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Thursday, August 18, 2022

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*A message from the Dean*

**FERNANDO R. MIRALLES-WILHELM**

## Making space history and launching student careers

*by Shobita Saytapal, Peter Plavchan, Gabriele Belle, and Tracy Mason*

Where were you on November 4, 2021?

Or how about July 12, 2022?

And where will you be on September 10, 2022?

On that early November day last year, the National Academies of Sciences, Engineering, and Medicine released the "[Pathways to Discovery in Astronomy and Astrophysics for the 2020s](#)." This decadal survey outlines scientific priorities and recommends funding for the next ten years of astronomy and astrophysics efforts.

On July 12, 2022 NASA released the first wave of images from their recently launched [James Webb Space Telescope](#) (JWST) inspiring current research and future astronomers, including many at George Mason University.

You too can be a part of Mason's space history if you register for and attend Mason's first [Space Day](#) on

the Fairfax campus this September 10, 2022.

This blog features an overview from some Mason science of what the future holds for Astronomy and Astrophysics research.

It is such an exciting time to inspire our students.

[Read full message](#)

## MASON SCIENCE COMMUNITY

### High school students shadow researchers in Quantum Pathways program

by Colleen Kearney Rich

The free summer program brought together rising high school seniors from around the region to participate in a week-long job shadowing opportunity and to learn about

quantum and STEM-related careers. The program was organized and run by [Jessica L. Rosenberg](#), an associate professor in the [Department of Physics and Astronomy](#) and the director of education for QSEC, and Nancy Holincheck, an assistant professor of STEM education in the College of Education and Human Development and associate director of education for QSEC. *Photo by Nancy Holincheck/QSEC.*



[More on the camp experience](#)



### Mason teams with Dominion Energy, HACU for Summer Bridge Program

by John Hollis

The Summer Bridge Program is part of Dominion's Building Hispanic Talent Initiative, a three-year, \$2 million program that will benefit more than 1,250 students at seven colleges

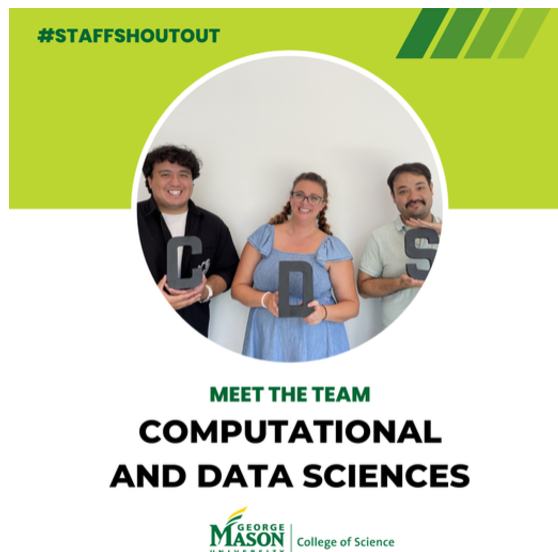
and universities while also allowing them to earn college credits. The seven-week Summer Bridge Program provides mentoring and tutoring, as well as career awareness and exploration seminars.

Students took part in College of Science courses led by Mason Science colleagues including [Kerin Hilker-Balkissoon](#), Director of Educational and Career Pathways (pictured here). *Photo provided.*

More on the camp experience

## MasonScience announces our new #StaffShoutouts

For those of you who follow us on social, you may have seen our weekly #FacultyFriday posts that we also feature in these newsletters. We are also adding staff shoutouts. Our first shoutout goes to the [Computational and Data Sciences](#) team. (From left to right) [Edgar Garcia](#), Academic Advising Support and Media Specialist, [Hillary Hamm](#), Fiscal and HR Specialist, and [Sam Stone](#), Academic Programs Manager. Thanks for all your hard work and dedication to the college and our students. Reach out or show them your appreciation via social media.



## RESEARCH & DISCOVERY

### Mason scientist will research human microbiome and gut brain axis

by *Elizabeth Grisham*

[Patrick Gillevet](#), Professor, [Biology](#), Director, [MicroBiome Analysis Center](#) received funding to conduct a longitudinal analysis of Human Gut Microbiome samples from veterans with

cirrhosis. The study will identify diagnostic markers with Hepatic Encephalopathy (HE), cognitive impairment due to cirrhosis, and Post-Traumatic Stress Disorder (PTSD). *Photo by Evan Cantwell/Creative Services.*



More on this research

Scientists seek to understand physics of magnetic and



## nematic fluctuations

by Elizabeth Grisham

[Karen Sauer](#), Professor, [Physics and Astronomy](#), and [Igor Mazin](#), Professor of Practice for Advanced Studies in Theoretical Physics, [Quantum Science and Engineering Center](#) (QSEC), Physics and

Astronomy, will receive funding from the National Science Foundation for the project: "Experimental and theoretical studies of iron pnictides through zero field nuclear magnetic resonance."

Explore their research

## IN THE NEWS

### Is there a link between fungal infections in the U.S. and dust storms?

by Virginia Gewin

In a study recently published by *GeoHealth*, [AOES](#) Associate Professor [Daniel Tong](#), and a team of researchers, say that previous findings indicating a link between Valley Fever and dust storms may be inaccurate.

More on the study



### Mason alumnus uses military experience to help others

by Ian Neligh

After a bomb blast injured Timothy Bleigh during his first tour of Afghanistan, the road to recovery was long and a self-described rollercoaster. Yet, he now uses that experience to empathize and connect with patients. Bleigh earned his MS in Biology in May as part of the College of Science led Mason [Enlisted to Medical Degree Preparatory Program \(EMDP2\)](#), and is now a medical student at Uniformed Services University. *Photo by Sharon Waldron on Unsplash.*

More on his experience

# Happening at Mason

## Encourage students to take part in upcoming Part-Time Job Fair

Mason students are invited to the Part-Time Job Fair taking place during Welcome Week to connect with on and off-campus employers hiring for the upcoming semester. The event will take place in Dewberry Hall on the lower level of the Johnson Center on August 24 from 11 a.m. to 2 p.m.



Register today

## Events

### **New Student Convocation**

August 19, 2022 | 10 to 11:15 a.m. | Eagle Bank Arena

*Join President Gregory Washington and University Life to kick off the academic year by welcoming our new students to the Mason Nation, and see Mason's talent on display with student performances and our very own Green Machine with Doc Nix.*

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

August 26, 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.](#)*

### **ScienceConnect 2022**

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

*Meet students, discuss your programs, and share research and professional opportunities with free food and chances to win Mason Science SWAG. [Register to attend.](#)*

### **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. [Register to attend.](#)*

### Innovations in Teaching and Learning Conference

September 30, 2022 | 9 a.m.

*Participate in a day of workshops, panels, teaching-focused presentations, and networking with colleagues.*

*This conference will include a variety of in-person activities, a diverse menu of live-streaming options, and on-demand content. [Register to attend.](#)*

### 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 sectional 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](#)

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