

# Superfund Research Program e-Posted Notes

January 8, 2016 (Issue 144)

## HEADLINES

### Environmental Health Science FEST

As part of its 50th anniversary celebration, NIEHS is organizing a grand meeting — the Environmental Health Science (EHS) FEST — to bring together researchers, community engagement teams, trainees, and young investigators who are supported through NIEHS programs.

There will be a mix of different meeting formats to meet almost everyone's professional needs. The EHS FEST will enable grantees to:

- Stimulate new ideas in research approaches, communication, translational research, tools, sensors, and more.
- Highlight scientific accomplishments around crosscutting themes.
- Share best practices.

The meeting will take place **December 5-8, 2016** in the North Carolina Triangle area. While this meeting will be in lieu of our traditional SRP Annual Meeting, we will schedule a block of time dedicated for our Program. Please hold these dates on your calendar, and RSVP online at <https://www.surveymonkey.com/r/EHSFESTRSVP>.

### KC Donnelly Administrative Supplements Due January 31

The KC Donnelly administrative supplements are made available by the SRP to promote transdisciplinary and translational research among early SRP investigators (e.g., graduate students/post-doctoral researchers), which includes the recruitment of talented researchers and improving the quality of the educational and training environment. The purpose of these supplements is to provide current SRP-funded graduate students/post-doctoral researchers with translational/transdisciplinary opportunities and experiences that improves their skill set and broadens their scientific network within other SRP-funded centers, government laboratories (e.g., EPA, ATSDR, NIEHS), or other agencies (state, local, Tribal).

The SRP KC Donnelly Administrative Supplement applications

## EMPLOYMENT OPPORTUNITIES

### Physical Scientist – Environmental Protection Agency

The Environmental Protection Agency is seeking a physical scientist to serve as a nationally/internationally recognized expert in the field of contaminated sediments and ecological risk assessment for environmental programs. A successful applicant also serves as a member of the Environmental Response Team (ERT), and will rapidly respond to environmental emergencies and uncontrolled hazardous waste sites. This position is located in the Office of Land and Emergency Management (OLEM), Office of Superfund Remediation and Technology Innovation (OSRTI), Innovation Technology Innovation and Field Services Division (TIFSD), Environmental Response Team-East in Edison, NJ. The position is open until January 21, 2016. For more information and to apply, visit the [USA jobs page](#).

### Tenure-Track Faculty Position – Oregon State University

The Department of Environmental & Molecular Toxicology (EMT) in partnership with the Linus Pauling Institute at Oregon State University (OSU) seeks highly motivated applicants at the Assistant or Associate Professor level to participate in the development and delivery of graduate programs and

are due January 31, 2016. Please see the KC Donnelly [webpage](#) and [guidelines](#) for more information.

## Coming in Spring 2016: SRP Water Innovation - An Integrated Approach to Sustainable Solutions

Stay tuned for the upcoming Risk e-Learning Web Seminar series, which will highlight SRP grantees and partners working toward sustainable solutions to improve drinking water. We are currently working with colleagues to identify topics and plan the sessions. If you have any ideas, please send them to Heather Henry ([henryh@niehs.nih.gov](mailto:henryh@niehs.nih.gov)).

## White House Initiative to Build a Sustainable Water Future

If your group is doing work related to building a sustainable water future, we encourage you to share your research as part of the White House Initiative: Activities and Actions to Build a Sustainable Water Future. The White House is interested innovative science and technology that address key water issues. To share your input, visit the [White House activities input page](#).

In December, the Obama administration also invited leaders in the water field to discuss approaches for fostering innovation in the water sector. UC Berkeley SRP Center grantee David Sedlak participated in this event and wrote a commentary discussing the effort. See his [commentary](#) in the journal Environmental Science and Technology to read more.

## IN THE NEWS

### NIEHS SRP News Stories

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

- [Wetterhahn Award honors Superfund Research Program trainee](#)
- Extramural Paper of the Month: [New tool sheds light on how environmental chemicals affect humans](#)
- [Environmental Factor 2015 SRP Extramural Papers of the Year:](#)
  - [Triclosan associated with liver damage in mice](#)
  - [Newly discovered cells regenerate liver tissue without forming tumors](#)
  - [Intestinal microbes protect the liver and prevent liver fibrosis](#)

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

- [Dartmouth-Sponsored Food Collaborative Convenes in Hanover](#)
- [Pezzoli Receives UC System President's Award](#)
- [SRP Grantees Develop Occupational Health and Safety](#)

to establish an extramurally-funded research program in Environmental Health Sciences. Applicants with research programs centered on one or more of the following or closely related areas are particularly encouraged to apply: inflammation, molecular and cellular signaling, genetics, epigenetics, pharmacogenomics, carcinogenesis, cancer chemoprevention, metabolomics and systems biology or closely related areas that impact human health. Applicants at the Associate level must demonstrate a track record of sustainable extramural research funding, research productivity, leadership, and collaborative research. The position is open until **March 30, 2016**. Visit the [OSU jobs page](#) for more information and to apply.

### Senior Research Scientist - Northeastern University

The Northeastern University PROTECT Center is seeking a Senior Research Scientist/Engineering 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.

## [Modules on Nanotechnology](#)

- [Commercializing Passive Sampling Technology to Enhance the Risk Analysis Process](#)

## **SRP Arsenic Review Article Featured on EHP Most-Read Research List**

The [Most Read in Environmental Health Perspectives \(EHP\)](#) list on December 18 included the review, [Arsenic and Environmental Health: State of the Science and Future Research Opportunities](#).

The review describes emerging issues in arsenic research, the state of the science, data gaps across disciplines, and future research opportunities. Authors of the article include SRP staff, collaborators, and grantees.

## **Well Water Community Action Toolkit Now Available Online**

The Dartmouth SRP Center has developed a [Well Water Community Action Toolkit](#), a step-by-step guide to help communities ensure the safety of private well water. Designed to help communities increase private well water testing and treatment, the toolkit contains background information, a step-by-step guide for planning community activities, useful resources, and communication materials. See the [Dartmouth SRP Center Toolkit](#) for more information.

## **PROTECT Co-sponsors Reproductive Health and the Environment Symposium at Northeastern University**

The Northeastern SRP PROTECT Center co-sponsored the Reproductive Health and the Environment Symposium at Northeastern University in December. The Symposium, which was open to the public, featured keynote speakers and panelists from local universities and organizations in the community. Keynote speaker Laura Vandenberg, of the University of Massachusetts Amherst, started the event with a talk focusing on endocrine disruptors and their prevalence in everyday products. She discussed the evidence that even low doses of endocrine disruptors in the womb can have adverse results on growth and development. For more about the symposium, see the [Northeastern SRP Center website](#).

## **BU and Iowa SRP Centers Receive Funding to Study Air-Borne PCBs in Response to Community Concern**

The Boston University (BU) SRP Center and the University of Iowa SRP Center each received supplementary funding from the NIEHS to study ambient PCBs around New Bedford Harbor in response to community concerns. Located in southern Massachusetts, the 18,000 acre New Bedford Harbor Superfund site (NBH) is one of the nation's largest sites contaminated with polychlorinated biphenyls (PCBs) and heavy metals. A local community group expressed specific concerns and questions regarding exposures to PCBs during dredging, and human health effects of PCBs. Working with BU CEC partners, this project is

## **Several Positions in Environmental Toxicology - University of California at Riverside**

The University of California, Riverside is embarking on a major new hiring initiative that will add 300 tenure-track positions in 33 cross-disciplinary areas selected through a peer-reviewed competition. They are currently looking to fill four positions in the area of environmental toxicology at both the junior and senior levels. For more information and to submit an application, see the [UC Riverside recruitment page](#).

## **Research Scientists - Silent Spring Institute**

The Silent Spring Institute is looking for research scientists in data science and informatics, chemistry/biochemistry and biomonitoring, and molecular biology or endocrinology. They have three postings at this time for a data scientist, machine learning expert, or statistician; a chemist, chemical engineer, or biochemist; and an individual with expertise in molecular biology and endocrinology. For more information, visit the [Silent Spring Institute website](#).

## **Biostatistician - Gradient**

Gradient is an environmental and risk sciences consulting firm renowned for their specialties in Toxicology, Epidemiology, Risk Assessment, Product Safety, Contaminant Fate and Transport, and Environmental/Forensic Chemistry. Gradient is seeking a biostatistician who can apply relevant skills in biostatistics, statistics, and mathematics to toxicology- and epidemiology-related projects. Excellent analytic and critical thinking, writing, and communication skills are required. Must have the ability to organize

designed to be directly responsive to their questions and engage the potentially affected community by utilizing the air monitoring/modeling technology developed by Iowa SRP. Visit the [BU SRP Center website](#) for more information.

## TRAINEE SPOTLIGHT

### Shohreh Farzan, Dartmouth College

Shohreh Farzan is a postdoctoral research fellow under the guidance of Margaret Karagas in the Dartmouth College SRP Center. Her work focuses on how exposure to environmental toxicants, such as arsenic, may increase the risk of chronic disease and long-term health outcomes.



Her current research centers on arsenic exposure in relation to cardiovascular disease and pre-clinical markers of cardiovascular dysfunction and inflammation. Farzan is working to explore these health effects at a range of environmental exposure levels through complementary research projects with the New Hampshire Birth Cohort through the Dartmouth SRP Center, the Children's Center for Environmental Health and Disease Prevention Research at Dartmouth, the New Hampshire Health Study, and the Columbia SRP Center Health Effects of Arsenic Longitudinal Study (HEALS), with the goal of advancing our understanding of arsenic's contribution to cardiovascular disease initiation and progression to prevent later life disease.

As a result of her outstanding research, Farzan received an NIH Pathways to Independence (K99/R00) award for research on preclinical indicators and biomarkers of cardiovascular effects of arsenic exposure. She recently accepted a position with the Department of Preventive Medicine at the Keck School of Medicine at the University of Southern California so she will soon transition from the mentored phase of the award (K99) to the independent investigator phase (R00). Farzan is currently in Bangladesh setting up her R00 study on cardiovascular effects of arsenic exposure and helping to teach a workshop.

Outside of work, Farzan loves to spend time outdoors or in her kitchen cooking. She also loves birdwatching and hiking and is excited to do both in California.

Farzan also received an NIEHS [KC Donnelly Externship Supplement Award](#) in 2013 and was highlighted in the [NIEHS](#)

and work with large datasets, and should be able to express complex statistical concepts and technical information to researchers and non-scientific audiences. Master's/PhD degree in biostatistics, statistics, mathematics or a related field of study with at least one year of coursework in statistics or biostatistics required. For more information, see the [Gradient jobs page](#).

### Postdoctoral Fellowship Positions - Rice University

Rice University is pleased to announce and invite applications for the Rice Academy Postdoctoral Fellows Program. The 2016 competition focuses exclusively on topics broadly related to health. Applications are particularly welcome from those who are interested in interdisciplinary approaches to scholarship. Applicants must have earned their doctoral degree between September 1, 2012, and August 31, 2016. All applications should be submitted electronically at the [Rice University Academy of Fellows website](#) by **January 11, 2016**. Rice Postdoctoral Fellows are all expected to begin September 1, 2016.

### CURRENT RESEARCH BRIEF

Research Brief 253: [Mapping Protein Targets of Environmental Chemicals Using Chemoproteomic Platforms](#) (Daniel K. Nomura, UC Berkeley) is available online.

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](mailto:HeacockM@niehs.nih.gov).

If you have ideas for future

[Environmental Factor newsletter](#) last year.

## HOT PUBLICATION

### Obesity and excess weight in early adulthood and high risks of arsenic-related cancer in later life

In a recent [study](#), UC Berkeley SRP Center researchers and colleagues observed a synergistic relationship between arsenic, elevated body mass index (BMI) and cancer.

The researchers assessed a unique situation of people living in northern Chile exposed to high arsenic concentrations in drinking water to investigate interactions between arsenic and BMI, and associations with lung and bladder cancer risks. The highest arsenic-related cancer odds ratios were seen in those with elevated BMIs in both early adulthood and in later life. They also found that adjustments for smoking, diet, occupation and other factors had little impact and associations were greatest in subjects with excess BMI throughout adulthood.

These findings provide novel preliminary evidence supporting the notion that environmentally-related cancer risks may be markedly increased in people with elevated BMIs, especially in those with an elevated BMI in early-life.

## WEBINARS

### SERDP and ESTCP Webinar Series: Vapor Intrusion

The Department of Defense's (DoD) environmental research programs - Strategic Environmental Research and Development Program (SERDP) and the Environmental Security Technology Certification Program (ESTCP) - are offering webinars to promote the transfer of innovative, cost-effective, and sustainable solutions. The webinar series targets end users including practitioners, the regulatory community, and researchers to provide cutting-edge and practical information from sponsored research and technology demonstrations.

Upcoming free webinars will highlight DoD research efforts in the environmental restoration and the resource conservation and climate change program areas. On **January 14 at 12 pm ET**, Helen Dawson and Todd McAlary from Geosyntec Consultants will discuss vapor intrusion regulatory updates and advances in assessment tools. See the [SERDP and ESTCP website](#) for more information and to register.

### Upcoming Call: Is a Health Study the Answer for Your Community?

The Boston University (BU) SRP Center Research Translation Core and [The Collaborative on Health and the Environment \(CHE\)](#) present the upcoming partnership call on [Is a Health Study the Answer for Your Community? A Guide for Making Informed Decisions](#).

Research Briefs, please submit them to: [HeacockM@niehs.nih.gov](mailto:HeacockM@niehs.nih.gov).

## SRP-SUPPORTED EVENTS

### Is a Health Study the Answer for Your Community? A Guide for Making Informed Decisions Co-Sponsored by the Boston University SRP

January 26, 2016, 1:00 - 2:00 pm ET  
Conference Call

[Website](#)

### Karst, Groundwater Contamination, and Public Health: Moving Beyond Case Studies

Grantee Event: Co-Hosted by the Northeastern University SRP  
January 27 - 30, 2016  
San Juan, Puerto Rico

[Website](#)

### Developing a Pan American Hub for Environmentally and Socially Compatible Mining

Grantee Event: Co-Sponsored by the University of Arizona SRP  
March 7, 2016  
Lima, Peru

[Website](#)

### Toxicology and Risk Assessment Conference

April 4-7, 2016  
Cincinnati, Ohio

[Website](#)

### Central and Eastern European Conference on Health and the Environment (CEECHÉ)

Grantee Event: Co-Hosted by the University of Kentucky SRP  
April 10 - 14, 2016  
Prague, Czech Republic

[Website](#)

### NIEHS Environmental Health Science FEST

December 5 - 8, 2016  
Durham, North Carolina

[RSVP](#)

## UPDATES FROM OTHER SRP CENTERS

Join one of the primary authors of the [Health Studies Guide](#), BU SRP Community Engagement Core (CEC) leader Madeleine Scammell, for a discussion on **Tuesday January 26, 2016 at 10:00 am Pacific/1:00 pm Eastern** about the considerations that might influence a community decision about whether or not to do a health study, and the types of studies to choose from.

Sylvia Broude, Executive Director of the [Toxics Action Center](#), a BU SRP CEC partner who has used the Guide with communities in efforts to organize and educate activists about environmental health issues, will also speak along with Stephen Lester, Science Director of the [Center for Health, Environment, and Justice](#) and contributing author to the Health Studies Guide. Visit the [CHE website](#) to register.

### PEPH Webinar: Healthy Homes

Save the date for the next PEPH Webinar on the topic of Healthy Homes. The webinar will take place January 21, 2016 from 1:00 to 2:30 pm ET. More information will be posted soon on the [PEPH Webinars page](#).

## CALL FOR ABSTRACTS

### Central and Eastern European Conference on Health and the Environment

The Central and Eastern European Conference on Health and Environment (CEECH 2016) will be held **April 10-14, 2016** in Prague, Czech Republic. The purpose of CEECH is to exchange knowledge on methods for addressing and assessing environmental health risks relevant to central and eastern European regions.

Abstracts for oral or poster presentations are due by **January 15, 2016**. Abstracts must be submitted electronically via the [Online Submission system](#). Trainees, Ph.D. students or Post Docs can also **apply for a travel award** by describing your financial needs and ways in which your attendance of CEECH 2016 will positively impact your career goals. Travel assistance will be decided by a Travel Award Selection Committee that will review the abstracts and assign assistance based on merit and need. For more information, see the [CEECH abstract submission guidelines page](#).

### Toxicology and Risk Assessment Conference – Call for Poster Abstracts

The 2016 Toxicology and Risk Assessment Conference (TRAC), **April 4-7, 2016 in Cincinnati, Ohio**, will focus on topics in risk assessment principles and practice. The conference provides attendees with an overview of current research, methodologic, and practice issues that are the focus of risk assessment efforts in various Federal agencies, academic institutions, industry, and other organizations.

The e-Posted isn't the only way you can find out about news and events from the SRP Centers. The [SRP Grantee Newsletters and Pages website](#) 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 [@SRP\\_NIEHS](#) to instantly hear news about the Program, noteworthy publications, events, and job opportunities for trainees.

## CONTACT INFORMATION

Information on NIEHS SRP Program Contacts can be found here: [NIEHS SRP Program Staff and Contacts](#).

A poster session on the evening of April 5, 2016 will feature trainees and is designed to provide participants the opportunity to share their work in a focused, collegial environment. The meeting organizers invite poster abstract submissions of broad interest to toxicology and risk assessment. The poster abstract deadline is **March 15, 2016**. See the [TRAC website](#) for more information.

## FUNDING OPPORTUNITIES

### **NSF Funds Big Data Hubs, Releases Big Data Spokes Initiative**

On November 2, the National Science Foundation (NSF) announced four awards, totaling more than \$5 million, to establish four Big Data Regional Innovation Hubs (BD Hubs) across the nation. NSF also released a new solicitation - [the BD Spokes initiative](#) - for projects that will leverage the BD Hubs' data. Each BD Spoke will focus on a specific BD Hub priority area and address one or more of three key issues: improving access to data, automating the data lifecycle, and applying data science techniques to solve domain science problems or demonstrate societal impact. See the [NSF Press Release](#) for more information. A letter of intent is due **January 12, 2016**, and proposals are due **February 25, 2016**.

### **Call For Proposals: Systems for Action - Systems and Services Research to Build a Culture of Health**

Systems for Action (S4A) is a national program of the Robert Wood Johnson Foundation (RWJF) that studies novel ways of aligning the delivery and financing systems that support a [Culture of Health](#). Building on a foundation of scientific progress from both health services research and public health services and systems research, S4A uses rigorous methods to test strategies for improving the reach, quality, efficiency, and equity of services and supports that promote health and well-being on a population-wide basis. Studies funded through this call for proposals (CFP) will identify system innovations and interactions that drive collaboration and integration across the multiple financing and delivery systems that support a Culture of Health. Applicants must first submit a three-page letter of intent through RWJF's online system by **January 12, 2016**. Only those projects that align with the CFP will be invited to submit a full proposal, which will be due **March 11, 2016**. For more information, visit the [RWJF website](#).

### **The Open Science Prize - Enabling Discoveries for Health Big Data Open Science Prize Opportunity**

The NIH Big Data to Knowledge initiative has partnered with Wellcome Trust, with additional support from the Howard Hughes Medical Institute, to launch a global science competition for new products or services to advance "open science," a movement to make scientific research data broadly accessible to the public. The Open Science Prize challenge consists of a two-phase

competition. The first phase of the competition is accepting applications through **February 29, 2016**.

More information about the Open Science Prize including eligibility and examples of potential innovations can be found on the [Open Science Prize website](#). Eligible teams must be a collaboration of a U.S. and an international partner.

### **Multiproject Center Grants Request for Applications**

The NIEHS is announcing the continuation of the Superfund Hazardous Substance Research and Training Program (P42) Request for Applications (RFA) to address the broad, complex health and environmental issues that arise from the multimedia nature of hazardous waste sites. SRP Center grants support problem-based, solution-oriented research Centers that consist of multiple, integrated projects representing both the biomedical and environmental science disciplines. The Center cores are also tasked with administrative, community engagement, research translation, research support, and training functions. Letters of Intent are due on **March 11, 2016**. Applications are due on **April 11, 2016**. For more information, see the [SRP Funding Opportunities - Multiproject Center Grants page](#).

If you missed the informational webinar to answer questions about [RFA-ES-15-019](#) on December 1, 2015, the archive is now available on the U.S. Environmental Protection Agency (EPA) [CLU-IN Training & Events Web page](#) for materials from the webinar and an archive.

## **INTERAGENCY NEWS**

### **Request for Nominations: National Advisory Council for Environmental Policy and Technology**

The Environmental Protection Agency (EPA) invites nominations to fill vacancies on its National Advisory Council for Environmental Policy and Technology (NACEPT). EPA established NACEPT in 1988 to provide advice to the EPA Administrator on a broad range of environmental policy, management, and technology issues. The Agency seeks nominees from a diverse range of qualified candidates representing the following sectors: Academia; state, local, and tribal governments; business and industry; and, non-governmental organizations.

Nomination packages must be emailed or postmarked no later than **January 15, 2016**. For more information, see the [Federal Register](#).

### **Request for Public Comments: EPA Guidelines for Human Exposure Assessment**

The EPA announced a 45-day public comment period for the External Review Draft of the "Guidelines for Human Exposure Assessment." EPA is seeking public comment prior to external

peer review. All comments received in the docket by **February 22, 2016** will be shared with the external peer review panel for their consideration. Comments received beyond that time may be considered by EPA when it finalizes the document.

In order to promote consistency and transparency in EPA risk assessments, the Agency produces guidance that articulates the current state-of-the-practice at EPA. The current guidance document for human exposure assessment, *Guidelines for Exposure Assessment*, was published in 1992, reflecting the state-of-the-science in the 1970s and 1980s. Since its publication, the field of exposure science has undergone significant transformation in methods and approaches. EPA programs have incorporated many of these advances into their policies and practices. Accordingly, the exposure guidelines are being revised and updated to reflect these changes.

Visit the [EPA website](#) for more information.

