



We envision a just and equitable world where knowledge is applied to ensure that humans live in harmony with nature.

Supporting Field Research with NHERI Community Resources: Interdisciplinary Coordination through CONVERGE

Rachel Adams, PhD, MPH

Research Associate

Natural Hazards Center and CONVERGE

University of Colorado Boulder



University of Colorado **Boulder**

NSF Award #1841338



The Natural Hazards Center

Mission: We are the National Science Foundation-designated information clearinghouse for the **societal** dimensions of hazards and disasters. We are dedicated to reducing disaster harm through:

1. translating and sharing hazards and disaster research and information;
2. building connections between researchers, non-profit and private sector professionals, the media, policy makers, and local, state, and federal officials;
3. advancing social science and interdisciplinary knowledge, with a special emphasis on the most vulnerable populations and places; and
4. training and mentoring the diverse next generation of hazards and disaster professionals.



hazards.colorado.edu/signup



CONVERGE

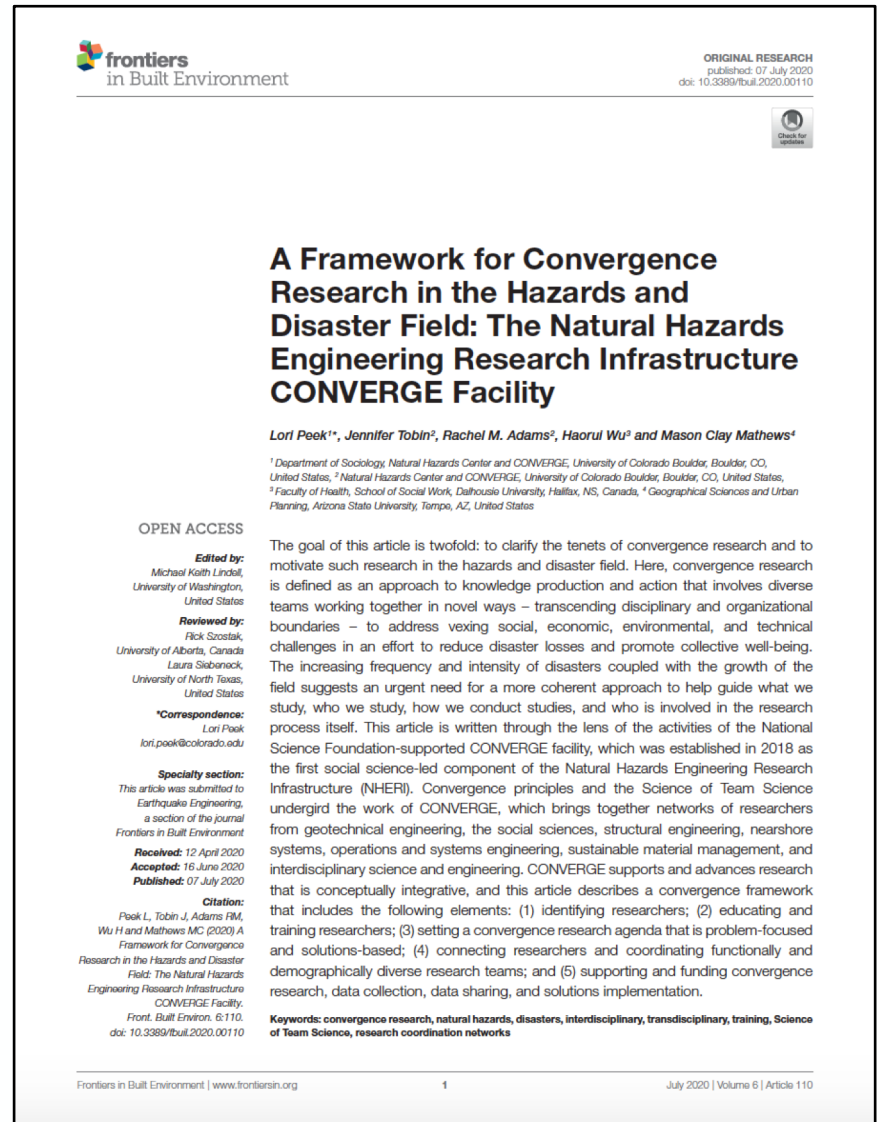
CONVERGE is a new National Science Foundation-Natural Hazards Engineering Research Infrastructure (NSF-NHERI) facility dedicated to:

- **identifying** researchers;
- **educating** and **training** researchers;
- **setting** a convergence research agenda that is problem-focused and solutions-based;
- **connecting** researchers and **coordinating** functionally and demographically diverse research teams; and
- **supporting** and **funding** convergence research, data collection, data sharing, and solutions implementation.



CONVERGE

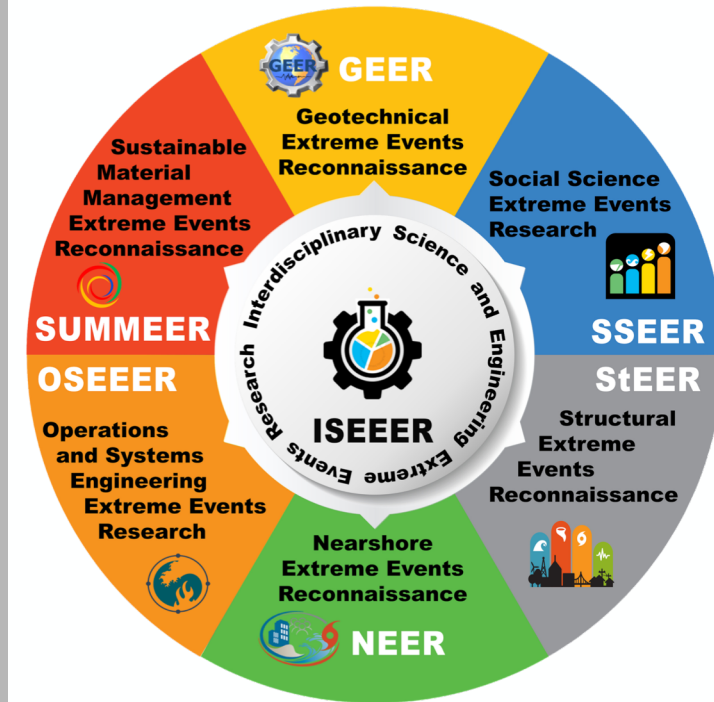
- In 2020 we published an article on CONVERGE in *Frontiers in Built Environment*
- This article synthesizes 20 years of convergence research in an effort to bring that framework to the natural hazards field
- Access the article for free online at:
<https://www.frontiersin.org/article/s/10.3389/fbuil.2020.00110/full>





NSF Extreme Events Reconnaissance / Research (EER) Networks

1. Geotechnical Engineering (GEER)
2. Social Sciences (SSEER)
3. Structural Engineering (StEER)
4. Nearshore Systems (NEER)
5. Operations and Systems Engineering (OSEEER)
6. Sustainable Material Management Engineering (SUMMEER)
7. Interdisciplinary Science and Engineering (ISEEER)



CONVERGE Training Modules

- Free, online courses designed to accelerate the training of diverse hazards and disaster researchers, including students and early career researchers
- 30-60 minutes to complete and includes quiz and certificate of completion



SOCIAL VULNERABILITY AND
DISASTERS



DISASTER MENTAL HEALTH



CULTURAL COMPETENCE IN
HAZARDS AND DISASTER
RESEARCH



INSTITUTIONAL REVIEW BOARD
(IRB) PROCEDURES AND EXTREME
EVENTS RESEARCH



CONDUCTING EMOTIONALLY CHALLENGING
RESEARCH



UNDERSTANDING AND ENDING GENDER-BASED
VIOLENCE IN FIELDWORK



BROADER ETHICAL CONSIDERATIONS FOR
HAZARDS AND DISASTER RESEARCHERS

Check Sheets and Briefing Sheets

[ABOUT](#)[RESEARCH NETWORKS](#)[RESOURCES](#)[DATA](#)[COMMUNICATIONS](#)[CONTACT](#)

CONVERGE Extreme Events Research Check Sheets Series

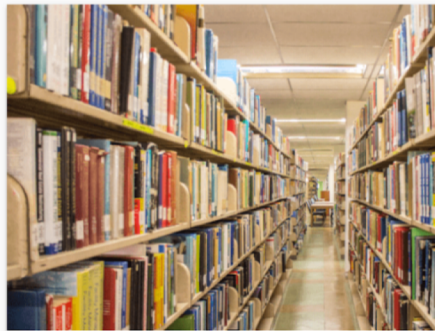
These short, graphical check sheets are meant to be used as researchers design their studies, prepare to enter the field, conduct field research, and exit the field. The series, which is currently in development, will offer best practices for extreme events research and consist of 1-2 page check sheets.

A list of planned check sheets follows:

Now Available



RESEARCH DESIGN TABLE



PART I: CONDUCTING A SYSTEMATIC LITERATURE REVIEW



PART II: SYSTEMATIC LITERATURE REVIEW TABLE



DON'T FORGET: A CHECKLIST OF THINGS TO BRING TO THE FIELD

NSF Award #1841338



converge.colorado.edu/resources



Data Ambassadors

CONVERGE Data Ambassadors

CONVERGE Data Ambassadors have completed a National Science Foundation-supported [Publish Your Data!](#) training session. As Data Ambassadors, they have committed to publishing their own data and instruments on [DesignSafe](#) to learning about the [CONVERGE](#) and [BAP2](#) facilities and their resources, and to sharing their newly attained knowledge with other social and behavioral scientists and colleagues from other allied disciplines in the hazards and disaster field. CONVERGE Data Ambassadors will help usher in a culture shift toward data publication and data and instrument sharing across disciplines.

The following page includes a list of instruments, reports, protocols, and other research materials published by the CONVERGE Data Ambassadors via the DesignSafe Cyberinfrastructure.



Lauren Clay
Associate Professor, Health Administration and Public Health
D'Youville College

Research Instrument Repository:

Clay, L. (2020). "COVID-19 and Social Determinants of Health Data Collection Instrument Repository." DesignSafe-CI. <https://doi.org/10.17603/ds2-nay0-1518>

Research Brief:

Clay, L., S. Penta, and A. Silver. (2020). "Risk Perception, Information Seeking, and Protective Actions During COVID-19 Among New Yorkers (May-July 2020)." In A Multi-Wave Study of Risk Perception, Information Seeking, and Protective Action in COVID-19. DesignSafe-CI. <https://doi.org/10.17603/ds2-7019-cs33>

Data Report:

Clay, L., S. Rogus, and P. Gadchodkar. (2020). "Primary and Secondary Health Impacts of the COVID-19 Pandemic on New Yorkers (May-June 2020)." In National Food Access and COVID Research Team (NFACT) - New York. DesignSafe-CI. <https://doi.org/10.17603/ds2-xe2x-x540>



Alex Greer
Associate Professor, College of Emergency Preparedness, Homeland Security, and Cybersecurity
University at Albany

Research Instruments and Data:

Greer, A., T. Wu, H. Murphy, and R. Chang. (2020). "Survey of Students and Households and Interviews with Key Stakeholders in Oklahoma," in Earthquake Adjustment in Oklahoma. DesignSafe-CI. <https://doi.org/10.17603/ds2-dn0z-0111>



Betty Lai
Blushtier Sesquicentennial Assistant Professor, Department of Counseling, Developmental, and Educational Psychology
Boston College

Interview Protocol:

Hoskova, B.J., Medzhitova, C., Colgan, B., Liang, and B. Lai. (2020). "Time 1 Interview Protocol on Colleges and COVID-19." in Colleges and the COVID-19 Crisis. DesignSafe-CI. <https://doi.org/10.17603/ds2-erz5-1090>



Lori Peek
Professor, Department of Sociology and Director, Natural Hazards Center
Principal Investigator, CONVERGE, SSEER, and ISEER
University of Colorado Boulder

Dataset:

Peek, L., E. Hines, M. Mathews, J. Gunderson, and H. Wu. (2020). "Global Academic Hazards and Disaster Research Centers Data." DesignSafe-CI. <https://doi.org/10.17603/ds2-9wq-9z57>

Research Instruments:

Peacock, W., N. Rosenheim, D. Gu, S. Van Zandt, L. Peek, M. Dillard, J. Tobin, and S. Hamideh. (2020). "Household Survey Instrument, November 26, 2016, Wave 1." in A Longitudinal Community Resilience Focused Technical Investigation of the Lumberton, North Carolina Flood of 2016. DesignSafe-CI. <https://doi.org/10.17603/ds2-qm19-3s33>

Sutley, E., M. Dillard, S. Hamideh, W. Peacock, J. Tobin, L. Peek, K. Seong, A. Barbosa, T. Tomiczek, J. van de Lindt, and D. Gu. (2020). "Household Survey Instrument, January 19, 2018, Wave 2." in A Longitudinal Community Resilience Focused Technical Investigation of the Lumberton, North Carolina Flood of 2016. DesignSafe-CI. <https://doi.org/10.17603/ds2-dh3h-qy28>

Scoping Literature Review:

Wu, H., L. Peek, M. Mathews, and N. Mattson. (2020). "A Scoping Literature Review: Cultural Competence for Hazards and Disaster Research." DesignSafe-CI. <https://doi.org/10.17603/ds2-9vz8-7v76>



Nathanael Rosenheim
Associate Research Scientist and Director of Research, Hazard Reduction & Recovery Center
Texas A&M University

Research Instruments:

Peacock, W., N. Rosenheim, D. Gu, S. Van Zandt, L. Peek, M. Dillard, J. Tobin, and S. Hamideh. (2020). "Household Survey Instrument, November 26, 2016, Wave 1." in A Longitudinal Community Resilience Focused Technical Investigation of the Lumberton, North Carolina Flood of 2016. DesignSafe-CI. <https://doi.org/10.17603/ds2-qm19-3s33>

Rosenheim, N., W. Peacock, M. Perez, and G. Lane. (2020). "Food Retail Survey Instrument." in Food Access Impact Survey for Southeast Texas and Harris County, Texas after Hurricane Harvey. DesignSafe-CI. <https://doi.org/10.17603/ds2-ao2k-dy92>

Toolkit:

Rosenheim, N., M. Stanley, C. Goodman, A. Berd, S. Hayes, E. Millard, J. Korukonda, and M. Watson. (2020). "Systematic Literature Review Toolkit." DesignSafe-CI. <https://doi.org/10.17603/ds2-3fn5-4b44>



Gavin Smith
Professor, Department of Landscape Architecture and Environmental Planning
North Carolina State University

Research Instrument:

Smith, G., O. Villa, and G. Caverly. (2020). "A National Evaluation of State Roles in Hazard Mitigation: Building Local Capacity to Implement FEMA Hazard Mitigation Assistance Grants." DesignSafe-CI. <https://doi.org/10.17603/ds2-sjlv-eg87>



Maria Watson
Research Assistant Professor, Department of Landscape Architecture and Urban Planning
Texas A&M University

Research Instruments:

Sutley, E., M. Dillard, S. Hamideh, W. Peacock, J. Tobin, L. Peek, K. Seong, A. Barbosa, T. Tomiczek, J. van de Lindt, and D. Gu. (2020). "Household Survey Instrument, January 19, 2018, Wave 2." in A Longitudinal Community Resilience Focused Technical Investigation of the Lumberton, North Carolina Flood of 2016. DesignSafe-CI. <https://doi.org/10.17603/ds2-dh3h-qy28>

Xiao, Y., M. Watson, J. Helgeson, K. Farokhnia, J. van de Lindt, J. Mitrani-Reiser, E. Sutley, D. Deniz, T. Tomiczek, A. Barbosa, J. Fung, O. Nofal, and M. Koliou. (2020). "Business Survey Instrument, January 19, 2018, Wave 2." in A Longitudinal Community Resilience Focused Technical Investigation of the Lumberton, North Carolina Flood of 2016. DesignSafe-CI. <https://doi.org/10.17603/ds2-f9k1-fm93>



Haorui Wu
Assistant Professor, School of Social Work
Dalhousie University

Dataset:

Peek, L., E. Hines, M. Mathews, J. Gunderson, and H. Wu. (2020). "Global Academic Hazards and Disaster Research Centers Data." DesignSafe-CI. <https://doi.org/10.17603/ds2-9wq-9z57>

Scoping Literature Review:

Wu, H., L. Peek, M. Mathews, and N. Mattson. (2020). "A Scoping Literature Review: Cultural Competence for Hazards and Disaster Research." DesignSafe-CI. <https://doi.org/10.17603/ds2-9vz8-7v76>



H. Tristan Wu
Associate Professor, Department of Emergency Management and Disaster Science
University of North Texas

Research Instrument:

Wu, T., S. Huang, and M. Lindell. (2020). "Household Mail Survey." in 2011 New Zealand and Japan Earthquake Household Response Survey. DesignSafe-CI. <https://doi.org/10.17603/ds2-st68-6b42>



**NATURAL
HAZARDS
CENTER**



We envision a just and equitable world where knowledge is applied to ensure that humans live in harmony with nature.



Contact Us at: converge@colorado.edu
Sign Up at: converge.colorado.edu/signup



University of Colorado **Boulder**

NSF Award #1841338



NHERI