

# NATURAL HAZARDS ENGINEERING RESEARCH INFRASTRUCTURE SUMMER INSTITUTE

June 12-14, 2024



San Antonio, Texas,  
UTSA Downtown Campus,  
Durango Building

**NHERI Summer Institute Day 1**  
**Wednesday, June 12, 2024**

<b>Time</b>	<b>Session</b>	<b>Location</b>
7:30 am-8:00 am	<p>Registration, breakfast, sign-up to meet with NSF ENG/CMMI Program Director, Giovanna Biscontin, and User Forum survey sign-up.</p> <p><b>Presenter:</b> <i>Giovanna Biscontin</i> <i>Program Director, National Science Foundation</i> <i>Civil, Mechanical, &amp; Manufacturing Innovation (ENG/CMMI)</i></p>	La Villita & Riverwalk Rm
8:00 am-9:00 am	<p><b>Welcome &amp; NHERI Overview</b></p> <p><b>Presenter:</b> <i>JoAnn Browning</i> <i>Co-Principal Investigator of the NHERI NCO, Co-Lead of NHERI NCO-ECO</i> <i>Interim Vice President of Research and Economic Development</i> <i>The University of Texas at San Antonio</i></p> <p><i>Following a welcome by the NCO-ECO leads, attendees will learn about the NHERI network, the Summer Institute objectives, and the UTSA Downtown Campus.</i></p>	La Villita Rm
9:00 am-9:15 am	<b>Networking Break</b>	La Villita Rm
9:15 am-10:40 am	<p><b>NHERI Site Presentations, Part I</b></p> <p><i>After a short introduction, representatives from all 10 NHERI sites will share site information with participants.</i></p>	La Villita Rm
9:18 am-9:30 am	<p><b>Wall of Wind</b></p> <p><b>Presenter:</b> <i>Steven Diaz</i> <i>Site Operations Manager, The Wall of Wind</i> <i>Florida International University</i></p>	
9:32 am-9:44 am	<p><b>O.H. Hinsdale Wave Research Laboratory</b></p> <p><b>Presenter:</b> <i>Pedro Lomónaco</i> <i>Co-Principal Investigator &amp; Director, O.H. Hinsdale Wave Research Laboratory</i> <i>Oregon State University</i></p>	
9:46 am-9:58 am	<p><b>Boundary Layer Wind Tunnel Experimental Facility</b></p> <p><b>Presenter:</b> <i>Brian Phillips</i> <i>Associate Professor, Department of Civil &amp; Coastal Engineering</i> <i>University of Florida</i></p>	
10:00 am-10:12 am	<p><b>Center for Geotechnical Modeling</b></p> <p><b>Presenter:</b> <i>Dan Wilson</i> <i>Associate Director &amp; Co-PI, Center for Geotechnical Modeling</i> <i>University of California, Davis</i></p>	
10:14 am-10:26 am	<p><b>Large High Performance Outdoor Shake Table</b></p> <p><b>Presenter:</b> <i>Joel Conte</i> <i>Principal Investigator, Large High Performance Outdoor Shake Table 6</i> <i>Professor, Civil Engineering</i> <i>University of California, San Diego</i></p>	
10:28 am-10:40 am	<p><b>Large-Scale Mobile Shakers</b></p> <p><b>Presenter:</b> <i>Tricia Clayton</i></p>	



	<p><i>Co-Principal Investigator, Large-Scale Mobile Shakers The University of Texas at Austin Associate Professor, Civil Engineer at Wake Forest University</i></p>	
10:42 am- 11:00 am	<b>Networking Break</b>	La Villita Rm
11:00 am-12:11 pm	<b>NHERI Site Presentation, Part II</b>	La Villita Rm
11:03 am-11:15 am	<p><b>Computational Modeling and Simulation Center (SimCenter)</b> <i>Presenter: Laura Lowes Leadership Team, SimCenter University of California, Berkeley</i></p>	
11:17 am-11:29 am	<p><b>RAPID Natural Hazards Reconnaissance</b> <i>Presenter: Laura Lowes ECO Director, RAPID Facility Department Chair &amp; Professor, Civil &amp; Environmental Engineering University of Washington</i></p>	
11:31 am-11:43 am	<p><b>Real-Time Multi-Directional (RTMD) Experimental Facility</b> <i>Presenters: James Ricles Principal Investigator &amp; Director, Real-Time Multi-Directional Experimental Facility Lehigh University, Bruce G. Johnson Professor of Structural Engineering</i></p> <p><i>Liang Cao Research Scientist, Real-Time Multi-Directional Experimental Facility Lehigh University</i></p>	
11:45 pm-11:57 pm	<p><b>DesignSafe-Cyberinfrastructure</b> <i>Presenter: Tim Cockerill Director of User Services at Texas Advanced Computing Center The University of Texas at Austin</i></p>	
11:59 pm-12:11 pm	<p><b>CONVERGE &amp; Natural Hazards Center</b> <i>Presenter: Candace Evans Graduate Research Assistant &amp; Co-Lead Training Module Developer CONVERGE &amp; Natural Hazards Center PhD Candidate, Department of Sociology University of Colorado, Boulder</i></p>	
12:15 pm-1:15 pm	<p><b>Networking Lunch / Meetings with NSF Program Director</b> <i>Individuals who signed up will meet with NSF Program Director, Giovanna Biscontin.</i></p>	Riverwalk Rm
1:15 pm-2:15 pm	<p><b>NHERI Networking Round Table Discussions (3 sessions – 15 Minutes each)</b> <i>Attendees will speak with NHERI representatives from each site.</i></p> <ul style="list-style-type: none"> <li>• Round 1- all sites available, except SimCenter</li> <li>• Round 2- all sites available, except RAPID</li> <li>• Round 3- all site available</li> </ul>	Riverwalk Rm
2:15 pm-2:30 pm	<p><b>Networking Lunch / Meetings with NSF Program Director</b> <i>Individuals who signed up will meet with NSF Program Director, Giovanna Biscontin.</i></p>	La Villita & Riverwalk Rm
2:30 pm-4:15 pm	<b>NSF Grant Writing Workshop Research 101</b>	La Villita Rm



**Presenter:** Joy Pauschke  
Program Director, National Science Foundation  
Division of Civil, Mechanical, and Manufacturing Innovation (CMMI)

Attendees will learn about research merit, overview of research activities and resources, and broader impacts of NSF proposal writing from the NSF CMMI Program Director, Joy Pauschke.

4:15 pm-4:30 pm      **Networking Break/ Meetings with NSF Program Director**      La Villita & Riverwalk Rm  
*Individuals who signed up will meet with NSF Program Director, Giovanna Biscontin.*

4:30 pm-5:30 pm      **Interdisciplinary Research Teams: Intellectual Merit**      La Villita Rm  
*Attendees meet their interdisciplinary research teams and learn more about the mock proposal. Members will introduce themselves and their research, compare research areas, identify problems, and explore common ground where a team's combined research knowledge can solve problems more effectively together.*

6:00 pm-8:00 pm      **User Forum Meet & Greet with Appetizers at Mi Tierra**      Mi Tierra  
*We will meet in the La Villita Rm at 6:00 to walk to Mi Tierra together. Please wear cool clothes and comfortable walking shoes.*

**Hosted by:**  
Stephanie Paal  
NHERI User Forum Member & Associate Professor, Civil & Environmental Engineering  
Texas A&M University

Shane Crawford  
NHERI User Forum Member & Assistant Professor, Civil, Construction, & Environmental  
Engineering, University of Alabama

Antonio Bobet  
NHERI NCO Co-Principal Investigator, User Forum NCO Representative, Edgar B., and  
Hedwig M. Olson Professor in Civil Engineering  
Purdue University

David Johnson  
NHERI NCO, User Forum NCO Representative, Associate Professor in Industrial  
Engineering & Political Science  
Purdue University



**NHERI Summer Institute Day 2**  
**Thursday, June 13, 2024**

Time	Session	Location
8:00 am-8:30 am	Registration, breakfast, sign-up to meet with NSF ENG/CMMI Program Director, Giovanna Biscontin and User Forum survey sign-up.	Riverwalk Rm
8:30 am-8:45am	<p><b>Education Consultant Welcome &amp; Introductions</b>  <b>Dr. Brian Welch</b>, <i>Anson Jones STEM Magnet Middle School, Northside Independent School District</i></p> <p><b>Jonathan Sandoval</b>, <i>Anson Jones STEM Magnet Middle School, Northside Independent School District</i></p> <p><b>Lindsay Carroll</b>, <i>Hatfield Marine Science Center, Oregon State University</i></p>	La Villita Rm
8:45 am-10:45 am	<p><b>NHERI Science Plan 3rd Edition</b>  <i>Presenter: Billy Edge</i>  <i>NHERI NCO Co-PI and NHERI Science Plan Task Group, Professor Emeritus, Civil, Construction &amp; Environmental Engineering</i>  <i>North Carolina State University</i></p> <p><i>Attendees will participate in an introduction, overview, and discussion of the third iteration of the NHERI Science Plan to address pressing research needs for the natural hazards' engineering community.</i></p>	La Villita Rm
10:45 am-11:00 am	<p><b>Interdisciplinary Research Teams: Science Plan Research Questions</b>  <i>Attendees will select one Key Research Question and one Grand Challenge with guidance from the NHERI Science Plan Task Group and the NHERI site representatives to complete their intellectual merit, research question, and resource plan slides.</i></p>	La Villita Rm
10:45 am-11:00 am	<p><b>Networking Break/Meetings with NSF Program Director</b></p>	La Villita Rm
11:00 am-12:00 pm	<p><b>Interdisciplinary NSF CAREER Awardee Panel</b>  <i>Moderated by: Karina Vielma</i>  <i>NHERI NCO-ECO Assistant Lead</i>  <i>Assistant Professor, Engineering Education</i>  <i>The University of Texas at San Antonio</i></p> <p><b>Panelist: Stephanie Paal</b>  <i>Associate Professor, Civil &amp; Environmental Engineering</i>  <i>Texas A&amp;M University (whoop!)</i></p> <p><b>Panelist: Gabriela Uribe</b>  <i>Associate Professor, Chemical Engineering</i>  <i>University of Texas at San Antonio</i></p> <p><b>Panelist: Christopher Combs</b>  <i>Assistant Professor, Dee Howard Faculty Fellow, Mechanical Engineering</i>  <i>University of Texas at San Antonio</i></p> <p><b>Panelist: David Johnson</b>  <i>Associate Professor, Political Science &amp; Industrial Engineering</i>  <i>Purdue University</i></p>	La Villita Rm



	<p><i>Attendees will learn about the NSF CAREER proposal from an interdisciplinary panel of successful awardees. Panelists will answer attendees' questions and share their experiences as they prepared submissions for the NSF CAREER proposal.</i></p>	
12:00 pm-12:55 pm	<p><b>Networking Lunch / Meetings with NSF Program Director</b>  <i>Individuals who signed up will meet with NSF Program Director, Giovanna Biscontin.</i></p>	Riverwalk Rm/ Alamo Boardroom
1:00 pm-2:15 pm	<p><b>Diversity, Equity, and Inclusion Workshop</b>  <b>Facilitated by:</b>  <i>Alex Mejia</i>  <i>Associate Professor, Engineering Education</i>  <i>The University of Texas at San Antonio</i></p> <p><i>Karina Vielma</i>  <i>NHERI NCO-ECO Co-Lead</i>  <i>Assistant Professor, Engineering Education</i>  <i>The University of Texas at San Antonio</i></p> <p><i>The workshop will give attendees opportunities to dialogue about topics of diversity, equity, and inclusion with other early career faculty members and education researchers.</i></p>	La Villita Rm
2:15 pm-2:30 pm	<p><b>Networking Break / Meetings with NSF Program Director</b>  <i>Individuals who signed up will meet with NSF Program Director, Giovanna Biscontin.</i></p>	La Villita & Riverwalk Rm
2:30 pm-3:15 pm	<p><b>Broader Impacts</b>  <b>Presenter:</b> <i>Karina Vielma</i>  <i>NHERI NCO-ECO Assistant Lead</i>  <i>Assistant Professor, Engineering Education</i>  <i>The University of Texas at San Antonio</i></p> <p><i>Attendees will learn more about the broader impacts of NSF proposals from Engineering Education Assistant Professor, Karina Vielma.</i></p>	La Villita Rm
3:15 pm-3:30 pm	<p><b>Networking Break / Meetings with NSF Program Director</b>  <i>Individuals who signed up will meet with NSF Program Director, Giovanna Biscontin.</i></p>	La Villita & Riverwalk Rm
3:30 pm-5:30 pm	<p><b>Interdisciplinary Research Teams: Broader Impacts Consultation</b>  <i>Attendees will work with education consultants to develop a plan for incorporating K-12 component meaningfully into your proposal.</i></p>	La Villita & Riverwalk Rm
5:55 pm-7:30 pm	<p><b>Klesse College of Engineering &amp; Integrated Design sponsored River Cruise</b>  <i>Participants will tour the River Walk via river barge. Please meet in the La Villita room at 5:55 pm. We will walk a short distance to catch the bus which will take the shuttle us.</i></p>	La Villita Rm



**NHERI Summer Institute Day 3**  
**Friday, June 14, 2024**

<b>Time</b>	<b>Session</b>	<b>Location</b>
8:00 am-8:30 am	Breakfast and User Forum survey sign-up.	Riverwalk Rm
8:30 am-9:00 am	<b>NHERI Technology Transfer Committee (TTC)</b> <i>Presenter: Kelly Cobeen</i> <i>Associate Principal, Wiss, Janney, Elstner Associates, Inc.</i>  <i>Presenter: Chris Rojahn</i> <i>Director Emeritus, Applied Technology Council</i>  <i>Presenter: Joseph Cibor</i> <i>President, Cibor, Inc.</i>	La Villita Rm
9:00 am-9:45 am	<b>Interdisciplinary Research Teams: Research into Practice</b> <i>Attendees will work within their teams to create a plan for moving research to practice for their mock proposal with guidance from the Technology Transfer Committee members.</i>	La Villita & Riverwalk Rm
9:45 am-10:00 am	<b>Networking Break / Meetings with NSF Program Director</b> <i>Individuals who signed up will meet with NSF Program Director, Giovanna Biscontin.</i>	La Villita & Riverwalk Rm La Villita Rm
10:00 am-12:00 pm	<b>Interdisciplinary Research Teams: Presentation</b> <i>Attendees will finalize their mock proposal presentations to present.</i>	Alamo Boardroom Alamo Boardroom
10:00 am-11:00 am	<b>User Forum Annual Meeting</b> <i>User Forum members will meet for their annual in person meeting.</i>	
11:15 am-11:45 pm	<b>ECO Committee Meeting</b> <i>ECO Committee members will meet for their June meeting.</i>	
12:00 pm-12:55 pm	<b>Networking Lunch / Meetings with NSF Program Director</b> <i>Individuals who signed up will meet with NSF Program Director, Giovanna Biscontin.</i>	Riverwalk Rm
1:00 pm-3:00 pm	<b>Group Mock Proposal Presentations</b> <i>Attendees will present their mock proposal slides to the judges and other participants for feedback.</i>	La Villita Rm
3:00 pm-3:15 pm	<b>Networking Break / Meetings with NSF Program Director</b> <i>Individuals who signed up will meet with NSF Program Director, Giovanna Biscontin.</i>	La Villita & Riverwalk Rm
3:15 pm-3:45 pm	<b>Awards Presentation &amp; Concluding Remarks</b> <i>Presenter: Karina Vielma</i> <i>NHERI NCO-ECO Lead</i> <i>Assistant Professor, Engineering Education</i> <i>The University of Texas at San Antonio</i>  <i>The award for the best mock proposal will be presented before concluding remarks close out the 2024 NHERI Summer Institute.</i>	La Villita Room

