

Superfund Research Program e-Posted Notes

September 9, 2016 (Issue 152)

HEADLINES

NIEHS Environmental Health Science FEST

The first ever NIEHS Environmental Health Science FEST (EHS FEST) is just around the corner! This meeting is an opportunity for dialogue across the many different NIEHS grant programs and among our grantees, community groups, small businesses, and federal partners with a common interest in environmental health. Registration for EHS FEST is now open!

This event will take place December 5 - 8, 2016 in Durham, North Carolina. SRP will hold an all-day grantee meeting on Monday, December 5 (more information coming soon).

The deadline to submit to be a part of the poster session, film festival, and sensor fair has also been extended to **Friday, September 16.** Visit the [NIEHS Environmental Health Science FEST](#) Web page to register for the meeting and for information about the agenda and hotel accommodations.

Upcoming Trainee Webinar: AAAS Science and Technology Fellowship Experiences

SRP staff would like to invite you to an SRP trainee webinar on **September 21 at 2:00 p.m. ET.** On this webinar, we will hear from two current [AAAS Science and Technology Policy Fellows](#), Wendy Heiger-Bernays, the Research Translation Core leader at Boston University, and Brad Newsome, a former trainee from the University of Kentucky SRP. They will discuss their experiences and lessons learned during their AAAS Science and Technology Policy Fellowships.

Please note that you need to register to join the webinar. Please visit the [NIH WebEx page](#) to register for the webinar and for more information about the presentation.

IN THE NEWS

NIEHS SRP News Stories

Take a moment to read about some of our colleagues' latest activities in this month's Environmental Factor, the NIEHS newsletter:

EMPLOYMENT OPPORTUNITIES

Editors in Chief of GeoHealth

The American Geophysical Union is launching GeoHealth, an open-access journal that will foster the intersection of earth science disciplines with those of human sciences. They are seeking applications for two dynamic, well-organized scientists with high editorial standards and strong leadership skills to serve 4-year terms as the editors in chief of this exciting journal, starting in 2017. One editor's main area of focus will be on the geosciences, while the other editor's main area of focus will be on health. If you would like to be considered for one of these positions, send your curriculum vitae with a letter of interest via e-mail to pubmatters@agu.org. If you would like to nominate a highly qualified colleague, send a letter of recommendation to the same e-mail address. Please make sure that you specify GeoHealth in the subject line of the e-mail.

Research Position at UC Davis

UC Davis is looking for highly motivated researchers to contribute to a recently funded BRAIN Initiative project to develop ScFv and nanobody-based intrabodies against brain proteins. They are searching for researchers with experience in recombinant antibody technology, specifically for ScFvs and camelid nanobodies, to contribute to this

- [Appalachian forum emphasizes community](#)
- [Study sheds light on lead's neurotoxic effects](#)
- [Researchers discover new diet-toxicant interaction](#)
- [Six promising Superfund trainees receive K.C. Donnelly awards](#)

Visit the SRP news page for more stories about the Program:

- [UCSD Professor and Nobel Prize Winner Roger Tsien Dies](#)
- [NIEHS anniversary event highlights SRP history and research](#)
- [Bioavailability fact sheet now available](#)
- [PROTECT expands to investigate Zika in infants and pregnancy](#)

Kim Anderson Featured on BBC World Service

Oregon State University SRP Center researcher Kim Anderson was highlighted on the BBC World Service's Science in Action program. In the segment, Anderson discusses her work to provide silicon wristbands to farmers in West Africa to monitor their exposure to toxic pesticide.

Science in Action reports on the best and most interesting science stories each week that BBC can identify and broadcasts the program to a large global audience interested in science.

There is a short quote by Anderson at the beginning, during the introduction, and the main interview with her begins at the 6:30 mark. Visit the [BBC Science in Action page](#) to listen to the story.

BUSRP and ISRP discuss air quality monitoring with EPA and MassDEP

Earlier this year, the Boston University SRP Center (BUSRP) and colleagues from the University of Iowa SRP Center (ISRP) met with officials from the Massachusetts Department of Environmental Protection and EPA Region 1 to discuss their air quality monitoring work in areas surrounding the New Bedford Harbor. In 2015, BUSRP and ISRP won supplemental funding to study the air quality in neighborhoods adjacent to the harbor in response to residents' concerns that the EPA's cleanup of PCB-contaminated sediment could cause the toxics to become airborne. Now, they are working with EPA and MassDEP to strengthen their collaborative efforts. For more on the project and collaboration, visit the [BUSRP website](#).

BUSRP also recently created a new [Web page](#) to document their long history with regulatory agencies and community leaders to address public health and ecological challenges at the New Bedford Harbor Superfund site.

Groundwater Contamination in Karst Regions Affects Human Health

A report from [Karst, Groundwater Contamination & Public Health](#), a meeting co-hosted by the Northeastern PROTECT SRP Center,

project. This project will be based at UC Davis, within the laboratory of Dr. James Trimmer, and will involve extensive interaction with a multi-institutional team. Preference will be given to researchers with experience in recombinant antibody technology. These positions are NIH-funded and include highly competitive salaries and fringe benefits. Applications will be accepted immediately until these positions are filled. Send a cover letter, highlighting relevant experience, and a CV including names of three references to jtlab@ucdavis.edu.

NIEHS Biostatistician Position

NIEHS is seeking an experienced biostatistician at the rank of Staff Scientist in the Biostatistics and Computational Biology Branch (BCBB) of the Division of Intramural Research (DIR). The incumbent will collaborate extensively with researchers in the DIR and the Division of the National Toxicology Program (DNTP). As the principal statistician for the National Toxicology Program (NTP), he/she will provide statistical leadership and ensure the statistical integrity of its research program. In addition, the position involves management and oversight of statistical support service contracts. Development of new statistical methods is encouraged but will not be a major component of the job. Interested persons should e-mail a combined, single PDF of their curriculum vitae and a two-page statement of research and collaboration experience. Applicants must also arrange to have three letters of reference in PDF format sent directly to dir-appls@niehs.nih.gov. Please instruct your referees to include your name and BCBB-SS in the subject line of their e-mail. Review of applications will begin on September 30, 2016, but applications will be accepted until the vacancy is filled.

was recently published in the American Geophysical Union's Earth and Space Science News. The article focused on how the meeting brought experts from multiple disciplines to explore knowledge gaps between the science of contaminant transport in karst aquifers and our understanding of exposure pathways and health outcomes. See the [Earth and Space Science News meeting report](#) to learn more.

LSU SRP Engages Local Students in Environmental Health Investigations

This summer, the Louisiana State University (LSU) SRP Center engaged with difference groups of students to introduce environmental health concepts with fun activities. Members of the LSU SRP Research Translation Core (RTC) spent July 31 - August 3 at Louisiana Outdoor Science and Technology (LOST) Camp at Camp Grant Walker in Pollock, Louisiana. The LSU SRP RTC developed and used their "Trackin' Toxins" activities to introduce participants to the different disciplines of science that are involved in studying and developing solutions to complex environmental health problems, such as the Environmentally Persistent Free Radicals (EPFRs) that the LSU Center studies. They also worked with Big Buddy to field test some new learning kits that focus on topics in environmental health science. See the LSU blog posts on the [Big Buddy activities](#) and the [LOST camp](#) to read more.

TRAINEE SPOTLIGHT

Nick Herkert - University of Iowa

Nick Herkert is a graduate student at the University of Iowa under the guidance of Keri Hornbuckle as part of the Iowa SRP Center.

His research project focuses on better understanding the relationship between observed concentrations of polychlorinated biphenyls (PCBs) in Chicago's air and the interactions that has with Lake Michigan. He is using modeling techniques to determine the sampling volume of passive samplers to determine site-specific concentrations of PCBs.

He has worked to revise laboratory procedures for detecting hydroxylated PCBs and has improved modeling techniques of passive air sampling of PCBs with MATLAB. He is also working to apply the passive air sampling model to determine effective sampling models for a wide range of persistent organic pollutants (POPs) anywhere on the globe.

In a recent [paper](#), Herkert reports on a model using local weather



Senior Research Scientist - Northeastern University

The Northeastern University PROTECT Center is seeking a Senior Research Scientist/Engineer with experience and a focus on environmental health, specifically one or more of the following: health informatics, geospatial informatics, and environmental epidemiology. This individual will work closely with scientists from different disciplines across multiple institutions to analyze large, complex environmental/biological datasets. This position requires a Ph.D. or equivalent in environmental engineering, epidemiology, biostatistics, geology, biomedical or other related quantitative fields with 3 - 6 years of experience, which includes progressively more responsible, independent research work evidenced by publications, inventions, or equivalent efforts. See the [Northeastern University jobs page](#) for more information.

CURRENT RESEARCH BRIEF

Research Brief 261: **Importance of Young Dissolved Organic Carbon to the Release of Arsenic in Aquifers** (Benjamin Bostick, Columbia University) is available on the [SRP Research Briefs website](#).

Past [Research Briefs](#) are available on the SRP website.

To receive the monthly Research Briefs in your e-mail, please send your e-mail address to heacockm@niehs.nih.gov.

If you have ideas for future Research Briefs, please submit them to heacockm@niehs.nih.gov.

SRP-SUPPORTED EVENTS

**SRP Trainee Webinar: AAAS
Science and Technology Policy
Fellowship Experiences**

data to determine the effective sampling volume for PCB congeners collected on passive air samplers. The Iowa SRP Center also produced an [SRP trainee video](#) on Herkert and his research.

When he isn't in the lab, Herkert enjoys spending time outdoors with his fiancée, Kirsten, and Chihuahua, Teddy. He also loves to travel and has visited Iceland, England, Ireland, Italy, Spain, and many more places. He has recently started to document his travels by editing videos he records while on the road.

HOT PUBLICATION

Results from Screening Foam Based Consumer Products for Flame Retardant Chemicals

A recent Duke SRP Center [paper](#) documents current results from [What's in my foam?](#), the polyurethane foam study being conducted by the Analytical Chemistry Core of the Duke SRP Center. Researchers have observed significant decreases in flame retardant applications in furniture products and childcare seats, suggesting that the use of additive flame retardants in polyurethane foam may be declining.

Flame retardant (FR) chemicals have often been added to polyurethane foam to meet required state and federal flammability standards. However, some FRs are associated with health hazards and are now restricted from use in some regions. In addition, California's residential furniture flammability standard has undergone significant amendments over the last few years. These events have likely led to shifts in the types of FRs used and the products to which they are applied. To provide more information on the use of FRs in products containing polyurethane foam, the Duke SRP Center established a screening service for the general public. Participants residing in the U.S. were allowed to submit up to 5 samples from their household for analysis, free of charge, and supplied information on the product category, labeling, and year and state of purchase. Between February 2014 and June 2016, they received 1,141 samples for analysis from various products, including sofas, chairs, mattresses, car seats and pillows. Of these samples tested, 52% contained a FR at levels greater than 1% by weight. Tris (1,3-dichloroisopropyl) phosphate (TDCIPP) was the most common FR detected in samples and was the most common FR detected in all product categories.

AWARD WINNERS

Karletta Chief Awarded 2016 AISES Professional of the Year Award

University of Arizona SRP Center researcher Karletta Chief received the American Indian Science and Engineering Society (AISES) Professional of the Year Award this year. Chief is an Assistant Professor and Extension Specialist - Hydrology in the

September 21, 2016 • 2:00 - 3:00

p.m. EDT

Webinar

[Website](#)

13th International Phytotechnologies Conference: Plant-Based Solutions for Environmental Problems from Lab to Field

September 26 - 28, 2016

Hangzhou, China

[Website](#)

U.S. Small Business Funding Opportunities (SBIR/STTR) for Environmental Technologies at NIEHS SRP, EPA, and NSF

October 3, 2016 • 1:00 - 3:00 p.m.

EDT

Webinar

[Website](#)

The 9th PCB Workshop: PCB Risk Evaluation and Environmental Protection

October 9 - 13, 2016

Kobe, Japan

[Website](#)

North Carolina Society of Toxicology Annual Meeting

October 25, 2016

Research Triangle Park, North Carolina

[Website](#)

Society of Environmental Toxicology and Chemistry (SETAC) North America 37th Annual Meeting

November 6 - 10, 2016

Orlando, Florida

[Website](#)

The 8th Princess Chulabhorn International Science Congress Environmental Health: Inter-linkages Among the Environment, Chemicals, and Infectious Agents

November 13 - 17, 2016

Bangkok, Thailand

[Website](#)

NIEHS Environmental Health Science FEST

December 5 - 8, 2016

Department of Soil, Water and Environmental Science at the University of Arizona in Tucson. She has partnered with the University of Arizona College of Public Health on two grants, which were both funded for over \$1 million for environmental justice work on the impact of the Gold King Mine spill in northwestern New Mexico. She has also secured more than \$6.2 million in research funds, and she was the winner of the AISES Most Promising Engineer or Scientist in 2011. Visit the [AISES website](#) to learn more about the award.

Stephania Cormier Named Inaugural Chair

Louisiana State University SRP Center Director Stephania Cormier was chosen as the inaugural associate vice chancellor for research and global partnerships at the University of Tennessee Health Science Center (UTHSC). The position was created by the UTHSC vice chancellor for research to stimulate national and international collaborations in basic, translational, and clinical trials research. Cormier's new responsibilities will include strategic coordination that fosters operational networks of interdisciplinary researchers. For more, visit the [LSU SRP Center website](#).

Ted Emmett and Members of the BoRit Community Advisory Group Receive Award

University of Pennsylvania SRP Center researcher Ted Emmett and the members of the Penn SRP Community Advisory Group were awarded the 2016 National Notable Achievement Award for Citizen Excellence in Community Involvement at the BoRit Asbestos Superfund site CAG meeting. Emmett and his team are working with the CAG to inform the community about asbestos exposure and to inform their research based on community concerns.

Fenna Sille to Continue her NIEHS Fellowship as an Assistant Professor

Fenna Sille, a UC Berkeley SRP Center postdoctoral trainee and recent awardee of an [NIEHS K99 grant](#), has recently accepted a competitive offer for a position as a tenure-track Assistant Professor in the Department of Environmental Health Sciences at the Johns Hopkins Bloomberg School of Public Health, where she will also continue her R00 grant research.

James Field Receives NSF Bridge to Doctorate Grant for Underrepresented Minorities in STEM Fields

University of Arizona SRP Center investigator James Field was awarded a \$1,068,000 National Science Foundation (NSF) Bridge to Doctorate Grant for underrepresented minority (URM) students in science, technology, engineering, and mathematics (STEM) fields. Starting on September 1, 2016, twelve Master of Science (MS) students will receive a \$32,000 fellowship per year over two years plus tuition.

Durham, North Carolina

[Website](#)

The 17th International Conference of the Pacific Basin Consortium

March 1 - 4, 2017

New Delhi, India

[Website](#)

GET UPDATES FROM OTHER SRP GRANTEES

The e-Posted isn't the only way you can learn about news and events from SRP grantees. The [SRP Grantee Newsletters and Pages](#) Web page has links to SRP Center electronic newsletters and Facebook pages. Check it out to see the latest SRP news!

To see the latest SRP grantee publications, visit the [SRP publications page](#).

Visit the [SRP Materials for Grantees page](#) for information intended to assist grantees, such as SRP administrative supplements information, SRP best practices, NIEHS logo use, and the Data Collection Form.

The [SRP Events page](#) contains up-to-date SRP grantee and staff events.

The SRP website also has [Search Tools](#) to help you learn more about projects funded by the Program.

JOIN THE @SRP_NIEHS KNOWLEDGE NETWORK ON TWITTER

NIEHS uses Twitter, a popular social media tool, for information-sharing through Tweets. Many SRP Centers also have accounts, and it would be great if all participated! Follow us at [@SRP_NIEHS](#) to instantly hear news about the Program, noteworthy publications, events, and job opportunities for trainees.

CONTACT INFORMATION

WEBINARS

BD2K Guide to the Fundamentals of Data Science

The NIH Big Data to Knowledge program is pleased to announce the BD2K Guide to the Fundamentals of Data Science, a series of online lectures given by experts from across the country covering a range of diverse topics in data science. This course is an introductory overview that assumes no prior knowledge or understanding of data science.

The series starts **Friday, September 9**, and will run weekly all year, from noon to 1:00 p.m. ET.

For up-to-date information about the series and to see archived presentations, visit the [BD2K Training Coordinating Center website](#).

CHE Partnership Call: 25 Years of Endocrine Disruption Research - Insights from the Director of NIEHS

The Collaborative on Health and the Environment (CHE) is hosting a teleconference call on NIEHS Endocrine Disruption research on **September 28 at 1:00 p.m. ET**. NIEHS Director Linda Birnbaum will present on the call, sharing her insights from the 25 Years of Endocrine Disruption Research: Past Lessons and Future Directions meeting, which is being held September 18 - 20, in Bethesda, Maryland. She will reflect on the history of endocrine disruption research, the current state of the science, and future directions for the field. Visit the [CHE website](#) to learn more and to RSVP for the call.

U.S. Small Business Funding Opportunities (SBIR/STTR) for Environmental Technologies at NIEHS SRP, EPA, and NSF

This webinar, scheduled for **October 3, 2016, from 1:00 to 3:00 p.m. EDT**, is designed to help small businesses and academic researchers better understand the different agencies that fund environmental technologies and the fundamental goals of the Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) programs. To learn more and to register, visit the [webinar's Web page](#).

CALL FOR ABSTRACTS

The 8th Princess Chulabhorn International Science Congress - Abstracts Due September 15

The 8th Princess Chulabhorn International Science Congress will be held in **Bangkok, Thailand, November 13 - 17**. The theme of the conference is inter-linkages among the environment, chemicals, and infectious agents. The scientific program will cover chemical and infectious agents, exposure, diseases resulting from environmental exposures, mechanisms and pathways of disease development, modifiers of susceptibility and

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disease outcomes, tools and technologies for environmental health, and new and emerging therapies. Many of our Superfund Research Program colleagues will be presenting their exciting work at this meeting!

All participants are invited to submit abstracts for platform or poster presentations by **September 15**. For more information, visit the [Princess Chulabhorn International Science Congress website](#). For questions about the meeting, please e-mail srp-info@nih.gov; in the subject line, insert "Question about Chulabhorn Meeting."

253rd American Chemical Society National Meeting & Exposition: Remediation and Detection Technologies Symposium

At the 253rd American Chemical Society National Meeting & Exposition in San Francisco on **April 2 - 6, 2017**, SRP Administrator Heather Henry and Souhail Al-Abed from the EPA Office of Research and Development are co-chairing a symposium, "From the Bench to the Field: Evaluating Innovative Remediation and Detection Technologies." The symposium will feature case studies applying cutting-edge approaches and technologies for site management, both in terms of remediation and detection of hazardous substances. Special attention will be given to how to evaluate success of these technologies. This symposium will also feature innovative detection and monitoring technologies that aid in the evaluation of remediation effectiveness. Abstracts will be due in October; visit the [ACS Meeting Portal](#) to submit yours. If you have questions about the session, contact Heather Henry at henryh@niehs.nih.gov or (919) 541-5330.

FUNDING OPPORTUNITIES

Big Data to Knowledge (BD2K) Community-Based Data and Metadata Standards Efforts (R24)

This Funding Opportunity Announcement (FOA), under the [Big Data to Knowledge \(BD2K\)](#) initiative, is to provide time-limited, catalytic support for activities necessary to develop or extend/refine data and metadata standards and/or related tools in areas relevant to the NIH basic, translational, and clinical research mission. For more information, see the [announcement](#).
Deadline: **November 9, 2016, by 5:00 p.m. local time of applicant organization.**

Joint NSF/NIH Initiative on Quantitative Approaches to Biomedical Big Data (QuBBD)

The NIH [Big Data to Knowledge Initiative](#) (BD2K), together with the Division of Mathematical Sciences at NSF, announces the release of a new program solicitation: [Joint NSF/NIH Initiative on Quantitative Approaches to Biomedical Big Data \(QuBBD\)](#). This program is designed to support novel mathematical, statistical, or computational approaches to biomedical big data challenges.

Collaborative efforts that bring together quantitative scientists and biomedical researchers are a requirement for this program and must be convincingly demonstrated in the proposal. The due date for full proposals is **September 28**.

Environmental Exposures and Health: Exploration of Non-Traditional Settings

This grant opportunity encourages interdisciplinary research aimed at promoting health, preventing and limiting symptoms and disease, and reducing health disparities across the lifespan for those living or spending time in non-traditional settings (i.e., playgrounds and nursing homes). Deadlines: **October 5, 2016** ([R01](#)); **October 16, 2016** ([R21](#)).

Research to Action: Assessing and Addressing Community Exposures to Environmental Contaminants (R01)

[Research to Action: Assessing and Addressing Community Exposures to Environmental Contaminants \(R01\)](#) encourages applications using community-engaged research methods to investigate the potential health risks of environmental exposures of concern to the community and to implement an environmental public health action plan based on research findings. Standard receipt dates apply (**October 5, February 5**).

Revolutionizing Innovative, Visionary Environmental Health Research (RIVER) (R35)

The NIEHS Revolutionizing Innovative, Visionary Environmental health Research (RIVER) program seeks to provide support for outstanding investigators in the environmental health sciences, giving them intellectual and administrative freedom, as well as sustained support to pursue their research in novel directions in order to achieve greater impacts. The program seeks to identify individuals, regardless of career stage, with a track record of innovative and impactful research and to combine their existing investigator-initiated research into a single seven-year award with direct costs of up to \$750,000 based on current NIEHS funding. Letters of intent are due **September 24, 2016**. Applications are due **October 24, 2016** by 5:00 p.m. local time of the applicant organization. For more information, visit the [RIVER Funding Opportunity Announcement](#).

Smart City Air Challenge

EPA is challenging communities across the country to collect data using hundreds of air quality sensors as part of the Smart City Air Challenge. The Agency is offering up to \$40,000 apiece to two communities to help them develop and implement plans for collecting and sharing data from air quality sensors. To qualify for the challenge, communities will need to submit plans for deploying hundreds of air quality sensors and managing the data they collect. The award money only covers part of the program costs, so communities will need to partner with sensor

manufacturers, data management companies, or others to get resources and expertise to implement their plans. After a year, EPA will evaluate the two projects and award up to an additional \$10,000 to the winning communities based on their accomplishments and collaboration. The deadline to apply is **October 28 at 4:00 p.m. ET**. See the [EPA Smart City Challenge website](#) for more information.

