

HEADLINES

Mark Your Calendars for the 2015 SRP Annual Meeting

Northeastern University's PROTECT Superfund Center announced that they will host the 2015 SRP Annual Meeting, to be held **November 18-20 in San Juan, Puerto Rico**. Puerto Rico is the main study site for PROTECT. It is a U.S. territory with a Latino population facing significant environmental challenges, including the presence of 16 active Superfund sites and a number of major public health issues. For example, in recent years, Puerto Rico's preterm birth rate has risen dramatically, and it has also seen elevated rates of autism, asthma, childhood and adult obesity, metabolic syndrome, and diabetes. They are already working to develop an exciting program for the meeting and will email further information as it becomes available.

SRP Research in Progress Webinar- Biogeochemical Interactions Grantees

Please join us for the second SRP Research in Progress webinar on **February 9** featuring *Individual Research Grants (R01)* addressing biogeochemical interactions affecting bioavailability for *in situ* remediation of hazardous substances. The purpose of these webinars is to facilitate dialogue among researchers, field practitioners, and stakeholders in the early stages of research to smooth the process for successful technology transfer and application by end users.

The webinar will take place on **February 9, 1:00-3:00 pm ET**. To learn more about the webinars and presenters, visit the [SRP Research in Progress Webinar page](#).

SRP in the Environmental Factor

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

- [NIEHS Superfund research training spurs collaboration with EPA](#)

Visit the [SRP News Page](#) for more stories about the Program.

Bhattacharyya Directs New Center of Membrane Sciences

The University of Kentucky Center for Membrane Sciences was established to foster multidisciplinary research on biological and synthetic membranes and their interface. Many experts agree that new breakthroughs in membrane science and technology, which contributes to remediation, separation, and detection of chemicals, will require integrative efforts and synergy of both biological and synthetic membrane experts to markedly enhance the applicability of membranes. The new center, directed by SRP grantee Dibakar Bhattacharyya, provides scientific and technological leadership and facilities to develop basic research in a new generation of membranes and to promote partnerships and technology transfer. See the [Center for Membrane Sciences website](#) to learn more.

SRP Grantees Work with NC Schools to Address Vapor Intrusion Questions

After a [Winston-Salem Journal report](#) revealed high levels of PCE in the air from an underground contaminant plume by Hanes and Lowrance middle schools in Winston Salem, NC, University of North Carolina SRP grantee Kathleen Gray was contacted by a community group in the area. Gray reached out to University of Kentucky SRP grantee Kelly Pennell because of her expertise in vapor intrusion. Pennell is traveling to Winston-Salem to speak at a free community education workshop Monday, February 9. Pennell was also featured in a [Winston-Salem Public Radio piece](#) about the issue. What an excellent example of grantee networking and response to community needs!

EMPLOYMENT OPPORTUNITIES

NIEHS - Independent Research Positions in Epidemiology

The NIEHS, located in Research Triangle Park, North Carolina, is recruiting for one or more tenure-track epidemiologists. Successful candidate(s) will be expected to develop an outstanding, investigator-initiated research program in any of the following areas: reproduction, pregnancy outcomes, pediatrics, early origins of disease, life-course epidemiology, adult health/chronic disease, or other areas of environmental epidemiology. NIEHS will begin evaluating complete applications on **March 9, 2015**. Applications will be accepted until vacancies are filled. For the full position description and application information, visit the [NIEHS job opportunity](#).

Postdoctoral Research Fellow - Brown University

A postdoctoral research fellow position is available to study the **basic mechanisms of disease related to environmental exposure to metals** in the laboratory of Tom Bartnikas, M.D., Ph.D. in the Brown University department of pathology and laboratory medicine. Emphasis will be placed on career development, communication skills, grantsmanship, interdisciplinary research, and implications of basic research for diagnosis and prevention of human disease. The candidate is expected to have a Ph.D. in toxicology, molecular or cell biology, biochemistry or a related field. For more information and to apply, see the [job description](#).

Children's Environmental Health Network - Engagement Manager Position

The Children's Environmental Health Network (CEHN) is seeking an Eco-Healthy Child Care Engagement Manager to foster the growth, development, and reach of the CEHN Eco-Healthy Child Care Program. This individual must have a strong understanding of children's environmental health, and also the world of child care within the United States including Child Care Resource and Referral agencies, child care licensing, accreditation, state Quality Improvement Rating Systems, and more. He/she will publicly represent CEHN while participating in meetings with federal and national association partners, presenting at national conferences, and conducting state-wide trainings. For the full position description and for application information, visit the [CEHN job opportunity](#).

Graziano featured on CBS News

Columbia University SRP Center Director Joe Graziano was recently featured in a video and an article from [CBS News](#) on the health worries surrounding arsenic in rice. CBS News highlights Graziano's work on arsenic in water and its effects on pregnant women, as well as other health effects of exposure to arsenic.

Research Spotlight on UCSD and UC Davis Collaborative Research

A [research spotlight](#) in the journal *Chemical Research in Toxicology* features joint research from Robert Tukey (UC San Diego SRP Center) and Bruce Hammock (UC Davis SRP Center) on how triclosan promotes liver tumor development. Their paper, published in the journal *PNAS*, was also the subject of the [January SRP Research Brief](#).

New University of Arizona Transferable Training Module

The University of Arizona SRP Community Engagement Core collaborated with *promotores de salud*, who are Latino community health advisors, and risk assessment scientists to add another "transferable training module" to their collection of educational materials. This new module was specifically designed to present the diverse concepts involved in the assessment of risk by both government agencies as well as everyday people. To view or download the risk assessment module or training modules on other topics, visit the [training module website](#). Each module is available in English and Spanish and includes a training guide and slide presentation.

Dartmouth Citizen Scientist Project Featured in Valley News

A front page [article](#) in the Valley News, a New Hampshire newspaper, covered the dragon fly citizen scientist project that the Dartmouth SRP Center has been running in partnership with the Schoodic Education Research Center in Winter Harbor, Maine to sample dragonfly larvae for mercury with local high school science classes. Dartmouth SRP trainee Kate Buckman presents to all of the school science classes and their Trace Metals Core analyzes the samples.

Learn About LSU SRP Trainees in New Videos

The Louisiana State University SRP Center Research Translation Core developed videos about two of their trainees to communicate their research to lay audiences. Check out the videos about [Elizabeth Feld](#) and [Godwin Nwosu](#) to learn more about what these trainees are doing at the LSU SRP Center!

Arsenic Stubbornly Taints Many U.S. Wells, Say New Reports

A [Columbia University press release](#) promotes their SRP research related to arsenic in private wells, a neglected threat to health and child development. The work is featured in a special section of the journal [Science of the Total Environment](#). Their work was also featured in this month's [SRP Research Brief](#).

Nishad Jayasundara, Duke University SRP Center

Nishad Jayasundara is a postdoctoral researcher at Duke University under the guidance of SRP project leader Rich Di Giulio. Jayasundara has been working the past two years to understand the mechanisms of polycyclic aromatic hydrocarbon (PAH) toxicity on a population of fish living in the Elizabeth River, a Virginia Superfund site highly contaminated with PAHs. Jayasundara is trying to understand how these fish adapted to high levels of contaminants, and the mechanisms that might underlie this adaptation. In a recent [paper](#), he describes some of these associated mechanisms.

He is also looking at the trade-offs of the fish adapting to the highly contaminated waters. He just completed a study looking at how swimming performance and energy consumption of the PAH-adapted fish are altered at different temperatures. With changing global environmental temperatures, it is important that we understand how chemical exposures affect an organism's ability to respond to multiple environmental stressors.



CURRENT RESEARCH BRIEF

Research Brief #242: [Assessing and Reducing Health Risks from Arsenic in Private Well Water](#) (Yan Zheng, Columbia University) 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.

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

SRP-SUPPORTED EVENTS

SRP Research in Progress Webinars Session II - Biogeochemical Factors Impacting in situ Remediation of Chlorinated Contaminants
February 9, 2015, 1:00 - 3:00 pm ET
Online (Registration required)
[Website](#)

14th Annual Pediatric Research Day Co-Sponsored by the Michigan State University SRP
March 18, 2015
Detroit, Michigan
[Website](#)

14th International Congress on Combustion By-Products and their Health Effects Co-Sponsored by the Louisiana State University SRP
June 14-17, 2015
Umea, Sweden
[Website](#)

Statistical Approaches to Epidemiological Studies of Combined Exposures/Mixtures
July 13-14, 2015
Research Triangle Park, North Carolina
[Website](#)

16th International Conference of the Pacific Basin Consortium for Environment and Health
August 10-13, 2015
Depok, Indonesia
[Website](#)

UPDATES FROM OTHER SRP CENTERS

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

Jayasundara was awarded a Duke postdoc professional development award in 2013. He also participated in a SETAC Pellston workshop to bring scientists, researchers, and policy-makers together to develop a framework for using ecosystem services in natural resource management. He continues to work with this group on a manuscript.

When he isn't working on research, he spends much of his time on several outreach and community activities. Jayasundara is a co-founder of a non-profit that helps students in Sri Lanka (where he is originally from) to gain access to higher education. He is one of the chairs of the Duke postdoctoral association. You will also see him outdoors as a member of the UNC cricket team or hiking and camping around North Carolina. For more on Jayasundara, see a recent post on the [Duke SRP blog](#).

Recent Advances in the Measurement of Arsenic, Cadmium, and Mercury in Rice and Other Foods

Trace element analysis of foods is increasingly important because of raised consumer awareness and the need to evaluate and establish regulatory guidelines for toxic trace metals and metalloids. A [paper](#), from researchers at the Dartmouth SRP Center, reviews recent advances in the analysis of trace elements in food, including challenges, state-of-the-art methods, and use of spatially resolved techniques for localizing the distribution of arsenic and mercury within rice grains.

Pennell Wins NSF Career Award for Vapor Intrusion Project

University of Kentucky SRP grantee Kelly Pennell, assistant professor of civil engineering, has received the prestigious National Science Foundation CAREER Award for her project "Vapor Intrusion, Knowledge Brokers, and Environmental Health--A Three Dimensional Perspective." The CAREER Award is one of the NSF's highest awards, and it supports junior faculty who exemplify the role of teacher-scholars through outstanding research, excellent education, and the integration of education and research within the context of the mission of their organizations. For more on Pennell and the award, see the [University of Kentucky news page](#).

The SOT Recognizes Slotkin for Excellence in Teaching

Duke SRP Center project leader Theodore Slotkin was chosen to receive the 2015 Society of Toxicology (SOT) Education Award. This award honors an individual who teaches and trains toxicologists and has made significant contributions to education in the field of toxicology. Slotkin has been at Duke University for more than 40 years, with many SOT members receiving training from him.

Goodale Awarded National Research Service Award

Dartmouth SRP Center trainee Britton Goodale was awarded a Ruth L. Kirschstein National Research Service Award fellowship from the NIEHS. Britton's research, under the mentorship of Bruce Stanton, aims to determine whether exposure to low-dose organic and inorganic arsenic causes adverse biological effects in human lung cells. During her fellowship, Britton will develop bioinformatics approaches to investigate how genes, proteins, and signaling pathways are affected by different forms of arsenic in bronchial epithelial cells, which provide the lung's first defense against infection.

14th International Congress on Combustion By-Products and Their Health Effects

The 14th International Congress on Combustion By-Products and their Health Effects (PIC 2015) will be held June 14-17, 2015 in Umea, Sweden. The main theme is "Origin, fate, and health effects of combustion-related air pollutants in the coming era of bio-based energy sources," which will be covered by 12 scientific sessions, including oral presentations and posters. Conference abstracts are due **February 15, 2015**. For more information, visit the [PIC 2015 conference web page](#).

Understanding and Promoting Health Literacy

The goal of the NIH Understanding and Promoting Health Literacy program announcement is to encourage

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. A "microblogging" service, Twitter allows users to distribute substantive content through messages called 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](#).

methodological, intervention, and dissemination research for understanding and promoting health literacy. Health literacy is defined as the degree to which individuals have the capacity to obtain, process, and understand basic health information and services needed to make appropriate health decisions. The application deadline is **February 16, 2015** ([R03](#) and [R21](#)).

ONES Award Funding Opportunity

The [Outstanding New Environmental Scientist \(ONES\) Award \(R01\)](#) seeks to identify talented Early Stage Investigators who intend to make a long-term commitment to research in the environmental health sciences. It assists them in launching an innovative research program focused on understanding environmental exposure effects on people's health. Applications are due **February 27, 2015**, by 5:00 p.m. local time of applicant organization. Visit the [funding opportunity](#) for more information.

Environmental Technologies Solicitation

The Department of Defense's (DoD) Environmental Security Technology Certification Program (ESTCP) issued a solicitation January 8, 2015, requesting proposals for demonstration of environmental technologies. Researchers from federal organizations, universities, and private industry can apply for ESTCP funding. The DoD Call for Proposals requests pre-proposals related to environmental restoration, munitions response in underwater environments, resource conservation, and weapons systems and platforms. All pre-proposals are due no later than **2:00 pm ET March 12, 2015**. More information about the solicitation, including instructions and deadlines, is available on the [ESTCP website](#).

Environmental Health Sciences Core Centers (P30) Funding Opportunity

The NIEHS Environmental Health Sciences Core Centers (EHS CC) Program provides funding for institutional infrastructure to support scientific equipment, facilities, and other resources shared among researchers tackling related environmental health questions. The centers foster interactions among researchers to allow them to take advantage of innovations and approaches beyond what individual scientists would be likely to attain by working independently. Letters of intent are due March 22, 2015. **Applications are due April 22, 2015**. Visit the [funding opportunity](#) for more information.

Big Data to Knowledge Funding Opportunities

Take a look at the [NIH Big Data to Knowledge \(BD2K\) page](#) for current funding opportunities related to BD2K initiatives that have approaching due dates in mid-February and in mid-March.

IRIS Bimonthly Public Science Meeting

The IRIS Bimonthly Public Meeting to be held **February 25-26, 2015** will focus on key science questions that apply to a broad group of phthalates. IRIS Bimonthly Public Science Meetings allow the public an opportunity to provide input and participate in discussions about problem formulation, preliminary assessment materials, and draft IRIS assessments.

If you are working on research related to phthalates, we encourage you to attend. Registration is free and the meeting can be accessed remotely via webinar. For more information, visit the [IRIS Public Meeting website](#).

Request for Nominations: Experts for the Clean Air Scientific Advisory Committee

The EPA Scientific Advisory Board Staff Office is seeking nominations of nationally and internationally recognized scientists with demonstrated expertise and research in the field of **air pollution related to particulate matter (PM)**. Experts are sought in air quality and climate responses, atmospheric science and chemistry, dosimetry, toxicology, controlled clinical exposure, epidemiology, biostatistics, human exposure modeling, risk assessment/modeling, characterization of PM concentrations and light extinction, and visibility impairment and related welfare effects.

Nominations are due **February 25, 2015**. For more information, see the request in the [Federal Register](#).

Chlorpyrifos Registration Review

An [EPA notice](#) announces the availability of EPA's revised human health risk assessment for the registration review of chlorpyrifos and opens a public comment period. A preliminary human health risk assessment was completed and released for public comment in July 2011 (76 FR 39399) and is available in the chlorpyrifos

registration review docket.

Duke SRP's neurodevelopmental research contributed to the chlorpyrifos risk assessment and decision to maintain tighter food residue standards to protect developing infants and children. In 2011, EPA considered relaxing the food residue limit, but research showing low-dose neurodevelopmental toxicity, including significant studies from Duke SRP, led EPA to retain an additional ten-fold margin of safety (consistent with the Food Quality Protection Act) below other safety factors used to calculate residue limits.

Comments on the chlorpyrifos risk assessment must be received on or before **March 16, 2015**. Visit the [EPA notice](#) for more information.