Announcements

GEORGE MASON UNIVERSITY | Institute for a Sustainable Earth

New Strategic Plan for ISE

The Institute for a Sustainable Earth has published its inaugural strategic plan. Drawing on ideas generated through numerous discussions, events, and activities, the ISE Advisory Council honed a strategic frame for ISE over the last several months. The ambitious plan provides a roadmap for ISE's first phase of work. It identifies key goals for the Institute and organizes its work into 6 research themes that align with the United Nation's Sustainable Development Goals. The ISE Team looks forward to implementing this plan in collaboration with all of you.

The Earth Month Calander is Live!

We won't give up – <u>we're going virtua</u>l!

You might already know that the <u>Office of Sustainability (OoS)</u> and the <u>Institute for a Sustainable Earth (ISE)</u> led the effort to partner Mason with the <u>Earth Day Network (EDN)</u> to celebrate the 50th Anniversary of Earth Day on April 22nd, 2020! We're also part of the <u>EDN's first-ever, state-based campaign in Virginia</u>! 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 (April) is going virtual, so welcome to Virtual Earth Month!

To ensure we're promoting and showcasing the amazing efforts of Mason's community during this challenging time, we'll be updating the Virtual Earth Month Calendar with amazing opportunities throughout the month. Additionally, we'll be adding opportunities from all over the world, so if you know of something cool, please let us know by sending us an <u>email</u>. If you're hosting a virtual program, event, or initiative and don't see it on the list or know someone who is, please let us know by sending us an <u>email</u>.

Wishing you the happiest Earth Month!

Faculty Lightning Talks for Mason International Collaborative

Mason faculty are invited to present during a lightning talk session hosted by the Mason International Collaborative's Research Committee. This is specifically designed for faculty who are involved with research, scholarship, and creative activities in international locations or on international topics. The session will be held via WebEx on Friday, May 8, 10 am - Noon. Please complete this **form** if you are able to virtually present a 3-5 minute talk.

Mason International Collaborative (MIC) is an 18-month initiative to review and to strategize on internationalization efforts. This is part of the American Council on Education Internationalization Laboratory. The MIC Research Committee is co-chaired by Dr. Aurali Dade and Dr. Padmanabhan Seshaiyer. For more information, please contact <u>MIC</u>.

Call for Materials

Karen Livingston is working with colleagues, students, and collaborators to 3D print face shields to provide needed supplies to healthcare facilities as we face the COVID-19 pandemic. In the near future other items such as tools to safely remove face masks and ventilator parts may also be printed. Please complete this brief underline survey to assess availability of 3D printers and materials to expand capabilities.
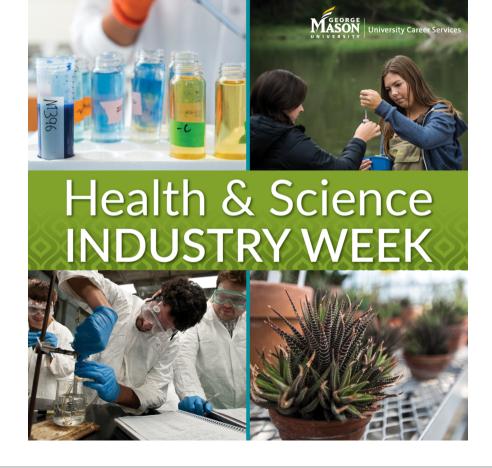

Upcoming Mason Events

A Day in the Life of a Scientist

Interested in learning more about careers in the sciences? Meet virtually with professionals who are currently working in forensic science, biology, and spatial intelligence to hear what their day-to-day looks like and to learn what it takes to land a job in those fields!

Speakers:

- Amara Drew – Forensic Scientist I at Idaho State Police Forensic Service
- Sarah Weiskopf – Biologist at United States Geological Survey (U.S.G.S.)
- Tiffany Morris – Outreach Program Manager at National Geospatial Intelligence Agency (NGA)

- **Date**: April 6, 2020
- **Time**: 5:30pm - 6:30pm
- **Location**: Virtual event
- **Link to event**

Health Alumni: Their Path from Degree to Career

Engage virtually with College of Health & Human Services alumni to learn how they've navigated the "world of work" post-graduation. You'll gain first-hand accounts on how alumni utilize their Mason education in the health industry. This event is sponsored by George Mason University Alumni Association; all those who attend the entire event will have a chance to win a $100 gift card!

Speakers:

- Christine Koehmstedt, BIS '15, MPH '18 – Senior Health System Analyst at MITRE Corporatio
- Christopher Miller, BSN '15 – Electrophysiology Program Manager at Virginia Heart
- Cordelia Cranshaw, BSW '14 – Social Worker at D.C. Child and Family Services Agency
- Joanne C. Langan, PhD, RN, CNE MSN '94, PhD '99 – Professor, Coordinator of Disaster Preparedness & RN Return to Practice at Saint Louis University School of Nursing

- **Date**: April 7, 2020
- **Time**: 6:00pm - 7:00pm
- **Location**: Virtual event
- **Link to event**

Sustainability Careers

Want to learn more about jobs in the sustainability industry? Connect with several professionals in the sustainability space to gain industry insights and to ask career questions!

Speakers:

- Caitlin Lundquist – Sustainability Program Manager at Sodexo (alum)
- Hannah Ashenafi – Vice Chair of Baltimore-Washington Air & Waste Management Association chapter
- Ashley Palmer – Conservation Education Specialist at Northern Virginia Soil & Water Conservation District (alum)

- **Date**: April 9, 2020
- **Time**: 1:30pm - 3:00pm
- **Location**: Virtual
- **Link to event**

Bicycle Commuting 101: Online via WebEx

Bicycling to campus can be fun and great for your well-being. Join Delia Johnson from the College of Visual and Performing Arts (CVPA) and a League of American Bicyclists certified instructor for Bicycle Commuting 101. Delia will share information to help you feel more confident about getting to campus on two wheels.

This session is open to all Mason faculty, staff and students.

- **Date**: April 10, 2020
- **Time**: 12pm
- **Location**: Virtual
- **Registration**: Send email to jwalker8@gmu.edu

Congratulations!

Funding Announcements, Awards, and Accomplishments

Situated Algorithmic Thinking: Preparing the Future Computing Workforce for Ethical Decision-Making through Role-Playing Scenarios

Primary Investigator (PI): Aditya Johri, Volgenau School of Engineering

Co-PI: Huzefa Rangwala, Volgenau School of Engineering

Co-PI: Alexander Monea, Volgenau School of Engineering

Funding source: National Science Foundation, $299,989

Network Labeling Optimization for Hidden Population Size Estimation

PI: Naoru Koizumi, Schar School of Policy and Government

Co-PI: Hadi El Amine, Schar School of Policy and Government

Funding source: KDI School of Public Policy, $20,000

Research Team Commercial First Innovation TM a.k.a. Smart Community IoT Innovation (SCITI Labs)

PI: Brenda Bannan, College of Education and Human Development

Co-PI: Julie Zobel, College of Education and Human Development

Funding source: Center for Innovative Technology and Department of Homeland Security, $200,000

City of Fairfax Wet Weather Monitoring Program 2020

PI: Christian Jones, College of Science

Co-PI: Benoit Van Aken, College of Science

Funding source: City Of Fairfax, $7,100

COVID-19 Funding Opportunities

The Research Development Services office has organized a detailed database of funding opportunities pertaining to COVID-19. The database is updated as new opportunities become available. If you would like to add opportunities to the database please contact Heather Arold.

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

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

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

Dear Colleague Letter: Provisioning Advanced Cyberinfrastructure to Further Research on the Coronavirus Disease 2019 (COVID-19)

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**: <u>Wellcome Trust</u>

Department of Energy

Through its user facilities, computational power, and enabling infrastructure, <u>Department of Energy</u> 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**: <u>Department of Energy</u>

Additional Funding Opportunities

Dear Colleague Letter: Critical Aspects of Sustainability (CAS): Micro- and Nanoplastics (MNP)

<u>This Dear Colleague Letter (DCL)</u> 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

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

The National Institute of Environmental Health Sciences (NIEHS) 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

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.

- Funding source: National Institute of Food and Agriculture
- Amount: $1,200,000
- Deadline: April 22, 2020
- Submission: grants.gov
- Contact: Gene W. Kim, 202-531-0636

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 micro/biology, environmental chemistry, and environmental geophysics may be relevant providing the research has a clear objective of protecting human and ecological health.

- Funding source: National Science Foundation
- Amount: $10,000,000
- Deadline: Proposals accepted at anytime
- Submission: grants.gov
- Contact: Karl Rockne

Limited Submission Funding Opportunities for Mason Faculty

The following funding opportunities limit the number of submissions per institution and require an internal submission process that is restricted to Mason faculty. Visit Mason's Research Development website for more information on the internal process.

If you plan to submit an internal application for one of the opportunities listed below, please submit a Notice of Intent (NOI) to Sheila Davis at least one week prior to the internal due date, if possible. The NOI should include the following: Solicitation Name; PI, Co-PI, and collaborators' names; and title of proposal.

Virginia Program

Virginia Environmental Endowment's Board of Directors adopted the following grant-making priorities in 2013. Current grant-making priorities in the Virginia Program are focused on improvement of local rivers and protection of water quality, restoration of the Chesapeake Bay, innovative land conservation and sustainable land use practices, environmental literacy and public awareness, and emerging issues of concern.

- **Funding source**: Virginia Environmental Endowment
- **Funding level**: See program announcement for funding details and award term length
- **Sponsor deadline**: June 15, 2020
- **Mason internal deadline**: May 1, 2020
- **Submit applications here**
- **1 Application per department, please include the following**:
    - Solicitation name
    - Project title
    - List of investigator(s) and collaborators
    - Project summary (up to 3 pages). Please consider the review criteria when preparing the project summary.
    - Two-page biosketch (any style) for PI

Regional Disaster Management Workshop: Building Resilience in the Indo-Pacific

The U.S. Consulate General, Public Affairs Section in Chennai announces a funding opportunity that seeks to host a workshop for 40 disaster management specialists (government officials, NGOs, academics, citizen first responders) from the Indo-Pacific region. Led by U.S., Indian, and regional experts, the workshop will encourage data sharing, dissemination of best practices, more institutional partnerships, and the development of a common "all-hazards" vernacular.

In light of the restrictive travel and public gathering environments being face globally due to the COVID-19 situation, the U.S. Mission to India invites interested applicants to submit one or two proposals in response to the reference Notice of Funding Announcement (NOFO). One proposal may be based on "business as usual" environments, where international travel, large public gatherings, and other programming parameters are unaffected by public health constraints. A second proposal, which is optional, would describe the applicant's ideas on how to execute the desired project goals in a manner that accounts for restrictions on public gatherings and travel, as well as public health concerns.

- **Funding source**: Department of State/US Mission to India
- **Funding level**: Up to $80,000

- **Sponsor deadline**: May 22, 2020
- **GMU internal deadline**: April 22, 2020
- <u>**Submit applications here**</u>
- **2 Applications accepted, please include the following**:
    - Solicitation name
    - Project title
    - List of investigator(s) and collaborators
    - Project summary (up to 3 pages). Please consider the review criteria when preparing the project summary.
    - Two-page biosketch (any style) for PI

One to Many: US Government Exchanges & Program Alumni Workshops

<u>The U.S. Consulate General, Public Affairs Section</u> in Chennai announces a funding opportunity that seeks to build upon four or more recent International Visitor Leadership Program (IVLP) and other exchange programs through the implementation of at least one follow-on alumni workshop for each exchange on eligible topics/themes. This funding opportunity seeks to build upon four or more recent IVLP and other exchange programs through the implementation of at least one follow-on alumni workshop for each exchange on topics/themes including (but not limited to):

- Water; Sustainability and Disaster Management/Resilience; Countering Disinformation and Online Harassment and Trollin; Civil Rights, Civic Responsibility, and Active Citizenship; Trafficking in Persons; Air Quality; Empowering Women and Girls; Advancing Science, Technology, Health, and Innovation; Promoting Inclusion and Educational Opportunity; Forthcoming projects from the 2020 IVLP slate, TBC.

In light of the restrictive travel and public gathering environments being face globally due to the COVID-19 situation, the U.S. Mission to India invites interested applicants to submit one or two proposals in response to the reference Notice of Funding Announcement (NOFO). One proposal may be based on "business as usual" environments, where international travel, large public gatherings, and other programming parameters are unaffected by public health constraints. A second proposal, which is optional, would describe the applicant's ideas on how to execute the desired project goals in a manner that accounts for restrictions on public gatherings and travel, as well as public health concerns.

- **Funding source**: Department of State/US Mission to India
- **Funding level**: Up to $30,000
- **Sponsor deadline**: May 22, 2020
- **GMU internal deadline**: April 22, 2020
- <u>**Submit applications here**</u>
- **2 Application accepted, please include the following**:
    - Solicitation name
    - Project title
    - List of investigator(s) and collaborators
    - Project summary (up to 3 pages). Please consider the review criteria when preparing the project summary.
    - Two-page biosketch (any style) for PI

Other Upcoming Events

Solve Climate by 2030

Organized by Bard College's Center for Environmental Policy, numerous universities across North America will host individual webinars that will discuss the importance of ambitious state and local action to solving climate change by 2030. View the list of states offering webinars. Read more about Solve Climate by 2030.

Professors are encouraged to #MakeClimateaClass by replacing class with a webinar, assigning viewing of a webinar (live or recorded) as homework, and then hosting a discussion in class.

- **Date**: April 7, 2020
- **Time**: Differs based on state, please view list of states
- **Location**: Virtual
- **Link to event**

Earth Optimism Summit 2020

On the 50th anniversary of Earth Day 2020, join online for an Earth Optimism digital event that will showcase stories of both small and large-scale actions that frame the conversation and demonstrate that success is possible in conservation, climate, and sustainability.

- **Date**: April 22-25, 2020
- **Location**: Virtual
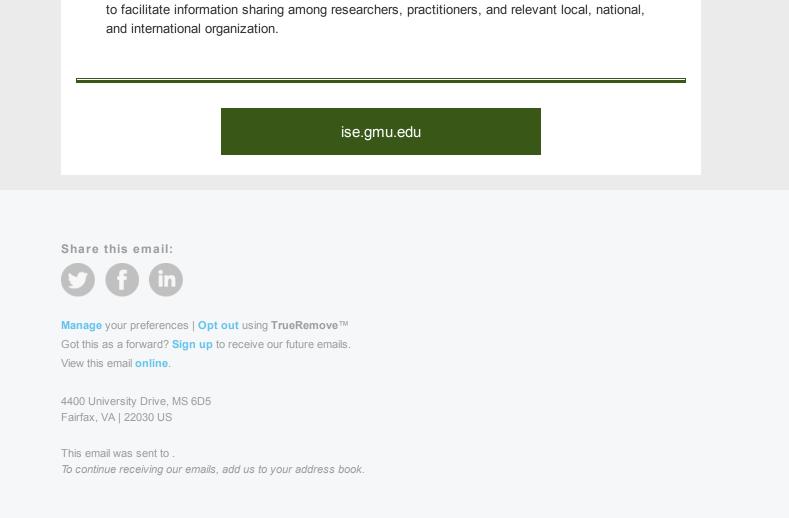

The 8th World Sustainability Forum

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**

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.

ise.gmu.edu