

Institute for a Sustainable Earth

ISE NEWSLETTER

February 10, 2020



Announcements

New Executive Director at Institute for a Sustainable Earth

We are delighted to announce that Dr. Leah Nichols will be joining Mason as the full time Executive Director for the <u>Institute for a Sustainable Earth (ISE)</u> on March 10, 2020. Dr. Nichols has a PhD in Energy and Resources from the University of California, Berkeley. She has served as a Mirzayan Science and Technology Policy Fellow with the National Academy of Sciences and as a Postdoctoral Fellow at the University of Michigan in the Science, Technology, and Public Policy (STPP) Program.

Most recently she has served in several roles at the National Science Foundation (NSF) since 2011, during which time she managed several complex NSF-wide programs that required extensive facilitation and stakeholder input; established and led a new interagency working

group for the US Global Change Research Program, which is tasked by Congress to coordinate federal research and investments in understanding the forces shaping the global environment and their impacts on society; worked in multiple cross-foundation and interagency contexts to integrate social and behavioral sciences into interdisciplinary environmental research programs including several that Mason actively pursues for funding; chaired NSF's Environmental Research and Education Working Group; and oversaw NSF's Advisory Committee for Environmental Research and Education 2018 report on Sustainable Urban Systems.

Additionally, she contributed to the fourth National Climate Assessment and has published in top sustainability journals including *Nature Sustainability* and *Nature Climate Change*.

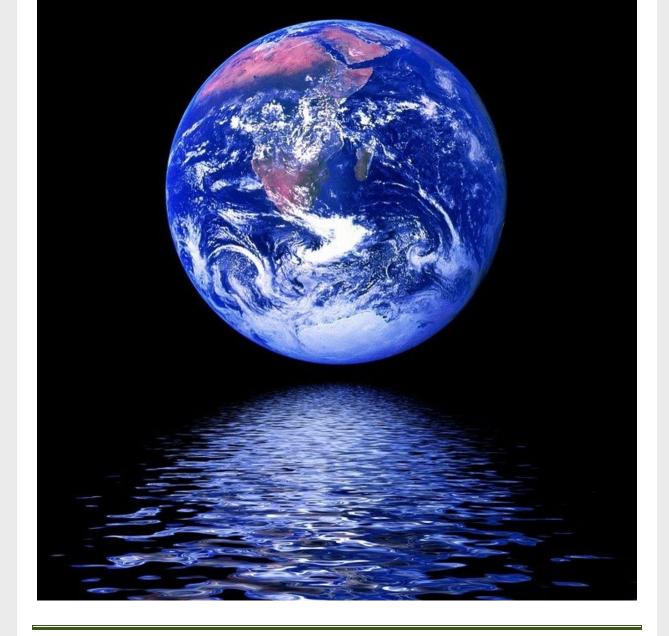
Dr. Nichols will report to Dr. Aurali Dade, who served as the inaugural Executive Director of ISE and remains Mason's Associate Vice President for Research and Innovation Initiatives. Dr. Thomas Lovejoy will remain ISE's Scientific Director in addition to his capacity as a University Professor.



50th Anniversary of Earth Day

The <u>Institute for a Sustainable Earth (ISE)</u> and the <u>Office of Sustainability (OoS)</u> want to let you know that Mason partnered with the <u>Earth Day Network (EDN)</u> for their first-ever, statebased campaign to celebrate the 50th Anniversary of Earth Day on April 22nd, 2020. We will also be celebrating Earth Month (April) and we need your help to do so effectively. One of our primary goals is to increase participation/engagement with the amazing sustainability-related programs, events, and initiatives faculty, staff, and students host throughout Earth Month. And we want to showcase and broadcast Mason's success.

To help us achieve our goals, we're asking that you **please** <u>complete a brief survey</u> (it should take approximately 3 minutes). We'll use the survey data to build a calendar of ALL the sustainability-related programs, events, and initiatives happening at Mason during Earth Month. Please feel free to forward the survey to interested groups and individuals at Mason. We can't wait to see the wonderful work you're doing! Thank you!



Upcoming Mason Events

Climate Change Panel

<u>GMU UNICEF Campus Initiative</u> is organizing a panel discussion on Climate Change. The panel discussion aims to spread awareness and educate the Mason community about what's going on in the Earth's climate system. Climate change is a pressing issue that affects us all.

- Date: February 13, 2020
- Time: 6:30pm 8:00pm
- Location: Johnson Center Cinema, Mason Fairfax Campus

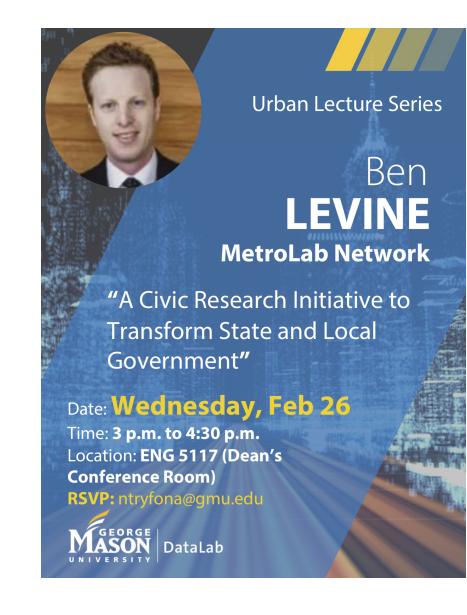
Urban Issues Lecture Series

George Mason University is organizing a lecture series on urban topics to create an active community of connected experts. These talks aim to facilitate knowledge exchange and

networking around urban topics and challenges, with participants from academia, industry and local governments.

Ben Levine, Executive Director of <u>MetroLab Network</u>, will deliver the second in our series of guest lectures on urban issues Ben will share his views on a civic research initiative to transform state and local government. MetroLab Network is a collaborative of 29 cities, 5 counties, and 35 universities (including George Mason University) focused on civic innovation. MetroLab Network was launched as part of the White House Smart Cities Initiative in 2015.

- Date: February 26, 2020
- Time: 3pm 4:30pm
- Location: Room 5117, Nguyen Engineering Building, Mason Fairfax Campus



"Talking to Strangers": An Evening with Malcolm Gladwell

Join George Mason University's <u>Department of Criminology, Law and Society</u> and esteemed guest Malcolm Gladwell on March 18th for "Talking to Strangers": An Evening With Malcolm Gladwell. Robinson Professor of Public Affairs Steven Pearlstein and Criminology, Law and Society Distinguished Professor David Weisburd will be in conversation with bestselling author, journalist, and speaker Malcolm Gladwell on his new book <u>Talking to Strangers</u>: What We <u>Should Know about the People We Don't Know</u>. Attendees will be able to submit questions for Gladwell prior to the event.

- Date: March 18, 2020
- **Time**: 6:00pm 7:15pm
- Location: Center for the Arts Concert Hall, Mason Fairfax Campus
- <u>Registration</u>



Congratulations!

Funding Announcements, Awards, and Accomplishments



Claudio Cioffi-Revilla named 2019 Fellow by the American

Association for the Advancement of Science

<u>George Mason University</u> professor <u>Dr. Claudio Cioffi-</u> <u>Revilla</u> is among a group of leading scientists honored as 2019 Fellows by the <u>American Association for the</u> <u>Advancement of Science (AAAS)</u> as recognition for their invaluable lifetime contributions to science and technology.

Dr. Cioffi-Revilla was honored for "distinguished research and service toward creating the field of Computational Social Science and its relationship to policy issues of international relations and social complexity," according to AAAS.



Fellows are elected each year by their peers serving on the Council of AAAS, the organization's member-run governing body. The complete list of 2019 Fellows was published in the Nov. 29 issue of the journal *Science*. The awards ceremony will be held in Seattle on Feb. 15, 2020, during the AAAS annual meeting.

Development of passive sampling methodologies for equilibrium sampling of PFAS compounds in surface and groundwater

Primary Investigator (PI): Gregory Foster, College of Science

Funding source: Department of Defense (Army Corps of Engineers), \$79,438

WSA Coronal and Solar Wind Modeling Research and Development Support

PI: Jie Zhang, College of Science

Funding source: Catholic University of America and National Aeronautics and Space Administration, \$50,000

The first systematic broad-band X-ray study of extreme accretion onto supermassive black holes with NuSTAR and XMMNewton

PI: Claudio Ricci, College of Science

Co-PI: Shobita Satyapal, College of Science

Funding source: NASA - Goddard Space Flight Center, \$84,760

The Secular Growth of Supermassive Black Holes: An XMM-Newton Investigation of Bulgeless Galaxies

PI: Shobita Satyapal, College of Science

Funding source: NASA - Goddard Space Flight Center, \$46,199

Survey Implementation/Crime Data Analysis and Reporting

PI: David Weisburd, College Humanities and Social Sciences

Funding source: City of Seattle, \$58,710

Police Stops, Crime Prevention, and Community Reaction: A Randomized Field Experiment at Violent Crime Hot Spots

PI: Charlotte Gill, College Humanities and Social Sciences

Funding source: Police Foundation and National Institutes of Justice, \$212,918

Burma Leadership Activity

PI: Juliette Shedd, School of Conflict Analysis and Resolution
Co-PI: Sheherazade Jafari, School of Conflict Analysis and Resolution
Funding source: Institute of International Education, USAID, \$40,934

City of Fairfax Stream Monitoring Program 2019-2020

PI: Christian Jones, College of ScienceCo-PI: Benoit Van Aken, College of ScienceFunding source: City Of Fairfax, \$5,054

US Immigration Policy and Demographic Scenarios

PI: Justin Gest, Schar School of Policy and Government
Co-PI: Jack Goldstone, Schar School of Policy and Government
Funding source: FWD.us Education Fund, Inc., \$46,951

A longitudinal, source attribution study of Campylobacter emergence and transmission in rural Bangladesh to inform intervention development

PI: Amira Roess, College of Health and Human Services

Funding source: Bill & Melinda Gates Foundation, \$1,159,830

Funding Opportunities

CBPC Academic Paper Competition

<u>The Chesapeake Bay and Water Resources Policy Committee (CBPC)</u> has launched its first annual paper competition which invites area high school, college, and graduate students to provide their perspectives on real-world sustainability and water resources issues. For the 2020 term, the topics will be focused on food and agricultural issues related to sustainability and resiliency within the metropolitan Washington region.

- Funding source: Chesapeake Bay and Water Resources Policy Committee
- Amount: \$500
- Deadline: Letter of Intent by February 14, 2020, final paper by April 17, 2020
- Submission: <u>CBPC Research</u>
- Contact: <u>Heidi Bonnaffon</u>

Global Sustainability Scholars Program

<u>The GSS Fellows Program</u> is offering a 10-week paid professional training experience with a Sustainability Organization for young professionals and/or graduate students from underrepresented groups. This program aims to bridge young professionals to career or graduate school.

GSS Fellows are embedded within an international sustainability research project for 10 weeks during the summer months. Fellows are paid a stipend of \$8000 for their full participation in the program. To apply follow this link: https://www.gsscholar.org/apply

- Funding source: University of Colorado Boulder
- Amount: \$8,000
- Deadline: February 28, 2020
- Submission: https://www.gsscholar.org/apply
- Contact: Maria Fernanda Enriquez

Dear Colleague Letter: Supporting Transition of Research into Cities Through the U.S. ASEAN (Association of Southeast Asian Nations Cities) Smart Cities Partnership

Through a <u>Dear Colleague Letter (DCL</u>), the National Science Foundation's (NSF) Directorate for Computer and Information Science and Engineering (CISE) together with the Department of State's Bureau of East Asia and Pacific Affairs wishes to notify the U.S. community of its intention to support the high-impact research-transition funding requests aligned with the U.S.-ASEAN Smart Cities Partnership.

- Funding source: National Science Foundation
- Amount: \$300,000
- Deadline: March 1, 2020
- Submission: grants.gov
- Contact: David Corman

FY 2020 Solicitation for the Office of Science Financial Assistance Program

<u>The Office of Science of the US Department of Energy</u> 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

<u>The Division of Environmental Biology (DEB)</u> 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

<u>The Environmental Engineering Program</u> 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: Applications accepted at anytime
- Submission: grants.gov
- Contact: Karl Rockne

Other Upcoming Events

Security Threat Profile of Global Climate Change

<u>The Center for Climate and Security</u> and the <u>Environmental and Energy Study Institute</u> invite you to a briefing on projected climate change impacts on U.S. security and national interests in the coming decades. How will climate impacts affect geopolitics, infrastructure, and security environments in a world with a 2-degree Celsius rise in average global temperature? How about a 4-degree rise?

- Date: February 24, 2020
- Time: 3:30pm-5pm
- Location: Room 2168, Rayburn Hourse Office Building
- <u>Registration</u>



Briefing Notice

A Security Threat Profile of Global Climate Change

Monday, February 24, 2020 3:30 PM – 5:00 PM Room 2168 (Gold Room), Rayburn House Office Building Seating on a first come, first served basis.

Please RSVP to expedite check-in: <u>www.eesi.org/022420security#rsvp</u> Live webcast (connection permitting) will be streamed at: <u>www.eesi.org/livecast</u>

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The briefing will showcase the Center for Climate and Security's **Security Threat Profile of Global Climate Change report**, a product of the National Security, Military, and Intelligence Panel on Climate Change. The report is a comprehensive look at the wide-ranging security impacts of climate change across all six geographic U.S. Combatant Commands, under two scenarios of future warming (a 1-2°C rise in temperatures, and a 2-4°C rise). Authored by a diverse group of U.S. national security and intelligence experts, this report offers both regional and international threat assessments for climate change, and recommendations for the way forward in addressing the looming global challenge.

Speakers for this forum are:

- Hon. John Conger (moderator), Director, Center for Climate and Security; Former Principal Deputy Undersecretary of Defense (Comptroller)
- Kate Guy, Principal Investigator, Center for Climate and Security; University of Oxford
- Hon. Sherri Goodman, Chair of the Board, the Council on Strategic Risks; Former Deputy Undersecretary of Defense (Environmental Security)
- Dr. Rod Schoonover, CEO, Ecological Futures Group; Adjunct Professor, Georgetown University School
 of Foreign Service; Former Director of Environment and Natural Resources, National Intelligence Council
- Ambassador (ret) Richard Kauzlarich, Co-Director of the Center for Energy Science and Policy, George Mason University; Former National Intelligence Officer for Europe; Former U.S. Ambassador to Azerbaijan, & Bosnia and Herzegovina

For more information, contact John Conger at <u>jconger@climateandsecurity.org</u> or Anna McGinn at <u>amcginn@eesi.org</u> / (202) 662-1885.

Hon. Jon Conger, Director • (202) 246-8612 • www.climateandsecurity.org • 1025 Connecticut Ave., NW, Suite 1000 • Washington, DC 20036 Daniel Bresette, Executive Director • (202) 628-1400 • www.eesi.org • 1020 19th Street, NW, Suite 650 • Washington, DC 20036

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64th Annual Meeting of the Comparative and International Education Society

<u>The 64th Annual Meeting of the Comparative and International Education Society</u> will create opportunities for sharing cutting-edge research and practice, immerse in a welcoming professional community, and engage in meaningful intellectual exchange. Over 3000 researchers, students, practitioners and policymakers are expected to attend the 2020 CIES conference.

Conference participants will address the theme of *Education Beyond the Human: Toward Sympolesis*. The conference theme challenges us to rethink the role of education in the era of epochal precarity associated with irreversible environmental catastrophe that is impacting all life on Earth.

- Date: March 20-26, 2020
- Location: Miami, Florida
- Contact: CISE 2020



6th International Symposium on

Knowledge and Capacity for the Water Sector FROM CAPACITY DEVELOPMENT TO IMPLEMENTATION SCIENCE

27-29 May 2020 | Delft, the Netherlands

6th International Symposium on Knowledge and Capacity for the Water Sector

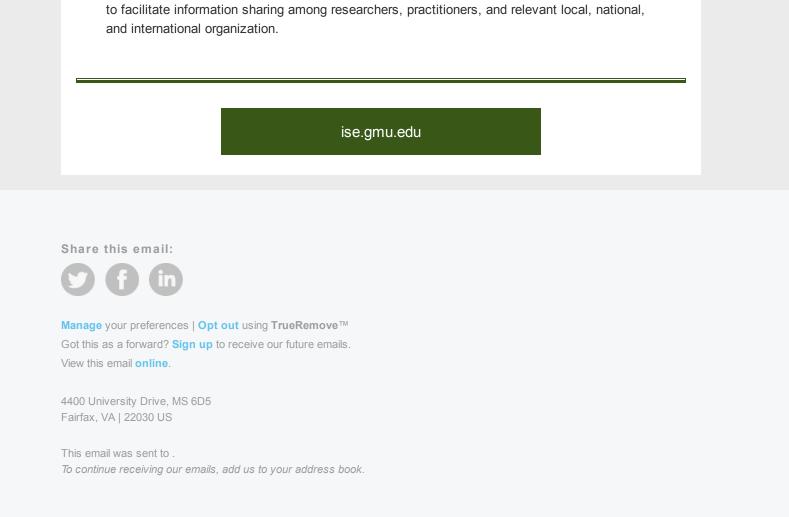
The African Development Bank, the IHE Delft Institute for Water Education, the Asian Development Bank, UN Habitat and other development partners are preparing the <u>6th</u> <u>International Symposium on Knowledge and Capacity for the Water Sector</u>, themed: From Capacity Development to Implementation Science.

The Symposium will convene key stakeholders to explore the skills, knowledge and attitudes needed by water professionals and institutions. The meeting will also study how new developments in implementation science can strengthen institutional capacity to enhance water security.

- Date: May 27-29, 2020
- Location: Delft, Netherlands
- Deadline: February, 29 2020

<u>The Institute for a Sustainable Earth (ISE)</u> 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



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