



## **NHERI Technology Transfer Committee (TTC) Report on the NHERI 2024 Summer Institute**

The Natural Hazards Engineering Research Infrastructure (NHERI) 2024 Summer Institute, which has been conducted annually for the last several years, was conducted June 12-14, 2024, at the University of Texas at San Antonio Downtown campus. The 50 participants included 20+ early career faculty, graduate students, and post-doctoral researchers, as well as NHERI institution representatives (from both the Network Coordination Office [NCO] at Purdue University and universities in the NHERI network), several K-12 educators, and several members of the NHERI Technology Transfer (TTC) Committee.

As noted by NCO Co-PI JoAnn Browning (University of Texas at Austin) in her welcoming remarks, “the NHERI Summer Institute is intended to introduce graduate students, early career faculty, practitioners, and K-12 educators to the NHERI network and to help them take advantage of the various aspects of the network that intersect with their careers. The NHERI community designed the activities of the Summer Institute with a few primary goals in mind:

- To build community and forge collaborations within the NHERI community and between the NHERI community and K-12 education and outreach.
- To build skills for early career faculty and graduate students to write successful NSF grant proposals using NHERI resources.
- To build knowledge for early career faculty, graduate students, practitioners and K-12 educators about NHERI, the NHERI Science Plan, the facilities, and other NHERI resources.
- To build networks between NHERI researchers and practitioners.”

The 3-day event included presentations from NHERI representatives on the following subjects:

- The NHERI program mission;
- NHERI network site capabilities;
- NHERI network resource requests;
- The NHERI Science Plan;
- NSF Grant proposal writing (in a zoom presentation by Joy Pauschke, NSF Program Director);
- Broader educational impacts of research;
- Outreach focused on diversity, equity, and inclusion;
- Community networking and mentoring;
- Technology Transfer; and
- K-12 Educator Training (for K-12 educators).

Representatives from the NHERI Network Coordination Office, NHERI Science Plan, NHERI Technology Transfer Committee, and User Forum, were also on hand to participate in the various Program break-out roundtable sessions and guide the participants’ mock proposal development exercise.

## Technology Transfer Committee (TTC) Involvement

The TTC members who participated in the 2024 Summer Institute were Joseph Cibor (Geotechnical Engineer and President, Cibor Geoconsultants, Houston, Texas), Kelly Cobeen (Structural Engineer and Associate Principal, Wiss Janney Elstner, Emeryville, California) and Christopher Rojahn (Applied Technology Council Director Emeritus, retired, Palo Alto, California).

While TTC member involvement included informal discussions with other participants throughout the three-day event, their main involvement was a 30-minute presentation on Friday morning, June 14, that summarized mechanisms of technology transfer and suggested how early career faculty might best involve themselves in technology transfer. Appendix A contains the set of slides used in their presentation, which was given primarily by Kelly Cobeen. Example TTC-recommended mechanisms to execute or enhance technology transfer included:

- Identify organizations (ACI, AISC, AWC, GBA, or similar entities) or committees (code, standard, or similar committees) that might advance results of your research into practice and establish interactive communication with persons involved.
- Identify industry advisors to be contributors of technical knowledge and recommendations through the course of your work, and that can become champions helping to implement your work.
- Inform individuals and professional groups who could best assist in transferring your research findings (new knowledge) into active practice (e.g., engineering guidelines, standards, and codes of practice; public policy) by giving talks and otherwise participating in conferences, seminars, and workshops and publishing in professional journals in your specialty field(s) of interest.
- Volunteer to give presentations at local technical society (e.g., ASCE, AWWA, APWA, ACEC) monthly meetings (technical sessions are typically scheduled immediately before general membership meetings) describing your research objectives/findings to-date and soliciting comments/input from practitioners attending the technical session, often to fulfill their annual PDH requirement.
- Join appropriate professional society(ies) and volunteer on committee(s).
- Establish ties/communication with TTC committee member(s) most closely aligned to your research area/interest.
- Intern at consulting firm or governmental agency during summer months and winter break to begin to gain practical experience.
- Subscribe to technical society's trade (not technical) magazine, which typically features articles written by practitioners and suppliers.

Subsequent to their technology transfer presentations, each TTC member participated in roundtable discussions by the various groups who were preparing mock proposals that were presented to the Summer Institute participants on the last (Friday) afternoon of the event. The TTC member role in each of those roundtable discussions was to provide guidance on how technology transfer might best be incorporated in the mock proposal.

## **Acronym Definitions**

ACEC	American Council of Engineering Companies
ACI	American Concrete Institute
AISC	American Institute of Steel Construction
APWA	American Public Works Association
ASCE	American Society of Civil Engineers
AWC	American Wood Council
AWWA	American Water Works Association
GBA	Geoprofessional Business Association
NCO	Network Coordination Office (of NHERI)
NHERI	Natural Hazards Engineering Research Infrastructure
NSF	National Science Foundation
PDH	Professional Development Hours
TTC	Technology Transfer Committee