Program & Schedule

February 14, 2018
12.30pm - 5.30pm

February 15, 2018
9.00am - 5.00pm

Michigan League

Sponsored by
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 for Global Sustainable Enterprise
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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 for Global Sustainable Enterprise

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
Schedule: Wednesday, February 14

12:00 – 12:30pm  Registration

12:30 – 12:35pm  Welcoming Remarks

12:35 – 2:00pm  Plenary Session
  – Susan Scott Parrish (Keynote)
  – Katherine Hummel
  – Alec Foster

2:00 – 3:30pm  Workshop Part 1
  I. Climate Systems
  II. Urban Systems
  III. Energy Systems
  IV. Agricultural and Food Systems

3:30 – 4:00pm  Poster Lightning Talks

4:00 – 5:30pm  Poster Reception (food and beverage provided)
Schedule: Thursday, February 15

9:00 – 9:30am  Open Plenary (coffee provided)
   – Seth Guikema

9:30 – 11:00am  Presentations
   1. Environmental Risk and Behavior
   2. Environmental Decision-making and Policy
   3. Urban Environments and Infrastructure
   4. Land Use and Land Cover Change

11:00 – 11:30am  Coffee break

11:30 – 1:00pm  Presentations
   5. Energy Norms and Futures
   6. Sustainable Food and Agriculture
   7. Perceptions of Science and the Environment

1:00 – 2:00pm  Lunch

2:00 – 3:30pm  Workshop Part 2
   I. Climate Systems
   II. Urban Systems
   III. Energy Systems
   IV. Agricultural and Food Systems

3:30 – 5:00pm  Concluding Panel

6:00 – 8:00pm  Public Reception – RSVP required (Greyline)
Keynote Speaker: Susan Scott Parrish

Susan Scott Parrish is a Professor in the Department of English and the Program in the Environment at the University of Michigan. Her research addresses the interrelated issues of race, the environment, and knowledge-making in the Atlantic world from the seventeenth up through the mid-twentieth century, with a particular emphasis on southern and Caribbean plantation zones.


She has served on the editorial boards of *American Literature*, *Early American Literature*, and the *Winterthur Portfolio*, has been a council member at the Omohundro Institute of Early American History and Culture, and has served on the Executive Committee of the MLA’s “American Literature to 1800” Division.

**Title:** *The Flood Year 1927: A Case for Interdisciplinary Environmental History*

Use material from Flood Year 1927, I will address the issue of why interdisciplinarity is important in reckoning with environmental problems, and disasters, of the past and of the future. In particular, I think Flood Year can help us see that how an environmental event takes on public significance is as important to consider as the causation and shape of the bare event itself.
Plenary Speaker: Katherine Hummel

Katherine E. Hummel is a second-year Ph.D. student in English Language and Literature. She holds a BA in English from La Salle University and an MA in Literary Studies from Purdue University. Her research interests focus on contemporary postcolonial literature, environmental ethics, critical animal studies, and visual culture.

Title: Toward Ethical Spectatorship: Aerial Photography and the Temporal Challenges of Sustainability in Post-Hurricane Haiti and Puerto Rico

Sustainability has emerged as the common focus for Caribbean recovery efforts as the 2017 hurricane season ends. As Vann Newkirk II writes in The Atlantic, “sustainability is literally survival” for post-Hurricane-Maria Puerto Rico. Rather than frame sustainability as short-term infrastructural repairs, this environmental humanities project considers the temporal limits of sustainability in a future marked by climate change. With Caribbean spaces facing unprecedented environmental change, what are the conceptual and representational challenges for imagining sustainability in wide-ranging temporal and geographical scales? To engage this question, I turn to aerial photographs taken after Hurricane Matthew in Haiti and Hurricane Maria in Puerto Rico. I argue that photographs, as temporally dynamic forms, can teach viewers to attend to multiple human and non-human temporalities that intersect in the moment of photographic capture. Analyzing the images’ composition and circulation, I claim these aerial photographs prioritize human survivors’ voices, traces, and histories by repurposing the spectacle of environmental disaster to draw attention to otherwise invisible experiences. Engaging with the politics of photographic exposure can thus develop stronger ethical modes of spectatorship and more critical perspectives on what sustainable futures in vulnerable environments look like.
Plenary Speaker: Alec Foster

Alec Foster is a Postdoctoral Research Fellow in the School of Natural Resources and Environment at the University of Michigan. He is a broadly trained Urban Geographer, with both quantitative and qualitative research skills and experience. His dissertation research examines the role of participation in urban environmental stewardship on Philadelphian’s sense of self, place, and nature.

Title: Detroit, How Does Your Garden Grow? The Potential and Challenges of Scaling-Up Urban Agriculture in the Motor City

Long a presence in the global South, an urban agricultural (UA) renaissance is now well-underway in cities throughout the global North. Perhaps no Northern city has received more attention regarding UA than Detroit. However, there has been little research that actually documents the composition, spatial extent, and motivations for UA in Detroit. This paper fills these lacunae through a mixed methods analysis. Focusing on Detroit’s Lower East Side, a time-series analysis of Google Earth imagery from 2010 and 2016, ground truthed through physical site audits, reveals rapid growth in the number of UA sites, although they remain a small portion of the available open land in the neighborhood. Qualitative interviews revealed the motivations that led lower eastside residents to participate in UA. Most frequently mentioned were community building and aesthetic benefits, with other common motivations being a connection with nature, economic and food access benefits, and a history of gardening or farming. Finally, we synthesize the challenges associated with scaling up UA. Challenges are both technological and social, highlighting the importance of understanding urban areas as complex social-ecological systems.
Thursday Keynote Speaker: Seth Guikema

Seth Guikema is an Associate Professor in the Department of Industrial and Operations Engineering and the Department of Civil and Environmental Engineering at the University of Michigan. Much of his group's recent work is focused on the problems of urban and infrastructure resilience and sustainability in a changing climate, though areas of application are broad. It is grounded in risk analysis, particularly data-drive risk analysis and complex systems simulation.

Title: Resilience and Sustainability in Disaster-Prone Communities

Many communities throughout the world are prone to natural hazards such as hurricane, earthquakes, floods, and wildfires. These communities evolve over time in response to many different drivers, including the impacts of disasters and behavioral and policy responses to these impacts. This evolution over time can substantially alter the vulnerability of the community to future natural hazards. This talk will provide an overview of several recent projects aiming at better understanding how the dynamics of individual and policy responses to disasters can change the trajectory of a community and how this affects community resilience and sustainability.
Workshops

The conference will contain two workshop sessions, which are broadly named “Big questions and the importance of interdisciplinarity”. The workshops aim to encourage discussions between conference participants and foster interdisciplinary collaborations. Each session will contain four parallel tracks:

- Climate systems
- Energy systems
- Agriculture and food systems
- Urban systems

The overall output of the workshops is a group challenge that involves coming up with an interdisciplinary research proposal focused on a topic developed during the workshop sessions. The workshop sessions will proceed as follows.

**Workshop 1** (Wednesday 14th, 2-3:30pm): this session will begin with a panel of faculty and/or postdocs working in the field of the workshop track. The panelists will be discussing and fielding questions about “big issues” in the field and the importance of interdisciplinary research. This will be followed by breakout discussions, where workshop participants will work together to propose broad research ideasDirections that span disciplinary boundaries. The goal here isn’t to solve the problem, but to identify interesting questions amongst your group.

Schedule:

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<th>Time</th>
<th>Activity</th>
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<tr>
<td>2:00 – 2:10</td>
<td>Arrival and introductions</td>
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<td>2:10 – 2:40</td>
<td>Panel discussion</td>
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<td>2:40 – 3:15</td>
<td>Breakout discussions</td>
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<td>3:15 – 3:30</td>
<td>Reporting back</td>
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The confirmed panelists are:

<table>
<thead>
<tr>
<th>Theme</th>
<th>Panelists</th>
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<tbody>
<tr>
<td>Climate</td>
<td>Frank Marsik (CLaSP)</td>
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<td>Jonathan Overpeck (SEAS)</td>
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<td>Carina Gronlund (SPH)</td>
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<td>Energy</td>
<td>Margaret Wooldridge (Mech. Eng.)</td>
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<td>Daniel Raimi (Ford School)</td>
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<td>Joe Arvai (Ross/SEAS)</td>
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<td>Agriculture and food</td>
<td>Arun Agrawal (SEAS)</td>
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<td></td>
<td>Lesli Hoey (Taubman)</td>
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<td></td>
<td>Julia Wolfson (SPH)</td>
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<tr>
<td>Urban</td>
<td>Josh Newell (SEAS)</td>
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<td>Larissa Larsen (Taubman)</td>
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Workshop 2 (Thursday 14th, 2-3:30pm): the goal of the second workshop is to build the research ideas that were tabled the day before into a more comprehensive research plan. The research ideas will be displayed in the conference venue leading up to the second workshop. Conference attendees are not obliged to attend the same track both days, and can browse the list of ideas and find the idea/track that is of most interest to them. Attendees will write their name next to the idea that they are interested in working on and attend that track.

The session will begin with a presentation from a faculty or postdoc focusing on their experience and advice for coming up with an interdisciplinary research plan, and/or the importance of considering a particular underlying issue relating to the track’s theme. Following this, teams will break out into the self-identified teams and work on their research plans. The workshop will conclude with a group discussion focusing on the experience of the past two days: what went well, what was difficult, and lessons learned for interdisciplinary research going forward.

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<td>Breakout</td>
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<td>3:10 – 3:25</td>
<td>Group discussion</td>
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<td>3:25 – 3:30</td>
<td>Farewell / contact details exchange</td>
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The confirmed presenters are:

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<td>Climate</td>
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<td>Energy</td>
<td>Sarah Mills (Ford School)</td>
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<td>Agriculture and food</td>
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<td>Urban</td>
<td>Joe Grengs (Taubman)</td>
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