



New Faculty Orientation Research for STEM

July 24, 2023

Michael Holland
VC for Science Policy & Research Strategy
mike.holland@pitt.edu

Pitt Research

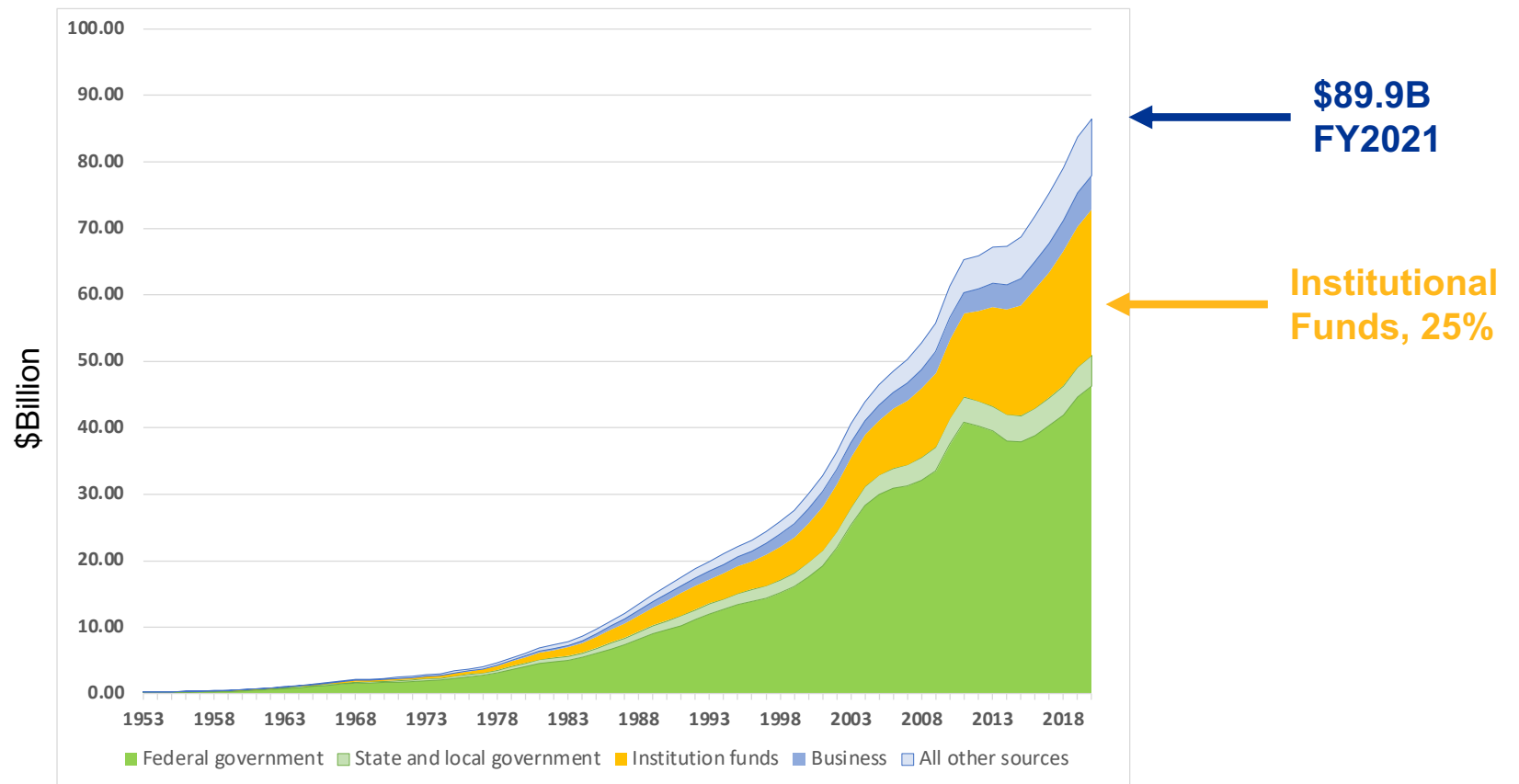
Learning Goals

- Recognize each stage of the sponsored project life cycle
- Identify the services PittResearch and other Pitt units offer that support your success as a faculty member.

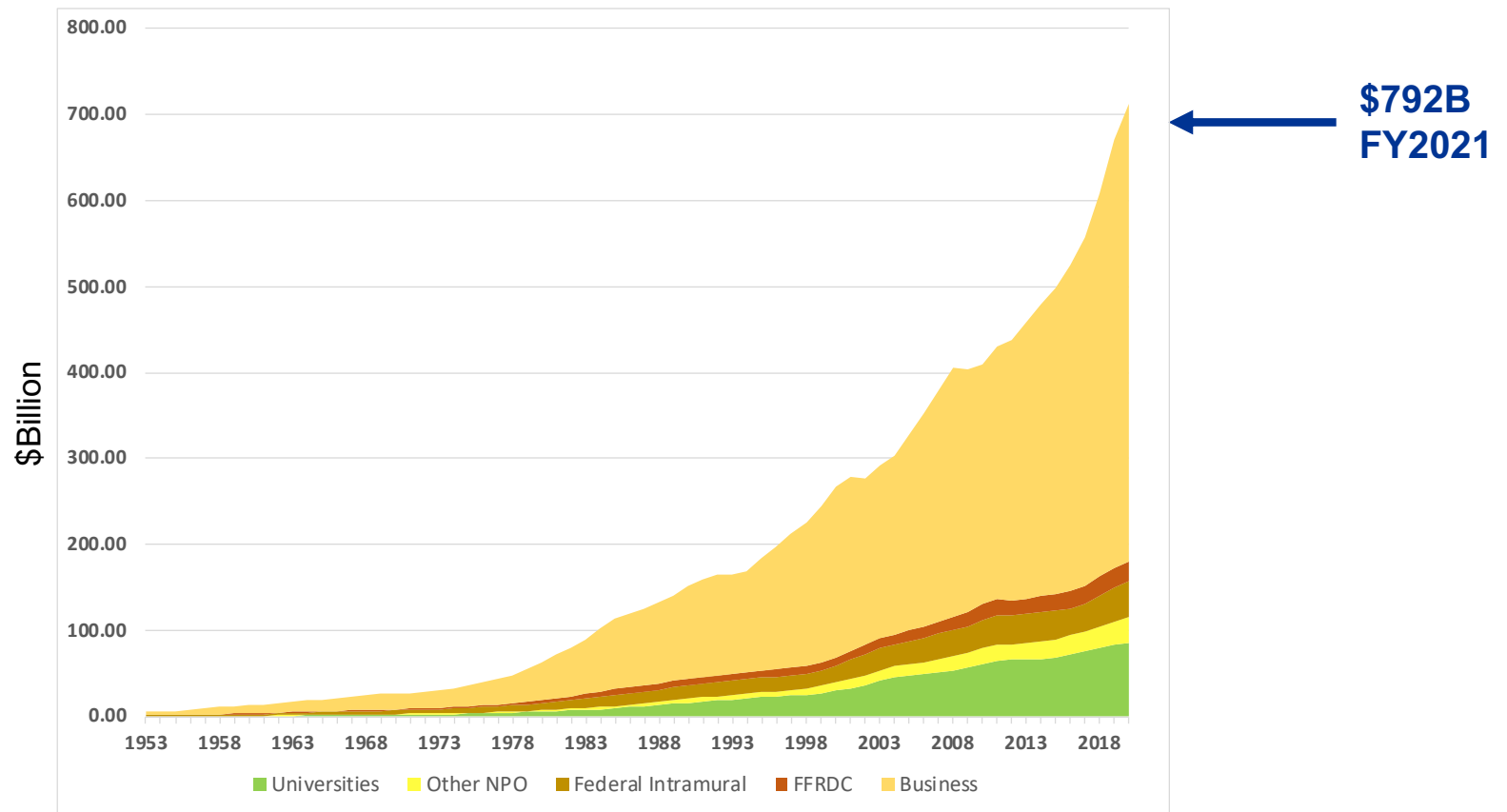
Agenda

- The Academic R&D Sector
- Pitt Research
- Other Pitt units
- Q&A
- Self Guided Slides

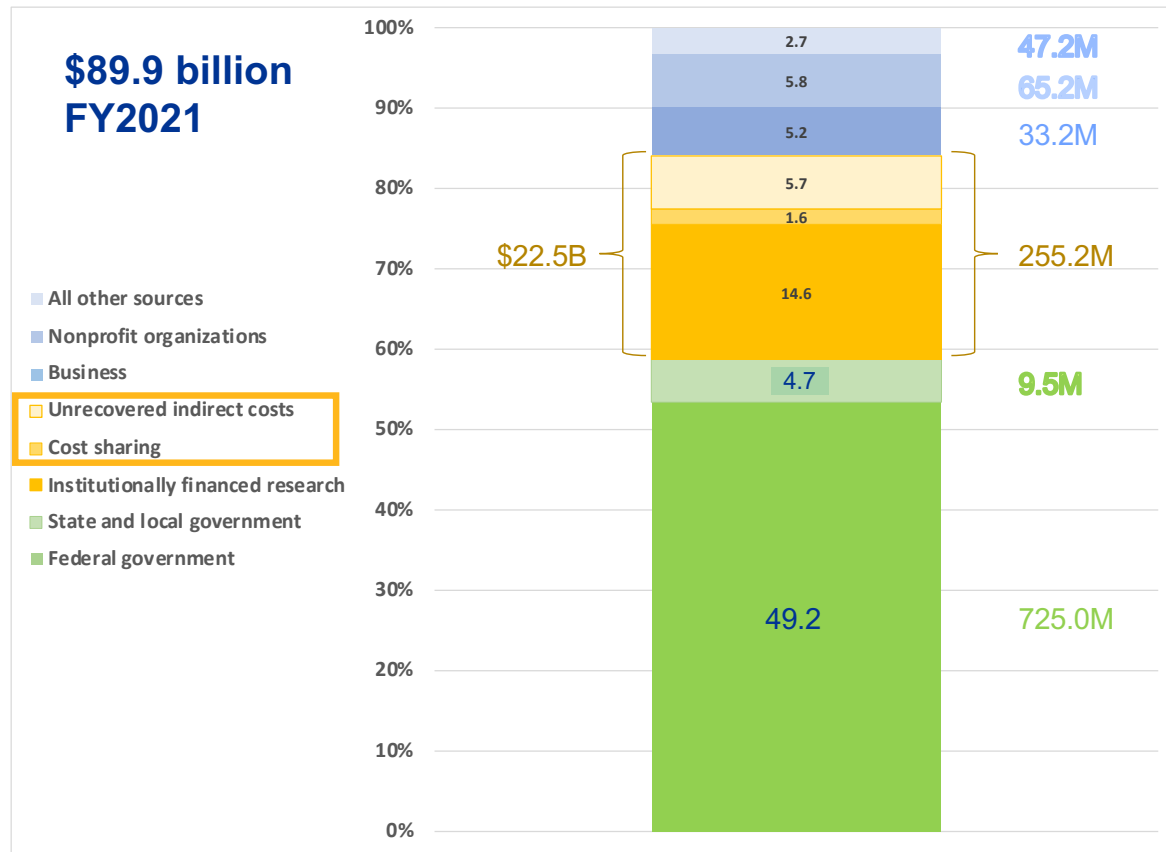
Higher Education R&D spending



US R&D spending



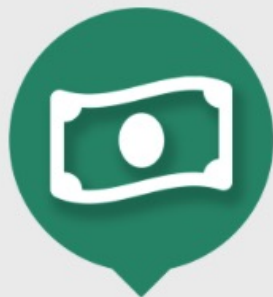
Higher Education R&D spending



Externally Driven

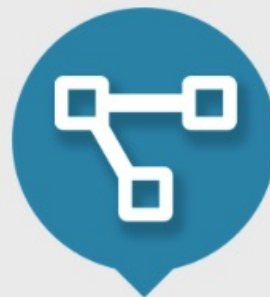


Stages of the Research Lifecycle



Identify Prospective Funding Sources

The first step in developing a funded project is identifying prospective funding sources.



Plan for Compliance and Regulatory Issues

Become familiar with the relevant rules and regulations while developing a project and funding proposal.



Develop Resources

The training, experience, and expertise of investigators and team members are the central resource in creating a successful research proposal.



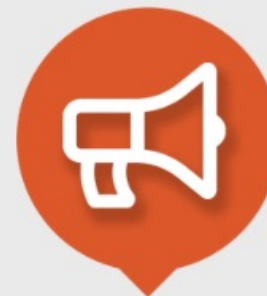
Propose Project to Prospective Funders

The key to every successful proposal is to address the opportunity as presented by the funding agency.



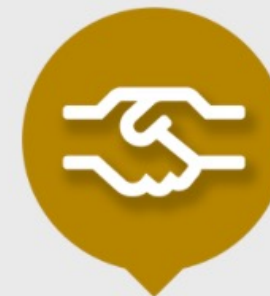
Perform Research

Complete preparations and carry out the proposed research.



Close out Project and Promote Work

Share, publish and promote the knowledge created through your research.



Innovate & Partner

Information and steps to submit an invention disclosure.

Research Roles & Responsibilities

- **Faculty member**
- **Division:** strategy, collaboration (subfield? Clinical v lab tensions?)
- **Department:** course releases, equipment, space, mentoring
- **School:** tuition remission for trainees, bridge funding, cost share, space, equipment, salary supplements on grants – often in collaboration with the department and ADR.
- **ADR:** request for resources from the school generally go through the ADR. Advocacy, research support, school-wide perspective, integration of departmental-level initiatives and priorities.
- **Centers & Institutes:** Clarity coming....
- **University:** regulatory compliance, EH&S, receives awards on behalf of PI, pre- (PittResearch) & post-award (CFO) grant management.

PittResearch Overview

- Who we are, what we do

Compliance



Awards \$

Computing & Data



IP, Startups, Partners

Pitt Research

SVC Research



Chief of Staff



Business Units

Office of Research
Computing



Office of Innovation &
Entrepreneurship



Office of Research
Protections



Office of Sponsored
Programs



Strategy & Infrastructure

Science Policy &
Research Strategy



Research
Infrastructure



STEM – Health
Sciences



Arts, Humanities,
Social Sciences, Profs



Operations



Administration



Comms



Data



Budget
& Finance

Office of Sponsored Programs



Jennifer Woodward
Vice Chancellor

- **Curates & share opportunities** for awards and honors across campus
- **Manages** pre-award: contracts and grants, federal, industry, and gov't; fee-for-service
- **Reviews** proposals for compliance, **submits** on behalf of Pitt
 - Sponsor guidelines & University policies
 - Budget details (correct rates, caps, etc.)
 - Approvals from external collaborators
 - Restricted Party Screening
- **Negotiates** contract terms & conditions, IP, etc. for all new awards

Pitt Research NAVIGATOR



Your Connection to
Research Resources

pittresearchnavigator@pitt.edu



Get Started  research.pitt.edu/pitt-research-navigator

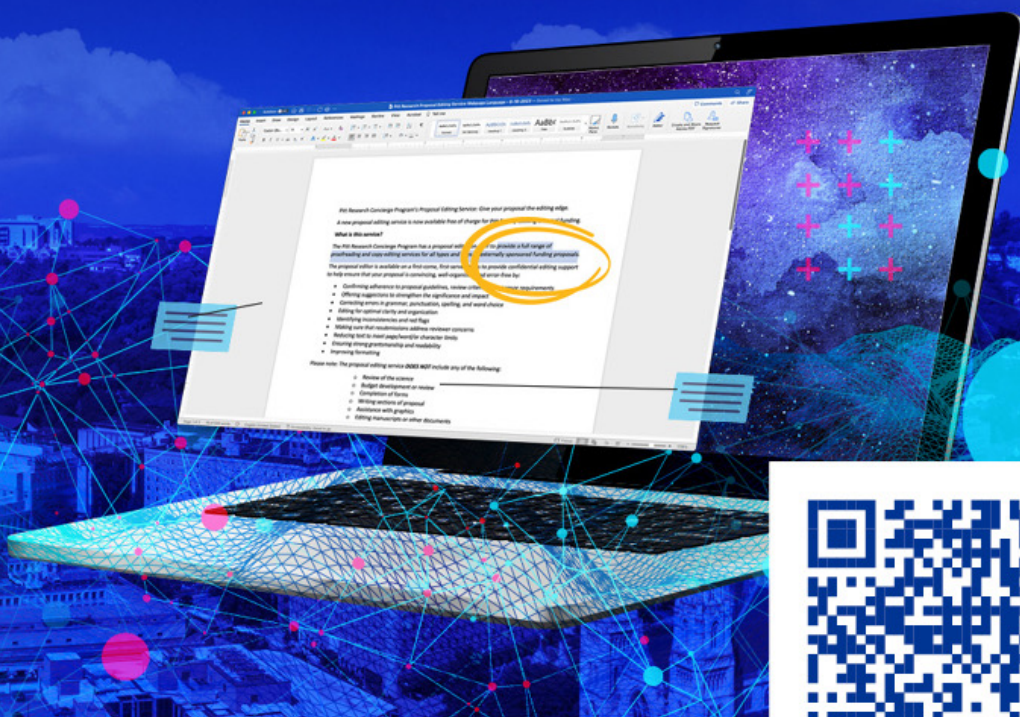


Pitt Research

PROPOSAL EDITING SERVICE

Give Your Proposal the Editing Edge

pittresearchproposaleditor@pitt.edu



Get Started [▶ osp.pitt.edu/pittresearchproposalediting](https://osp.pitt.edu/pittresearchproposalediting)

Research Development Team

- Responsible for
 - strategically advancing the University's research goals,
 - communicating research opportunities,
 - prospecting for funding,
 - enhancing research collaboration and team science.



Toby Rodriguez

Assistant Director for Research
Development
ter57@pit.edu

[Group Consultation bookings](#)

OSP's Weekly Funding Updates by Discipline

Computing & Information

Education

Engineering

Health & Life Sciences

Humanities

Natural & Physical Sciences

Social Sciences

Limited Submissions

We send these to research faculty in relevant Schools

Pitt Research



Pitt Research | Research Development
Office of Sponsored Programs

March 22, 2022 Funding Updates

Social Sciences Funding Updates

Please scroll for a full listing of funding updates related to social sciences.



Research and Evaluation on Domestic Radicalization to Violent Extremism

NIJ seeks proposals for rigorous research and evaluation projects targeted toward developing a better understanding of the domestic radicalization phenomenon, and advancing evidence-based strategies for effective intervention and prevention.

Deadline: April 25



Fulbright Scholar Programs

The Fulbright U.S. Scholar Program offers over 400 awards in more than 130 countries for U.S. citizens to teach, conduct research and carry out professional projects around the world. Dozens of programs have recently been updated.



Racial and Ethnic Disparities in the Justice System: A Study of Existing Evidence and Public Policy Implications

NIJ seeks investigator-initiated proposals to conduct a

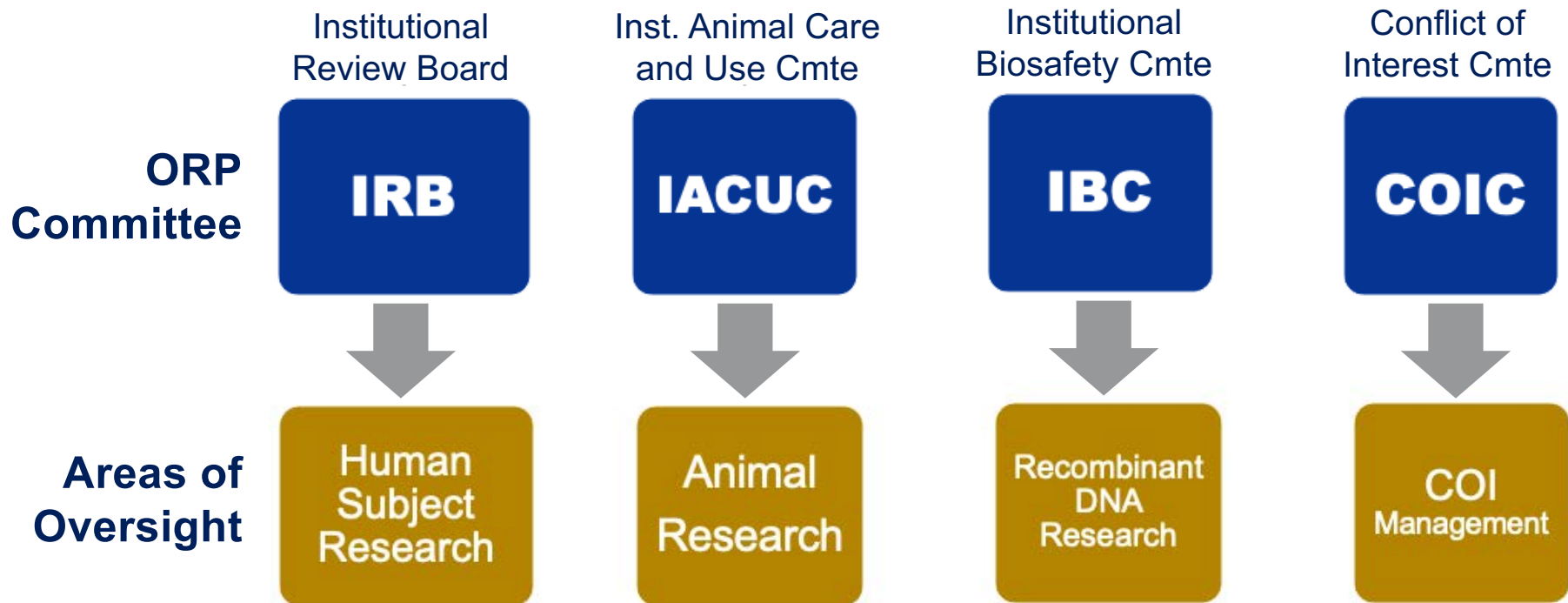
PittResearch: Research Protections



Bill Yates
Vice Chancellor

- Assures Pitt research conduct is **ethical & legal**
- Reviews research proposals (protocols) to assure **compliance** with all relevant federal and state laws
- Assures investigators are **trained** for research conduct
- **Inspects/audits** labs & studies for standards compliance

Regulatory Oversight via Faculty Cmtes

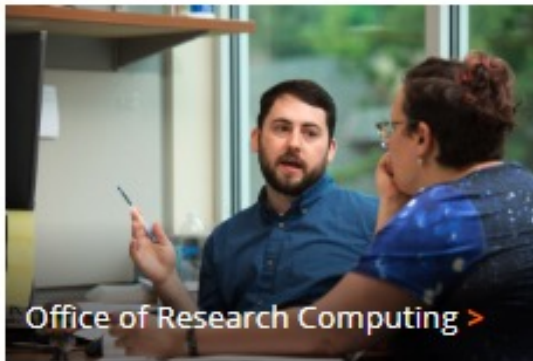


In addition: Trade Compliance, Radiation Safety, Research Integrity, Clinical/FDA

ORP Concierge Services

The screenshot displays the website for the University of Pittsburgh Office of Research. The top navigation bar includes 'ABOUT', 'TRAINING', 'RESOURCES', 'EVENTS', 'PEOPLE', and 'CONTACT'. A red arrow points to the 'RESOURCES' menu item. A dropdown menu is open under 'RESOURCES', listing 'Clinical Trial Registration', 'Controlled Substances', 'Dual Use Research of Concern', 'Investigators Leaving University' (highlighted with a red box), and 'Concierge Services'. Below the navigation is a grid of service tiles with the following titles: 'Animal Research Protection', 'Conflict of Interest', 'Education and Compliance Support', 'Human Research Protection', 'Human Stem Cell Oversight', and 'Institutional Biosafety'. The background features a close-up of a person in a white lab coat.

Office of Research Computing



James Barr von Oehsen
Vice Chancellor
PSC Director

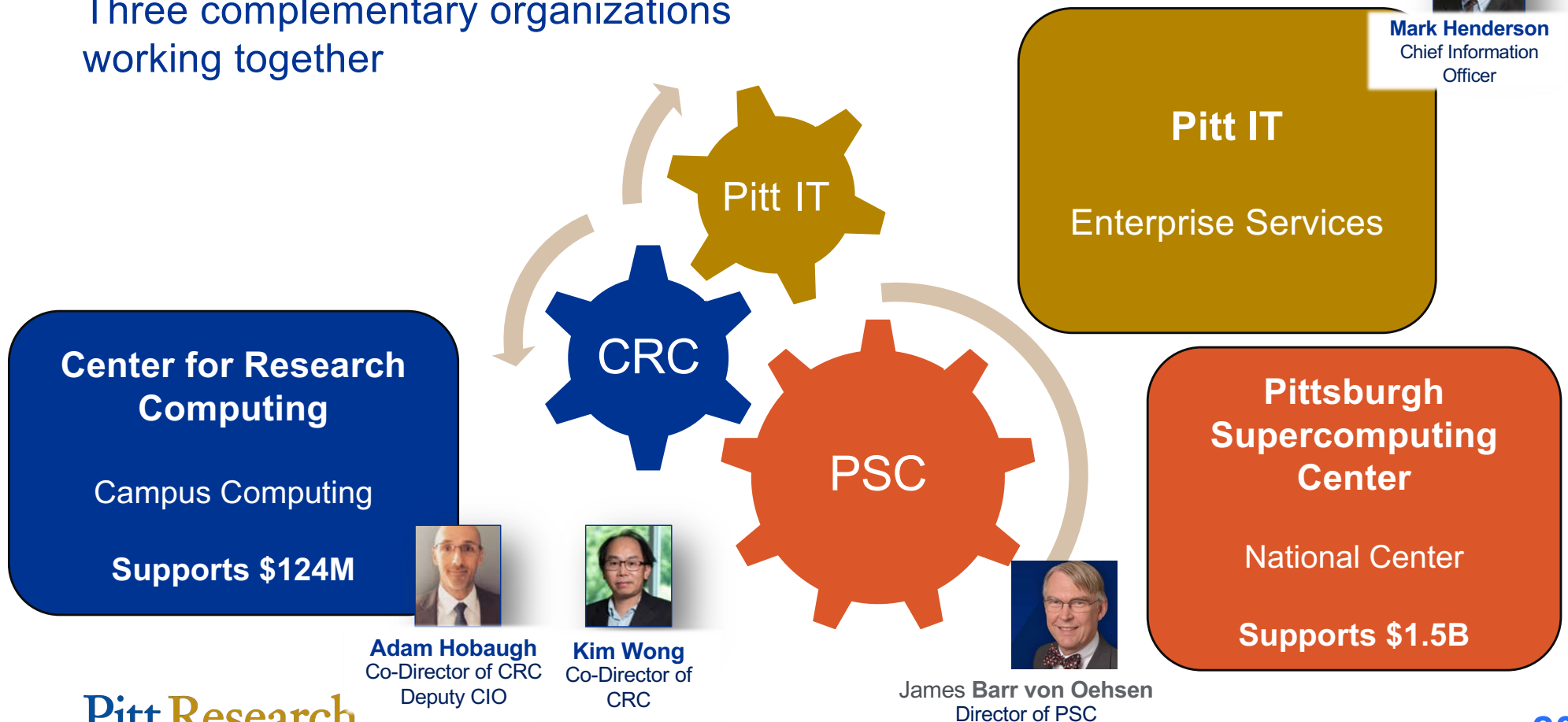
- Provides **advanced computing platforms** to Pitt researchers
- **Expert advising** on technical, science applications
- **Computing & storage** solutions
- **Broad:** Hardware, software, services; on-premise platforms, cloud platforms

Research Computing Ecosystem

Three complementary organizations working together



Mark Henderson
Chief Information Officer



Lots of Computing Resources

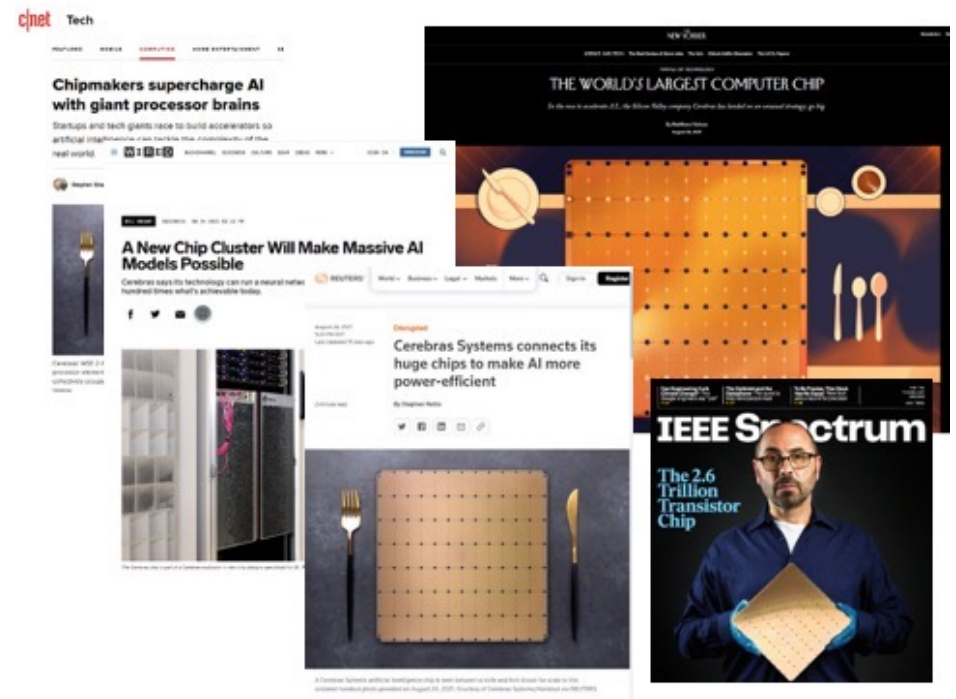
- On-premise & remote cloud
- Computing & storage
- Especially for AI apps
- You just **need to ask...**

Ex: Cerabras AI machine.

- Most schools have 0; we have 2

PittCRC PSC

Resource	CRC	PSC
General CPU Cores	10K+	72K+
GPU & AI Cores	640K+	1.7M+
Data Storage	3PB	15PB
Research Supported	\$124M	\$1.4B



Pitt Research

Office of Innov & Entrepreneurship



Evan Facher
Vice Chancellor

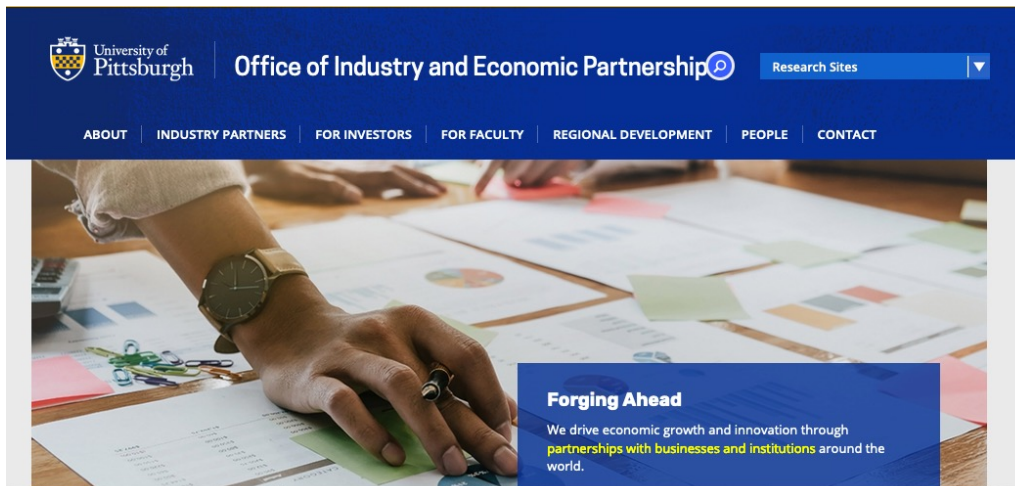
- **Manages intellectual property (IP):** patents, copyrights, trademarks, licensing
- Supports **innovation pipeline:** students, faculty, startups, incubation
- Manages new **Chancellor's Gap Fund** for startups
- Manages **industry partnering** and **economic development**
- Supports **small business** services

3. Startups & Industry Partnering

- **Pitt ranks top #15 in US R&D funding***
 - Pitt receives around **1.5%** of total federal R&D at universities
 - **Strong** overall performance
- **Pitt does not hit top 50 rank in industry funding**
 - Ranked #57 in 2019 NSF HERD survey
 - **Not** a strong overall performance

* **Data source:** 2019 US NSF Higher Ed Research and Development (HERD) Survey

Office of Industry & Econ Partnerships



PARTNER WITH PITT

The Office of Industry and Economic Partnerships (OIEP) aligns Pitt's vast research capabilities and world-class expertise with the needs of industry, creating mutually beneficial partnerships that advance important science, solve industry-relevant R&D challenges, and provide channels for the commercialization of new technologies of high value and societal impact. We also partner with economic development organizations to grow opportunities for employment and regional investment.



Joe Havrilla, Assoc. VC

37 years in health industry

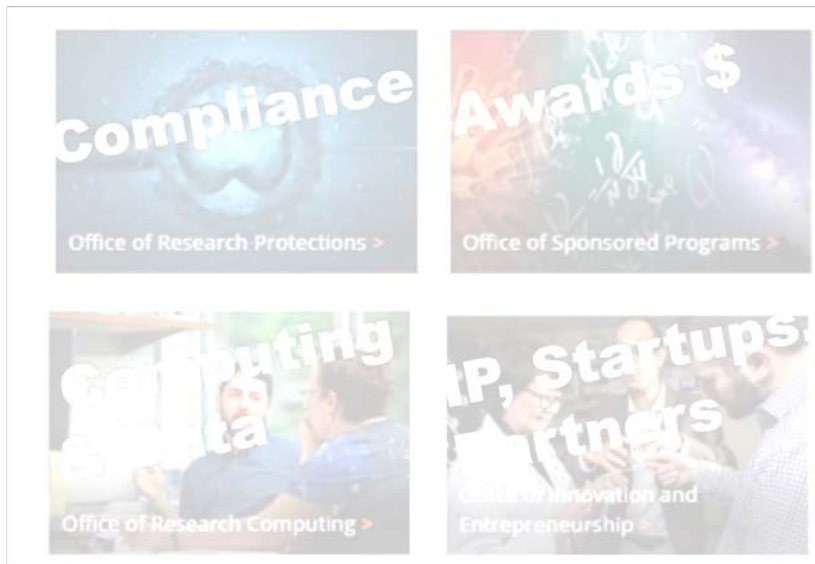
30+ patents → \$1.5B revenue

Previous job:

SVP & Global Head of BizDev.
& Licensing for **Bayer Pharma**

PittResearch Overview

- Who we are, what we do
- Our strategic priorities



PittResearch: Focus Priorities

1. Team science
2. Policy ecosystem
3. Startups & industry partnering
4. Foreign influence
5. Outreach to Research at Key Intersections
6. Prestigious faculty awards

1. Fed R&D Funding Pivoting to *Teams*



Science Contents News Careers Journals

REPORT
The Increasing Dominance of Teams in Production of Knowledge
Stefan Wuchty^{1,*}, Benjamin F. Jones^{2,*}, Brian Uzzi^{1,2,*†}

†* These authors contributed equally to this work.
* See all authors and affiliations

Science 18 May 2007;
Vol. 316, Issue 5827, pp. 1036-1039
DOI: 10.1126/science.1136099

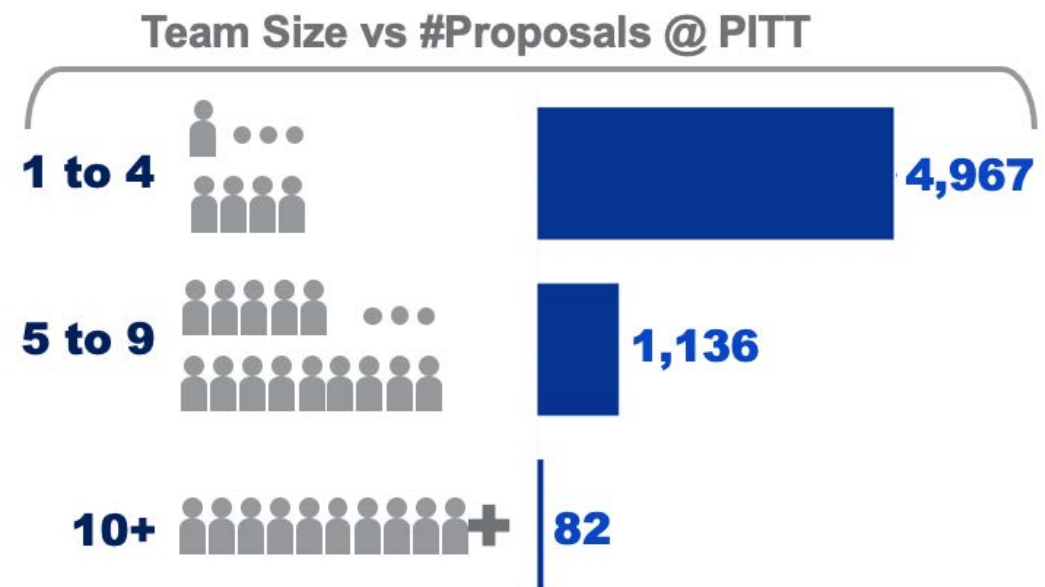
Article Figures & Data Info & Metrics eLetters PDF

Abstract
We have used 19.9 million papers over 5 decades and 2.1 million patents to demonstrate that teams increasingly dominate solo authors in the production of knowledge. Research is increasingly done in teams across nearly all fields. Teams typically produce more frequently cited research than individuals do, and this advantage has been increasing over time. Teams now also produce the exceptionally high-impact research, even where that distinction was once the domain of solo authors. These results are detailed for sciences and engineering, social sciences, arts and humanities, and patents, suggesting that the process of knowledge creation has fundamentally changed.

DOI: 10.1126/science.1136099

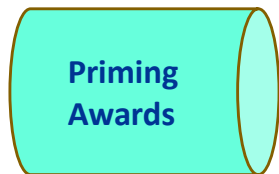


**Collaborations matter
Especially for large \$\$**



Pitt Momentum Funds: Part of an Ecosystem of Support

**\$6.2 million
over 4 cycles**

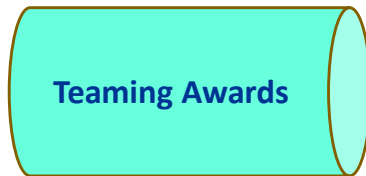


**Priming
Awards**

up to \$25,000

104 awards to date

Support individual
excellence & fields
lacking external support

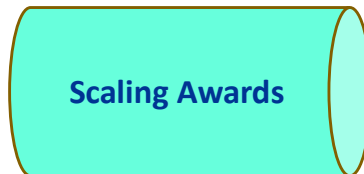


Teaming Awards

up to \$60,000

20 awards to date

Build teams & strategy



Scaling Awards

up to \$400,000

8 awards to date

Project planning, risk
reduction, early results,
mature ecosystem



Arts & Humanities Microgrants

\$3,000

21 awards to date



Federal or Foundation funding



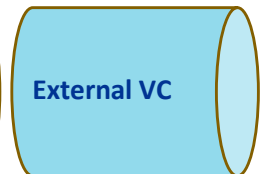
For-profit or Non-profit Spin Out



**Campus
Commercialization
Funds**



Gap Funds



External VC

Refreshed in 2021

Pitt Research

Big Proposal Bootcamp Agenda

• Case studies

- Rob Rutenbar, SRC/DARPA C2S2: Proposal parts & pieces



- Alan George, SHREC: Corporate ecosystem



- Bill Wagner, NSF ERC: Lessons learned



- Alison Langmead, DHRX: Research collaboration



- Cori Zawacki, RIBBiTR: Working with coaches, RSVs



- Anuradha Ray, Sally Wenzel: NIH P01 Program Project Grants **NIH Asthma P01**

- Julia Lane, Coleridge: Working with foundations



Opportunities at Research Intersections

- **Leadership** to focus on opportunities at intersections of Pitt's strengths, disciplines, organizational units



Prof. Shelome Gooden

Asst Vice Chancellor for Research
in Arts, Humanities, Social Sciences
and Related Professional Fields



Prof. Rory Cooper

Asst Vice Chancellor for Research
for STEM – Health Sciences
Collaborations

Research, Ethics & Society Initiative & Research Ethics Consultation Service

- Modeled on hospital Clinical Ethics Consultation Services
 - Consult with researchers on research design & conduct
- Consultative, not regulatory
- Complements
 - HRPO/IRB, IACUC, HSCRO ...
 - CTSI, CITI

RESI Resources

The Research, Ethics and Society Initiative (RESI) gathers and creates resources for scholars and researchers. These include guidance documents, in-depth discussions of ethical issues, and information about research ethics forums. Suggestions of additional resources may be made to: RESI@pitt.edu



Communication about Research >

Communicating about research to people outside a specific field or outside academia requires commitment, resources, and practice. [Learn about Pitt's resources for communicating about research.](#)



Courses and Curriculum Development >

Pitt offers opportunities to learn about research ethics issues in courses, lecture series, workshops and discussion groups. Moreover, the RESI is participating in the [development of curricular offerings](#) and extracurricular activities in multiple schools.



Guidance and Regulation >

There is a wealth of [guidance](#) published to aid in research design and conduct. Some are binding regulations; others are advisory.



Bookshelf >

The [RESI Bookshelf](#) provides links to key books and articles on research ethics.

6. Prestigious Faculty Awards

- **Fact:** Pitt faculty **under-awarded** for prestigious honors
- **Data:** Pitt ranks near bottom of AAU schools for #awards

Key gaps

- Award awareness and strategy
- Award tactics and **execution**



ULS Scholarly Communication & Publishing Services



- **Open Access**: Understand Open Access (OA) publishing options and find OA journals



- **Article Processing Charges**: Obtain up to \$3000 of funding yearly for applicable articles



- **Share Research**: Use our D-Scholarship@Pitt institutional repository to share articles, conference materials, datasets, and more



- **Copyright**: Navigate publishing contracts, author rights, and licensing



- **Scholarly Profile**: Learn how to use Elements, ORCID, and other profiles to share your research



- **Publishing**: Discover our Pitt Open Library Publishing journal catalog



- **Go Open**: Make your journal Open Access with our publishing program and hosting services



- **Theses and Dissertations**: Get assistance with Electronic Theses and Dissertations (ETD) requirements, formatting, copyright, and support.

Data Services



- **Write** a data management or sharing plan



- **Comply** with data sharing policies



- **Organize & describe** your research data or files



- **Identify** appropriate data repositories



- **Create** effective data visualizations



- **Locate** existing datasets for reuse



- **Preserve** your data/files for long-term access

Statistical Consulting

- **Center for Statistics:** services include - design, data summarization, analysis, and interpretation of results. Researchers from various disciplines.
- CTSI Biostatistics, Epidemiology, and Research Design (**BERD**) Core - statistical and study design consultations and research-focused training through workshops and individual meetings.

CENTER FOR STATISTICS

1809 WESLEY W. POSVAR HALL

STATISTICAL CONSULTING

Are you...

- ✓ writing a thesis or a dissertation
- ✓ working on a research project
- ✓ preparing a proposal

and need help with statistics?

STATISTICAL CONSULTANTS ARE AVAILABLE FOR ASSISTANCE

Email for an appointment!
statcon@pitt.edu

<http://www.stat.pitt.edu/resources/statistics-consulting-center>

THERE IS NO CHARGE CURRENTLY FOR THIS SERVICE



Team & Contact Info



Maria Mori Brooks, PhD
Core Director, Biostatistics &
Epidemiology Research Design
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E-mail: mmoroks@pitt.edu



Tim Lezon, PhD
Core co-Director, Biostatistics &
Epidemiology Research Design
E-mail: lezon@pitt.edu



OUR MISSION

- Internationalizing the student experience on campus and abroad
- Supporting international/global interdisciplinary research and partnerships

Global Priorities

1 PITT to the WORLD the WORLD to PITT

Connect our domestic and international pursuits to generate synergies that help strengthen our communities

2 GLOBAL READY

Cultivate globally capable and engaged students toward lives of impact in their communities and beyond

3 GLOBAL IMPACT

Convene a global community of researchers that advances our frontiers of knowledge and tackles real-world problems

4 GLOBAL OPERATIONS SUPPORT

Rewire and improve our infrastructure to streamline, facilitate, and expand engagement with the world

Dietrich's Writing Institute

- **Dana Nowlin-Russell** coaches faculty on writing grant proposals:
 - organizing proposal information,
 - generating and clarifying ideas,
 - working through writer's block, and
 - developing language appropriate for funders
- **Faculty Writing Program:** Writing Days & Writing Groups
- <https://www.writinginstitute.pitt.edu/>

Self Guided Slides

-  Brief tutorial on indirect costs
-  OSP: Research development team, finding funding, workshops
-  ORP: Concierge services, research security, export control, COI
-  Research data management and other library services
-  Thumbnail overview of grantsmanship

Indirect Costs (Federal)

Direct Costs + Indirect Costs = Total Award Amount

Faculty salaries,
GSR salaries, fringe,
tuition remission,
equipment,
consumables, travel
& events, renovation,
commercial supplies
& services

Electricity, water, HVAC,
IT, phones, building
renovation &
maintenance, libraries,
CRC, debt service, OSP,
Research Protections,
university & departmental
admin

Indirect Costs Limitations: Federal

Direct Costs + Indirect Costs = Total Award Amount

Direct Costs + **56.5%** Direct Costs* = Total Award

Direct Costs + **56.5% MTDC** = Total Award

EXCLUSIONS OR EXCEPTIONS TO MTDC CALCULATION

- Subawards in excess of \$25,000
- Equipment (including lease purchased equipment) > \$5,000
- All building and land rentals and leases
- Alterations and renovations to permanent structures
- Tuition for graduate teaching and research students on appointment
- Student or postdoc fellowship and traineeship stipends
- Participant support costs

Indirect Costs Limitations: Federal

Direct Costs + Indirect Costs = Total Award Amount

Direct Costs + **56.5%** Direct Costs* = Total Award

Direct Costs + **56.5% MTDC** = Total Award

56.5% = Indirect Cost **Rate** Federal, on-campus, FY22

Indirect Cost **Share** < 36.1% Total Award

Indirect Costs = Indirect Cost Recovery = IDC
= Overhead = “F&A”

Info on Indirect Costs

- Kelvin Droegemeier's Labor/HHS Appropriations Subcommittee testimony:
<https://www.cogr.edu/sites/default/files/Droegemeier%20Full%20Written%20Testimony%20FINAL.pdf>
- “Understanding the Real Costs of Research” by AAMC, APLU, AAU, COGR, ACE, NACUBO :
<https://youtu.be/GzNcZh49f-s>

OSP Research Development Office

Manage Prestigious Awards proposal support (+P&AE)



OSP Research Development Office

Curates funding opportunities (from 30K+ sources, weekly)

Manages limited submissions

Offers award workshops, coaching, office hours

Manage Prestigious Awards databases and training



RD Calendar: Pitt Workshops & Funder Events

The screenshot shows the website www.osp.pitt.edu/finding-funding-workshops. It includes a calendar for September 2020, a navigation menu with 'Funding' highlighted, and a sidebar with 'Finding Funding Workshops' circled. The main content area lists upcoming workshops with dates and registration links.

Prerecorded Webinars:
Featured webinar(s) include: NEH

Federal Funding: NSF CAREER
The Office of Sponsored Programs series designed for faculty interests

Research Development Office Hours
Schedule a meeting with Ryan Champagne (rkc12@pitt.edu), Assistant Director for Research Development, to learn more about securing funding:
<https://outlook.office365.com/owa/calendar/UniversityofPittsburgh4@pitt...>
Schedule a meeting with Bradley Pollock (bcp27@pitt.edu), Research Development Funding Specialist, to explore the funding landscape and identify opportunities: <https://outlook.office365.com/owa/calendar/UniversityofPittsburgh/Research...>

- Interactive events with funders
- Recorded webinars
- Weekly Pivot sessions each term
- Individual and group consultations
- Workshop series for grant writing
 - Varies each term
 - Federal sponsor-focused
- <https://www.osp.pitt.edu/finding-funding-workshops>

InfoReady: Internal Applications

The screenshot shows the 'InfoReady Review' website. At the top, there is a blue header with the University of Pittsburgh logo and 'InfoReady Review' text, and a yellow bar with 'UNIVERSITY OF PITTSBURGH' and 'CALENDAR'. The main content area is titled 'Limited Submissions and Nominations'. It features an image of a grand hall, a text block explaining the process, and a table of opportunities. A search bar is located above the table. To the right, there is a 'Limited Submissions Process Overview' section with a 'Related Resources' list and technical support information.

Limited Submissions and Nominations

The opportunities listed below specifically limit the number of applications or nominations the University may submit. In these situations, Pitt is responsible for overseeing an internal competition to select the candidates and applications that best meet the requirements of the opportunity, and have the best chance to be selected or funded.

Please see the details of each opportunity for program information and the requirements to submit an internal application. All questions for specific opportunities should be directed to the appropriate program.

Search:

Title	Due Date	Organizer	Category	Cycle
2024 Rita Allen Foundation Scholars	08/7/2023	Limited Submissions	All	All
Apply for a Limited Submission Opportunity Not Listed On InfoReady		Limited Submissions		

Limited Submissions Process Overview

Limited submissions and nominations are overseen by the Office of the Senior Vice Chancellor for Research. All questions, including how to apply for a limited submission opportunity not listed on InfoReady, should be directed to the Pitt Research Development team.

For email announcements of limited submissions, awards and funding opportunities, subscribe to the weekly newsletter.

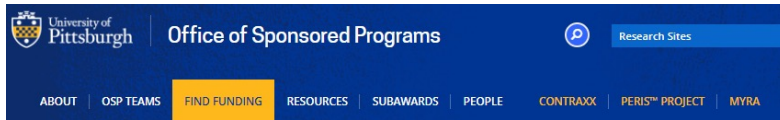
Related Resources

- Pitt Research
- Office of Sponsored Programs
- Pitt Research Development
- Funding Opportunities
- Pivot-RP (Funding Database)
- Pitt Research Navigator
- Pitt Proposal Editing Service
- Office of Research, Health Sciences
- PAE Corporate and Foundation Relations

Technical support questions may be directed to support@infoready.com.

- Limited Submission opportunities
 - Funder restricts number of applications
 - Early stage “lite” version of project
 - Pitt Research endorses institutional applicant
 - <https://www.osp.pitt.edu/limited-submissions-process>
- Internal Funding Mechanisms
 - Pitt Research – Momentum Funds (fall)
 - Chancellor – Pitt Seed Projects (spring)
 - New programs annually
 - <https://www.osp.pitt.edu/internal-funding-opportunities>
- Log in via MyPitt.edu to apply

OSP Workshops



Find Funding /

Finding Funding Workshops

Finding Funding: Interactive Opportunities for New Researchers

BUILDING FUNDING SEARCHES IN PIVOT

The University of Pittsburgh subscribes to Pivot, a comprehensive source for funding information that provides timely updates and recommendations tailored to your scholarly profile. The Office of Sponsored Programs hosts workshops to provide an overview of Pivot and how it may be used to find funding and collaboration opportunities to support research and scholarly endeavours.

Workshops are interactive and informal, and allow for as much individualized interaction as time permits. Additional resources for identifying prestigious academic awards, funding programs for early career faculty, and internally-coordinated competitions for limited submission and University-funded programs will also be presented. Faculty and staff are welcome to join.

Summer 2022 Schedule:

- June 24, 2022 (12:00 - 1:00 PM) [Register here](#)
- July 8, 2022 (12:00 - 1:00 PM) [Register here](#)
- August 5, 2022 (12:00 - 1:00 PM) [Register here](#)
- August 19, 2022 (12:00 - 1:00 PM) [Register here](#)

FIND FUNDING

External Funding

Internal Funding

Limited Submissions

Find Funding Workshops

» Prerecorded Webinars

» NIH Webinars

» NSF Webinars

» Research Development Office Hours

Prestigious Awards for Pitt Faculty

Big Proposal Bootcamp

Student Opportunities

Traineeship and Fellow Opportunities



The Office of Sponsored Programs hosts weekly workshops to provide an overview of resources available through Pitt Research that may be used for finding funding and collaboration opportunities to support and reward research and scholarly endeavors.

Registration:

<https://www.osp.pitt.edu/funding/find-funding-workshops>

Pitt Research

OSP's NSF for NIH Investigators

For faculty considering diversifying their funding portfolio beyond NIH-awarded projects the NSF may be a viable sponsor.



Agency Considerations -
NIH v. NSF

- *two-part information sessions with follow-on office hours;*
- *accepting and returning feedback on concept papers through August 2022*
- [Session 1: Introducing Differences Between Agencies \(Recording linked\)](#)
- [Session 2: Writing a Competitive NSF Research Proposal \(Recording linked\)](#)

OSP's NSF CAREER



For junior faculty who exemplify the role of teacher-scholars through outstanding research, excellent education and the integration of education and research within the context of the mission of their organizations

- *2022 three-part panel discussions involving institutional awardees, peers, and research support services partners*
- *2021 four-part information sessions accepting and returning feedback on concept papers through August 2022*
- [OSP page with links and all session links in notes](#)

OSP's The NIH R25



Pitt Research

For faculty interested in research education activities that: (a) complementing workforce training to meet the nation's biomedical, behavioral and clinical research needs; (b) enhancing the diversity of the biomedical, behavioral and clinical research workforce; (c) recruiting individuals to research careers in biomedical, behavioral and clinical sciences; or (d) fostering a better understanding of biomedical, behavioral and clinical research and its implications.

- *one-part information session with follow-on office hours*
- *accepting and returning feedback on concept papers through August 2022*
- [NIH R25 Session recording link](#)

OSP's Introducing the Department of Defense



For faculty with limited experience in strategizing outreach and proposing projects to the Department of Defense, and with some emphasis on early career funding mechanisms.

- *2021 three-part information sessions accepting and returning feedback on concept papers through January 2022*
- [OSP page with links and all session links in notes](#)

OSP's Introducing & Demystifying the NIH



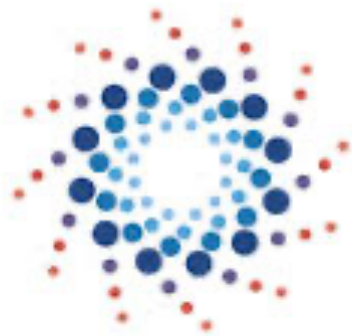
National Institutes
of Health

Pitt Research

For faculty with limited experience of proposing projects to the National Institutes of Health and with some emphasis on early career funding mechanisms.

- *2021 four-part information sessions accepting and returning feedback on concept papers through August 2022*
- [OSP page with links and all session links in notes](#)

OSP's Introducing SBIR/STTR Programs



SBIR · STTR
America's Seed Fund

For faculty interested in the innovation landscape, developing private sector partnerships, or creating a small business.

- *one-day information session with consultations and follow-on review support; accepted and returned feedback on concept papers through September 2021*
- [OSP page with links and all session links in notes](#)

OSP Office Contact

Find the appropriate contact for your school, office, or department. Members of our processing teams are here to help you.

Note: Due to recent security updates this search function is restricted to computers that are connected to PittNet via the on campus network or the VPN. For more information on connecting to the VPN, please see <https://www.technology.pitt.edu/services/pittnet-vpn-pulse-secure>.

Select Department

Click to choose
12212 - Linguistics
12213 - History & Phil of Science
12215 - Studio Arts
12219 - Religious Studies
12227 - Medieval & Renaissance Studies
12230 - University Theatre
13203 - Chemistry
13204 - Geology & Environmental Science
13205 - Mathematics
13206 - Physics & Astronomy
13207 - Psychology
13208 - Computer Science
13209 - Pymatuning Laboratory
13210 - Statistics
13211 - Crystallography
13213 - Intelligent Systems
13225 - Neuroscience
13226 - Biological Sciences
13228 - Neuroscience Research Support

<https://www.osp.pitt.edu/find-your-office-contact>

Pitt Research

Funding Supplements

NSF Graduate Research Diversity Supplements

NSF Research Experience for Undergraduates

NSF Research Experience for Teachers

NSF Research Assistantships for High School Students

NSF Research Opportunity Awards

NIH Diversity Supplements

DOE Phase II Diversity Supplements

OSP's Research Development Calendar

University of Pittsburgh / LibCal / Grants Development Workshops and Events

Grants Development Workshops and Events - Upcoming Events

Time Zone: Eastern Time - US & Canada (change)

MAY 18 Wed, 2:00pm - 3:00pm **Online** **30 SEATS LEFT**

NEH Summer Stipends Webinar

NEH will be offering a webinar introducing the Summer Stipends program. Program officers will describe the application and nomination process, and offer application-writing suggestions. There will be ... [More](#)

MAY 19 Thu, 10:30am - 12:00pm

Human Networks and Data Science Program Office Hour

Please join the Human Networks and Data Science Program to discuss questions about the program with the program director. Office hours take place over Zoom, generally on Thursdays. Please see

JUN 6 Mon, 2:00pm - 4:00pm [Show more dates >>](#)

NSF Virtual Grants Conference - June 6-10, 2022

This conference is designed to give new faculty, researchers, and administrators key insights into a wide range of current issues at NSF. NSF program officers will provide up-to-date information about...

JUN 7 Tue, 2:00pm - 4:00pm [Show more dates >>](#)

NSF Virtual Grants Conference - June 6-10, 2022

This conference is designed to give new faculty, researchers, and administrators key insights into a wide range of current issues at NSF. NSF program officers will provide up-to-date information about...

JUN 8 Wed, 2:00pm - 4:00pm [Show more dates >>](#)

NSF Virtual Grants Conference - June 6-10, 2022

This conference is designed to give new faculty,

JUN 9 Thu, 2:00pm - 4:00pm [Show more dates >>](#)

NSF Virtual Grants Conference - June 6-10, 2022

This conference is designed to give new faculty,

- The Research Development team maintains a calendar of funding- and proposal development-related events hosted by federal agencies as well as philanthropic and corporate sponsors.
- A comprehensive list of upcoming events may be accessed in the Research Development calendar [here](#).

Connect with ORP

- Jumpstart your research
- Custom onboarding for new investigators to discuss regulatory requirements ([sign up here](#))
- Workshops (see flyer)
- General questions and training.
[Fill out Form](#)
- IRB specific questions
askirb@pitt.edu

Foreign Influence: Finding New Normal

Sept 2020:



<https://www.chronicle.com/article/u-s-turns-up-heat-on-colleges-foreign-ties-that-may-chill-partnerships-for-years>

Pitt Research

April 2021: **POLITICO**

EDUCATION

Universities fight scrutiny of foreign funding in Senate China bill

Under the initial bipartisan proposals, universities would face national security reviews of some of their foreign transactions.



AP Photo/J. Scott Applewhite

<https://www.politico.com/news/2021/05/27/universities-foreign-funding-china-491239>

Other Areas Intersecting with Export Controls

- International Travel

- What are you taking?
- Where are you going?
- With whom are you collaborating?
- Use Concur <https://pext.pitt.edu/concur/>



- International Shipments

- Use University ProShip system for automatic export screenings
- <https://www.pts.pitt.edu/mailling-services/mail/express-mail>



- Academic Visitors

- See www.visitor.pitt.edu



- Procurement

- Items values over \$10,000
- https://cfo.pitt.edu/pexpress/purchases/exports_intnlxsns.php

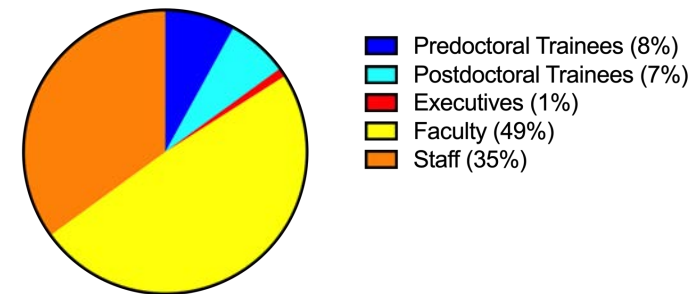


Procurement

Manage Conflict of Interest Disclosure



Disclosers by Category
(data from June 2021)



- Prior to 2020: **Paper** COI form; wet signature; not searchable
- New in 2020: **Unified web disclosure** solution Pitt+UPMC
- COI Mgt Today: **Completed** 2nd disclosure season (99+% compliant!)

Pitt Policy Ecosystem Updates



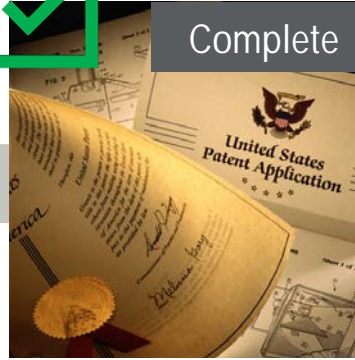
Complete



Conflict of Interest (COI)

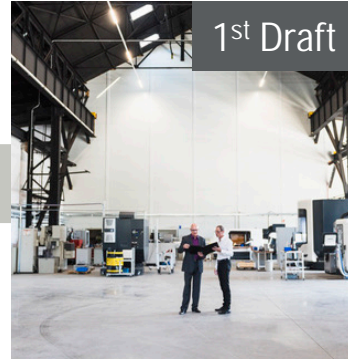


Complete



Intellectual Property (IP)

1st Draft



Outside Activities (Consulting)

Starting



Licensing Human Subject Samples/Data

Pitt's University Library System offers Services for Your Research Data

Working with data & code

programmatic tools like
Python and R

data visualization for
exploratory analysis or
publication

geospatial data (GIS) and
mapping

computational text
analysis

Managing your data & code

data management plans
for grant proposals

version control using Git
and GitHub

documentation for long-
term reusability

Sharing for Open Science

finding the right repository
for your data

using D-Scholarship, Pitt's
institutional repository

preparing your project for
sharing

Finding and reusing data & code

finding needed packages or
open datasets

making sense of others'
code and documentation

understanding data and
code licensing

Book a consultation or
inquire about workshops at

<https://library.pitt.edu/ask-us>



University of
Pittsburgh | Library System

ULS Research Services

Resources include planning, design and implementation, discovery, data management, impact, publishing support and archiving:

- [Identify potential collaborators](#)
- [Learn about copyrights](#)
- [Request digitized material](#)
- [Start the electronic theses and dissertation process](#)
- [Access geographic information systems](#)
- [Access metadata support](#)
- [Follow open access publishing](#)
- [Schedule a research consultation](#)
- [Access text mining and analysis](#)
- [Conduct literature search and review with the help of library specialist](#)
- [Manage your information sources](#)
- [Establish research reporting guidelines](#)

Pitt Research

Health Sciences Library System

The Health Sciences Library System ([HSLs](#)) offers assistance throughout the research process from developing/refining a search strategy, reviewing the literature, developing search methodology, managing data, and communicating research:

- [Review the existing literature](#)
- [Find existing systematic reviews and develop systematic review protocol](#)
- [Manage citations](#)
- [Access discovery tools, databases and full text published literature](#)
- [Create with SciENCv](#) (for applying for NIH funding)

Grantsmanship

- Do your homework
- Talk to Program Managers before you apply
- Open calls
- Solicitations:
 - Read the Funding Opportunity Announcement (FOA, RFP, BAA, ...)
 - COMPLIANCE, COMPLIANCE, COMPLIANCE
- NOTE: Agencies are using ML tools to catch plagiarism, self-plagiarism, failures to disclose.

Talk to Program Managers

- How do I contact? email
- How do I get prepared (read FOA, do your homework)
- What do I send ahead (Quad chart, concept paper, specific aims)
- What do I ask about?
 - Portfolio priorities & Program fit (this program? a different one?)
 - What should I not ask about?

Scrutinizing a solicitation

Are there any RED FLAGS?

What NSF Directorates participate?

Does this grant fit my timeline?

Does this MEET MY NEEDS?

What are the program updates/revisions?

What should my proposal include?

Will my proposal be competitive?

What is the goal of the program?

Am I eligible to apply?

Will the budget be enough?

What is the PO's contact info?

Faculty Early Career Development Program (CAREER) Includes the description of NSF Presidential Early Career Awards for Scientists and Engineers (PECASE)

PROGRAM SOLICITATION NSF 20-525

REPLACES DOCUMENT(S):
NSF 17-537

National Science Foundation
 Directorate for Biological Sciences
 Directorate for Computer and Information Science and Engineering
 Directorate for Education and Human Resources
 Directorate for Engineering
 Directorate for Geosciences
 Directorate for Mathematical and Physical Sciences
 Directorate for Social, Behavioral and Economic Sciences
 Office of Integrative Activities
 Office of International Science and Engineering

Full Proposal Deadline(s) (due by 5 p.m. submitter's local time):
 July 27, 2020
 Fourth Monday in July, Annually Thereafter

IMPORTANT INFORMATION AND REVISION NOTES

- The PI needs to meet all eligibility criteria as of the annual deadline
- Clarification regarding the minimum percentage appointment (tenure-track and tenure-track equivalent) for eligibility to the program
- Only one annual deadline applies to all CAREER submissions, regardless of Directorate
- Added guidance on the CAREER proposal submission timeline

Any proposal submitted in response to this solicitation should be submitted in accordance with the revised NSF Proposal & Award Policies & Procedures Guide (PAPPG) (NSF 20-1), which is effective for proposals submitted, or due, on or after June 1, 2020.

SUMMARY OF PROGRAM REQUIREMENTS

General Information

Program Title:

Faculty Early Career Development Program (CAREER)
 Includes the description of the NSF component of the Presidential Early Career Awards for Scientists and Engineers (PECASE)

Synopsis of Program:

CAREER: The Faculty Early Career Development (CAREER) Program is a Foundation-wide activity that offers the National Science Foundation's most prestigious awards in support of early-career faculty who have the potential to serve as academic role models in research and education and to lead advances in the mission of their department or organization. Activities pursued by early-career faculty should build a firm foundation for a lifetime of leadership in integrating education and research. NSF encourages submission of CAREER proposals from early-career faculty at all CAREER-eligible organizations and especially encourages women, members of underrepresented minority groups, and persons with disabilities to apply.

PECASE: Each year NSF selects nominees for the Presidential Early Career Awards for Scientists and Engineers (PECASE) from among the most meritorious recent CAREER awardees. Selection for this award is based on two important criteria: 1) innovative research at the frontiers of science and technology that is relevant to the mission of NSF, and 2) community service demonstrated through scientific leadership, education, or community outreach. These awards foster innovative developments in science and technology, increase awareness of careers in science and engineering, give recognition to the scientific missions of the participating agencies, enhance connections between fundamental research and national goals, and highlight the importance of science and technology for the Nation's future. Individuals cannot apply for PECASE. These awards are initiated by the participating federal

**NSF
Engineering
Research
Centers
(ERC)
Solicitation**

NSF 19-503

**REPLACES DOCUMENT(S):
NSF 15-589**



National Science Foundation

Directorate for Engineering
Engineering Education and Centers

Letter of Intent Due Date(s) (required) (due by 5 p.m. submitter's local time):

November 30, 2018

Preliminary Proposal Due Date(s) (required) (due by 5 p.m. submitter's local time):

January 16, 2019

Full Proposal Deadline(s) (due by 5 p.m. submitter's local time):

July 12, 2019

IMPORTANT INFORMATION AND REVISION NOTES

IMPORTANT INFORMATION



Cost Sharing: Cost sharing is required. However, inclusion of "voluntary committed cost sharing" is specifically prohibited in NSF's cost sharing policy, as stated in the *NSF Proposal and Award Policies and Procedures Guide*. ERC proposals that include cost sharing amounts more than the specified formula described in this solicitation will be *returned without review*. The formula for required cost sharing is described in the full text of this solicitation.

**NSF
Engineering
Research
Centers
(ERC)
Solicitation**

Anticipated Funding Amount: \$14,000,000

\$14,000,000 to support the first year for up to four newly funded ERCs, depending on availability of funds in FY 2020. ERCs generally operate for ten years, with an initial award for the first five years and second award based on performance and review of a renewal proposal.

NSF expects to make the ERC awards in the summer of 2020. The initial ERC award would be for five years. The maximum annual budget allowed is shown in the table below.

Year	Allowable Maximum Budget
1	\$3,500,000
2	\$4,500,000
3	\$6,000,000
4	\$6,000,000
5	\$6,000,000

Most agencies specify Total Award.
NIH usu. specifies Max Direct Costs

Year 1 budget will be committed upon award, and subsequent year budgets are subject to satisfactory annual review of accomplishments and availability of funds. After a gradual ramp up, years three through five are projected to level off at \$6,000,000 in each of those years. Pending performance and outcome of a renewal review in the fourth year, support for years six to eight will continue at \$6,000,000 per year. Support for years nine and ten will be phased down, with \$4,000,000 in year 9 and \$2,600,000 in year 10.



NSF Engineering Research Centers (ERC) Solicitation

Cost Sharing Formula:

ERC cost sharing requirements are graduated based on classification at the time of the LOI submission deadline as defined in the "Carnegie Foundation's Classification of Institutions of Higher Education." Limited financial resources at smaller colleges and universities that lack high research activity may present significant challenges to cost sharing. Therefore:

- RU/VH: Research Universities - required cost sharing level is 20% of the allocation of the NSF budget to the lead or core partner university;
- RU/H: Research Universities - required cost sharing level is 15% of the allocation of the NSF budget to the lead or core partner university;
- DRU: Doctoral/Research Universities - cost sharing level is 10% of the allocation of the NSF budget to that core partner university;
- Master's L: Master's Colleges and Universities - cost sharing level is 10% of the allocation of the NSF budget to that core partner university/college;
- Bac/Diverse: Baccalaureate Colleges--Diverse Fields - cost sharing level is 5% of the allocation of the NSF budget to that core partner college.

If the university is classified in more than one Carnegie category, it must cost share at the highest cost sharing category as described above. The Carnegie classification shall remain throughout the duration of the competition and any subsequent award. The total ERC cost share shall be 20% or less, depending upon the Carnegie classifications for each of the partners.



NSF Engineering Research Centers (ERC) Solicitation

Other Budgetary Limitations:

The overall ERC-level budget should be prepared to assure sufficient funding from all sources to achieve the goals of the ERC. Hence, this budget would include faculty and staff to support the research, education, diversity and culture of inclusion, industrial collaboration/innovation, and management of the ERC. Budgets should include resources for reporting, site visit costs, and travel for cross-ERC collaboration and NSF meetings. The budget submitted to NSF will include an allocation plan for the NSF funding only.

Review Criteria

Preliminary Proposal Review Criteria:

Reviewers should consider these high-level questions: How well does the preliminary proposal narrative address the following in the project description?

1. *What is the compelling new idea and what is the potential high societal impact?*
2. *Why is an ERC necessary to tackle the idea?*
3. *How will the ERC's infrastructure integrate and implement convergent research, engineering workforce development, diversity and culture of inclusion, and an innovation ecosystem to achieve its vision and create societal impact, impact on the scientific enterprise, and impact on the engineering community?*
4. *What is the proposed management structure for the ERC and how will it foster team-formation and convergent research, as well as an integrated approach for items 1-3 above?*
5. *What are the proposed strategies for engaging and developing the appropriate stakeholder community?*
6. *How will all ERC participants engage in a unique experience that would otherwise not be available?*

Financial Review Criteria

- Financial Support and Resources
 - How well does the Center describe strong institutional commitment for all core partner institutions?
 - Does the Center have adequate capital (i.e., facilities, equipment, cyberinfrastructure) and procedural (i.e., safety, environmental) resources? Why or why not?
 - Does the Center have a convincing plan for data sharing and management? Why or why not?

Reporting Criteria

C. Reporting Requirements

For all multi-year grants (including both standard and continuing grants), the Principal Investigator must submit an annual project report to the cognizant Program Officer no later than 90 days prior to the end of the current budget period. (Some programs or awards require submission of more frequent project reports). No later than 120 days following expiration of a grant, the PI also is required to submit a final project report, and a project outcomes report for the general public.

Failure to provide the required annual or final project reports, or the project outcomes report, will delay NSF review and processing of any future funding increments as well as any pending proposals for all identified PIs and co-PIs on a given award. PIs should examine the formats of the required reports in advance to assure availability of required data.

PIs are required to use NSF's electronic project-reporting system, available through Research.gov, for preparation and submission of annual and final project reports. Such reports provide information on accomplishments, project participants (individual and organizational), publications, and other specific products and impacts of the project. Submission of the report via Research.gov constitutes certification by the PI that the contents of the report are accurate and complete. The project outcomes report also must be prepared and submitted using Research.gov. This report serves as a brief summary, prepared specifically for the public, of the nature and outcomes of the project. This report will be posted on the NSF website exactly as it is submitted by the PI.

More comprehensive information on NSF Reporting Requirements and other important information on the administration of NSF awards is contained in the *NSF Proposal & Award Policies & Procedures Guide* (PAPPG) Chapter VII, available electronically on the NSF Website at https://www.nsf.gov/publications/pub_summ.jsp?ods_key=pappg.

NSF requires ERCs to submit annual reports that are more extensive in scope than those required of single investigator awards. NSF provides guidelines for these reports. NSF also requires ERCs to collect and submit to NSF data on indicators of progress, outcome, impact, and financial management. NSF provides data definition guidelines and templates for the recording and submission of these data through a secure web site.

Develop a Compliance Checklist

Synopsis of Program:

CAREER: The Faculty Early Career Development (CAREER) Program is a Foundation-wide activity that offers the National Science Foundation's most prestigious awards in support of early-career faculty who have the potential to serve as academic role models in research and education and to lead advances in the mission of their department or organization. Activities pursued by early-career faculty should build a firm foundation for a lifetime of leadership in integrating education and research. NSF encourages submission of CAREER proposals from early-career faculty at all CAREER-eligible organizations and especially encourages women, members of underrepresented minority groups, and persons with disabilities to apply.

PECASE: Each year NSF selects nominees for the Presidential Early Career Awards for Scientists and Engineers (PECASE) from among the most meritorious recent CAREER awardees. Selection for this award is based on *three* important criteria: The criteria are 1) performance of innovative research at the frontiers of science, engineering, and technology that is relevant to the mission of the sponsoring organization or agency, 2) community service demonstrated through scientific leadership, education or community outreach, and 3) commitment to STEM equity, diversity, accessibility, and/or inclusion. These awards foster innovative developments in science and technology, increase awareness of careers in science and engineering, give recognition to the scientific missions of the participating agencies, enhance connections between fundamental research and national goals, and highlight the importance of science and technology for the Nation's future. Individuals cannot apply for PECASE. These awards are initiated by the participating federal agencies. At NSF, up to twenty-six nominees for this award are selected each year from among the PECASE-eligible CAREER awardees most likely to become the leaders of academic research and education in the twenty-first century. The White House Office of Science and Technology Policy makes the final selection and announcement of the awardees.

Convert solicitation's text into
Excel spreadsheet

Focus on "should," "must," "will"

Pitt Research

Review Rubric and Compliance Checklist

Using the table and requirements below, please indicate whether the PI has met the technical requirements for a compliant and complete submission. Refer to all proposal documents received, as applicable & included.

Compliance measures: ■ Fully Met ■ Partially Met ■ Not Met ■ Not Included
 Not Applicable

Requirement	Met/Unmet	Comments
Overall Compliance		
Application is from an early-career faculty member who exemplifies the role of a teacher-scholar through outstanding research, excellent education, and the integration of education and research within the context of the mission of their organizations.		
Proposed activities build a firm foundation for a lifetime of leadership in integrating education and research.		
Proposed research activities are in any area of science, mathematics, engineering, and education normally supported by NSF.		
Proposal describes how the CAREER award would position the PI and his/her organization to take a leadership role on the global scene.		
PI and Institution Eligibility		
Proposals is submitted either by universities/colleges, or non-profit/non-academic organizations.		
PI meets all of the following requirements <u>by the annual deadline:</u>		
· Holds a doctoral degree in a field supported by NSF;		
· Is engaged in research in an area of science, engineering, or education supported by NSF;		
· Holds at least a 50% tenure-track (or tenure-track-equivalent) position as an assistant professor (or equivalent title);		
· Is untenured;		
· Has not previously received a CAREER award;		

Start Early

Writing Big Proposals is its own Project!

- Define a proposal development schedule.
- Program in “color team” reviews of multiple drafts (pink, red, gold).
- Allow for INTERNAL and EXTERNAL DEADLINES.
- More institutions involved, the longer tasks take.
- COI/COA checks w/ collaborators. Things you need from others (know your compliance issues)
- Subawards (other university timelines)

Date	Days	Title: DOD MURI Consultant Services: Full Consultant Service: Strategy, FOA, Tear Sheet, Teaming, Template, Internal Proposal Reviews (IPR)/Color teams White Paper / Full Proposal
Friday, Feb 21	106	Pitt RADD Team Meeting/ Consultant Review Focus Doc
Monday, Feb 24	103	Consultant & PI Focus Comments/Draft Workflow*
Tuesday, Feb 25	102	(Pending DOD topic release and FOA dates)
Thursday, Feb 27	100	Pitt next draft FOCUS document
Monday, Mar 2	96	Consultant writing template: Pitt begins White Paper
Tuesday	95	Abstract / 4pages/ Appendices
Wednesday, Mar 11	87	Pitt Sends Draft 0 to Consultant IPR 0 Review Draft 0
Thursday, Mar 12	86	PI & team continue to work on Draft 1
Thursday, Mar 19	79	Consultant debrief to Pitt on IPR 0
Friday, Mar 20	78	PI & team Augments Draft 1 based on IPR 0
Monday, Mar 30	68	Pitt sends Draft 1 to Consultant for IPR 1
Tuesday, Mar 31	67	Consultant launch IPR 1, Pitt develop Draft 1-2 with figures
Wednesday, Apr 1	66	PI & team continues to work on Draft 2
Tuesday, Apr 7	60	Consultant returns IPR 1 to Pitt; Debrief to Pitt
Wednesday, Apr 8	59	PI & team continue to work Draft 2
Monday, Apr 13	54	Pitt Draft 2 to Consultant for IPR 2
Tuesday, Apr 14	53	Consultant launch IPR 2; PI & team continue to work Draft 2
Wednesday, Apr 15	52	PI & team works on Draft 3
Friday, Apr 24	43	PI & team begins to finalize figures
Monday, Apr 27	40	Consultant returns IPR 2 to Pitt; Debrief TBD
Friday, May 1	36	Pitt sends final figures to Consultant for review
Tuesday, May 5	32	Pitt sends Draft 3 to Consultant for GOLD team
Wednesday, May 6	31	Consultant launch Gold
Monday, May 10	26	Consultant returns GOLD team review to Pitt
Tuesday, May 11	25	PI & team works on Draft 4
Monday, May 24	12	Pitt sends Draft 4 to Consultant for WHITE team
Friday, May 28	8	Consultant returns final WHITE team review
Saturday	7	PI & team final tweaks
Wednesday, Jun 3	3	Pitt Final Proof
Friday, Jun 5	0	White Paper Submission deadline
Monday, Jun 8	1	Begin work on full proposal+A3:C33