

HEADLINES

See You at the Annual Meeting!

The SRP Annual Meeting is right around the corner, and SRP staff is excited to see everyone in San Juan! The meeting begins Wednesday, November 18 and concludes Friday, November 20.

Meeting registration ends this Sunday, November 8 so register now if you haven't already done so! A near-final conference program, including all abstracts, is now available on the [Northeastern SRP Annual Meeting website](#).

The theme for this year's meeting is "SRP Collaboration for Innovation." The objective of this meeting is to identify how collaboration across disciplines within SRP centers, across different SRP centers, or even with external partners has led to innovation in biomedical and environmental basic and applied research, training, community engagement, and research translation activities. In addition, we hope to generate discussions on how best to foster innovative research activities relating to the identification of contaminants of emerging concern, and also how environmental, genetic, epigenetic, and psychosocial exposures interact to affect the health of individuals living or working near SRP sites.

Funding Opportunities Webinar Date Change: Multiproject Center Grants Request for Applications

The informational webinar that was originally scheduled for December 14, 2015 from 1:00 - 2:00 p.m. ET, to answer questions about [RFA-ES-15-019](#) will now take place on **December 1, 2015 from 1:00 - 2:00 p.m. ET**. To register for this webinar, please see the U.S. Environmental Protection Agency's (EPA) [CLU-IN Training & Events Web page](#).

On the webinar, NIEHS staff will provide information and answer questions about 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. For more information, see the [SRP Funding Opportunities – Multiproject Center Grants page](#).

Working with ATSDR to Protect Communities from Hazardous Substances

We encourage you to attend an upcoming [Information Exchange Webinar](#) to learn more about the Agency for Toxic Substances and Disease Registry (ATSDR). The webinar, hosted by the SRP Research to Risk Assessment Interagency Working Group, is designed for SRP trainees and others in the program to learn about what the ATSDR is doing and how SRP grantees may be able to work with them.

ATSDR works with communities to assess health risks at Superfund and other waste sites and

EMPLOYMENT OPPORTUNITIES

Toxicologist - EPA's National Center for Environmental Assessment

EPA's National Center for Environmental Assessment (NCEA) is seeking a Toxicologist with expertise in neurotoxicology or developmental/reproductive toxicology to join the Integrated Risk Information System (IRIS) Program. The IRIS Program supports EPA's overall mission to protect human health and the environment by identifying and characterizing the health hazards of chemicals found in the environment. The IRIS Program develops state-of-the-science health assessments that are used by EPA's program and regional offices, as well as organizations at the state, local, tribal, and international levels, to inform decision-making. Deadline to apply for this position is **November 16**. For more information, visit the [USAJobs website](#).

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 the 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.

Postdoctoral Fellowship Positions – UC Berkeley

The Center for Environmental Research and Children's Health (CERCH) at UC Berkeley is offering a 2-year post-doctoral fellowship in Maternal and Child Health Epidemiology with a focus on exposure to environmental hazards during pregnancy and childhood. [CERCH](#) is a research center working through community-based partnerships to investigate environmental exposures to future parents and children; evaluate their effects on child health, behavior, and development; and translate research findings into sustainable strategies to reduce environment-related childhood disease. To apply, send your CV, a cover letter describing your interests, and three names of reference to:

makes recommendations to protect public health. Join this webinar for an introduction to ATSDR, including Toxicological Profiles and the health assessment process, and to learn how SRPs can collaborate with ATSDR to protect communities from harmful exposures.

The webinar will be held on **Tuesday, November 10, 1:30-3:00 pm ET**, with Ben Gerhardstein, a public health advisor with ATSDR, and Deborah Burgin, Ph.D., an ATSDR toxicologist, as presenters. To register to attend the webinar, visit the [NIH WebEx Event page](#).

SRP Trainee Videos Posted on the SRP Website

Check out the [SRP Trainee Videos page](#) to see what some of the SRP trainees have been researching. The videos include both trainee profiles and trainee presentations. Don't see your trainee video on the list? Send your links to srpinfo@mail.nih.gov and we will add them to the page.

For more videos related to environmental health, visit the [NIEHS's YouTube channel](#).

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:

- [Placental cadmium linked to increased risk of preeclampsia](#)

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

- [NIEHS SRP Staff Member Attends EPA's International Environmental Youth Symposium](#)
- [SRP Grantee Moderates Smartphone Apps for Citizen Scientists Workshop](#)
- [SRP Grantees Share Cutting Edge Research at EMGS](#)
- [Kelly Pennell Receives NSF CAREER Award](#)

SRP Grantees Featured in NIEHS Stories of Success

Boston University SRP Center grantee Verónica Vieira and SRP small business grantee and former UC Berkeley SRP Center trainee Jay James were recently featured as [NIEHS Stories of Success](#), which highlight NIEHS grantees who are performing groundbreaking research.

[Jay James](#) launched a start-up company, Picoyune, in 2012 to commercialize a portable mercury detector that he helped develop as an SRP trainee. The reliable and easy-to-use mercury detector can replace the complex laboratory equipment typically used to analyze samples from contaminated sites. It also allows on-site analysis.

Environmental epidemiologist [Verónica Vieira](#) uses advanced modeling tools to examine how environmental exposures and disease risk change over space, or location, and time. Her methods and modeling expertise have contributed to a number of national and international environmental epidemiological studies examining risk of autism, birth defects, cancer, and other adverse health outcomes.

Arsenic and Rice: Translating Research to Address Health Care Providers' Needs

A recent [commentary](#) published in the Journal of Pediatrics, summarizes key information for health providers faced with providing guidance on arsenic exposure from rice consumption in

Brenda Eskenazi, PhD, eskenazi@berkeley.edu; put "MCH epi postdoc" in subject line. Applications are being accepted until the position is filled.

Postdoctoral Research Associate – Northeastern University and Silent Spring Institute

This two-year postdoctoral research associate will be part of the new NIEHS training program, "Transdisciplinary Training at the Intersection of Environmental Health Science and Social Science" (EH+SS), co-directed by Northeastern University's Social Science Environmental Health Research Institute and Silent Spring Institute. This training program will prepare scholars to be future leaders in social science-environmental health science collaborations. A combination of learning at Northeastern and Silent Spring Institute will be complemented by externships at community-based organizations. The postdoctoral research associate will spend 2/3 of their time at Silent Spring Institute and 1/3 at Northeastern. For more information and to apply, see the [Northeastern jobs page](#).

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](#).

CURRENT RESEARCH BRIEF

Research Brief 251: [Development of a Sustainable Remediation System to Remove TCE from Groundwater](#) (Akram Alshwabkeh, Northeastern University SRP) 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

Working with ATSDR to protect communities from hazardous substances
Research to Risk Assessment Information Exchange Webinar

children. Though actual risks are still being defined, the commentary describes health effects associated with arsenic exposure, provides evidence that rice is a major contributor to dietary arsenic exposure, discusses testing children for exposure, and provides recommendations and limitations. UC Berkeley SRP Center researcher Craig Steinmaus and Dartmouth SRP Center researcher Margaret Karagas contributed to the commentary.

SRP Staff and Grantees at the Research Triangle Environmental Health Summit

At the Research Triangle Environmental Health Collaborative *2015 Environmental Health Summit* October 26-27 in Research Triangle Park, North Carolina, SRP staff and grantees participated in conversations regarding safe drinking water. The Summit convened to develop recommendations addressing new and old threats to North Carolina's private wells. SRP Health Scientist Administrator Heather Henry discussed SRP-funded research around the country related to detecting and measuring contaminants in water and drinking water remediation. Dartmouth SRP Center grantee Mark Borsuk presented during a community impacts panel about the work Dartmouth is doing to test well water in New Hampshire for arsenic. UNC SRP Center Director Rebecca Fry presented at the community education working group, which was organized by UNC staff Kathleen Gray and Neasha Graves. The summit emphasized working group sessions throughout the meeting with the goal to work toward an assurance of safe drinking water for all North Carolinians.

Responding to Communities: Communicating the Science of TCE and PCE

SRP grantees from Boston University and the University of North Carolina at Chapel Hill (UNC) presented on a recent Collaborative on Health and the Environment (CHE) Partnership call. The speakers on this call discussed the health effects of TCE and PCE and provided information on promoting and facilitating public participation in the oversight of environmental activities that involve communicating science and solutions for TCE and/or PCE exposure. Lastly, they wrapped up with a case study where grantees from UNC and the University of Kentucky SRP Centers were involved in organizing responses to community concerns and questions about TCE and PCE contamination in groundwater near two schools in the Winston-Salem area.

The call was 12th in a series of calls organized by CHE and the Boston SRP Center. If you missed the call, you can listen to the Mp3 recording and access the slides on the [CHE website](#).

Brown Presents at Vapor Intrusion Workshop

Brown SRP Center project leader Eric Suuberg presented at the *Association for Environmental Health and Sciences Foundation's* 31st Annual International Conference on Soils, Sediments, Water and Energy. His specific workshop on "*Vapor Intrusion Assessment: Developments and Advances*" focused on exposure limits, VOC transport, pathways, advances in sampling, transport modeling related to risk, and mitigation design. The purpose of the non-profit, member-supported foundation is to facilitate communication and foster cooperation among professionals concerned with the challenge of soil, sediment and water assessment, cleanup, and protection.

LSU SRP Co-Hosts Environmental Justice Workshop

The Louisiana State University SRP Center assisted the Louisiana Environmental Action Network (LEAN) in hosting a *workshop* for environmental justice leaders in the state. For one of the activities, participants previewed The Louisiana Citizens' Guide to Environmental Engagement, developed by LEAN with the LSU SRP Community Engagement Core. LEAN received an EPA Office of Environmental Justice grant for this workshop and for future conferences.

Tuesday, November 10, 1:30-3:00 pm ET
[Website](#)

International Symposium on Persistent Toxic Substances

Co-Hosted by the University of California, Riverside
November 16 - 20, 2015
Riverside, California
[Website](#)

2015 Annual Meeting of the Superfund Research Program

November 18-20, 2015
San Juan, Puerto Rico
[Website](#)

Experimental & Computational Approaches to Cancer Risk Assessment from Chemical [and Drug] Exposure

Grantee event: Boston University SRP Center Mini-Symposium
November 30, 2015, 1:00 – 5:00 pm ET
Boston, Massachusetts
[Website](#)

SRP Funding Opportunities Web Seminar

P42 Funding Opportunity
December 1, 2015, 1:00 – 2:00 pm ET
[Website](#)

The International Chemical Congress of Pacific Basic Societies

December 15-20, 2015
Honolulu, Hawaii
[Website](#)

Central and Eastern European Conference on Health and the Environment (CEECHHE)

Grantee Event: Co-Hosted by the University of Kentucky SRP
April 10 - 14, 2016
Prague, Czech Republic
[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 SRP grantee and staff events.

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

TRAINEE SPOTLIGHT

Senthilkumar Perumal Kuppusamy, University of Iowa

Senthilkumar Perumal Kuppusamy, who earned his doctorate in 2012 under the guidance of Gabriele Ludwig, is a graduate of the University of Iowa Superfund Research Program. During his time at Iowa, he investigated the effects of polychlorinated biphenyls (PCBs) on telomeres, which are stretches of DNA at the ends of chromosomes that provide stability to DNA and make it possible for cells to divide.



At Iowa, Kuppusamy observed that telomeres become shorter in cells treated with PCBs, which may result in premature aging and an increased risk of cancer. Every time normal human cells divide, their telomeres become shorter. When telomeres get too short, the cell can no longer divide and becomes inactive or dies, a process associated with aging and cancer. This is the first study to show that exposure to PCBs is associated with shortened telomeres. The experiments were designed to simulate long-term potential human exposures and the synthetic mixture of PCBs that Kuppusamy used resembles the PCBs in Chicago air.

Kuppusamy's work on telomere regulation by PCBs has since been cited in the International Agency for Research on Cancer (IARC) monographs on PCBs, Volume 107. His research was used to demonstrate cellular mechanisms, specifically genotoxicity, relevant to PCBs induced carcinogenesis and conclude that PCBs are carcinogenic to humans (Group 1) by IARC.

In May 2015, Kuppusamy joined the Centers for Disease Control and Prevention as a toxicologist. His primary responsibility is to perform human health risk assessments for occupational and environmental chemicals. He is applying the knowledge and skills that he obtained at the University of Iowa to make scientifically-based statements about the dangers of compounds humans may be exposed to. Previously, he worked at the EPA, where he performed similar risk assessments for various environmental pollutants. He is also certified as a Diplomate of the American Board of Toxicology (DABT).

Outside of his work, Kuppusamy enjoys watching and playing sports and spending time with his family.

HOT PUBLICATION

Inventory of PCBs in Chicago and Opportunities for Reduction in Airborne Emissions and Human Exposure

A recent [*study*](#) from the University of Iowa SRP Center, designed to inventory airborne polychlorinated biphenyls (PCBs) in Chicago, finds that soils, sewage sludge, and paint are major airborne PCB sources. According to the researchers led by Keri Hornbuckle, the results suggest that current cleanup strategies may not be the most effective for protecting people's health and strategies to further reduce exposure and ecosystem deposition must focus on the largest emissions sources rather than the most contaminated sites or the largest closed source legacy stocks.

PCBs were once widely used as electrical insulators and industrial lubricants but were banned in the late 1970s when researchers found them building up in people and linked them to health

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](#).

effects such as cancer, heart problems, and impacts to brain development. However, Iowa SRP Center researchers found that some of the current PCB load in Chicago air comes from a chemical reaction in paint still sold in hardware stores. In recent years, researchers have found that some *paints, clothing, newspapers and magazines* contain forms of the chemicals, usually a specific compound called PCB-11. To learn more about the study, see a recent article in *Environmental Health News*.

AWARD WINNERS

Jay Goodman Received International Toxicology Award

Michigan State University SRP Center researcher Jay Goodman received the International Society of Regulatory Toxicology and Pharmacology's *International Achievement Award* this past year. The Society annually presents the award to an outstanding individual in recognition of their contributions and achievements in the resolution of public environmental concerns.

WEBINARS

WHO Webinar Series: Systematic Review and Chemical Risk Assessment

The World Health Organizations (WHO) Chemical Risk Assessment Network is beginning a webinar series exploring systematic review and chemical risk assessment. All network participants, interested colleagues, and stakeholders are invited to participate.

The first webinar will be held **November 12, 2015 at 11:00 am ET**. Please email ipcsmail@who.int to indicate your interest in participating. On the day of the event, please log-in via the *WHO IPCS Webinar Room*. A link will be provided at log-in giving local telephone numbers to call in from a wide number of countries. The default number is +44-203-478-5289 (UK). For all countries, please enter the following access code: 168 535 112.

FUNDING OPPORTUNITIES

Office of Disease Prevention Call for Co-funding Proposals

The Office of Disease Prevention (ODP) is requesting proposals to fund or co-fund projects that address evidence gaps in current disease prevention research. Primary consideration for support will be given to applications that are linked to the *NIH strategic plan*, most notably Strategic Priorities II, III, and IV. Preference will be given to collaborative research that involves more than one institute or office or other public and private entities. In addition, the ODP plans to support initiatives in the areas of disease screening, economics of prevention, prevention methods and measurement research, health disparities, and training efforts. Trans-NIH and trans-Agency projects are highly encouraged. To learn more about projects supported in the past, please see the ODP website for a list of *ODP co-funded projects*. To apply, please send a completed request form (2016 ODP COF Request 11-2-15) and accompanying documents to Drs. Rachel Ballard and Amy C. Lossie at rachel.ballard@nih.gov and amy.lossie@nih.gov by **5 pm ET Tuesday, December 1, 2015**. Please copy Kimberly Thigpen Tart at thigpenk@niehs.nih.gov (NIEHS rep. to Prevention Research Coordinating Committee).

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.

The funders are holding a webinar on **December 10, 2015, 11:00 am ET**, to further discuss the prize and answer your questions. Visit the [Open Science Prize Event WebEx page](#) to register.

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, 2015**. For more information, see the [SRP Funding Opportunities – Multiproject Center Grants page](#).

INTERAGENCY NEWS

EPA Work Plan on Flame Retardant Chemicals – Public Comment Period Extended

On August 13, 2015, EPA released for public comment three TSCA Work Plan Chemical problem formulation and initial assessment documents for the following flame retardant clusters: Brominated Bisphenol A (TBBPA), Chlorinated Phosphate Esters (CPE), and Cyclic Aliphatic Bromides (HBCD). The initial public comment period was scheduled to close on October 19, 2015. Due to numerous requests from various stakeholder groups, the public comment period for the three problem formulation and initial assessment documents has been extended to **November 18, 2015**.

Each flame retardant cluster has a separate docket assignment: Chlorinated Phosphate Esters Cluster - EPA-HQ-OPPT-2015-0068; Cyclic Aliphatic Bromides Cluster - EPA-HQ-OPPT-2015-0081; and Tetrabromobisphenol A and Related Chemicals Cluster - EPA-HQ-OPPT-2014-0730. For additional information, please visit the EPA Assessments for [TSCA Work Plan Chemicals page](#).