



Research at the University of Pittsburgh

Humanities, Arts, Social Sciences and Related
Fields

July 28th, 2023

Shelome Gooden
sgooden@pitt.edu

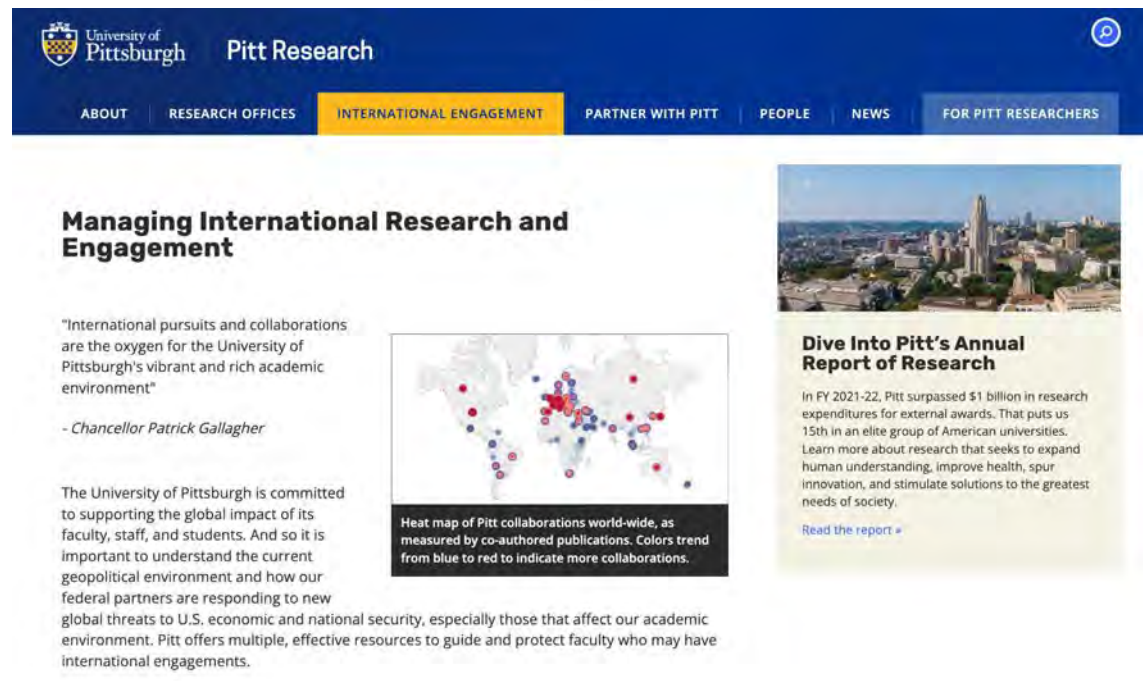
Assistant Vice Chancellor for Research

Pitt Research

Our Name: Pitt Research

Because “*The Office of the Senior Vice Chancellor for Research*” is too long...

Our Website: research.pitt.edu



The screenshot shows the Pitt Research website homepage. At the top is a dark blue navigation bar with the University of Pittsburgh logo and 'Pitt Research' text. Below the navigation bar are several menu items: ABOUT, RESEARCH OFFICES, INTERNATIONAL ENGAGEMENT (highlighted in yellow), PARTNER WITH PITT, PEOPLE, NEWS, and FOR PITT RESEARCHERS. The main content area features a large article titled 'Managing International Research and Engagement' with a quote from Chancellor Patrick Gallagher and a world map showing collaboration hotspots. To the right is a smaller article titled 'Dive Into Pitt's Annual Report of Research' with a cityscape image and a link to read the report.

Managing International Research and Engagement

"International pursuits and collaborations are the oxygen for the University of Pittsburgh's vibrant and rich academic environment"

- Chancellor Patrick Gallagher

The University of Pittsburgh is committed to supporting the global impact of its faculty, staff, and students. And so it is important to understand the current geopolitical environment and how our federal partners are responding to new global threats to U.S. economic and national security, especially those that affect our academic environment. Pitt offers multiple, effective resources to guide and protect faculty who may have international engagements.

Heat map of Pitt collaborations world-wide, as measured by co-authored publications. Colors trend from blue to red to indicate more collaborations.

Dive Into Pitt's Annual Report of Research

In FY 2021-22, Pitt surpassed \$1 billion in research expenditures for external awards. That puts us 15th in an elite group of American universities. Learn more about research that seeks to expand human understanding, improve health, spur innovation, and stimulate solutions to the greatest needs of society.

[Read the report »](#)

Goal

Showcase and help you identify the services **PittResearch** and other units at Pitt offer that support your success as a faculty member.

Pitt Research

Institutionally Financed Research

Why do we do this?

- Reputation

Honoric awards “create role models, highlight the values of a society.”¹

The overwhelming majority of scholarly awards recognize research accomplishments: Guggenheim, Carnegie Fellows, Nobel, Fields Medal, NASEM or AAA&S membership, etc.

 How Global Universities Were Ranked

RANKING INDICATOR	WEIGHT
Global research reputation	12.5%
Regional research reputation	12.5%
Publications	10%
Books	2.5%
Conferences	2.5%
Normalized citation impact	10%
Total citations	7.5%
Number of publications that are among the 10% most cited	12.5%
Percentage of total publications that are among the 10% most cited	10%

¹Frey, B. S., & Neckermann, S. (2009). Awards: A disregarded source of motivation. *Perspectives in Moral Science*, pp. 177–182. <https://core.ac.uk/download/pdf/6327542.pdf>

Institutionally Financed Research


Why do we do this?

- Reputation
- Incentives
- Expectations
 - Non-profits **must** invest surpluses in mission.
 - Ours is teaching, research, and service.
 - Pitt's endowment: #22

Pitt Research

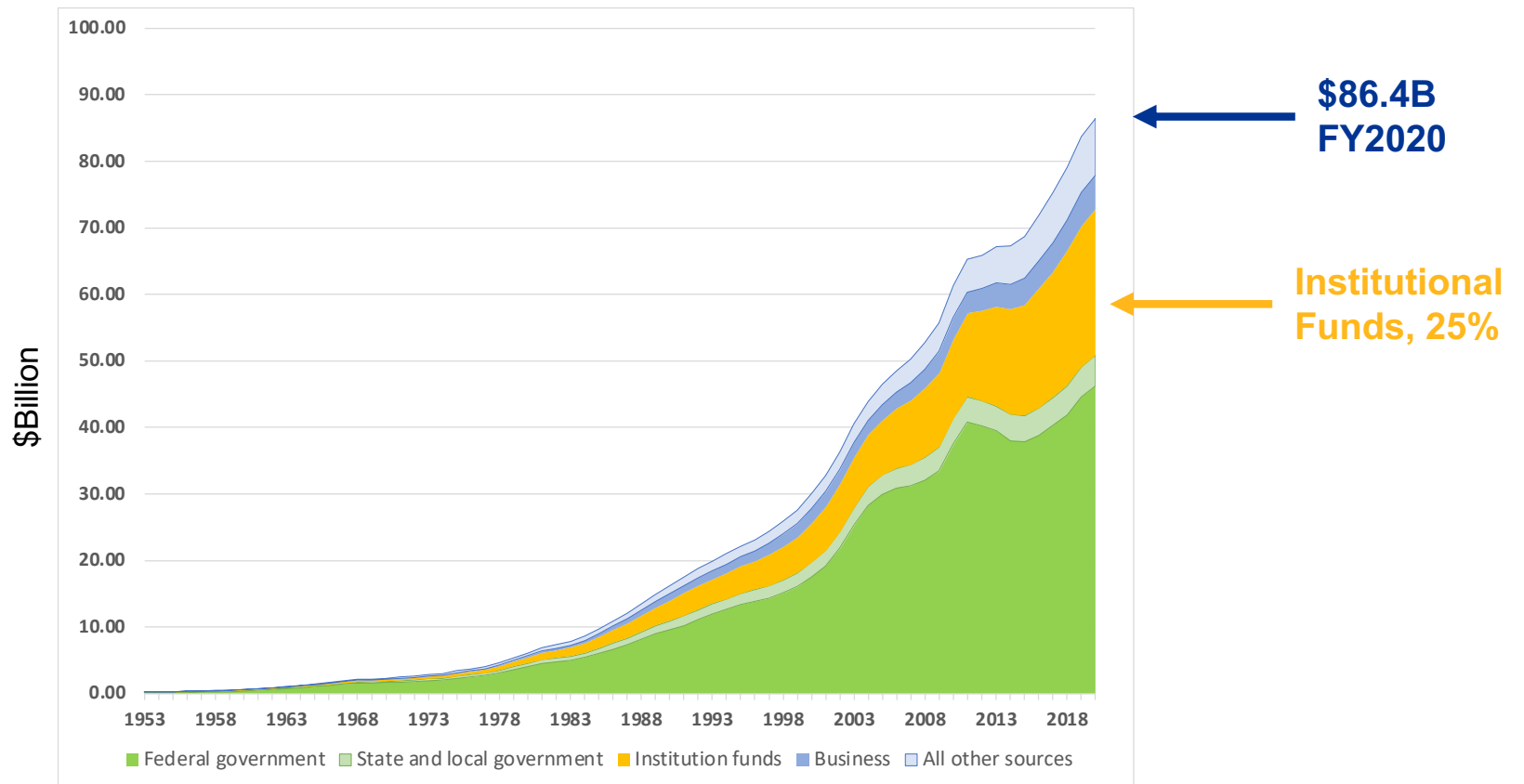
Harvard University	1	1	\$41,894,380,000 ↑ (2.4%)
Yale University	2	2	\$31,201,686,000 ↑ (2.9%)
Stanford University	3	3	\$28,948,111,000 ↑ (4.5%)
Princeton University	4	4	\$25,944,283,000 ↑ (1.3%)
Massachusetts Institute of Technology	5	5	\$18,381,518,000 ↑ (5.4%)
University of Pennsylvania	6	6	\$14,877,363,000 ↑ (1.6%)
University of Notre Dame	7	7	\$12,319,422,000 ↑ (6.5%)
Columbia University in the City of New York	8	8	\$11,257,021,000 ↑ (2.8%)
Emory University	9	9	\$9,169,027,771 ↑ (6.3%)
Washington University in St Louis	10 ↑	12	\$8,489,294,000 ↑ (4.4%)
Northwestern University	11	11	\$8,484,706,000 ↑ (2.9%)
Duke University	12 ↓	10	\$8,474,071,000 ↓ (1.6%)
University of Chicago	13	13	\$7,199,520,706 ↓ (0.6%)
Vanderbilt University	14 ↑	17	\$6,917,370,802 ↑ (10.3%)
Cornell University	15 ↓	14	\$6,882,707,803 ↓ (1.3%)
Johns Hopkins	16	16	\$6,750,092,000

www.collegeraptor.com, 2023



Total Assets	Foundation Name
\$50,996	BILL & MELINDA GATES...
21,015	LILLY ENDOWMENT INC...
17,828	FORD FOUNDATION...
13,293	WILLIAM & FLORA HEWL...
13,226	ROBERT WOOD JOHNSON ...
9,043	DAVID AND LUCILE PAC...
8,651	BLOOMBERG FAMILY FOU...
8,575	GORDON E AND BETTY I...
8,314	THE LEONA M & HARRY ...
8,218	ANDREW W MELLON FOUN...
8,210	JOHN D & CATHERINE T...
7,903	W K KELLOGG FOUNDATI...
7,733	CONRAD N HILTON FOUN...
7,118	ROCKEFELLER FOUNDATI...
6,704	WALTON FAMILY FOUNDA...

Higher Education R&D spending



SPONSORED RESEARCH

SPONSORED RESEARCH EXPENDITURES



Pitt Researchers Pass \$1 Billion Mark in Expenditures

Over the past five years, sponsored project expenditures have consistently increased. In Fiscal Year 2022, Pitt surpassed a landmark of \$1 billion, putting Pitt in an elite national cohort of research peers. This achievement represents not the money awarded to researchers but the actual funds spent on research activities. Despite the disruptions to daily life and global supply chains caused by the COVID-19 pandemic, our researchers consistently achieved productivity.

Timeframe: FY18–FY22

Source: University of Pittsburgh Office of the Chief Financial Officer (CFO)

SPONSORED RESEARCH DATA



8,930

Proposals
Submitted



3,283

Grants
Awarded



967

Direct
Sponsors



\$1.07B

Expenditures
FY22

Timeframe: Fiscal Year 2021 and Fiscal Year 2022, except for Expenditures, which are only FY22

Sources: University of Pittsburgh Office of Sponsored Programs for proposals, awards and sponsors; Office of the CFO for expenditures data

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.

PittResearch Overview

- Who we are, what we do



- Our strategic priorities



Pitt Research

SVC Research



Rutenbar

Chief of Staff



Hauck

Business Units

Office of Research Computing



Barr

Office of Innovation & Entrepreneurship



Facher

Office of Research Protections



Yates

Office of Sponsored Programs



Woodward

Strategy & Infrastructure

Science Policy & Research Strategy



Holland

Research Infrastructure



Cunningham

STEM - Research & Innovation



Martin-III

STEM - Health Sciences



Cooper

Arts, Humanities, Social Sciences, Profs



Gooden

Research Inclusion & Outreach Strategy



Iriti

Operations



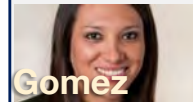
Manges

Administration



Lalo

Comms



Gomez

Data



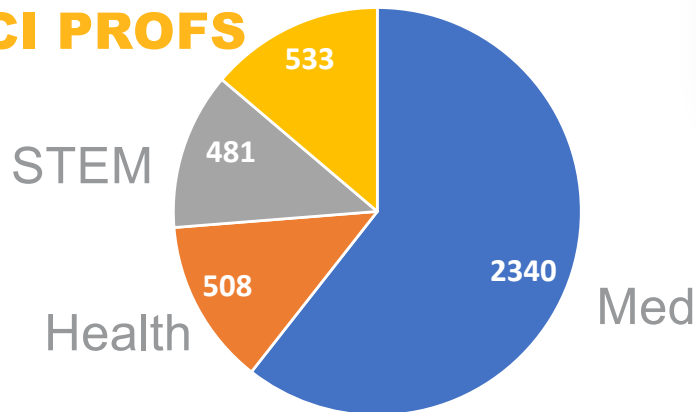
Bayer

Budget & Finance

Humanities Arts Social Sciences and Related Fields

- A broad range of areas
- Different research needs

**ARTS HUM
SOCSCI PROFS**



Pitt # Faculty

Pitt Research



Humanities



**Social Work,
Social Sciences**



**Business
GSPiA**



**Arts
Education**



Law, Libraries

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

PittResearch: A closer look

- What we do



- Our strategic priorities



Pitt Research: Focus Priorities

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

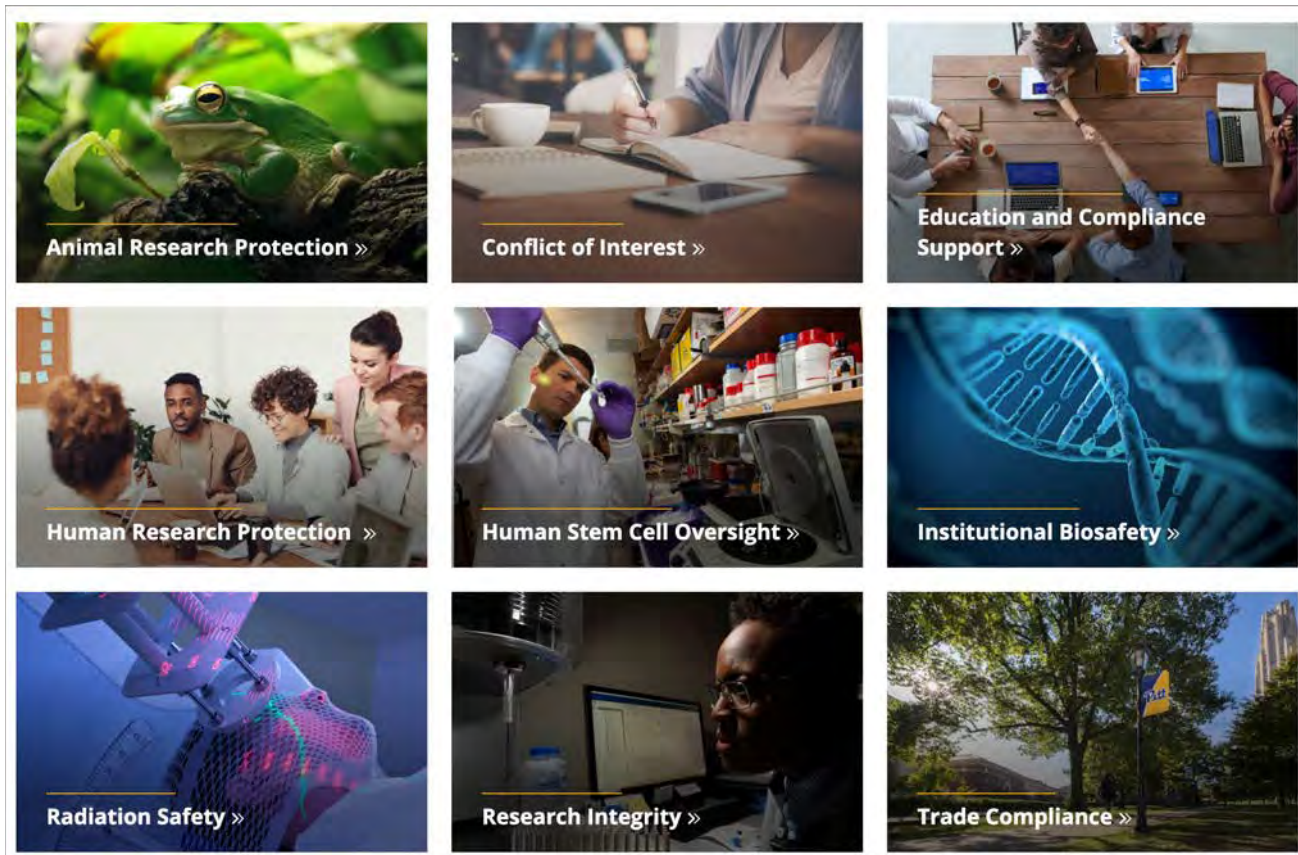
Office of Research Protections



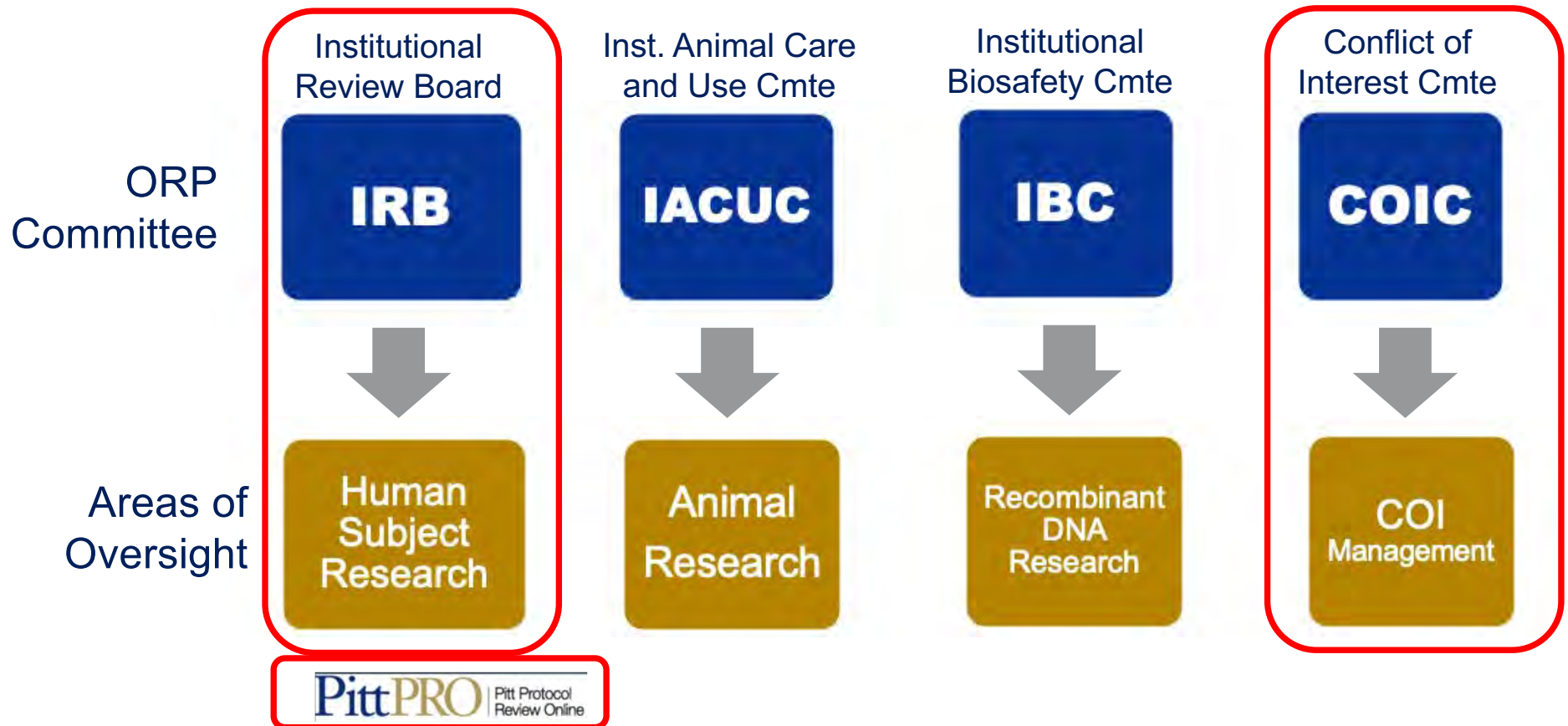
Bill Yates
Vice Chancellor

- 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

Office of Research Protections: Units



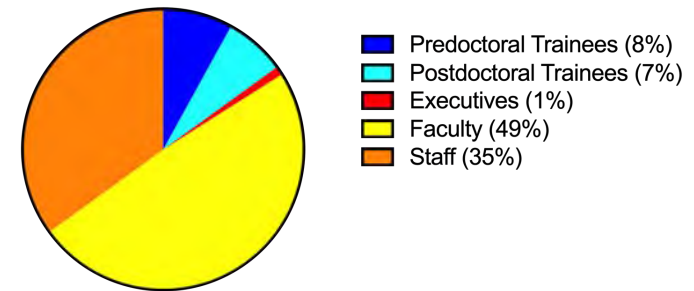
Regulatory Oversight via Faculty Cmtes



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



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>

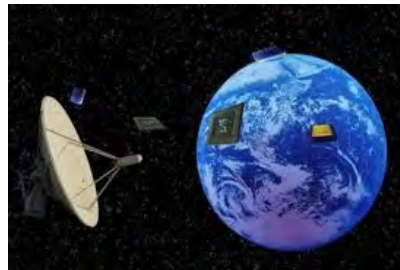
Trade Compliance: Export Control

- Export laws that regulate the shipment, transfer or disclosure of controlled items, technical data and software to foreign countries or to foreign persons and entities within the U.S.
- U.S. export controls aim at protecting the national security, economic interests and foreign policy of the United States.
- Export Control Act (July 5th 1940)

Physical Export



Technical Data Transfer



Software Export



Examples of Export Controlled Items



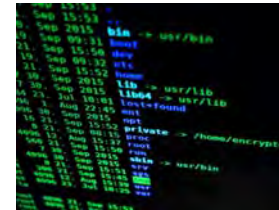
Voice and video recorders



Mobile phones



Computers



Software source code



Magnetometers, gradiometers, electric field sensors



Theodolites and transits



Drones



Biological pathogens & toxins

Office of Sponsored Programs



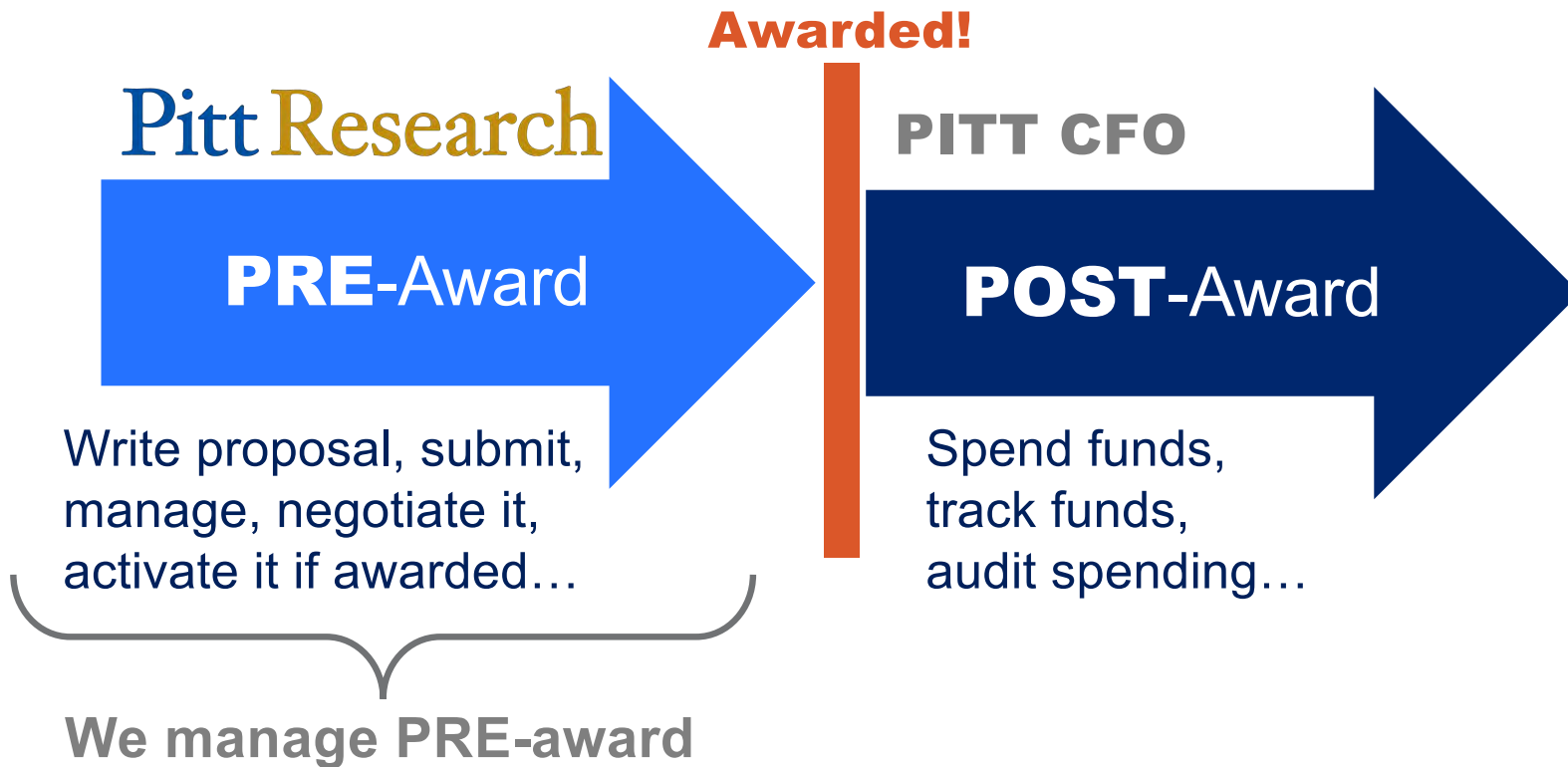
Jennifer Woodward
Vice Chancellor

- **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

OSP Review Functions

- New federal compliance changes
 - Other Support, foreign engagements, data/network security
- Issues of “completeness”, including:
 - Review against sponsor guidelines, University policies
 - Budget review (correct rates, caps, etc.); budget matches justification
 - Ensure all attachments are allowable (eg: NIH disallows appendices)
 - Restricted Party Screening, as applicable
 - Appropriate approvals & documentation from external collaborators
 - Internal compliance checks (ex: RBL approval before proposal submit)
 - Terms & Conditions (Ts&Cs) that must be accepted at time of proposal

Sponsored Award Terminology



National Support Ecosystem

US Federal



National Science Foundation



NATIONAL ENDOWMENT FOR THE HUMANITIES



Pitt Research

Philanthropic



Why Pursue External R&D Funds

- Personal resources

- Salary (summer, sabbatical)
- Teaching buy-outs
- Travel, event organization

- Research resources

- Staff – grads, undergrads
- Staff – IT, stats, data collect
- Data at scale – large surveys
- Human subject participants
- Field work
- Increase opportunity for **collaboration**

- How it works

- You write a proposal
- We (Sponsored Programs) submits it, on behalf of Pitt
- You get the direct costs (to fund you, students, stuff)
- Your School/Dean get Indirects (“overhead”) – maybe you too
- ...very relevant in new ReSTART budget model

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**



How do you find out about these funding opportunities?



Pitt Research: Discovery & Coaching

Office of Sponsored Programs

Pitt **Research**

Research Development Team

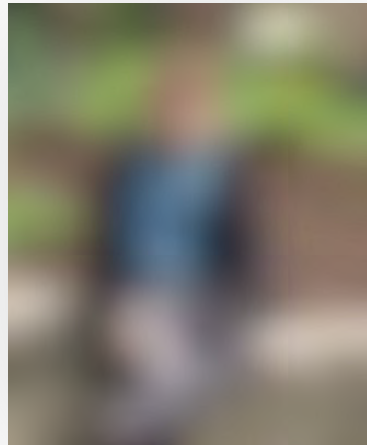
- Responsible for
 - strategically advancing the University's research goals,
 - communicating research opportunities,
 - enhancing research collaboration and team science.



Tobias Rodriguez

Assistant Director for Research Development
ter57@pit.edu

[Group Consultation bookings](#)



TBD

Research Development Funding Specialist

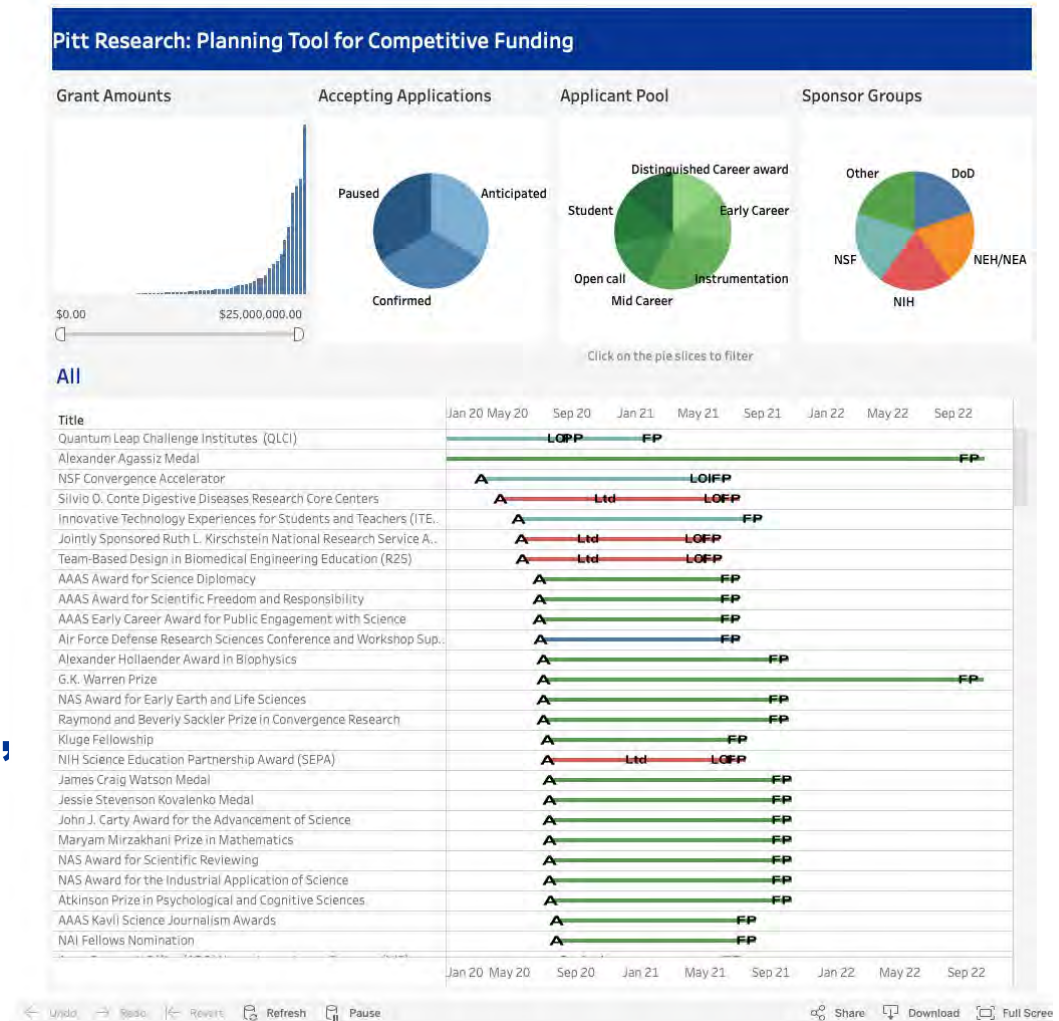
[Individual Consultation bookings](#)

Curate funding opportunities:
from **30K+** sources, weekly

Manage **Prestigious Awards**
databases and training

Offer award workshops, coaching,
proposal review

Pitt Research



Weekly Funding Updates by Discipline

We have several areas of our disciplinary focus highlighted in RFPs

We send these to research faculty in relevant Schools

Pitt Research



NEH Infrastructure and Capacity Building Challenge Grants: Capital Projects

This program supports the purchase, design, construction, restoration, or renovation of buildings or sites of national, historical, architectural, or cultural significance and facilities that house humanities collections or are used for humanities activities. Capital Projects support the purchase, design, construction, restoration, or renovation of facilities for humanities activities.

Pitt Deadline: Apr. 4, 2023
Funder Deadline: May 17, 2023

March 30 Limited Submission Announcements

Some sponsors choose to place a restriction on the total number of nominees/applications submitted per institution, school and/or discipline. When this limitation is stipulated in their program guidelines, an internal review and selection process is necessary to select the best-qualified candidate(s)/proposal(s) to represent the University.

The Office of the Senior Vice Chancellor for Research is responsible for selecting and endorsing candidates to limited submission opportunities. Faculty interested in learning more about limited submission opportunities are to visit [InfoReady Review](#).

Please review additional details about the University of Pittsburgh limited submission process, related FAQ, and a comprehensive listing of limited submission deadlines via the [Office of Sponsored Programs' Limited Submission resources](#).

Tips & Tricks

The Office of Sponsored Programs website has a page dedicated to Frequently Asked Questions (FAQs) surrounding the Limited Submissions process. [Follow the link to learn more.](#)

Finding Funding: Tweets



@PittGrantsDev

- Seven weekly newsletter tweets
- Ongoing funder retweets
- Curated for eligibility
- Special program releases
- Limited submission announcements
- Event registrations

Pivot: Funding Opportunity Database

FUNDING OPPORTUNITIES
Comprehensive global source of funding opportunities
Timeline of open scheduling and closing

PRE-POPULATED SCHOLAR PROFILES
Your email
Find contacts
Reviewed by

COLLABORATION
Connects
Cultivate

Log In Sign up

University of Pittsburgh
Funding opportunities powered by pivot

Announcements Grants Development Research HELP

Funding Profiles Papers Invited Awards Admin Funding social justice

Search Funding Results Your Search: ((social AND justice))
Advanced Search Save Search Refine Search

Calendar View

Submission type	Deadline	Amount
Limited Submission! 25		
390 Results Sort-		
<input type="checkbox"/> Social Justice Paper Prize Society for Ethnomusicology (SEM)	14 Feb 2021 Abstract Submi... Anticipated	\$200 USD
<input type="checkbox"/> The Leibel and Nomi Fein, Rabbi Richard J. Israel, and Jay E. Orlin Social Justice Fellowships New Israel Fund (NIF)	10 Mar 2021 Application Anticipated	see record
<input type="checkbox"/> Social Justice Fund A.J. Mute Memorial Institute	21 Sep 2020 Pre-Application Confirmed	\$50,000 USD
<input type="checkbox"/> Stetson Kennedy Vox Populi ("Voice of the People") Annual Award Oral History Association (OHA)	01 Jun 2021 Submission/Entry Anticipated	\$200 USD
<input type="checkbox"/> Grants Norman Foundation, Inc.	continuous Letter of Inquiry Confirmed	\$30,000 USD
<input type="checkbox"/> Anthony Lewis Prize for Exceptional Rule of Law Journalism World Justice Project (WJP)	19 Mar 2021 Self-Nominatio... Anticipated	\$10,000 USD
<input type="checkbox"/> Vermont Economic Justice Program Ben & Jerry's Foundation	01 Jul 2021 Proposals Anticipated	\$20,000 USD

Intelligent M
research fund

EDITORIAL INTEGRITY

- Funding opportunit
- Our editorial team: 13,000 sponsors, 1 international
- Keywords are addi discovery
- See our latest featur

Top funding types

- Program or Curriculum ... 146
- Training or Scholarshi... 100
- Prize or Award 83
- Research 78
- Visiting Personnel 20

Top sponsor types

- Other Nonprofit 135
- Private Foundation 118
- Academic Institution 47
- Professional Society a... 46
- National Government, N... 15

Top applicant types

- Nonprofit 176
- Individuals: Early Car... 168
- Individuals: Mid-Career... 151
- Individuals: Graduate 95
- Academic Institution 72

Top keywords

- Social Justice 261
- Civil or Human Rights 108
- Social Change 66
- Social Sciences 63
- Community or Outreach 56

- 30K+ funding opportunities
- All disciplines, career stages
- Weekly search results
- Prioritized alerts
- Account required
- Subscription service
- Workshops
- <https://www.osp.pitt.edu/external-funding-resources>

Competition Space: Internal Applications

The screenshot displays the 'Competition Space' page on the University of Pittsburgh website. It features a navigation bar with the university logo and 'Competition Space' title. Below the navigation, there are sections for 'Funding Opportunities at the University of Pittsburgh' and 'Limited Submissions Process Overview'. The main content area shows details for a specific funding opportunity: '20-554: ADVANCE: Organizational Change for Gender Equity in STEM Academic Professions (ADVANCE) (Institutional Transformation Track)'. Key information includes the internal submission deadline (Monday, September 21, 2020), the administrator (Pitt Research: OSP-Organs Development Team (Owner)), and the category (Limited Submission - External Funding). The award cycle is annual, and the number of applications allowed per applicant is 1. The limited submission section explains that eligible PIRs can submit one proposal to the Institutional Transformation Track, and eligible non-PIR, non-academic organizations can submit one proposal to the Adaptation competition and be a partner on one or more Partnership proposals. The website URL is https://www.osp.pitt.edu/limited-submissions-process/. The sponsor is the National Science Foundation (NSF), and the funding organization's deadline is Thursday, October 7, 2021. A description at the bottom states that the NSF ADVANCE program contributes to the National Science Foundation's goal of a more diverse and inclusive scientific and engineering workforce.

- 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

PERIS: a Pre-award IT System

Submit new
proposals &
manage them

Pitt Research

The screenshot shows the PERIS website interface. At the top, the University of Pittsburgh logo and name are visible, along with navigation links for Pitt Home, My Pitt, and Find People. Below this is a dark blue navigation bar with the text "ELECTRONIC RESEARCH INFORMATION SOLUTION" and a search icon. The main content area features a large banner with the PERIS logo and the text "PITT ELECTRONIC RESEARCH INFORMATION SOLUTION". Below the banner are two buttons: "PERIS™ Login" and "Training Guides & Videos". The page is divided into three columns. The left column is titled "Alerts" and contains a message: "THERE IS NO ALERT AT THIS TIME" dated "on JULY 14, 2021". The middle column is titled "Training" and lists "Faculty Training", "Administrator Training", "Quick Guides", "Frequently Asked Questions", and "Glossary of Terms". The right column is titled "Help & Support" and lists "PERIS™ Support & Assistance" (Email: Peris Project Support), "Training Support & Scheduling" (Email: Eric Larson), "Subscribe to the PERIS™ Listserv" (Sign-up Form), and "Project Information, Comments & Questions" (Contact Us Form). At the bottom of the middle column is a "PERIS™ Login" button.

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)

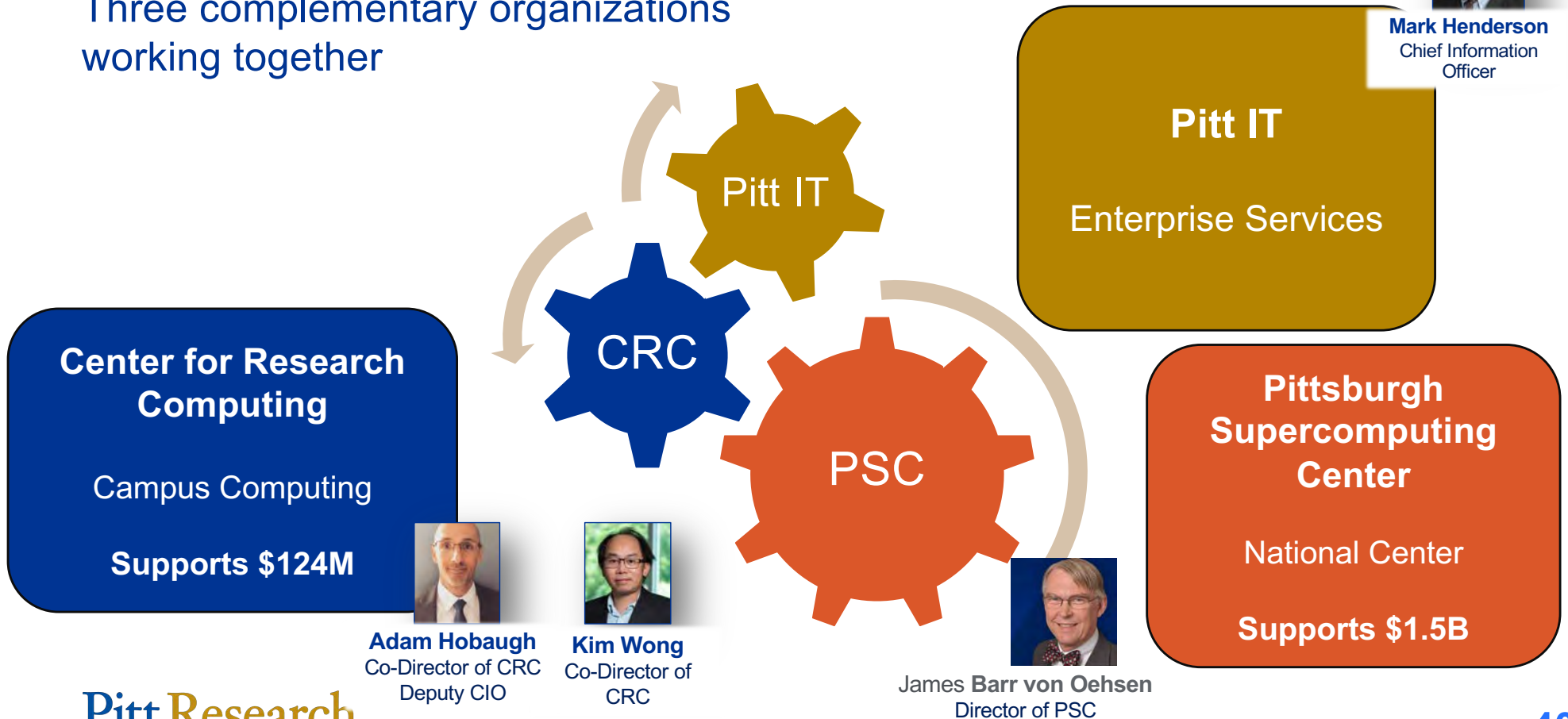


Research Computing Ecosystem

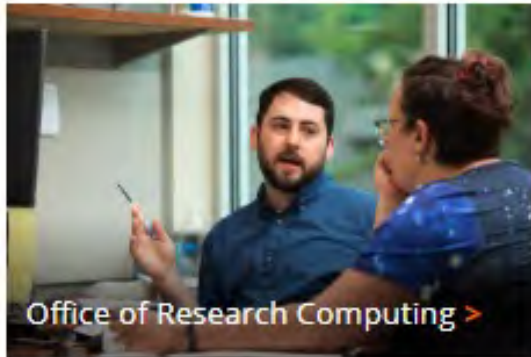
Three complementary organizations working together



Mark Henderson
Chief Information Officer



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

If it's too big for your laptop, it's big data!

CRC Mission

- To increase the research productivity of all Pitt faculty through advanced computing
- Free access to cutting-edge computer hardware and software and hosting services for enabling transformative research and teaching.
 - Request an account: <https://crc.pitt.edu/apply>
 - Each faculty member is automatically eligible for 10,000 computing hours (or service units) on CRC computer clusters.

CRC Mission cont.

- Free training workshops and lectures
 - Topics include: Effective Computing Cluster Usage, Deep Learning with Pytorch, Intro to Python, Intro to Pandas, Intro to R, and Advanced R.
- Extended personalized consultation
 - Consultants are available 9am to 5pm. 312 Schenley Place 4420 Bayard Street
 - Contact the team using Help Tickets at crc.pitt.edu/UserSupport or call 412-648-3094.
- Support for research in fields across the university community

Lots of Computing Resources

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

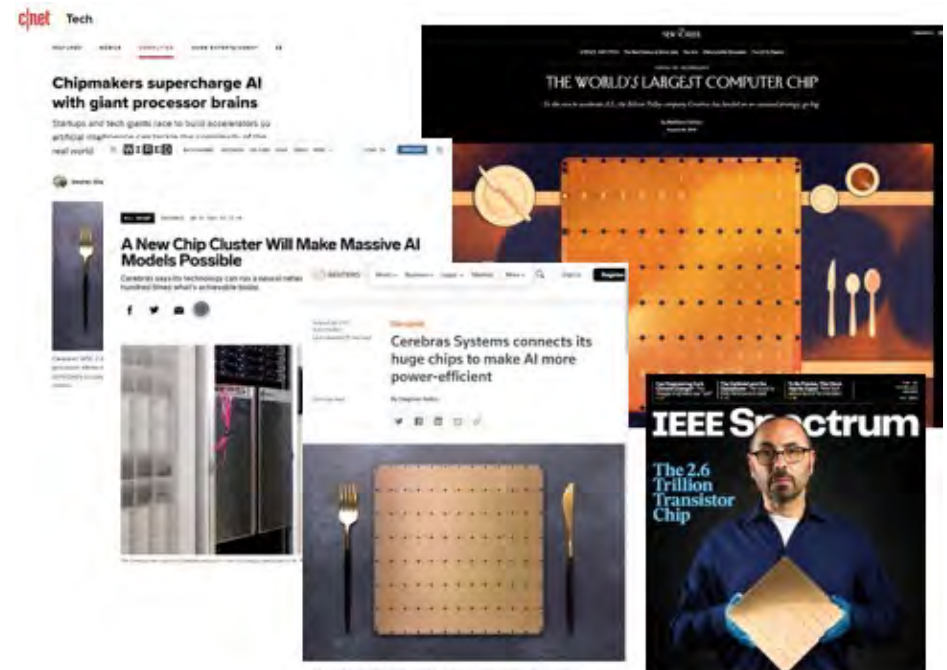
Ex: Cerabras AI machine.

- 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 to 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

University of Pittsburgh | Office of Industry and Economic Partnership | Research Sites

ABOUT | INDUSTRY PARTNERS | FOR INVESTORS | FOR FACULTY | REGIONAL DEVELOPMENT | PEOPLE | CONTACT

Forging Ahead
We drive economic growth and innovation through partnerships with businesses and institutions around the world.

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: Focus Priorities

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

Fed R&D Funding Pivoting to *Teams*



Science Contents News Careers Journals

REPORT
The Increasing Dominance of Teams in Production of Knowledge
 Stefan Wuchty^{1,2}, Benjamin F. Jones^{2,3}, Brian Uzzi^{1,2,3,4}

↔* 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

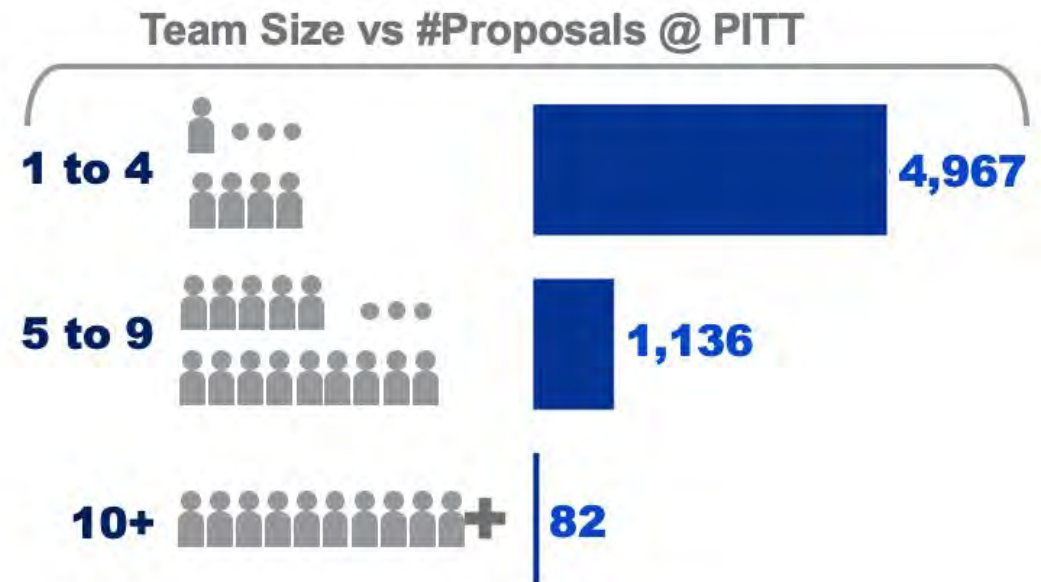
Article Figures & Data Info & Metrics eLetters PDF

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

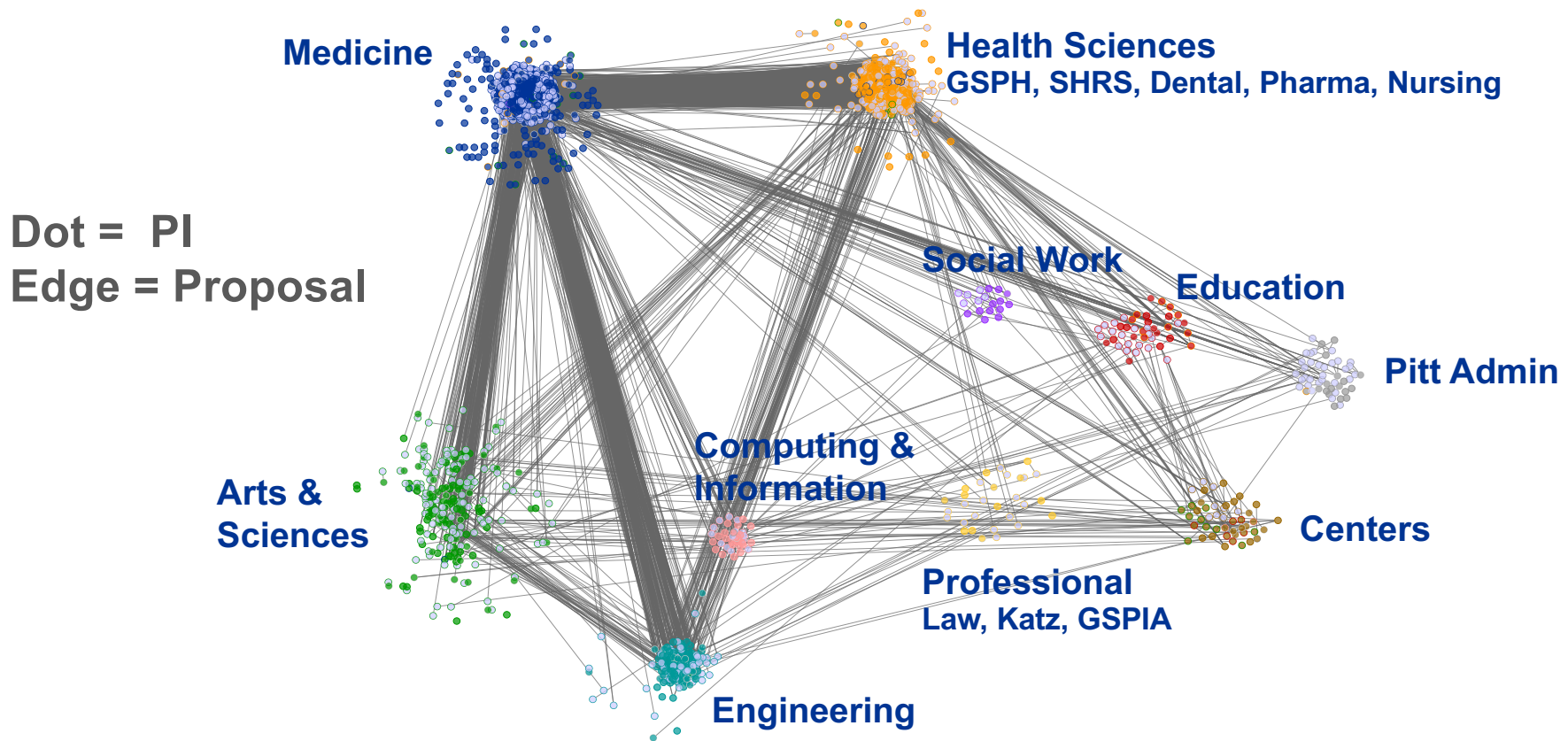


**Collaborations matter
 Especially for large \$\$**



Data Source: Office of Sponsored Programs, FY18-20

Tracking Pitt Award/Collab Network



Pitt Research: Team Science Investment

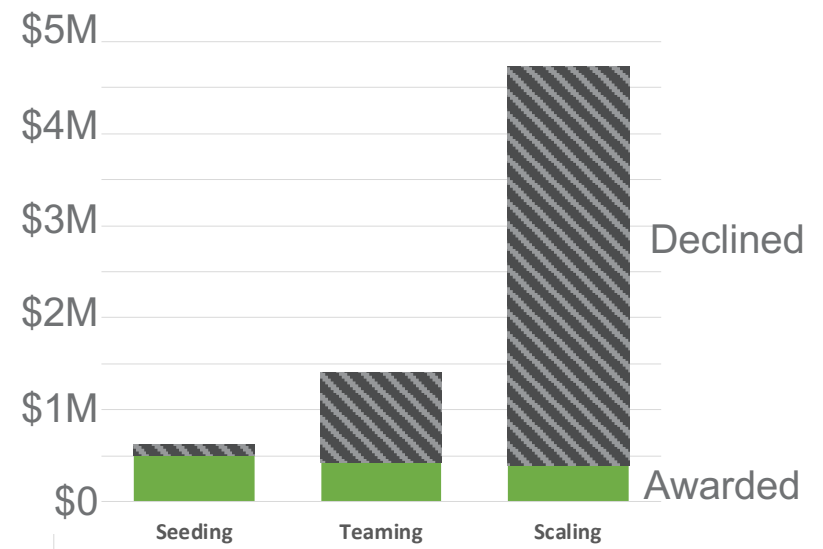
• Big Proposal Bootcamp

- Train faculty how to effectively to “go big”
- Team building and corporate partners
- Evaluating and mentoring for large scale



• Pitt Momentum Funds

- First strategic ramp of investment, seed, to team, to large center



Pitt Momentum Funds: Part of an Ecosystem of Support

**\$6.2 million
over 4 cycles**

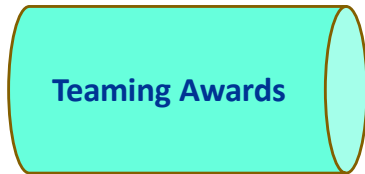


**Priming
Awards**

up to \$25,000

104 awards to date

Support individual
excellence & fields
lacking external support

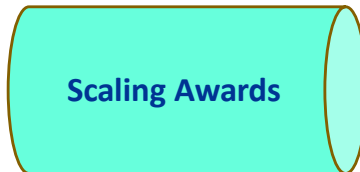


Teaming Awards

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



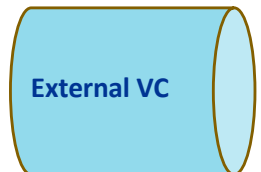
For-profit or Non-profit Spin Out



**Campus
Commercialization
Funds**



Gap Funds



External VC

Refreshed in 2021

Pitt Research

Pitt Momentum Funds

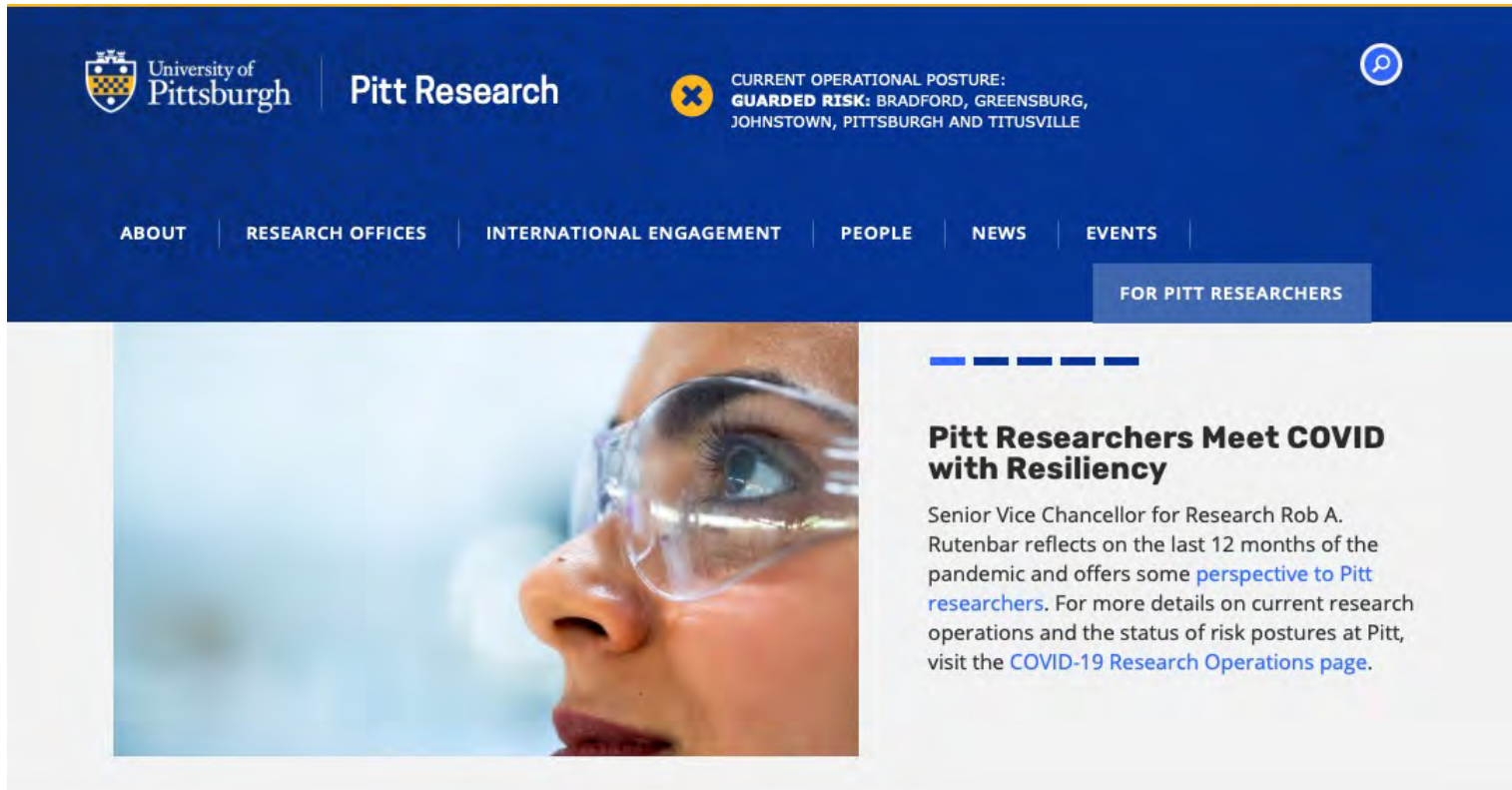
- **Arts & Humanities Microgrants:** smaller-scale projects for faculty (individual or teams) in the arts and humanities. (\$3K 1-year awards, Fall & Spring);
- **Priming Grants** support significant and innovative scholarship by individual or groups of faculty at all ranks
 - Up to \$16,000 for one year, with \$2K supplement for undergraduate research participation
 - Four tracks: Creative arts & Humanities; Engineering, Natural sciences & Math; Health & life; Social sciences, which includes Business, Policy, Law, Education, Informatics, and Social Work
- **Teaming Grants** support the planning and capacity-building stages for multidisciplinary team project to successfully pursue large-scale external funding.
 - Up to \$60,000 for one year
- **Scaling Grants** support the detailed project planning, gathering of proof-of-concept results, and reducing technical risk so that teams can competitively pursue large, complex, extramural funding.
 - Up to \$400,000 for two years

Eligibility

- Current Pitt faculty with an appointment that includes research responsibilities
- Teams comprised of faculty representing 3 different schools
- New and nascent collaborations

- **Microgrants** -- expanding the pool of monies available to Arts & Humanities Faculty for internal funding
- **not a substitute** for the priming grants
 - Arts & Humanities faculty can also apply for other level grants.
- a resource to support existing or work in progress or to test new concepts where a smaller grant with fast decision making could be transformative.
 - We envision a wide range of supported research activities
- **Application and review process will be simpler**
 - **IMP**: Expression of interest does not apply!

Thanks!



The screenshot shows the top portion of the Pitt Research website. The header is dark blue with the University of Pittsburgh logo and 'Pitt Research' text on the left. On the right, there is a search icon and a yellow 'x' icon with the text 'CURRENT OPERATIONAL POSTURE: GUARDED RISK: BRADFORD, GREENSBURG, JOHNSTOWN, PITTSBURGH AND TITUSVILLE'. Below the header is a navigation menu with links for 'ABOUT', 'RESEARCH OFFICES', 'INTERNATIONAL ENGAGEMENT', 'PEOPLE', 'NEWS', and 'EVENTS'. A button labeled 'FOR PITT RESEARCHERS' is positioned below the 'EVENTS' link. The main content area features a large image of a person wearing safety goggles on the left. To the right of the image is a section titled 'Pitt Researchers Meet COVID with Resiliency' with a sub-header of 'Senior Vice Chancellor for Research Rob A. Rutenbar reflects on the last 12 months of the pandemic and offers some perspective to Pitt researchers.' The text continues: 'For more details on current research operations and the status of risk postures at Pitt, visit the COVID-19 Research Operations page.'

University of Pittsburgh | Pitt Research

CURRENT OPERATIONAL POSTURE:
GUARDED RISK: BRADFORD, GREENSBURG,
JOHNSTOWN, PITTSBURGH AND TITUSVILLE

ABOUT | RESEARCH OFFICES | INTERNATIONAL ENGAGEMENT | PEOPLE | NEWS | EVENTS

FOR PITT RESEARCHERS

Pitt Researchers Meet COVID with Resiliency

Senior Vice Chancellor for Research Rob A. Rutenbar reflects on the last 12 months of the pandemic and offers some [perspective to Pitt researchers](#). For more details on current research operations and the status of risk postures at Pitt, visit the [COVID-19 Research Operations page](#).

Pitt Research

Additional Resources

Pitt Research

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

	<p>Maria Mori Brooks, PhD Core Director, Biostatistics & Epidemiology Research Design Phone: 412-624-1618 E-mail: mbrooks@pitt.edu</p>		<p>Tim Lezon, PhD Core co-Director, Biostatistics & Epidemiology Research Design E-mail: lizon@pitt.edu</p>
--	--	--	---

Writing Support Services

- **Dietrich School:** Writing Institute: Grant writing support available
- Dana Nowlin-Russell consults with faculty on grant proposals. Also teaches a grant writing class English Department
- <https://www.writinginstitute.pitt.edu/>

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>

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

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

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_intnlsxns.php



Procurement

Pitt Research

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 »

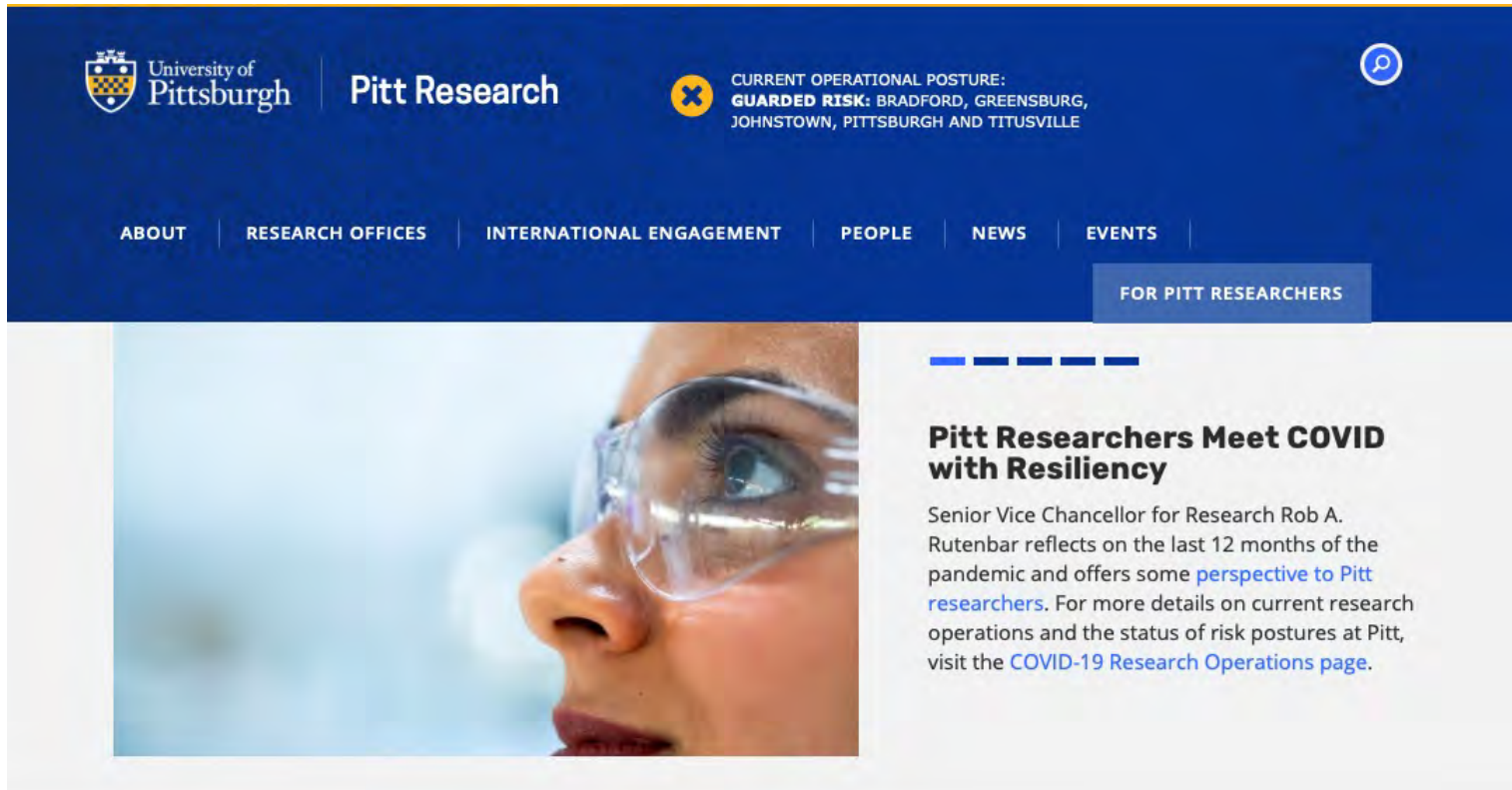
There is a wealth of [guidance](#) published to aid in research design and conduct. Some are binding regulations; others are advisory.



Bookshelf »

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

Thanks!



The screenshot shows the top portion of the Pitt Research website. The header is dark blue with the University of Pittsburgh logo and 'Pitt Research' text on the left. On the right, there is a search icon and a yellow 'X' icon with the text 'CURRENT OPERATIONAL POSTURE: GUARDED RISK: BRADFORD, GREENSBURG, JOHNSTOWN, PITTSBURGH AND TITUSVILLE'. Below the header is a navigation menu with links for 'ABOUT', 'RESEARCH OFFICES', 'INTERNATIONAL ENGAGEMENT', 'PEOPLE', 'NEWS', and 'EVENTS'. A button labeled 'FOR PITT RESEARCHERS' is positioned below the 'EVENTS' link. The main content area features a large image of a person wearing safety goggles on the left. To the right of the image is a section titled 'Pitt Researchers Meet COVID with Resiliency' with a sub-header of 'Senior Vice Chancellor for Research Rob A. Rutenbar reflects on the last 12 months of the pandemic and offers some perspective to Pitt researchers.' The text continues: 'For more details on current research operations and the status of risk postures at Pitt, visit the COVID-19 Research Operations page.'

University of Pittsburgh | Pitt Research

CURRENT OPERATIONAL POSTURE:
GUARDED RISK: BRADFORD, GREENSBURG,
JOHNSTOWN, PITTSBURGH AND TITUSVILLE

ABOUT | RESEARCH OFFICES | INTERNATIONAL ENGAGEMENT | PEOPLE | NEWS | EVENTS

FOR PITT RESEARCHERS

Pitt Researchers Meet COVID with Resiliency

Senior Vice Chancellor for Research Rob A. Rutenbar reflects on the last 12 months of the pandemic and offers some [perspective to Pitt researchers](#). For more details on current research operations and the status of risk postures at Pitt, visit the [COVID-19 Research Operations page](#).

Pitt Research