NAM)

Texas A&M Health

Jie Zhang, Ph.D. (NAE)

GeoTomo

O'Donnell Foundation Gifts \$1 Million to Endow Future O'Donnell Award Ceremonies



TAMEST received a transformative \$1 million gift from the O'Donnell Foundation to permanently endow the Edith and Peter O'Donnell Awards Ceremony as well as fund other key components of its prestigious annual awards program. This generous investment ensures the long-term sustainability and continued growth of one of Texas' most distinguished honors recognizing excellence in medicine, engineering, science and technology innovation.

The gift was announced by the **Honorable Kay Bailey Hutchison, TAMEST Honorary Chair and former United States Senator and U.S. Ambassador to NATO**, during the 20th Anniversary Edith and Peter O'Donnell Awards Dinner and Ceremony on February 3, 2026. The celebration took place at the Kimpton Santo Hotel in San Antonio as part of the TAMEST 2026 Annual Conference, marking a historic year for the awards and the organization.

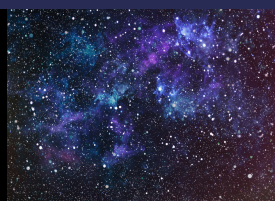
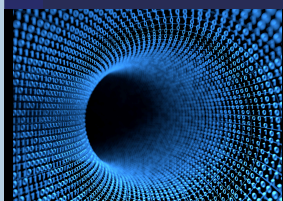
"This extraordinary gift from the O'Donnell Foundation reaffirms their unwavering belief in the power of science, innovation and the next generation of Texas research talent," **said TAMEST Honorary Chair Kay Bailey Hutchison.**

This milestone gift will ensure the longevity of the Edith and Peter O'Donnell Awards, one of Texas' most distinguished honors for early-career researchers and innovators. It also includes funding to ensure the award recipients can travel to the TAMEST Annual Conference each year and present their work, providing unmatched visibility for recipients to leaders from academia, industry and members of the National Academies.

"The O'Donnell Awards have played a crucial role in motivating these researchers to continue their important work and have helped keep them here in Texas, where their contributions can have the greatest impact," **said William T. Solomon, Chairman, President and Chief Executive Officer, O'Donnell Foundation.**

Save the Date

TAMEST.org/2027



TAMEST ★ 2027 ANNUAL CONFERENCE

FRONTIERS OF DISCOVERY:

EXPLORING FROM THE QUANTUM TO THE COSMOS

February 1-3, 2027 | InterContinental Houston | Houston, Texas



Hill Prizes Award \$3.5 Million to Texas Researchers and Launch New Artificial Intelligence Prize Category

The Hill Prizes, funded by Lyda Hill Philanthropies, support high-risk, high-reward research with strong potential for real-world impact. The program honors exceptional innovators with funding to advance groundbreaking science and reinforce Texas as a hub for world-class research. New this year, the prizes included a dedicated Artificial Intelligence (AI) category, recognizing AI's growing influence across disciplines. Each of the seven recipients' institutions or organizations will receive \$500,000 to accelerate their pioneering work.

2026 Hill Prizes Recipients and Co-Recipients:

ARTIFICIAL INTELLIGENCE



Kristen Grauman, Ph.D.

The University of Texas at Austin

for creating video understanding models that help people acquire physical and procedural skills

BIOLOGICAL SCIENCES



Susan M. Rosenberg, Ph.D.

Baylor College of Medicine

for developing a groundbreaking strategy to combat antibiotic resistance by targeting the evolutionary process itself

ENGINEERING



Naomi J. Halas, Ph.D., D.Sc. (NAE, NAS)
Rice University



CO-RECIPIENT
Peter J. A. Nordlander, Ph.D.



CO-RECIPIENT
Hossein Robatjazi, Ph.D.

for advancing light-driven technologies for sustainable ammonia synthesis

MEDICINE



Raghu Kalluri, M.D., Ph.D.

The University of Texas MD Anderson Cancer Center

for developing eye drops to treat age-related macular degeneration (AMD) and other posterior eye diseases

PHYSICAL SCIENCES



Karen L. Wooley, Ph.D. (NAE, NAS)
Texas A&M University



CO-RECIPIENT
Matthew Stone
Teysha Technologies

for transforming agricultural waste into safe, degradable plastics and chemicals

PUBLIC HEALTH



Elizabeth C. Matsui, M.D.

Baylor College of Medicine and The University of Texas at Austin

for identifying climate change-related environmental exposures as key contributors to adverse maternal and birth outcomes and associated disparities

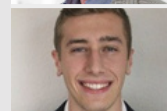
TECHNOLOGY



Kurt W. Swogger
Molecular Rebar Design, LLC



CO-RECIPIENT
Clive Bosnyak, Ph.D.



CO-RECIPIENT
August Krupp

for addressing critical environmental and safety concerns related to tire performance and chemical toxicity

Join TAMEST for Information Sessions on the 2027 Hill Prizes



Join TAMEST for information sessions on the **2027 Hill Prizes** on Wednesday, April 15, 2026, to learn more about the upcoming application cycle. Two Zoom sessions will be offered: a 10 a.m. Academic Session covering the Hill Prizes in Artificial Intelligence, Biological Sciences, Engineering, Medicine, Physical Sciences and Public Health; and a 1 p.m. Private Sector Session covering the Hill Prizes in Commercialization, Innovation and Technology, exclusively for the private sector, and Artificial Intelligence, open to both academia and the private sector. **Applications open May 1 and close June 1, 2026.**

LEARN MORE: TAMEST.org/hill-prizes



O'Donnell Awards Celebrate Two Decades of Innovation and Excellence



For 20 years, the Edith and Peter O'Donnell Awards have done more than honor research excellence in Texas – they have helped fuel it. To mark this milestone year, TAMEST hosted a special 20th anniversary celebration during its annual conference, bringing together current and past recipients, nominators and leaders from across the Texas research community. The evening highlighted two decades of bold ideas, breakthrough discoveries and rising-star talent shaping the future of science and innovation across the state.

The event celebrated a shared sense of momentum toward the future through a commemorative anniversary video, inspiring remarks and an engaging networking dinner. The **Honorable Kay Bailey Hutchison, TAMEST Honorary Chair and former United States Senator and U.S. Ambassador to NATO**, captured the essence of the evening as she reflected on the legacy of the awards and their namesakes: "I know that Peter O'Donnell is looking down on all of us ... and is so happy with what's happened in the last 20 years."

Save the Date: The celebration continues on Thursday, September 10, 2026, in Austin with a special one-day Edith and Peter O'Donnell Awards Summit. The event will feature standout recipients from across both decades, sharing the stories behind their discoveries and the impact of their work. Open to all, the summit is a chance to connect with the ideas and people shaping the future of research in Texas. Registration opens summer 2026.

LEARN MORE: TAMEST.org/odonnell-awards

By the Numbers

87

past recipients of the O'Donnell Awards

19

past recipients who have gone on to National Academy election

6

past recipients who have gone on to multiple National Academy elections

\$2M+

honorariums given to recipients

Texas' Rising Star Researchers: 2026 O'Donnell Awards Recipients

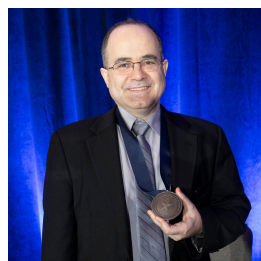
MEDICINE



Pengfei Liu, Ph.D.
Baylor College of Medicine

for using innovative genome and RNA sequencing to improve the diagnosis and treatment of rare genetic diseases

ENGINEERING



Bilal Akin, Ph.D.
The University of Texas at Dallas

for advancing sustainable and high-efficiency energy conversion systems for electric vehicles and industrial automation

BIOLOGICAL SCIENCES



Yunsun Nam, Ph.D.
UT Southwestern Medical Center

for uncovering how RNAs and proteins interact at the molecular level – providing key insights for gene regulation, cancer biology and RNA-based therapeutics

PHYSICAL SCIENCES



Fan Zhang, Ph.D.
The University of Texas at Dallas

for exploring new topological quantum matter, which has changed how we think about physics

TECHNOLOGY INNOVATION



Yue Hu, Ph.D.
bp

for applying artificial intelligence to optimize real-time industrial processes in the energy sector

TAMEST Board of Directors Meet in San Antonio at SwRI and Texas Biomed



In September, the TAMEST Board of Directors traveled to San Antonio to visit two of TAMEST's newest member institutions: **Southwest Research Institute (SwRI)** and **Texas Biomedical Research Institute (Texas Biomed)**. On September 29, the board toured Texas Biomed, which included a look inside its state-of-the-art BSL-4 laboratory. The visit also featured a reception and remarks from **Texas Biomed President and CEO Larry S. Schlesinger, M.D.**, who spoke on the institute's work in infectious disease research. The following day, the board held its September meeting at SwRI, where they toured the campus and were briefed by **SwRI President and CEO Adam L. Hamilton** on the institute's latest scientific advancements and strategic priorities.

TAMEST Names 2026 Mary Beth Maddox Award and Lectureship Recipient

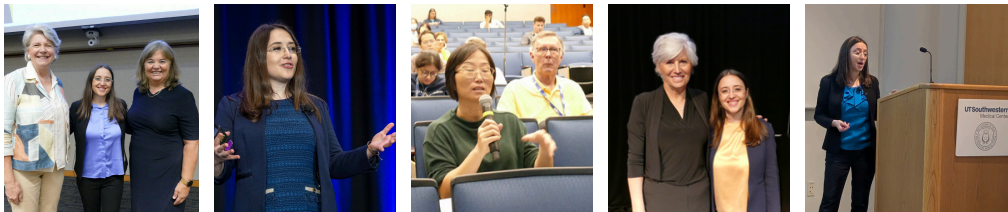


Maralice Conacci-Sorrell, Ph.D., Associate Professor, Department of Cell Biology at UT Southwestern Medical Center, was named the recipient of the 2026 Mary Beth Maddox Award and Lectureship for her work revealing how cancer cells harness nutrients to drive their growth and for creating targeted strategies to suppress otherwise untreatable cancers.



"Dr. Conacci-Sorrell's research has been pivotal in advancing our understanding of how cellular processes drive disease and uncovering strategies to address them," said **Mary Beth Maddox Award and Lectureship Committee Chair Helen Heslop, M.D., D.Sc. (Hon) (NAM)**, Baylor College of Medicine.

Mary Beth Maddox Award Lecture Series Showcases Cancer Research Across Texas



As part of the Mary Beth Maddox Award and Lectureship, recipients share their work through lectures and seminars at TAMEST member institutions with National Cancer Institute Designated Cancer Centers. 2025 Mary Beth Maddox Award Recipient **Gerta Hoxhaj, Ph.D., Assistant Professor at Children's Medical Center Research Institute at UT Southwestern (CRI)**, gave four lectures in 2025 at Baylor College of Medicine, MD Anderson Cancer Center, UT Southwestern Medical Center and UT San Antonio.

Lyda Hill Philanthropies Awards \$1.1 Million in Additional Funding to Hill Prizes Applicants

Lyda Hill Philanthropies awarded \$1.1 million in ad hoc funding in 2025 to 11 standout researchers from the 2025 Hill Prizes applicant pool. Each received \$100,000 to advance high-potential projects that were not selected for a 2025 Hill Prize but showed exceptional promise and real-world impact.

The additional funding highlighted the strength of the applicant pool and expanded the reach of the Hill Prizes, which currently distribute \$3.5 million annually to breakthrough innovations in Texas. The funded researchers spanned disciplines from cancer prevention and wearable health tech to environmental health, and many reapplied for the 2026 prizes.

2025 Hill Prizes Ad Hoc Funding Recipients (\$100,000 Each):

- **Michael Buszczak, Ph.D.**, UT Southwestern Medical Center
- **Reuben Harris, Ph.D.**, The University of Texas at San Antonio
- **David Lary, Ph.D.**, The University of Texas at Dallas
- **Elizabeth C. Matsui, M.D.**, Baylor College of Medicine and The University of Texas at Austin
- **Joshua Mendell, M.D., Ph.D. (NAM)**, UT Southwestern Medical Center
- **Nicholas A. Peppas, Sc.D. (NAM, NAE)**, The University of Texas at Austin
- **Shalini Prasad, Ph.D.**, The University of Texas at Dallas
- **Jonathan L. Sessler, Ph.D. (NAS)**, The University of Texas at Austin
- **Anil K. Sood, M.D. (NAM)**, MD Anderson Cancer Center
- **Andrew Wang, M.D.**, UT Southwestern Medical Center
- **Jie Zheng, Ph.D.**, The University of Texas at Dallas

TAMEST Congratulates 10 Texans Elected to NAE



TAMEST welcomed nine new members and congratulated one current member on their election to the National Academy of Engineering (NAE) in 2026. Their election brings the current TAMEST membership to 373.

Learn more about our new members:

- **Thomas Alwin Blasingame, Ph.D. (NAE)**, Texas A&M University
- **John-Paul Clarke, Sc.D. (NAE)**, The University of Texas at Austin
- **Bruce Edward Gnade, Ph.D. (NAE)**, The University of Texas at Dallas*
- **Teresa Plumley Karjala, Ph.D. (NAE)**, Dow
- **Jitendra Kikani, Ph.D. (NAE)**, Chevron
- **Kenneth L. McMillan, Ph.D. (NAE)**, The University of Texas at Austin
- **Walden C. Rhines, Ph.D. (NAE)**, Silvaco Group Inc.
- **Venkat Selvamani, Ph.D. (NAE)**, University of Houston
- **Mark Waggoner (NAE)**, Walter P. Moore & Associates, Inc.
- **Karen L. Wooley, Ph.D. (NAE, NAS)**, Texas A&M University**

TAMEST will welcome these and other new members at the opening reception of the TAMEST 2027 Annual Conference in Houston, Texas.

*Past TAMEST Protégé

**2026 Hill Prize Recipient, Current NAS Member, 2027 O'Donnell Awards Committee Member

First TAMEST Members Reach Triple Election



In 2025, TAMEST members **Lydia E. Kavraki, Ph.D. (NAM, NAE, NAS)** and **Rebecca R. Richards-Kortum, Ph.D. (NAM, NAE, NAS)**, both of Rice University, became the first TAMEST members ever elected to all three National Academies — a distinction shared by only 28 individuals worldwide.

TAMEST Workshop Highlights Nuclear Energy and Artificial Intelligence Research



On February 2, TAMEST held a research workshop, which featured insights from the Texas Advanced Nuclear Energy Office and a panel on "Artificial Intelligence for Science," with leaders from AMD, Rice University, Texas A&M University and The University of Texas at Austin discussing opportunities for AI-driven research and collaboration in Texas.

TAMEST Hosts Meeting with NAS President



On February 2, **National Academy of Sciences President Marcia McNutt, Ph.D. (NAE, NAS)** led a roundtable discussion with Texas-based NAS members ahead of the TAMEST 2026 Annual Conference. Members shared perspectives on research funding and key scientific issues.

TAMEST 2026 Protégé Poster Challenge Highlights Early Career Innovations



Fifty-eight TAMEST protégés showcased their research at the TAMEST 2026 Protégé Poster Challenge, sponsored by Shell. New this year, four finalists each received \$20,000 in funding from Lyda Hill Philanthropies, along with VIP conference experiences and the opportunity to present on the main stage. The Grand Prize Winner, **Alexander Tatara, M.D., Ph.D., of UT Southwestern Medical Center**, was recognized for his poster, "Transforming Biomaterials into Antimicrobial Immunotherapy." All participants were also eligible for the Audience Choice Award.

TAMEST Profiles

TAMEST profiles one of its members or affiliates in each issue of its digital newsletter. See all TAMEST news and updates and sign up for the digital newsletter at TAMEST.org/news.



Building More Resilient Communities:

"As we look ahead to the future of climate and health, with all its complexities and challenges, I believe our greatest strength lies in collaboration. Together, we can build healthier, safer and more resilient communities for generations to come."

David Gimeno Ruiz de Porras, Ph.D., UT San Antonio

TAMEST 2026 Annual Conference Medicine Co-Chair

Celebrating the 20th Anniversary of the Edith and Peter O'Donnell Awards:

"The proof is in the pudding. A striking number of O'Donnell Award recipients have gone on to be recognized by one or more of the National Academies. This really shows that both the awards program and TAMEST are doing an excellent job of selecting truly deserving recipients."

William T. Solomon, O'Donnell Foundation



Recognizing the Importance of the Mary Beth Maddox Award and Lectureship:

"Awards like this play a vital role in advancing equity and representation of women in science. Visibility matters – you can't be what you can't see. Recognitions like this expand the picture of what excellence and scientific leadership look like."

Gerta Hoxhaj, Ph.D., Children's Medical Center Research Institute at UT Southwestern (CRI)

2025 Mary Beth Maddox Award and Lectureship Recipient

Mentoring the Next Generation of Infectious Disease Experts:

"In mentoring the next generation of scientists at Texas Biomed, I emphasize the importance of asking the right questions – those that get to the heart of each unique outbreak. Every emerging threat requires a tailored approach, guided by the most pressing scientific questions and supported by the best technology available."

Jean L. Patterson, Ph.D., Texas Biomedical Research Institute

TAMEST 2026 Annual Conference Science Co-Chair



Giving to the TAMEST Annual Fund:

"TAMEST is doing a fantastic job in bringing scientists, engineers and medical people together. Interdisciplinary communication is such an important part of a scientific approach, and I'm delighted to see my donations go towards supporting such impactful work."

Nobel Laureate Johann Deisenhofer, Ph.D. (NAS), UT Southwestern Medical Center

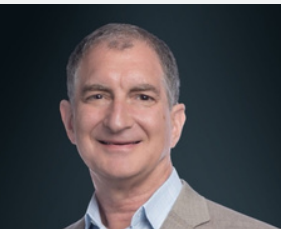
TAMEST Nobel and Breakthrough Prize Laureates Committee Member

Chairing the Hill Prize in Technology Subcommittee:

"It's not just about chasing the next big thing, it's about recognizing the kinds of innovations that can truly move the needle in health care, technology and beyond. By focusing on long-term value rather than short-term flash, the Hill Prizes help ensure we continue fostering bold, meaningful innovation in Texas."

Lynda Chin, M.D. (NAM), Apricity Health

2026 Hill Prize in Technology Subcommittee Chair



Anticipating the Future of Artificial Intelligence (AI):

"The developments we've seen so far are just beginning. AI promises to transform everything from health care to computing infrastructure and that excites me beyond measure. I am eager to see how we will continue to drive progress and make impactful contributions."

Mark Papermaster (NAE), AMD

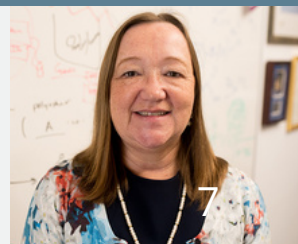
2026 Hill Prize in Artificial Intelligence Subcommittee Member

Carrying the Honor of National Academy Election:

"Many people think of TAMEST as an honorific society. That is completely wrong. TAMEST and the National Academies are all about service. Receiving recognition by one's peers carries with it a responsibility to help other researchers and promote the next generation of researchers."

Joan Frances Brennecke, Ph.D. (NAE), The University of Texas at Austin

TAMEST 2025 Hill Prize in Engineering Recipient and 2026 Hill Prize in Engineering Subcommittee Chair



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Upcoming Deadlines and Events:

April 1–30, 2026	April 15, 2026	May 1–June 1, 2026	May 20, 2026	September 10, 2026	February 1–3, 2027
2027 Mary Beth Maddox Award Nominations Open TAMEST.org/mary-beth-maddox-award	2027 Hill Prizes Information Sessions TAMEST.org/hill-prizes	2027 Hill Prizes Applications Open TAMEST.org/hill-prizes	2026 Mary Beth Maddox Award Lecture Series, UT Southwestern Medical Center TAMEST.org/mary-beth-maddox-award	Edith and Peter O'Donnell Awards Summit: Celebrating 20 Years, Austin, Texas TAMEST.org/odonnell-awards	TAMEST 2027 Annual Conference: Frontiers of Discovery, Houston, Texas TAMEST.org/2027

About TAMEST

Texas Academy of Medicine,
Engineering, Science & Technology

TAMEST (Texas Academy of Medicine, Engineering, Science and Technology) was co-founded in 2004 by the Honorable Kay Bailey Hutchison and Nobel Laureates Michael S. Brown, M.D., and Richard E. Smalley, Ph.D. With more than 360 members, eight Nobel Laureates and 23 member institutions, TAMEST is composed of Texas-based members of the three National Academies (National Academy of Medicine, National Academy of Engineering and National Academy of Sciences) and other honorific organizations. We bring together the state's brightest minds in medicine, engineering, science and technology to foster collaboration, and to advance research, innovation and business in Texas.

TAMEST's unique interdisciplinary model has become an effective recruitment tool for top research and development centers across Texas. Since our founding, more than 350 TAMEST members have been inducted into the National Academies or recruited to Texas.



Baylor University



RICE UNIVERSITY



SOUTHWEST RESEARCH INSTITUTE



HEALTH



TEXAS A&M UNIVERSITY



TEXAS TECH



TEXAS TECH UNIVERSITY HEALTH SCIENCES CENTER



THE UNIVERSITY OF TEXAS AT ARLINGTON



THE UNIVERSITY OF TEXAS AT AUSTIN



THE UNIVERSITY OF TEXAS AT DALLAS



THE UNIVERSITY OF TEXAS AT EL PASO



UT San Antonio
The University of Texas at San Antonio



THE UNIVERSITY OF TEXAS MD Anderson Cancer Center
Making Cancer History



utmb Health
Working together to work wonders.



UNIVERSITY OF NORTH TEXAS



UNT Health
FORT WORTH



UT Southwestern
Medical Center

TAMEST recognizes members of the Founders of the Endowment and the Legacy Circle, whose extraordinary commitment ensures sustainable funds to continue the mission of promoting excellence in science and technology.

Founders of the Endowment

Anadarko Foundation • AT&T • BNSF Foundation • ConocoPhillips • Energy Future Holdings • Edith and Peter O'Donnell • Temple-Inland • The USAA Foundation

Legacy Circle

The Eugene McDermott Foundation