Division of RESEARCH

MARK A. BARTEAU
Vice President for Research
Halliburton Professor in Engineering
Professor of Chemical Engineering
Professor of Chemistry

vpr.tamu.edu
Research GROWTH

- 1985: $165M
- 1990: $273M
- 1995: $363M
- 2000: $397M
- 2005: $480M
- 2010: $657M
- 2015: $867M
- 2016: $893M
- 2017: $905M
- 2018: $922M
- Most Recent: $952M (2019)
Texas A&M AgriLife Research
Texas A&M AgriLife Extension Service
Texas A&M Engineering Experiment Station (TEES)
Texas A&M Engineering Extension Service (TEEX)
Texas A&M Forest Service
Texas A&M Transportation Institute (TTI)
Texas A&M Veterinary Medical Diagnostic Lab
Texas Division of Emergency Management
RESEARCH EXPENDITURES
by Federal Agency
Research @ TEXAS A&M

Articles, Photos and Videos about Research Projects
from across the Texas A&M research enterprise
ON A SINGLE WEBSITE

research.tamu.edu
Overview of the
THE DIVISION

Institutes
Core Facilities
Core Services
Faculty Research
Enhancement
Texas A&M’s Division of Research delivers strategic support to further the University’s research mission through:

- **Research Development Services (RDS)**
  - providing support to faculty as individuals or in groups
  - fostering and supporting interdisciplinary/multidisciplinary collaborations

- **Sponsored Research Services (SRS)**
  - pre- and post-award proposal support
  - MAESTRO

- **Research Integrity and Compliance**
  - ensuring compliance with federal, state, University, and System research standards

- **Research Administration**
- **Core Facilities**
  - strengthening the research infrastructure

- **Centers and Institutes**
  - Board of Regents approved entities

- **Research Communications**
  - promoting the value of research

- **The President’s Excellence Fund**
  - X-Grants
  - Triads for Transformation (T3)
  - Presidential Clinical Research Partnership Grants (PCRP)
Assists the Texas A&M research community by:

- Facilitating and supporting preparation of large-scale multidisciplinary team proposals
- Assisting faculty with CAREER and other Young Investigator Awards
- Providing professional development workshops, seminars, and writing groups
- Assisting with proposal resubmission based on reviewers’ comments
- Administering internal grant programs, including two international programs
- Accessing and training for funding opportunities
A consortium of Texas A&M University System members who bring expertise to enhance the research administration services

- **Proposal preparation and submission** to assist researchers
- **Contract negotiation** to review agreements for non-standard conditions and negotiate necessary changes
- **Award and account set-up and expediting team** to handle award intake, interim funding, and establish projects and accounts in MAESTRO and FAMIS
- **Project administration assists** with good project management practices during the lifecycle of an award
- **Accounts receivable** manages invoicing, letter of credit draws, and financial reporting
Responsible for the comprehensive oversight of research administration at Texas A&M, the Texas A&M University Health Science Center, Texas A&M-Galveston campus and Texas A&M-Qatar campus:

- Coordination of institutional support letters when required by the sponsors solicitation
- Oversight of Time and Effort reporting
- Establishment and maintenance of all cost share accounts
- Creation of all Texas A&M external research reporting and data surveys
- Management and administration of monthly distribution of indirect costs
- Coordination of Unfunded Agreements (NDA, MTA, DUA)
MAESTRO
Research Portal

Provides transparency for researchers to:

- View proposals and projects
- Check account balances, transactions, and payroll activity
- Set-up compliance items needed to manage the proposed work (IRB, IACUC, radioactive materials, etc.)
- View required sponsor project deliverables and upload technical reports
Information and guidance in:

- Animal Care and Use
- Biosafety
- Biosafety Occupational Health
- Conflict of Interest/Commitment
- Export Controls
- Human Research Protection
- Research Misconduct
- Visiting Scholars
Export controls are essential:

- to regulate the transmission of certain information, technologies, services, and items to foreign visitors to the United States and to everyone abroad

- to restrict or prohibit transactions to country, person, and entities that have been sanctioned by federal agencies as threats to important US interests

- if violated, could result in institutional or personal liability, including loss of research funding, debarment, unwanted publicity, significant fines, or imprisonment
Centrally administered support service for animal research and teaching programs at Texas A&M:

- Facilities and services are available for all Texas A&M campus affiliated faculty, staff, and students who have been approved to conduct animal research by the Institutional Animal Care and Use Committee (IACUC).

- CMP leads the program of animal care at Texas A&M that is accredited by the Association for the Assessment and Accreditation of Laboratory Animal Care (AAALAC) International.

- **An Attending Veterinarian** is responsible for the health and well-being of all animals used for research, teaching, and testing.
The Research Development Fund (RDF) was established in 2015 to help create new or enhance existing shared core facilities at A&M. Fifteen percent of IDC from Texas A&M, TEES, AgriLife, and HSC is pooled to make available substantial funds each year for faculty groups to apply for.

Examples of core facilities created through the RDF:

- Advanced Nano-Patterning and Substrate Development Capabilities at AggieFab Nanofabrication Cleanroom
- Enhancing Access to NMR Spectroscopy
- Human Biometrics and Behavior Laboratory
- Interdisciplinary Advanced Robotics Facility
- Integrated Metabolomics Analysis Core
- Multidisciplinary Soft Matter Facility
- Texas A&M’s Mass Spectrometry Core Facility
GLOBAL HEALTH RESEARCH COMPLEX
an $86 million, 102,000 sq. ft., state-of-the-art, nationally distinct facility and core laboratory serving as a System-wide resource to combat emerging disease threats. The GHRC supports and advances multidisciplinary large animal and insect vector research, education, and training opportunities.

HIGH-PERFORMANCE RESEARCH COMPUTING
a dedicated computing resource used for cutting-edge, collaborative, and transformative research and discovery at Texas A&M University. HPRC supports more than 2,500 users, including more than 450 faculty members. Computing resources are used for cutting-edge, collaborative, and transformative research.

MATERIALS CHARACTERIZATION FACILITY
trains students to use state-of-the-art instrumentation in support of their research and educational goals and provides infrastructure and centralized resources for faculty across campus who wish to apply for funding for new instrumentation that further enhances materials science and engineering.

MICROSCOPY AND IMAGING CENTER
provides current and emerging technologies for teaching and research involving microscopy and imaging in life and physical sciences, training and support services for microscopy, sample preparation, in situ elemental/ molecular analyses, as well as digital image analysis and processing.
149 centers and institutes

8 thematic areas:
- Climate and the Environment
- Computation and Information
- Education and Outreach
- Energy, Food and Water
- Global Health and Security
- Healthcare
- Infrastructure, Materials, and Manufacturing
- Society, Policy, and the Economy

Centers and Institutes Directors Council

research.tamu.edu/centers
TEXAS A&M INSTITUTE FOR GENOME SCIENCES AND SOCIETY

serves as the nexus for genomic research, training, and support. TIGSS functions as a virtual institute to unite genome scientists with researchers who study the social, economic, and ethical consequences and impacts of genomics technology, as well as bioinformatics scientists who conduct research on how to analyze and manage large datasets such as those generated by high-throughput genomics experiments.

TEXAS A&M ENERGY INSTITUTE

pursues and supports new approaches for multi-disciplinary energy research, education, and external partnerships. These approaches cross departmental and college boundaries and address all facets of the energy landscape that naturally connect engineering, sciences, technologies, economics, law, and policy decisions.

TEXAS A&M INSTITUTE OF DATA SCIENCE

provides leadership in the development of data science as a new discipline and satisfies the diverse data collection, management, security, and analysis requirements of researchers, students, and partner organizations throughout Texas A&M.
COMMUNICATIONS

LIMITED SUBMISSION PROPOSALS

FUNDING OPPORTUNITIES
Funding for research from public and private sources

SPECIAL EDITION
COVID-19 Funding Opportunities

RESEARCH BULLETIN
A weekly news update designed specifically for faculty-researchers and their teams at Texas A&M University

email

bit.ly/tamuresearch-subscribe
X - GRANTS PROGRAM

The X-Grants program, part of the President’s Excellence Fund, is an interdisciplinary program designed to bring faculty together across disciplines. The goal is to unlock creative and imaginative ideas that will address important problems in areas that will significantly impact the most important challenges facing global society. Seven million dollars is devoted each year to a mix of smaller scale awards and larger scale collaborative research awards.

FUNDING OPPORTUNITIES

RESEARCH DEVELOPMENT FUND

Texas A&M University, Texas A&M Health Science Center, Texas A&M Engineering Experiment Station and Texas A&M AgriLife Research developed the Research Development Fund (RDF) to be utilized for strategic investments that support the total Texas A&M research enterprise and catalyze new ventures. These investments are likely to be in the areas of core research facilities and equipment and their initial operation; strategic investments in the creation of core facilities and significant renovations of existing core facilities; and investment in faculty development and support for competing for exceptionally large projects. This fund will support faculty research across those administrative units participating in the fund.

ARTS & HUMANITIES FELLOWS PROGRAM

The Arts & Humanities Fellows Program was created to stimulate interactions among scholarly and artistic faculty at Texas A&M University as well as nationally and internationally. The program is designed to recognize the importance of the arts and humanities in shaping and advancing human civilization. Since its launch in 2015, the program has sponsored projects by 41 faculty members, including the 10 newest fellows.
The President’s Excellence Fund, established in October 2017 by President Michael K. Young, is a ten-year, $100 million initiative designed to further Texas A&M University’s commitments to the three pillars of:

- advancing transformational learning;
- enhancing discovery and innovation;
- and expanding impact on our community, state, nation, and world.

**President’s EXCELLENCE FUND**

---

**X-GRANTS**

- 3 years
- 24 projects
- $21M

**T3**

- 3 years
- 300 projects
- $9M

---

**PCRP**

Presidential Clinical Research Partnership Grants

- $8 Million in Additional Funding Announced in 2019
- 1 year
- 6 Projects
- $1M

- Interdisciplinary research programs improving health, health care and health equity in Texas and across the nation
- Co-led by faculty or faculty-equivalent at healthcare facilities with established affiliation or clinical research collaboration agreements
- Each project up to $200,000 for a two-year period

pef.tamu.edu
President’s Excellence Fund
X-GRANTS PROJECTS

Monitoring Rapidly Changing Arctic Ecosystems Using High-Resolution Satellite-Based Datasets and Art
Leader: Julie Loisel
Total Members: 10
2018

Mastering Friction to Reduce Current and Future Energy Demands
Leader: James D. Batteas
Total Members: 14
2018

Project X-CEL: Eliminating Bias in School Discipline through Teacher Training
Leader: Jamilia J. Blake
Total Members: 12
Round 2
President’s Excellence Fund
X-GRANTS PROJECTS

Engineering Brain Health Using an Adaptive Wireless Optogenetic Neurostimulator
Leader: Stephen Maren
Total Members: 8
Round 2

Biology Hidden in RNA Structures and Epi-modifications
Leader: Xiuren Zhang
Total Members: 8
Round 2

A Multidisciplinary Platform for the Identification of Cancer and COVID-19 Therapeutics
Leader: Wenshe Liu
Total Members: 13
Round 3
### President's Excellence Fund

#### 2020 Presidential Clinical Research Partnership Grants (PCRP)

<table>
<thead>
<tr>
<th>Project Title</th>
<th>Principal Investigator(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Combining Low Dose Computerized Tomography and Blood Based Biomarkers of Genetic Stability to Improve the Diagnostic Precision of Lung Cancer Screening</strong></td>
<td>Kenneth Ramos, Institute for Biosciences and Technology, College of Medicine, in affiliation with Randa El-Zein, Houston Methodist Hospital and Research Institute</td>
</tr>
<tr>
<td><strong>Improving Maternal Health Equity and Decreasing Racial Disparities through Transdisciplinary Research and Collaboration in the Brazos Valley</strong></td>
<td>Michael Moreno, Department of Mechanical Engineering, College of Engineering, in affiliation with Mahwash Kassi, Houston Methodist Hospital and Research Institute and Theresa Morris, Department of Sociology, College of Liberal Arts, in affiliation with Hector Chapa, CHI St. Joseph Health Regional Hospital</td>
</tr>
<tr>
<td><strong>Nanozyme Therapy for Chronic Venous Stasis Dermatitis: New Approach for a Major Unmet Clinical Need</strong></td>
<td>Thomas A. Kent, Institute for Bioscience and Technology, College of Medicine, in affiliation with Arvind Bhimaraj, Houston Methodist Hospital and Research Institute and Carl Tong, Department of Medical Physiology, College of Medicine, in affiliation with Scott Goble, CHI St. Joseph Health Regional Hospital</td>
</tr>
<tr>
<td><strong>Engineering Optimal Care for Patients with Heart Disease</strong></td>
<td>Fei Liu, Department of Molecular and Cellular Medicine, College of Medicine, in affiliation with Scott Goble, CHI St. Joseph Health Regional Hospital</td>
</tr>
</tbody>
</table>

**pcrp.tamu.edu**
Faculty Members Awarded
2020 ARTS & HUMANITIES FELLOWS

José Luis Bermúdez
Department of Philosophy & Humanities
College of Liberal Arts

David Donkor
Department of Performance Studies
College of Liberal Arts

Side Emre
Department of History
College of Liberal Arts

Carmela Garritano
Department of International Studies
College of Liberal Arts

Sonia Hernandez
Department of History
College of Liberal Arts

Britt Mize
Department of English
College of Liberal Arts

Stephen Badalyan Riegg
Department of History
College of Liberal Arts

Hope Hui Rising
Department of Landscape Architecture & Urban Planning
College of Architecture

Andrea Roberts
Department of Landscape Architecture & Urban Planning
College of Architecture

Robin Vel'dman
Religious Studies Program
College of Liberal Arts

vpr.tamu.edu/arts-and-humanities-fellows
The Office of
EXTERNAL
FACULTY AWARDS
& RECOGNITION

JACK BALDAUF
Senior Associate
Vice President for Research
The Office of External Faculty Awards & Recognition (OEFA)

- Celebrates faculty excellence through external awards and recognition.
- Cultivates a systematic and strategic approach.
- Amplifies the efforts of units across campus to recognize faculty excellence.
- Establishes a university culture where faculty, peers, and unit leaders recognize the excellence of their peers through external awards.
- Embraces the importance of collaborating, communicating, empowering, and cultivating a growth mindset.

facultyawards.tamu.edu
CORE VALUES

- **Collaborating** – By building trust-worthy relationships, acceptance, and bridging.

- **Communicating** – By the use of transparency, strategic listening, and networking.

- **Empowering** – By providing opportunities that create value in others and foster individual accomplishments.

- **Cultivating** – By growing a learning and strategic mindset.
AWARD BENEFITS

- Awards establish you as a leader in your discipline.

- Awards increase your visibility and provide wider recognition for your work among colleagues, peers, and others.

- Awards open opportunities for other recognitions.

- Awards offer new learning opportunities and cross-disciplinary collaboration.

- Awards present exciting opportunities and offer faculty an expanded community of scholars.

- Awards elevate your research and that of your department and college.
Take ownership in your own career (award) path.

Consider and identify awards that will allow you to receive the types of opportunities that are important for you and your work. Build them into your career map.

Speak with faculty from all career stages about awards and society memberships.

Discuss award goals with your department head or supervisor.

Logon to the external awards website and searchable database.

Research similar scholars.

Highly encourage the nomination for an Early Career, Prestigious (P), Highly Prestigious (HP), or Other (O) type of Award.

Network at a regional, national, or an international level.

Nominate your peers for awards.
Great achievement is usually born of great sacrifice and is never the result of selfishness.” Napoleon Hill
THANK YOU.

MARK BARTEAU
VICE PRESIDENT FOR RESEARCH

barteau@tamu.edu
vpr.tamu.edu

TEXAS A&M UNIVERSITY
Division of Research