

### **RESEARCH UPDATE**

**GW Faculty Senate** 

Pamela Norris Vice Provost for Research

February 9, 2024



#### Overview

- A Year of Impact
- Looking Forward
  - Forging and Strengthening External Collaborations
  - Growing and Supporting GW's Research Enterprise
- Appendix: Additional Impact and Sponsored Research Metrics

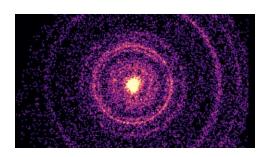
#### A Year of Impact



Cicada Cycle



Meat Bacteria and Health



Gamma-ray Bursts



Al Avatars and Race



Global Trade and the Solar Industry



New Drug Combo to Treat Cancer

#### A Year of Distinction



Akos Vertes (CCAS) & Chet Sherwood (CCAS)



NSF CAREER Awardees
Gina Adam (SEAS), Ling Hao
(CCAS), Fang Jin (CCAS) & Arkady
Yerukhimovich (SEAS)



Fulbright Scholars
Hugh Agnew (ESIA), Reid Click
(GWSB), Ian Toma (SMHS),
Gerald Feldman (CCAS) & Laura
Engel (GSEHD)



NLJ Lifetime Achievement Award Alan Morrison (GW Law)



James S. Jackson Memorial

Award

Lisa Bowleg (CCAS)



Johan Skytte Prize in Political Science Martha Finnemore (ESIA)



bell hooks Legacy Award
Alexa Alice Joubin (CCAS)



2023 Highly Cited
Researcher
Herman Aguinis (GWSB)



National Academy of Inventors Fellow Charles Garris, Jr. (SEAS)

#### **GW Joins AAU**

Arizona State University • Georgia Institute of Technology • Indiana University • Michigan State University • The Ohio State University • The Pennsylvania State University • Purdue University • Rutgers University – New Brunswick • Stony Brook University – The State University of New York • Texas A&M University • University at Buffalo – The State University of New York • The University of California, Davis • University of California, Berkeley • University of

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**America's Leading Research Universities** 

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Washington University • The Johns Hopkins University • Massachusetts Institute of Technology • New York University • Northwestern University • Princeton University • Rice University • Stanford University • Tufts University • Tulane University • The University of Chicago • University of Miami • University of Notre Dame • University of Pennsylvania • University of Rochester • University of Southern California • Vanderbilt University • Washington University in St. Louis • Yale University • McGill University • University •

#### **AAU Membership Metrics**

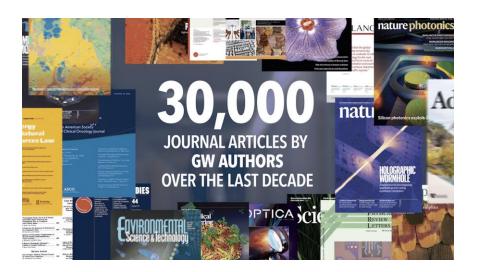


#### Celebrating Academic Excellence



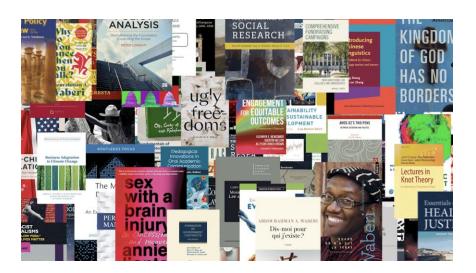
#### A Publishing Powerhouse: Journals

- GW scholars published 3,700+ journal articles, chapters, monographs and more in 2023.
- GW research appeared in Science, Nature, Proceedings of the National Academy of Sciences, the American Journal of International Law and other top journals.



#### A Publishing Powerhouse: Books

- GW scholars published more than 100 books in 2022 and 2023 on a range of topics.
- These works of original scholarship represent years of dedicated effort and wield considerable influence in their respective fields and in the public discourse.



#### **New Cross Disciplinary Initiatives**





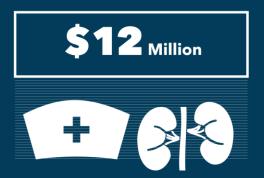


Alliance for a Sustainable Future

**Equity Institute** 

Global Food Institute

#### Highlighted Awards



# Patient-Centered Outcomes Research Institute

Multi-disciplinary, multi-institutional study to improve shared decision making and patient choice for people with kidney failure, especially patients of advanced age.



#### **National Institutes of Health**

Study to investigate how the impact of repetitive head injuries from American football and social determinants of health contribute to later-life cognitive function in adult Black male athletes.

#### **Emerging Strengths: AI & Society**



**National Science Foundation & National Institute of Standards and Technology** Co-lead Institute for Trustworthy AI in Law and Society (TRAILS), focused on developing new Al technologies that promote trust and mitigate risks, while empowering and educating the public.

- NSF Research Traineeship on Trustworthy A.I.
- Hosted Athens Roundtable on Al and the Rule of Law in December 2023
- University Seminar Series on A.I. and the Humanities

#### **Emerging Strengths: Workforce Development**



#### Office of Naval Research

Multi-institutional effort to create a robust, diverse, and sustainable naval engineering workforce by developing dedicated pathways within the greater D.C. metropolitan area.



#### National Institute of Standards and **Technology**

Establish the GW Professional Research Experience Program (PREP), offering unique research opportunities with a focus on recruiting talent from underrepresented groups in STEM.

#### **Leveraging Our Location**



Research!America



**Athens Roundtable** 



**DC Science Writers** 



**Cybersecurity Forum** 



International Women in STEM



University-Industry Demonstration Partnership

#### Innovation & Entrepreneurship

#### **New Global Programs & Engagements**

- MOU with World Business Angels Investors Forum
- Two GW teams among finalists at international pitch competition
- Programs in Korea, Japan, Georgia,
   Ireland, Armenia, Ukraine, Egypt,
   Cambodia, European Innovation Council



#### Innovation & Entrepreneurship

- **Growing New Venture Competition**
- Broader adoption of Lean Innovation classroom modules
- Micro-internships for GW students to work with international founders
- National Academy of Inventors chapter at GW
- Two new clinical trials of GW-invented drugs



#### **Looking Forward**

#### **Enhancing GW's Research Reputation**

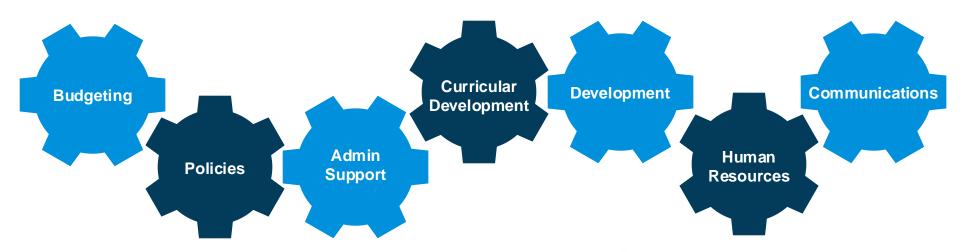
- GW booth at American Association for the Advancement of Science annual meeting
- Hosting live taping of <u>Science Friday</u>
- NSF proposal under development to offer research administration apprenticeship program
- New quarterly GW research e-newsletter
- Educational partnership agreement with Naval Postgraduate School



#### **Looking Forward**

#### **Strengthening the GW Research Enterprise**

... requires cross-functional collaboration and a shared commitment to centering research in all activities.



#### Onboarding New Scholars and Research Staff

- Semester-long Spark to Impact research orientation series
  - Contributions from many units
  - Video-on-demand library
- New faculty survey
- Small group luncheons with new faculty
- GW Research Commons portal



#### **Engagement with Lewis-Burke Associates**

- Help prepare faculty to pursue federal grants
- Continue to grow the university's federal funding portfolio
- > 1:1 consultations, targeted e-newsletters, actionable intelligence for **GW** faculty
- https://research.gwu.edu/engaginglewis-burke-associates



#### Growing and Supporting GW's Scholarly Enterprise

#### Administrative enhancements to support research and scholarship

- Recruited new leader for Office of Research Integrity and Compliance (ORIC)
- Reorganized ORIC and appointed an Export Control Officer
- Expanded Pod support for non-school units
- Offered a robust Responsible Conduct of Research seminar series



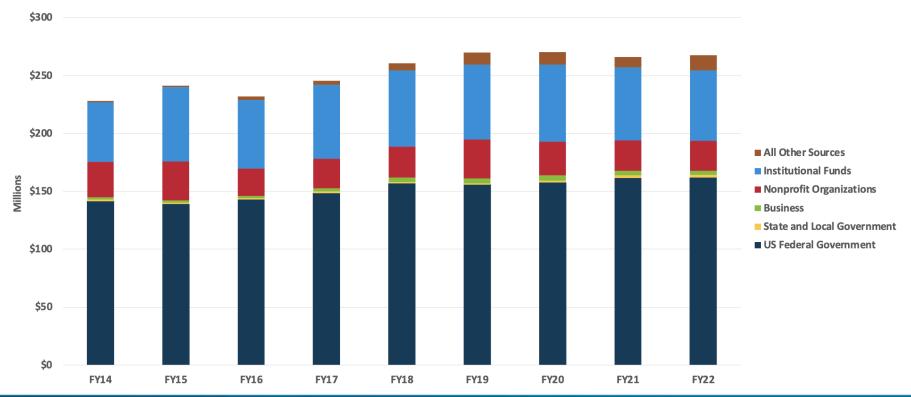


#### Growing and Supporting GW's Scholarly Enterprise

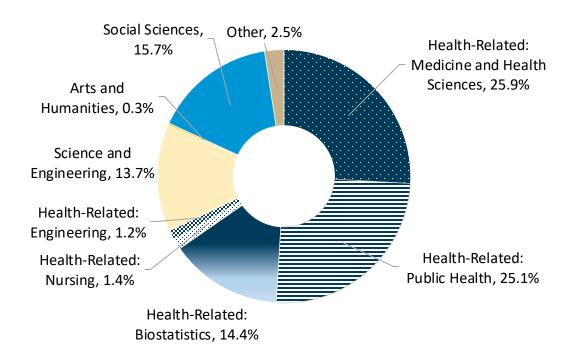
#### Providing support to faculty to boost capacity and impact

- Procured and implemented new digital lab notebook tool (LabArchives)
- Leveraging resources of Hanover Research
- Promoting Federal Work Study as mechanism to staff research projects and engage undergraduates in experiential learning
- Hosting structured faculty writing retreats with University Writing Program
- Hiring Director of Research Development
- New intramural competition, "Center-Scale Seed Fund"

# Total R&D Expenditures by Source (FY14-22) as reported in the NSF HERD survey



#### Total Expenditures by Types of Research (FY23)



Type of Research	Total \$	% of Total \$
Health-Related	\$138.3M	67.7%
Science & Engineering	\$28.2M	13.7%
Arts & Humanities	\$519K	0.3%
Social Sciences	\$32.2M	15.7%
Other	\$6.0M	2.5%

#### **Upcoming Research & Innovation Events**

- February 15-17, 2024 (Denver, CO)
- Science Friday Radio Show @ GW Saturday, March 23, 2024
- GW New Venture Competition Thursday, April 11, 2024
- School-based Student Research Celebrations
  Various dates in April 2024
- <u>GW Research Showcase</u> (University-wide)
  Wednesday, May 1, 2024 (Details coming soon!)



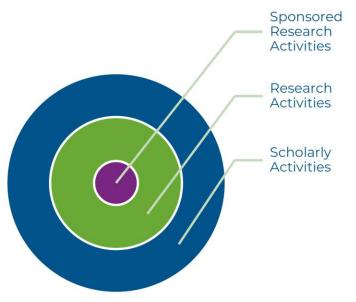
# **THANK YOU!**

## **APPENDIX**

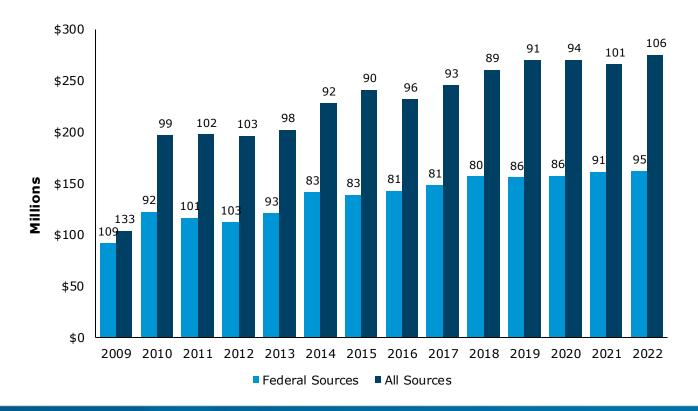
# Strengthening the GW Research Enterprise Responding to Shifting Federal Regulations

- A focus on research security
- Disclosure requirements
- Establishment of a research security program
  - Cybersecurity
  - Foreign Travel
  - Research security training
  - Export control training
- GOAL: Make GW scholar compliance as easy a possible

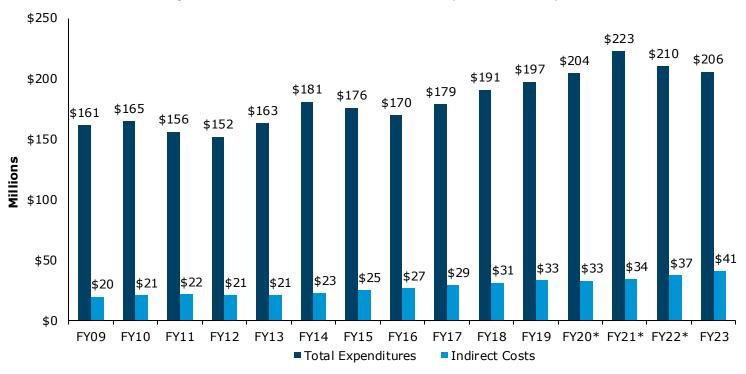
#### **Impact Across the Institution**



#### Research Expenditures with HERD Ranking (FY09-22)

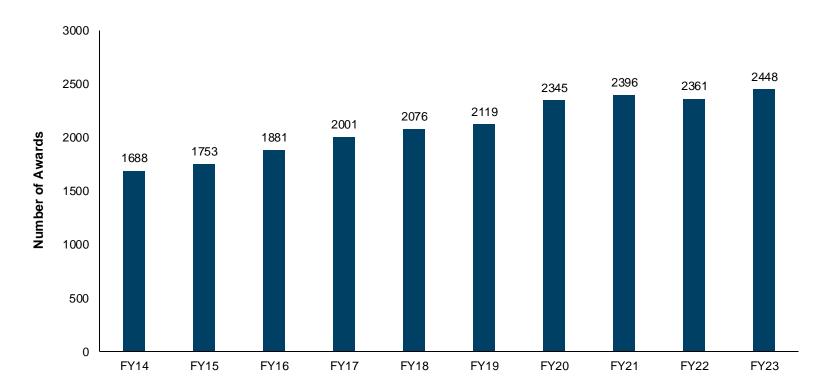


#### Year-End Total Expenditures & Indirects (FY09-23)



<sup>\*</sup>Federal expenditures include \$8.8M in CARES Act funding in FY20; \$27.3M in FY21; and \$12.8M in FY22. CARES Act funding is not included in NSF HERD survey data.

#### Year-End Active Awards (FY14-23)



# THE GEORGE WASHINGTON UNIVERSITY

WASHINGTON, DC