If you are going to be significant, you have to tackle the significant problems.

President Gregory Washington
ISE Mission

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.
ISE Vision

Make Mason the place where people come to put research, scholarship, and creative activity into action and co-create innovative solutions to local, regional, and global sustainability and resilience challenges.
ISE Team

Leah Nichols
Executive Director

Jeremy Campbell
Assistant Director for Strategic Engagement

Biruk Haregu
Graduate Research Assistant

Ji Eun Kim
Student Communications Assistant

Judit Ungvari
Research and Innovation Officer

Joint position with:
In Memoriam – Tom Lovejoy

Founding Scientific Director
ISE Faculty Fellows

January 2021 – December 2022

Cher Chen
School of Integrative Studies
CHSS

Celso Ferreira
Civil, Environmental, and Infrastructure Engineering
CEC

John Qu
Geography and Geoinformation Sciences
COS
Advisory Council

Supriya Baily CEHD
Sara Cobb Carter School
Cody Edwards Associate Provost for a Sustainable Earth; SMSC
Mahmud Farooque Arizona State University
Constance Gewa CHHS
Lisa Gring-Pemble Business School
Lazaro Gonzalez Micron
Joan Kelsch Arlington County, Retired
Erica Key Future Earth US

Jim Kinter COS
Todd La Porte Schar School
Ed Maibach CHSS
Dale Medearis Northern Virginia Regional Commission
Lisa Moerner Dominion Energy
Sam Salem CEC
Michael Sanio American Society of Civil Engineers
Tony Socci US EPA
Josh Tewksbury Smithsonian Tropical Research Institute
Research Themes

1) Human health, well-being, and capabilities
2) Sustainable and resilient communities and ecosystems
3) Harnessing the digital revolution for sustainability and education for all
4) Clean energy, decarbonization, and climate action
5) Enhancing equality, equity, and access to basic goods and services
6) Peace, justice and strong institutions to support thriving economies
Total = 533
60+ Research Centers

Center for Resilient and Sustainable Communities (Transdisc)

Center for Climate Change Communication (CHSS)

Center for Peacemaking Practice (Carter)

Business for a Better World Center (School of Business)

Center for Ocean-Land-Atmosphere Studies (COS)

Institute for Immigration Research (CHSS)

Center for International Education (CEHD)

Terrorism, Transnational Crime and Corruption Center (Schar)

Center for Health Policy Research and Ethics (CHHS)
Annual Sustainability-Focused Research Expenditures

FY 21 Expenditures by Unit

- FY 17: $40,809,687
- FY 18: $43,786,271
- FY 19: $43,829,357
- FY 20: $32,212,306
- FY 21: $57,394,460
# Top Funding Sources

## For FY21 Expenditures

<table>
<thead>
<tr>
<th>Source</th>
<th>Expenditures</th>
</tr>
</thead>
<tbody>
<tr>
<td>US Department of Health and Human Services (DHHS)</td>
<td>$8,775,066</td>
</tr>
<tr>
<td>George Mason Univ Foundation</td>
<td>$6,094,822</td>
</tr>
<tr>
<td>US Dept Of Education</td>
<td>$6,028,128</td>
</tr>
<tr>
<td>National Science Foundation</td>
<td>$5,364,332</td>
</tr>
<tr>
<td>NASA-Goddard Space Flight Cent</td>
<td>$4,247,652</td>
</tr>
<tr>
<td>Office of National Drug Control Policy</td>
<td>$3,368,065</td>
</tr>
<tr>
<td>US Department of Homeland Security</td>
<td>$2,955,147</td>
</tr>
<tr>
<td>National Oceanic &amp; Atmospheric Administration (NOAA)</td>
<td>$2,496,094</td>
</tr>
<tr>
<td>US Department of Transportation (US DOT)</td>
<td>$1,982,315</td>
</tr>
<tr>
<td>US Dept Of State</td>
<td>$1,950,612</td>
</tr>
<tr>
<td>US Department of Justice</td>
<td>$1,459,352</td>
</tr>
</tbody>
</table>
FY 21 Research Expenditures by Theme

Theme 1: Human Health, Wellbeing, and Capabilities
Theme 2: Sustainable and Resilient Communities and Ecosystems
Theme 3: Digital Revolution for Sustainability and Education
Theme 4: Clean Energy, Decarbonization, and Climate Action
Theme 5: Enhancing Equality, Equity, and Access to Basic Goods and Services
Theme 6: Peace, Justice, and Strong Institutions to Support Thriving Economies

- Business School
- Carter School
- CEC
- CEHD
- CHHS
- CHSS
- COS
- CVPA
- Law School
- Schar School
- Other
ISE Strategic Plan - Goals

1. Lead by example – locally, regionally, globally
2. Deeply engage faculty in collaborations – create communities & develop partnerships
3. Develop institute infrastructure
4. Catalyze curricular integration and student opportunities

ISE Strategic Plan - Goals

1. Lead by example – locally, regionally, globally
   Practice what we teach. Promote a sustainable campus and region.

2. Deeply engage faculty in collaborations – create communities & develop partnerships

3. Develop institute infrastructure

4. Catalyze curricular integration and student opportunities

ISE Strategic Plan - Goals

1. Lead by example – locally, regionally, globally
2. **Deeply engage faculty in collaborations** – create communities & develop partnerships
   
   ISE is driven by faculty. Participation is essential.

3. Develop institute infrastructure
4. Catalyze curricular integration and student opportunities

ISE Strategic Plan - Goals

1. Lead by example – locally, regionally, globally
2. Deeply engage faculty in collaborations – create communities & develop partnerships
3. Develop institute infrastructure
   Build the foundation for an enduring and impactful institute.
4. Catalyze curricular integration and student opportunities

ISE Strategic Plan - Goals

1. Lead by example – locally, regionally, globally
2. Deeply engage faculty in collaborations – create communities & develop partnerships
3. Develop institute infrastructure
4. Catalyze curricular integration and student opportunities

ISE faculty are committed to translational activities that include mentoring students in experiential learning opportunities.

Key Priorities

2019-20
- Launch institute
- Create advisory council
- Build faculty affiliation program
- Hire full-time executive director
- Develop strategic plan

2020-21
- Centralize sustainability communications
- Expand ISE team
- Launch faculty fellows program
- Establish Mason Sustainability Council
- Launch 17 Rooms U at Mason

2021-22
- 17 Rooms U at Mason
- MSC: Sustainability and Climate Action Plans
- Develop living labs program
- Develop external partnership network
- Pilot Summer Graduate Research Fellowships
Mason Sustainability Council

"...an institution-wide initiative that will integrate Mason’s research and academic strengths in sustainability with campus operations to mitigate Mason’s impact on the global climate, enable our campuses to become living laboratories, and further establish Mason as an institutional leader in higher-education sustainability."

More info: https://sc.gmu.edu/
MSC Members

Co-Chairs:
  Mark Ginsberg  Provost
  Carol Kissal  SVP

Paul Allvin  VP Communication and Marketing
Trishana Bowden  VP Advancement
Laurence Bray  Assoc. Provost Grad. Ed.
Aurali Dade  AVP & Deputy Chief Research Officer
Bill Dracos  AVP Business Services
Cody Edwards  Assoc. Provost Sustainable Earth
Jack Fadek  Student Gov. Chair of Univ. Services
Lisa Gring-Pemble  Business School
Erin Iacangelo Rogers  Chair Staff Senate

Co-Coordinators:
  Greg Farley  Director, Office of Sustainability
  Leah Nichols  Exec. Dir. ISE

Paul Liberty  VP Gov. Relations
Ed Maibach  CHSS
Andre Marshall  VP Research
Rene Stewart O’Neal  AVP Planning and Budget
Rose Pascarell  VP University Life
Frank Strike  VP Facilities
Bethany Usher  Assoc. Provost Undergrad. Ed.
Tobi Walsh  AVP Capital Strategy and Planning
Tom Wood  SIS, Faculty Senate Rep.
MSC: Progress

Current Activities

- **Circular Economy & Zero Waste Task Force**
  Successfully implemented Executive Order 77 to Eliminate Single-Use Plastics

- **Climate Action Plan Task Force**
  CAP Phase 1 complete in April 2022

- **Sustainability Action Framework**

Faculty & Student Engagement

- **Reps on MSC**
- **Reps on Taskforces**
- **Circular Economy & Zero Waste Research Roundtable**
- **CAP Town Halls & Focus Groups**
- **Mason as a Living Lab:**
  CAP special faculty discussion on curricula & research alignment
Mason as a Living Lab

Utilizing the campus grounds and infrastructure for research

- Partnership between ISE and Facilities w/in MSC
- Establish a framework to streamline decision-making
- Facilitate communication with all stakeholders
- Create a data repository for research and decision-making
- Connect research to action
17 Rooms U at Mason

Pilot for Brookings Institution in collaboration with B4BW

17 dialogues – inclusive of faculty, staff, students, and partners
Identify near-term actions to make progress on the SDGs
Summit Oct 1, 2021
Seed funding and implementation

More info:
https://ise.gmu.edu/17-rooms/
17 Rooms U: Broad Engagement

External participants from:
Northern Virginia Regional Council
American Society of Civil Engineers
Rotary Club of Rosslyn
Smithsonian
Belmont Forum
Future Earth
M3D Consulting, LLC
Fairfax County Public Schools
City of Fairfax
WaterAid
Northern Virginia Food Rescue
Library of Congress
Chesapeake Bay National Estuarine Research Reserve in Virginia
Millennium Water Alliance
EnCompass, LLC
US Department of Transportation
17 Rooms U: Diverse Dialogues

Participants per room by academic unit

Room 1: No Poverty
Room 2: Zero Hunger
Room 3: Good Health and Well-Being
Room 4: Quality Education
Room 5: Gender Equality
Room 6: Clean Water and Sanitation
Room 7: Affordable and Clean Energy
Room 8: Decent Work and Economic Growth
Room 9: Industry, Innovation, and Infrastructure
Room 10: Reduced Inequalities
Room 11: Sustainable Cities and Communities
Room 12: Responsible Consumption and Production
Room 13: Climate Action
Room 14: Life Below Water
Room 15: Life on Land
Room 16: Peace, Justice, and Strong Institutions
Room 17: Partnership for the Goals

# of participants

Business School
Carter School
CEC
CEHD
CHHS
CHSS
COS
CVPA
Schar School
Other Internal
External
Engaging Global Networks

Collaborated with the Business School and B4BW to co-host the 2021 Ashoka U Exchange; the annual conference for a global community of changemakers in higher ed.

Over 50 Mason faculty and students organized and spoke at the following sessions to showcase Mason’s work.

- Leading change the changemaker way
- The role of higher education during times of upheaval
- Antiracist educator professional development
- Brain(mental) health: Journey into well-being & resilience
- Dismantling denial about teachers’ biases
- SDG 16: Peace, justice, & strong institutions
- Multidisciplinary approaches to climate change research and teaching
- Addressing racial inequalities & promoting ethnic justice at Mason
- Three big ideas for the future of student preparedness
- Creating a sustainability ecosystem in higher education
- Leveraging partnerships for the SDGs
- Health equity: The role of researchers, community partners, & practitioners
Establishing Local Networks

• Mason representation on local sustainability committees
• Quarterly meetings w/ Fairfax County and City via MSC
• Local Sustainability Directors Workshop
• Placement of OSCAR students with local partners
• SSDN NOVA Flood Resilience Workshops
• 2022 Summer Team Impact Grant – Indigenous Environmental Mapping and Resilience Planning in the Greater Chesapeake
  
  Jeremy Campbell & Tom Wood
Sustainability Summer Fellowships for Graduate Research Partnerships

In partnership with Office of Graduate Education
2021-22 Curriculum Impact Grants

Office of Undergraduate Education aligned the CIGs with the UN Sustainable Development Goals

Lifestyle Behavior Change Certificate Program - Debra Stroiney, Suzanne Carmack, Joel Martin (CEHD) Maction Komwa, Viviana Maggioni, Constance Gewa (CEC, CHHS, COS)


Bridging the Divide: Preparing Graduate STEM Students to Navigate the Science Policy Interface - Lee Solomon, Karen Akerlof, James Olds, Jessica Rosenberg, Jennifer Salerno (COS, Schar)

Creating new pathways to success for early career biology students through computational data science - Ron Mahabir, Matthew Valko, Jason Kinser, Geraldine Grant, Andrea Weeks (COS)

Race and Ethnicity in Cultural Studies: New Courses, New Connections - Tim Gibson, Pavithra Suresh, Jessica Scarlata, Eric Ross, Alex Monea (CHSS)

Ethics and AI Minor - Jesse Kirkpatrick, Peng Warweg, Amarda Shedu, Rachel Jones, Alexander Monea (CEC, CHSS)

Minor in Business for a Better World - Leila Austin, Elaine Viccora, Anne Lauer, Yvonne Demory, Shora Moteabbed, Karen King, Christine Landoll, Sidhartha Das, Ioannis Bellos, Niki Maria Vlastara, Anne Magro, Lisa Gring-Pemble, Robert Pierce (SBUS)
Convening to Engage Ideas (in FY21)

Research Roundtables:
- Energy Policy and Decarbonization Research Roundtable
- NSF Smart and Connected Communities Roundtable – w/ IDIA
- Circular Economy and Zero Waste Research Roundtable – w/ MSC CEZW Task Force

Research to Action Webinar Series:
6 webinars focused ISE’s research themes. Each featuring panels of Mason faculty and practitioners who discussed the interactions between research and practice.

Other Convenings:
- Race, the Origin Story of the Criminal Legal System, and the Future of Reform – w/ Human Rights and Social Justice Initiative
- Resistance and Resilience: Student Activism and Well-being – w/ Human Rights and Social Justice Initiative
- Building Tall with Mass Timber – w/ Center for Real Estate Entrepreneurship
- Virginia’s Climate Future – w/ Green New Deal Virginia, Mason’s Chapter of the NAACP, COLA, Mason’s Office of Sustainability, and ESP
- Solve Climate by 2030: The Co-Benefits of Clean Energy in Virginia – w/ UVA Environmental Resilience Institute
Connect to find collaborators

Weekly newsletter 880 subscribers
Twitter 530 followers
Faculty directory 150 profiles
Research centers directory 63 centers

Follow us on Twitter: @GeorgeMasonISE
Subscribe to our newsletter: https://ise.gmu.edu/contact-us/
Add your profile to the ISE directory: https://ise.gmu.edu/add-profile/