Mason Science On the Rise

by Fernando Miralles-Wilhelm

Some have called George Mason University a best kept secret, yet our hard-working faculty, staff, and students consistently demonstrate what we have known all along, Mason’s College of Science offers accessible, accommodating, innovative, and impactful graduate STEM educational and research experiences with top faculty in state-of-the-art science laboratory and research facilities.

Rankings and labels don't define a program, yet they do influence brand perception of that program and its people. US News and World Report recently released its ever-anticipated graduate program rankings and our entire Mason Science community has good reason to celebrate as we are on the rise.

One might guess a university like Mason so close to Washington DC and the Pentagon would contribute to a stellar reputation for our policy, law, cyber security, and business programs (yes, they are very highly regarded). Yet that access to federal partners, national and international organizations, combined with the commitment to community also carries over to those seeking strong scientific collaborators. For example, our science partners include EPA, NASA, NIH, NOAA, NSF and the
More on the center
departments of Defense, Justice, Education, the Smithsonian, as well as many branches of the US military.

Many Mason Science programs significantly advanced in the rankings from last year; take our biological sciences, which rose 71 spots to No. 119 and kudos to chemistry and biochemistry for achieving their rankings related goal two years ahead of schedule. Here is a sampling of our notable graduate programs on the list.

- **Geology**: No. 113 nationally, No. 81 among public institutions.
- **Mathematics**: No. 115 nationally, No. 72 among public institutions
- **Biological Sciences**: No. 119 nationally, No. 66 among public institutions.
- **Physics**: No. 132 nationally, No. 78 among public institutions.
- **Chemistry**: No. 165 overall, No. 107 among public institutions.

I am thrilled to congratulate the department chairs, associate chairs for research, our graduate program coordinators, along with all the faculty, staff, and students involved with these programs on achieving these notable accomplishments.

Read full message

Virginia Climate Center to help local communities meet climate challenges

*by John Hollis*

George Mason University will bring its array of resources and expertise to bear in the state's efforts to increase resilience to the impacts of climate change with the creation of the Virginia Climate Center. According to the recent Richmond Times Dispatch op-ed by Jim Kinter, Professor, Atmospheric, Oceanic and Earth Sciences and Director, Center for Ocean-Land-Atmosphere Studies (COLA) within Mason’s College of Science and Mason's Center for Climate Change Communication Director Ed Maibach, local municipal leaders will have access to an unprecedented range of observational data, environmental models, and experts in climate science, sustainability and engineering solution through the center. *Illustration by Getty Images.*
Dylan Nguyen, a computational and data sciences student, was one of 61 student scholar athletes honored recently with the Peter N. Stearns Provost Scholar Athlete Award. An honors student and member of Mason’s men’s swimming and diving team, Nguyen excels in both his studies and sports pursuits.

#FacultyFriday features environmental science and policy adjunct faculty

#MasonScience continues to highlight #EarthMonth with this week’s #FacultyFriday feature, Natalie Howe, Adjunct Faculty, Environmental Science and Policy. Howe’s research focuses on disturbance and recovery in urban plant and lichen communities of urban areas in the Mid-Atlantic Region of the United States. In addition to educating students on mushrooms and molds and society, she works as an Agriculturist at the USDA, where she helps make sure that the fresh food plants we trade with other countries are not carrying pests or diseases that could harm farms. Most notably, Howe helped create and deliver an innovative botanical education program for the State Prison System in New Jersey.

COVID-19 antibody measurement technology assesses virus blocking efficacy

A cross-disciplinary team coordinated by scientists at Mason’s Center for Infectious Disease Research (CIDR), led by Yuntao Wu, Professor, School of Systems Biology, have developed the hybrid alphavirus-SARS-CoV-2 pseudovirus system.
that can robustly express reporter genes in cells within hours to rapidly measure neutralizing antibodies. Ha-CoV-2 pseudovirus was utilized against the COVID-19 virus and its variants including Alpha, Delta, and Omicron, as well as the currently emerging omicron BA.2 variant.

Explore this research

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**IN THE NEWS**

**NOAA's Weather Program Office features Mason scientists in FY 21 report**

The National Oceanic and Atmospheric Administration's Weather Program Office recently released its Fiscal Year 2021 Annual Accomplishments Report. The report included **Cristiana Stan**, Professor, Atmospheric, Oceanic and Earth Sciences whose work will increase the understanding of weather and climate predictability, improve community driven NOAA modeling initiatives and operational systems, and support public and private usage of NOAA forecast systems. It also highlighted **B.H. Baek**, Research Associate Professor, Center for Spatial Information Science and Systems who is developing the National Air Quality Forecast Capability Community Emission Testbed to improve the accuracy of air quality simulation. *Photo by NOAA on Unsplash.*

Read the report

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**Mason mathematician featured during Mathematics and Statistics Awareness Month**

In honor of Mathematics and Statistics Awareness Month, the Society for Industrial and Applied Mathematics (SIAM) highlighted influential mathematicians and statisticians in their community. This included **Padhu Seshaiyer**, Professor, Mathematical Sciences who currently serves as the Chair of the SIAM Diversity Advisory Committee.
New meditation garden and labyrinth offer Patriots a place for reflection

by Pam Shepherd

Just in time for spring, George Mason University’s new meditation garden and labyrinth are now open to the community. The garden and the labyrinth are visual artifacts signaling Mason’s commitment to the well-being of its community. They can be found between Horizon Hall and the renovated Harris Theatre, adjacent to the new mini amphitheater that sits on the former site of Robinson Hall. Photo courtesy of Cathy Pinskey/Mason Facilities.

50th Anniversary Commemorative Celebration & Mason Vision Day
April 7, 2022 | 11:30 a.m. to 6 p.m. | Johnson Center Atrium, Fairfax Campus
Please join us as we commemorate 50 years of faculty, staff, and student achievement; alumni success; and community impact and support. Register.

Geology Seminar featuring Tom Hansell
April 7, 2022 | 4:30 to 5:45 p.m. | 1309 Exploratory Hall and Virtual
Join Tom Hansell, Appalachian State University, for a lecture titled “Documenting After Coal”.

Colloquium Speakers Series
April 19, 2022 | Virtual
Join Dr. Rosemarie Booze from University of South Carolina for a lecture titled “Post-acute sequelae of HIV-1 or SARS-CoV-2 in the CNS”. Contact Gwen Cox for Zoom details.

General Faculty Meeting with President Gregory Washington
April 20, 2022 | 3 to 4:15 p.m. | Merten 1201 and Zoom
This faculty meeting is an opportunity to engage with and hear from the President, Provost, and key university leaders in a public forum on institution-wide initiatives, as well as participate in discussions on several issues that are important to the general faculty.

Mason’s CCEE graduation ceremony for students of color
May 7, 2022 | 6:30 p.m. | Dewberry Hall
Graduates have the option to attend in person or virtually and are welcome to bring up to three guests. To
participate, sign up to attend via Mason360 or the event's registration form by April 8 2022 at 5 p.m. (EST).