

HEADLINES

Happy New Year!

NIEHS SRP staff would like to wish you all a Happy New Year! We hope you all had a very happy and restful holiday season and we are wishing you the best for 2014!

KC Donnelly Externship Supplement Awards – Research Exchange Opportunity

Applications for the KC Donnelly Administrative Supplement Awards will be accepted January 31-February 28, 2014. This is an exciting opportunity for SRP graduate students and post-docs either directly supported or conducting research supported by an SRP P42 or R01 grant. In honor of *KC Donnelly*, the supplemental award provides funding to pursue translational and transdisciplinary opportunities and experiences with other SRP-Funded grantees, government laboratories (EPA, ATSDR, NIEHS), or other agencies (state, local, Tribal).

For more information, please review the *KC Donnelly Externship Guidelines*. Also, check out the *SRP website for past winners* to see examples of what others have done with this externship opportunity!

SRP Multi-Project Center Grant Opportunity (P42)

The NIEHS is announcing the continuation of the Superfund Hazardous Substance Research and Training Program, referred to as the SRP. SRP Center grants will support problem-based, solution-oriented research Centers that consist of multiple, integrated projects representing both the biomedical and environmental science and engineering disciplines; as well as cores tasked with administrative, community engagement, research translation, training, and research support functions. The application deadline is April 10, 2014. Visit the *SRP website* for more information

The SRP will be holding a web seminar on January 16, 1:00-2:30 pm EST, to provide information about the new multi-project center grant announcement (P42), including an emphasis on changes compared to previous solicitations. Participants will have an opportunity to ask questions. For more information and to register, see the *EPA Clu-In website*.

Seeking Working Group Members for Disaster Response Network

NIEHS will be initiating an Environmental Health Research Response Network, a pilot working group to build on its extensive grant program capabilities, research networks, and field experience in disaster research response. SRP has been invited to nominate a few grantees to participate in this initial effort to establish a framework for the development and prioritization of the systems, tools, protocols, and subject matter expertise among NIEHS intramural/extramural researchers, Centers, grantees, and academic partners. If you are interested in becoming a part of this group, please contact Heather Henry (henryh@niehs.nih.gov).

Annual P42 Center Updates

Each fall, SRP sends a request for Annual P42 Center Updates to Center Directors and Administrative Staff. The Annual P42 Center Update provides SRP with information that is used to update the SRP databases, NIH databases, the SRP website, and to assist in developing the SRP Annual Meeting and other Programmatic materials (such as Research Briefs, webinars, news stories, etc.). We would like to have your materials by February 1, 2014. This coincides with the Non-Competing Continuation Progress Report February 1 deadline.

The Annual P42 Center Update materials are now available for download from the SRP website. In order to safeguard any information that may be confidential, we have protected the annual updates webpage with a username and password. Please log on to the *Center Update Web page* using the following username and password: Username: srp Password: updates

EMPLOYMENT OPPORTUNITIES

Biology Research Positions at NIEHS

The National Institute of Environmental Health Sciences is recruiting for multiple full-time appointments at either the tenure-track or tenure-eligible level in the areas of molecular and cellular signaling, neuroscience, and developmental or reproductive biology. The successful candidates are expected to lead innovative, independent research programs on any fundamental aspect of research in the above three areas of interest which form a basis for understanding the effects of the environment on human health. Investigators in the NIH intramural program have no formal teaching duties and minimal administrative responsibilities.

NIEHS will begin evaluating applications on February 3, 2014. The vacancies will remain open until they are filled. Visit the *NIEHS website* for more information.

Research Positions in Biostatistics/Computational Biology at NIEHS

The National Institute of Environmental Health Sciences is recruiting for multiple full-time appointments at either the tenure-track or tenure-eligible level in the areas of biostatistics, bioinformatics, and computational biology. The successful candidate will develop and direct a high-quality, independent research program on analytic methods applicable to understanding the effects of the environment on human health. Applicants should have a Ph.D. or equivalent doctoral degree and a proven record in the development of analytic methods with biomedical application. Experience working with epidemiologic or high dimensional genetic, epigenetic, and genomic datasets is highly desirable, but not required.

NIEHS will begin evaluating applications on or about February 10, 2014. Applications will be accepted until the vacancies are filled. Visit the *NIEHS website* for more information.

ASPPH/EPA Environmental Health Fellowship Program

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We appreciate your time and effort in compiling this information in support of the Superfund Research Program. If you have any questions concerning this request, please feel free to contact [SRP staff](#).

IN THE NEWS

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.

- [Duke brings Superfund research to the Elizabeth River Learning Barge](#)
- [Preterm birth linked with maternal phthalate exposure during pregnancy](#)
- [Researchers find elevated flame retardant exposure among U.S. gymnasts](#)
- [New study finds toenails help trace arsenic exposure from foods](#)

The following papers, which include SRP grantees were selected as [E-Factor 2013 Papers of the Year!](#)

- [Flame retardant Firemaster 550 confirmed as endocrine disruptor](#)
- [Using membrane transporters to improve crops for sustainable food production](#)
- [Graphene sheets pierce and enter cells](#)

Nice work, SRP grantees!

OSU SRP Scientists Discover Novel Compounds More Mutagenic than their Parent PAH Compounds

Researchers at OSU SRP led by Staci Simonich have discovered novel compounds, nitrated PAHs (NPAHs), produced when PAHs chemically interact with nitrogen "a" a chemical reaction that can be seen in vehicle exhaust or grilling meat. Scientists discovered that the NPAHs are hundreds of times more mutagenic than their parent compounds, PAHs, which are known carcinogens. These compounds were not previously known to exist, and raise additional concerns about the health impacts of heavily-polluted urban air or dietary exposure. Read more on the [OSU SRP blog](#).

Interesting finding, Staci!

SRP Researchers Featured in Articles about New FDA's rule on Triclosan and Triclocarban

There has been mounting concern that the antibacterial chemicals triclosan and triclocarban, which go into everyday items like soap and toothpaste, are doing more harm than good. The Food and Drug Administration reported in December that it is requiring soap manufacturers to demonstrate that the substances are safe or they must take them out of the products altogether. Research from several SRP grantees has informed what we know about triclosan and triclocarban.

Rolf Halden, an SRP grantee at Arizona State University, was featured in a [NY Times article](#) about the new FDA rule where he commented on his concerns regarding the proliferation of the compounds use. His research team has found that triclosan and triclocarban persist even after wastewater treatment and are now causing environmental contamination nationwide.

UC Davis SRP grantee Bruce Hammock was interviewed by [WebMD](#) regarding the newly proposed federal mandate. Hammock and other researchers at UC Davis have shown a wide variety of potential health impacts from exposure to triclocarban and triclosan (See [Research Brief 213](#) for more information).

Website supported by Harvard SRP Honored for Risk Communication

The [Kids+Chemical Safety website](#), which is supported in-part by the Harvard SRP Research Translation Core, received the 2013 Risk Communication Award from the Alliance for Chemical Safety! The awards ceremony will be held on Wednesday, January 15, 2014 at Interact for Health, in Cincinnati, Ohio. The website provides up-to-date health information on chemical hazards and safe use of chemicals around children.

Nice research translation project, Harvard SRP!

Slotkin Featured on NPR

Duke SRP grantee Ted Slotkin's research on nicotine, pregnancy, and brain development was featured on NPR Morning Edition in late November. Slotkin explained how nicotine is especially disruptive to the developing brain

Schools and Programs of Public Health (ASPPH) Environmental Health Fellowship Program is to provide professional training and opportunities for early career public health professionals by enabling them to work in EPA on current and emerging environmental public health needs. Fellowship positions are full-time opportunities for duration of one year (September 2014 - August 2015, estimated). Fellowships may be extended for an additional year, pending available funding, continued priority of the project area within EPA, and mutual agreement by the fellow, EPA, and ASPPH.

Fellows will be placed in various EPA organizations, most of which are located in the Washington, D.C. area, but may also be located in any of several laboratories, regional offices, or centers throughout the country. To qualify for this fellowship, candidates must have received their masters or doctorate degrees from an ASPPH-member school or program of public health within the last five years and be a U.S. Citizen or permanent resident (Green Card). Preference will be given to candidates with a Certification in Public Health (CPH).

Deadline: January 16, 2014.
Visit the [ASPPH Fellowships website](#) for more information.

Assistant Professor in Environmental Health "a" University of Iowa Department of Occupational and Environmental Health

The University of Iowa, College of Public Health invites applications for a tenure track faculty position at the level of Assistant Professor in Environmental Health with an emphasis in water and global sustainability. The successful candidate for this position will be expected to participate actively in an ambitious new multidisciplinary initiative in sustainability as well as teach courses, direct graduate thesis research, and develop an extramurally-funded research program. Applicants must hold a PhD or other doctorate in a relevant science or engineering field.

Position is open until filled. For more information and to apply, visit the [Iowa Job posting](#), requisition #63494.

Assistant/Associate Professor "a" Iowa Pharmaceuticals and Translational Therapeutics Program

The University of Iowa Division of Pharmaceutics and Translational Therapeutics invites applications for a twelve-month, tenure track Assistant/Associate Professor with research interests in toxicology, pharmacokinetics and pharmacodynamics to join the Pharmaceutics and Translational

and that pregnant smokers who use nicotine replacement might be better off avoiding the patch, which provides a continuous dose of nicotine through the skin. Visit the [NPR website](#) for the full story.

Interesting story, Ted!

Brown SRP Sponsors Environmental Justice Summit

The Brown SRP Community Engagement Core co-sponsored a regional one-day Environmental Justice Summit with the Environmental Justice League of Rhode Island (EJLRI) and the Alternatives for Community and the Environment (ACE) in November. The EJ Summit drew about 70 participants, representing 15 community organizations and universities and was part of an ongoing effort to build a sense of community among organizations doing similar work and to foster academic-community partnerships. The forum began with an activity around an interactive map, designed to build a regional New England EJ identity and included a series of break-out workshops and group sessions. The summit concluded with updates from each of the environmental justice groups presenting their current EJ-related campaigns.

Sounds like a fantastic summit, Brown SRP!

Eighth Graders Get Real Life Science Experience with Oregon State SRP

Researchers at OSU SRP connected with an eighth grade class in Massachusetts via OSU's [Hydroville Curriculum Project](#), an NIEHS-funded project developed to use environmental health topics to improve students' academic performance and stimulate interest in problem-solving, environmental health science, decision making, teamwork, and social responsibility. As part of the collaboration, OSU SRP grantee Robert Tanguay Skyped with the class to describe his zebrafish research and answer questions from the class. Read more about OSU's collaboration with the eighth grade classroom in [OSU SRP's blog](#).

This sounds like a fantastic opportunity for students, OSU SRP!

Stapleton Featured on the Dr. Oz Show

In December, the Dr. Oz show discussed flame retardant exposure from polyurethane foam. Duke SRP grantee Heather Stapleton's lab was featured in the show and analyzed foam and urine samples, with results discussed on the air. Some of Stapleton's current research focuses on the sources, fate, transformation and human exposure to flame retardant chemicals that are found in consumer products (e.g. furniture, baby products, TVs, computers, etc.). Check out a recap of the show on the [Dr. Oz website](#).

It's great to see SRP research geared toward a general audience. Nice work, Heather!

TRAINEE SPOTLIGHT

Nour Abdo, University of North Carolina SRP

Nour Abdo just began her fourth year as a toxicology PhD student with Ivan Rusyn at the University of North Carolina at Chapel Hill (UNC). You may have seen her give an exciting presentation about screening for inter-individual and population variability in toxicity of pesticide mixtures at this year's annual meeting!

Abdo focuses on quantitative high-throughput screening for chemical toxicity in a human population based in-vitro model. Through her research, she is evaluating and assessing the validity of using a population human model system to assess chemical toxicity. She is also identifying candidate genes that may be related to chemical susceptibility.

Abdo is evaluating inter-individual variability in response to chemical exposure across genetically diverse populations using a high throughput large scale in-vitro model. In December, Abdo gave a presentation at NIEHS on the high-throughput in vitro model she is working with, the 1000 Genomes Toxicity Screening Project. The effort is conducted in collaboration with UNC biostatisticians and with researchers at NIEHS and N.C. State University. The 1000 Genomes-based in vitro screening model offers exceptional opportunities for identifying variations in response to environmental chemicals at the DNA sequence level, enhancing high-throughput risk assessments by establishing population-based confidence intervals in toxicity, and establishing potential modes of action for environmental compounds.

Abdo has won a number of awards during her time at UNC, including first place for her poster at the 2013 North



Therapeutics program. Applicants should have a Pharm.D. with relevant research training or a Ph.D. in pharmaceutical sciences, toxicology, pharmacokinetics, pharmacodynamics, pharmacology, or a related discipline.

Applicants should submit a cover letter describing their interests and unique accomplishments, their curriculum vitae, a concise description of their proposed research and teaching and a list of three references.

Position is open until filled. For more information and to apply, visit the [University of Iowa jobs website](#), requisition #63127.

Northeastern University
Chairperson in Department of Health Sciences

The BouvÃ© College of Health Sciences at Northeastern University invites full professor applicants for a Chairperson in the growing and exciting interdisciplinary Department of Health Sciences.

In partnership with the faculty, the Chair is expected to take the Department to the next level of excellence in research, scholarship and academic program quality. In addition to the responsibilities of a Full Professor (teaching, scholarship, and service), the Chairperson provides collaborative and energetic leadership in the recruitment, development, and retention of high caliber faculty and manages administrative affairs of the Department. The Chair will play a leadership role enhancing Northeastern's standing in community and public health and further strengthening a strong research oriented faculty. For more information and how to apply visit the [online job posting](#). If you have any questions, please contact Phil Brown (p.brown@neu.edu).

Position is open until filled.

CURRENT RESEARCH BRIEF

Research Brief #229: "[Comparing Black Carbon Types to Sequester PBDEs in Sediments](#)" (Jay Gan, University of California, Riverside) 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.

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

Carolina SOT meeting.

Abdo, a Jordan native, received her Bachelors of Veterinary Medicine and Surgery (equivalent to a D.V.M.) in Irbid, Jordan. She also received a Masters of Public Health from New Mexico State University before she began her Ph.D. at UNC. In her spare time, Abdo enjoys traveling and exploring new sights.

HOT PUBLICATION

Sewer Gas: An Indoor Air Source of PCE to Consider During Vapor Intrusion Investigations

Vapor intrusion generally occurs when there is a migration of volatile chemicals from contaminated groundwater or soil into an overlying building. Researchers at Brown SRP are working to better understand the sources and pathways of vapor intrusion to better assess indoor air sources of the vapors and their potential human health risk.

According to a study led by Kelly Pennell at Brown SRP, infiltration of sewer gas into homes resulted in PCE concentrations in indoor air that were nearly two orders of magnitude higher as compared to when infiltration of sewer gas was not known to be occurring. The [paper](#), published in Groundwater Monitoring and Remediation highlights the previously understudied pathway where sewers serve as sources of PCE (and potentially other VOC) vapors. The researchers also discuss the implications of this new pathway for vapor intrusion investigations.

This month, the paper was picked up by John Boyer, an environmental scientist and co-team leader for the Interstate Technology and Regulatory Council (ITRC) vapor intrusion team. John contacted Brown SRP commending the group for their interesting finding and asked to use information and figures from the paper in later presentations about vapor intrusion to explain VOCs in sewers in plumbing traps. According to John, "I recently read your paper on Sewer Gas in Groundwater Monitoring & Remediation. This is definitely a source that I have not given serious consideration during VI investigations."

AWARD WINNERS

Kentucky SRP Grantees Awarded Prestigious Fellowship

Andrew Morris, Bernhard Hennig, and Kevin Pearson, from the Kentucky SRP, won the 2014 University of Kentucky John P. Wyatt, M.D. Traveling Fellowship. The award provides institutional support to organize a one-day symposium on hazardous pollutants and associated environmental stress throughout the human life cycle. The symposium will feature prominent speakers and trainees. The Wyatt award also provides funds that the UK SRP will use to initiate research collaborations with one of the invited symposium speakers, Tomas Trnovec of the Department of Environmental Medicine at Slovak Medical University in Bratislava, Slovakia.

Congratulations Kentucky SRP!

Norma Torres wins Scholarship from Puerto Rico Society of Engineers

Northeastern SRP trainee Norma Torres won a scholarship from the Puerto Rico Society of Engineers, the first ever of its kind for an environmental engineer. Torres is working on a project at Northeastern SRP related to dynamic transport and exposure pathways of phthalates and TCE in karst groundwater systems. Congratulations Norma!

FUNDING OPPORTUNITIES

Outstanding New Environmental Scientist (ONES) Award (R01) Funding Opportunity

The Outstanding New Environmental Scientist (ONES) Award is intended to identify the most talented Early Stage Investigators (ESIs) who intend to make a long-term commitment to research in the Environmental Health Sciences. The funding will assist them in launching an innovative research program focused on the understanding of environmental exposure effects on people's health. These R01 research grants are targeted for researchers who are defined by the NIH as [Early Stage Investigators](#).

The Letter of Intent due date is January 28, 2014. Applications are due February 28, 2014. See the [Request for Applications](#) for more information.

This is a wonderful opportunity for early-stage SRP investigators! We encourage all SRP researchers who are early in their career to apply.

SRP SUPPORTED EVENTS

SRP Funding Opportunities Web Seminar
Date: January 16, 2014, 1:00 - 2:30 pm EST
Webinar
[Website](#)

Risk e Learning Webinar Series: Using GIS Tools to Analyze, Compute, and Predict Pollution
Session I (Rebroadcast) - Exposure Assessment in the Field and Links to Human Health
Date: February 6, 2014, 2:00 to 4:00 p.m. ET
Webinar
[Website](#)

Health effects and mitigation of arsenic:
Current research efforts and future directions
Date: March 3-4, 2014
Location: Research Triangle Park, NC
[Website](#)

OTHER CONFERENCES OF INTEREST

Community-Campus Partnerships for Health Conference
Date: April 30-May 3, 2014
Location: Chicago, Illinois
[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 participated! Follow us: [@SRP_NIEHS](#) to instantly hear about news around the Program, key publications, events, and job opportunities for trainees.

Validation and Demonstration of Devices for Environmental Exposure Assessment (R21/R33)

This funding opportunity announcement (FOA) is intended to facilitate the translation of prototype devices for characterization of personal exposures into field use by supporting a phased validation effort involving a partnership between tool developers and environmental epidemiologists. In the initial (R21) phase, the focus is on iterative refinement of the prototype based on evaluation in a pilot scale study.

Applications are due February 4, 2014. See the [Request for Applications](#) for more information.

Several SRP grantees have created prototype tools for characterizing the personal environment. This is a great opportunity to receive funding to validate and translate these tools into epidemiological studies!

Call for Proposals: EPA's Environmental Education Grants Program

EPA's Environmental Education Model Grant Program is currently accepting applications. The program works to engage communities across the country through educational projects that have a lasting impact on local watersheds and air quality. This year's competitive grants program will total \$2.77 million. Grants will be awarded from each of the ten EPA regional offices and EPA's headquarters in Washington, DC for a total of 22 to 32 grants. Each award will be an estimated \$75,000 to \$200,000.

Proposals are due February 4, 2014. For more information and to apply, visit the [EPA website](#).

NIH Revision Awards for Creating Virtual Consortium for Translational/ Transdisciplinary Environmental Research (ViCTER) (R01)

The purpose of the ViCTER program is to foster and promote transdisciplinary collaborations and/or translational research efforts among basic (technology and mechanism oriented), clinical (patient-oriented), and population-based researchers, and other individuals with expertise relevant to environmental health who have come together in common interest around a particular environmental stressor(s) of interest.

Each virtual consortium will consist of an NIEHS-funded researcher, who will serve as the PD/PI and overall coordinator of the consortium, and two new collaborators. The Revision application should include one to two new specific aims for the current NIEHS-funded research project and one to two specific aims from each of the new collaborators that will expand the scope of the current funded project with the goal of making the research more transdisciplinary and/or translational.

Letters of intent are due February 4, 2014. Applications are due March 4, 2014. For more information and to apply, visit the [NIEHS Funding Opportunity Announcement](#).

This is a great opportunity to expand your research and collaborations! We encourage all SRP grantees with an interest in broadening the scope of their research and create transdisciplinary collaborations to apply!

Environmental Health Sciences Core Centers FOA Released

This [Funding Opportunity Announcement](#) invites applications from qualified institutions for support of Environmental Health Sciences Core Centers (EHS CC). An EHS CC is designed to establish leadership and support for programs of excellence in environmental health sciences by providing scientific guidance, technology, and career development opportunities for promising investigators.

A Core Center Grant is an institutional award to support centralized scientific resources and facilities shared by investigators with existing research projects. By providing structure and resources, this support is intended to enhance the ability of scientists working in the field of environmental health sciences to identify and capitalize on emerging opportunities that will translate into advances improving the understanding of the relationships among environmental exposures, human biology, and disease.

Applications are due April 22, 2014 by 5:00 pm local time. Visit the [funding announcement](#) for more information.

CONTACT INFORMATION

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

INTERAGENCY NEWS

EPA Releases Data on 1,800 Chemicals

In December, the EPA announced it has released screening data on 1,800 chemicals found in industrial and consumer products, food additives, and drugs.

The data, which was gathered through a variety of advanced techniques including robotics and high-throughput screening, is available through the EPA's new interactive [Chemical Safety for Sustainability dashboard](#). The dashboard and the data is part of an ongoing collaboration, known as Tox21, between the EPA, NIEHS/National Toxicology Program, National Center for Advancing Translational Sciences, and the Food and Drug Administration, to improve chemical screening.

Making the data public will help researchers across disciplines better identify hazardous [chemicals](#), according to Raymond Tice, who heads the Biomolecular Screening Branch at the NIEHS.

The EPA also announced the [ToxCast Data Challenges](#), an invitation to the science and technology sectors to work with the data and come up with solutions for how the new chemical screening information can be used to predict potential health effects. Challenge winners will receive awards for their ideas.

This is an excellent opportunity for our grantees working in the field of computational toxicology! We encourage you to work with the data and look for innovative ways to use the data to better understand health effects of environmental chemicals. Visit the [EPA website](#) for more information.

IRIS Bimonthly Public Meeting

EPA scheduled the next IRIS Bimonthly Public Meeting for February 26-27, 2014. The objective of the public meeting is to obtain input from stakeholders and the public on the studies and data that may be used in assessments that are under development. Specifically, EPA is seeking input on preliminary materials including draft literature searches and associated search strategies, evidence tables, and exposure-response arrays for chemicals prior to the development of the IRIS assessments.

For more information, visit the [EPA IRIS website](#).