Message from Dr. Leah Nichols, Executive Director

Thank you all for such a warm welcome! The strength of the Mason community is impressive and I’m delighted to have joined the team. Please remember, although all ISE staff are now working remotely, we are still here to support you and your research endeavors. Don’t hesitate to contact us.

As the COVID-19 pandemic continues to unfold, we would like to support your efforts to pursue additional research in response to this unprecedented situation. Please contact us at mise@gmu.edu if you a) are interested in building an interdisciplinary team to research any aspect of the COVID-19 pandemic and societal response or b) have active COVID-19 relevant research. Several new funding opportunities related to COVID-19 are also highlighted below.
The ISE team is also continuing development of web profiles for all ISE faculty affiliates. If you have not already submitted your information, please do so by responding to this survey.

Thank you,
Leah Nichols
Executive Director

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50th Anniversary of Earth Day

Earth Month is going virtual! You might already know that the Office of Sustainability (OoS) and the Institute for a Sustainable Earth (ISE) led the effort to partner Mason with the Earth Day Network to celebrate the 50th Anniversary of Earth Day on April 22nd, 2020! Although a lot has changed as a result of COVID-19, we are steadfast and remain committed to creating positive change for people and the planet. And that is why Earth Month is going virtual, welcome to Virtual Earth Month!

To ensure that we're promoting and showcasing the amazing efforts of Mason's community during this challenging time, we're sending out this brief survey to collect information about virtual programs, events, and initiatives that members of the Mason community are hosting during Virtual Earth Month (April). Please complete the survey before Wednesday, March 25th at 11:59pm. We'll use this information to create a Virtual Earth Month calendar that highlights all of the amazing sustainability-related programs, events, and initiatives happening throughout April. Thank you for your participation!
Upcoming Mason Events


Political polarization is being blamed for many areas of dysfunction in the U.S. government, and the response to infectious diseases is not immune to this concern. This presentation will discuss how a lack of cooperation between Democrats and Republicans has hindered the ability of the nation to carry out essential public health emergency response functions, such as biosurveillance and the development and deployment of medical countermeasures. Particular attention will be given to bipartisan efforts to move forward with public health preparedness efforts, such as the implementation of the National Biodefense Strategy, in light of the challenges posed by the global coronavirus pandemic.

- **Date:** March 26, 2020
- **Time:** 6:00pm - 7:30pm
- **Location:** Virtual
- **Registration**

Virginia Environmental Justice Summit
The Virginia Environmental Justice Summit is a conference to engage undergraduate and graduate students throughout the state in multidisciplinary conversations around issues of environmental justice. Attendees will learn about environmental justice issues impacting local Virginia communities, build advocacy and activism skills for making the change they wish to see, and network with other activists for other universities. It will take place entirely online, but there will be plenty of room for interaction and engagement. Please register online at virginiaenvjustice.org to tune in.

- **Date**: March 28, 2020
- **Time**: 9:30am - 3:45pm
- **Location**: Virtual
- **Registration**

**Congratulations!**

Funding Announcements, Awards, and Accomplishments
The George Mason University (George Mason) Rural Opioid Telehealth Project (ROTP)

**Primary Investigator (PI):** Rebecca Sutter, College of Health and Human Services  
**Co-PI:** Alison Evans Cuellar, College of Health and Human Services  
**Funding source:** US Department of Agriculture, $500,000

Examining the Distribution and Mobility of Teacher Human Capital across Traditional and Charter Schools in Pennsylvania: Patterns, Contexts and Consequences

**PI:** Matthew Steinberg, College of Education and Human Development  
**Funding source:** George Mason University Foundation and The Heinz Endowments, $50,000

CFPB Task Force

**PI:** Todd Zywicki, Antonin Scalia Law School  
**Funding source:** Consumer Financial Protection Bureau, $226,944

Translating Crime Reduction Best and Emerging Practices for Small and Rural Agencies

**PI:** Charlotte Gill, College of Humanities and Social Sciences  
**Funding source:** International Association of Chiefs and US Department of Justice, $100,803
OFIA Research Project Outreach and Gamification
PI: James Casey, College of Visual and Performing Arts
Funding source: Dewberry Engineers Inc. and FEMA, $77,471

Research Assistant for Mainstream Anammox Support
PI: Christian Jones, College of Science
Funding source: Alexandria Renewal Enterprises, $11,697

Philadelphia RNR
PI: Amy Murphy, College of Humanities and Social Sciences
Funding source: First Judicial District of the Common Pleas, $82,185

Fostering student-led assessment and self-regulated learning in middle schools
PI: Anastasia Kitsantas, College of Education and Human Development
Funding source: Battelle for Kids, Inc., $100,000

Nomination of Konrad Wessels to Incubation Study Team: Surface Topography and Vegetation
PI: Konrad Wessels, College of Science
Funding source: NASA, $96,114

High Density Drug Trafficking Areas (HIDTA)
PI: Thomas Carr, College Humanities and Social Sciences
Co-PI: Cynthia Lum, College Humanities and Social Sciences
Funding source: Office of National Drug Control Policy, $3,345,920

Biomass Enabled Nanomaterials for Capacitive Desalination and Water Purification Technologies
PI: Pei Dong, Volgenau School of Engineering
Opioid Use Disorder (OUD) Pharmacogenomics OUD Transcirptome Project

Design best-practices suggest a large font size for easy readability both on desktop and mobile devices.

PI: MingKuan Lin, College of Science

Funding source: Inova Healthcare, $34,122

The Integrated Translational Health Research Institute of Virginia (iTHRIVE): Using Date to Improve Health - UL 1

PI: Jiayang Sun, Volgenau School of Engineering
Co-PI: Pramita Bagchi, Volgenau School of Engineering
Co-PI: Scott Bruce, Volgenau School of Engineering
Co-PI: Guoqing Diao, Volgenau School of Engineering

Funding source: Inova Healthcare, $144,050

COVID-19 Funding Opportunities


The Centers for Disease Control and Prevention is issuing a Broad Agency Announcement (BAA). This is an immediate call for white papers. Prior to submission of a white paper, offerors are strongly encouraged to contact the CDC BAA technical point of contact for the research topic/subtopic of interest.

- Funding source: Centers for Disease Control and Prevention
- Amount: $10,000,000 (total funding available)
- Deadline: March 25, 2020 by 3:00PM EST
- Contact: Jan Gum

Notice of Special Interest Regarding the Availability of Urgent Competitive Revisions for Research on the 2019 Novel Coronavirus
National Institute of Allergy and Infectious Diseases (NIAID) and National Institute of General Medical Sciences (NIGMS) are issuing this Notice of Special Interest (NOSI) to highlight the urgent need for research on the 2019 novel Coronavirus (2019-nCoV).

NIAID is particularly interested in projects focusing on viral natural history, pathogenicity, transmission, as well as projects developing medical countermeasures and suitable animal models for pre-clinical testing of vaccines and therapeutics against 2019-nCoV.

NIGMS is specifically interested in incorporation of data from the 2019-nCoV into ongoing research efforts to develop predictive models for the spread of Coronaviruses and related pathogens.

- Funding source: National Institute of Health
- Amount: No limit
- Deadline: Rolling basis
- Contact: Erik J. Stemmy

**NIAID’s Multi-Pronged Response to the COVID-2019 Outbreak**

The National Institute of Allergy and Infectious Diseases (NIAID) is taking several approaches to support new research in response to severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) and coronavirus disease 2019 (COVID-2019).

- Funding source: National Institute of Health
- Amount: Differs - check with specific Center of interest
- Deadline: Rolling basis until February 6, 2021
- Contact: Erik J. Stemmy

**Dear Colleague Letter on the Coronavirus Disease 2019 (COVID-19)**

In light of the emergence and spread of the coronavirus disease 2019 (COVID-19) in the United States and abroad, the National Science Foundation (NSF) is accepting proposals to conduct non-medical, non-clinical-care research that can be used immediately to explore how to model and understand the spread of COVID-19, to inform and educate about the science of virus transmission and prevention, and to encourage the development of processes and actions to address this global challenge.

- Funding source: National Science Foundation
- Amount: $200,000 per award
- Contact: NSF

Through this Dear Colleague Letter, the Office of Advanced Cyberinfrastructure (OAC) within the Directorate for Computer and Information Science and Engineering is inviting RAPID proposals and supplemental funding requests to existing awards that address COVID-19 challenges through data and/or software infrastructure development activities. Such activities would be funded by the Computational and Data-Enabled Science and Engineering (CDS&E) program or the Cyberinfrastructure for Sustained Scientific Innovation (CSSI) program.

- Funding source: National Science Foundation
- Amount: $200,000 per award
- Contact: William Miller

**Epidemic Preparedness: COVID-19 Funding Call**

This call aims to strengthen the evidence base to better prevent and control coronavirus (COVID-19) epidemics and to increase research and response capacity. It’s part of an existing partnership between Wellcome and the UK Department for International Development (DFID) through the Joint Initiative on Research in Epidemic Preparedness and Response to help low-and middle-income countries prepare for and tackle epidemics.

- Funding source: Wellcome Trust
- Amount: £2 million
- Deadline: Rolling basis
- Contact: Wellcome Trust

**Department of Energy**

Through its user facilities, computational power, and enabling infrastructure, Department of Energy has unique capabilities that the scientific community may leverage for the COVID-19 response and recovery.

- Funding source: Department of Energy
- Deadline: Rolling basis
- Contact: Department of Energy

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**Additional Funding Opportunities**


This Dear Colleague Letter (DCL) encourages the submission of proposals that tackle some of the fundamental scientific questions underlying micro- and nanoplastic characterization,
behavior, and reactivity in the environment (including animal and human health), as well as their elimination from land and water systems.

Sustainable solutions to the plastic waste problem require creative approaches from many scientific disciplines, to reduce the burden and harmful effects of micro- and nanoplastics and ensure our ability to track their fate in the environment.

Several Directorates/Offices/Divisions welcome the submission of proposals on this topic, though each division will only accept proposals of a certain type, as described in the corresponding sections. All questions regarding proposals should be addressed to the cognizant Program Officers to whom submission is contemplated.

- Funding source: National Science Foundation
- Deadlines: Multiple
- Contacts: Multiple

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Optimizing Natural Systems for Remediation: Utilizing Innovative Materials Science Approaches to Enhance Bioremediation

The National Institute of Environmental Health Sciences (NIHES) invites qualified investigators from domestic institutions of higher education to submit an application for Superfund Research Program. This funding opportunity focuses on research that will advance mechanistic understanding and effectiveness of bioremediation through incorporation of advanced, novel materials science approaches. Bioremediation refers to the use of biota (bacteria, algae, fungi, plants, etc.) to reduce or detoxify hazardous substances in the environment. Bioremediation is a cost-effective, low-energy-intensive remedy that has contributed to the cleanup and closure of sites impacted by hazardous substances.

- Funding source: National Science Foundation
- Amount: $1,000,000
- Deadline: April 20, 2020
- Submission: grants.gov
- Contact: Heather Henry, 984-287-3268

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Special Research Grants Program - Aquaculture Research

The purpose of the Aquaculture Research program is to support the development of an environmentally and economically sustainable aquaculture industry in the U.S. and generate new science-based information and innovation to address industry constraints. This program funds applied aquaculture research projects to address issues related to: 1) Genetics of commercial aquaculture species; 2) Critical disease issues impacting commercial aquaculture species; 3) Design of environmentally and economically sustainable commercial aquaculture production systems; or 4) Economic research for increasing commercial aquaculture profitability.
FY 2020 Solicitation for the Office of Science Financial Assistance Program

The Office of Science of the US Department of Energy is providing funding for research in the following program areas: Advanced Scientific Computing Research, Basic Energy Sciences, Biological and Environmental Research, Fusion Energy Sciences, High Energy Physics, and Nuclear Physics.

- Funding source: Office of Science, Department of Energy
- Amount: Up to $5,000,000
- Deadline: September 30, 2020
- Submission: grants.gov
- Contact: Kimberlie Laing, 301-903-3026

Environmental Biology

The Division of Environmental Biology (DEB) Core Track supports research and training on evolutionary and ecological processes acting at the level of populations, species, communities, and ecosystems.

Proposals should be submitted to the core clusters (Ecosystem Sciences, Evolutionary Processes, Population and Community Ecology, and Systematics and Biodiversity Sciences). DEB also encourages interdisciplinary proposals that cross conceptual boundaries and integrate over levels of biological organization or across multiple spatial and temporal scales.

- Funding source: National Science Foundation
- Awards: 120 awards each year
- Funding amount: $100,000,000 for new awards each year pending availability of funds
- Deadline: Proposals accepted anytime
- Submission: grants.gov
- Contact: Division of Environmental Biology

Environmental Engineering Program

The Environmental Engineering Program supports potentially transformative fundamental research that applies scientific and engineering principles.

Integral to achieving these goals is a fundamental understanding of the transport and biogeochemical reactivity of pollutants in the environment. Research on environmental
Other Upcoming Events

The 8th World Sustainability Forum

**The 8th World Sustainability Forum (WSF2020)** is an international scientific conference coordinated by MDPI under the patronage of the University of Basel, the University of Geneva and the UN Sustainable Development Solutions Network (UN SDSN). The event will not only celebrate the 5th anniversary of the 2030 Agenda for Sustainable Development and the UN Sustainable Development Goals, but we also wish to create synergies between researchers and all stakeholders relevant to sustainability to maximize positive impact on regional, national, and international sustainability agendas.

If you are interested in submitting any of your current research, abstract submissions are now open. There are several different options – Paper presentation, Poster presentation, Session and Stream. The deadline for submitting an abstract for each option is 31 March 2020.

- **Date:** September 15-17, 2020
- **Location:** International Conference Centre, Geneva, Switzerland
- [Registration](#)

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The Institute for a Sustainable Earth (ISE) aims to connect members of the Mason community with others across the Mason community—and with other communities, policy-makers,
businesses and organizations—so that, together, we can more effectively address the world’s pressing sustainability and resilience challenges.

The ISE Newsletter provides up-to-date information on conferences, funding opportunities, and research pertaining to environmental science and sustainability. The biweekly newsletter aims to facilitate information sharing among researchers, practitioners, and relevant local, national, and international organization.