Mason SCIENCE

Understand. Innovate. Succeed.

Thursday, July 28, 2022 **science.gmu.edu**

In this Issue

- Message from the Dean
- Mason Science Community
- Research & Discovery
- In the News
- Happening at Mason
- Events



Setting science trajectories

by Fernando Miralles-Wilhelm

Year after year, our College of Science conceptualizes and implements very meaningful outreach programs that spark scientific interest and creativity, while simultaneously broadening one's STEM awareness and research foundation. And two of them are happening now.

The College's FOCUS program, (Females of Color Underrepresented in STEM) is a week-long camp held on the campus of George Mason University each summer. Originally offered for rising sixth through eighth grade girls, the popular program has expanded to include an academy for high schoolers as well.

FOCUS participants engage with collegiate counselors and Mason faculty in different interactive and hands-on STEM workshops to introduce them to such topics as coding, forensic science, and geoinformation systems. On the last day, program participants present what they learned in these workshops in a conference-style setting.

In addition to the week-long FOCUS programs, our college also organizes and offers ASSIP, Aspiring

Scientists Summer Internship Program. Mason ASSIP is one of the country's premiere immersive and transformative STEM research experiences for hundreds of high schoolers and undergraduate students involving more than 100 Mason STEM research faculty and staff mentors across three of our campuses. Selected participants work one-on-one with Mason researchers representing science as well as other STEM disciplines at Mason.

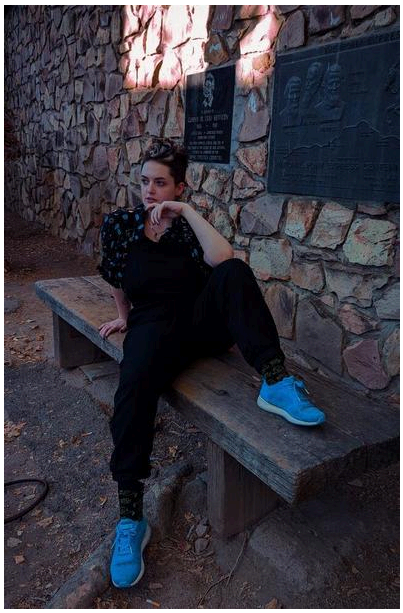
As part of the 8-week full-time internship, participants gain hands-on experience using cutting-edge, sophisticated equipment and technologies while developing and exercising their scientific writing and communication skills. The ASSIP cohort also explores career choices through discussion forums and meetings with role models while learning how to apply creative approaches to their science, crucial to performing innovative research. Leaders of the program describe student projects as innovative approaches to problems and challenges not yet attempted or solved.

Read full message

MASON SCIENCE COMMUNITY

Incoming doctoral student earns 2022 Graduate Inclusion and Access Scholarship

by Laura Powers



In May, Mason announced the recipients of the 2022 Graduate Inclusion and Access Scholarship for incoming first-generation doctoral students from underrepresented populations. Mathematics PhD student, Sky Ratcliffe, is one of four individuals to earn this scholarship and receive financial support for the upcoming academic year. *Photo provided*.

About Sky

#FacultyFriday highlights Physics and Astronomy Assistant Professor

This past week's #FacultyFriday featured Fereshte Ghahari Kermani, Assistant Professor, Department of Physics and Astronomy at George Mason University. Her research focuses on understanding quantum phenomena in low dimensional materials with a focus on graphene-based nanostructures. She studies novel quantum phases in these structures by a combination of nanofabrication, quantum transport and scanning probe measurements. Throughout her career, her passion has been to discover new physical phenomena in quantum materials and better understand the world around her with hopes these



discoveries make the world a better place for generations to come.

Read Ghahari Kermani's bio

RESEARCH & DISCOVERY

Mason scientists to continue ecological study of Hunting Creek for 2022 to 2023

by Elizabeth Grisham



R. Christian Jones, Professor/Director, Potomac Environmental Research and Education Center (PEREC), Environmental Science and Policy (ESP); T. Reid Nelson, Assistant Professor, ESP, PEREC; Amy Fowler, ESP, PEREC; Benoit Van Aken, Associate Professor, Chemistry and Biochemistry, PEREC; and Randolph McBride, Associate Professor, Geology and Oceanography, Atmospheric, Oceanic and Environmental Science (AOES), PEREC, are set to receive funding from Alexandria Renewal Enterprises for: "An Ecological Study of Hunting Creek: 2022-2023."

More on this research

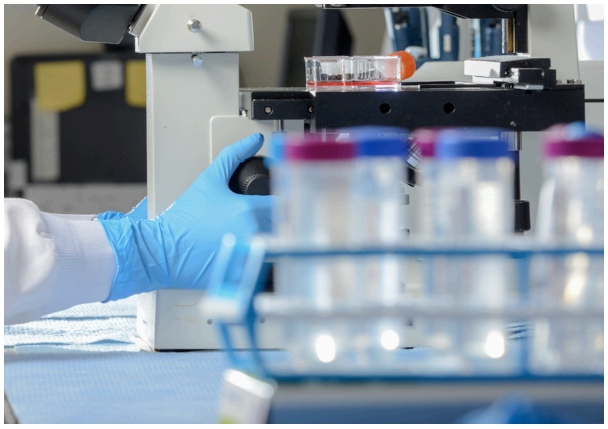
IN THE NEWS

Mason scientist discusses the politics of climate change

Jagadish Shukla, Professor, AOES, spoke to *CGTN America* on the impacts of climate change being felt around the world. Political interests, however, have stalled real reform on climate policies.

Watch the full segment





Center for Infectious Disease Research helps create COVID antibodies

by Kamal Saini

A new study, performed in part by scientists in Mason's Center for Infectious Disease Research, found that hen eggs may be the key to a new method for creating antibodies against COVID-19.

Read about the study

UN Foundation Launches Thomas Lovejoy Memorial Press Fellowship

by Megan Rabbitt

A new fellowship, named in honor of the late Thomas Lovejoy, will send selected reporters to the Amazon's longest-running biodiversity research project to provide an opportunity to examine the effects of climate change firsthand.



More on the fellowship

Happening at Mason

RAMP Grants and Agreements module now live

by Meghan St. George

Faculty–please note that as the module is now live, process changes will occur making it even more critical to follow proposal timelines and deadlines. Some of those changes include:

RAMP Grants:

- This is the official live link to the modules. You will log in via Mason's single sign-on using your Mason user ID and password.

The RAMP Grants link replaces the former "Request for Proposal Assignment Form."

- Begin your proposal by logging into RAMP Grants and selecting the "Create Funding Proposal" option on the top left of the dashboard. You will go through a series of dynamic Smartforms with very similar information requested to our prior system. Any initial information you enter can be changed during the proposal preparation process.
- View the "Create a Funding Proposal" video through Mason Leaps.

If you have not done so already, please view the short Introduction to RAMP Video for additional details. You can also visit the RAMP website to stay up-to date on the project and email the project team with questions. RAMP training for the Mason research community is available in MasonLEAPS.

Please do not hesitate to reach out to your research administrator for support during this transition period or the RAMP team for any assistance.

Review the 'step by step' guide

Participate in the Stearns Center First Year Five



The First Year Five is a program for new faculty run by the Stearns Center for Teaching and Learning. George Mason University has a deep commitment to inclusivity in all aspects of university life, and faculty's work in designing and teaching courses is a fundamental aspect of that dedication. The Stearns Center, with support from the ARIE Project, the Inclusive Excellence Council, and the Diversity Office, invites new faculty to join this endeavor, increasing their own capacities as teachers while building a network of like-minded peers across the university, starting in their very first weeks at Mason.

Faculty who participate in First Year Five will be invited to identify and participate in five hours of work that is intended to improve the anti-racist, inclusion, and equity strategies they use to teach at Mason.

Learn about the program



Science Communication Training for Faculty, Post-Docs, and Graduate Students

August 1 to August 3, 2022 | 9 a.m.

Faculty in communication and psychology at Mason are offering free science communication training this summer. Participants learn to communicate with audiences about the value and importance of their work as well as science more generally. Registration required.

Mental Health First Aid Training

Aug 9, 2022 | 9 a.m. to Aug 10, 2022 | 1 p.m. | Virtual

Mason's Student Health Services and the Center for the Advancement of Well-Being are pleased to offer Mental Health First Aid Training at no cost to members of the university community (faculty, staff, students). Registration required.

SAVE THE DATE: ScienceConnect 2022

September 13, 2022 | 12:30 to 4:30 | Fairfax Campus and September 15, 2022 |11:30 to 1:30 | SciTech Campus

Meet students, discuss your programs, and share research and professional opportunities with free food and chances to win Mason Science SWAG.

Sayas Numerics Day 2022 (formerly DelMar Numerics Day)

September 17, 2022 | 9 a.m. to 6 p.m. | University of Maryland, Baltimore County

Join Mason and other organizing institutions for this annual event to connect researchers of computational mathematics in VA, MD, DC, DE and adjacent areas and to provide opportunities to students, postdocs and other early career researchers.

Society for Industrial and Applied Mathematics (SIAM) Sectional Meeting

November 4, 2022 | Noon to 5 p.m. | Virginia Tech Research Center

The Society for Industrial and Applied Mathematics (SIAM) Washington D.C. Section invites you to attend the section meeting. The event consists of two keynote talks and panelists from three funding agencies: National Science Foundation, Air Force Office of Scientific Research, and Office of Naval Research. There will also be a contributed poster session. This is a unique opportunity to network, learn about new research areas, and to know what funding agencies are looking for. Registration required.

See Full Calendar

Stay Connected

Read the College of Science's latest annual report

© 2022 George Mason University
College of Science
science.gmu.edu

Share this email:



Manage your preferences | **Opt out** using **TrueRemove®**
Got this as a forward? **Sign up** to receive our future emails.
View this email **online**.

4400 University Drive
Fairfax, VA | 22030 US

This email was sent to .
To continue receiving our emails, add us to your address book.

Subscribe to our email list.