



**MICHIGAN UNIVERSITY-WIDE
SUSTAINABILITY & ENVIRONMENT
CONFERENCE 2018**

Wednesday, February 14

12:00 – 12:30pm	Registration
12:30 – 2:00pm	Welcoming Plenary: S. Parrish, K. Hummel, & A. Foster (Ballroom)
2:00 – 3:30pm	Workshop Part 1 (parallel sessions) <ol style="list-style-type: none">I. <i>Climate Systems (Room 4, 1st Floor)</i>II. <i>Urban Systems (Hussey)</i>III. <i>Energy Systems (Kalamazoo)</i>IV. <i>Agricultural and Food Systems (Room D, 3rd Floor)</i>
3:30 – 5:30pm	Poster Reception and Lightning Talks (Ballroom)

Thursday, February 15

8:00 – 9:00am	Breakfast (Concourse)
9:00 – 9:30am	Plenary: Seth Guikema (Vandenberg)
9:30 – 11:00am	Presentations (parallel sessions) <ol style="list-style-type: none">1. <i>Environmental Risk and Behavior (Hussey)</i>2. <i>Environmental Decision-making and Policy (Kalamazoo)</i>3. <i>Urban Environments and Infrastructure (Michigan)</i>4. <i>Land Use and Land Cover Change (Vandenberg)</i>
11:00 – 11:30am	Coffee break (Concourse)
11:30 – 1:00pm	Presentations (parallel sessions) <ol style="list-style-type: none">5. <i>Energy Norms and Futures (Hussey)</i>6. <i>Sustainable Food and Agriculture (Michigan)</i>7. <i>Perceptions of Science and the Environment (Vandenberg)</i>
1:00 – 2:00pm	Lunch (Concourse)
2:00 – 3:30pm	Workshop Part 2 (parallel sessions) <ol style="list-style-type: none">I. <i>Climate Systems (Room 4, 1st Floor)</i>II. <i>Urban Systems (Hussey)</i>III. <i>Energy Systems (Kalamazoo)</i>IV. <i>Agricultural and Food Systems (Michigan)</i>
3:30 – 5:00pm	Concluding Panel (Vandenberg)
6:00 – 8:00pm	Public Reception – RSVP required (Zingerman's Greyline)

Wednesday, February 14

12:30pm Welcome Plenary (Ballroom)

Keynote: Susan Scott **Parrish** (English/PitE)

The Flood Year 1927: A Case for Interdisciplinary Environmental History

Katherine **Hummel** (English), *Aerial Photography and the Multi-Scalar Challenges of Sustainability in Post-Hurricane Haiti and Puerto Rico*

Alec **Foster** (SEAS), *Detroit, How Does Your Garden Grow? The Potential and Challenges of Scaling-Up Urban Agriculture in the Motor City*

2:00pm Parallel Workshops, part 1

Climate Systems (Room 4, 1st Floor)

Panel: Frank **Marsik** (CLASP), Jonathan **Overpeck** (SEAS), Carina **Gronlund** (SPH)

Urban Systems (Hussey)

Panel: Larissa **Larsen** (URP), Josh **Newell** (SEAS)

Energy Systems (Kalamazoo)

Panel: Margaret **Wooldridge** (ME), Daniel **Raimi** (Ford), Joe **Arvai** (Ross/SEAS)

Agricultural/Food Systems (Room D, 3rd Floor)

Panel: Arun **Agrawal** (SEAS), Lesli **Hoey** (URP), Julia **Wolfson** (SPH)

3:30pm Poster Reception (Ballroom)

5:30pm Adjourn

Thursday, February 15

8:00am Registration Breakfast (Concourse)

9:00am **Plenary** (Vandenberg)

Seth **Guikema** (IOE)

Resilience and Sustainability in Disaster-Prone Communities

9:30am Parallel Presentations, session 1

1. Environmental Risk and Behavior (Hussey)

Daniel **Raimi** (Ford): *The Fracking Debate*

Tom **Logan** (IOE): *Engineered climate adaptations can increase vulnerability to natural hazards*

Sam **Russel** and Hanna **Droessler** (SEAS): *Livelihood and climate adaptation of Indian famers*

Kaitlin **Raimi** (Ford): *Individual Differences in (Dis)comfort with Altering the Natural World: The Tampering with Nature (TWN) Scale*

Julia **Liao** (Psyc): *Using Earth Concepts to Effectively Tailor Pro-Environmental Messages*

Sara **Goto** (SEAS): *The influence of generational difference on loss aversion and risk taking*

2. Environmental Decision-making and Policy

(Kalamazoo)

James **Arnott** (SEAS): *The making of effective decision-maker scientist partnerships*

Margaret **Wooldridge** (ME): *From biofuel chemistry to biofuel policy: On how scientific findings can—and should—inform policy-making*

Michael **Lerner** (Polsci): *Too Many Cooks in the Kitchen? The Consequences of Fragmented Jurisdictions for Environmental Policymaking*

Anna **White** (IOE): *Persistent Patterns of Discriminatory Housing Policy and Inequity*

Sarah **Mills** (Ford): *The wind siting paradox: Climate denialism in America's windiest places*

Dominic **Bednar** (SEAS): *Defining Lines: Terminology and Methodological Approaches Toward Household Energy Justice*

3. Urban Environments and Infrastructure

(Michigan)

Thomas **Moran** (URP): *Building Post Rock*

Jim **Gawron** (SEAS): *Life Cycle Assessment of Connected & Automated Vehicle Subsystems*

Mark **Lindquist** (SEAS): *U3D-DSS: A Novel Decision Support System for Community Directed Green Infrastructure Design*

Stefania **Almazán** (SEAS): *Exploring household willingness to participate in solid waste collection services in Liberia*

Austin **Martin** (SEAS): *The native bees of Detroit's neighborhoods: how human social variables influence native bee communities*

4. Land Use & Land Cover Change (Vandenberg)

Manish **Verma** (CSCAR): *Remotely Sensed Solar Induced Fluorescence for Spatiotemporal Monitoring of Terrestrial Ecosystems*

Ripudaman **Singh** (ME): *Identifying Optimal Locations for Production of Cellulosic Ethanol for Use in the Transportation Sector in Ghana*

Cynthia **Gerlein-Safdi** (CLASP): *Using remote sensing to estimate the effects of reforestation policy in the fight against desertification in China*

Patricia **Koman** (EHS): *Wildland Fire Smoke Exposures and Cardiopulmonary Health*

Andrew **Bernard** (Anthro): *Distinguishing the effects of climate change: primates, their habitat, and their food*

11:00am Coffee Break (Concourse)

11:30am Parallel Presentations, session 2

5. Energy Norms and Futures (Hussey)

Patrick **Thomas** (SEAS): *Can ecological theory help us fuel and feed the world with algae?*

Tae **Lim** (ME): *Technical and economic feasibility of climate intervention in the U.S. electricity sector with direct air capture*

Stephanie **Ross** (EECS): *Stability of Increasingly Renewable Grids*

Kwonsik **Song** (CEE): *Non-Invasive Personalized Normative Messaging Intervention for the Reduction of Household Energy Consumption*

Lars **Junghans** (URP): *Concept 22/26, Future of high performance Buildings*

Doug **Kelbaugh** (URP): *URBAN COOL, Heat, Health and Habitat in the Anthropocene*

6. Sustainable Food and Agriculture (Michigan)

Brent **Heard** (SEAS): *Anticipating the Effects of Emerging Technologies on Food System Sustainability*

Jesse **Contreras** (Epi): *Health risks from exposure to untreated wastewater used for irrigation in the Mezquital Valley, Mexico: A 25-year update*

Alison **Bressler** (SEAS): *Cover Crop "Cocktails" for Conservation: Ecological Nutrient Management in Mixtures vs. Monocultures*

Lauren **Schmitt** (SEAS): *Shedding light on the shade: leaf litter decomposition in shaded coffee agro-ecosystems*

Mariana **Valencia** (EEB): *A Chayanovian analysis of tree management among Panamanian farmers*

7. Perceptions of Science and the Environment (Vandenberg)

Caitlin **Drummond** (Erb): *Historical Trends in Ideological Polarization of Science*

Jennifer **Carman** (SEAS): *Conceptually mapping middle school students' knowledge of climate change science*

Abigail **Dumes** (Anthro): *Lyme Disease, "Nature," and Environmental Risk in the United States*

Robert **Goodspeed** (URP): *Analyzing Stakeholder Uncertainty Perceptions to Advance Collaborative Sustainability Science*

Katie **Williamson** (SEAS): *Mental Maps, Envisioning, and Community-based Climate Adaptation in Coastal Connecticut*

Jacqueline **Cardoza** (SPH): *Sustainable Living Experience's Evaluation of Themed Residential Housing as an Influencer to Students' Sustainability Awareness and Behaviors*

1:00pm Lunch (Concourse)

2:00pm Parallel Workshops, part 2

Climate Systems (Room 4, 1st Floor)

Guest: Maria Carmen **Lemos** (SEAS)

Urban Systems (Hussey)

Guest: Joe **Grengs** (URP)

Energy Systems (Kalamazoo)

Guest: Sarah **Mills** (Ford)

Agricultural/Food Systems (Michigan)

Guests: Melissa **Zaksek** (Erb/Graham), Terry **Nelidov** (Erb)

3:30pm Concluding Panel (Vandenberg)

5:00pm Adjourn

About the Michigan University-Wide Sustainability and Environment Initiative

The pace and scale of global environmental changes to Earth systems and the pivotal role humans are playing in driving those changes have introduced challenges which confront science and society. Although many scholars are working in this area, these challenges are far from solved. Tackling these challenges requires communication and collaboration both within academia and between researchers and the public. The Michigan University-Wide Sustainability and Environment (MUSE) Initiative was founded to bring together emerging scholars to foster this crucial dialogue and encourage collaborations. MUSE consists of a bi-weekly workshop, an online network of scholars, and this annual conference.



So, we warmly welcome you to the 2nd annual MUSE Conference! The conference's goals are to bring together the immense array of sustainability and environment related research that we are doing here at the University of Michigan, Ann Arbor and foster on-going connections and collaborations. The conference is a constructive environment where we will share ideas and be open to the differences between disciplinary approaches – recognizing, embracing, and exploring this diversity is what will make our research richer and perhaps provide it that extra impact, so that together we can make real change in this world.

We offer our sincere thanks to our sponsors without whom this conference would not be possible.

Sponsors: School for Environment and Sustainability, College of Engineering, Rackham Graduate School, School of Public Health, College of Literature Science and Arts, Climate and Space Sciences and Engineering, Political Science, Industrial and Operations Engineering, Erb Institute | Business for Sustainability

MUSE Conference 2018 Organizing Committee:

Chair: Lizz Ultee (Climate and Space Sciences and Engineering)
Katie Browne (School for Environment and Sustainability)
Jennifer Carman (School for Environment and Sustainability)
Sara Goto (School for Environment and Sustainability)
Brent Heard (School for Environment and Sustainability)
Michael Lerner (Political Science)
Tom Logan (Industrial and Operations Engineering)
Matt Villeneuve (History)
Tim Williams (Industrial and Operations Engineering)
Emily Yang (Climate and Space Sciences and Engineering)

Learn more about MUSE: <https://muse-initiative.umich.edu>

Join us for the **MUSE Social event**: 5pm March 16, Detroit Street Filling Station