

# WELCOME TO UH RESEARCH

Luncheon Event for New Faculty  
September 28, 2023

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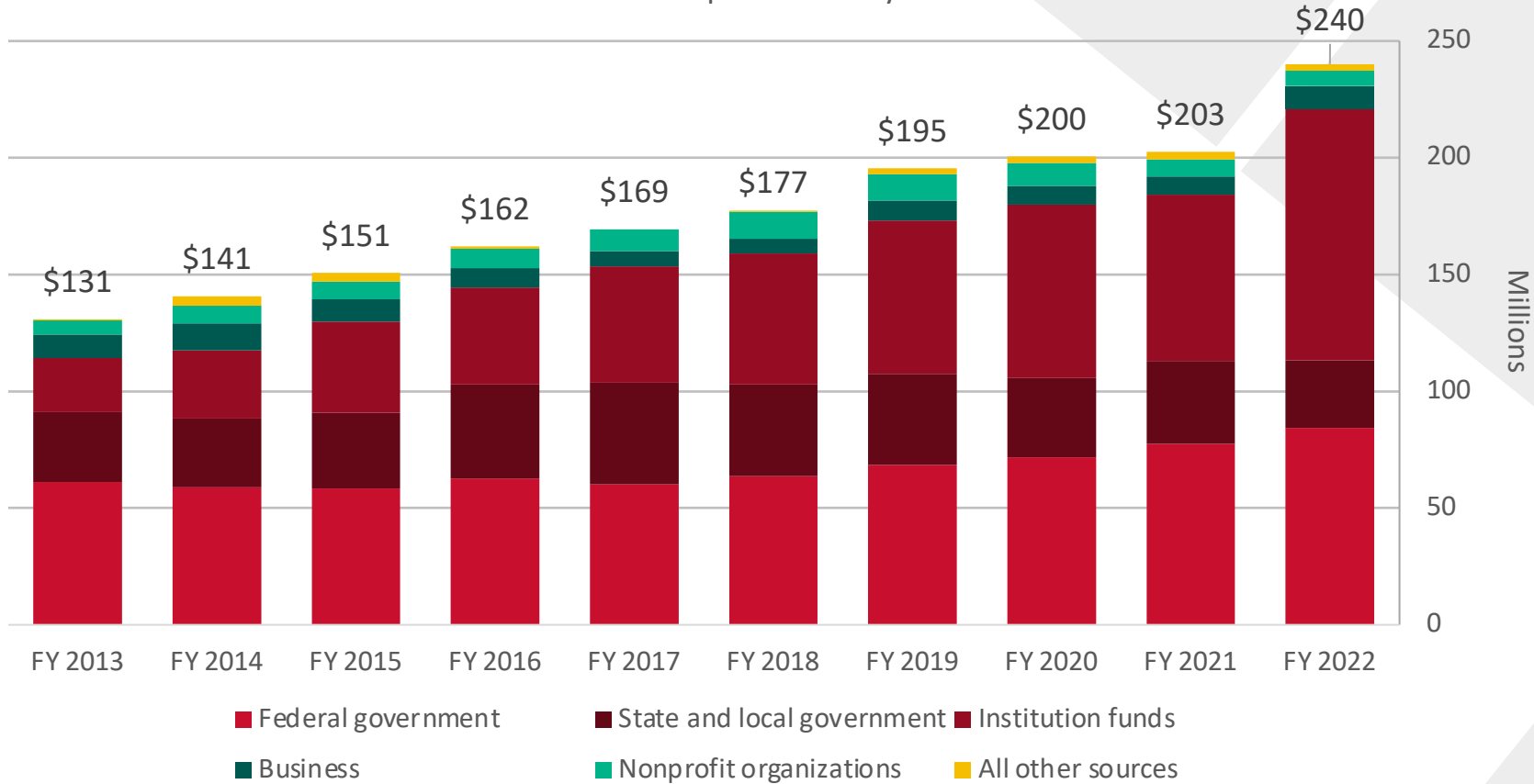
**Claudia Neuhauser**, Interim VP for Research



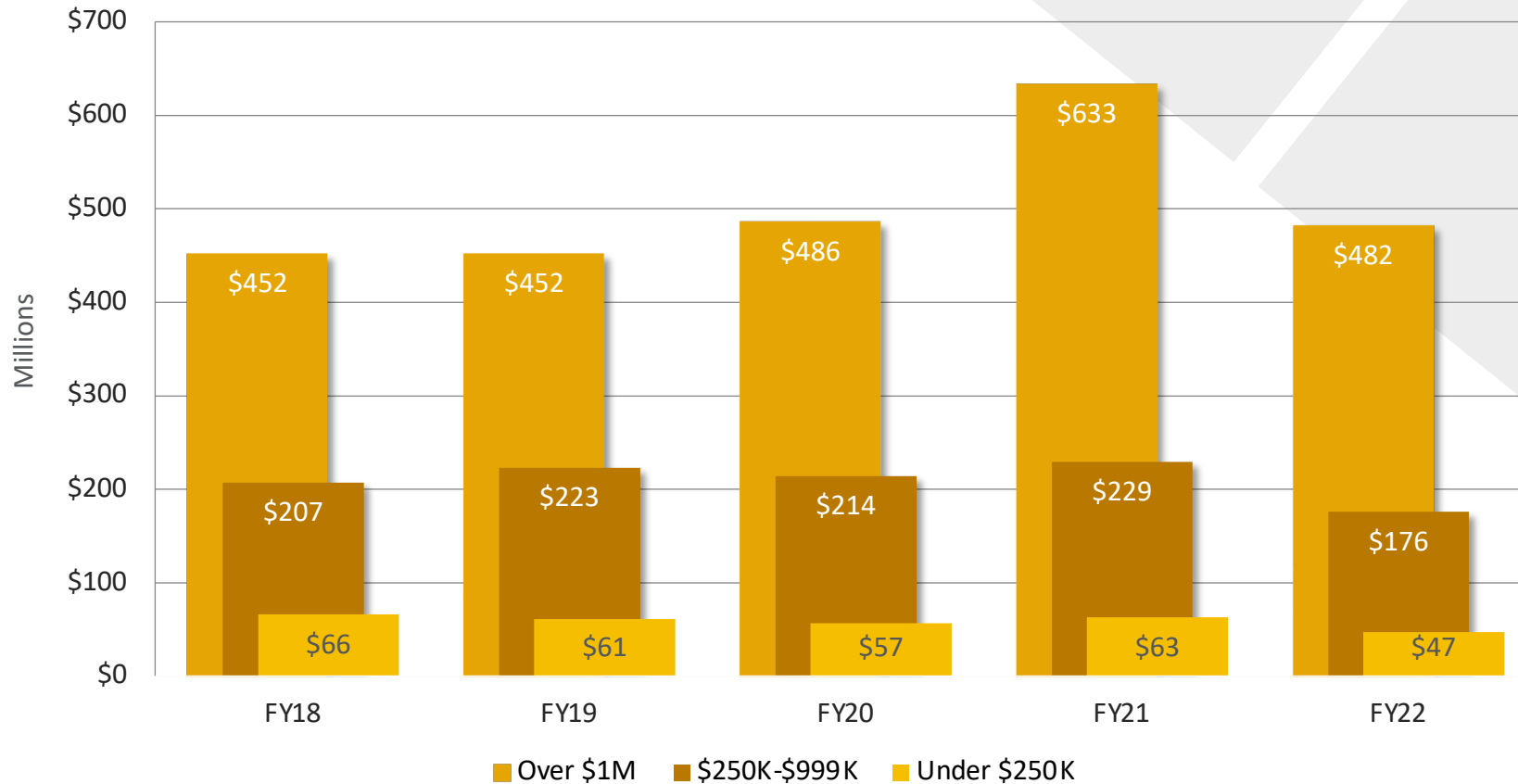
The University of Houston  
is on the move

# Total Expenditure – NSF Reported

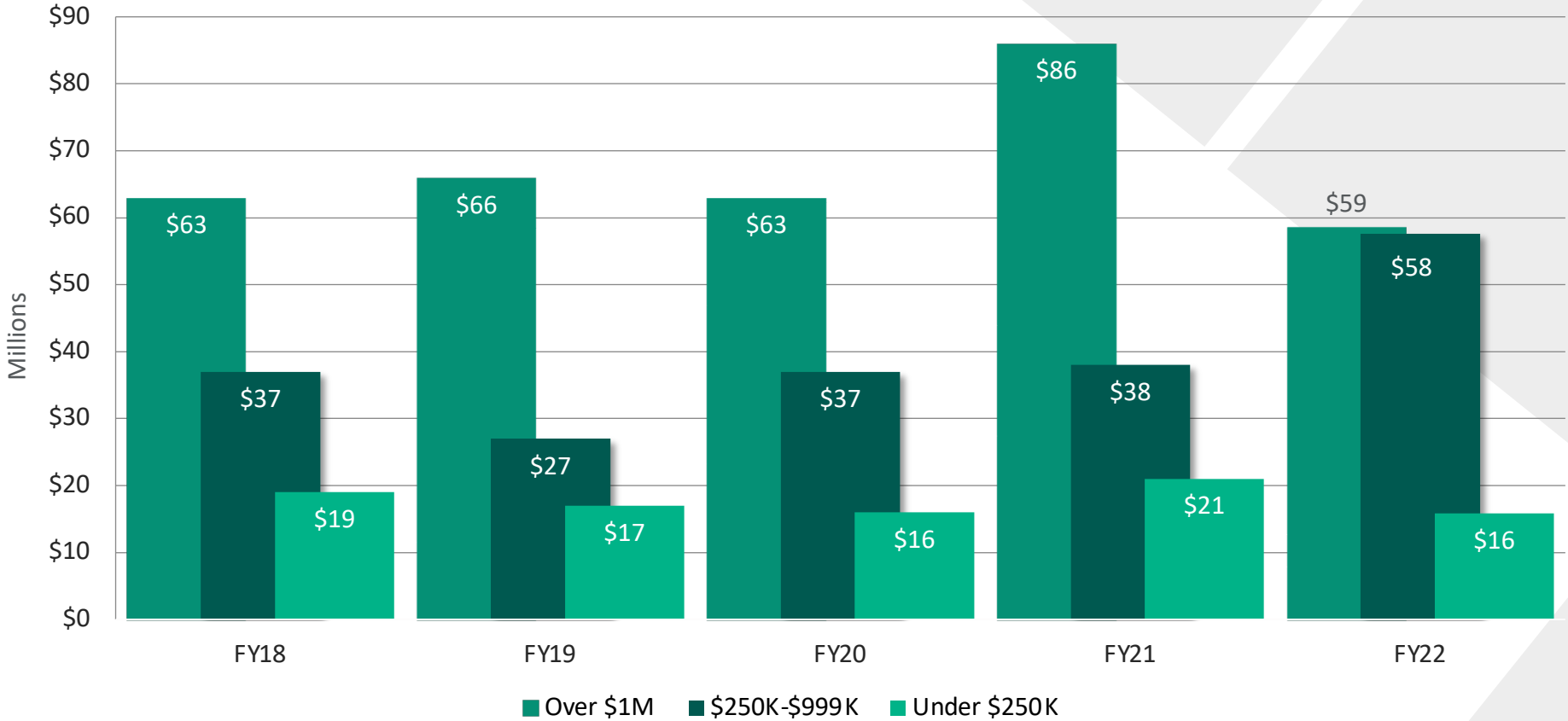
Total R&D Expenditures by Source



# Total Funds Requested



# New Awards Funded



# National Centers

UH leads eleven externally-funded centers, comprising numerous collaborations with partner institutions and industry...

## **ASMI**

Advanced Superconductor  
Manufacturing Institute

## **BTI**

Borders, Trade and  
Immigration Institute

## **BRAIN Center**

Center for Building Reliable Advances and  
Innovations in Neurotechnologies

## **CIC**

Center for Integrated Catalysis

## **CSEL**

Center for Success of  
English Learners

## **CYBER-CARE**

Transportation Cybersecurity Center  
for Advanced Research and Education

## **HEALTH-RCMI**

HEALTH Center for Addictions Research  
and Cancer Prevention

## **NCALM**

National Center for Airborne  
Laser Mapping

## **NCRED**

National Center for Research  
on Educator Diversity

## **SSI**

Subsea Systems Institute

## **TCLD**

Texas Center for Learning  
Disabilities

# University Centers

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UH also has eight highly-visible university-supported centers....

## **AMI**

Advanced Manufacturing Institute

## **CCME**

Center for Carbon Management  
in Energy

## **DDI**

Drug Discovery Institute

## **HPE DSI**

Hewlett Packard Enterprise  
Data Science Institute

## **HRI**

HEALTH Research Institute

## **HuRRI**

Hurricane Resilience Research  
Institute

## **TcSUH**

Texas Center for  
Superconductivity at UH

## **TIMES**

Texas Institute for Measurement,  
Evaluation and Statistics

# Notable Faculty

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NSF CAREER  
Award Winners



National Academy of  
Sciences Members



National Academy of  
Inventors Members



National Academy of  
Engineering Members



# Major Initiatives

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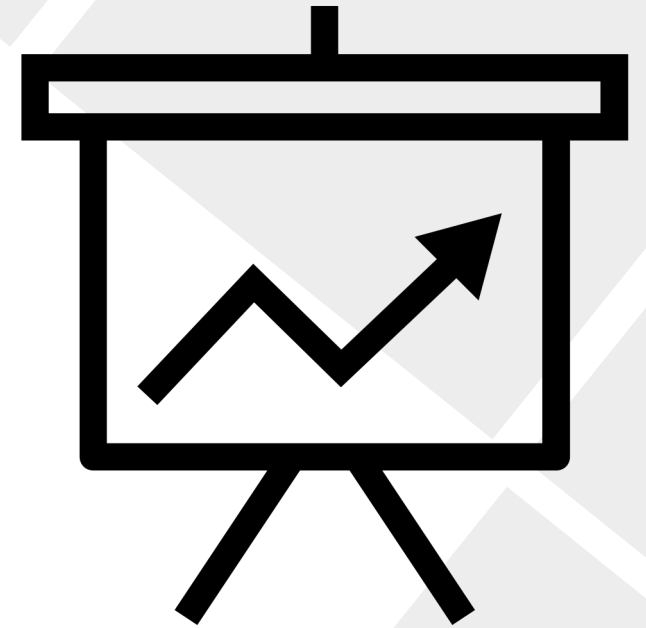
*Setting the research agenda for the University of Houston*

# Vision for Research Preeminence:

## Doubling Research Expenditures

Our goal is to **double our research expenditures**, increasing NSF-reported research expenditures to \$400 million annually over the next five years.

To achieve this, the University is investing in infrastructure and new positions for faculty.



# New Core Facilities

The University has committed **\$22 million** to purchase equipment for new core facilities to support national priority research areas:

- **Advanced Manufacturing**
- **Advanced Materials**
- **Imaging and Scanning**
- **Data and Sensing**
- **Automation and Autonomy**

The investment will provide equipment for our research community to compete effectively for research awards and excel at delivering the goals and objectives of their research projects. Core facilities optimize investments in equipment and make them available to the UH research community.

## Phase 1

- Electron Microscopy Core Facility (TEM) **Advanced Materials**
- Core Facility for Autonomy **Autonomy and Automation**
  - Virtual and Augmented Reality Core Facility
- Digital Humanities Core Facility **Data and Sensing**
- Advanced Manufacturing Core Facility **Advanced Manufacturing**
  - Pilot-scale Roll-to-roll/Large-area/Flexible Manufacturing Tools
  - Additive Manufacturing Tools (upgrade existing facility)
  - Pilot Superconductor Manufacturing Core Facility (upgrade existing facility)
  - Solid State Battery Prototype Facility

# Institutional Research Thrusts



Cyber and Physical Security



Drug Discovery and Development



Sustainable Communities and Infrastructure



Accessible Healthcare



Energy Security and Transition

## Research Tools



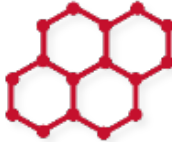
Data



Imaging



Automation



Materials



Advanced Manufacturing

We are here  
to help

# Mission

To effectively and professionally serve the research community at UH and to lead the university in creating, managing and propagating institutional research priorities



# DOR Offices



# Research Support

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## Find Funding

New opportunities are published each week in the *Inside Research* newsletter.



## Develop Proposals

DOR supports colleges in submitting proposals for external funding and provides workshops and other grantsmanship resources.



## Manage Awards

DOR establishes cost centers, communicates terms and conditions, and oversees subaward management.



## Stay in Compliance

DOR ensures compliance with federal regulations and the responsible conduct of research and conducts congruency reviews.



# Research Operations

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## Contract & Grants

- Research Administrative Services
- Research Financial Services
- Research Systems & Reporting



## Research Integrity

- Human Subjects Research
- Animal Research
- Conflict of Interest



## Animal Care

- State-of-the-art animal care facility



# Research Operations

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## University Level Centers & Institutes

- 8 DOR-supported research centers



## Core Facilities

- \$22 million for phased expansion
- Growing resources to support research thrust areas

# Foundational Offices

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## Business Operations

- Human Resources
- Budgeting/Accounting
- Research Core Facilities



## Communications

- External Visibility
- Internal Engagement
- DOR News and Events

# Division of Energy and Innovation

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## Intellectual Property

- Patents
- Licensing



## Innovation

- Startups
- Venture Funds
- Innovation Centers and Labs



**Division of Energy and Innovation**  
UNIVERSITY OF **HOUSTON**

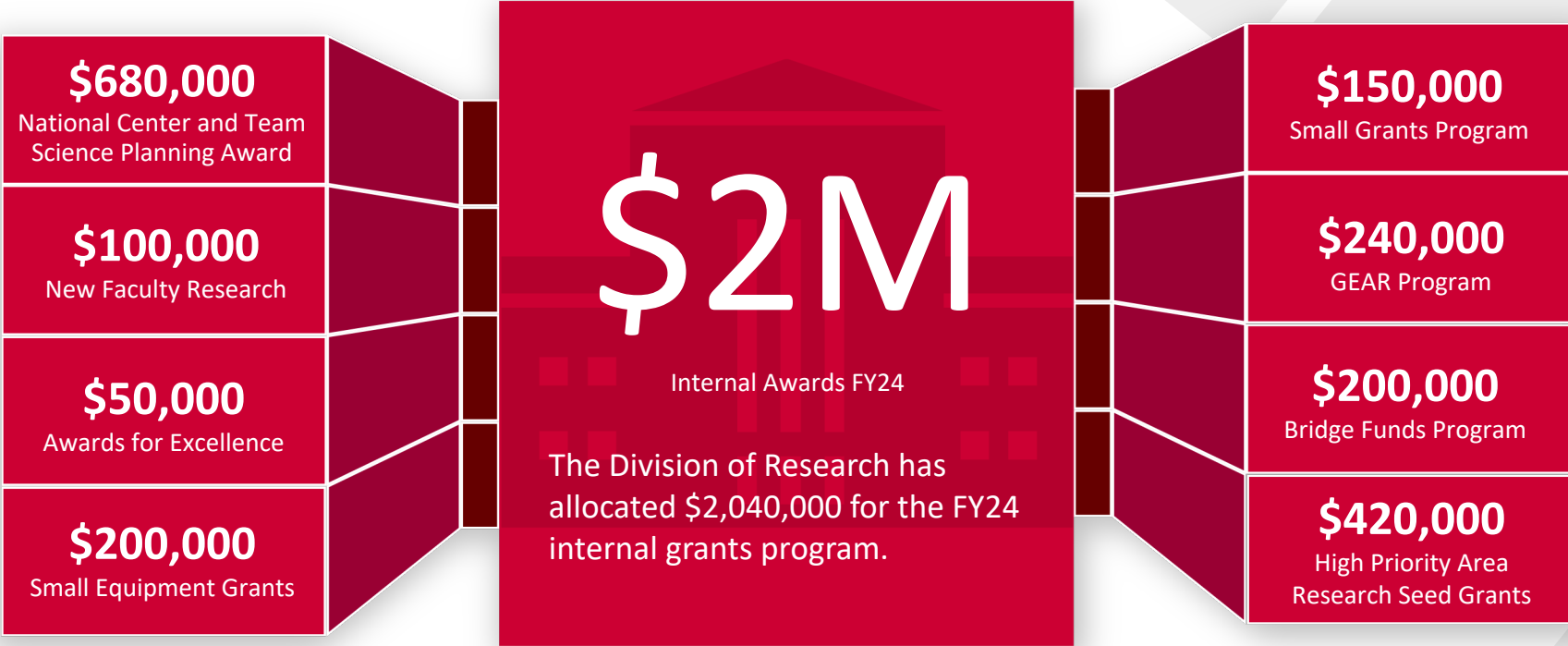


**Division of Research**  
UNIVERSITY OF **HOUSTON**

# Faculty Resources



# Internal Awards



# Event Series



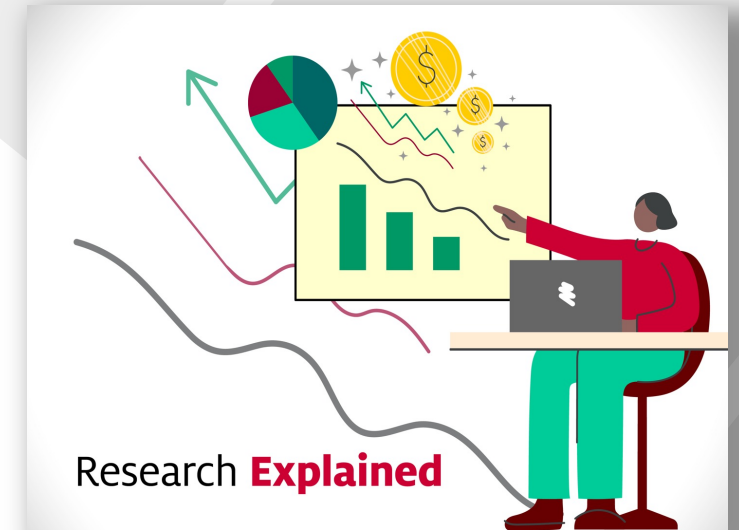
## UH Research Forum

Monthly presentations and panel discussions on the ever-changing world of university research.



## Research Administration Forum

Monthly learning series covering processes that departmental and college research administrators encounter.



## Research Explained

Deeper dives into agency updates, data management and protection, research security, and other complex topics.

# Upcoming Events



## Data Management Best Practices for UH Researchers

Friday, September 29  
10 a.m.

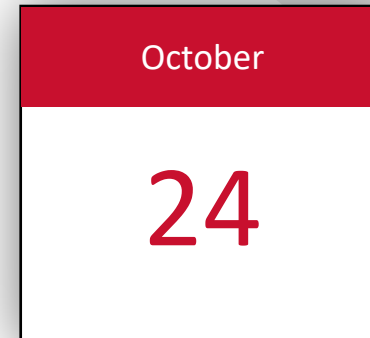
*Virtual Event*



## Strategies for Success with Internal Awards

Friday, October 20  
10 a.m.

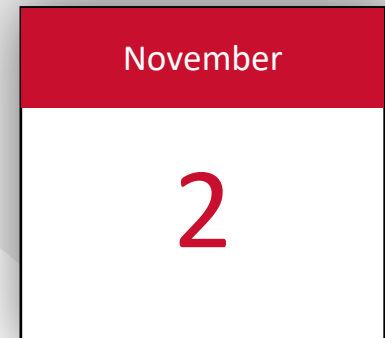
*Virtual Event*



## UH Research Forum

Tuesday, October 24  
Noon

*Virtual Event*



## Bagels with the VP

Thursday, November 2  
10 a.m.

*Faculty Caf *

View full event schedule at [uh.edu/research/calendar](http://uh.edu/research/calendar)



# Inside Research

Every Wednesday, the Division of Research sends **news, events, funding opportunities** and other **announcements** to the UH research community.

## Inside Research

News, Events and Resources for the UH Research Community

Latest News   Upcoming Events   Featured Event   Featured Funding Ops

### Announcements

- The FY2024 Proposal Budget Template has been updated to reflect the [latest IDC rate plan](#) and fringe rates, and it is now available for use. [Download the new template](#) (.XSLX).
- The HEALTH Center for Addictions Research and Cancer Prevention Pilot Grant Program [invites applications](#) that seek to break new ground in addressing health disparities in addictions and cancer prevention. This short-term (1-year) funding opportunity supports 3 to 5 innovative pilot grants (\$30,000 to \$50,000), with funding anticipated to start in February 2024.

Letters of Intent are due by **September 1**.

View past announcements on the Division of Research [website](#).

### Campus News



#### [\\$1.7M Research Project to Examine How Public Schools Identify Learning Disabilities](#)

UH Research Associate Professor of Psychology Jeremy Miciak will lead a four-year study at schools in Texas and Florida. His team will examine how elementary schools identify specific learning disabilities in students so children with significant academic disabilities can succeed.



#### [UH Leads Program to Provide Research Opportunities to Postbaccalaureates](#)

## Featured Funding Opportunities

Health   Science, Engineering & Technology   Social Sciences, Art, Humanities & Education

### Health

**Funding Agency:** National Institutes of Health  
**Title:** [NIA Research and Entrepreneurial Development Immersion \(REDI\): Entrepreneurial Small Business Transition Award \(R41/R42 Clinical Trial Optional\)](#)  
**Application Deadline:** October 26, 2023  
This Notice of Funding Opportunity (NOFO) invites Research and Entrepreneurial Development Immersion (REDI) Small Business Technology Transfer Research (STTR) Grant applications. The goal of this NOFO is to foster the career development of early-career scientists with an interest in entrepreneurship by simultaneously supporting their entrepreneurial development and facilitating their transition to industry.

**Funding Agency:** National Institutes of Health  
**Title:** [Analytical and Clinical Validation of Biomarkers for Alzheimer's Disease \(AD\) and AD-Related Dementias \(ADRD\) \(U01 Clinical Trial Optional\)](#)  
**Application Deadline:** Multiple deadlines  
The goal of this Notice of Funding Opportunity (NOFO) is to accelerate the establishment of effective and reliable biomarkers of Alzheimer's disease (AD) and AD-related dementias (ADRD) for use in therapy/medical product discovery and development, clinical trials and/or clinical practice. Specifically, this NOFO will support analytical and/or clinical validation of a biomarker, composite biomarker or biomarker signature, with rigor comparable with the expectations described in the Food and Drug Administration (FDA) Biomarker Qualification Program (BQP) or recommended by other FDA regulatory pathways.

**Funding Agency:** National Institutes of Health  
**Title:** [Understanding and Mitigating Health Disparities experienced by People with Disabilities caused by Ableism \(R01 Clinical Trial Optional\)](#)  
**Application Deadline:** November 29, 2023  
The goal of this NOFO is to encourage research to understand the impact of ableism on health outcomes. Research on the underlying mechanisms by which ableism adversely influences the health of persons with disabilities (PWD), as well as developing and/or testing interventions at a community or health systems level to mitigate adverse health effects of ableism are high priority.

**Funding Agency:** National Institutes of Health  
**Title:** [Planning for Product Development Strategy \(R34 Clinical Trial Not Allowed\)](#)  
**Application Deadline:** Multiple deadlines  
The purpose of this Notice of Funding Opportunity (NOFO) is to support the development of a comprehensive and well-defined product development strategy for next-generation treatments for HIV and HIV-associated comorbidities, coinfections and complications and preventive strategies for HIV, as well as facilitating the translation of research findings into drug products that enables submission of an Investigational New Drug (IND) application to the FDA.

**Funding Agency:** National Institutes of Health  
**Title:** [NIA Research and Entrepreneurial Development Immersion \(REDI\): Entrepreneurial Small Business Transition Award \(R43/R44 Clinical Trial Optional\)](#)  
**Application Deadline:** October 26, 2023  
This Funding Opportunity Announcement (FOA) invites Research and Entrepreneurial

# Networking

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## Office of Contracts and Grants

*Submit Proposals and Manage Your Awards*

- **Research Administrative Services** assists faculty in proposal development and submission, sponsored project contract negotiation and execution of monetary and non-monetary agreements, and management of awards.
- **Research Financial Services** handles billing, financial reporting, and effort reporting and close out for sponsored projects.
- **Research Systems and Reporting** is responsible for data and system analysis for division and institutional reporting, and oversee the design, development, and maintenance of research databases

# Networking

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## Research Integrity and Oversight

### *Understand the Regulations Around Your Research*

- Ensures compliance with federal regulations for work with both human and animal subjects, conflicts of interest, grant congruency, and responsible conduct of research.
- Conducts congruency reviews prior to award set up (verifies IRB, IACUC, COI, safety approvals)

# Networking

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## Animal Care Operations

### *Care For Your Research Animals*

- Provides professional veterinary and husbandry services to support animals used in biomedical and behavioral research
- Maintains standards for animals, facilities, equipment, and procedures
- Offers services to faculty for animal procurement, training, veterinary consultation in research design, transportation of animals and veterinary care

# Networking

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## Supporting Services

- **Business Operations** provides human resources, financial, and administrative support services for the Division of Research, and is responsible for maintenance of computer databases and division information repositories.
- **The Research Administration** office provides oversight to laboratory renovation and construction projects, as well as University wide core facilities and large equipment purchases.
- **Strategic Research Communications** is responsible for raising the visibility of UH research and innovation programs nationally, among peer institutions and throughout Houston's regional industry.

# TO SERVE

**We serve** the research community by satisfying client requirements, ensuring research compliance, and protecting the University's intellectual and financial interests.

# TO LEAD

**We lead** the university by managing institutional research priorities and supporting a broader view of individual and small-group research.

[uh.edu/research](http://uh.edu/research)



Division of Research  
UNIVERSITY OF HOUSTON