Scientific research impact and engagement takes much effort

*by Fernando Miralles-Wilhelm*

Scientists today have many responsibilities; as we develop our research ideas, test our various hypotheses, and conduct our experiments, we must work diligently to influence and keep abreast of progress and policy within our areas of expertise. In addition, as educators, we must also impart this knowledge to the next generation of scholars and researchers to impact future practices.

As an administrator, I often have opportunities to share the many successes of our Mason Science community. Whether we are developing COVID-19 vaccines, discovering exoplanets, or skillfully and successfully educating the next generation of the STEM workforce during a global pandemic, there is much to share. Over the past year, in addition to our impactful discoveries, I’ve been extremely impressed with the steady stream of our published work by both faculty and students, the many global colloquiums and conferences our faculty have coordinated, and the invaluable mentoring programs we’ve fostered. In such a thriving scientific community, I can’t help but be inspired to not slow down my work as a researcher and continue the work in my field of interest: water.
Join us and spread the word about ScienceConnect 2021

Join us Thursday, February 25 from 1 to 3 p.m. for ScienceConnect to take a break with trivia and hear from peers about their current research. Please share the event with your students and encourage them to participate, connect, and learn about research opportunities. Registration required. Download the event PDF to share information with students.

#FacultyFriday highlights the work of Kelly Knight

Meet Mason Forensic Science Program Associate Professor Kelly Knight. An expert in both forensic serology and forensic DNA analysis, she has testified in several court cases and is active in the forensic science community.

In addition to her work as a professor, Knight serves as the advisor of Mason's Women of Color in STEM organization and volunteers for the organization STEMNOIRE, taking time to champion the representation and professional development of women of color in STEM.

#MasonScience is proud of this amazing professor's commitment to her field and our community. Be sure to check out and encourage your students to attend the upcoming Women of Color in STEM meeting on Feb. 18 at 7 p.m.
Weigel and collaborators developing Python tools to help scientists view heliophysics data

*By Elizabeth Grisham*

Robert Weigel, Associate Professor, Physics and Astronomy, and his collaborators are developing a suite of Python tools that will allow scientists to easily view and explore heliophysics data in 3-D.

For the software development side of the project, the researchers will (1) create a set of Python functions that use existing SpacePy and HAPI libraries to read in measurements and simulation output and use the Python/ParaView API to render the data; (2) create a library of functions that produce 3-D renderings of data in a way that is useful for domain scientists; and (3) develop a set of functions that allow for common and basic 3-D data reduction and manipulation that can be used for exploring 3-D data renderings.

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**IN THE NEWS**

School of Systems Biology professors publish study on the MMR Vaccine and its effects on COVID-19.

The *Journal of Microbiology & Biology Education* by the American Society for Microbiology released a paper by Professor Ancha Baranova and affiliated faculty member Ekaterina Marakasova exploring how and why the MMR Vaccine may aid in reducing the severity of COVID-19 symptoms.

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**Happening at Mason**

Attend the Anti-Racism Inclusive Excellence (ARIE) Task Force town hall

Attend the [ARIE](#) town hall on **Tuesday, February 23 from 2 to 3:30 p.m.** The townhall provides an opportunity for the Mason community to learn more about the taskforce’s work during the Fall 2020 semester and the recommendations for action being put forward to meet Dr. Washington’s charge of “establishing the university as a national exemplar of anti-racism and inclusive excellence”. The town hall is an invitation to all members of our community.
Colloquium on Computational Social Science/Computational Data Sciences
February 19, 2021 | 3 to 4:30 p.m.
Hear a discussion about Timothy R. Gulden, Gavin S. Hartnett, Raffaele Vardavas, and David Kravitz’s recent paper: Protecting the Most Vulnerable by Vaccinating the Most Active.

Mason Science Series: Rising to the National and International COVID-19 Challenge
February 23, 2021 | 4 to 5 p.m.
Join us to hear Biology’s Aarthi Narayanan share the latest developments in ongoing efforts to combat COVID-19.

Session proposal DEADLINE: Mason’s 2021 Innovations in Teaching & Learning (ITL) Conference
February 24 | 5 p.m.
The request for speakers and session proposals for Mason’s 13th annual Innovations in Teaching & Learning (ITL) conference is now posted. Complete the application by close of business on 2/24.

ScienceConnect 2021 (Virtual)
February 25, 2021 | 1 to 3 p.m.
Connect with Mason Science faculty, staff, and students. Be sure to join us for Trivia from 2 to 3 p.m. Participants must register to gain access.