

UH Research Forum

December 5, 2022



Welcome & Announcements

Claudia Neuhauser, Ph.D.

Interim Vice President for Research

Upcoming Events

February

27-28

Write Winning Grant Proposals Workshop

Monday, February 27 — Tuesday, February 28
8:30 a.m. — Noon

The Division of Research is bringing back to the University of Houston the widely acclaimed “Write Winning Grant Proposals” seminar, presented by John D. Robertson, Ph.D., of Grant Writers’ Seminars and Workshops. This live, virtual presentation will be held over the course of two days, in the morning only. The seminar will cover:

1. Critical steps for organizing and planning your proposal (all of the things you need to do before you start writing a full proposal in order to have a competitive edge)
2. Understanding the role (and mindset) of your reviewers
3. A 4-paragraph rhetorical strategy for writing a compelling Specific Aims or Overview & Objectives page
4. Specific strategies and tips for each major section of a grant proposal

View more events and register to attend at uh.edu/research/calendar

Today's Agenda

Open Scholarship and the 2022 OSTP Public Access Memo

Santi Thompson, Librarian and Associate Dean for Research and Student Engagement, UH Libraries

Getting to the Core: Core Facilities Plan

Claudia Neuhauser, Interim Vice President for Research

Facilities and Administrative Cost (IDC): The Facts (Not Myths)

Cris Milligan, Assistant Vice President for Research Administration

Communication with Agencies: Pre and Post Award

David Schultz, Assistant Vice President, Sponsored Research Administration

Open Scholarship and the 2022 OSTP Public Access Memo

Santi Thompson

Librarian and Associate Dean for Research and
Student Engagement, UH Libraries

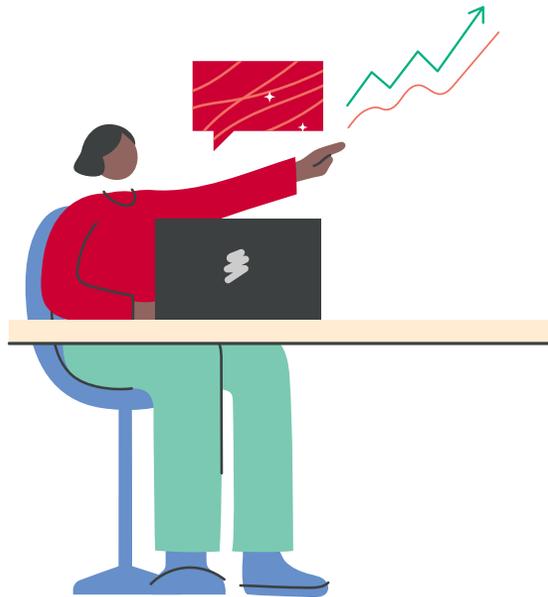
Open Scholarship



Open scholarship (sometimes called “open science” or “open research”) is an expansive term meant to encompass the rapid and widespread sharing of a range of scholarly activities and outputs, across disciplines.

Open scholarship promotes inclusivity, transparent and trustworthy research, innovation, and collaboration.

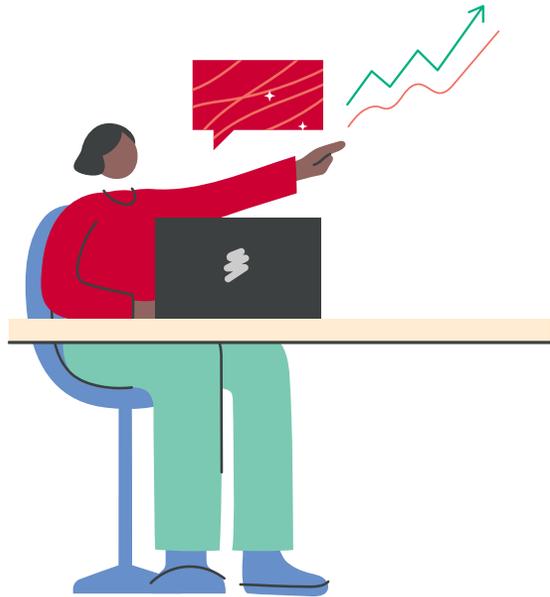
2022 OSTP Memo



In August 2022, the Biden Administration, through the Office of Science and Technology Policy (OSTP), released the memo “Ensuring Free, Immediate, and Equitable Access to Federally Funded Research” (“Nelson Memo”)

Builds on the 2013 OSTP memo “Increasing Access to the Results of Federally Funded Scientific Research” (“Holdren Memo”)

Highlights of the Memo



The 2022 memo:

- **Removes** the previous 12-month embargo on publications
- **Requires** scientific data to be shared
- **Ensures** research integrity is addressed specifically in policies

The timeline for agencies to draft plans depends on the size of the agency, with implementation to be completed by December 2025

UH Open Scholarship Task Force

Task force charged by Office of the Provost in 2021

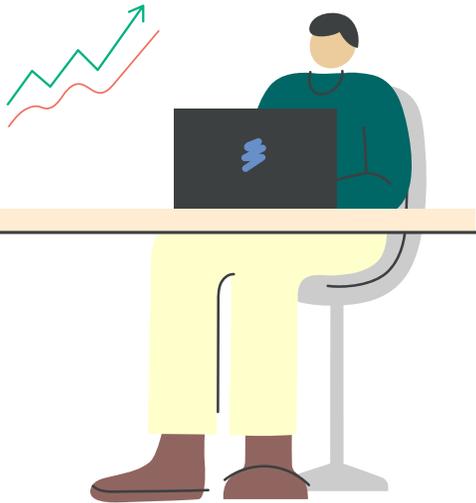
Membership includes representation from DOR, Faculty Senate, Graduate School, Office of the Provost, and University Libraries.

Seeks to:

- **Understand** current campus open scholarship climate and practices
- **Identify** short- and long-term goals that will enhance campus engagement in open scholarship

Chaired by Athena Jackson, Dean of University Libraries

- Dean Jackson also serves as UH's representative to The Higher Education Leadership Initiative for Open Scholarship (HELIOS)



Thank You!

Questions?

Type your question to the moderator for the panel discussion at the end.



Getting to the Core: The Core Facilities Plan

Claudia Neuhauser

Interim Vice President for Research

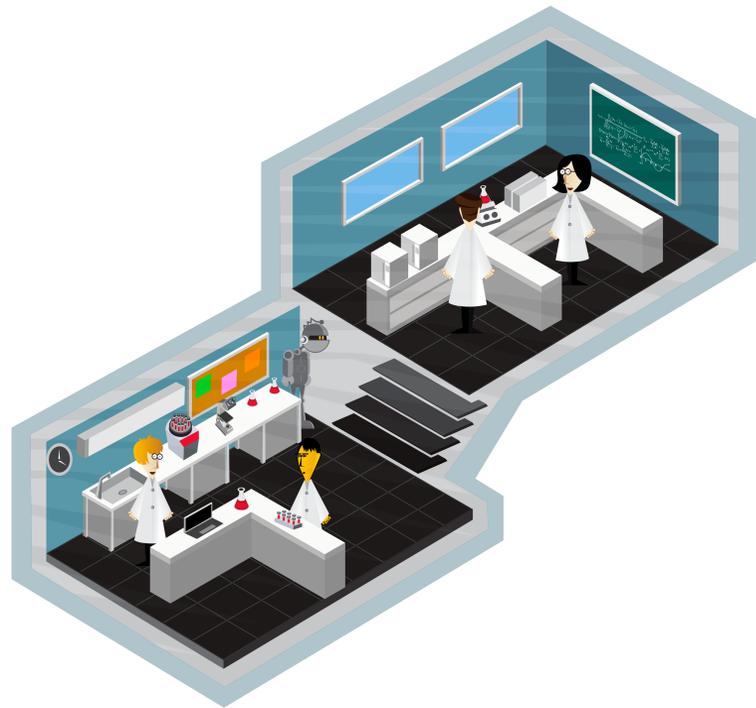


The Commitment

UH committed significant funding for core facilities in five national priority research areas

- Advanced manufacturing
- Advanced materials
- Imaging
- Data and Sensing
- Automation

Five faculty committees with representation from the RSC developed proposals to prioritize major equipment and identify requirements for operation and maintenance.



The Plan



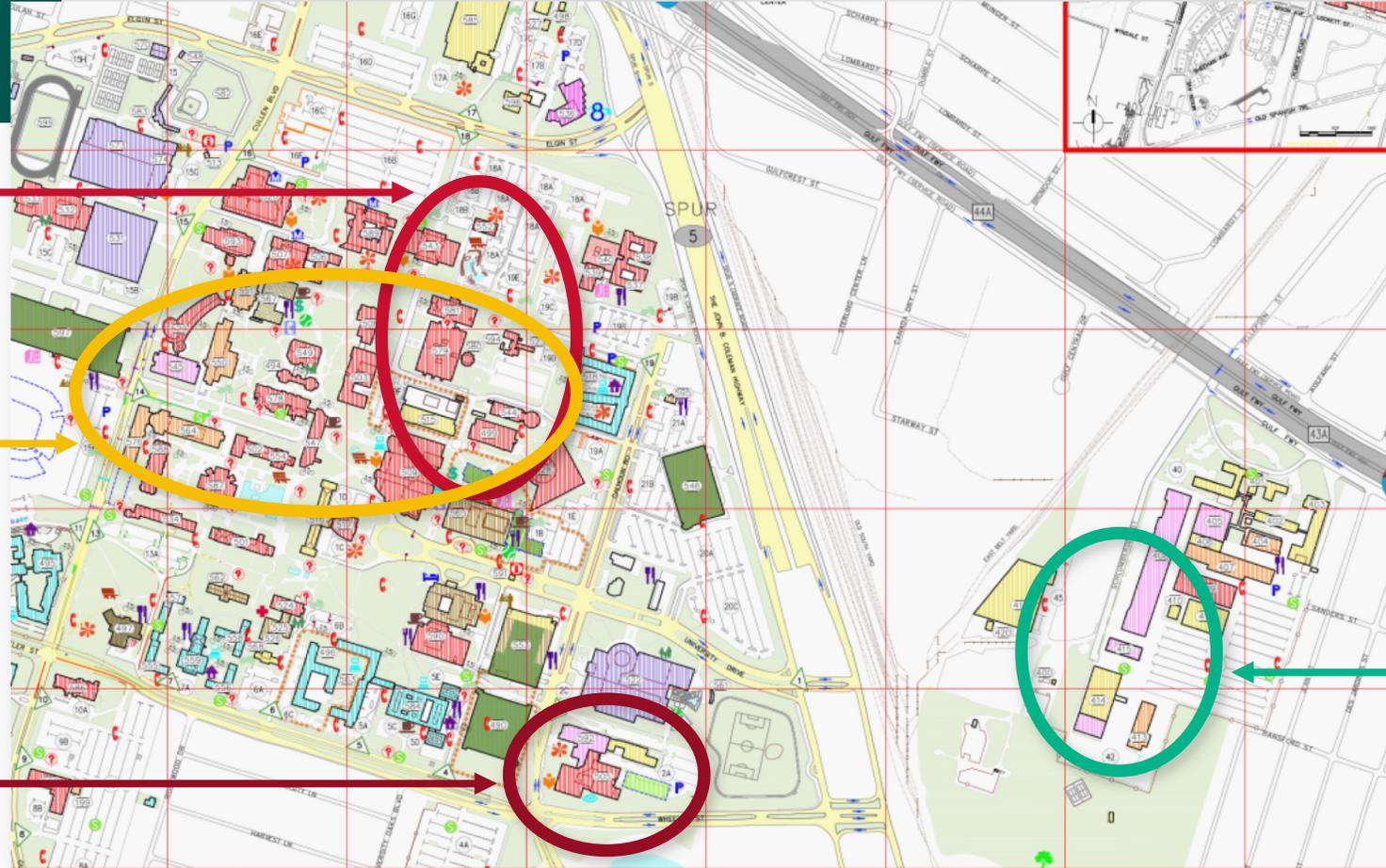
- Each core facility will be governed by a committee of three faculty with 2-year, renewable appointments to oversee the operation and supervise the manager of the facility
- The Shared Services Office of DOR will provide administrative support
- Each core will develop a charge model for user fees and establish the facility as a service center

Primary Clusters of Core Facilities

Data, Sensing,
and Automation

Materials

Imaging



Advanced
Manufacturing

This is a high-level overview of the geographic location of core facility themes
Most clusters have core facilities that overlap with other themes

Current Core Facilities

Currently Existing Central Core Facilities

- Animal Behavior Core
- Animal Care Operations
- Digital Humanities Core
- Electron Microscopy Core (new)
- Mass Spectrometry Core (new)
- Research Computing Data Core
- Texas Center for Superconductivity Core



On the Horizon: New Core Facilities



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)

On the Horizon: New Core Facilities



Phase 2

- Core Facility for Autonomy **Autonomy and Automation**
 - Quadruped Robot
- Environmental Sensing Core Facility **Imaging and Scanning**
- Solid State Battery Prototype Facility **Advanced Manufacturing**
- Advanced Imaging Core Facility **Advanced Materials**
 - 2-Photon Confocal Microscope
 - Optical Coherence Tomography System
 - Magnetic Resonance Imaging and Spectroscopy System
- Printing Core Facility **Advanced Materials**
 - 3D Printer
- Elemental Analysis Core Facility (staffing only) **Advanced Materials**

On the Horizon: New Core Facilities



Phase 3

- Advanced Surface Analysis Core Facility **Advanced Materials**
 - UHV X-ray and UV Photoelectric Spectrometer
 - Near Atmospheric Pressure X-ray Photoelectron Spectrometer
 - Time of Flight Secondary Ion Mass Spectrometer (refurbished)
 - Raman Spectrometer (with confocal, TERS, and AFM capabilities)
- Core Facility for Autonomy **Autonomy and Automation**
 - UAV Flight Arena
- CRAFT LAB **Autonomy and Automation**

Faculty Equipment in Labs

UH encourages the sharing of equipment that is housed in individual faculty labs. The sharing policy follows that of equipment purchased from federal awards.

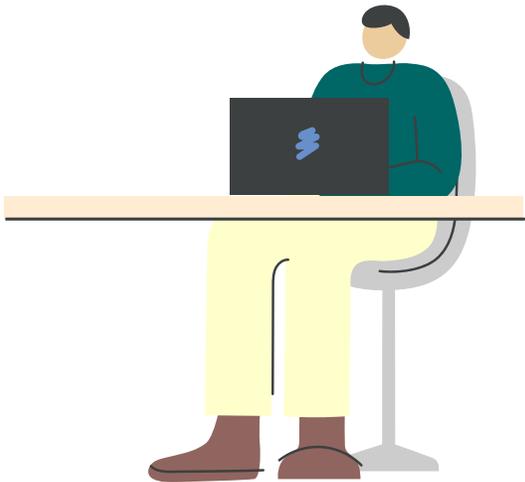
- Equipment purchased on federal awards will be made available for use on other projects that are currently or have been previously supported on federal awards, provided the use will not interfere with the work on the project for which it was originally acquired.
- A similar policy applies to equipment purchased with funding other than federal awards.
- The PI Portal has a searchable list of research equipment.
- PIs can develop billing fees (SAM 03.A.32 Specialized Service Facilities)



New Website

New Website: Virtual Cores

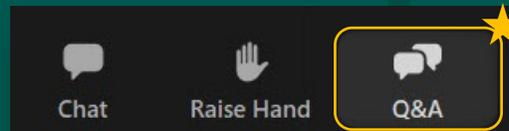
- University-wide investments
- On the Horizon
- Governance and Operation
- Establishing a service center
- Central core facilities
- College/department-level core facilities
- Faculty equipment



Thank You!

Questions?

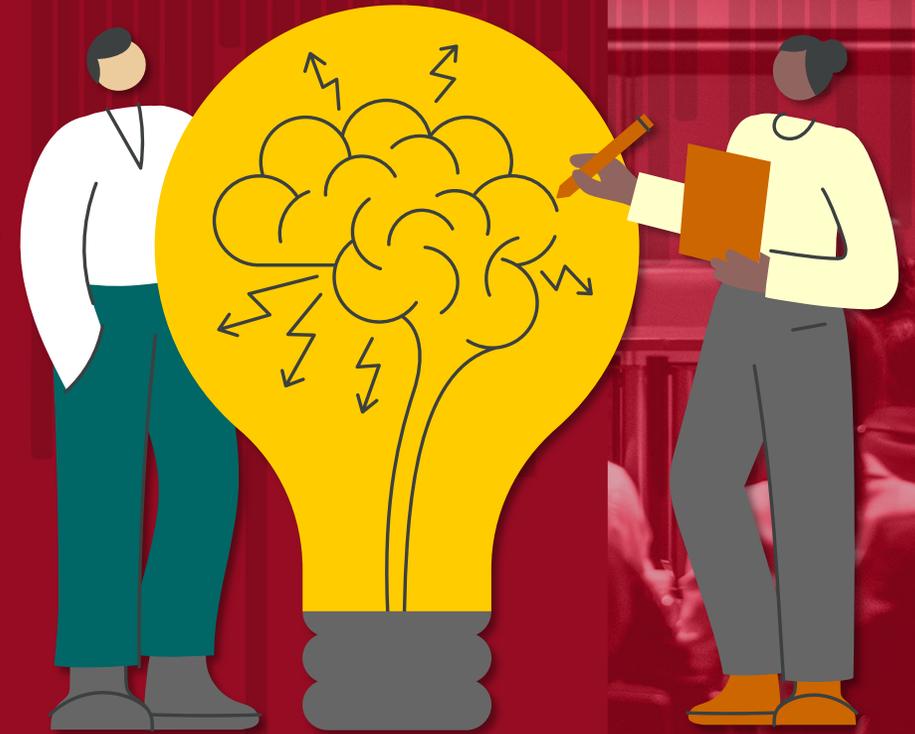
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Facilities and Administrative Cost (IDC): The Facts (Not Myths)

Cris Milligan

Assistant Vice President for
Research Administration



Fact #1

F&A Costs Are Real Costs of Research

Myths

Myth #1a: The funds provided for direct costs cover all expenses connected with project activities. Payment for F&A cost is “extra” funding

Myth #1b: F&A provides a way for institutions to cover costs unrelated to the sponsored project

Facts

Direct costs can be assigned directly to a specific project or activity with a high degree of accuracy – e.g. salaries, supplies, equipment and travel

F&A costs are reimbursed for actual expenses incurred - use of space, facilities, equipment and administrative services

There is a federally prescribed methodology used to negotiate and assign a fair portion of allowable costs to research F&A

Fact #1

F&A Costs Are Real Costs of Research

Myths

Myth #1c: F&A costs are like a tax which is levied by the institution to fund its overall activities and operations

Myth #1d: F&A received is funneled back to individual researchers and their departments for discretionary use

Facts

F&A reimbursement covers costs allocable to the sponsored activity, including facilities maintenance, utilities, disposal of research waste and administration

Distribution of recovered F&A is based on costs previously incurred to support the sponsored activity. Once the institution is reimbursed for F&A costs, UH distributes the funds according to its policy

Fact #1

F&A Costs Are Real Costs of Research

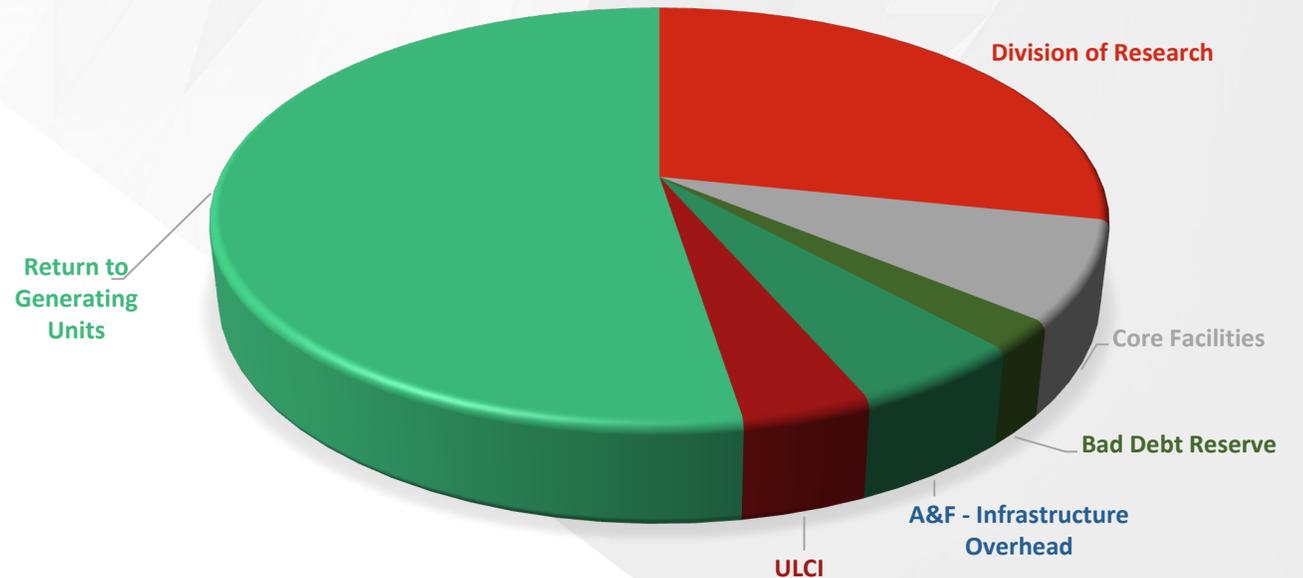
In FY22:

- \$82.2M in institutional funds were spent for R&D activities.
- \$25.7M in F&A costs was recovered.

In FY21:

- \$24M in F&A costs were recovered.
- 51.36% was returned to generating units in FY22.

FY21 F&A DISTRIBUTION



Fact #2

F&A Cost Reimbursement Is Neither Profit Nor A Tax

Myths

Myth #2a: F&A includes actual costs plus a profit

Myth #2b: F&A is based on market factors

Myth #2c: F&A charges subsidize unrelated activities such as education, entertaining, or athletics

Facts

Federally negotiated F&A cost rates are based on actual allowable costs as defined in OMB Uniform Guidance. Profit is unallowable under these cost principles and cannot be charged.

F&A cost rates are based on actual expenses as reported in audited annual financial statements, which are reviewed and approved by DHHS, our cognizant federal agency.

F&A cost rate charges reflect research-related costs only and rate calculations are prohibited from including any other expenses.

Fact #2

F&A Cost Reimbursement Is Neither Profit Nor A Tax

Facts

F&A costs are a relatively small percentage of the actual costs that UH spends on:

- Operations and Maintenance
- Department Administration
- Sponsored Program Administration
- General Administration (central IT, finance, risk management, HR)
- Buildings (labs and offices)
- Equipment
- Libraries and Research Facilities

Fact #3

A 55% Rate Does Not Equal 55¢ of the Dollar to F&A

Myths

Myth #3: An F&A cost rate of 55% means that over half of the funding goes to pay F&A costs with less than half available for direct costs.

Facts

F&A cost rates are applied to the Modified Total Direct Costs (MTDC) of a project, which results in F&A charges of no more than one-third of a project's total costs.

Example: \$100,000 is required to support a proposed project. Of which, \$80,000 is MTDC (i.e. the F&A cost rate is applicable). The total budget is calculated as follows:

$$\$80,000 \text{ (MTDC)} \times 55\% = \$44,000$$

$$\$100,000 + 44,000 = \$144,000 \text{ Total Project Costs}$$

$$\text{F\&A} = 30\% \text{ of Total Project Costs}$$

Fact #4

Researchers and Faculty Benefit from F&A Activities

Myths

Myth #4a: F&A reimbursements only support the institution's infrastructure, providing little benefit to scientific research.

Myth #4b: Reducing funding allocated to F&A would mean additional money for scientific endeavors.

Facts

F&A supports the space and infrastructure required to conduct cutting edge research. Researchers depend on and benefit greatly from UH investments funded by F&A cost reimbursement.

F&A cost reimbursement supports critical functions supporting research, required through compliance regulations, and integral to an institution's research mission (e.g. Research Integrity Office, Animal Care, Environmental Health and Safety, etc.)

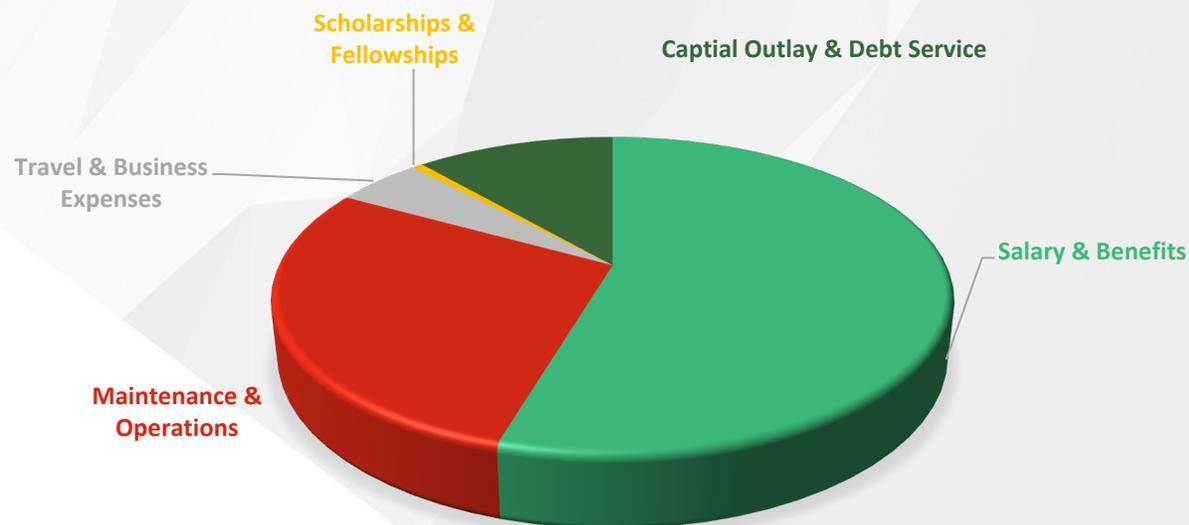
Fact #4

Researchers and Faculty Benefit from F&A Activities

\$14.5M in recovered F&A was expended in FY22 to support research investments.

Sponsors do not cover the full costs of conducting the research that they support. The unfunded costs are subsidized through university, college, and department contributions.

\$82.2M of institutional funds were invested in R&D activities in FY22.



FY22 F&A INVESTMENTS

Fact #5

UH Is a Major Financial Contributor to Research

Myths

Myth #5a: F&A reimbursements cover all infrastructure costs for research operations.

Myth #5b: Increases in research support costs are covered dollar for dollar by the federal government.

Myth #5c: Institutions expect the federal government to cover all costs connected with sponsored research.

Facts

F&A cost reimbursement covers substantially less than the full cost of conducting research, with institutions subsidizing all federally sponsored research.

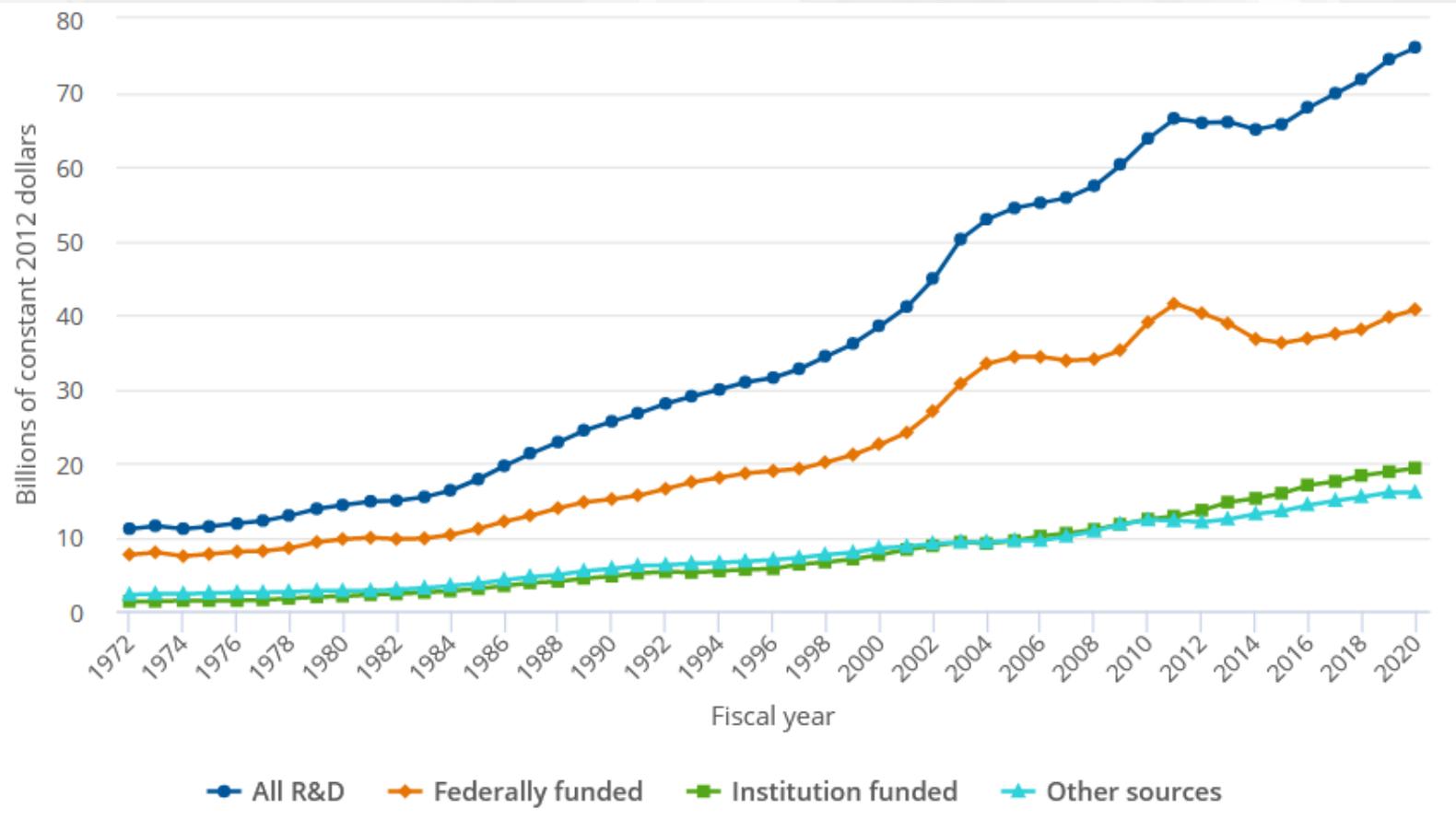
Institutions invest their own money to support infrastructure improvements which may be covered by future incremental rate increases.

The 2021 NSF Higher Education Research & Development Survey (HERD) showed an established and continuing trend of institutions increasing their contributions to research, both as a percentage and in actual dollars.

Fact #5

UH Is a Major Financial Contributor to Research

Higher education R&D expenditures ,
by source of funds FYS 1972—2020



Fact #5

UH Is a Major Financial Contributor to Research



In FY22:

\$98 million was received/projected from 344 externally sponsored awards

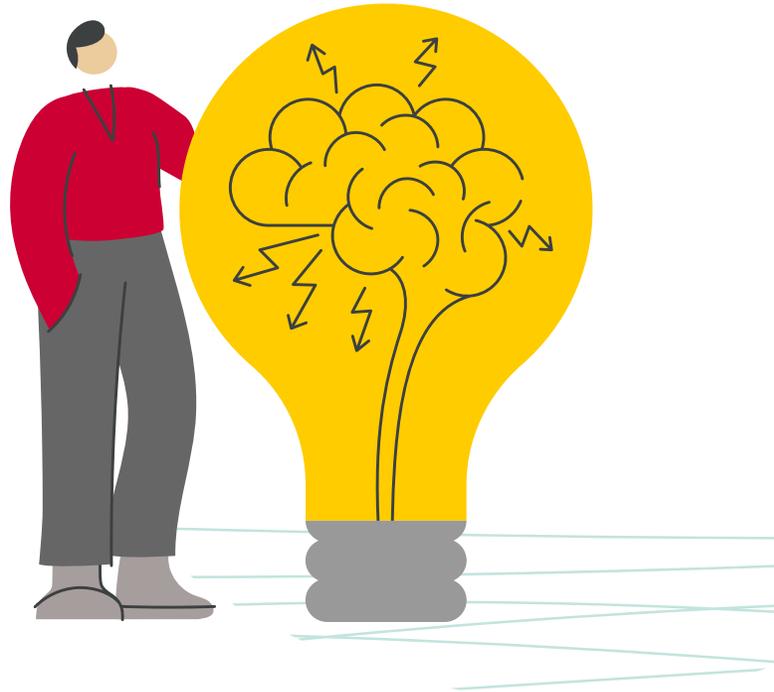
\$82.2M of institutional funds was invested in R&D activities

Fact #6

In 5 Minutes You Can Learn More About F&A

*Understanding the Real Costs of Research:
A Focus on Facilities and Administrative Costs*

https://www.youtube.com/watch?v=V_glHzUE8qM



Thank You!

Questions?

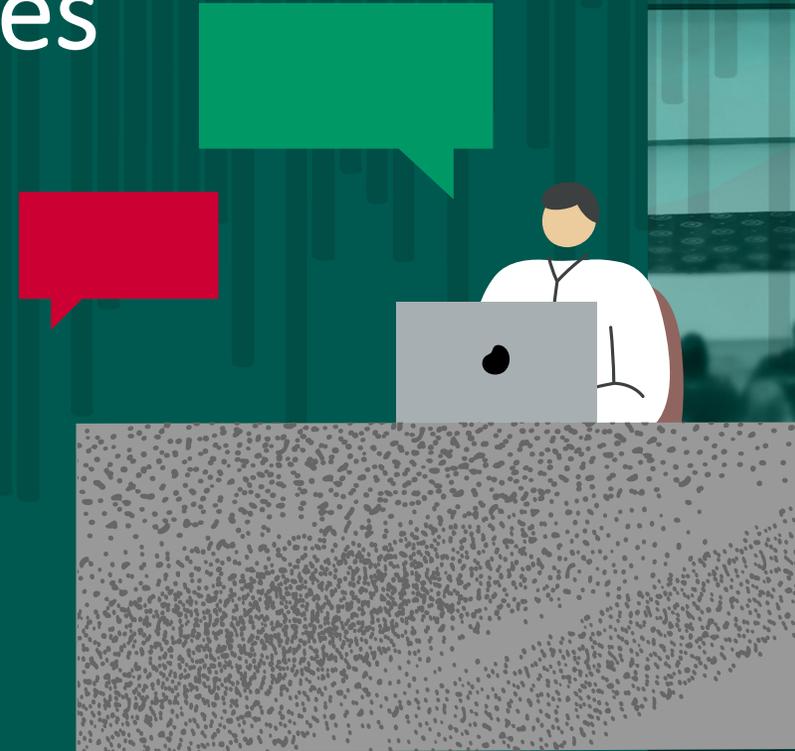
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Communicating with Agencies Pre and Post Award

David Schultz

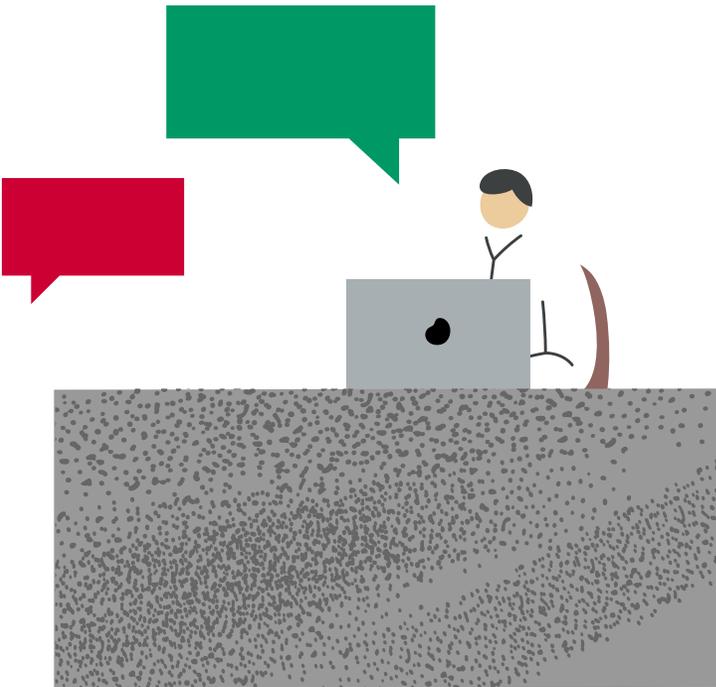
Assistant Vice President for Sponsored
Research Administration



Agency Communications

Communication with agencies is an essential part of sponsored research. How those communications are managed is also important.

- Avoid multiple inquires from different individuals
- Ensure communications reach correct POC
- Formal request by AOR may be required
- Obtain all necessary approvals
- Use proper agency portal



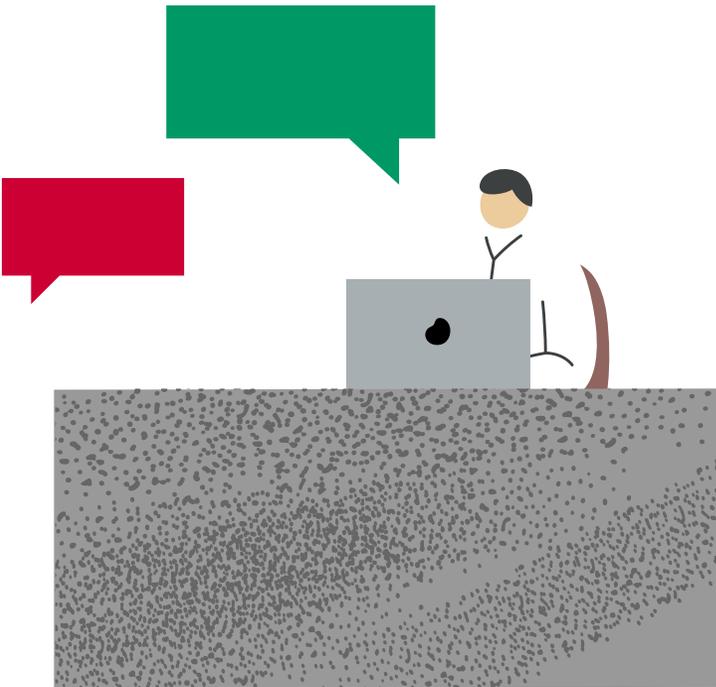
Pre-Award Communications

Faculty

- Communication with Program Director or TPOC
- Provide clarification or justification for budget

OCG

- Review and approve any binding terms and conditions
- Seek clarification on RFP or Program announcement
- Sign any Reps and Certs required by agency
- Formal submission of proposals*
 - Campus RLOs also have AOR permission for proposals only



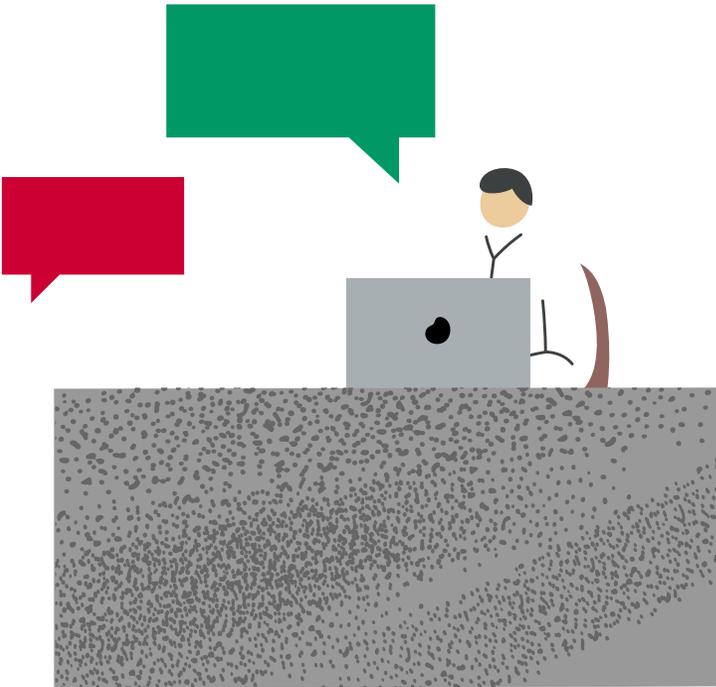
Post-Award Communications

Faculty

- Communication with Program Director or TPOC
- Technical reports or deliverable notifications
- Publications/presentations for review

OCG

- Communication with Grant of Contracting Officer
- Formal acceptance of award or modifications
- Submission of all formal requests to agency
- Submit all Invoicing and Financial reporting



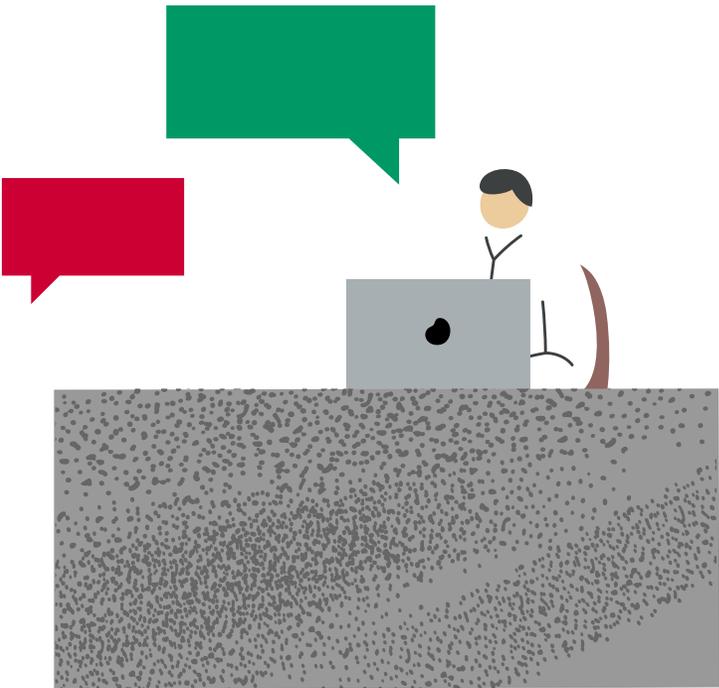
Key Takeaways

Faculty

- Verbal or Program Officer commitments are not binding
- Forward any notification that does not include OCG
- Always reach out to your RLO or DOR/OCG first
- Expect a delayed response from agencies

OCG

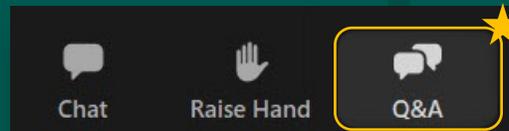
- AVP or Director, RAS are only authorized signatories for funded or non-funded agreements and amendments
- Single point of contact for communication with agency



Thank You!

Questions?

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