THE GEORGE WASHINGTON UNIVERSITY
WASHINGTON, DC

Supporting Faculty-led Scholarly Activities

Pamela Norris
Vice Provost for Research

August 2023

Research and Scholarly Mission

GW's mission is to improve the world with the discoveries and creative expressions of its faculty and students.

The university invests in scholarly and research areas where it can make the most significant impact, while fostering a robust research ecosystem that empowers scholars to achieve their aspirations.

Faculty and Academic Excellence

R1

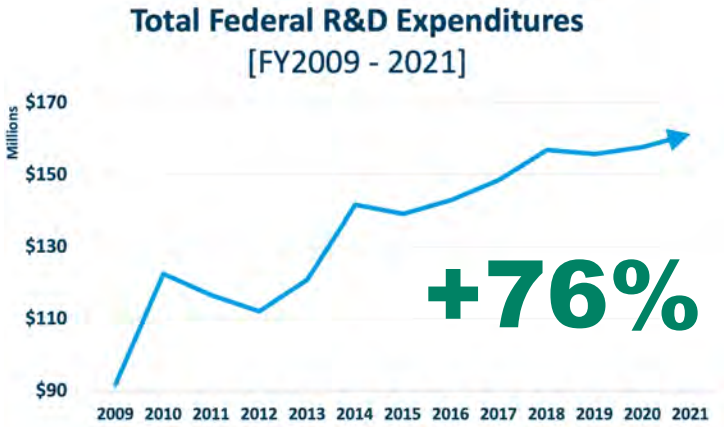
Carnegie Classification signifying “very high research activity” among Higher Education Institutions

AAU

Member of the prestigious Association of American Universities, an organization of 71 premier research universities transforming lives through education, research, and innovation.

Measuring Impact

A Rising Research Institution



#1 **in the nation's capital**
Highest total federal R&D expenditures of colleges and universities in Washington, D.C.

170+ **GW-authored books**
Self-reported via Lyterati (2021)

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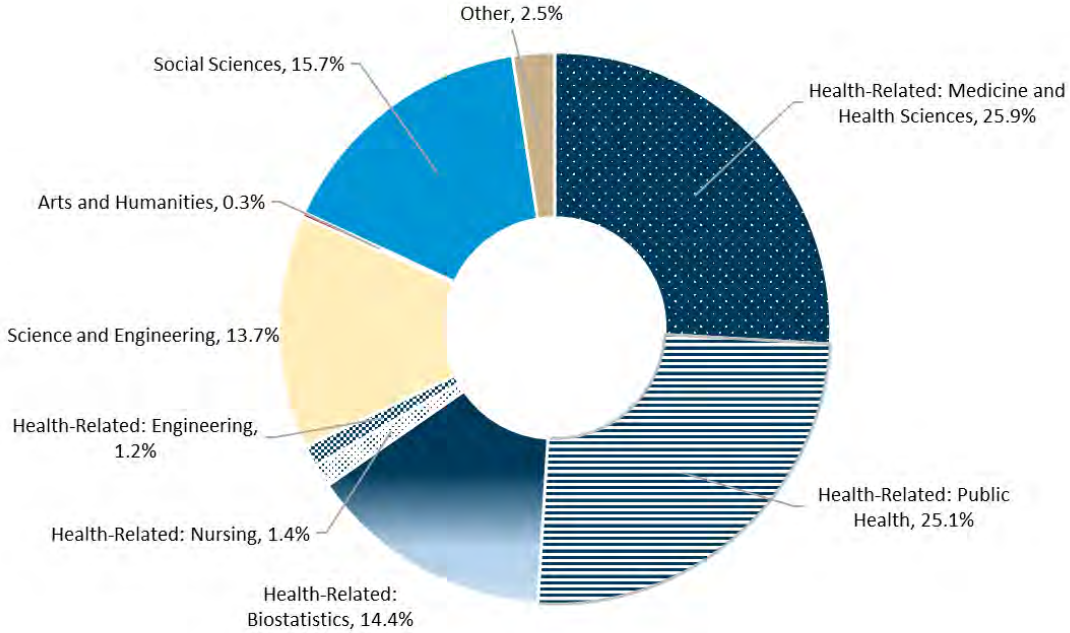
A Unique and Vibrant Research Community

- **26,000+ students**
  - ~11,500 undergraduates
  - ~15,000 graduate students
- **8,755 degrees awarded (AY 21-22)**
  - 4,127 Master's Degrees (47.14%)
  - 2,936 Baccalaureate Degrees (33.54%)
  - 1,078 Doctoral Degrees (12.31%)
- **100+ postdocs**

26% **UG Participation in Mentored Research**

Self-reported by GW undergraduates via Graduating Student Survey

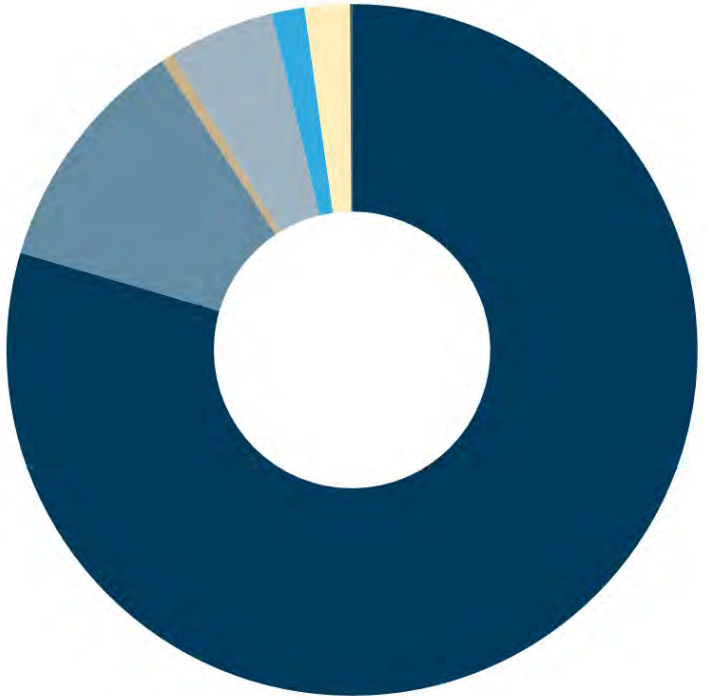
Types of Sponsored Research (FY23) / $205.6 Million



- Health-Related - $139.7M (67.9%)
- Science & Engineering - $28.2M (13.7%)
- Arts & Humanities - $0.5M (0.3%)
- Social Sciences - $32.2M (15.7%)
- Other - $5.0M (2.5%)

Sources of Funding (FY23) / $205.6 Million

- Federal - $163.5M (79.5%)
- Foundation - $23.0M (11.2%)
- International - $1.2M (0.6%)
- Non-Profit - $10.2M (5.0%)
- Corporations - $3.2M (1.5%)
- State - $4.3M (2.1%)
- Other - $190K (0.1%)



GW's Entrepreneurial Community

58 Inventions Disclosed

25 Patents Issued

$1M Gross Licensing Income

FY 2023

350+ New Ventures Created

$1B+ Follow-on Funding

Since 2010

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Research with a Global Impact

GW's sponsored research collaborations have been located in more than **85 countries on six continents**.

More than **10%** of all sponsored research projects have an **international component**.

4.3% of all of GW's sponsored projects are **funded by an international sponsor**.

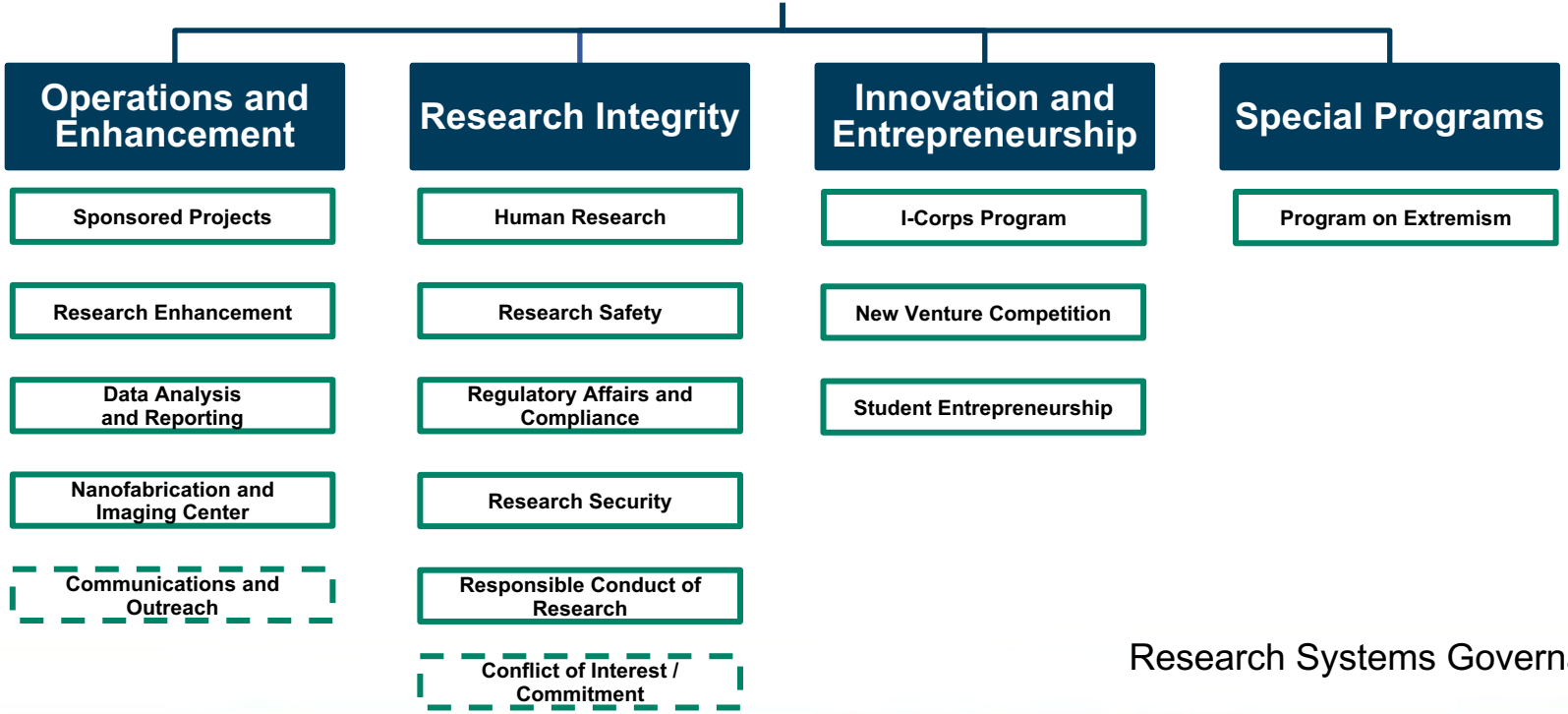
Institution-wide Goals

- Ensure that principal investigators have the support and flexibility they need to focus on their scholarship.
- Enhance GW's research and scholarly reputation and promote discoveries and innovations made by the university community.
- Align the research and academic enterprises.
- Enrich the educational experience of GW students by increasing opportunities to work and publish with faculty.

A shared focus on impact!

A Robust Network of Support

Office of the Vice Provost for Research



Research Systems Governance

Research Administration Pods

Your First Point of Contact for Sponsored Projects Administration

Pod 1

- Columbian College of Arts and Sciences
- Elliott School of International Affairs
- School of Business
- Graduate School of Education and Human Development
- College of Professional Studies
- Libraries and Academic Innovation
- Non-school units

Pod 2

- Milken Institute School of Public Health
- Biostatistics Center
- GW Law

Pod 3

- School of Medicine and Health Sciences
- School of Engineering and Applied Science
- School of Nursing

Research administration pods manage the complete lifecycle of a sponsored research project and provide continuity from inception to award closeout. Learn more about the pods.

Office of Sponsored Projects

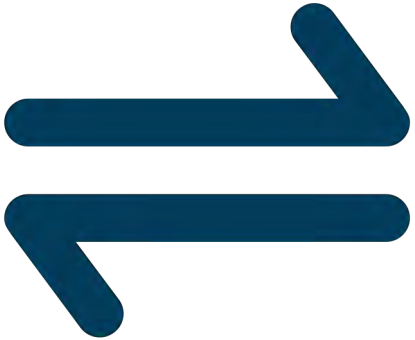
- **The Office of Sponsored Projects (OSP) supports the university's research mission by providing oversight and stewardship of externally-sponsored research.**

  A Collaborative Approach

  - The OSP team works closely with investigators, pods, school-based research staff and administrators across campus to ensure success and compliance throughout all phases of a sponsored project.

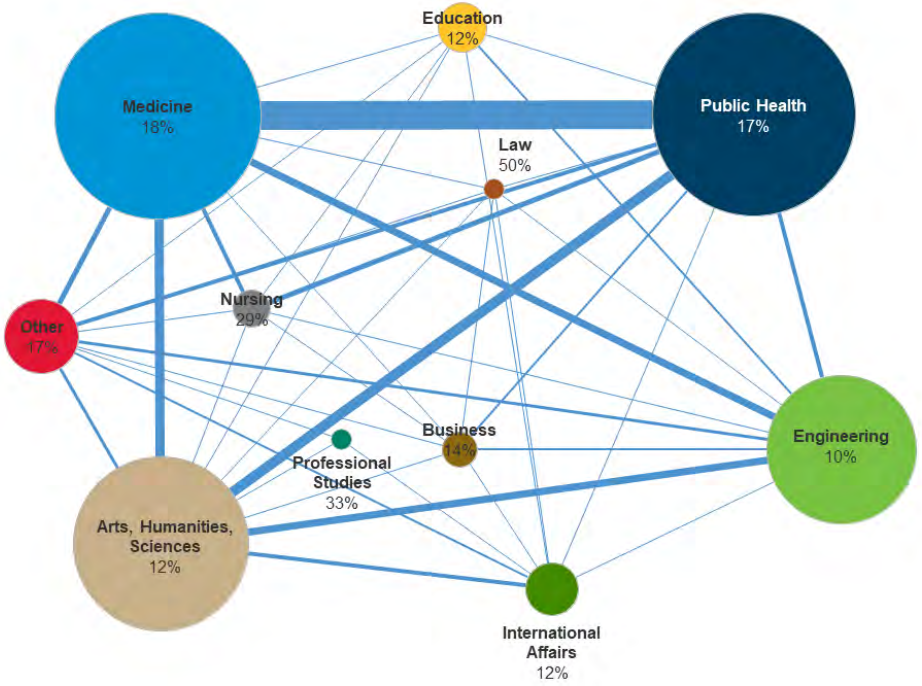
Transfer Your Grants to GW

- **Grants are awarded to institutions, not individuals. For this reason, your prior institution must "relinquish" the grant to GW. In addition, the awarding agency must approve all grant transfers from one organization to another.**
  - Your research administration pod is the first point of contact for transferring projects from your prior institution.
  - The research administration pod will work closely with the Office of Sponsored Projects to transfer the award.



Collaborate Across the Disciplines

The world's most pressing problems require an interdisciplinary approach and diverse perspectives.



Integrate Research and Teaching

- **Boost your capacity by providing well-structured opportunities for students and trainees.**
  - Identify labor-intensive activities that a larger pool of students can contribute to (e.g., data collection, data analysis, literature review)
  - Don’t be afraid of giving your students your research data and asking them to evaluate it
  - Publish with students
  - Seek guidance from the Center for Undergraduate Fellowships and Research

Mechanisms for Engaging Students

Federal Work Study Positions

Offer FWS-eligible students an opportunity to work with you, grow professionally, and earn funds to support themselves. Currently, *GW employers are responsible for 25% of the total wage.*

Zero-Credit Transcript Notation

Highlights non-credited research experiences on official GW transcripts, recognizing important experiential learning.

More Ways to Engage UGs in Mentored Research

Undergraduates can contribute in meaningful ways to faculty research. There are a few primary avenues through which to engage undergraduate student researchers.

Leading by Example

Sponsored Training and Workforce Programs

GW is home to externally-funded training and professional development programs in biomedical research, designing trustworthy AI systems, and collaborations with NIST scientists, among others.

NSF Research Experiences for Undergraduates (REUs)

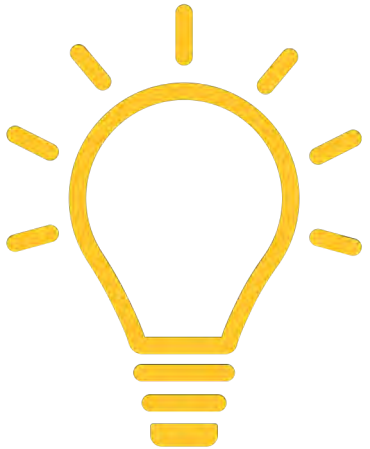
Host cohorts of undergraduates to work in specialized research areas. Current GW programs include green chemistry and science policy and human-environment dynamics.

Course-based Undergraduate Research Experiences Using Digitized Collections

Funded by $1million National Science Foundation award.

Begin the Innovator's Journey

- **Equip yourself with tools and practices to solve big problems.**
  - Monthly "lean innovation" workshops are open to the entire GW community
  - Access to mentors-in-residence
  - Ready-to-use classroom modules integrate innovation and entrepreneurship concepts seamlessly into existing curricula
  - https://innovation.gwu.edu/faculty-track



Leverage GW's Institutional Subscriptions

- **Subscribe to receive regular tips for professional development and relevant funding opportunities.**
  - Search funding opportunities, browse curated lists, and create personalized alerts in Pivot. *GW's Research Enhancement Unit can help!*
  - Sign-up for targeted grant calendars and alerts from Hanover.
  - On-demand access to mentoring, tools, and support to be successful in academia from the the National Center for Faculty Development & Diversity. *Free with GW's institution-wide license!*

A Culture of Disclosure and Transparency

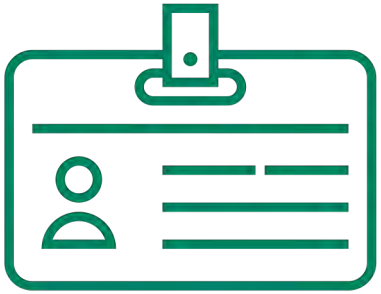
- **Managing multiple projects—and managing potential conflicts between projects—is a routine part of conducting original research and scholarship.**
  - Conflicts are not inherently bad, but failure to disclose them is. Disclosure is the best way to protect the scholar and GW's research enterprise.
  - A number of GW units can help review projects, identify issues to monitor, and develop management plans.
  - Initiatives are underway to make disclosure easier and more centralized.
  - When in doubt, contact the Office of Research Integrity at rescomp@gwu.edu.

Enhanced Research Security Program

- **A growing federal focus on research security and foreign influence.**
  - Fast-moving, complex and expanding regulatory environment for required disclosures.
  - Anticipate rigorous requirements for disclosure and tracking of outside activities, support/funding, financial interests and foreign travel.
  - Applies to scholarly activity across the academic enterprise, not just recipients of federal funding.
  - When in doubt, contact the Office of Research Integrity at rescomp@gwu.edu.

The Benefits of a Digital Persistent Identifier (DPI)

- **A digital persistent identifier (DPI), such as an ORCiD, lets scholars control their publication and profile data throughout their career, even if they change their name or institutional affiliation.**
  - Ensures reliable citation, attribution, and linking of research outputs.
  - ORCiD can be linked to SciENcv to save time when building proposal documents for NSF and NIH submissions, among other benefits.
  - Create your ORCiD / Link your existing ORCiD to GW
  - GW librarians can assist you! (Gelman / Himmelfarb)



Share Your Expertise and Accomplishments

- **Enhance your reputation, reach new audiences, and influence the conversation.**
  - Promote scholarly findings
  - Author op-eds
  - Create visuals to explain your work (cover art, proposals, etc.)
  - Get training for media interviews
  - Reach out early! Each school has a communications lead in addition to central support
  - https://research.gwu.edu/communicating-gw-research

10 Tips for a Successful Scholar

1. To fail to plan, is to plan to fail.
2. Develop effective time management skills (make time for writing).
3. Learn to say “no”.
4. Identify mentors and advocates early in your career.
5. Keep a log of all your activities.
6. Join the appropriate professional societies early.
7. Network.
8. Take full advantage of GW’s proximity to many resources, such as funding agencies, national labs, museums, etc.
9. Be inquisitive, ask questions.
10. Don’t be afraid to ask for help, we all want you to be successful.

10 Tips for Successful Grantsmanship

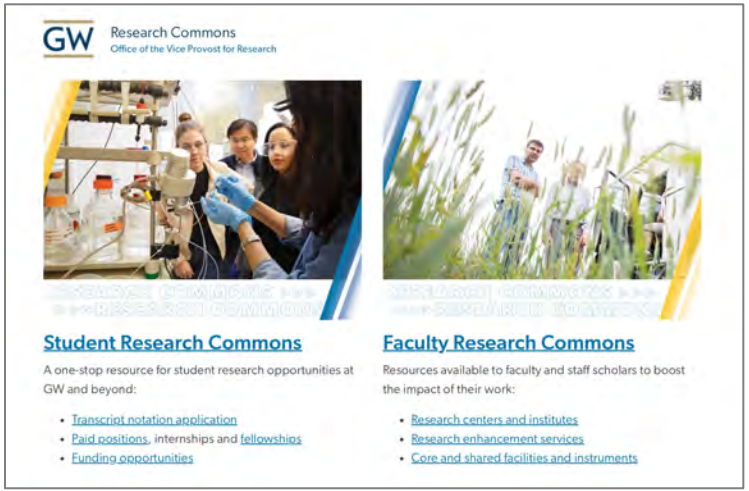
1. Be novel, but not too novel.
2. Include the appropriate background and preliminary data, as required.
3. Identify the appropriate funding mechanism.
4. Follow sponsor and GW guidelines carefully.
5. Be concise, clear and complete.
6. Reviewers are people, too.
7. Planning: timing and internal review are important.
8. Get to know the sponsor/agency grants officials.
9. Become a grant reviewer early in your career.
10. Accept rejection and deal with it appropriately.

Excerpted from "Ten Simple Rules for Getting Grants"; PLOS Computational Biology; Philip E. Bourne and Leo M. Chalupa
https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1378105/

Coming Soon!

GW Research Commons

- Web portal featuring resources, events, and support



"Spark to Impact" Series

- Orientation sessions presented by units that provide direct support to GW researchers and scholars
- Schedule to be announced; throughout Fall 2023

GW RESEARCH

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Contact Us

Office of the Vice Provost for Research (OVPR)
https://research.gwu.edu
askovpr@gwu.edu

OVPR Leadership
https://research.gwu.edu/leadership

Office of Research Integrity (ORI)
https://researchintegrity.gwu.edu
resinteg@gwu.edu

Office of Sponsored Projects (OSP)
https://sponsoredprojects.gwu.edu
OSP Helpdesks

Welcome to GW!

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Appendix:

Resources throughout the Research and Scholarship Lifecycle

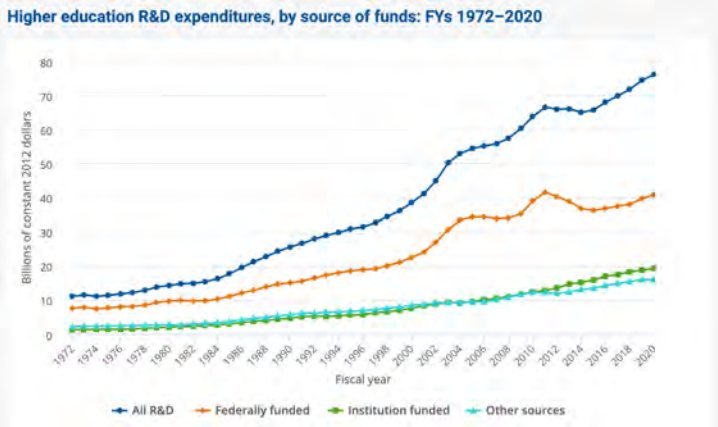
Definition of a Sponsored Project

- **Sponsored projects...**
  - are activities that are sponsored, in whole or in part, by sources external to GW;
  - have a stated expectation for either performance and/or reporting beyond simple stewardship of funds;
  - are reviewed and approved by OVPR; and
  - are fiscally setup and managed through GW's financial system.

- **Read GW's Policy on Categorization of External Funding**

Find External Funding

- **Pivot**
  - Searchable database of funding opportunities from a variety of sources. Allows user to receive automatic updates on customized, saved searches.
- **Research Enhancement Unit**
  - REU provides 1:1 consultations to identify funding sources/mechanisms and get the most out of the Pivot database.
- **Philanthropic Support**
  - GW's Office of Corporate and Foundation Relations (CFR) works with external partners to support faculty research.



Source: https://ncses.nsf.gov/pubs/nsf22312

Intramural Funding

Seed funding with the goal of securing external funding and garnering external recognition.

- **University Facilitating Fund**
  - UFF funds new projects and activities that will have significant impact in a scholar's field
- **Cross-Disciplinary Research Fund**
  - CDRF supports collaborative partnerships between scholars from two or more diverse departments
- **Humanities Facilitating Fund**
  - HFF funds new scholarship in the humanities
- **University Seminars Series**
  - USS provides support for sustained exploration of issues that cross traditional disciplinary boundaries

Research Enhancement Services

➢ Funding Roadmaps

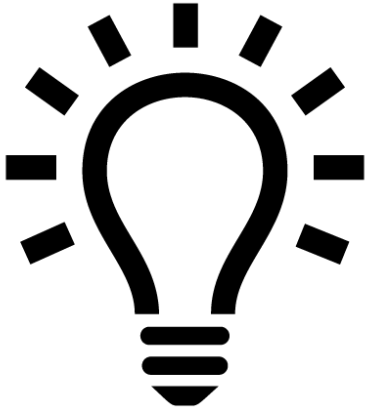
- Identify targeted opportunities to expand and diversify sources of research funding.

➢ Proposal Editing

- Technical and scientific proposal editing services to GW investigators applying for federally-sponsored research opportunities.

➢ Workshops and Seminars

- Grant writing seminars, grantsmanship training, and orientations to GW systems.



Develop and Submit Proposals

➢ Research Enhancement Unit (REU)

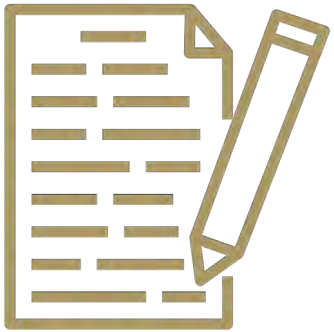
- REU provides support for finding funding opportunities and editing services for federal research proposals. Available at no cost to the PI!

➢ Research Administration Pods

- Notify your research administration pod that you intend to submit a proposal; then work with your assigned pod staff to finalize the submission.

➢ Office of Sponsored Projects (OSP)

- OSP works closely with the research administration pods and is responsible for submitting proposals to the sponsor.



If your funding opportunity limits the number of applications from any one institution, please review the guidelines for limited submission opportunities.

Award Management

The principal investigator (PI) has primary responsibility for the financial and technical aspects of a sponsored project.

- Research Administration Pods
- Office of Sponsored Projects
- Roles & Responsibilities Matrix
  - This document clarifies responsibilities of investigators and administrators, OSP, and other related offices for each phase of a sponsored project. *(GW Login required)*
- Grants and Contracts Accounting Services
  - GCAS supports effort certification, post-award financial compliance, invoicing, and other accounting services.

Electronic Systems for Sponsored Research Administration

GW myResearch

- [myResearch]
  - Proposal creation, reviews and SF424 submissions
  - Award modifications
  - Research agreement submission, review, negotiation and execution
  - Subaward creation
  - New award intake, acceptance and setup

- [PI Dashboard]
  - Summary and detail reports, interactive visualizations and transaction details
  - Up-to-date information on a grant's expenditures
  - Dynamic reporting
  - Exportable information
  - Accessible anywhere with a single login

What are my roles and responsibilities as a PI?

Dean / Research Dean / Department Chair

- Set strategic direction
- Commit faculty effort to projects (balancing other academic and administrative commitments)
- Provide necessary resources, including space
- Mentor faculty

Principal Investigator (PI)

- Conception and strategic direction of research program
- Teaching and service activities
- Requests for funding including proposals and award changes
- Ensuring compliance with federal, state, sponsor and university policies, laws and regulations to include progress reports and approval of financial transactions

Department / Research Administrators (Pods)

- Assist and support the PI in all aspects of research administration, including proposal submission, personnel transactions, expenditures, subaward invoice approvals, financial monitoring, etc.

Your department chair, associate dean for research, or research administration pod leader can provide additional information about your role as a PI.

Can I sign agreements pertaining to my own research?

- The short answer is no...
- Research proposals and awards require institutional approval by a GW authorized representative.
  - According to university's bylaws, only certain individuals are authorized to contractually bind the university: the president, the provost, and the EVP CFO, or such other person or persons as may be authorized by the Board of Trustees. Pursuant to their delegation, the EVP CFO has further delegated the authority to sign sponsored research grants and contracts to VPR and her/his designees.
- All proposal, award, subaward, certifications and related documents must contain a university-authorized approval or signature, including:
  - Confidentiality agreements
  - MTAs
  - DUAs
  - Teaming agreements
  - Collaboration agreements
  - Other agreements on behalf of the university

Purchasing and Hiring on a Sponsored Project

- Goods and Services, including Equipment
  - Procurement and Travel Services offers multiple methods for purchasing goods and services. The method varies depending on the nature and amount of the purchase involved.
- Travel
  - Review reimbursement policy and special considerations for international travel.
- Personnel
  - Human Resource Management and Development manages the staff hiring process.
  - Office of Graduate Student Assistantships and Fellowships
  - GW Student Employment
- University Payables
  - Centralized invoice processing and payment function.

Use, Manage and Share Data

Data Transfer and Use Agreements

- The Office of Research Integrity can assist in the drafting of Data Transfer and Use Agreements (DTUAs) or provide an approved template. ORI must review and approve all DTUAs.

Data Sharing and Management Plans

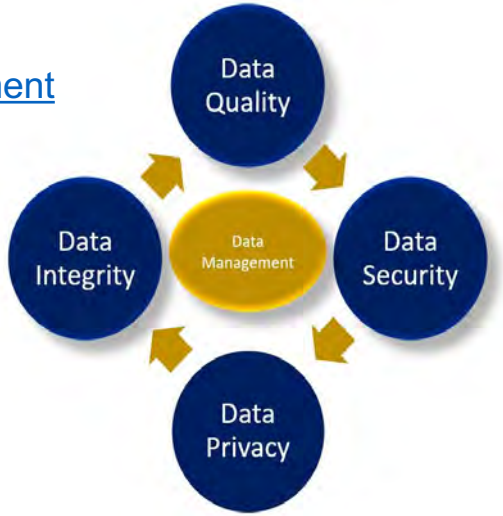
- GW Libraries has resources for building Data Sharing and Management Plans.

Data Privacy

- The GW Privacy Office answers questions related to compliance with privacy laws, regulations and policies, and best practices for data protection.

High-Performance Computing

- Research Technology Services supports computationally intensive activities for research and teaching.



Research Integrity

Research Integrity Officer

- Responsible for the stewardship and administration of the university's Responsible Conduct of Research program
- Reviews allegations of fabrication, falsification, or plagiarism in proposing, performing, or reviewing research, or in reporting research results

Responsible Conduct of Research

- Online content and in-person programming of the core norms, ethics, principles, regulations, and rules governing the practice of research.
- Research ethics trainings offered year-round via the CITI Program.

Research Security

Research security is a broad term that refers primarily to national security concerns surrounding research involving certain types of sensitive data, intellectual property, export-controlled information, conflict of interest and disclosure of "Other Support", travel security; foreign influence, and cybersecurity.

➢ Export Controls

- Compliance with regulations that govern the shipment or transfer, by whatever means, of controlled items, software, technology, or services out of the U.S.
- GW has implemented an export control compliance program to reduce the risk of export control violations. All faculty and students must be aware of, and are responsible for, the export control implications of their work and must ensure their activities conform to export control laws and regulations.
- Questions about export controls can be directed to GW's Export Control Officer by phone (202-994-2891) or by email (ExportControl@gwu.edu).

How do I secure my research from undue foreign influence?

GW is committed to enhancing the global reach of our research and therefore supports and encourages international collaborations, interdisciplinary research, and the global exchange of ideas.

Recent federal oversight activities have highlighted concerns about foreign threats to U.S. intellectual property and the integrity of research endeavors, including:

- diversion of intellectual property to foreign entities;
- disclosing confidential grant application information to third parties;
- failure of researchers to disclose research resources and support provided by other organizations, including foreign entities and foreign governments; and
- threats to national security and economic competitiveness.

GW's Efforts to Secure Research

Learn more about GW's efforts to safeguard unauthorized access and sharing of intellectual property and confidential information, ensure appropriate use of federal funding, and comply with sponsor requirements.

- Watch videos on undue foreign influence considerations during various stages of the research lifecycle.
- Contact resinteg@gwu.edu for more information.

Research Safety

Biosafety, Radiation Safety, Laser Safety, and Animal Welfare

- The Office of Research Safety (ORS) provides training, consultation, and services in the areas of biosafety, radiation safety, laser safety, and animal welfare.
- ORS provides administrative support to the Institutional Biosafety Committee (IBC), the Radiation Safety Committee (RSC), and the Institutional Animal Care and Use Committee (IACUC).

Chemical Hygiene and Hazardous Waste

- The Office of Health & Safety provides training, consultation, and services in the areas of chemical safety and hazardous waste management.

Humans, Animals and Stem Cells in Research

Protection of Human Participants

- The Office of Human Research (OHR) provides guidance, education and oversight for the protection of human participants in research. It provides administrative support for GW Institutional Review Boards (IRBs).

Animal Care and Services

- Space, equipment and care for animals used for research and teaching purposes; training for PIs and research staff.
- The Office of Research Safety (ORS) provides administrative support to the Institutional Animal Care and Use Committee (IACUC).

Shared Research Facilities and Other Support

Core Facilities

- Shared research facilities at GW include the GW Nanofabrication and Imaging Center and labs/centers that support biomedical research, among others.

Clinical Research Office

- Support for efficient execution and management of clinical research while ensuring the highest level of research participant safety.

Libraries and Academic Innovation

- Supporting teaching, learning, and research, including consultations for data management, ORCID iDs, and biosketches.

Research Technology Services

- High-performance computing, data storage, cloud/data infrastructure, and technology consultations, among other support and services.

Disclose Innovations / Launch a Venture

➢ Disclose and Protect an Invention or Technology

- Report inventions, software, research tools and other items developed through your research to the Technology Commercialization Office (TCO).

➢ Licensing an Invention or Technology

- TCO partners with companies to develop products based on GW's cutting-edge research.

➢ Supporting Entrepreneurs

- The Office of Innovation and Entrepreneurship provides programming around innovation, education, venture creation, and making connections.

➢ I-Corps at GW

- A National Science Foundation-funded program that provides real world, hands-on training and funding to translate innovations into successful products.

Publish and Promote Your Research

Scholarly Writing

- GW Libraries assists scholars with the research and publishing process.
- Himmelfarb Health Sciences Library provides a guide to scholarly publishing.

Research Communications

- Work with the Communications and Marketing team to create research illustrations, promote your work, and publish op-eds.

CREATE Digital Studio

- Learn digital storytelling skills to communicate research and ideas.

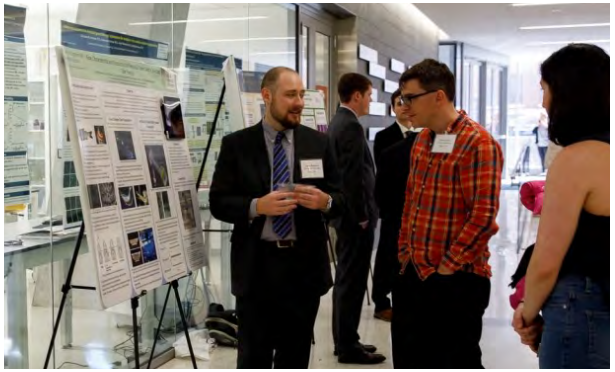
Faculty Research Awards

- Nominate colleagues to be recognized for research contributions and mentorship.

Students & Trainees

Engaging Undergraduates in Mentored Research

- GW Student Research Commons is a one-stop resource for students to find research opportunities and events at GW and beyond.
- Transcript Notation for Undergraduate Research Experiences
- Faculty Guidance for Offering Research Internships
- Center for Undergraduate Fellowships and Research
- Hiring Federal Work Study Students



Student and Trainee Organizations

- GW Undergraduate Review
- GW COMPASS (Graduate students)
- GW Postdoc Association

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