



National
Science
Foundation

University of California at San Diego



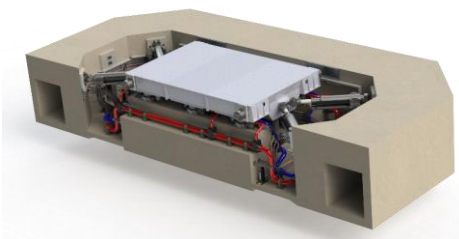
Natural Hazards Engineering Research Infrastructure



UC San Diego
JACOBS SCHOOL OF ENGINEERING
Structural Engineering

Education and Community Outreach

Lelli Van Den Einde, NHERI@UC San Diego ECO Director



NHERI@UC San Diego User Training Workshop



***December 15-16, 2022
University of California, San Diego***



- ECO Goals
- ECO Activities & Partners
- ECO Proposal Ideas (Examples)

- Training Workshop Survey

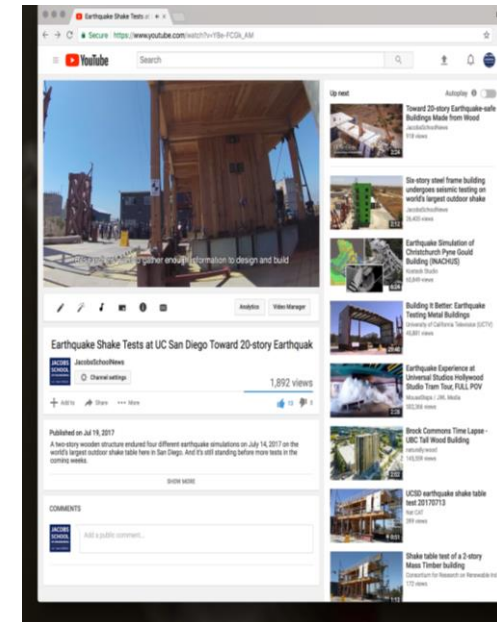
NHERI@UC San Diego ECO Goals

1. Support technology transfer to practitioners and future engineers to promote the implementation of research results in practice through dissemination at annual community workshops, webinars, and conferences.
2. Highlight innovative research at NHERI@UC San Diego and demonstrate benefits of the research to the public and critical decision makers through targeted Media Relations.
3. Engage K-12 students in understanding earthquake engineering challenges through existing programs such as Seismic Outreach, ENLACE, CREATE, etc.



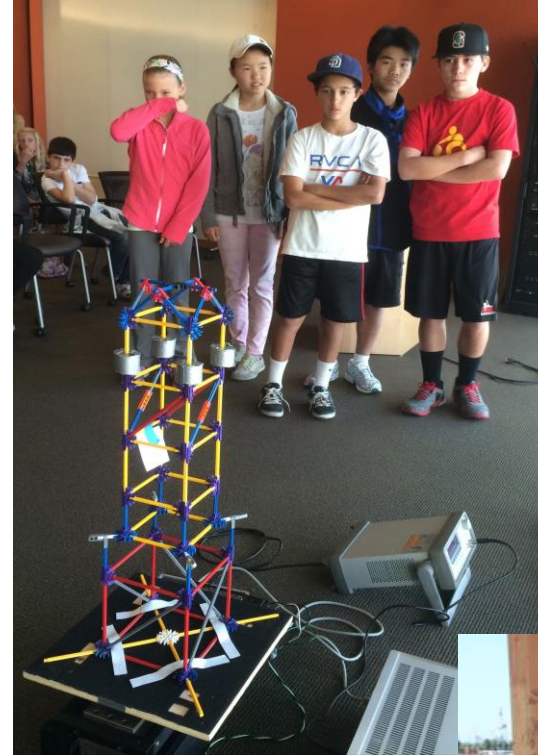
Tours & Professional Development Workshops

Jacobs School
Media Relations
Group



NHERI@UC San Diego ECO Goals

4. Provide professional development opportunities for undergraduate students and broaden participation of groups underrepresented in STEM through collaboration with the UC San Diego Jacobs School of Engineering IDEA Center, PATHS, COSMOS, etc.
5. Support the NHERI REU program by providing unique and stimulating experiences for undergraduates in high-quality engineering research.
6. Provide continual support to future users through annual user training workshops and associated training material (all annual workshop training material is available on DesignSafe-CI).



UC San Diego's Seismic Outreach Ambassador Program

EERI SESI
Classroom Education & Outreach
<https://www.eeri.org/schools/sesi-classroom-education-and-outreach>



NHERI REU program

NHERI@UC San Diego ECO Activities



WBS 1.5.1 Facility tours

- General Public
- Professional Societies
- Industry Partners
- Educational Partners



WBS 1.5.2 Training Workshops

- Joint NHERI EF Workshops
- Community Workshops in Specific Research Areas
- NHERI Summer Institute
- Teacher Curriculum Training Workshops



WBS 1.5.3 Webinars

- LHPOST6 Seminar Series
- IDEA Engineering Graduate & Scholarly Talks



WBS 1.5.4 Research Programs

- NHERI REU program
- ENLACE
- IDEA Scholars
- COSMOS
- PATHS/ STARS



WBS 1.5.5 Outreach Events

- Seismic Outreach
- NHERI4Kids
- CREATE CSSI
- IDEA student diversity organizations



WBS 1.5.6 Dissemination

- Jacobs School of Engineering Media Relations
- NHERI@UC San Diego Social Media
- Technology Transfer
- Support the development of promotional videos

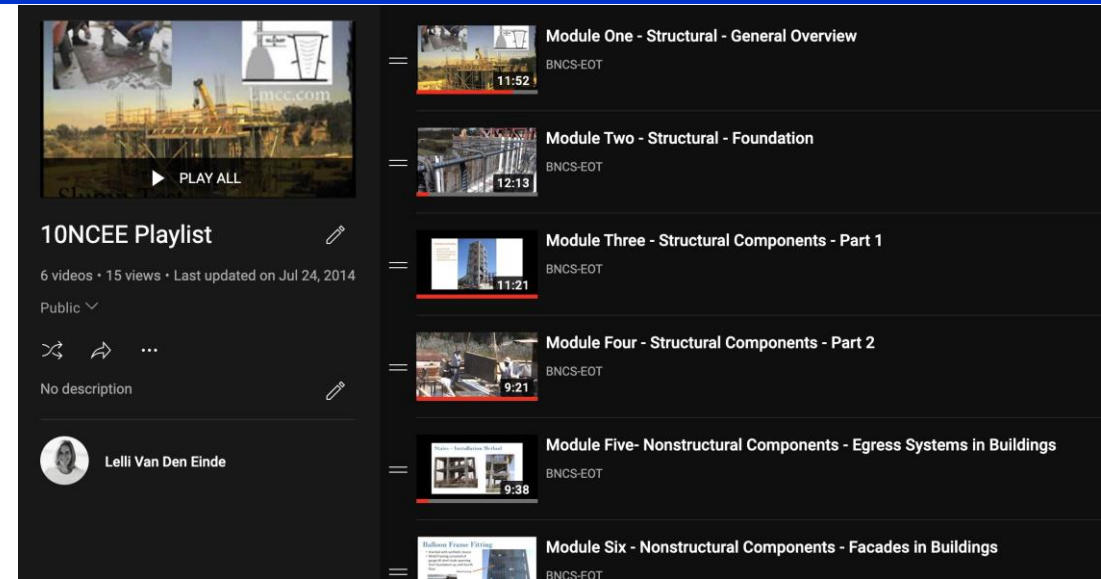


WBS 1.5.7 Curriculum Development

- EERI School Earthquake Safety Initiative
- Support the development of educational modules

Proposal Ideas for ECO

- Use footage of experimentation and make powerful educational videos for undergrad and graduate courses (bring your research into the classroom).
- Leverage existing curriculum or develop your own for outreach to encourage younger URM students to go into structural engineering.
- Develop Blind Predictions for students/community to participate in modeling prior to your experimental program.
- Give a LHPOST6 Webinar
- Support K12 or Undergraduate research and events



[Link to example educational videos](#)

2021 Reinforced Concrete Column Blind Prediction Contest

Quasi-Static Cyclic Test of an RC Column: Blind Prediction Invitation



Invitation

We invite you to participate in the prediction of the response of a reinforced concrete column subjected to lateral deformation. This invitation is based on an experimental test of a concrete column conducted in 2020, the results of which have not yet been published. The test column is representative of gravity columns common in concrete buildings designed prior to the 1990s. [Tipping Structural Engineers](#) and [Maffei Structural Engineering](#) designed the test column. The column was built and tested by [Simpson Strong-Tie](#) at the Tyrell Gilb Research Laboratory in Stockton, California.

In addition to providing your own prediction, please share this invitation with your colleagues and encourage them to participate. We designed the response form to be short, with the objective of minimizing the time required to participate. Participation requires predicting only a few quantities (strength, stiffness, deformation capacity, and behavior mode) for one cyclic-static test.

We envision that most entrants will use hand or spreadsheet calculations from approaches defined in building codes, guidelines, or published research, perhaps spending just a few hours to make their predictions. But any approach is allowed, and numerical modeling approaches are also welcome.

The invitation is open to anyone in the structural engineering field. We hope to

Important Dates:

- Contest opens: July 21, 2021
- Deadline for questions: August 19, 2021
- Deadline for submissions extended to: October 13, 2021, 11:59PM (Pacific)
- Winners Announced: November 23, 2021



Building it Better: Earthquake Resilient Hospitals for the Future



30 minute professional video documenting the project from start to finish & relating it to the importance of hospital resiliency – geared towards society at large.

[Link to example video created for general public](#)



San Diego: UCSD-TV

<http://www.ucsd.tv/>



Worldwide: UC-TV

<http://www.uctv.tv/>

NHERI 4 Kids



Training Workshop Survey

- Enter QR code to the survey here