

**SRP SPAN Leadership Committee Meeting**  
**Agenda: Training Core Activities and Round-robin.**

**Tuesday, June 29th from 2 - 3 pm ET**

**Attendees:**

Linda Abriola (Brown)	Priyanka Kushwaha (Arizona)
Emmanuel Ampiah (LSU)	Makenna Lorange (Northeastern)
Alma Anides Morales (Arizona)	Gabriele Ludewig (Iowa)
James Ankrum (Iowa)	Craig Marcus (Oregon State)
Ricardo Berrios-Perez (Univ. of Puerto Rico)	Pamela Mellon (UC San Diego)
Marjorie Bilderback (Brown)	Isabel Meza (UNM)
Candice Brinkmeyer-Langford (TAMU)	Jennifer Moore (UKY)
Thomas Burbacher (University of Washington)	David Purdy (Iowa)
Pratiti Chowdhury (LSU)	Holly Rudel (Yale)
Daniel Conklin (Louisville)	Thomas Sheahan (Northeastern)
Mona Dai (Harvard)	Lura Slowinski (Northeastern)
Eliane El Hayek (UNM)	Theodore Wensel (Baylor College of Medicine)
Rocio Estrella (Arizona)	Brian Westra (Iowa)
Summer Gonsalves (Brown)	Ben Yang (Arizona)
Farhana Hasan (LSU)	Sara Amolegbe (NIEHS)
Andrew Hawkey (Duke)	Danielle Carlin (NIEHS)
David Hein (Louisville)	Heather Henry (NIEHS)
Kristin Hicks (Northeastern)	Brittany Trottier (NIEHS)
J. Zach Hilt (UKY)	
Jen Irving (LSU)	Ava Medina (MDB)
Christine Kim (University of Michigan)	Mali Velasco (MDB)
Susan Korrick (Harvard)	

## **Agenda Items:**

### **• Training Core Activities and Round-robin:**

#### **Iowa**

(Gabriele Ludewig, James Ankrum, and Brian Westra)

- RETCC Teams Resource Wiki:
  - Created a Teams Wiki page to assist trainees with professional development, writing and communication, research methods, data management, statistics, and research translation / community engagement resources. All trainees, project and core leaders, and staff can add items to the page.
- Mentor Training:
  - 6-week training.
  - Ways to help prepare students for independent science careers. Discusses how to align expectations, foster independence, maintain communication.
  - The goal is to develop a mentoring plan and philosophy to be shared with graduate trainees.
- Data Management Course:
  - RETCC Co-Investigator and University of Iowa Data Services Manager Brian Westra taught a course in spring 2021 on data management and sharing.
  - The course taught data management, file organization, documentation, data structure, and cleanup tools. It also taught how and where to share and publish data.
- Community Engagement Training:
  - Created information leaflet to report the results of PCB passive sampling at Columbus Secondary School.
  - Trainees Jacob Jahnke and Moala Bannavti placed the samplers in the school, measured the results, and assisted with creating the flyer.

#### **Louisiana State University**

(Emmanuel Ampiah, Pratiti Chowdhury)

- Assisted in planning Dellinger Annual Symposium:
  - SRP trainees received awards during the symposium:
    - Poster awards: Jonathan Tollefson (Brown), Nadra Sakr (LSU), Ricardo Berrios-Perez (University of Puerto Rico).
    - Oral presentation award: ChuQi Guo (LSU).
- Tracking Toxins: Shining Light on Pollution Virtual Summer Camp:
  - Trainees will serve as mentors for summer participants who are entering freshmen at Southern University in Baton Rouge.
  - Focus on air pollution and health effects, modeling and measuring air pollution, and touring toxicology facilities.

#### **Oregon State**

(Craig Marcus)

- Hired new faculty training mentor- Water Quality Toxicologist: Manuel Garcia-Jaramillo.
- New monthly virtual seminar series on Environmental Health Information:
  - Allowed feedback for trainees and students.

- New activities for trainees (social and scientific).
- New online database for trainees to hold workshops and meetings, receive mental health assistance.
- New online data reporting activity, virtual socials, and drop-in chatrooms.
- Renew Environmental Health Science grant.
- Submitted supplements for new training programs, including science writing.
- Started special projects that allowed students to work on scientific writing. Published review paper - "*Toxicology of Vaping*" *Pharmacol Ther.* 2021 Mar 19;225:107837. (18 trainee authors).
- Trainee-initiated science communication and outreach:
  - Science fair judging.
  - Mentoring events.
  - Radish seed dose-response and yeast dose-response activities.
  - Worked with the Science & Math Investigative Learning Experiences (SMILE) program to help with radish seed experiment.
  - Asynchronous instructional videos (K-12):  
<https://www.youtube.com/channel/UCfhNM79wgTaNTnCqd2rNZdw/featured>
- Trainee highlights:
  - Brianna Rivera completed a 3-month summer externship (Integral Consulting).
  - Hannah Rolston was awarded the OSU University Award for Mentoring Undergraduates in Research.
  - Kari Gaither (PNNL) was awarded the SOT Science Communication Award to attend the Alan Alda Center for "Communicating Science " Virtual Workshop".

## **Brown**

(Summer Gonsalves)

- Received grant for installing Native Plant Pollinator Garden and Apiary at the Narragansett Indian Tribal Farm:
  - Conducted soil analyses.
  - Based on the Native American Four Directions, connecting to Spiritual, Emotional, Mental and Physical health.
- Community Partner Volunteer Day:
  - Hosted to connect our community partners to one another.
  - Southside Community Land Trust, Woonasquatucket River Watershed Council, Terracops, Massachusetts Institute of Technology, United Way of Rhode Island, Audubon Society, Narragansett Indian Tribe, Brown Trainees.
- Worked with Wild Plant Society.
- Created and delivered over 500 Garden Enrichment Kits to youth in Rhode Island.
- Hoping to work with community growers and community members.
- Working with Southside Community Land Trust to create Food Justice Workshop.

## **Harvard**

(Susan Korrick)

- MEMCARE- Metals and Metal Mixtures: Cognitive Aging, Remediation, and Exposure Sources.
- 4 research projects, 4 cores, 18 trainees in 6 institutions and 4 states.
- Goal: to build relationships with trainees across distances.

- Seminars allow students to present and grow their science skills in presenting/writing:
  - MEMCARE,
  - Trainees Works-in-Progress,
  - Racism Disparities and Environmental Health Colloquium.
- Specific activities: environmental literacy, environmental justice science communication workshops.
- Community Engagement Core: virtual community sites, fact sheets, information interviews and focus groups.
- Developing social media to grow community communication.
- Have opportunities for: Externships, Practicums, SRC Seminars, SRC Annual Retreat, National Scientific Meetings, among others.

### **University of Washington**

(Thomas Burbacher)

- Current trainees: Yadong Wang, Megumi Matsushita, Hao Wang, Jacqueline Garrick, Samantha Fung.
- Yadong Wang:
  - Project: Mechanisms and Biomarkers of Metal Olfactory Injury in Salmon.
- Megumi Matsushita:
  - Passed her general Ph.D. examination with a presentation titled “Cellular and molecular mechanisms of cadmium neurotoxicity and its interaction with APOE4 on memory impairment.”
  - Works with CEC volunteering.
  - Racial Justice research.
  - Project: Cellular and Molecular Mechanisms of Cadmium Neurotoxicity.
- Hao Wang
  - Awarded a 2020 KC Donnelly externship to work at UC Davis.
  - Won 2<sup>nd</sup> place post-doc presentation award 2020 Regional Society of Toxicology.
  - First author on two publications.
  - Project: Cellular and Molecular Mechanisms of Cadmium Neurotoxicity.
- Jacqueline Garrick
  - Defended Ph.D. thesis titled “Characterizing the Role of Paraoxonase 2 (PON2) in the Brain: Phenotypic Analysis and Modulating Factors.”
  - Dissertation, 3 parts all submitted.
  - Project: Role of Paraoxonases (PONs) in Modulating Cadmium and Manganese Neurotoxicity.
- Samantha Fung
  - Passed her general examination with a presentation titled “Seasonal and Short-term Effects of Mixing Patterns on Arsenic Contamination in Shallow Lakes.”
  - Recent presentations at 2021 Association for the Sciences of Limnology and Oceanography as well as 2020 Annual Meeting of the Washington Lake Protection Association.
  - Project: Arsenic in Shallow Unstratified and Seasonally Stratified Urban Lakes: Mobility, Bioaccumulation, and Ecological Toxicity.

### **Baylor College of Medicine**

(Theodore Wensel)

- Research Experience and Training Coordination Core
- Objectives: Cross-disciplinary training, common language, diversity, career development (trainees and mentors)
- 7 Program Faculty mentors3 Trainees that work on many kinds of projects
- Program Plan:
  - Focus on Research training and mentorship.
  - Series of courses that work on Precision Environmental Health which have established Environmental Health courses.
  - Have workshops and training which integrate trainees into different programs.
- Trainees attended and presented at SRP Annual Meeting 2020

## **TAMU**

(Candice Brinkmeyer-Langford)

- Held Special Skills “Boot Camps” with outside speakers for trainees in Spring 2021:
  - How to communicate scientific findings, preparing manuscripts, finding jobs, creating CVs.
  - Trainees indicate a very high level of satisfaction/benefit.
- Coming soon: Big Data Training in summer and fall:
  - Learn more: <https://superfund.tamu.edu/big-data-series-2021/>
  - The first course is on July 14.
  - Free courses.
  - Some of the courses will be led by EPA professionals.
  - Workshops featuring R, data in contexts of exposure, how to use online resources for science predictions.
- This winter will have a disaster research training workshop.
- Recent graduates:
  - Burcu Beykal: now an assistant professor at the University of Connecticut.
  - Zunwei Chen: now a postdoc at the Harvard SRP Center.
  - Krisa Camargo: now a toxicologist at the US Army Public Health Center.
  - Sara Hearon: now a toxicologist at Exponent.

## **UC San Diego**

(Pamela Mellon)

- Directly supports a small number of trainees:
  - Provide career advancement opportunities.
- Aims for renewal:
  - Focus on offering educational and career advancement opportunities.
  - Allow trainees to organize and lead an undergraduate fellowship program.
- Series of activities that the new core will support:
  - SRP seminar series hosted by trainees.
  - Independent development programs with trainees.
  - Career hours with presentations by past trainees.

## **University of Kentucky**

(Zach Hilt)

- Organized Symposium on Innovation in Remediation Strategies and their Impact on Superfund Contaminants.

- Trainees attended the Environment and Health Symposium where they shared elevator pitches of their research.
- CEC participated in Berry Bush Trimming at Danville Senior Center.
- Pan Deng, a former trainee, is now a co-PI in Project 1. Had a publication selected as a highlight at College of Pharmacy.
- Molly Frazer received the Tau Beta Pi Most Outstanding Graduate Student in the College of Engineering award.
- Angela Gutierrez- UKSRC Center Liaison, recognized by NIEHS in a Story of Success: <https://www.niehs.nih.gov/research/supported/success/index.cfm>

### **University of New Mexico**

(Eliane El Hayek, Isabel Meza)

- Pilot study on metal exposure with trainees and community local farmers and gardeners.
- Clinical Trial in Navajo Nation involving trainees:
  - Zinc supplements to investigate the potential of zinc to reduce the damage from arsenic and uranium and other metals exposure by enhancing DNA repair mechanisms.
  - Juliana Huestis defended her master's Thesis, "Zinc finger DNA repair protein targets of arsenite in the nucleotide excision repair pathway," on March 25, 2020.
- Other activities: presentations at SRP webinars, trainees were authors on 16 publications.
- Trainees work was featured in the also Supplementary Cover of the most recent issue of ACS Earth and Space Chemistry.
- Research did not stop during the pandemic! Trainees have been presenting their work at virtual conferences and continue working in their labs.

### **PROTECT - Puerto Rico**

(Tom Sheahan)

- Trainees established a LinkedIn Group to connect with former trainees.
- Trainees led multi-site March of Dimes walk team.
- Met with Enrichment Cores.
- Professional development: DMAC workshop on Computational Tools and their Applications for Environmental Health.
- Held Literature Review Tips Webinar and Environmental Justice webinars.

### **Q&A via Chat:**

1. For Oregon State: What system did you use for the online database and calendar of events?  
*We used a combination of platforms. Some of the resources were just posted on a new RETCC webpage, and some were entered into a new Trainees Calendar, which I think was just a dedicated Outlook Calendar. The Outreach and education module was a combination of shinyapps and YouTube.*
2. For Brown: How many trainees were involved in this activity with the Narragansett?  
*On this day, we had 4 trainees collaborate with the Narragansett Tribe.*
3. For TAMU: Are these courses open for trainees from other SRP Centers?

*Yes, absolutely! Any of the training I discussed is open to any trainees. We'd love to have them!*

- **Thank you to everyone who sent submissions for the SRP Trainee Summer Scientific Art/Photo Competition!**
  - This competition was a chance for trainees to share any amazing images captured during laboratory or field experiments, other photos, and artwork.
  - We are reviewing submissions now and will announce the winners soon.
- **Highlighting trainee videos in the [e-Posted](#) via SPAN**
- **Annual Meeting Save the Date**
  - **Dec. 15-17** in Raleigh, North Carolina.
  - The University of North Carolina at Chapel Hill and the North Carolina State University SRP Centers will co-host the event.

**Additional Information:**

- **Reminder to use the SRP Data Collection Tool (DCT) to submit Trainee Highlights!**
  - Submit awards, publications, honors, and photos of activities. SRP uses these entries to learn about what trainees are doing and to select trainees to highlight in the E-Posted! We also consider submitted photos for the E-Posted Photo of the Month! Submitting highlights helps you with the Annual Update Process!
- **Reminder to update CareerTrac**
- **Wetterhahn Award**
  - The winner of the 2021 Wetterhahn Award will be announced at the SRP Annual Meeting in December.
  - Congratulations to Jennifer Kay! Kay completed her Ph.D. under the direction of Bevin Engelward, Ph.D., at the Massachusetts Institute of Technology SRP Center and is now a researcher at Silent Spring Institute.
  - Nominations for the 2021 Karen Wetterhahn Memorial Award will be accepted from July 1st until August 1st.
  - <https://www.niehs.nih.gov/research/supported/centers/srp/training/wetterhahn/index.cfm>
- **Reminder to send updates to SPAN Leadership Committee**
  - These will be taken September/January of each year (please limit to 1 – 2 graduate students/Post-Docs per Center to keep up with the listserv)
  - Please email your nominations to [danielle.carlin@nih.gov](mailto:danielle.carlin@nih.gov) and indicate the current status of the new member (e.g., graduate student or Post-Doc)
  - Membership on the SPAN Leadership Committee is a two-year term.
- **SRP Website – for SPAN/Training**
  - <http://www.niehs.nih.gov/research/supported/srp/training/index.cfm>
  - Notes from all previous SPAN Teleconferences/WebEx Discussions are posted here.

- **SRP e-Posted: Trainee Highlights**
  - Training Core Leaders, please send Mali Velasco ([mali.velascodelgado@nih.gov](mailto:mali.velascodelgado@nih.gov)) any news items of interest to trainees (e.g., trainee success stories, pictures, job announcements).
- **SRP/NIEHS on LinkedIn:** <https://www.linkedin.com/groups/8565066>
  - Note: this is for SRP Trainees only
- **Next SPAN Zoom Webinar**
  - Data science/management course taught by **Brian Westra**, Data Services Manager at the University of Iowa Libraries.
  - Tentative **September 2021**.