

Superfund Research Program e-Posted Notes

October 9, 2020 (Issue 201)

HEADLINES

SRP Annual Meeting Now Virtual

The 2020 SRP Annual Meeting, hosted by the Texas A&M University SRP Center, will be held virtually **December 14 -15**. [Registration is now open](#), and the deadline to register is **October 16**. Abstracts are due **October 16**, and the final agenda will be posted **October 30**. Please visit the [SRP Annual Meeting website](#) for additional information.

SRP Virtual Technology Fair

In lieu of an in-person technology fair at the annual meeting, SRP will be holding a virtual technology fair on **December 16** to showcase SRP-funded technologies that support the SRP Mandates. Please save the date and stay tuned for more information.

SRP Data Science Mini-Workshop

Save the date for the SRP data science mini-workshop, which will be held virtually **December 16**. Also, to share the progress on your activities to SRP, please consider submitting a poster to the SRP Annual Meeting. Being digital, the poster format is an effective way to share your Center's Data Management and Analysis Core and data science supplement activities with the wider SRP community. The posters are dynamic and will allow you to share multimedia tools, such as recordings, videos, and animations. This is a great way to share the advances you have made and resources you have developed in the realm of SRP data science. Stay tuned for more information on the mini-workshop.

SRP Remembers Mike Aitken

[Mike Aitken](#), an integral part of the University of North Carolina at Chapel Hill (UNC) SRP Center for more than 20 years, passed away after a long, courageous battle with cancer. He was a pioneer in the field of bioremediation and proponent of using interdisciplinary research to address complex problems. Aitken was an outstanding scientist and exceptional person. He will be missed by SRP, UNC, and the global environmental science and engineering community.

EMPLOYMENT OPPORTUNITIES

Tenure-track Assistant Professor at Penn State

The Department of Biobehavioral Health in the College of Health and Human Development at Pennsylvania State University invites applications for a tenure-track Assistant Professor faculty position in the area of precision population health. They seek applicants using an integrative research approach to study precision population health. The ideal applicant will integrate behavioral, psychological, social and biological information at the population level.

Applications are due **October 30**. For more information and to apply, please see the [job description](#)

Silent Spring Institute Seeks Study Coordinator

The Silent Spring Institute is hiring a study coordinator for a new study of health effects associated with PFAS exposures from drinking water in two communities in Massachusetts. The study coordinator will work under the supervision of the study principal investigators and project collaborators and will be responsible for setting up the infrastructure and implementing the research plan. This is an exciting opportunity to contribute to a major public health study that will advance our understanding of PFAS health effects. Visit the [Silent Spring](#)

SRP Releases 2020-2025 Strategic Plan

In 2020, SRP engaged stakeholders from academia, environmental health agencies, and not-for-profit organizations to review and refine the SRP strategic plan. The [2020 Strategic Plan](#) builds on the 2010 and 2015 SRP Strategic Plans which summarized program objectives and goals and outlined strategies to achieve them. In the 2020 update, SRP reaffirms its commitment to the objectives presented in these previous iterations, while focusing SRP research and training through a systems approach lens to accommodate emerging complexity of environmental health issues.

Registration Now Open: Progress in Research Webinars

The fall [SRP Progress in Research webinar series](#) will highlight promising research from SRP Centers awarded grants in 2020. These awards were made as part of the Multiproject Center Grant (P42) solicitation RFA-ES-18-002. In each session, awardees will describe their research projects, accomplishments, and next steps. The first session will be held Wednesday **October 21 from 2–4 p.m. ET** and will feature researchers from the **UNC SRP Center**, the **Harvard School of Public Health SRP Center**, and the **University of Arizona SRP Center**. [Registration for Session I is now open](#). The subsequent sessions will be held October 28, November 9, and November 19.

SRP Welcomes New Small Business Grantees

NIEHS funds Small Business Innovation Research (SBIR) grants to help small businesses develop innovative tools to translate and communicate environmental health research to improve public health.

Here are the newest NIEHS SBIR grants awarded to foster the commercialization of innovative environmental technologies for detecting and remediating hazardous substances:

- [Stemloop, Inc.](#): A Paper-Based Synthetic Biology Platform for the On-Demand Testing of Water Quality, Khalid Alam, Phase I SRP SBIR
- [Microvi Biotech, Inc.](#): Intensified, High-Rate Reductive Immobilization of Hexavalent Chromium, Fatemeh Shirazi, Phase I SRP SBIR
- [AxNano, LLC](#): Hydraulic Fracturing of Controlled Release Oxidants for Remediation of Low Permeability Zones, Alexis Carpenter, Phase II SRP SBIR
- [Bluegrass Advanced Materials, LLC](#): Development of Smart Flocculants for the Treatment of Per- and polyfluoroalkyl substances (PFAS) Contaminated Water, Angela Gutierrez, Phase I SRP SBIR
- [Picoyune](#): Plasmonic Mercury Sensor and Wearable Gas Detector, Jay James, Phase I SRP SBIR
- [Microvi Biotech, Inc.](#): High-throughput Biocatalyst Manufacturing for Environmental Biotechnology, Fatemeh

[website](#) for more information.

Call for Volunteer Associate Editors – Environmental Health Perspectives

The journal Environmental Health Perspectives (EHP) seeks nominations for new Associate Editors with expertise across the environmental health sciences to join its [Board of Associate Editors](#).

Associate Editors evaluate papers that are being considered for full peer review, solicit peer reviewers, and summarize reviews in recommendations to the [Editor-in-Chief](#). The Associate Editor position is a volunteer role.

The ideal candidate has a strong sense of the relevant research field, an aptitude to recognize things that are novel and important, the ability to handle manuscripts across a wide range of topics and disciplines, and a good network of experts they can call upon to conduct reviews.

Associate Editors should expect to receive approximately three new submissions for evaluation each month and must be able to handle papers in a timely manner and participate in discussions regarding manuscripts they manage.

To nominate yourself or a colleague, send an email to ehpsubmission@niehs.nih.gov that includes the nominee's name and a brief explanation of their background and subject matter that they are most qualified to handle. Self-nominating candidates should also include a brief explanation of why they are interested in being an *EHP* associate editor. For more information, see the [announcement](#).

EHP seeks a diverse pool of editors and especially welcomes the nomination of individuals from groups historically underrepresented in editorial positions.

IN THE NEWS

NIEHS SRP News Stories

Visit the SRP news page for stories about the program:

- [SRP Studies Highlight Strategies to Improve Well Testing for Arsenic and Document Benefits](#): In a pair of recent publications, researchers from the Columbia University SRP Center demonstrated a strategy to improve private well testing for arsenic. They also showed that water treatment systems effectively reduced arsenic water levels and may reduce the likelihood of developing cancer.

Stapleton Quoted on House Dust Study

Duke University SRP Center project leader Heather Stapleton was quoted in a recent [Environmental Health Perspectives article](#) about chemicals in house dust. Stapleton commented on how certain chemicals in house dust may disrupt normal thyroid function. Her SRP-funded research focuses on how brominated and organophosphate flame retardants, which can be present in indoor dust, increase fat accumulation in the body.

Columbia SRP Center Highlights Long-term Challenges for Safe Drinking Water

Research from the Columbia University SRP Center was recently [highlighted](#) in Eos, a magazine from the American Geophysical Union. In Bangladesh, pumping in deeper aquifers has been implemented to reduce arsenic exposure from drinking water. However, in their 2020 [study](#), Columbia SRP Center researchers reported that the process of deep pumping from arsenic-free aquifers may not be safe in the long run and could lead to arsenic contamination from the overlying aquifer.

Chiu's Research Featured in Environmental Health Perspectives

Weihshueh Chiu, Decision Science Core leader at the Texas A&M University SRP Center, contributed to a study that was recently featured in an Environmental Health Perspectives [Science Selection article](#). The [SRP-funded study](#) found that the health benefits to local communities from remediation of a Superfund site may not outweigh the health risks to more distant communities and cleanup workers. Chiu was also recently featured in an NIEHS [Grantee Highlight](#).

SRP Trainees Find Link Between Climate and Arsenic Levels in Rice

Trainees at the Columbia University SRP Center recently quantified the complex effects of climate on arsenic accumulation in rice. They [reported a link](#) between arsenic levels in Cambodia and climate variance. Under the mentorship of Columbia SRP

CURRENT RESEARCH BRIEF

[SRP Research Brief 310](#): New Tool Monitors a Flame Retardant in Sediment (Bruce Hammock, University of California, Davis)

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).

Video summaries of the SRP Research Briefs are available on the [NIEHS Social Media Shorts YouTube page](#).

EVENTS

[PFAS in Our World: What We Know and What We Can Do](#)

October 13-14, 2020
Virtual Conference

[SRP Progress in Research Webinar Session I: Metals](#)

October 21, 2020
2-4 pm EDT

[SRP Progress in Research Webinar Session II: Legacy and Emerging Contaminants](#)

October 28, 2020
1-3 pm EDT

[SRP Progress in Research Webinar Session III: Vulnerable Populations](#)

November 9, 2020
2-4 pm EST

[Sixth Computational Approaches for Cancer Workshop](#)

November 15, 2020
Virtual Conference

[RDA 6th Plenary Meeting](#)

November 9-12, 2020
Virtual Conference

[SC20](#)

November 9-19, 2020
Virtual Conference

[SRP Progress in Research Webinar](#)

Center project leader Benjamin Bostick, they also identified ways to potentially decrease arsenic contamination in rice.

UNM Strategies to Protect Native American Health Highlighted in Eos

A recent [article in Eos](#) highlighted research at the University of New Mexico (UNM) SRP Center. Led by Center Director Johnnye Lewis, the team is exploring the use of zinc to protect the health of tribal communities exposed to uranium and other metals. Lewis commented on the need to consider the possible interaction of COVID-19 and metals exposure on health. The article also highlights the work of UNM artist in residence and member of Zuni Pueblo indigenous community, Mallery Quetawki, who uses Native American art and symbolism to communicate research findings from the UNM SRP Center.

SRP Trainees Quoted on PFAS

SRP trainees Anna Robuck and Charlotte Wagner with the University of Rhode Island SRP Center were quoted in a recent article on PFAS in [The Revelator](#). Robuck and Wagner explained how PFAS accumulate in the ocean environment and in wildlife. The article also featured North Carolina State University SRP Center researcher Jamie DeWitt, who explained how PFAS may harm the immune system.

TRAINEE SPOTLIGHT

Schmidlin Provides Insight into Toxicant's Link to Lung Tumors

University of Arizona (UA) SRP Center trainee Cody Schmidlin studies the role of the NRF2 signaling pathway in cancer development. NRF2 is a protein that regulates the expression of antioxidant proteins and protects against damage to cells.

Working with Associate Center Director Donna Zhang, Schmidlin studies the role of NRF2 in preventing cancer, as well as changes that can lead to cancer and its progression. Specifically, he is interested in how exposure to harmful pollutants may activate the NRF2 signaling pathway and trigger changes in cells that make cancer more aggressive.

"NRF2 is complex because it has both a light side and a dark side in cancer," said Schmidlin. "I want to explore how the NRF2 signaling pathway can be manipulated to improve cancer treatments."

For example, Schmidlin and others showed that NRF2 activation



[Session IV: Emerging Exposures](#)

November 19, 2020

2-4 pm EST

[2020 SRP Annual Meeting](#)

December 14-15, 2020

Virtual Conference

[FLUOROS 2021 Symposium](#)

October 3-6, 2021

Providence, Rhode Island

[SETAC 8th World Congress](#)

September 4-8, 2022

Singapore

[11th Conference on Metal Toxicity and Carcinogenesis](#)

October 17-20, 2021

Montreal, Canada

GET UPDATES FROM OTHER SRP GRANTEES

To see the latest SRP grantee publications, visit the [SRP Grantee 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 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

can be [protective against](#) oxidative stress and damage to skin caused by radiation treatment. On the other hand, in a [recent study](#), the UNM team reported that exposure to low levels of arsenic over a long period of time may trigger changes in the NRF2 signaling pathway leading to aggressive cancer. In the same study, they identified a molecular target within the NRF2 pathway that could increase the aggressiveness of cancer following arsenic exposure. According to Schmidlin, this study provides evidence that NRF2 is a useful target in cancer therapy.

In recognition for this study, Schmidlin received second place in the prestigious 2020 Carl C. Smith Award from the Mechanisms Specialty Section of the Society of Toxicology.

Away from the lab, Schmidlin enjoys working at a local high school, where he helps teach students in the marching band.

HOT PUBLICATION

Chronic Arsenic Exposure Linked to More Aggressive Cancers

Researchers from the UA SRP Center recently uncovered the mechanism by which exposure to [low levels of arsenic may lead to cancer](#). The team found that exposure to small concentrations of arsenic through contaminated groundwater over a long period of time may trigger changes in cells that make cancer more aggressive and more likely to spread to other organs of the body.

The team treated specialized lung cells with low levels of arsenic for three months and analyzed changes to normal cell processes and functions. They found that arsenic exposure increased the malignant transformation of cells, the process by which healthy cells become cancer cells, and increased their ability to spread throughout the body. These changes involved the NRF2 signaling pathway, which regulates the expression of antioxidant proteins that protect against cell damage triggered by injury and inflammation. While NRF2 activation is thought to protect against short term chemical exposure, according to the researchers, long-term arsenic exposure may promote changes that lead to more aggressive cancers.

The group further explored molecular targets that could reduce NRF2 activation and protect cells against arsenic exposure. By using cells lacking an important gene involved in the NRF2 pathway, called SOX9, they observed a drastic decrease in the types of cellular changes that led to cancer in their earlier experiments.

According to the authors, understanding the NRF2 mechanism may be useful in designing better therapies, such as those targeting SOX9, to treat aggressive lung cancers.

AWARD WINNERS

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.

UNM College of Pharmacy Receives New Center Funding

UNM SRP Center researcher Matt Campen received a [five-year Centers of Biomedical Research Excellence grant](#). UNM's new Center will research how metals – as contaminants, medicines, or nutrients – affect human health. The UNM SRP Center focuses on understanding how tribal communities are exposed to metals and how those exposures harm their health.

University of Kentucky Receives NSF Award

Researchers at the University of Kentucky (UK) received a large award from the [National Science Foundation \(NSF\)](#) to develop cutting edge data analysis tools. Led by UK SRP Center Data Management and Analysis Core co-leader Hunter Moseley, the team will develop new approaches to analyze metabolomics data, which represents all chemical break-down products and molecules of metabolism, in the body. They will also explore methods to integrate metabolomics data with other big data sets, like genomic data.

Zhang Receives Chau Hoi Shuen Foundation Award

University of California, Berkeley (UC Berkeley) SRP Center researcher Luoping Zhang received a [2020 Chau Hoi Shuen Foundation Award](#). The award supports educational and research projects submitted by UC Berkeley female faculty members who are engaged in collaborative research with female scientists in China. Zhang has long-term collaborations with researchers at the U.S. National Cancer Institute and the Chinese Center for Disease Control and Prevention to study human exposure to benzene, formaldehyde, and trichlorethylene in China.

Hornbuckle Receives Faculty Excellence Award

University of Iowa SRP Center Director Keri Hornbuckle received the 2019-2020 University of Iowa College of Engineering Faculty Excellence Award for Service. The award honors a faculty member for their leadership, research, and service to the community. Hornbuckle is internationally known for her work investigating sources, exposures, and toxicities of semi-volatile polychlorinated biphenyls.

Tanguay Recognized for Highly Cited Manuscript

Oregon State University SRP Center Director Robyn Tanguay's research group was recognized by Toxicology and Applied Pharmacology for having one of the most highly cited manuscripts published by the journal in recent years. Their [publication](#) showed that exposure to benzo[a]pyrene during development could alter brain development and behavior, and be transmitted to future generations.

Rana Recognized with Awards to Continue Graduate Education

UC Berkeley SRP Center trainee Iemaan Rana was recently

[awarded](#) the 2020 Gunther and Lee Weigel Medical School Scholarship issued by the Elks National Foundation to pursue an M.D. at the University of Illinois College of Medicine. She is also enrolled in the Ph.D. program at the UC Berkeley School of Public Health where she was awarded a Rosalie M. Stern Fellowship. Rana studies how exposure to environmental pollutants like formaldehyde and benzene may lead to cancer and other chronic diseases, she is mentored by Luoping Zhang.

WEBINARS AND TRAININGS

Federal Government Human Health PFAS Research Virtual Workshop

The National Academies of Sciences, Engineering, and Medicine will conduct a virtual workshop **October 26-27** to review federal government human health research on PFAS and to identify research and data gaps. This two-day virtual workshop will address the state of the science and ongoing federal research regarding exposure to PFAS, toxicology studies, and cross-cutting issues, such as mixtures and class-based approaches.

This event is free to attend via Zoom. Those who [register](#) will also have the opportunity to submit suggested research needs or data gaps for consideration as input to the workshop.

FUNDING OPPORTUNITIES

NIEHS Releases Request for Applications for SRP Multiproject Center Grants

NIEHS released the latest request for applications for the SRP Multiproject Center Grants, [RFA-ES-20-014](#). SRP Center grants will support problem-based, solution-oriented research centers that consist of multiple, integrated projects. Projects will represent both the biomedical and environmental science and engineering disciplines, as well as cores tasked with administrative (which includes research translation), data management and analysis, community engagement, research experience and training coordination, and research support functions. Letters of intent are due **January 15, 2021** and applications are due **February 15, 2021**. For more information, refer to the [Multiproject Center Grant Funding Opportunities](#) page. A [recorded archive](#) of the October 1 informational webinar is available.

NIH Opportunities to Support COVID-19 Research

[Notice of Special Interest \(NOSI\): NIEHS Support for Understanding the Impact of Environmental Exposures on COVID-19](#) for mission-relevant research to understand the impact of environmental exposures on COVID-19 and its causative agent, SARS-CoV-2. The next due date is **November 2**, with subsequent due dates at the beginning of each month until **May 3, 2021**.

[Community Interventions to Address the Consequences of the](#)

[COVID-19 Pandemic among Health Disparity and Vulnerable Populations \(R01- Clinical Trial Optional\)](#) encourages research with NIH-designated health disparity populations and other vulnerable groups on community interventions to address the adverse effects of SARS-CoV-2 and COVID-19. Applications are due **December 1**.

MOSAIC K99/R00 Program

NIEHS has signed on to the [Maximizing Opportunities for Scientific and Academic Independent Careers \(MOSIAC\)](#) program announcement led by the National Institute of General Medical Sciences. This is a K99/R00 program for postdoctoral fellows and trainees from diverse backgrounds. The program is part of NIH's efforts to enhance diversity within the academic biomedical research workforce and is designed to facilitate the transition of promising postdoctoral researchers from diverse backgrounds. In addition to the K99/R00 award, MOSAIC scholars will be part of organized scientific cohorts and will be expected to participate in mentoring, networking, and professional development activities coordinated by MOSAIC Institutionally Focused Research Education Award to Promote Diversity (UE5) grantees. Applications are due **October 12**.

Virtual Consortium for Translational/Transdisciplinary Environmental Research (ViCTER) (R01 Clinical Trial Optional)

The purpose of the updated ViCTER program is to foster and promote early-stage transdisciplinary collaborations and translational research efforts among fundamental, clinical, and population-based researchers in the environmental health field. The newly established collaborative teams will come together to investigate potential links between human health and one or more environmental stressors. The ViCTER program is intended to support innovative high-risk, high-reward cross-disciplinary and/or translational research projects that are more difficult to achieve in a typical R01 application. Collaboration among investigators at different institutions through a virtual consortium arrangement are encouraged. See the [Funding Opportunity Announcement \(RFA-ES-18-007\)](#) for more information. Applications are due **December 1**; a letter of intent is due 30 days prior to the application due date.

Environmental Influences on Aging: Effects of Extreme Weather and Disaster Events

Two complementary funding opportunities aim to clarify the behavioral, biological, epigenetic, genetic, neurological, and socioecological processes that affect the aging process:

- [Effects of Extreme Weather and Disaster Events on Aging Processes \(R01 Clinical Trial Not Allowed\)](#) supports research exploring the impacts of extreme weather and disaster events on the basic biology of aging. Applications are due **November 9**; a letter of intent is due 30 days prior to the application due

date.

- [Effects of Extreme Weather and Disaster Events on Aging Populations \(R01 Clinical Trial Optional\)](#) supports research to advance our understanding of the impact of extreme weather and disaster events in aging human populations. Applications are due **November 9**; a letter of intent is due 30 days prior to the application due date.

The goal of these companion funding opportunities is to improve the health and well-being of older adults via increased knowledge about extreme weather and disaster preparedness, response, and recovery.

Research to Action: Assessing and Addressing Community Exposures to Environmental Contaminants (R01 Clinical Trial Optional)

This [funding opportunity](#) encourages multidisciplinary projects to investigate the potential health risks of environmental exposures of concern to a community and to implement an environmental public health action plan based on research findings. Projects supported under this program are expected to use community-engaged research methods to not only conduct research but also to translate research findings into public health action. The Research to Action program is part of the NIEHS Partnerships for Environmental Public Health network. Visit the [Research to Action Currently Funded Grantees webpage](#) for a sense of the types of projects supported through the program. Applications are due **December 4**.

Biomedical Knowledgebase (U24 – Clinical Trials Not Allowed)

The funding opportunity announcement for [Biomedical Knowledgebase \(U24 – Clinical Trials Not Allowed\)](#) has been published. The next application due date is **January 25, 2021**.

This funding opportunity supports biomedical knowledgebases with the primary function to extract, accumulate, organize, annotate, and link growing bodies of information related to core datasets. Support for data curation should include efficient and effective methods that scale to the needs of the community and include semi-automated methods. Support for software and tool development must be limited to that which provides essential functions or significantly increases the efficiency of operation of the knowledgebase. Applications that have a significant focus on software or tool development are not appropriate for this activity.

Biomedical Data Repository (U24 – Clinical Trials Not Allowed)

The funding opportunity announcement for [Biomedical Data Repository \(U24 – Clinical Trials Not Allowed\)](#) has been published. The next application due date is **January 25, 2021**.

This funding opportunity is designed to support biomedical data

repositories with the primary function to ingest, archive, preserve, manage, distribute, and make accessible the data related to a particular system or systems. Support for data curation must be limited to that which improves the efficiency and accessibility of data ingestion, management, and use and reuse by the user communities. Support for software and tool development must be limited to that which provides essential functions or significantly increases the efficiency of operation of the repository.

Applications that have a significant focus on software and tool development are not appropriate for this activity.

INTERAGENCY NEWS

2020 NIH Virtual Seminar on Program Funding and Grants Administration

The 2020 NIH Virtual Seminar on Program Funding and Grants Administration provides a unique opportunity to learn about the NIH grants process, programs, and policies directly from NIH and Department of Health and Human Services experts. This event is intended to help demystify the application and review process, clarify federal regulations and policies, and highlight current areas of special interest or concern. The seminar will be held **October 27-30**. Visit the [seminar webpage](#) for more information and to register.

National Library of Medicine Strategic Planning

The National Library of Medicine (NLM) requests guidance on the implementation of their [strategic plan](#) through 2027. To assure that implementation of the plan remains current, NLM issued a [Request for Information](#) to solicit public comment on major opportunities or challenges relevant to the NLM mission that have arisen or become significantly more important in the last five years. Responses must be received by **October 19**.

National Children's Study Biological and Environmental Samples Now Available

Biological and environmental sample materials from the National Children's Study (NCS) Vanguard are now available for secondary research use. NCS Vanguard was a pilot for a planned cohort study of environmental influences on child health and development. The study enrolled over 14,000 participants throughout the U.S. and followed them for five years. It collected nearly 19,000 biological and 5,500 environmental samples. Biological samples include blood, urine, saliva, breast milk, and vaginal swabs. Environmental samples include dust, indoor air, infant formula, and water.

Sample materials can be [requested](#) through the Eunice Kennedy Shriver National Institute of Child Health and Human Development's [Data and Specimen Hub](#). Samples are available in limited quantities and for a limited time. See the Notice ([NOT-HD-20-018](#)) for more information.

Brown University SRP Uses Flood Factor Database

Researchers at the Brown University SRP Center were awarded academic research access to [First Street Foundation's Flood Factor Database](#). Their project will integrate historical contaminant and flooding data in six cities to assess neighborhood social vulnerability to flood risk and hazardous exposures. The team, including Scott Frickel and Tom Marlow, plans to use this as pilot data for a larger project that will model flooding and study how chemicals move in the environment and how people may be exposed.

The TRUST Principles for Digital Repositories

Following a year-long public discussion and consensus among experts, stakeholders across the digital repository community collaboratively [developed a set of guiding principles](#) to demonstrate the trustworthiness of digital repositories. The TRUST (Transparency, Responsibility, User focus, Sustainability and Technology) Principles provide a common framework to discussing and implementing sound data stewardship.

New Study: What Drives and Inhibits Researchers to Share and Use Open Source Data?

A new [systematic review](#) discusses individual researcher's drivers and inhibitors for both sharing and using open research data. According to the authors, the study serves as a first vital step towards developing effective incentives for both open data sharing and use behavior.

International FAIR Convergence Symposium

The [International FAIR Convergence Symposium](#) will now take place as a fully virtual event from **November 30 – December 4**. The symposium will provide a forum for advancing international and cross-domain convergence around FAIR – Findability, Accessibility, Interoperability, and Reusability – data principles. The event will bring together a global data community with an interest in combining data across domains for a host of research issues, including major global challenges, such as those relating to the Sustainable Development Goals or the COVID-19 pandemic. Outcomes will directly link to the CODATA Decadal Programme, “Data for the Planet: Making Data Work for Cross-Domain Grand Challenges,” and to the bottom-up developments of the GO FAIR community towards the Internet of FAIR data and services.

Participation is open to all researchers and data experts, particularly those with an interest in participating in the CODATA Decadal Programme and in the GO FAIR community. The deadline for poster abstracts is **October 31**.

The [International Conference for High Performance Computing, Networking, Storage, and Analysis](#) (SC20) will be a fully virtual conference in November this year. The conference is designed to share best practices in areas such as algorithms, applications, architectures and networks, clouds and distributed computing, machine learning, system software, and state of the practice in large-scale deployment and integration. It will also cover data analytics, visualization, and storage. Early registration closes **October 19**.

Computational Approaches for Cancer Workshop

The National Cancer Institute Center for Biomedical Informatics and Information Technology and SC20 have announced the [Sixth Computational Approaches for Cancer Workshop](#). The workshop is designed to bring together clinicians, cancer biologists, mathematicians, data scientists, computational scientists, engineers, developers, thought leaders, and anyone else interested in advancing computation to use in cancer care and research.

A special emphasis for the workshop is the role of high-performance computing and artificial intelligence to address research challenges when data are limited by availability, variability, and size. The workshop will be held in conjunction with SC20 on **November 15**.

RDA 16th Plenary Meeting

The [16th Plenary meeting of the Research Data Alliance](#) (RDA) will take place **November 9-12**. With the theme "Knowledge Ecology," the event is co-organized by CONARE Costa Rica, RDA United States, and Research Data Canada. The virtual plenary meeting will provide attendees the opportunity to remotely attend plenary sessions, participate in multiple breakout sessions, attend poster sessions, and collaborate with attendees. The deadline to submit posters is **October 23**.

HHEAR is Accepting Applications

Applications are being accepted for the [Human Health Exposure Analysis Resource \(HHEAR\)](#) program, which provides health researchers access to laboratory and data analysis services to expand assessment of environmental exposures in their existing NIH-funded epidemiological and clinical health studies.

To [check your eligibility](#), visit the program website. SRP grantees are eligible for targeted and untargeted analysis of environmental samples, and untargeted analysis of biological samples.

To apply to HHEAR, visit the [How to Apply](#) page. The next submission deadline is **October 30**. For questions related to the application process, contact HHEARHelp@Westat.com

You can learn more about HHEAR's goals, application processes, and laboratory and data analytic capabilities through the [NIEHS](#)

[Exposure Science and the Exposome Webinar Series on HHEAR](#). You can access the webinar archive on the [Seminar Series YouTube Channel](#). If you have any questions regarding the information shared in the webinar series, please contact Michelle Heacock (heacockm@niehs.nih.gov).

PHOTO OF THE MONTH



Researchers from the Duke SRP Center and North Carolina State University have teamed up to examine PFAS contamination in North Carolina. The research team deployed passive sampling devices at six locations along the Cape Fear River to test for PFAS and other contaminants to inform later studies in fish. (Photo courtesy of the Duke University SRP Center)