

## HEADLINES

### K.C. Donnelly Awards Announced

Congratulations to the five exceptional SRP trainees who received a 2014 [K.C. Donnelly Externship Award Supplement](#) to enrich their research in environmental health science. The award provides the SRP trainees with funding for an externship (up to three months) at other SRP centers, government laboratories, and state, local, or tribal agencies to support transdisciplinary research and collaboration.

The 2014 winners are: Andres Cardenas (Oregon State University SRP), Andrea Gonzalez (University of Puerto Rico/Northeastern SRP), William Klaren (University of Iowa SRP), Christopher Olivares (University of Arizona SRP), and Vivien Taylor (Dartmouth College SRP). For more on the winners and information about their externships, visit the SRP [K.C. Donnelly 2104 Winners page](#).

### SRP at the ISEE Meeting

We look forward to seeing SRP grantees at the International Society of Environmental Epidemiology Meeting (ISEE) in Seattle, WA, August 24-28! OSU SRP researcher Molly Kile is the co-chair of the upcoming ISEE conference and several investigators and trainees are on the agenda. SRP Program Administrator Danielle Carlin will be presenting Monday August 25 during a 2:00 pm session on Methods and Health Effects for Complex Exposure Mixtures. If you will be attending and/or presenting at the meeting, please contact Danielle Carlin ([Danielle.carlin@nih.gov](mailto:Danielle.carlin@nih.gov)) to let her know!

**Trainees:** Please let Danielle and Luis O. Rivera-Gonzalez, Post-Doctoral Trainee from University of Michigan ([lorivera@umich.edu](mailto:lorivera@umich.edu)), know if you are attending and are interested in an "SRP Trainee Networking Hour" either at lunch time or at a local restaurant during one of the evenings of the meeting. This will be a great way to connect with all of you and hear about your research!

Hope to see many of you at this exciting meeting in Seattle!

### SRP in the Environmental Factor

This month, the NIEHS E-Factor featured four stories about the SRP and its grantees! Take a moment to read about some of our colleagues' latest activities.

- [Promising Superfund trainees receive K.C. Donnelly award](#)
- [SRP and EPA collaborate on passive sampling devices](#)
- [PEPH webinar highlights environmental health literacy](#)
- [Keystone seminar highlights multiple chemical exposures](#)

### Penn SRP Community Work is Underway

The University of Pennsylvania SRP, the newest SRP Center, isn't wasting any time with their new grant. Penn SRP, driven by community-based concerns of asbestos hazardous waste near the [BoRit EPA region 3 Superfund site](#), has presented information on the new SRP grant at the June BoRit Asbestos Superfund Site Community Advisory Group meeting in Ambler, PA. They also organized a presentation with the EPA for community members to discuss the cleanup process so far and met with community members for a tour of the neighborhoods near the Superfund site. For more about its work so far, visit its new [Facebook page](#).

It is great to see you moving along and we look forward to hearing more from your Center, Penn SRP!

## EMPLOYMENT OPPORTUNITIES

### NACCHO - Director, Built Environment and Health Community Design

The National Association of County and City Health Officials (NACCHO), a national organization representing approximately 3,000 local health departments (LHDs) nationwide, has an immediate opening for a Director for the Built Environment and Healthy Community Design portfolio. This position is funded through cooperative agreements with the U.S. Centers for Disease Control and Prevention and grants from the Health Impact Project at the Pew Charitable Trusts. The Director organizes and manages a significant function or program of NACCHO, including the supervision of staff members at the Senior Specialist, Specialist or Associate levels. The Director develops the processes and programs required to implement the unit's strategy and manage the resources of the function - both financial and human.

See the [job description](#) for more information and to apply. Position is open until filled.

### Bayer CropScience - Bioinformatics Scientist

The primary responsibility of this role is to use bioinformatics tools, algorithms, and databases to discover novel genes from microbes that will improve agronomic performance and value in key crops, including soybean, cotton, wheat, corn, canola, and rice. These traits include--but are not limited to--pest control, herbicide resistance, disease control, and plant growth/yield. A desirable candidate will incorporate his/her high level of knowledge of molecular biology, bacterial, insect, and plant genomics along with bioinformatics to find biologically relevant solutions. In addition, the candidate will be responsible for interacting with third party software developers to manage the further development and maintenance of Bayer CropScience's widely used custom trait discovery and management system. For more information, see the [job description](#). Position is open until filled.

### Professor and Chair - Bioengineering Department at Northeastern

## UC Davis SRP Researchers Present to Department of Toxic Substances Control

The California Department of Toxic Substances Control (DTSC) invited researchers from the UC Davis SRP to present in their Environmental Chemistry Lab Seminar Series on July 9. The presentation, given by Project Leader Shirley Gee, was both broadcasted over the web and given to a live audience on the DTSC campus. Both partners are now working to identify studies where they can utilize immunoassays developed by UC Davis SRP.

Great collaboration, UC Davis SRP!

## Heather Stapleton Featured in New York Times Well blog

Duke SRP investigator Heather Stapleton was highlighted in the New York Times Well Blog for her research on exposure to flame retardants. The article, [\*Flame Retardants are Everywhere\*](#), discusses the use of flame retardants in everyday products, where the chemicals have been discovered, and potential health effects.

Interesting work, Heather!

## Dartmouth SRP Holds Webinar on New Hampshire Survey

The Dartmouth SRP held the second of three Project Advisory Team webinars on July 25 to receive feedback on the analysis and interpretation of survey results from New Hampshire private well owners. Dartmouth SRP received a CDC grant to survey private well owners to know how many people in New Hampshire test and treat their wells for arsenic, and to see if there are obstacles to testing that can be overcome. The effort spans several SRP Centers, with project advisory team members that include Sara Flanagan from the Columbia SRP and Sarah Wilkinson from the Arizona SRP. The survey closed on June 30 and a final report is expected at the end of August.

Nice work, Dartmouth SRP!

## Brown SRP Holds Workshop on Intellectual Property and Commercialization

The Brown SRP Research Translation Core co-organized and sponsored a workshop on Intellectual Property and Research Commercialization held on July 24 in Providence, RI. The 40 participants in attendance were undergraduate and graduate students, postdocs, faculty, research staff and research translation and community engagement staff from Brown SRP, Northeastern SRP, and the University of Rhode Island.

Excellent research translation, Brown SRP!

## Kelly Pennell Invited to Serve on Soil Gas Mitigation Committee

University of Kentucky SRP grantee Kelly Pennell was invited to serve on the American National Standard Committee for Soil Gas Mitigation Standards for Single-Family Residences committee. Over the next year, the committee will develop standards for vapor intrusion mitigation. Chlorinated organic compounds (especially, TCE and PCE) are considered some of the most important compounds for hazardous waste vapor intrusion exposures. Pennell recently served as an external peer-reviewer for the ATSDR Vapor Intrusion Guidance and previously served as an external peer-reviewer for ATSDR's Tetrachloroethene Toxicological Profile.

Thanks Kelly for making these connections!

## New Combination Drug Controls Tumor Growth and Metastasis in Mice

UC Davis SRP Center Director Bruce Hammock led a group of researchers at UC Davis, University of Massachusetts, and Harvard Medical School to create a combination drug that controls both tumor growth and metastasis. By combining a COX-2 inhibitor, similar to Celebrex, and an epoxide hydrolase (sEH) inhibitor, the drug controls angiogenesis (blood vessel formation), limiting a tumor's ability to grow and spread. The [\*study\*](#) appeared in the journal Proceedings of the National Academy of Sciences.

Dr. Hammock's team studies sEH in its ability to effect and metabolize environmental chemicals. His previous research also showed that sEH gene expression increases in the liver of animals exposed to certain environmental chemicals such as plasticizers and herbicides. Developing new inhibitors to the soluble epoxide hydrolase may prove to be one way of minimizing the deleterious effects of environmental chemicals.

## OSU SRP Grantees Present at Large Community Event

Grantees from the OSU SRP Center presented at the Majestic Theatre in downtown Corvallis as part of the Da Vinci Days arts and science festival in Oregon to celebrate innovation and creativity. OSU SRP investigator Kim

Northeastern University's College of Engineering seeks outstanding candidates for the position of Chair of Bioengineering.

Building on existing strengths, Northeastern University has recently formed the [\*Bioengineering Department\*](#). The Chair will be expected to provide a vision to direct the hiring of faculty, the creation of research foci, and the development of educational curricula. Qualified candidates will have demonstrated strategic vision through leadership of a well-established, well-funded and internationally recognized research program, as well as demonstrated excellence and significant experience in teaching (a minimum of five years) at both the undergraduate and graduate level. A doctoral degree in Bioengineering or another closely related field is required. For more information, visit the [\*Northeastern jobs page\*](#). Position is open until filled.

## CURRENT RESEARCH BRIEF

Research Brief #236: "[\*Developments toward Low-Cost, Unattended Vapor Intrusion Monitoring\*](#)" (Sanjay Patel, Seacoast Science) is available online.

Past [\*Research Briefs\*](#) are available on the SRP's website.

To receive the monthly Research Briefs in your e-mail, please send your e-mail address to [\*beth.anderson@nih.gov\*](mailto:beth.anderson@nih.gov).

If you have ideas for future Research Briefs, please submit them to: [\*beth.anderson@nih.gov\*](mailto:beth.anderson@nih.gov).

## SRP SUPPORTED EVENTS

**If Cells Could Talk, What Would They Tell Us About Chemical Exposures? Applications of Cell Based Bioanalytical Methods**  
Date: August 11, 2014, 1-3 pm ET  
Online

[\*Website\*](#)

**Latin American Conference on Compatible Mining: Protecting Vulnerable Populations and the Surrounding Environment**  
Co-Hosted by the University of Arizona SRP  
Date: September 8-10, 2014  
Location: San Luis Potos, Mexico

[\*Website\*](#)

**The Eighth International PCB Workshop: Exposure Effects, Remediation, and Regulation**  
Co-Hosted by the University of Iowa SRP and the Boston University SRP  
Date: October 5-9, 2014  
Location: Woods Hole, Massachusetts

[\*Website\*](#)

Anderson and trainee Steven O'Connell highlighted their new passive sampler in the form of a silicone wristband that can monitor an individual's exposure to more than 1,200 chemicals. OSU SRP Training Core leader Stacey Harper then gave a presentation about nanomaterial safety, nanomaterial applications, and societal impacts and benefits.

Outstanding community engagement, OSU SRP!

## Daniel Brown, Duke University SRP

Daniel Brown is a fifth year doctoral student at Duke University, under the guidance of Duke SRP Center director and investigator Richard Di Giulio. Brown's research focuses on early life exposure to PAH mixtures and later life consequences in *Fundulus heteroclitus*, a small killifish found in the eastern United States.

Brown is investigating how some killifish living in the Elizabeth River, which runs through the Atlantic Wood Industries Superfund site, have developed a resistance to PAHs, and the costs and benefits of adapting to living in a PAH-contaminated environment. This longitudinal project introduces both behavioral and performance based assays to better track the emergence of effects following early life exposure. Although acute exposures to PAHs have been well-studied, little is known about the subtle effects of chronic, low-level exposures. Brown is interested in the unique exposure period early in life because of the mounting evidence suggesting that early life exposures during critical periods of development can have detrimental consequences that persist into adulthood.

In addition to his research, Brown has a passion for teaching others and mentoring students through research projects, and hopes to become a small liberal arts college professor. He was recently accepted into Duke University's Preparing Future Faculty Program (PFF). Through this program, he will be teaching next year at Elon University, his undergraduate alma mater. This spring, Brown visited an Elon University Advanced Genetics course to lead a case study exploring science and policy issues related to Duke SRP research, including Elizabeth River contamination and morpholino technology. At Duke, Brown also mentored undergraduate Jasmine Thompson this summer through the NSF Research Experiences for Undergraduates (REU) program, which provides students with the opportunity to work alongside top faculty on cutting-edge research projects (See [Duke Blog highlight](#) for more on Thompson).

"In terms of what I've enjoyed about being a graduate student, I really like interacting with scientists just as they're building that foundational knowledge, helping them grapple with ideas of how to design an initial experiment," said Brown. "I'm most interested in participating in the process of mentorship from building a foundational base to creating an independently thinking scientist that knows proper technique and how to ask good questions and is excited about becoming a scientist in the field."

When he's not in the lab or the classroom, Brown enjoys intramural sports, specifically basketball, soccer, and volleyball. He also serves as the Community Outreach Chair on the University's Graduate and Professional Student Council (GPSC).



## Genomic Models of Short Term Exposure Predict Long-Term Carcinogenicity

In a recent [article](#) in the journal PLOS One, researchers led by Boston SRP Biostatistics core co-PI Stefano Monti and bioinformatics SRP trainee Daniel Gusenleitner, validated a toxicogenomic approach to predict carcinogenicity. In the study, the researchers used a rat-based microarray dataset from the NTP DrugMatrix Database to test the ability of toxicogenomics to model carcinogenicity. They found that the prediction of carcinogenicity is tissue-dependent and that the results also confirm and expand upon previous studies implicating DNA damage, the peroxisome proliferator-activated receptor, the aryl hydrocarbon receptor, and regenerative pathology in the response to carcinogen exposure. The researchers also provided strong evidence that, with a larger set of compounds, they should be able to improve the sensitivity and specificity of the predictions.

### Fourth Conference of Prenatal Programming and Toxicity (PPTOX IV)

Date: October 26-29, 2014  
Location: Boston, Massachusetts

[Website](#)

### SRP Annual Meeting (Website coming soon!)

Date: November 12-14, 2014  
Location: San Jose, California

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

Co-Sponsored by the Louisiana State University SRP  
Date: June 14-17, 2015  
Location: UmeÅ, Sweden

[Website](#)

## OTHER CONFERENCES OF INTEREST

### ISEE 2014

Date: August 24-28, 2014  
Location: Seattle, Washington

[Website](#)

### SETAC Asia Pacific and Australasia Conference

Date: September 14-17, 2014  
Location: Adelaide, South Australia

[Website](#)

### 11th International Phytotechnologies Conference

Date: September 30 - October 3, 2014  
Location: Heraklion, Greece

[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 and the [SRP News Page](#) has recent grantee news. Check them out to see the latest SRP news!

## JOIN THE @SRP\_NIEHS KNOWLEDGE NETWORK ON TWITTER

NIEHS uses Twitter, an increasingly popular social media tool, for information sharing. A "microblogging" service, Twitter allows users to distribute substantive content through messages called Tweets. SRP has escalated its Twitter posts and hope that you will join us as a follower. You will get routine Program updates and announcements.

Several SRP Centers are leading the way, and it would be great if all

## AWARD WINNERS

### David Kaeli Named Distinguished Professor

Northeastern SRP Data Core Leader David Kaeli was recently named distinguished professor in the College of Engineering at Northeastern University. Professor Kaeli is renowned nationally and internationally for his scholarly contributions to the field of Computer Architecture. He leads the Northeastern SRP PROTECT Data Core, which provides the Center with efficient collection, cleaning, and effective management of the data being collected and analyzed across the project. See the [Northeastern SRP website](#) for more about Kaeli and the award.

Congratulations, David!

### Maud Walsh Named to Board of Directors

LSU SRP Research Translation Core leader Maud Walsh has been named to the Board of Directors for the Louisiana Environmental Health Association (LEHA) for 2014-2018. The LEHA, a state affiliate of the National Environmental Health Association, is dedicated to helping environmental health professionals meet the demands necessary for the effective control of environmental hazards.

Congratulations, Maud!

## PPTOX: Environmental Stressors in Disease and Implications for Human Health

The Endocrine Society is sponsoring the fourth international summit of Prenatal Programming and Toxicity (PPTOX) – a conference series dedicated to cutting-edge discussion of environmental hazards during early life and long-term consequences. The conference will be held **October 26-29, 2014 at the Boston Marriott Long Wharf Hotel, Boston, MA.**

PPTOX is one of the premier international venues for scientists to evaluate current knowledge and guide forward momentum for this burgeoning field. The program includes topics of interest for a wide spectrum of professional backgrounds applicable to individuals interested in the developmental origins of endocrine diseases and mechanisms of developmental programming across the lifespan and between generations.

**Submit your abstract online by August 18, 2014** to be considered for oral and poster presentations at PPTOX IV. For more on the meeting and to submit your abstract, visit the [PPTOX IV website](#).

## SOT Best Postdoctoral Publication Awards

The Postdoctoral Assembly (PDA) of the Society of Toxicology is pleased to announce the availability of the 2015 Best Postdoctoral Publication Awards. These awards recognize outstanding postdoctoral researchers who have recently published papers in the field of toxicology as a result of postdoctoral research. All qualified postdoctoral scholars are encouraged to apply.

**Applications are due October 9, 2014.** Visit the [SOT award website](#) for more information and application materials.

## If Cells Could Talk, What Would They Tell Us About Chemical Exposure?

Join the University of Arizona SRP, University of California, Davis SRP and EPA Region 9 for a webinar focused on applications of cell-based bioanalytical methods.

This two-part seminar will feature Michael Denison of UC Davis SRP and Scott Boitano from Arizona SRP and will focus on applications of cell-based bioanalytical methods to better understand environmental toxicities.

The webinar is August 11, 1:00-3:00 pm ET. To register, visit the [Clu-In website](#).

participated! Follow us: [@SRP\\_NIEHS](#) to instantly hear about news around the Program, key 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](#).

## EPA Releases Final Risk Assessment on TCE

On June 25, the EPA released a final risk assessment for Trichloroethylene (TCE). The assessment identified health risks from TCE exposures to consumers using spray aerosol degreasers and spray fixatives. It also identifies health risks to workers when TCE is used as a degreaser in small commercial shops and as a stain removing agent in dry cleaning. See the [EPA press release](#) for additional information on the TCE risk assessment.

The peer review meeting of the Draft Report on Carcinogens (RoC) Monograph on Trichloroethylene (TCE) will be held on **August 12 at NIEHS in Research Triangle Park, NC**. For more information on the meeting and to register to attend (in-person or to view the webcast), visit the [NTP meeting page](#).