**Announcements**

**NSF rankings show Mason ahead of research funding goals**

The latest figures released by the National Science Foundation (NSF) show Mason’s research funding in the top 25 nationally in the areas of:

- **Social sciences**: 10th among all universities (best in the Washington, D.C., area) and seventh among public universities.
- **Computer and informational science**: 21st among all universities and 13th among public universities in federally funded research.
- **Engineering** continued its impressive gains by moving up five places to 73rd nationally among all universities (rising 69 places since 2018), and advancing four spots to No. 52 among public institutions.

Overall, Mason’s research and development funding was 75th among public institutions and 60th among public institutions without medical schools.

**Click Here to Learn More**

---

**2024 Mason ORIEI NSF CAREER Cohort Support Program**

The Office of Research Innovation and Economic Impact (ORIEI) is launching the 2024 Mason ORIEI NSF CAREER Cohort Support Program. NSF CAREER awards are among the most prestigious awards in support of early career faculty issued from the NSF. We are excited about launching this new program, intended to support our early career faculty applying for 2024 NSF CAREER Awards, through workshops, mentorship and a structured grant writing process. The NSF CAREER program page and solicitation can be found [here](https://example.com).

The attached flyer provides information about the support program, which will kick off the week of February 12th with an Orientation. The program will also include provide:

1. Specialized workshops from NSF CAREER proposal development consultants
2. Identification of a faculty mentor for each participant
3. Panel discussion with Mason CAREER awardees
4. Review and feedback from external experts
This structured program will provide faculty with step-by-step support and expert feedback as they develop their proposals. Faculty planning to submit an NSF CAREER proposal in the 2024 Cycle are strongly encouraged to apply to participate in this program. Applications for the program are due February 5th. The link to the brief application form is in the attached flyer and can be found here: 2024 NSF CAREER SUPPORT PROGRAM.

2024 Energy and Climate-Tech Innovation Policy “Boot Camp” for Early Career Researchers

George Mason University’s Schar School of Policy and Government and the University of Maryland’s Center for Global Sustainability are pleased to invite applicants to participate in their 2024 energy and climate-tech innovation policy “boot camp” for early career researchers. The Mason-Maryland boot camp’s main purpose is to strengthen researchers’ understanding of how energy and climate-tech policy is made, so their research has a greater impact on real-world clean energy and climate innovation outcomes. It is supported by the Alfred P. Sloan Foundation.

A central feature of the boot camp will be face-to-face discussions with key players shaping the energy and climate-tech policy landscape in the United States. These discussions will span Congress, the executive branch, international organizations, NGOs, businesses, and other players. The 2024 event will build on the success of prior boot camps in 2019 and 2022. The Bipartisan Policy Center’s Energy Program will partner with Mason and Maryland to assist in the creation of a high-quality program.

Click Here to Learn More

GIS Analyst for Northern Virginia Regional Trails, Sponsored by the Institute for a Sustainable Earth

Apply skills in GIS and cartography to enhance regional recreation and transportation trails. GIS data and maps are essential for planning a complete and high-quality regional trail network, enhancing community health activity, and promoting the region’s trail network to boost tourism and reduce road trips to make for a cleaner environment. Collaborate with team members from the Northern Virginia Regional Commission (NVRC) and the Institute for Sustainable Earth to assist with assessing existing jurisdiction bike/ped trails GIS data schemas and attribute values, along with researching national data standards. Provide recommendations on a regional data standardization solution that integrates the data and attributes existing across the region’s GIS layers, while at the same time seeking to adhere to national data standards for the region’s trails data. Migrate/maintain data and produce a technical report and GIS/map products that provides research findings.

Required Skills: Advanced undergraduate student pursuing a degree in Geography with a focus on GIS. Must be versed in basic research techniques, technical writing, GIS Desktop, ArcGIS Online, database design, and MS Office suite. **Applicants must be approved for Federal Work Study.** Accepting applications immediately, and the position is open until filled. Pay rate: $14.00/hour, for ~10 hours a week through the end of the Spring 2024 semester.

Questions? Contact Dr. Jeremy Campbell at the Institute for a Sustainable Earth: jcampb30@gmu.edu.
Summer Graduate Research Fellowships with Organizations on the Front Lines of Sustainability

Challenges

Co-sponsored by Mason’s Graduate Division and the Institute for a Sustainable Earth, the 2024 Sustainability Summer Fellowships for Graduate Research Partnerships program provides financial support and professional development to graduate students who will work with partner organizations on applied research projects. This opportunity is designed to connect students with organizations making a positive impact on our world. Together, fellows and partner organizations will identify research and action priorities for the period of the fellowship, allowing students to gain valuable experience and organizational access. Participants in the Sustainability Summer Fellowship program will then be able to leverage this research partnership in their dissertation or master’s thesis work.

In the News

- 2024 President’s Report
- Mason engineers develop “rusty” coffee grounds to remove pollutants from water
- Mason, Prince William County Public Schools expand EIP collaboration
- Tech inefficiencies, piles of (electronic) paperwork, and increased patient volume contribute to burnout of primary care physicians, study finds

Events

Tech Duels is excited to bring you our next Tech Duels debate, Securing Tomorrow: Artificial Intelligence vs Augmented Intelligence on Feb 7th from 6-9pm at George Mason University (3351 Fairfax Dr, Arlington, Va). This event is brought to you by Arlington Economin Development Agency, Ace of Cloud and Rapid Talent.

This debate will focus on the future of AI and Augmented Intelligence and which of these technologies will dominate our future. Will it be intelligence with human intervention or without. Augmented intelligence offers suggestions to humans to take decisions unlike artificial intelligence, which works through data and takes anonymous decisions.

Wednesday, February 7, 2024 | 6:00 - 9:00 PM (ET) | Click here to register.
Heather’s Highlights: Each week we will highlight current funding opportunities, alternating between the six ISE Research Themes.

Research Theme 1: Human Health, Well-Being, and Capabilities

The National Science Foundation (NSF) along with the National Institutes of Health (NIH) are soliciting proposals for the Smart Health and Biomedical Research in the Era of Artificial Intelligence and Advanced Data Science interagency program.

The purpose of this interagency program solicitation is to support the development of transformative high-risk, high-reward advances in computer and information science, engineering, mathematics, statistics, behavioral and/or cognitive research to address pressing questions in the biomedical and public health communities. Transformations hinge on scientific and engineering innovations by interdisciplinary teams that develop novel methods to intuitively and intelligently collect sense, connect, analyze and interpret data from individuals, devices and systems to enable discover and optimize health.

Application Due Dates: October 3, 2024
Research Theme 2: Sustainable and Resilient Communities and Ecosystems

Future Earth has released their Program for Early-stage Grants Advancing Sustainability Science (PEGASuS) funded by the Gordon and Betty Moore Foundation’s Science Program.

The Program for Early-stage Grants Advancing Sustainability Science (PEGASuS) seeks to increase knowledge, promote innovation, and establish evidence-based solutions to the world’s most difficult sustainability challenges. PEGASuS brings together researchers from across borders and the natural and social sciences to take creative approaches to exploring the relationships between people and the planet. There are currently two Open Calls for funding.

Application Due Date: Feb 29, 2024

Funding Amount: various

Research Theme 3: Harnessing the Digital Revolution for Sustainability and Education for All

The National Science Foundation has a call out for the Civic Innovation Challenge (CIVIC).

The Civic Innovation Challenge (CIVIC) is a research and action competition that accelerates the transition to practice of foundational research and emerging technologies into communities through civic-engaged research. By addressing priorities at the local scale that are relevant across the US, CIVIC is laying the foundation for a broader and more fluid exchange of research and technology capabilities and civic priorities through joint partnerships involving civic partner and the research community.

Application Due Date: May 1, 2024

Funding Amount: Budgets for Stage 1 are up to $75,000 and Stage 2 Full Awards are up to $1,000,000.

Student Opportunities

RaMP-UP Fellows Program

Get a stipend of $32,000 for a full year of participation. RT ticket to Panamá and lodging while at Smithsonian Tropical Research Institute facilities. Come away with a robust research experience, scientific products, an international professional network, a peer network, and strong mentors to advocate for their careers. Check back soon for 2024/2025 application openings.

RaMP-UP Fellows spend a year engaged in BioDiversity studies with Smithsonian Tropical Research Institute (STRI) Scientists. Embedded in the tropical landscapes of Panamá, practicing cutting-edge and rigorous methodologies to make a lasting impact on Tropical BioDiversity.

Click here to learn more.

National Geographic: Internships at the Society

Every year, the National Geographic Society provides a number of students with a paid opportunity to spend the summer exploring and learning with us. We offer a diverse range of dynamic internships
that are designed to offer a well-rounded experience. Our goal is to provide engaging, educational, and work-related opportunities for both undergraduate and graduate students.

Click here to learn more.

**EnergyTech University Prize**

EnergyTech UP aims to cultivate the next generation of energy innovators while accelerating the transfer of energy technologies to market. This prize seeks to attract the talented students of today and help them develop into the engineers, policymakers, entrepreneurs, market analysts, and project developers of tomorrow. Multidisciplinary student teams develop and present a business plan that leverages National Laboratory-developed or other high-potential energy technologies, including university-developed technologies or other technologies of interest to student competitors.

This prize is sponsored by the Office of Technology Transitions (OTT) at the U.S. Department of Energy (DOE), as well as several other program offices. EnergyTech UP, in partnership with American-Made Challenges, is designed to be approachable, equitable, and scalable nationwide. Winners will be chosen based on the strength of their business proposals. Students interested in participating in this prize will be provided with a curated list of National Lab technologies that are ready for commercialization and that can be used for their business plan.

Click here to learn more.

**NASA MSI Incubator: Wildfire Climate Tech Challenge**

NASA's Wildfire Climate Tech Challenge, part of the MSI Incubator initiative, seeks innovative solutions for wildfire prevention and climate technology. NASA invites students and employees of Minority Serving Institutions (MSIs) to address the escalating issues caused by wildfires exacerbated by climate change. Successful participants will have the opportunity to join a startup incubator program and compete for a prize of $100,000. Additionally, this initiative offers a platform for participants to present their ideas to venture capitalists and NASA experts, furthering the development of technology in the fields of wildfire prevention and climate change, while promoting inclusivity and diversity.

Click here to learn more.

**Global Sustainability Scholars Fellows Program**

The GSS Fellows program offers a 10-week paid immersive training and mentoring with a global sustainability organization. Fellows will gain professional work experience, receive professional mentorship and professional development training, and build an international professional network in sustainability science. We will accept 5 -10 fellows per year to join the GSS community, provide advanced professional development training, and build professional connections that foster opportunities for employment and/or graduate school opportunities.

Click here to learn more.

**The Institute for a Sustainable Earth (ISE)** aims to connect members of the Mason community with others across the Mason community—and with other communities, policy-makers, businesses and organizations—so that, together,
we can more effectively address the world's pressing sustainability and resilience challenges.

The ISE Newsletter provides up-to-date information on conferences, funding opportunities, and research pertaining to environmental science and sustainability. The biweekly newsletter aims to facilitate information sharing among researchers, practitioners, and relevant local, national, and international organization.