

Superfund Research Program e-Posted Notes

October 6, 2017 (Issue 165)

HEADLINES

Early Registration Extended: SRP 30th Anniversary Meeting

[Registration](#) is open for the [SRP Annual Meeting](#), which will be held **December 6 - 8, 2017** in Philadelphia, Pennsylvania. The meeting will celebrate the 30th anniversary of the program, showcasing SRP's accomplishments to protect human health and the environment. The University of Pennsylvania SRP Center will be hosting the meeting in collaboration with SRP Centers at Dartmouth College and Northeastern University.

[Discounted early bird ticket pricing](#) is available through **October 14**. All ticket types will increase by \$100 on October 15. [Abstracts](#) are also due **October 14**.

Hotel reservations are available at the [Loews Hotel](#). The preferred hotel rate ends on **October 28**.

Register Now: Risk e-Learning Fall Webinar

Registration is open for the first session of the fall SRP Risk e-Learning webinar series, [Introduction to the Adverse Outcome Pathway Framework](#), which will be held **Wednesday, October 11, 1:00 - 3:00 p.m. EDT**. In the first session, EPA staff will provide an introduction and overview of adverse outcome pathways (AOPs) and will discuss the AOP Knowledge Base, which is designed to house descriptions of the biological mechanisms underlying chemical toxicity in a structured manner.

In addition, please save the date for the second session, *Assembling and Assessing AOP Information*, on **Wednesday, November 29, 1:00 - 3:00 p.m. EST**, which will focus on how data can be used in the context of AOPs and will include a case study on assembling AOP information. The webinars are free and open to the public.

Please visit the [Risk e-Learning website](#) for more information and registration links.

New and Returning SRP Center Descriptions

Interested in learning more about the new SRP Centers? The SRP website now includes pages for each of the recently-funded

EMPLOYMENT OPPORTUNITIES

Coordinator – University of Rhode Island SRP Center

The University of Rhode Island (URI) SRP Center is looking for a coordinator to administer the research, communications, outreach, and student training activities, financial management, and daily operations of the URI STEEP (Sources, Transport, Exposure and Effects of PFASs) SRP Center. The coordinator will assist the center director with day-to-day oversight and coordination activities in support of the projects and cores as well as the administrative core. The position is calendar-year part-time (25 hours per week), limited to June 23, 2018 with extension contingent upon funding approval. Job is located at the URI Narragansett Bay Campus. For full position description or to apply, please see the [URI jobs page](#).

The position is open until filled. Applications received after **October 13, 2017** may not be given full consideration.

Cluster Hire in Environmental Toxicology-- University of California, Riverside

The University of California, Riverside (UCR) is implementing a major expansion of its faculty and investing in state-of-the-art research facilities to support their work. This expansion will build critical mass in

Centers: [Boston University](#), [Columbia University](#), [Duke University](#), [Massachusetts Institute of Technology](#), [Texas A&M University](#), [University of Arizona](#), [University of California \(UC\) Berkeley](#), [UC Davis](#), [UC San Diego](#), [University of Louisville](#), [University of New Mexico](#), [University of Rhode Island](#), and [University of Washington](#).

Time-Sensitive Research Opportunities in Environmental Health Sciences for Hurricane Response Research

NIEHS is accepting [time-sensitive research applications](#) related to exposures and health outcomes resulting from the recent hurricanes of 2017. NIEHS considers Hurricanes Harvey, Irma, and Maria to be unpredictable events that provide a limited window of opportunity to collect human biological samples or environmental exposure data. Applications should be submitted to [RFA-ES-16-005: Mechanism for Time-Sensitive Research Opportunities in Environmental Health Sciences \(R21\)](#).

Time-sensitive applications focusing on recent hurricanes will only be accepted on the following receipt dates: November 1, 2017 and December 1, 2017. If you are interested in applying, please contact Martha Barnes (barnes@niehs.nih.gov, 919-541-3336), the program contact for the time sensitives R21s.

The [NIH Disaster Research Response \(DR2\) Program](#) has tools and technical assistance available to researchers and teams interested in disaster research-related work. Please feel free to reach out to DR2@niehs.nih.gov if you have questions or a request for assistance with finding or building tools, protocols, or IRB questions.

If your group is involved in DR2 efforts, we invite you to use the [SRP Data Collection Form](#) or to contact us directly. Your reporting is instrumental to NIEHS's role in coordinating with other agencies during times of natural or man-made disasters.

In a recent [commentary](#), David Sedlak, a UC Berkeley SRP Grantee and the Environmental Science & Technology (ES&T) Editor-in-Chief, discusses the need for efforts to publish data on the nature and extent of contamination resulting from these disasters. ES&T Letters will provide its usual rapid turnaround (typically under 2 weeks) on manuscripts characterizing the effects of the flood. Over the longer term, ES&T will provide a venue for comprehensive assessments of the fate, transport and effects of contaminants released by the floodwaters.

Lastly, we wish to send our thoughts to the many people within our SRP community who have been impacted directly by these recent natural disasters – as well as those individuals involved in response efforts. You have our full support!

34 vital and emerging fields of scholarship, foster truly cross-disciplinary work, and further diversify the faculty at one of America's most diverse research universities. UCR encourages applications from scholars committed to excellence and seeking to help define the research university for the next generation. Visit the [UCR Cluster Hiring website](#) for more information about the hiring initiative and the [recruitment page](#) to submit an application.

Postdoctoral Research Associate – Northeastern University

The SRP Center at Northeastern University has an open Postdoctoral Research Associate position, which will require an experienced research scientist or engineer with a focus on environmental health and engineering, specifically one or more of the following: health informatics, geospatial informatics, environmental epidemiology, and environmental modeling. This individual will work closely with scientists from different disciplines across multiple institutions to analyze large, complex environmental/biological datasets. Primary responsibility is ensuring that the research is complete. The appointment generally does not extend beyond two years.

The candidate must have a Ph.D. or equivalent in environmental health, computer science, epidemiology, statistics, geology, biomedical or other related quantitative fields. He/she should have advanced knowledge of modeling, analysis tools, and statistical packages. Previous experience in proposal development is strongly preferred. The ability to communicate and collaborate with a geographically dispersed group is essential. For more information, see the [full job announcement](#).

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:

- [Hurricane responses build on community connections](#)
- [Unique opportunities to study health effects of arsenic and more](#)

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

- [SRP-Funded Small Business Provides Cost-Effective Technology for Mercury Emissions](#)
- [SRP-Funded FACETS Program Prepares Undergraduates for Advanced Education](#)

OSU and Texas A&M SRP Centers respond to Hurricane Harvey

Only days after Harvey, Oregon State and Texas A&M SRP Center researchers started working to better understand potential exposure after the hurricane.

Researchers led by Jennifer Horney at Texas A&M began collecting soil, mud, and water samples in the Manchester community in Houston to look for contamination as a result of flooding. They are testing for lead, arsenic, and other potentially dangerous chemicals. A recent [National Public Radio story](#) provides more information about their efforts.

Oregon State SRP researchers led by Kim Anderson have partnered with Texas A&M, the University of Texas Health Science Center at Houston, and the Baylor College of Medicine to place personal samplers on individuals living in and near hurricane-damaged areas. The passive sampling wristband can detect over 1,500 different chemicals. They are preparing wristbands and enrolling several hundred individuals to wear them as part of a study. The results will help us better understand the potentially toxic chemical exposures that could result following natural disasters. For more information on their efforts, see a recent [OSU SRP news story](#).

Brown Featured in PEPH Story

Northeastern SRP grantee Phil Brown was recently the topic of an [NIEHS Partnerships for Environmental Public Health Grantee Highlight](#). Brown, co-lead for community outreach, engagement, and translation efforts for the Northeastern SRP Puerto Rico Testsite for Exploring Contamination Threats (PROTECT) Center, is passionate about integrating social science with environmental health and expanding collaborations between experts in these fields.

The highlight includes information about how Brown and SRP colleagues are working to share data with study participants using a new smart phone application that will deliver data on phthalates, volatile organic compounds, and other contaminants. This

Ph.D. Candidate – Norwegian Geotechnical Institute

The Norwegian Geotechnical Institute (NGI) is seeking a PhD candidate for a 3-year position on the project "Reducing the impact of fluorinated compounds on the environment and human health" funded by the Norwegian Research Council. The candidate will hold a master's degree, ideally within environmental geochemistry. Experience related to the fate and transport of organic chemicals in the geo-environment is desirable. The position opens the possibility for extended research visits to project partners in America and the Netherlands. Fluent spoken and written English is essential, Norwegian is advantageous. Applications are due **October 15**. For more information, see the [full announcement](#).

Postdoctoral Research Associate in Environmental Epidemiology - Boston University

The Boston University School of Public Health (BU SPH) is offering a postdoctoral research associate opportunity in environmental epidemiology, focusing on the investigation of an epidemic of chronic kidney disease (CKD) in Central America. BU SPH has been [investigating the CKD epidemic](#) since 2009 and is currently launching a large prospective cohort study of workers in Nicaragua and El Salvador. The postdoctoral associate will analyze existing data from past field work in Central America, lead an analysis of electronic medical records and health care claims data from the U.S., and prepare manuscripts for publication. The successful candidate must have recently completed a Ph.D./doctorate in epidemiology, environmental health, or related field; have strong quantitative skills; and have an

application will help Center researchers provide participants with customized reports of environmental health data in a timely, easily accessible, and user-friendly format.

Suk and Suuberg Quoted in Vapor Intrusion Story

SRP Director Bill Suk and Brown SRP grantee Eric Suuberg were quoted in a [recent article](#) on vapor intrusion. The article outlines how hazardous vapors may seep into homes, the difficulty in estimating potential risk, and potential ways to lower exposure risk, such as installing mitigation systems and preventing the problem by cleaning up hazardous waste sites that emit the vapors.

Stapleton's Work Highlighted in Chicago Tribune

A recent [Chicago Tribune article](#) featured work by Duke SRP grantee Heather Stapleton to test flame retardants in household products. Stapleton and colleagues tracked how chlorinated tris, the carcinogen removed from children's pajamas nearly 40 years ago, later became the top flame retardant in upholstered furniture cushions. The chemical also was commonly added to nursing pillows, highchairs, and diaper-changing pads, the researchers found. Between 2014 and 2016, consumers sent Stapleton more than 1,100 samples of polyurethane foam from household products. About a quarter of the samples contained organohalogens, and chlorinated tris again was the one most frequently detected.

TRAINEE SPOTLIGHT

Elena Craft Addresses Pollution After Harvey

Elena Craft, a former Duke SRP trainee and Wetterhahn Winner, has been featured in the news for her work in response to Hurricane Harvey. Craft is a senior scientist at the Environmental Defense Fund (EDF) in Austin.



Craft and others met with representatives of the Texas Commission on Environmental Quality to talk about environmental pollution after Harvey. Houston officials estimated that it will cost at least \$200 million to dispose of 8 million cubic yards of storm debris. According to Craft and colleagues, much of the debris is toxic and it is important to keep harmful debris out of unlined landfills, which could contaminate groundwater.

In addition, the group estimates around six million pounds of air toxics have been released into the air as a result of damage to

interest in kidney disease / kidney function. Madeleine Scammell, D.Sc., in the Department of Environmental Health will serve as the primary supervisor. This is a two-year position. Travel in the first year will be limited; there is potential for travel in year two. To apply, send a CV and a letter describing your interests to Madeleine Scammell (mjs@bu.edu). Please put "Environmental Epidemiology Postdoctoral Associate" in the subject line. For more information, see the [full announcement](#).

Postdoctoral Associate in Community Engagement - Boston University

The BU SPH is seeking a Community Engagement (CE) postdoctoral associate to work with [BU Superfund Research Program \(BU SRP\) Center](#) and [Center for Research on Social and Environmental Stressors in Housing Across the Life Course \(CRESSH\)](#) investigators, Core leaders, and community partners to facilitate, evaluate, and document community engagement activities. The successful candidate must have a Ph.D./doctorate in social sciences or in a public or environmental health field; expertise in qualitative research; knowledge of environmental health / environmental epidemiology; and community engagement experience. The primary postdoctoral supervisor will be Madeleine Scammell, D.Sc. This is a two-year position. To apply, send a CV and a letter describing your interests to Madeleine Scammell (mjs@bu.edu). Please put "Community Engagement Postdoctoral Associate" in the subject line. For more information, see the [full announcement](#).

CURRENT RESEARCH BRIEF

facilities due to the storm and floods. According to Craft in a [New York Times article](#), many of these compounds are cancer causing and pose long term health risks, even if they are not immediately toxic.

Craft was also featured on [National Public Radio](#) for her discussion of emissions that result from the start up and shut down of industrial facilities. According to Craft, the act of shutting plants down, and then re-starting them, can produce more pollution due to risks associated with the large-scale operations at a complicated industrial facility. EDF is keeping track of regulatory filings related to emission events that petrochemical companies are required to make with the Texas Commission on Environmental Quality.

At Duke, Craft received the [Karen Wetterhahn award](#) during the third year of her Ph.D. training, where she participated in the integrated toxicology program with a focus on metal toxicity. She earned the award based on her innovative research on the characterization of metal responsive signal transduction pathways. She also determined the mechanism by which metals activate metal-responsive transcription factors.

HOT PUBLICATION

Effect of Particulate Matter Mineral Composition on Environmentally Persistent Free Radical (EPFR) Formation

The presence of sulfates in fly ash limits the formation of environmentally persistent free radicals (EPFRs), according to a [study](#) from the Louisiana State University SRP Center. EPFRs are newly discovered, long-lived surface bound radicals that form on particulate matter and combustion borne particulates, such as fly ash. Human exposure to such particulates is associated with cardiovascular and respiratory disease through the production of reactive oxygen species.

In the study, researchers synthesized model fly ash particles and investigated the conditions that led to the formation of EPFRs. Different types of fly ash were synthesized to mimic the presence of their major mineral components, including metal oxides, calcium, and sulfur. They found that the presence of sulfates limits formation of EPFRs due to inhibition or poisoning of the transition metal active sites necessary for their formation. These findings provide a pathway toward understanding differences in EPFR presence on particulate matter and uncover the possibility of remediating EPFRs from incineration and hazardous waste sites.

AWARD WINNERS

Leuthner Receives Award for Best Student Presentation at EMGS

Research Brief 274: "Endophytes Help Poplar Trees Clean Up TCE on Superfund Site" (Michael Blaylock, Ph.D., Edenspace Systems Corporation)

Past [Research Briefs](#) are available on the SRP website. To receive the monthly Research Briefs or to submit ideas, email Michelle Heacock (heacockm@niehs.nih.gov).

SRP EVENTS

SRP Risk-eLearning Web Seminar: Introduction to the Adverse Outcome Pathway Framework

October 11, 2017, 1:00 - 3:00 p.m. EDT

Webinar

[Website](#)

International Society of Exposure Science

October 15-19, 2017

Research Triangle Park, North Carolina

[Website](#)

North Carolina Society of Toxicology Annual Meeting

October 30, 2017

Research Triangle Park, North Carolina

[Website](#)

Southeast Asia Regional Conference on Groundwater Arsenic

November 2 - 3, 2017

Hanoi, Vietnam

[Website](#)

SETAC North America Annual Meeting

November 12 - 16, 2017

Minneapolis, Minnesota

[Website](#)

International Conference of the Public Health Foundation of India and the Pacific Basin Consortium

November 14 - 16, 2017

New Delhi, India

Duke SRP trainee Tess Leuthner received an award for her presentation, "Adaptation to cadmium reveals mechanism and susceptibility to mitochondrial genotoxicity," as part of a symposium titled "Effects of Environmental Exposures on Mitochondria." She co-chaired the symposium with Joel Meyer at the Environmental Mutagenesis and Genomics Society Annual Meeting in Research Triangle Park, North Carolina, September 9 - 13.

Vieira Receives ISEE 2017 Tony McMichael award

Boston SRP grantee Veronica Vieira (UC Irvine) was awarded the [2017 Tony McMichael award](#) by the International Society for Environmental Epidemiology (ISEE) for innovative, independent research in environmental epidemiology. The award recognizes a mid-career scientist who has demonstrated excellence in novel research, student mentorship, and contribution to guidelines, public debates, or dissemination of scientific results in environmental epidemiology. Vieira is also a former SRP trainee.

Maier Appointed Interim Director of Institute of the Environment

University of Arizona (UA) SRP Center Director Raina Maier has been named [interim director of the UA Institute of the Environment](#), a university-wide research body that aims to identify and advance innovative solutions to environmental challenges in Arizona and around the world. During the appointment for the next two to three years, Maier plans to focus on applying an interdisciplinary approach, similar to the UA SRP Center, to research and outreach efforts. She explained that this, along with engaging stakeholders to inform decision making, will be her primary focus as she begins her new role.

CALL FOR ABSTRACTS

255th ACS National Meeting: Call for Papers

The 255th American Chemical Society (ACS) National Meeting will be held in New Orleans, Louisiana, March 18 - 22, 2018. The theme of the meeting is the nexus of food, energy, and water.

The deadline to submit an abstract is October 9. The following symposia are being organized by SRP grantees and partners. We encourage you to submit an abstract:

- Evolving Chemical Hazard Evaluation Strategies to Address Compliance under the New TSCA ([James Rice](#))
- Accurate Mass/High Resolution Mass Spectrometry for Environmental Monitoring & Remediation ([Thomas Young](#))
- Contaminants in Water Sources Impacted by FEW Systems: Emerging Challenges & Opportunities ([Craig Just](#))
- FEWESTERN: U.S.-China Food Energy Water Systems Transdisciplinary Environmental Research Network ([Frank Loeffler](#))
- Great Achievements in Environmental Science &

[Website](#)

SRP Annual Meeting

December 6 - 8, 2017

Philadelphia, Pennsylvania

[Website](#)

2018 Toxicology and Risk Assessment Conference

April 23 - 26, 2018

Cincinnati, Ohio

[Website](#)

International Conference on One Medicine One Science

April 29 - May 2, 2018

Minneapolis, Minnesota

[Website](#)

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

June 10 - 14, 2018

Krakow, Poland

[Website](#)

GET UPDATES FROM OTHER SRP GRANTEEES

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

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

See the [SRP Science Digest](#) to read more about recent SRP research highlights and activities.

The [SRP Events page](#) contains information about upcoming meetings, seminars, and webinars.

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

Technology (Invited) ([David Sedlak](#))

- Advances & Challenges in Policy Making & Public Understanding at the Food-Energy-Water Nexus ([Jillian Goldfarb](#))

International Conference on One Medicine One Science

The [3rd International Conference on One Medicine One Science](#) (iCOMOS) will be held in Minneapolis, Minnesota, April 29 - May 2, 2018. iCOMOS will explore new ways to solve pressing health issues, facilitate interdisciplinary collaborations, and promote science's role in influencing public policy at the interface of humans, animals, and the environment. The conference will feature NIEHS Director Linda Birnbaum, as well as presentations by SRP Health Scientist Administrator Heather Henry, grantee Jose Cordero, and former trainee Nishad Jayasundara.

[Poster abstracts](#) are being accepted and must be submitted no later than **January 15, 2018**. A limited number of travel awards will be available for selected abstracts with preference for students and trainees.

2018 Toxicology and Risk Assessment Conference

The [2018 Toxicology and Risk Assessment Conference \(TRAC\)](#) will be a four-day meeting focusing on topics in risk assessment principles and practice. The conference provides attendees with an overview of current research, methodological, and practice issues that are the focus of risk assessment efforts in various federal agencies, academic institutions, industry, and other organizations. The theme for TRAC 2018 is "Models, Methods, and Emerging Concerns."

TRAC will feature a poster session with a trainee poster competition. The poster abstract deadline is **March 12, 2018**.

FUNDING OPPORTUNITIES

DOD and EPA Small Business Funding Opportunities

The Department of Defense (DOD) SBIR (Small Business Innovation Research) 17.3 and the STTR (Small Business Technology Transfer) 17.C Broad Agency Announcements are now open for submission of proposals. For more information and to apply, begin by creating an account on the [SBIR/STTR Web portal](#). You can then view topics, ask questions through the Q&A system, and start your proposal. The announcement will officially close on **October 25 at 8:00 pm ET**.

The U.S. Environmental Protection Agency (EPA) held a webinar September 28 with information about their 2017-2018 SBIR Phase I Solicitation. The archive for the EPA SBIR webinar will be available soon on the [EPA SBIR website](#). The call for proposals is expected to be released later in October.

NHGRI Genomic Data Science Analysis, Visualization,

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

Need to get in touch with an NIEHS SRP staff member? Check out our [Contact Staff](#) page.

and Informatics Lab-space (AnVIL)

The [AnVIL Funding Opportunity Announcement](#) supports an interoperable resource for the research community by co-locating data, storage, and computing infrastructure with commonly used services and tools for analyzing and sharing data. The AnVIL will further advance research by leveraging a cloud-based infrastructure to facilitate genomic data access by the broad scientific community, integration and computing on and across large datasets generated by National Human Genome Research Institute (NHGRI) programs, or programs funded by others in support of human genomics research. The AnVIL resource will provide genomic researchers with the following:

- Cloud-based infrastructure and software platform
- Shared analysis and computing environment
- Participation in a federated genomic data commons ecosystem
- Cloud services cost control
- Genomic datasets, phenotypes and metadata
- Data access and data security
- User training and outreach
- Incorporation of scientific and technology advances

Letters of intent are due **October 9, 2017**. Full applications are due **November 9, 2017**. Applicants are encouraged to apply early to allow adequate time to make any corrections to errors.

New Request for Proposals: U.S. EPA Brownfields Assessment, Revolving Loan Fund, and Cleanup Grants

The [U.S. EPA Brownfields Program](#) enhances public health by reducing public exposure to hazardous substances and petroleum products in our towns, cities, and neighborhoods. By enabling the cleanup and reuse of brownfield sites, the program sparks economic development that leads to vibrant communities.

Brownfields grants empower state and local officials to address blight and assess and clean up abandoned and underused properties. Once blight and environmental contamination is addressed, the reuse of brownfields can spur community revitalization and economic development. Community revitalization succeeds when the local population embraces the planning, assessment, cleanup, and reuse of brownfield sites and works to ensure that reuse is consistent with the needs of the community.

Brownfields grants may be used to address sites contaminated by petroleum and hazardous substances, pollutants, or contaminants (including hazardous substances co-mingled with petroleum). The proposal submission deadline is **November 16, 2017**.

Toxics 2018 Travel Award

The [Toxics 2018 Travel Award](#), sponsored by the journal Toxics, will help towards travel costs for a postdoctoral fellow or non-

fellow postdoctoral trainee in toxicology research to present his/her data, in poster or oral presentation format, at a scientific conference in 2018. The prize will consist of 800 Swiss francs. Applications are due **November 30, 2017**. The winners will be announced by the end of January 2018.

