

HEADLINES

SRP Events at the SOT Meeting

If you are going to the [SOT meeting](#) this month, don't miss some special SRP events!

SRP trainees will be hosting an informal networking get together Tuesday March 25th from 5-7pm at the [District Wine Bar](#) (the first level of Sheraton Phoenix Downtown Hotel). This is a chance for SRP trainees to get to know one another and to meet the SRP Staff.

SRP Program Administrator Danielle Carlin will be having two workshops during SOT: "New Concerns and New Science Addressing Environmental Asbestos Exposures" and "Developmental Toxicity from Chemical Mixtures: Research to Application in Susceptible Populations." Look out for more information about the workshops in March. You don't want to miss these interesting sessions!

For Center Directors: Dr. Linda Birnbaum (Director, NIEHS) and Mary Gant (NIEHS Legislative Affairs) are meeting with current SRP P42 Center Directors Monday March 24 from 5-7pm at Sheraton's North Mountain meeting room (in the SOT HQ hotel). We would like for each school to have one representative at this meeting. SRP R01 Principle Investigators are also welcome at this meeting. Please contact Heather Henry if you have any questions (henryh@niehs.nih.gov).

SRP Announces More Diversity in Administrative Supplement Opportunities

SRP is pleased to announce that we are now accepting administrative supplements to promote diversity in SRP-related research. The "SRP Diversity Administrative Supplement" opportunity is intended to promote diversity in the biomedical, environmental science and engineering, and social sciences (e.g. community engagement and research translation) workforce.

The research experience must be integral to the approved, ongoing research of the parent grant, and it must have the potential to contribute significantly to the research career development of the candidate. Graduate or postdoctoral candidates are eligible for applicants from specific racial and ethnic groups; individuals with disabilities; and individuals from disadvantaged backgrounds. For more information, please see the [SRP Administrative Supplement page](#). The next due date for all Administrative Supplements is **April 1, 2014**.

IN THE NEWS

SRP in the Environmental Factor

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

- [UNC SRP trainee develops chemical risk assessment interface](#)
- [SRP grantee receives prestigious Brodie Award](#)
- [Genetic variation may explain PCB-resistance in Atlantic killifish](#)

CHE Presents Fourth Call in Series featuring SRP

The Collaborative on Health and the Environment (CHE), with the Boston SRP, hosted a call on chemical trespassers in indoor air, specifically vapor intrusion resulting from hazardous material volatilizing into the basement or ground floor of a building. The call featured Madeleine Scammell (Boston SRP) and Kelly Pennell (Brown SRP, University of Kentucky). For more information and to listen to a recording of the call, visit the [CHE website](#).

What an effective way to reach out to an expanded community!

EMPLOYMENT OPPORTUNITIES

Professor and Chair à€ Bioengineering Department at Northeastern

Northeastern University's College of Engineering seeks outstanding candidates for the position of Chair of Bioengineering. This is a unique opportunity to significantly impact the vision and direction of a new program in a world-class research university.

Building on existing strengths, Northeastern University has recently formed the Bioengineering Department (coe.neu.edu/bioe). 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.

Senior Contract and Grant Officer position at UC Berkeley

The University of California, Berkeley, is inviting candidates to apply for an upper level full time continuing position in their Sponsored Projects Office (SPO), the central office at UC Berkeley responsible for pre-award and non-financial post-award contract and grant administration for sponsored projects supported by government, foundation, and non-profit extramural sponsors. The position requires a bachelor's degree and at least three years of pre-award research administration experience, preferably within a University setting.

To apply, visit the [UC Berkeley jobs page](#). Choose the appropriate portal and search for position 17478. Position is open until filled.

Biology Research Positions at NIEHS

The National Institute of Environmental Health Sciences is recruiting for multiple full-time

Investigating PCBs in Yellow Pigments

In February, an [Environmental Health News article](#) featured work on PCBs led by Iowa University SRP grantee Keri Hornbuckle. The EHN article describes new research that found that PCB-11, an unintentional by-product of pigment manufacturing, is also leaching out of clothing and print materials, which builds on previous findings from Hornbuckle. Iowa SRP researchers discovered inadvertent [PCBs in commercial pigments](#) commonly used in paint but also in inks, textiles, paper, cosmetics, leather, plastics, and food.

Fascinating research, Keri!

Studying the Effects of the NC Coal Ash Spill

On February 2, 2014 one of the largest coal ash spills in the nation's history started in Eden, NC, at a Duke Energy containment pond on the banks of the Dan River. UNC SRP scientist Damian Shea (NC State University) is now coordinating with state and federal regulatory agencies to help answer important questions about the type and amounts of toxic chemicals present in the coal ash, which will enable regulators to better assess potential risks to communities along the river. Using passive sampling devices, which remain in the river for 30-day intervals, Shea is assessing the amounts of some of the chemicals people may be exposed to over a longer term and the percentage of those chemicals that are bioavailable, or able to be taken up into an organism. Visit the [UNC SRP website](#) for more on the story.

Thanks for responding quickly and filling the critical need to understand the effects of this spill, Damian!

Dartmouth Study Shows Coastal Water, Not Sediment, Predicts Mercury Contamination

A [study](#) by Dartmouth SRP and the University of Connecticut shows that methylmercury concentrations in estuary waters -- not in sediment as commonly thought -- are the best way to predict mercury contamination in the marine food chain. The findings raise questions about current mercury cleanup practices, and shed new light on the different ways in which the toxic metal bioaccumulates in aquatic species, from bottom-dwelling worms to forage fish to larger fish consumed by humans.

Nice work, Dartmouth!

Addressing Health Risks and Regulation of 1,4-Dioxane in Massachusetts

Boston SRP grantees Madeleine Scammell and Wendy Heiger-Bernays presented on the health risks and regulation of the contaminant 1,4-dioxane at the Eastham Town Hall in Eastham, Mass., on Feb. 11. It was standing room only when townspeople and town officials turned out for an update on the Eastham landfill, from its opening in the 1930s to a recent discovery of 1,4-dioxane in a monitoring well that led the town to start inspecting private wells in the area. For more on the community forum, visit the [BU SRP website](#). Courtesy of the Town of Eastham, [a video recording of the forum](#) is also available online.

Great research translation, BU SRP!

New PEPH Podcast Features Guerinot

Dartmouth SRP grantee Mary Lou Guerinot is featured in a recent PEPH podcast on arsenic in rice and other foods. Arsenic poisoning is a recognized health threat worldwide. Although contaminated drinking water is a primary culprit, people can also be exposed to arsenic through foods. In this [podcast](#), learn why rice and other foods sometimes contain arsenic and get tips on how to reduce your exposure. You also can find past podcasts on the [Environmental Health Chat](#) Web page or subscribe to the series on [iTunes](#).

Flame Retardants in Tents May Rub Off on Hands

Another February [Environmental Health News article](#) features recent [findings](#) from a study, led by Duke SRP grantee Heather Stapleton and Boston SRP researcher Thomas Webster, conducted at a North Carolina campground. Researchers found that flame retardants used in the manufacture of tents are likely rubbing off on campers' hands. Ten of 11 tents tested contained flame retardants. According to the authors, the results suggest that individuals are exposed to flame retardant chemicals following contact with treated textiles and further studies are needed to better characterize this route of exposure.

Interesting finding, Heather and Thomas!

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.

The vacancies will remain open until they are filled. Visit the [NIEHS website](#) for more information.

Assistant Professor in Environmental Health & 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.

CURRENT RESEARCH BRIEF

Research Brief #231: [Novel Pathway Involved in Neurodevelopmental Toxicity of PCBs](#) (Pamela Lein, UC Davis) 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.

SRP SUPPORTED EVENTS

Webinar Series Viewing on Impacts of Natural Gas Extraction on Water Resources

Co-Hosted by the Harvard School of Public Health SRP
Dates:
March 13, 2014, 12:00-1:30 p.m. ET
April 17, 2014, 12:00-1:30 p.m. ET

LSU SRP Provides Environmental Health Activity for Teachers

Kelli Palmer and Maud Walsh, LSU SRP Research Translation Core, and Elisabeth Feld and Cholena Ren, LSU SRP trainees working with Center Director Barry Dellinger, participated in the 2014 Louisiana Environmental Education Symposium. Feld and Ren led a chemistry and air pollution activity entitled "Understanding the Chemistry of Air" using LEGOs to demonstrate the connection between fuel combustion and environmental health issues. The activity, which was adapted from "LEGO Atoms and Molecules: Understanding Air" by Dr. Kathleen Vandiver at the Massachusetts Institute of Technology, can be used to introduce K-12 students to molecules, atoms, chemical notation, and chemical compounds. Visit the [LSU SRP website](#) to learn more.

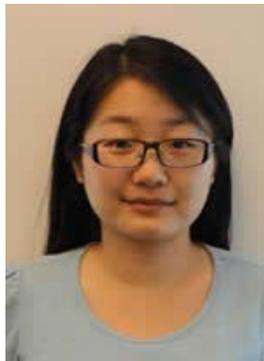
What a fun K-12 activity, LSU SRP!

TRAINEE SPOTLIGHT

Jing Sun, Columbia University SRP

Jing Sun is a fourth year Ph.D. student in the Department of Earth and Environmental Sciences (DEES) at Columbia University. You may have seen her at the SRP Annual Meeting last October, where she won first place in the non-biomedical trainee poster competition!

Sun works with Benjamin Bostick and Steven Chillrud at Columbia SRP to develop effective remediation strategies for arsenic contaminated aquifers. She is currently working on an *in situ* arsenic immobilization approach with magnetite as the target host mineral. Due to instability of hosts when aquifer redox conditions change, immobilization strategies have often failed in serving as long-term arsenic sinks. Her work suggests that magnetite may be a good target for immobilization since it is stable in a wide range of conditions including iron-reducing environments where arsenic is typically mobilized and bioavailable. Through magnetite formation within aquifer sediments, the adsorption capacity and stability of arsenic can be greatly increased.



Before coming to Columbia, Sun worked with Bostick as a Masters student at Dartmouth. In those two years, they studied tungsten speciation and transport in munitions-impacted soils and tried to understand the mechanisms behind the unexpected high tungsten solubility.

When she is not in lab, Sun loves to explore New York City, visiting museums, going to Broadway shows and movies, and enjoying good food. She is also currently learning to play the ukulele!

We look forward to hearing from her in an upcoming SRP poster winner student webinar on April 30. For more information on the 2014 trainee poster winner webinar series, visit the [SRP trainee webinar page](#).

HOT PUBLICATION

Combustion By-Products and Their Health Effects: Issues and Challenges

A [review](#) by Slawo Lomnicki at LSU SRP and colleagues summarizes and discusses the issues presented at the 13th International Congress on Combustion By-Products and their Health Effects held in New Orleans, Louisiana from May 15 to 18, 2013. The congress, sponsored by the SRP, National Institute of Environmental Health Sciences, and National Science Foundation, brought together international academic and government researchers, engineers, scientists, and policymakers. With industrial growth, increased power needs and generation and coal consumption and their concomitant emissions, pernicious health effects associated with exposures to these emissions are on the rise. The formation, conversion, control, and health effects of combustion by-products, including particulate matter and associated heavy metals, persistent organic pollutants, and environmentally persistent free radicals, were discussed during the congress. This review describes how the congress provided an interdisciplinary exchange and discussion forum for these topics and summarized needs for future research moving forward.

CALL FOR ABSTRACTS

Methods for Detecting and Prioritizing Contaminants of Concern at the ACS National Meeting

SRP grantee Rolf Halden and colleagues will be hosting an American Chemical Society (ACS) symposium on "Analytical Methods for Detecting and Prioritizing Contaminants of Concern" through the Division of Environmental Chemistry at the 248th ACS National Meeting in San Francisco, CA on Aug. 10-14, 2014. Topics in the session will

May 1, 2014, 12:00-1:30 p.m. ET
June 26, 2014, 12:00-1:30 p.m. ET
Location: Boston, Massachusetts

[Website](#)

Communicating Risk to the Public

Co-Sponsored by the Brown University SRP

Date and Location:
March 27, 2014 in Westford, Massachusetts
March 28, 2014 in Providence, Rhode Island

[Website](#)

2014 Trainee Webinar Series

Dates:
April 15, 2014, 1:00 – 2:00 pm ET
April 30, 2014, 1:00 – 2:00 pm ET
May 13, 2014, 1:00 – 2:00 pm ET
Online

[Website](#)

Risk e Learning: PCBs in Schools

Session I: Overview and Exposure Assessment

Date: April 21, 2014, 2-4 pm ET

Session II: Identifying and Reducing Health Risks

Date: April 28, 2014, 2-4 pm ET
Online

[Website](#): Info will be posted soon

The Central and Eastern European Conference on Health and the Environment

Date: May 25-30, 2014
Location: Cluj-Napoca, Romania

[Website](#)

The Eight International PCB Workshop

Date: October 5-9, 2014
Location: Woods Hole, Massachusetts

[Website](#)

OTHER CONFERENCES OF INTEREST

247th American Chemical Society National Meeting

Date: March 16-20, 2014
Location: Dallas, Texas

[Website](#)

53rd Annual Society of Toxicology Meeting

Date: March 23-27, 2014
Location: Phoenix, Arizona

[Website](#)

2014 National Environmental Justice Conference and Training Program

Date: March 26-28, 2014
Location: Washington, DC

[Website](#)

Community-Campus Partnerships for Health Conference

Date: April 30-May 3, 2014
Location: Chicago, Illinois

include advanced methods for detection, analytical and computational tools for toxicity assessment, computational and experimental approaches for prioritization of contaminants of concern, analysis of complex environmental samples, and predictive models for chemical risk assessment.

You are invited to submit and abstract for a platform or poster presentation to the [ACS Program and Abstract Creation System](#) by **March 10, 2014**. For more information, visit the [ACS meeting abstract call for submissions](#).

SETAC Asia Pacific and SETAC Australasia (ASE) Conference Abstract Submission

The Society of Environmental Toxicology and Chemistry (SETAC) Asia Pacific and SETAC Australasia (ASE) Conference will be held at the Adelaide Convention Centre September 14-17, 2014 in Adelaide, South Australia. The theme of SETAC 2014 is **Advancing Science for a Sustainable Environment**.

The deadline for the submission of abstracts is **March 31, 2014**. Please contact Heather Henry (henryh@niehs.nih.gov) if you are planning to submit an abstract. Visit the [SETAC AP/AU Conference website](#) for more information.

The Eighth International PCB Workshop: PCBs in Schools, Exposures, Effects, Remediation and Regulation

A primary objective of the PCB Workshops is to provide a single forum for the world experts on issues of analysis, fate and transport, exposure assessment, metabolism and disposition, toxicity, and public health policy – a unique opportunity for scientists to come together and learn from each other. The Eighth International PCB Workshop in 2014 will include presentations on basic aspects of PCB chemistry, biology and toxicology, as well as a new emphasis on specific sites that are highly contaminated, including Superfund sites. There will be broad input from scientists both within and outside of the Superfund Research Program.

The Workshop will take place in Woods Hole, MA. **October 5-9, 2014**. Abstract submissions close on **July 25, 2014**. Visit the [PCB Workshop website](#) for more information and to register.

FUNDING OPPORTUNITIES

Support for Conferences and Scientific Meetings (R13)

The NIEHS SRP participates in [NIH Support for Conferences and Scientific Meetings \(Parent R13/U13\)](#). For more information, visit the NIEHS Notice for Applications Relevant to SRP Mandates. The next receipt date for R13 applications are due April 1; however if interested in applying, **a letter requesting permission must be submitted immediately**.

Instructions for applying may be found on the [NIEHS R13/U13 webpage](#).

ATSDR Community Health Projects at Brownfield/Land Reuse Sites Funding Opportunity

The ATSDR Community Health Projects (CHP) Related to Contamination at Brownfield/Land Reuse Sites purpose is to increase responsive public health actions by promoting healthy and safe environments and preventing harmful exposures related to contamination at Brownfield/Land Reuse Sites. To address potential contamination issues, public health impacts, and redevelopment concerns related to Brownfield/Land Reuse sites, a strategy to promote healthy, safe environments while preventing harmful exposures is needed. Projects that propose such strategies and show success in implementing the strategies may improve overall community health status in these communities.

Funding applications are due **March 19, 2014**. For more information about the funding opportunity, see the [ATSDR website](#).

Health Impact Project Funding Opportunities

The Health Impact Project is issuing a [call for proposals](#) to support two types of initiatives: health impact assessment (HIA) demonstration projects that inform a specific decision and HIA program grants. The HIA program grants enable organizations with HIA experience to develop sustainable programs that integrate the assessments and related approaches in policymaking at the local, state, or tribal levels. The proposal deadline is **April 2**. For more information, see the [Health Impact Project website](#).

[Website](#)

SETAC Asia Pacific and Australasia Conference

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

[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.

CONTACT INFORMATION

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

SBIR/STTR Funding Opportunity

The 2014 Omnibus Grant Solicitations of the NIH, CDC, FDA and ACF are now available for the Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) programs (NIH only).

Please note that applicants may now switch between the SBIR and STTR programs for the Omnibus solicitation and all NIH SBIR/STTR funding opportunity announcements (FOAs). For more information and to learn about the SRP areas of interest for SBIR/STTRs, visit the [SRP website](#).

Please find the 2014 SBIR/STTR Omnibus solicitations for more information: SBIR: [PA-14-071](#) and STTR: [PA-14-072](#). **The next application receipt due date is April 5.**

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, including an archive of the informational webinar in January and frequently asked questions.

Brownfields Training, Research, and Technical Assistance Grants Request for Proposals

The US EPA is requesting proposals from eligible entities, including nonprofit organizations and educational institutions, to conduct research, or provide technical assistance to communities facing brownfields cleanup and revitalization challenges.

Proposals are due by **April 18**. Visit the [EPA Request for Proposals](#) for more information.

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.

CDC Health Impact Assessment for Improved Community Design

The Center for Disease Control and Prevention (CDC) is providing funding for health impact assessments to increase the capacity of public health departments to include health considerations in transportation and land use planning decisions, and to expand the scope of health impacts considered when making decisions that impact community design. See the [CDC Grant Opportunity](#) for more information. Applications are due **April 28**.

Centers for Children's Environmental Health Funding Opportunity

The National Institute of Environmental Health Sciences and the Environmental Protection Agency intend to publish a joint Funding Opportunity Announcement (FOA) to solicit applications for [Children's Environmental Health and Disease Prevention Research Centers](#). The purpose of this program is to support a multidisciplinary program of applied and basic research along with an active community outreach translation effort to examine and translate the effects of early exposure to environmental hazards on children's health and wellbeing.

[This Notice](#) is being provided to allow potential applicants sufficient time to develop meaningful collaborations and responsive projects and cores. The FOA is expected to be published in spring 2014 with an expected application due date in summer 2014.

WEBINARS

NTP Report on Carcinogens Webinar on Trichloroethylene

The National Toxicology Program (NTP) announces a public webinar, "Human Cancer Studies on Exposure to Trichloroethylene (TCE): Methods Used to Assess Exposure and Cancer Outcomes." The Office of the Report on Carcinogens (ORoC), Division of the NTP (DNTP), National Institute of Environmental Health Sciences (NIEHS) will hold the webinar using Adobe Connect, and the public can register to attend.

The meeting will be held **Monday, March 17, 2014 from 9:00 AM to 1:00 PM EST.**

Pre-registration is required by March 13, 2014 for this meeting. Visit the [NTP website](#) for more information and to register.

2014 Trainee Webinar Series

This webinar series features the outstanding work being conducted by graduate and postdoctoral students conducting SRP-funded research. Specifically, this year's series consists of presentations from Poster Award Winners from the previous SRP Annual Meeting. This is an excellent opportunity for peers, SRP researchers, SRP alumni, and SRP's partners to hear the poster winners describe their current research/activities. The intent of the series is to increase collaboration and exchange of ideas among young investigators conducting SRP-funded research/activities and to hear about their award-winning work.

Session I: Featuring Minghui Gui (University of Kentucky) and Fabian Grimm (University of Iowa), **April 15, 2014; 1:00 – 2:00 pm EDT**, [Registration](#)

Session II: Featuring Jing Sun (Columbia University) and Peter Wagner (Harvard University), **April 30, 2014; 1:00 – 2:00 pm EDT**, [Registration](#)

Session III: Leslie Knecht (University of Miami) and Daniel Gusenleitner (Boston University), **May 13, 2014; 1:00 – 2:00 pm EDT**, [Registration](#)

For more information, visit the [SRP trainee webinar page](#).

Save the Dates: Risk e Learning Webinar Series

The next Risk e Learning Web Seminar Series will focus on PCBs in schools. Please mark your calendars for the following sessions:

April 21st, 2014, 2-4 pm ET: PCBs in Schools: Overview and Exposure Assessment

April 28th, 2014, 2-4 pm ET: PCBs in Schools: Identifying and Reducing Health Risks

Registration information will be posted on the [SRP ReL Web page](#) as soon as it is available.

INTERAGENCY NEWS

Nominations for Peer Reviewers and Availability of Draft Health Effects Documents: Perfluorooctanoic Acid and Perfluorooctane Sulfonate

EPA is seeking candidates who are nationally and/or internationally recognized scientific experts to serve as external peer reviewers for the draft health effects documents for PFOA and PFOS. Nominees should possess and demonstrate background knowledge and experience in one or more of the following areas: (1) Epidemiology, (2) toxicology (liver effects, immunotoxicity, neurotoxicity, developmental and reproductive toxicology, etc.), (3) membrane transport, (4) human health risk assessment, (5) pharmacokinetic models, and (6) mode-of-action for cancer and noncancer effects. See the [Request for Nominations](#) for more information.