

Education and Community Outreach Committee
April 27, 2023 – 1:00 pm Central Time via Zoom
<https://utsa.zoom.us/j/9013659006>

Attendance **Melissa Villarreal** (University of Colorado Boulder — CONVERGE), Pedro Lomonaco (Oregon State University—HWRL), Laura Lowes (University of Washington — RAPID), Matt Schoettler (University of California, Berkeley—SimCenter), Lelli Van Den Einde (University of California, San Diego—LHPOST6), Stephanie Paal (Texas A&M University—User Forum), Tricia Clayton (Wake Forest University—UT Mobile Shakers), Klarissa Alarcon (University of California, Davis—CGM), Kurt Gurley (University of Florida—BLWT), Eric Salna (Florida International University—Wall of Wind), Joe Saunders (Lehigh University—RTMD), Robin Nelson (University of Texas at San Antonio—NCO)

1. Approved March ECO Meeting Minutes.

2. ECO Updates

We welcomed Joe Saunders, Lehigh University's new ECO Representative. Thank you again to Chad Kusko for all he has done for the ECO and NHERI REU. Thank you for providing the bios and headshots or approving them for the Summer Institute. Thank you for reaching out to your REU students about **arrival**, **housing**, and **mentors**. It makes all the difference.

3. Diversity Survey

- Thank you again for providing a list of their NHERI NSF paid employees.
- Launched NHERI Leadership Diversity Survey, 3/20 with 71 out of 90 surveys completed and NHERI Facilities Diversity, 3/28 with 47 out of 173 surveys completed.
- **ACTION ITEM:** Please encourage your NSF paid employees at your site to complete the NHERI Facilities Diversity Survey.

4. NHERI REU Summer Program

Important 2023 Dates

- *June 5 - August 11 — Block 1*
- *June 20 – August 24 —Block 2*
- *August 9 & 12 REU Travel Days*
- *August 10-11 — NHERI REU Research Symposium: August 10-11 hosted by OSU.*

Report—

- Creating the Moodle for REU interns and a Google Calendar for Mentors.
- Karina created a short resource document to help mentors build rapport with their REU mentees. Please see attachment below (See 9.). We also added ice breakers to help facilitate introductions.
- **ACTION ITEM:** Please share mentor names with Robin so she can schedule the mentor training. Thank you!

Questions—

- *We would like to introduce the mentors and REU participants before the program begins or at the latest during Orientation? [At site meeting before REU participants arrive or at NHERI ECO Orientations -Block I (June 6) & II (June 20)]. It seems that most of the sites are making sure to introduce mentors and mentees before they arrive on site. We greatly appreciate this!! If you would like us to organize this for your site, please reach out to Robin or Karina. We are both happy to help!*
- *We also wanted to share the “First Meeting Mentor” form that we ask all REU students to complete their first week. This helps them walk through questions they might have establish expectations with their mentors and together develop a schedule and goals for the project. Breaking down the project into the training, article research, instrument, experimental, and analysis phase really help participants envision the process.*

5. NHERI Summer Institute

Important 2023 Dates

- April 24/ASAP—update headshots and bios for presenters

- May 15 —Deadline to register as presenter, in-person self-funded attend, or virtual participant https://bit.ly/2023NHERISI_Registration
- April ECO Meeting— Deadline to submit updated bios and headshots.
- May 15 —Deadline to register as presenter, in-person self-funded attend, or virtual participant https://bit.ly/2023NHERI_PresenterRegistration
- May 21 — Deadline to reserve room at Double Tree with NHERI group rate <https://group.doubletree.com/2rep6c>
- **June 1:** Please provide PPT, flyers, lesson plan, and any other material to be printed.
- **June 21-23:** NHERI Summer Institute

NHERI Summer Institute Site Representatives									
Site	Representative	Bio 4/24	Head shot 4/24	Reg. 5/15	Media 5/15	Flyer 6/1	Lesson Plan 6/1	PPT 6/1	Email led
FIU, WOW	Krishna Sai Vutukuru	Y	Y	Y	Y				X
Lehigh, RTMD	Jim Ricles	N	N	N	N				X
	Liang Cao	Y	Y	Y	Y				
OSU, HWRL	Pedro Lomonaco	Y	Y	Y	Y				X
SimCenter	Laura Lowes	Y	Y	Y	Y				X
UC Davis, CGM	Ross Boulanger	N	N	N	N				X
UCSD, LHPOST	Koorosh Lotfizadeh	Y	Y	Y	N				X
	Joel Conte	N	N	N	N				
CONVERGE	Melissa Villarreal	Y	Y	Y	Y				X
UF-BLWT	Jennifer Bridge or	N	N	N	N				X
	Kurt Gurley	N	N	N	N				
UT-FMS	Tricia Clayton	Y	Y	Y	Y				X
UT-DesignSafe	Tim Cockerill	Y	Y	Y	N				X
UW-RAPID	Laura Lowes	Y	Y	Y	Y				X
NCO Reps	Julio Ramirez	Y	Y	Y	Y				X
NCO Reps	Antonio Bobet	Y	Y	Y	Y				X
Science Plan	Billy Edge	N	N	N	N				X
TTC	Cherylyn Henry	N	N	N	N				X
TTC	Yazen Khasawneh	N	N	N	N				X
TTC	Joe Cibor	N	N	N	N				X
TTC	One more	N	N	N	N				X
User Forum	Mohammad Khosravi	N	N	N	N				X
User Forum	Wei Song								X
User Forum	Stephanie Paal	N	N	N	N				X
User Forum	Idil Akin	N	N	N	N				X
User Forum	Esteban Villalobos Vega	Y	Y	N	N				X
User Forum	Maggie Leon-Corwin	Y	Y	Y	Y				X

Report—

- Based on the feedback at April's meeting several tweaks were made to the NHERI Site Table Discussion format. Please see the attached updated itinerary below (See 10.) **ACTION ITEM:** Please review the itinerary and suggested meeting times with NSF CMMI Director, Dr. Joy Pauschke.
- 46 virtual registrations (https://bit.ly/2023NHERI_SIVirtualRegistration); 7 confirmed in-person registrations for self-funded attendees (https://bit.ly/2023NHERISI_Registration)
- We emailed all NHERI Summer Institute presenters' information except for remaining possible User Forum representatives:
 - Register, sign-up for excursion, and provide dietary restrictions (https://bit.ly/2023NHERI_PresenterRegistration)
 - Excursion, Thursday, June 22 6:00-8:00 pm, tour of the Tower of Americas.
 - Complete media release (https://bit.ly/2023NHERI_SIMediaRelease)

- Reserve hotel at DoubleTree by Hilton (<https://group.doubletree.com/2rep6c>).

Questions—

- We request your feedback on the NHERI Summer Institute itinerary. Joy Pauschke would like to meet for 20 minutes with each participant, but she doesn't want them to miss content. Based on these parameters, we will only be able to fit in 15-minute sessions. Which suggested schedule do you think would work best, or please share other ideas?
 1. 15 min. sessions with funded participants (36)
 2. Sign-up for 15 min. slots first come first serve (35 slots) for funded and self-funded participants.
 3. It was also suggested that not all participants may have an idea to pitch so check with them and have sign-up before the Institute so they can prepare if they would like to sign-up.

6. NHERI Graduate Student Council

Important Dates

- May 5 — Executive Committee
- May 19 — General Meeting
- May 26 — NHERI GSC Mini-Conference
- June 9 — Academic Publishing Workshop with Graduate Student Panel and Dr. Jack Baker

Report—

- NHERI GSC is also hosting the NHERI GSC Mini-Conference on May 26, 2023. If you would like to attend or graduate students you know would like to attend, please register here: https://bit.ly/2023NHERIGSC_MiniConfRegistration.
- NHERI GSC will host Academic Publishing Workshop with Dr. Jack Baker, NHERI GSC members Natalie Coleman and Amer Hamad Issa Abukhalaf.

7. New Business-

- SimCenter requests that you share with your network the NHERI Computational Academy, Austin, Texas, at TAAC, July 17th -20th, 2023. Registration is open until May 5th, 2023. Cost is \$150. Travel assistance is available. Pick from one of seven projects. Find out more here: <https://www.designsafe-ci.org/learning-center/designsafe-academy/>.
- SimCenter also requests that all sites share the SimCenter Programming Bootcamps 1) Session 1- Introduction to c/C++/HPC, June 5-9 (online); 2) Session 2- Python, June 12-16 (online). Additional information and registration can be found here: <https://www.designsafe-ci.org/learning-center/training/>.
- Please take a moment to share your availability for the next NHERI ECO Committee Meeting: <http://whenisgood.net/nfxhbjf>.

8. Adjourn

9. Resources for REU MENTORS:

Building Rapport with Mentees — Ideas for Mentors

Questions students might have:

- What will I be expected to do during the summer? (Dress, meetings, attendance, safety training, other trainings)
- At what time can I arrive at the site? Where will I work?
 - What are the things (products and deliverables) I will need to create/design/prepare and what are the deadlines?
 - How often will we meet? What should I come prepared with to meetings?
 - What happens if I need a question answered before we meet?
- What if I don't know how to do something?
 - Who can I go to? Where can I get more information?
- How will I know if I'm doing things well?

Some questions for mentors to answer during the first meeting:

- Setting expectations and Communicating

- What are the expectations for the student during the summer?
 - Products (papers, readings, coding, data/data analysis, instrumentation)
 - Meeting attendance (how often/where/when/with whom)
 - Method of communication with faculty mentor and others (email, meetings, phone)
 - When do students communicate in what ways? For example, when can they send you a text? When should they email you? What can wait for an in-person meeting?
- What are the responsibilities of the REU student?
 - Who can they go to for help meeting expectations/fulfill responsibilities?
 - What other resources are available to REU students to meet their needs? *For example, staff, lab equipment, grad students, coding books*
- What will they need to do to meet these expectations? *Set milestones with desired deadlines.*
- How will expectations be reviewed? *Use the first-meeting mentor form to review expectations during meetings. Adapt it as needed throughout the summer.*
- How often do you want to meet to go over expectations and progress outcomes?

Before the REU program

- Reach out personally to the REU student via email, phone to introduce yourself.
- Make yourself available to answer REU students' questions in case they have any.
 - They might have questions about the housing, their project, or expectations. Answer the questions that you can help with. Be prepared to politely refer them to others who can help them get their questions answered.
- If they need safety training, arrange it for the students ahead of time so that they can take part in that as soon as they arrive to the program or before, if possible.
- Provide literature, citations, and pdfs of readings that will help students prepare for the REU program. If you require some of the readings, please let them know. Otherwise, let them know that these articles are meant to help them get acquainted with the project and that they're not expected to fully understand all the information. If you will answer any questions about these readings, also let them know that when you send them to the student.

First day of the REU program

- Students should know where to go and at what time to arrive.
- They should know who to meet with at the time that they arrive.
- If they need an ID, have this information reading for them (where to go and what to take).
- If there are trainings, what do students need to present to you to verify that they've completed the trainings.
- Give students any resources they will need.
- Introduce students to people that will help them throughout the summer. When you introduce the people, let them know how the person can help them. If possible, schedule some informal activities for students to meet with staff such as a lunch or outing.
- Introduce students to other REU students (and other students who are also working at the site during the summer, whether they are working with NHERI or not).

First week of the REU program

- Check in with the student(s) formally or informally and see if they have any questions or concerns.
- Make sure they have all the trainings necessary.
- Make sure they have access to the buildings, offices, lab spaces that they need to access.

Ideas for activities to help build a positive rapport.

- Reach out early.
 - Call or email students to introduce yourself and ask if they have any questions.
 - Set up a Zoom meeting to introduce yourself and others that will help the students have a successful summer such as staff, housing, or other REU students.
- Talk to students about your experiences.
 - Share your academic journey and other relevant stories with the student(s).
 - Ask students for their career goals are beyond the REU program and graduation.
 - If you can, help them connect their goals with activities they can do or people they might be able to network with throughout the summer.
 - Talk to students about how you became interested in the work you do.
 - What challenges have you had to overcome during your career? How did you overcome them?
- Take students out to an informal activity.
 - Ask students and staff/researchers what they would enjoy doing together (or you choose). Ideas: go out to eat to a local restaurant, go to see a park or scenic place close to campus, go bowling together...
- Use Icebreakers to learn more about mentors and mentees.
 - **Get to Know You BINGO**- create a card bingo card <https://bingobaker.com/cards?q=Get+to+know+you>, print one out for each person, and use the activity to help everyone get to know each other. Allow everyone to walk around and ask people about themselves and write their names on the BINGO card that accurately portrays something about them (I'm left-handed, I've been to Europe, I love hybrid simulation, etc.). Give prizes to individuals who finish one row, one column, four corners, etc.
 - **Question Jar**- have everyone, mentors and mentees, write anonymous questions meant to help you to get to know each other on a strip of paper. Fold all the papers up and drop them in a jar. Draw one question at a time and ask everyone to share their answer to the question with the group.
 - **Spaghetti Towers**- Have mentors and mentees pair up and create a tower with nothing but spaghetti and marshmallows within a certain amount of time. Give each pair a natural hazard that their tower must withstand. At the end of time (10-20 minutes), ask each group to show their tower and explain how their design mitigated the natural hazard. If time, introduce the natural hazard to see how the design fares.
 - **Paper Plate Speed Dating**- Give each mentor and mentee a paper plate and ask them to draw the face of a clock on their plate. Ask everyone to walk around and find a "date" for each hour, writing their date's name next a number on the face of the "clock". The catch is no one can make a "date" with more than one person per hour. After everyone has made their dates, speed up time to allow 1-3 minutes for each hour. The pairs will then get the chance to get to know each other.
 - **Sentence Stems**- Create a sentence stem sheet for each group. Pair mentors and mentees together and ask them to complete the sentence stems sharing with their partner their answers. Below are some examples:
 - Before I came to the NHERI REU, my main interests were . . .
 - The way I would describe my family is
 - The thing I like most engineering/social science is
 - The things I value most are
 - In five years, I hope to be
 - The thing I would most like to accomplish during the NHERI REU is . . .

- The thing that concerns me most about research is
-

Give the REU students all the information they need.

- People
 - Graduate students
 - Other research undergraduates
 - NHERI site staff
- Provide the resources they will need.
 - Books
 - Computers
 - Research journals
 - Literature
- Trainings
 - Safety
 - Programming/coding
 - IRB/Human subjects
- Access to:
 - Buildings/labs
 - Computers/computer labs
 - Passwords or other key information for access
- Activities
 - Dates, times, location
 - Importance of attending activities

**Natural Hazards Engineering Research Infrastructure (NHERI)
Research Experiences for Undergraduates (REU)
Summer 2023**

REU Participant: _____ Date: _____
 NHERI Experimental Site/University: _____
 Faculty Mentor: _____ Graduate Student Mentor: _____
 Research Project Working Title: _____

REU student completes as much as possible and posts questions in preparation for the first meeting with the mentor.

This is who I am. This is how I identify.

Questions for my mentor:

My personal goals for the summer research experience...

Research question(s) addressed with summer project:

Research Project Goals	Motivation for each goal (Why is this goal important? How does it fit into answering the research questions?)

Resources, Trainings, Software Needed to Achieve Goals

Actions to achieve goals	Milestone date
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REU Participant Signature: _____ Date: _____

REU Faculty Mentor Signature: _____ Date: _____

REU Graduate Student Mentor Signature: _____ Date: _____

10. Summer Institute proposed Itinerary with changes as suggested at April ECO Meeting:

Day 1 — Wednesday, June 21, 2023		
7:30-8:30am	Registration, networking sign-up, breakfast	Riverwalk
8:30-9:30am	Welcome & NHERI Overview —JoAnn Browning Welcome & Housekeeping (5 minutes) Ice Breaker (10 minutes) Introduce presentation rubric (10 minutes) Write goals for Summer Institute (stickies on chart paper) (10 minutes) Introduce groups (5 minutes) NHERI Overview (20 minutes)	La Villita
9:30-11:00am	NHERI Site Presentations Part I 9:31-9:43am FIU (12 minutes) 9:45-9:57am OSU (12 minutes) 9:59-10:11am UF (12 minutes) 10:13-10:25am UC Davis (12 minutes) 10:27-10:39am UCSD (12 minutes) 10:41-10:53am UT Mobile Shakers (12 minutes)	La Villita
10:55 – 11:10am	Networking Break	La Villita/ Riverwalk

11:15am-12:15pm	NHERI Site Presentations Part II	La Villita
11:17-11:29am	Lehigh (12 minutes)	
11:31-11:43am	RAPID (12 minutes)	
11:45-11:57am	UC Berkeley (12 minutes)	
11:59-12:11pm	UT Design Safe (12 minutes)	
12:13-12:25pm	CONVERGE (12 minutes)	
12:30-1:20pm	Networking Lunch/ Individual meetings with Joy Pauschke	Riverwalk/ Alamo
1:25-1:55 pm	NHERI Networking Round Table Discussions	Riverwalk
2:00-3:45pm	NSF Proposal Writing Workshop w/group collaboration- Joy Pauschke	La Villita
3:45-4:00pm	Networking Break	La Villita
4:00-5:00pm	NSF CAREER Awardee Panel- Moderated by Karina Vielma	La Villita
6:00-8:00pm	User Forum Meet & Greet- We will meet in the La Villita room at 5:50 to walk over together to for the User Forum Meet & Greet at Mi Tierra.	La Villita/Mi Tierra

Day 2— Thursday, June 22, 2023

8:00-8:30am	Registration and breakfast/ Individual meetings with Joy Pauschke	Riverwalk/Alamo
8:30-9:30am	NHERI Science Plan – Billy Edge	La Villita
9:30am-12:00pm	Collaborative Groups w/visit from Billy Edge, Science Plan Task Group Member & Meetings with NSF Director, Joy Paucshke	La Villita
	9:00am-12:00pm	K-12 Educator Training Alamo BR
12:00-1:00pm	Networking Lunch/ Individual meetings with Joy Pauschke	Riverwalk/Alamo
1:00-3:00pm	Diversity, Equity, and Inclusion Workshop—Karina Vielma & Alex Mejia	La Villita
3:00-3:15pm	Networking Break	La Villita
3:00-5:30pm	Broader Impacts Workshop w/K-12 educator collaborative groups—Karina Vielma	La Villita
6:00-8:00pm	Tower of Americas Excursion- We will meet in La Villita to walk to catch the bus which will take us to the Tower of the Americas.	La Villita/ Tower of Americas

Day 3— Friday, June 23, 2023

8:00-8:30am	Registration and breakfast/ Individual meetings with Joy Pauschke	Riverwalk/Alamo
8:30-9:00am	NHERI Technology Transfer Committee	La Villita
9:00am-12:00pm	9:00-10:00am	User Forum Meeting
		La Villita

	Group Collaboration w/visit from TTC Members & Meetings with NSF Director, Joy Pauschke	10:00-11:00am 11:00-12:00am	NIAC Meeting ECO Meeting	
12:00-1:00pm	Networking Lunch/ Individual meetings with Joy Pauschke			Riverwalk/Alamo
1:00-2:25pm	Group Collaborations/ Individual meetings with Joy Pauschke			La Villita/Alamo
2:30-4:00pm	Group presentations			
4:00-4:30pm	Present awards and concluding remarks.			

Suggested Times to Meet with NSF CMMI Director, Dr. Joy Pauschke

Day 1

12:30-12:45

12:45-1:00

1:00-1:15

5:00-5:15

Day 2

8:00-8:15

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Day 3

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