

# Superfund Research Program e-Posted Notes

April 9, 2021 (Issue 207)

## HEADLINES

### Save the Date! SRP Annual Meeting

The 2021 SRP Annual Meeting will be held **December 15-17 in Raleigh, North Carolina**. The University of North Carolina at Chapel Hill and the North Carolina State University SRP Centers will co-host the event. Additional details will be shared soon!

### SRP Science Digest Features Newly Funded SRP Centers

The most recent [SRP Science Digest](#) is live! This issue highlights multidisciplinary and innovative work of newly-funded SRP Multiproject Centers to address complex environmental health problems, as well as SRP staff and grantees involvement to advance research translation to multiple stakeholders and organizations.

### ATSDR Launches a New Community Stress Resource Center

The Agency for Toxic Substances and Disease Registry (ATSDR) has been working to better understand and develop resources to address the psychological and social impacts associated with living in a community affected by long-term environmental contamination. The agency launched the [ATSDR Community Stress Resource Center](#).

Life in a community experiencing long-term environmental contamination can be stressful for many reasons, including uncertainty, health and financial concerns, and feelings of powerlessness. While it is normal for community members to feel stress in these situations, chronic or sustained stress can pose health risks on top of those related to environmental exposures.

The resource center is aimed at helping public health professionals reduce community stress and build resilience through their work with community members, community-based organizations, and clinicians facing environmental contamination. It contains a new “3 Keys Framework: Recognize, Prepare, Partner” – and over 40 diverse resources for achieving the framework’s objectives. The resource center offers guidance to understand, prevent, and address problems that cause stress, but not specific interventions.

## EMPLOYMENT OPPORTUNITIES

### University of Rochester Seeks Postdoctoral Fellow

The Department of Biostatistics and Computational Biology at the University of Rochester has announced an opening for a postdoctoral traineeship in Environmental Health Biostatistics, funded by an [NIEHS T32 training grant](#). The post-doc will participate in community engaged research related to understanding and addressing environmental health problems. The successful candidate should be available to start prior to **June 30** and have a doctoral degree in biostatistics, epidemiology, computational biology, data science, environmental health, or a related field. For more information, please see [the job description](#).

### University of Cincinnati Seeks Research Scientist or Post Doc Fellow

The University of Cincinnati has an opening for a post-doc or post-master research scientist with a background in toxicology, biology, epidemiology, or other related field to participate in diverse projects on organic flame retardants, nanomaterials, and other industrial chemicals. For more information and to apply, please see the [post-doc fellow job description](#) or the [research scientist job description](#).

### US EPA Seeks Environmental

Explore the Community Stress Resource Center to:

- **Learn the science** about the connection between environmental contamination and stress-related health risks.
- **Take action** by recognizing, preparing, and partnering to reduce community stress and build resilience as part of public health responses to environmental contamination.
- **Find resources** to help you achieve the objectives of the 3 Keys framework. The toolkit contains over 40 practice-oriented resources!

We hope you will take the opportunity to check out the resource center to learn how these resources can support your work! Please contact ATSDR at [ATSDRStress@cdc.gov](mailto:ATSDRStress@cdc.gov) with any questions.

### FRTR Spring 2021 Meeting

Save the Date! The Spring 2021 Meeting of the [Federal Remediation Technologies Roundtable \(FRTR\)](#) will be held as a two-part virtual public webinar **May 19 and May 26, 1-3:30 p.m. ET**. The spring 2021 webinars will feature the topic: FRTR at 30 Years: Grand Challenges and Opportunities for Advancing Remediation Technologies. The meetings will include panel discussions by senior leaders of federal and state agencies, exploring the current state of remediation technologies and how to accelerate application of new technologies. To register, please see the [Session I](#) and [Session II](#) registration pages. More information will be posted on the [FRTR meeting page](#) as it becomes available.

### Save the Date: SRP Risk Communication Workshop

The SRP will hold a virtual workshop focused on Risk Communication Strategies to Reduce Exposures and Improve Health **June 21-22**. We are working to put together an exciting lineup of speakers and we encourage you to save the dates!

This workshop will be open to SRP grantees and partners. The focus of the meeting will be on effective risk communication strategies in the context of Superfund-related hazardous substances. We expect to have presentations by SRP grantees as well as risk and health communication experts outside of the program. More information is coming soon.

## IN THE NEWS

### NIEHS SRP News Stories

Take a moment to read about some of our colleagues' latest activities in this month's [Environmental Factor](#), the NIEHS newsletter:

- [Data science paves the way with new tools, insights for SRP](#): The NIEHS SRP held its first External Use Case Showcase.

## Engineer

The US EPA Office of Land and Emergency Management has an opening for an Environmental Engineer. Qualifications may include engineering experience supporting the implementation of remedial technologies at oil and hazardous waste contaminated sites; using techniques and equipment to characterize site contaminants; presenting to regions or other officials on appropriate remediation technologies to clean up contaminated sites. Application deadline is **April 21**. For more information and to apply, please see the [job description](#).

## CURRENT RESEARCH BRIEF

[SRP Research Brief 316](#): Arsenic Exposure Before Conception May Trigger Diabetes in Male Offspring. (Rebecca Fry and Miroslav Styblo, University of North Carolina at Chapel Hill)

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](mailto:heacockm@niehs.nih.gov)).

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

## EVENTS

[Best Practices for Community-Engaged Research for Environmental Health: Exploring Strategies for More Meaningful Engagement](#): Resources for Communities

Grantee Event: Sponsored by the Louisiana State University SRP Center  
April 13, 2021  
Virtual Seminar

Over 140 participants joined the meeting to share experiences and recommendations about integrating datasets from SRP-sponsored research.

- [Extramural Paper of the Month: New study sheds light on TCE bioremediation](#): NIEHS-funded researchers demonstrated that natural microbial communities amended with acetylene can break down chlorinated contaminants, and in the process, they discovered a new bacteria species.

Visit the SRP page for more stories about the program:

- [SRP Grantees Share Innovative Science at Microbiome Conference](#): In an NIEHS virtual symposium, held February 23-24, SRP grantees were well represented within the broader NIEHS community, sharing their efforts to understand the relationship between environmental exposures, the microbiome, and human health.

### **SRP Grantees and Staff Comment on the Environment, COVID-19, and Children's Health**

SRP Director, Bill Suk, and SRP Health Specialist, Brittany Trotter, collaborated with several SRP grantees in a [recent commentary](#) about the interactions between environmental exposures and COVID-19 on the health of children. The group of researchers identified knowledge gaps in the epidemiological link between air pollution and COVID-19 infection in children, who seem to be less affected by the virus than adults. The team also developed a transdisciplinary research strategy to address these gaps. According to the researchers, lessons learned about COVID-19 in children will help us to understand and reduce disease severity in adults.

### **MIT Research in the News**

A [recent publication](#) by researchers from the Massachusetts Institute of Technology (MIT) SRP Center was featured in a [Medical News article](#) and a [CBS newscast](#). The study uncovered a mechanism that helps explain whether exposure to drinking water contaminant N-Nitrosodimethylamine, or NDMA, leads to cancer in mice. The team found that low activity of one enzyme necessary for DNA repair leads to increased cancer rates. However, too much activity of the enzyme produces tissue damage, particularly in the liver.

### **Fry Gives Q&A on Arsenic Pollution**

University of North Carolina at Chapel Hill (UNC) SRP Center Director, Rebecca Fry was highlighted in a [Knowable Magazine Q&A article](#) on battling arsenic pollution. Fry spoke with the magazine about recent discoveries and emerging strategies for reducing the threat to human health resulting from arsenic exposure.

### **Zychowski Quoted on COVID-19**

University of New Mexico (UNM) SRP Center researcher

#### [Seminars in Environmental Justice:](#)

OOD Production, Toxic Trespass and Environmental Justice  
Grantee Event: Sponsored by the University of California Berkeley  
SRP Center  
April 16, 2021  
Virtual Seminar

#### [Seminars in Environmental Justice:](#)

Climate Change and EJ:  
Implications for Adaptation and Mitigation Strategies  
Grantee Event: Sponsored by the University of California Berkeley  
SRP Center  
April 30, 2021  
Virtual Seminar

#### [Federal Remediation Technologies Roundtable \(FRTR\) Spring 2021 Meeting: FRTR at 30 years Session 1 Grand Challenges](#)

May 19, 2021  
Virtual Seminar

#### [Federal Remediation Technologies Roundtable \(FRTR\) Spring 2021 Meeting: FRTR at 30 years Session 2 Advancing New Technologies](#)

May 26, 2021  
Virtual Seminar

#### [2021 High-Risk, High-Reward Research Symposium](#)

High-Risk, High-Reward Research Program's Pioneer, New Innovator, Transformative Research, and Early Independence award recipients share groundbreaking research and discoveries.  
June 9-11, 2021  
Virtual Symposium

#### [SRP Risk Communication Workshop](#)

June 21-22, 2021  
Virtual

#### [FLUOROS 2021 Symposium](#)

Sponsored by the University of Rhode Island SRP Center  
October 3-6, 2021  
Providence, Rhode Island

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

Katherine Zychowski was interviewed on their research on metals and environmental exposures for an [Albuquerque Journal news article](#). They reported that air pollution and environmental exposures, in addition to pre-existing health conditions, may be contributing factors to COVID-19 severity and mortality.

### Lohman Talks PFAS and 5G

Rainer Lohmann, director of the University of Rhode Island (URI) SRP Center, was quoted in a [Bloomberg Law article](#) about the use of per- and polyfluoroalkyl substances (PFAS) to help equipment deliver data in 5G's specific radio wave frequency. He stated that PFAS chemicals can get released during the production of 5G equipment or years later when materials containing them degrade.

### Duke Researchers Highlighted in The Atlantic

Research led by Duke University SRP Center Director Richard Di Giulio and other center researchers was featured in an article in [The Atlantic](#). The piece highlights work done by the Di Giulio lab to understand how Atlantic Killifish in the Elizabeth River area of Virginia adapted to high levels of pollution. The story also features Joel Meyer, Melissa Chernick, and Lindsay Jasperse from the Duke SRP Center.

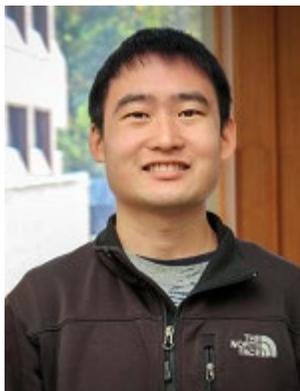
### Horney Co-Authors Commentary

Jennifer Horney, Texas A&M University (TAMU) SRP CEC co-investigator, co-authored a [commentary in Bay to Bay News](#). The article discussed challenges and outlooks surrounding COVID-19 inoculations and critical takeaways of the Johnson & Johnson vaccine's clinical trial data. Horney works with TAMU SRP CEC to improve the adaptive capacity of communities to plan for and manage environmental risks associated with disaster events, such as hurricanes and chemical spills.

## TRAINEE SPOTLIGHT

### Su Reflects on Research and Expanding Diversity

Anthony Su is a former doctoral student at the University of Michigan (UM) and a former Northeastern SRP Center trainee under project leader Rita Loch-Carusio. Su's SRP research sought to understand the mechanisms of trichloroethylene (TCE) toxicity during pregnancy. TCE is a volatile organic compound used as a metal degreasing agent and is a common groundwater contaminant at Superfund sites.



In a recent [NIEHS-funded study](#), Su and co-authors showed how

October 17-20, 2021

Montreal, Canada

SRP Annual Meeting

December 15-17, 2021

Raleigh, NC

[SETAC 8th World Congress](#)

September 4-8, 2022

Singapore

## 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 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.

changes to TCE metabolism can have adverse effects on reproductive toxicity, like decreased fetal weight. The researchers explored how molecules involved in metabolism can modify the response to TCE toxicity. Su suggests these findings reveal novel tissue-specific and cell-specific knowledge that will inform future experiments to advance the understanding of TCE toxicity during pregnancy.

Su is interested in this work because some studies in humans have linked TCE exposure with adverse pregnancy outcomes and cancer. He finds it particularly interesting how metabolism changes can impact toxicity and appreciates how TCE metabolism can depend on factors such as sex, species, tissue, and lifestyle choices. According to Su, this means that some amount of TCE toxicity may be avoidable.

Su served on both the UM Environmental Health Sciences departmental and school-wide Diversity, Equity, and Inclusion (DEI) committees, and was recently honored with the [2020 Feingold Excellence in Diversity Award](#). Su feels a responsibility to apply his skill set in DEI so more individuals and programs can benefit and to ensure a safe, hospitable atmosphere to learn and work in, which is a defining feature of public health.

Su is now a postdoctoral researcher at the University of Pennsylvania and is investigating the role of enzymes in the chemical transformation of diesel exhaust constituents.

Aside from his research, Su likes to run, hike, swim, and play tennis, badminton, and piano. He enjoys classical music, is a nature enthusiast, and likes spending time at National Parks and other scenic places.

## HOT PUBLICATION

### **Understanding the Role of the Gut in Adaptations to Environmental Pollutants**

In a [recent publication](#), Duke SRP Center researchers found differences in the gut microbiomes of fish from a polluted river that have developed resistance to polycyclic aromatic hydrocarbons (PAHs) compared to fish from a cleaner section of the river that do not have PAH-resistance. These shifts were mirrored by metabolic differences in the two groups of fish.

The Atlantic Wood Superfund Site in the Elizabeth River is heavily contaminated with PAHs, highly toxic contaminants that can harm humans as well as fish. Remarkably, Atlantic killifish in the site have adapted over time to resist the effects of PAH exposure.

The research team collected PAH-adapted adult killifish from the Atlantic Wood Superfund Site and non-adapted fish from King's Creek, another site in the river where PAH levels are much lower.

The researchers measured 163 biological molecules in fish gut that are important in metabolism and identified several differences

between the two groups. For example, PAH-resistant fish had lower levels of tryptophan, amino acids that regulate energy and protein synthesis, and higher levels of spermidine, molecules that protect against oxidative stress. Fish in the contaminated site also had increased levels of sphingolipids, a class of lipids that provide structural function to the cell and protection from harmful environmental factors.

Additionally, the authors analyzed bacteria in fish gut samples to investigate how the microbiome might be linked to shifts in metabolism. They observed lower bacterial species richness and diversity in the gut of fish from the more contaminated site. Specifically, PAH-resistant fish had reduced levels of sphingolipid containing bacteria. The team suggests the potential relationship between bacteria and sphingolipids and the impact of the fish metabolism in regulating sphingolipids needs to be further investigated.

According to the authors, these findings indicate the gut may play an important role in how some animals adapt to contamination. In future work, the researchers suggest exploring the complex dynamics between metabolites and the gut microbiome.

## AWARD WINNERS

### **UC Berkeley Trainee Recognized Among the 40 Under 40 Leaders in Minority Health**

University of California (UC), Berkeley postdoctoral trainee Jamaji Nwanaji-Enwerem, was named among the [40 Under 40 Leaders in Minority Health](#) for 2021 by the National Minority Quality Forum. This award recognizes minority health leaders under the age of 40 working towards building sustainable healthy communities and reducing health disparities. The winners will receive their awards during the forum's 2021 Annual Summit on April 26-27. Nwanaji-Enwerem is mentored by Andres Cardenas.

### **Sunderland Recognized as One of the World's Most Cited Researchers**

University of Rhode Island (URI) SRP project lead Elsie Sunderland was recognized as a [Web of Science Highly Cited Researcher for 2019 and 2020](#). This annual list includes researchers from around the world who have had multiple highly cited papers in the top one percent of citations of their field. Sunderland also leads a project at the Harvard SRP Center.

### **SRP Researchers Shine at SOT**

Several SRP trainees and grantees received awards during the 2021 Society of Toxicology (SOT) Annual Meeting:

- UNC SRP Director [Rebecca Fry](#) received the Translational Impact Award.
- UNM SRP Director Johnnye Lewis received the Public Communications Award.

- UNM SRP trainee Lindsay Volk was awarded first place for the Carcinogenesis Specialty Section Award for her work on the inhibition of Rad18 by arsenic.
- A [recent publication](#) by UNC SRP researchers won the Paper of the Year award at the Occupational and Public Health Specialty Section.
- A [publication](#) by TAMU SRP trainee, Chimmedulam Dalajamts, won the Best Paper award at the Biological Modeling Specialty Section.

## FUNDING OPPORTUNITIES

### Understanding and Addressing the Impact of Structural Racism and Discrimination on Minority Health and Health Disparities

The National Institute on Minority Health and Health Disparities, with other NIH Institutes, Centers and Offices is soliciting applications for (1) observational research to understand the role of structural racism and discrimination in causing and sustaining health disparities, and (2) intervention research that addresses structural racism and discrimination to improve health in minority populations or reduce health disparities. A funding opportunity announcement is expected to be published in April with an expected application deadline in **August 2021**. For more information, see the [Notice of Intent to Publish \(NOITP\)](#) for this funding opportunity. Please contact Lindsey Martin ([lindsey.martin@nih.gov](mailto:lindsey.martin@nih.gov)) if you have any questions.

### Human Health Exposure Analysis Resource (HHEAR) Program

Applications are being accepted for the HHEAR program, which provides health researchers access to laboratory and data analysis services to expand assessment of environmental exposures in their existing NIH-funded studies. Past and present SRP grantees with ongoing studies can apply for no cost targeted and untargeted analysis of environmental samples, and untargeted analysis of biological samples. For more information and to check your eligibility, visit the [program website](#) or see the [recorded archive](#) of the NIEHS Exposure Science and the Exposome Webinar Series on HHEAR. To apply, visit the [How to Apply](#) page. The next submission deadline is **May 14**. For questions related to the application process, contact [HHEARHelp@Westat.com](mailto:HHEARHelp@Westat.com). If you have any questions about the HHEAR program, please contact Michelle Heacock ([heacockm@niehs.nih.gov](mailto:heacockm@niehs.nih.gov)).

### Telomere Network Analysis Awards

The [Telomere Research Network](#), sponsored by the NIEHS and National Institute on Aging, is seeking proposals from early-stage investigators who are interested in joining the network. The Telomere Research Network is dedicated to facilitating collaboration between scientists across disciplines to promote the

science on telomere length as a predictor of environmental exposure, psychosocial stress, and disease susceptibility. This funding opportunity will support at least five projects that address scientific gaps in relation to telomere length as it applies to epidemiological research. Awardees will receive a \$4,000 honorarium, mentorship from telomere measurement experts, and access to high level statistical consultation as needed. Proposals are due **April 15** and should be submitted as a single PDF to [telomerenetwork@gmail.com](mailto:telomerenetwork@gmail.com). If you have any questions, please email Elissa Epel ([elissa.epel@ucsf.edu](mailto:elissa.epel@ucsf.edu)) or Stacy Drury ([sdrury@tulane.edu](mailto:sdrury@tulane.edu)).

### **RADx-UP Coordination and Data Collection Center Community Collaboration Mini-Grants and Rapid Pilots**

To further support communities across the nation who are confronting COVID-19, the RADx-UP Coordination and Data Collection Center (CDCC) is soliciting applications for two kinds of awards. The [RADx-UP CDCC Community Collaboration Mini-Grant Program](#) is open to community-serving organizations, faith-based organizations, and tribal nations and organizations to help advance capacity, training, support, and community experience with COVID-19 testing initiatives. The [RADx-UP CDCC Rapid Research Pilot Program](#) is also open to universities and non-profits both within and outside of the RADx-UP network and will support the implementation of novel or emerging testing technologies in communities. The deadline for the application is **April 16**. Application instructions and a communication kit to spread the word about these opportunities throughout your networks are [available here](#).

### **NSF Center for Advancement and Synthesis of Open Environmental Data and Sciences**

NSF seeks to establish a Center to accelerate scientific innovations and discoveries in environmental biology through the use of data-intensive approaches, team science, and research networks. The new Center will further enable data-driven discovery through immersive education and training experiences to provide the advanced skills needed to maximize the scientific potential of large volumes of available open data. Higher education institutions and non-profit research organizations are invited to apply. Preliminary proposals are due **April 29**. For more information, and to apply see the [NSF program solicitation](#).

### **NHLBI Opportunities for Predictive Analytics**

The [National Heart, Lung, and Blood Institute \(NHLBI\)](#) announced the following funding opportunity and Notice of Special Interest: [Use of Predictive Analytics to Accelerate Late-Stage Implementation Research to Address Heart, Lung, Blood, and Sleep Disorders](#). The purpose of this solicitation is to leverage existing data resources using predictive analytics implementation research to inform and test the designs of implementation strategies for heart, lung, blood, and sleep (HLBS) conditions.

NHLBI also encourages applications with a focus on the development of advanced modeling techniques and data reporting, which would be publicly available and used to inform implementation strategies to address HLBS conditions. Applications are due **May 25**.

### **NIH Support for Research Excellence**

NIH released several notices announcing a new program opportunity titled Support for Research Excellence (SuRE). SuRE is a research capacity building program designed to develop and sustain research excellence in higher education institutions that receive limited NIH research support and serve students who are underrepresented in biomedical research. The following notices are being provided with the intent to allow potential applicants sufficient time to develop meaningful collaborations and projects: [NOT-GM-21-003](#); [NOT-GM-21-008](#); [NOT-GM-21-009](#). More information will be released through a Funding Opportunity Announcement in early spring 2021 with an expected application due date in early **fall 2021**.

### **Smart Health and Biomedical Research in the Era of Artificial Intelligence and Advanced Data Science**

NIH announced a collaboration with the NSF on an interagency funding opportunity, [Smart Health and Biomedical Research in the Era of Artificial Intelligence and Advanced Data Science](#). The solicitation aims to address technological and data science challenges that require fundamental research and development of new tools to address pressing questions in the biomedical and public health communities. Traditional disease-centric medical, clinical, pharmacological, biological, or physiological studies and evaluations are outside the scope of this solicitation. Applications are due **November 10**. For more information, refer to the [NSF Smart Health website](#).

### **GeoHealth Program**

The Fogarty International Center, in partnership with the National Cancer Institute, the National Institute on Aging, the NIEHS, and the NIH Office of Research on Women's Health, has reissued two Funding Opportunity Announcements (FOAs) for the Global Environmental and Occupational Health (GEOHealth) program. These FOAs invite new and renewal applications to support institutions based in low- or middle-income countries.

- [RFA-TW-21-001](#): Hubs of Interdisciplinary Research and Training in Global Environmental and Occupational Health (GEOHealth) – Research (Collaborative U01 Clinical Trial Optional). Applications are due **July 8**.
- [RFA-TW-21-002](#): Hubs of Interdisciplinary Research and Training in Global Environmental and Occupational Health (GEOHealth) – Research Training (Collaborative U2R Clinical Trial Optional). Applications are due **July 8**.

The purpose of the GEOHealth program is to support a global

network of hubs that serves as a platform for coordinated research and training activities in environmental and occupational health in low- and middle-income countries. For additional information, see the [GEOHealth program page](#).

## INTERAGENCY NEWS

### National Library of Medicine Seeks Comments on Use of Common Data Elements

The National Library of Medicine (NLM) recently released a Request for Information ([NOT-LM-21-005](#)) on the use of Common Data Elements in research funded by the NIH. NLM is especially interested in the use of Common Data Elements in the context of research on COVID-19. These comments will be used to inform NIH's continuing development of guidance on Common Data Elements used for COVID-related research. [Responses](#) are due **May 10**. For more information, see this [blog post](#) by the NIH's Deputy Director for Extramural Research.

## DATA SCIENCE AND DATA SHARING

### TAMU SRP Develops Approach to Monitor the Mobility of Contaminants After Floods

In a [recent publication](#), TAMU SRP researchers developed a method to monitor toxic substances releases during flood events. Their approach combines the Toxics Mobility Inventory and spatial analysis to identify and visualize the risk of hazardous contaminants releases and mobility to better target solutions.

### UK SRP Releases Python Package to Make Metabolomics Data FAIR

University of Kentucky (UK) SRP researchers implemented a [Python library and package](#) to improve the accessibility, reusability, and interoperability of data and metadata from the utilization of the Metabolomics Workbench Data Repository. The source code and other documentation are publicly available on GitHub and via the Python Package Index.

### Call for Contributions: ICBO 2021

The International Conference on Biomedical Ontologies (ICBO) will be held **September 15-18** in Bozen-Bolzano, Italy, accompanied by live streaming and virtual participation. ICBO is an annual conference that brings together researchers, students and professionals involved in the development and application of ontologies, knowledge graphs, and semantic technologies in all areas of scientific research. ICBO 2021 is soliciting submissions of novel research papers in all areas of ontology design, development, evaluation, and use. In addition, ICBO invites contributions showcasing methods for ontology-based research, and contributions addressing the challenges associated with working with multiple ontologies at the same time. For more information, please see the [ICBO 2021 website](#).

## Request for Proposals: Health Disparities Codeathon

The National Institutes of Health Office of Data Science Strategy, in partnership with the Howard University Research Centers for Minority Institutions Program, will host a codeathon focused on health disparities on **June 21-24**. The purpose of this event is to explore building analysis and visualization techniques on topics relating to health disparities, such as metabolic syndrome, maternal morbidity, or COVID-19 disparities. They are interested in proposals for pipelines and analysis of large-scale public health datasets, data interoperability, and using machine learning techniques. Proposals are due **April 26**. For proposal submission instructions and more information, see the [full announcement](#).

## PCD Looking to Publish Papers on GIS and COVID-19

Preventing Chronic Disease (PCD) is accepting submission for an upcoming collection highlighting how spatial analysis and techniques can be applied to research and public health practice, addressing the intersection of chronic disease and COVID-19. Interested authors are encouraged to submit an inquiry to the journal to the Editor in Chief at [PCDeditor@cdc.gov](mailto:PCDeditor@cdc.gov) by **June 4**. Complete manuscripts must be submitted by **December 3**. More information about this special collection, requirements, and submission guidelines can be found on the [PCD website](#).

## US-EPA Chemicals Dashboard: An Integrated Data Hub Supporting Exposomics Research

On **April 20**, the NIH Metabolomics Interest Scientific Group will host a webinar to discuss how the [US-EPA CompTox Chemicals Dashboard](#) provides a foundation to support exposomics and metabolomics research. The dashboard provides access to data associated with over 900,000 chemical substances. For more information, please see the [metabolomics group events website](#) and the [webinar registration page](#).

## Leveraging Geospatial Technologies for Environmental Health Decisions Workshop

The National Academies of Sciences, Engineering, and Medicine will hold a workshop on **April 14-15** titled Leveraging Advances in Remote Geospatial Technologies to Inform Precision Environmental Health Decisions. The purpose of this event is to explore how advances in the resolution of geospatial technologies could inform targeted public health interventions that reach the right populations at the right time. The workshop will also include a discussion component for participants to delve into ways to integrate geospatial data with other environmental exposure data. For more information, please see the [event page](#) and the [preliminary agenda](#).

## International Digital Curation Conference

The 2021 International Digital Curation Conference will take place

on **April 19**. The event will focus on data quality and its impact on research output. Topics will include transparency in all aspects of data collection and assessment, data sovereignty, promoting diversity and inclusion in digital skills programs, and the curation of misinformation. For more information see the [conference website](#).

### **Changing the Culture of Data Management and Sharing Workshop**

On **April 28-29**, the National Academies of Sciences, Engineering, and Medicine will host a virtual workshop to explore challenges and opportunities in establishing effective data management and sharing practices. This event will provide a venue for stakeholders across different fields to discuss possible data science strategies and researcher needs in light of the new [NIH Policy on Data Management and Sharing](#). For more information, and to register, see the [workshop website](#).

### **Research Data Alliance 17th Annual Meeting**

The theme of [RDA's 17th Plenary Meeting](#) will be Opening Data for Global Challenges. The meeting will be held on **April 20-22**. The plenary session will focus on the themes of global challenges, global mechanisms for data reuse, sustainable solutions with benefits for all, and global cooperation to address grand challenges and ensure societal impact of data reuse.

### **Enhancing Semantic Interoperability in Environmental Health Sciences Research**

The NIEHS will host an informal discussion session about developing standards to foster environmental health data accessibility, interoperability, and reuse at the upcoming RDA Plenary Meeting. The event will be held on **April 21** and will include presentations from environmental health experts who will share challenges and best practices for standardizing environmental health sciences terminologies. For more information, please see the [meeting page](#).

### **Fair Festival 2021 – Advancing Data and Science**

The GO FAIR International Support and Coordination Office will be hosting the Fair Festival 2021 – Advancing Data and Science on **June 21-23**. GO FAIR is an initiative that aims to implement the FAIR data principles, making data Findable, Accessible, Interoperable, and Reusable (FAIR). The purpose of this event is to celebrate FAIR shift in data management and offer an open and inclusive ecosystem for researchers to build on their scientific achievements. A meeting agenda and registration information will be posted soon on the [GO FAIR events website](#).

### **FORCE 11 Scholarly Communication Institute**

In partnership with the UCLA library, FORCE 11 Scholarly Communication Institute will be held online on **July 26-30**. This week-long program provides skill training, networking, and

collaboration opportunities on innovative ways of communicating research. The program brings researchers, students, administrators, funders, librarians, publishers, and other informational professionals together to build up expertise through intensive training and hands-on collaborations. [Courses offered](#) last year included classes advancing FAIR data stewardship and FAIR data in the scholarly communications lifecycle. More information and an updated list of courses will be posted soon in the [FORCE 11 website](#).

### **International Conference on Intelligent Systems for Molecular Biology**

The annual international conference on Intelligent Systems for Molecular Biology, one of the world's largest bioinformatics and computational biology conferences, will take place on **July 26-30**. The conference will include training workshops and tutorials, multidisciplinary scientific presentations, on-demand repository talks and poster presentations, and other virtual events to disseminate the latest developments in bioinformatics and computational biology. For more information, see the [conference website](#).

### **Data for Policy 2021**

The sixth International Data for Policy Conference will take place in London on **September 14-16**. The event provides a platform for multidisciplinary and cross-sector discussions about the applications and implications of data science in governance and the public sector. For more information, see the [conference website](#).

### **Save the Date: International Data Week 2021**

The International Science Council's Committee on Data (CODATA) and World Data System (WDS), and the Research Data Alliance (RDA) announce that the 2021 edition of [International Data Week](#) will be held on **November 8-11** both virtually and onsite in Seoul, South Korea. This international event will bring together researchers and data stewards from different disciplines to explore how best to exploit the data revolution to improve science and society through data-driven innovation. The event combines the RDA 17th Plenary Meeting and SciDataCon 2021, a scientific conference addressing the frontiers of data in research organized by CODATA and WDS.

### **Call for Sessions: International Data Week's SciDataCon**

Proposals are invited for sessions at International Data Week's SciDataCon 2021: Data to Improve our World. Sessions may include presentations of original research, interesting data practices, or a mix of the two, and should be compelling and of interest to the global data community. Proposals are due **April 30**. For more information and to submit session proposals, see the [SciDataCon 2021 website](#).



Kamila Murawska-Wlodarczyk, a trainee at the University of Arizona (UA) SRP Center, is investigating the adaptation processes of plants exposed to elevated concentrations of metalloids near mining sites. She is testing 30 types of non-contaminated soil materials which vary in quality that could be potential capping materials for mine tailings. Through this work, Murawska-Wlodarczyk hopes to identify key factors to help optimize bioremediation techniques used in mine tailing reclamation. Her mentors are UA SRP grantees Raina Maier and Alicja Babst-Kostecka.