

## Education and Community Outreach Committee November 28, 2022 – 3:00 pm via Zoom

**1. Attendance** Pedro Lomonaco (*Oregon State University—HWRL*), Laura Lowes (*University of Washington—RAPID Facility*), Matt Schoettler (*University of California, Berkeley—SimCenter*), Lelli Van Den Einde (*University of California, San Diego—LHPOST6*), Melissa Villarreal (*University of Colorado Boulder—CONVERGE*), Candace Evans (*University of Colorado Boulder—CONVERGE*), Taylor Heath (*Pennsylvania State University—NHERI GSC Chair of Research*), Rakesh Salunke (*Jackson State University—NHERI GSC Vice-Chair of Research*), Eric Salna (*Florida International University—Wall of Wind*), Karina Vielma (*University of Texas at San Antonio—NCO*), Robin Nelson (*University of Texas at San Antonio—NCO*)

**2. ECO Updates**

- Have any NHERI news stories for NCO Communications? Please contact [Marti](#) or [Cheryl Ann](#).

**3. NHERI REU Summer Program**

**Important 2023 Date Considerations**

- **Block 1:** June 5 – August 11
- **Block 2:** June 20 – August 24
- **NHERI REU Research Symposium:** August 10-11 in Corvallis, OR.
- **Application deadline:** Friday, February 10, 2023.

**Report—**

- 7 completed applications; 75 started applications, 36 views (total of 118 application interactions)
  - This year applications number from Qualtrics will be reported a little differently due to how the survey will be open and reported.
- *November NHERI REU Virtual Recruitment Event numbers:* 123 views; 17 registered; 11 attended
- Upcoming events Virtual Recruitment Events: *December 13<sup>th</sup> & January 24<sup>th</sup> @ 5:00 pm CST*
  - Students may register for the December and January Virtual REU Events: [https://bit.ly/2023NHERI\\_REU\\_VirtualRecruitmentEvents](https://bit.ly/2023NHERI_REU_VirtualRecruitmentEvents)
- Please share updated REU flyer with students who would benefit from participation in the program.

**Questions—**

- *Thoughts about updated budget and proposed housing subsidy.*
  - *Here is the current (amended) budget:*
    - \$280,500 Total budgeted for REU interns (amended)
      - \$165,000 Stipend (\$5,000 per student x 33)
      - \$49,500 Site travel (\$1,500 per student x 33)
      - \$15,853 Symposium travel (from site to EUG +\$100)
      - \$50,147 Housing Subsidy (CoL) (amended)
- *The Housing Subsidy is calculated using an average of the Cost of Living (CoL) estimates from several sources and is added or subtracted from the base \$1519 (amended)*
  - <https://www.salary.com/research/cost-of-living/corvallis-or>
  - <https://www.payscale.com/cost-of-living-calculator?>
  - <https://www.bankrate.com/real-estate/cost-of-living-calculator/>
  - <https://www.bestplaces.net/>
  - <https://www.gobankingrates.com/>
- *The NHERI REU Research Symposium travel cost is calculated by using the American Airline application to book flights on August 9 and August 12 to and from each NHERI site to Eugene, Oregon.*

*The table below show the COL and the flight cost to travel to from Eugene, Oregon, for the NHERI REU Research Symposium.*

University	City, State	Cost of Living Percentages	Ranking 10 highest CoL	Total REU housing bonus	Travel to Eugene, OR
Lehigh	Bethlehem, PA	+6.7%, 6%, -3.6%, +4.2%	2 (+3.32%)	332	\$615
FIU	Miami, FL	+11.6, +17%, +23.1%, +22.4%	5 (+18.52%)	185	\$587

UF	Gainesville, FL	-6.6%, +2%, -9.5%, -10%	1 (-6.02%)	-602	\$623
UT Austin	Austin, TX	+2.3%, +1.1%, +30.2%, +29.4%	4 (+15.7%)	157	\$588
UC Boulder	Boulder, CO	+28.9%, 5%, 68.6%, +67.6%	7 (+42.52)	425	\$536
UC Berkeley	Berkeley, CA	+56.8%, +82%, +139.7%, 138.3%	10 (+104.2%)	1040	\$788 (San Francisco)
UC Davis	Davis, CA	+7.4%, +54.9%, ?, +54.0%	6 (+38.76%)	387	\$800
UC San Diego	San Diego, CA	+35.0%, +47%, 61.4%, +60.4%	8 (+50.95%)	509	\$548
OSU	Corvallis, OR	+2.3%, ?, +8.9%, +9.1%	3 (+6.76%)	67	\$0
UW	Seattle, WA	+35.7%, +53%, +68.8%, 67.8%	9 (+56.32%)	563	\$378

- *Karina presented the idea of having faculty mentors meet with REU participants at the ECO REU Orientation for 30 minutes to set-up channels of communication, expectations, and finalize projects. We suggest that sites bring in lunch for both faculty and REU students and make this an “event” for both. Other ideas included*
- *Tricia also asked for ideas on how to deal with virtual mentors. ECO Committee suggestions included:*
  - *having mentors visit for at least a week to build a rapport and to work intensively with participants*
  - *having REU participants work from a non-NHERI site or other NHERI site where mentors can be present; similar to Rice University and Jamie Padgett collaborating with DesignSafe to host REU students in Houston and travel to Austin to visit the DesignSafe.*
  - *Keep REU students in groups of three to promote community*
  - *Acknowledged importance of face-to-face support in some way as well as the viability of hybrid models when support is provided*

#### 4. NHERI Summer Institute

##### *Important 2023 Date Considerations*

- *Summer Institute: June 21-23, 2023*
- *Application deadline: Friday, February 24, 2023.*

##### **Report—**

- *16 Completed Applications; 25 Started Applications; 11 Views (52)*
- *31 early-career faculty; 2 professional engineers or staff; 7 NHERI GSC members; 9 graduate students; 1 other*
- *Please share updated flyer with early-career faculty.*

##### **Questions—**

- *What ideas do you have for the site session during the NHERI Summer Institute in 2023?*
  - *Moving forward we will add the additional time from the research panel in 2022 to the NHERI sites to have additional time to share with participants based on the feedback from 2022 participants and ECO Committee*
- *Who will be your site representative at the Summer Institute? Please share by ECO's January meeting.*

#### 5. NHERI Graduate Student Council

##### *Important Dates*

- *Executive Committee- first Friday of each month 11:00 am CT*
- *NHERI GSC & SimCenter's Research Tools Workshop series- second Friday of the month 11:00 am CT*
- *General Meeting- third Friday of each month 11:00 am CT*

## Report—

- **NHERI GSC Chair and Vice-Chair of Research, Taylor Heath, and Rakesh Salunke, presented the NHERI GSC mini conference to ECO and asked for feedback and offered sites the chance to participate.**
  - **What is the NHERI GSC Mini-Conference?**
  - The NHERI GSC Research Team and Executive Committee would like to hold a virtual Research Mini-Conference in Spring 2023. Submissions of all kinds (posters and paper drafts) will be accepted, with emphasis on key challenges in the natural hazards field highlighted in the NHERI Science Plan and by CONVERGE.
  - To build excitement and support for the conference, the NHERI GSC Research Team will also host a Collaborative Interdisciplinary Research Challenge, the preliminary results of which will be presented at the conference.
  - **Who is the audience?**
  - Presenters will be based on submissions from NHERI GSC members, but attendance from NHERI and outside faculty, students, and practitioners will be encouraged.
  - How will it highlight NHERI resources?
  - Topics for the Interdisciplinary Research Challenge will be based on the NHERI Science Plan and CONVERGE modules.
  - Posters and panels will ideally be published with DOIs through DesignSafe Data Depot.
  - Presenters will be encouraged to use data from DesignSafe's DataDepot and publish external data where possible.
  - The NHERI GSC Research Tools Workshops will offer space to encourage presenters to learn about and then use SimCenter applications in their research.
  - We would like to host a NHERI Facilities workshop where site representatives can introduce their facilities to NHERI GSC members to build connections and identify research opportunities.
  - **How can the ECO help?**
  - NHERI ECO members who have any experience in conference organizing who are interested in meeting briefly to share ideas. Laura suggest the NHERI GSC check out another graduate student run conference for ideas.
  - NHERI ECO members or recommendations for faculty who may be interested in serving as mentors and reviewers for submissions. Based on Tricia's feedback, it may be better for NHERI GSC members to conduct peer reviews.
  - NHERI ECO members who are interested in speaking on their NHERI sites in a workshop for NHERI GSC. Would you be interested in sharing a presentation at the NHERI GSC mini conference with participants?
- **Programming: We welcome any NHERI site or representative to speak at our meetings!**
  - *Workshop series launched in collaboration with SimCenter: Taylor Heath, Rakesh Salunke, Jasmine Bekkaye, Olaniyi Afolayan, & Adam Zsarnocsay: DesignSafe & SimCenter Research Tool Workshop, 2<sup>nd</sup> Friday of the month from 11:00 am-12:00 pm CT.*
    - **December 9 - Machine Learning and AI Resources at DesignSafe**  
Wenyang Zhang, Research Associate, UT Austin (wzhang@tacc.utexas.edu)
    - **January 13 - Developing and Benchmarking Fragility and Consequence Functions**  
Adam Zsarnoczay, Research Engineer, Stanford University
    - **February 10 - Simulation of Regional Hurricane Impact using SimCenter Tools**  
Stevan Gavrilovic, Postdoctoral Scholar, UC Berkeley (gavrilovic@berkeley.edu)
    - **March 10 - Data Integration Using Relational Databases and Application Programming Interfaces**  
Scott Brandenburg, Professor, UCLA (sjbrandenberg@g.ucla.edu)
- **Recruitment: Please share!**
  - *Please share our recruitment materials attached below with graduate students in your programs.*

## 6. New Business

*Please take a moment to share your availability for the next NHERI ECO Committee Meeting by Friday, December 2nd: <http://whenisgood.net/qxa5ffz>.*

## **7. Adjourn**

**Please see REU, NHERI GSC, and Summer Institute Flyers below.**



# Research Experiences for Undergraduates



The NSF-funded Natural Hazards Engineering Research Infrastructure offers a Research Experiences for Undergraduates (REU) program. Land a research opportunity at one of 11 multi-hazard engineering or interdisciplinary sites during a 10-week summer research program. Study natural hazards through earthquake, wind, tsunami, coastal engineering, data management, cyberinfrastructure, post-disaster reconnaissance, simulation, or social science research at a NHERI facility.

- **WORK** with faculty and graduate students
- **WRITE** a professional, publishable research paper
- **NETWORK** with peers in research group meetings
- **LEARN** about grad school and career development
- **BUILD** relationships through mentoring
- **GAIN** hands-on research experience



*REU students conducting research at the OH Hinsdale Wave Research Laboratory at Oregon State University.*

## REU Block 1: June 5 - Aug. 11, 2023

- Florida International University
- Lehigh University
- University of California, Berkeley
- University of Colorado Boulder
- University of Florida
- University of Texas, Austin
  - Mobile Shakers program
  - Cyberinfrastructure

## REU Block 2: June 20 - Aug. 24, 2023

- Oregon State University
- University of California, Davis
- University of California, San Diego
- University of Washington

**Learn More:** [designsafe-ci.org/learning-center/reu/](https://designsafe-ci.org/learning-center/reu/)

*NHERI encourages members of racial and ethnic underrepresented groups, females, and veterans to apply for this research experience.*

**APPLY TODAY**



**Deadline: Feb. 10, 2023**



# RESEARCH EXPERIENCES FOR UNDERGRADUATES



## VIRTUAL RECRUITMENT WEBINAR

November 15<sup>th</sup>, December 13<sup>th</sup>, or January 24<sup>th</sup> 5:00-6:00 pm Central



2022 NHERI REU cohort in front of NHERI@UTexas T-Rex mobile shaker.

*Are you interested in natural hazards research from an engineering or social science perspective? Did you know most participants in the NHERI REU Program have not participated in research before their summer experience?*

**Learn more about National Science Foundation's NHERI REU program.**

**The NHERI Research Experiences for Undergraduates (REU) program offers funded research opportunities at 11 multi-hazard engineering sites during a 10-week summer research program.**

Study earthquake, wind, tsunami, coastal engineering, data management, cyberinfrastructure, post reconnaissance, simulation, or social science topics. Travel funding provided, a housing subsidy, and a \$5000 stipend for the 10-week summer program. Underrepresented minority, women, and military veteran undergraduate students are encouraged to apply.

Attend an **REU Virtual Recruitment Event** and hear from NHERI REU alumni and learn about a typical day, funding, and the application process. Check out and register for the November 15<sup>th</sup>, December 13<sup>th</sup>, or January 24<sup>th</sup> event:

[https://bit.ly/2023NHERI\\_REU\\_VirtualRecruitmentEvents](https://bit.ly/2023NHERI_REU_VirtualRecruitmentEvents)





# NHERI Summer Institute for Early Career Faculty



## NHERI Summer Institute JUNE 21 - 23, 2023

The annual NHERI Summer Institute will be held June 21-23, 2023, at the University of Texas at San Antonio's (UTSA) Downtown campus and online.

Early career faculty, engineers, social scientists, and researchers interested in learning more about the Natural Hazards Engineering Research Infrastructure (NHERI) community and NSF proposal writing may **apply** or **register**. Join previous alumni who earned over \$11 million in NSF funding and 5 NSF CAREER Awards. *NHERI encourages members of racial and ethnic underrepresented groups, females, and veterans to apply for this research experience.*

Topics of the three-day event include:

- NHERI program mission
- NHERI network facility capabilities
- NHERI Science Plan
- NSF Grant proposal writing
- Education and community outreach focused on diversity, equity, and inclusion
- Community networking and mentoring

You may **apply** for an NSF travel award by **February 24, 2023**, and attend in person, or **register** to attend the event online by **June 1, 2023**. Apply or register online at [designsafe-ci.org/learning-center/summer-institute/](https://designsafe-ci.org/learning-center/summer-institute/).



"It was a great experience. I had the opportunity to learn a lot about NSF proposal writing, use and capabilities of NHERI experimental facilities, and integration of teaching and research."

-NHERI Summer Institute Alumni

## APPLY OR REGISTER NOW





NSF Award #2129782

# NHERI GSC

## Graduate Student Council

A Graduate Research Community established by the NSF-funded Natural Hazards Engineering Research Infrastructure (NHERI) to connect and support the next generation of natural hazards researchers and scientists.

**ONLINE  
MONTHLY  
MEETINGS:**

**3<sup>rd</sup> Friday**

11:00 a.m. Central Time (US)

in Zoom. \*Sign-up to receive the meeting link

**Click here  
Sign-up!**



# Join Us

NHERI GSC Members:

- ✓ Build a diverse graduate community of natural hazards researchers,
- ✓ Connect with diverse mentors in the natural hazards field,
- ✓ Attend natural hazards research and career workshops,
- ✓ Encourage diversity, equity, and inclusion (DEI) conversations,
- ✓ Learn about the impact of research on natural hazards practice, and
- ✓ Gain leadership, service, and \*funding opportunities

# LEAD ♦ GROW ♦ CONNECT

\*For more information, please email Membership Working Group: Faith (Chair) [fennenanya@ucdavis.edu](mailto:fennenanya@ucdavis.edu) or Sasan (Vice-Chair) [seyedsasan.khedmatgozardolati@utsa.edu](mailto:seyedsasan.khedmatgozardolati@utsa.edu) or email Robin Nelson (NHERI Liaison) at [robin.nelson@utsa.edu](mailto:robin.nelson@utsa.edu)

Visit: <https://www.designsafe-ci.org/learning-center/nheri-graduate-student-council/>