Mason scientists are experts in their fields and make important discoveries every day. From COVID diagnostics, monitoring, and treatment to saving living species and identifying exoplanets, we have a tremendous science enterprise here. At this time each year, we get to see the exciting progress our students made by attending their research poster presentations or when hearing their dissertation defenses.

As a research university, we strive to involve students in our research activities early on. The Mason science robust research portfolio sits on a solid foundation created by our accomplished faculty. Our faculty and graduate level mentors cultivate exciting research experiences which power the discoveries our students make because our students are heavily involved in all aspects of the research process.

This exciting research and learning doesn't happen in a vacuum. Our research is highlighted in hundreds of media outlets, scientific publications (294 last year alone) and conferences. And we share often amongst ourselves as well. As an example, we recently gathered to showcase our discoveries.
Learn about her experience at Mason during the successful Geographic Information Systems (GIS) day and chemistry poster sessions. This week, our science community can attend biology-, systems biology-, Smithsonian-Mason School of Conservation-, and MEGL-sponsored research reviews. And next week we all can participate in the college-wide Learning Assistant Virtual Poster Session and university’s OSCAR celebration of student scholarship.

Why should these challenging and meaningful research experiences build the next generation of scientists?

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**MASSON SCIENCE COMMUNITY**

**Freshman channels scientific passion at Mason to create floating island**

*by Mariam Aburdeineh*

Mason environmental science major Kennedy Ream installed a floating biological island to combat the algae problem in the pond behind her high school in Logansport, Indiana. She did so after attending the Washington Youth Summit on the Environment hosted by Mason, the National Geographic Society, and the Smithsonian’s National Zoo as a high schooler in 2018. *Photo by Tony Walters. Courtesy of Pharos Tribune.*

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**#FacultyFriday highlights computational data science associate professor**

This week’s #FacultyFriday highlights Anamaria Berea, Associate Professor, Computational Data Science. Berea recently received a Frontier Development Lab Award of Merit, acknowledging outstanding contribution in the field of artificial intelligence for space exploration and humanity. As a Mason alumna and now faculty member, Berea feels privileged to see how the CDS department has grown and evolved over the years, much like the complex living systems she is studying in her research.
Mason chemists take important steps in finding a sustainable energy source to replace the use of fossil fuels

Hao Jing, Assistant Professor, Chemistry and Biochemistry, published a study with doctoral students Andrew Evangelista and Mariia Ivanchenko aimed at finding new energy sources that may decrease pollution and replace fossil fuels. Their study "Efficient Near-Infrared-Activated Photocatalytic Hydrogen Evolution from Ammonia Borane with Core-Shell Upconversion-Semiconductor Hybrid Nanostructures" appeared in Nanomaterials as part of a special issue on developments in luminescent nanomaterials.

Fall leaves appear later in the year compared to previous centuries

The reason? Climate change. National Geographic spoke to Rebecca Forkner, Associate Professor, Biology who says that more research is necessary to understand whether the shift in fall foliage is a warning on the future health of our forests.

Mason researcher's paper on fishing management receives award
Diego Valderrama, Assistant Professor, Environmental Science and Policy, co-authored a paper that received the Peter Berck’s Best Discussion Paper Award, awarded annually by Environment for Development. The paper, "Improving utilization of the queen conch resource in the Colombian Caribbean," highlights strategies to improve fish harvesting and policy.

Celebrate the work of Smithsonian-Mason School of Conservation students

The Smithsonian-Mason School of Conservation invites you to attend their virtual Fall 2021 Student Final Presentations. The event takes place from December 7 to December 9 showcasing student research, case studies, and practicums. The order of presentations, abstracts, and Zoom links will be sent via email. Contact adeluyck@gmu.edu for more information.

Events

2021 Biology Research Celebration
December 2, 2021 | 11:30 a.m. to 2:30 p.m. | HUB Ballroom
Join the 2021 research semester class as they present their research findings from the current semester.

MEGL Poster Session
December 3, 2021 | 10 to 11 a.m. | Exploratory 4208 or Zoom
Join MEGL for a poster session highlighting all the research their teams have been doing this semester. Be sure to stop by and vote on your favorite poster - the poster with the most votes wins.

Learning Assistant Virtual Poster Session
December 6, 2021 | noon to 2 p.m. | Virtual
The poster session will take place in the Gather.town platform, where LAs will present posters reflecting their teaching experiences, their students’ learning, and new instructional initiatives that they have implemented. Registration required.

Celebration of Success 2021
December 6, 2021 | 2 to 3:30 p.m. | Exploratory Hall Atrium
Celebrate your colleagues and enter for a chance to win fantastic prizes at the College of Science’s annual Celebration of Success. Registration required.