Biden administration presents significant opportunities for science

by Dean Fernando R. Miralles-Wilhelm

Impact. The importance and impact of science continues to dominate news headlines each day. COVID-19 vaccine to save humanity. Climate change to save our planet.

Today we start a new chapter as a nation. When President Biden took his oath of office, he pledged to “refresh and reinvigorate our national science and technology strategy to set us on a strong course for the next 75 years so that our children and grandchildren may inhabit a healthier, safer, more just, peaceful and prosperous world”.

Biden has appointed a geneticist, Dr. Eric Lander, President and Founding Director of the Broad Institute of MIT and Harvard, a top US biomedical research organization, to lead this charge. In his letter to Dr. Lander, the President asked him to consider these five questions:
1. What can we learn from the pandemic about what is possible — or what ought to be possible — to address the widest range of needs related to our public health?
2. How can breakthroughs in science and technology create powerful new solutions to address climate change — propelling market-driven change, jump-starting economic growth, improving health, and growing jobs, especially in communities that have been left behind?
3. How can the United States ensure that it is the world leader in the technologies and industries of the future that will be critical to our economic prosperity and national security, especially in competition with China?
4. How can we guarantee that the fruits of science and technology are fully shared across America and among all Americans?
5. How can we ensure the long-term health of science and technology in our nation?

These questions feed right into George Mason University president Gregory Washington’s focus on healthy people, healthy planet, healthy economy, and healthy society. I encourage you to consider how your work currently does and might possibly fit into these areas. Perhaps you could marshal your influence to help shape the direction of your scientific field. Take inspiration from Mason’s Thomas Lovejoy who responded with a call to act in this recently published paper in bioscience.

MASON SCIENCE COMMUNITY

Experts weigh in on current environmental science job market trends

Department of Environmental Science and Policy Chair, A. Alonso Aguirre, recently participated in a panel to discuss the environmental sciences job market on Zippia, a platform aimed at improving career outcomes.

Mary Ellen O'Toole interviewed on Mason's Excellence Podcast

Listen to Forensic Science Program Chair, and former FBI profiler, Mary Ellen O'Toole, describe what it is like to interview a mass murderer. She also talks about Mason's new Forensic Science Research and Training Laboratory, which will be one of only eight in the U.S. to use donor remains for forensic research.
Scientists discover a new topological magnetic state

By Tracy Mason

In a paper published in the journal Science Advances, Physics and Astronomy Assistant Professor Nirmal Ghimire leads a group of materials science experts from Mason, NIST, ANL, and ORNL to discover a quantum phenomenon that has the potential to become a building block of future electronic technology emerges at high temperatures from a mechanism not before realized.

NCBID partners with Noble Life Sciences

The National Center for Biodefense and Infectious Diseases and Noble Life Sciences collaboration will provide university researchers opportunities to develop novel therapeutics and diagnostics in the fight against infectious diseases.

Steven Burmeister discusses Nashville bombing to CBS News

Forensic Science Assistant Professor and Retired FBI official, Steven
Burmeister provided insights into the investigation process of the Nashville bombing.

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**Happening at Mason**

**ISE seeks Mason students for new Global Sustainability Scholars (GSS) Fellows Program**

The Institute for a Sustainable Earth (ISE) is pleased to announce our participation in the newly created Global Sustainability Scholars (GSS) Fellows program. This program offers graduate students 10-week paid summer fellowships in global sustainability organizations. **Applications are due January 31, 2021.**

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**Events**

**College of Science Faculty Meeting**

January 21, 2021 | 3 to 4 p.m.
Check your email for Zoom link

**Research and Scholarship at Mason Orientation**

January 21, 2021 | 1 to 4:30 p.m.
This orientation is designed to help faculty become more familiar with the resources available and strategies necessary to undertake extramurally supported and impact driven activities as they lay the groundwork for excellence in research, scholarship and creative work. Register to attend.

**Health Disparities Multidisciplinary Research Roundtable**

January 22, 2021 | 9 to 11:30 a.m.
This roundtable will facilitate collaboration, new ideas, and awareness of Health Disparities funding opportunities.
Center for Mathematics and Artificial Intelligence Colloquium
January 29, 2021 | 10 a.m.
Hear Carnegie Mellon University's Irene Fonseca discuss Geometric Flows and Phase Transitions in Heterogeneous Media.