

# Superfund Research Program *e-Posted Notes*

December 4, 2020 (Issue 203)

## 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**. The final [agenda](#) is posted online along with other details on the [SRP Annual Meeting website](#).

### SRP Data Science Mini-Workshop and Virtual Technology Fair

On **December 16**, SRP will hold two satellite meetings:

1. **Data Science and Data Sharing Mini-workshop, 11:00 a.m. – 12:30 p.m. ET** – If you are involved in an SRP data supplement or Data Management and Analysis Core, you should have received an email announcement about the workshop from Michelle Heacock. Please contact Michelle Heacock if you have any questions: [heacockm@niehs.nih.gov](mailto:heacockm@niehs.nih.gov).
2. **Virtual Technology Fair, 1:00– 4:00 p.m. ET** – In lieu of an in-person technology fair at the Annual Meeting, SRP will host a [Virtual Technology Fair](#). The event is free, but there will be a separate registration to attend. NIEHS Small Business Innovative Research (SBIR) grantees will showcase environmental remediation and detection technologies being developed with SBIR funding. All federal staff and SRP Annual Meeting attendees are invited to join. If you are registered for the SRP Annual Meeting, you will receive the link to register by email. If you are not registered for the SRP Annual Meeting but would like to attend the Virtual Technology Fair, please contact Heather Henry: [heather.henry@nih.gov](mailto:heather.henry@nih.gov).

### KC Donnelly Externship Applications due January 31

The [KC Donnelly Externship Award Supplements](#) provide current SRP-funded graduate (master's or Ph.D.) students and postdoctoral researchers with translational and transdisciplinary opportunities to travel to and collaborate with other SRP grantees, government laboratories (e.g., EPA, ATSDR, NIEHS), or other agencies (state, local, Tribal). The award provides support for up to three months for supplies, travel and housing costs (not to exceed \$10,000 direct costs), and funds to attend the SRP Annual Meeting where the recipient is invited to present their research.

More information about the application process and application

## EMPLOYMENT OPPORTUNITIES

### 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. More [information about this position and how to apply](#) is available on the Silent Spring website.

### Northeastern University Seeks Tenure Track Candidate in Environmental Health

The Department of Health Sciences at Northeastern University seeks candidates for a tenure-track Assistant or Associate Professor position in the field of environmental health. Research areas should address new and

be announced through the release of a Notice of Special Interest in the [NIH Guide](#). Please contact Brittany Trottier ([brittany.trottier@niehs.nih.gov](mailto:brittany.trottier@niehs.nih.gov)) and your respective Program Officer if you have any questions.

## Administrative Supplements to Promote Diversity Now Available to SRP Grantees

Effective November 24, 2020, SRP participates in [PA-21-071 Research Supplements to Promote Diversity in Health-Related Research](#). These administrative supplements, which are available to applicants funded by SRP, have the purpose to enhance diversity of the research workforce. The following career levels are eligible: baccalaureate and master's degree holders, graduate (predoctoral) and health professional students, and individuals in postdoctoral training. Requests may be up to \$50,000 total costs for up to two years and only one supplement application submission is permitted per grantee per year.

## 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:

- [Extramural paper of the month: Predicting the cancer-causing potential of PAH chemicals](#): Oregon State University SRP Center grantees developed a method to better predict the cancer-causing potential of polycyclic aromatic hydrocarbons (PAHs). According to the authors, results support the use of pathway-based gene sets and 3D human tissue models to better predict the carcinogenic effects of PAHs.
- [Extramural Paper of the Month: PFAS profiles in seabirds point to a shift in chemical production](#): Researchers at the University of Rhode Island SRP Center found high levels of both legacy and emerging per- and polyfluoroalkyl substances (PFAS) in seabird tissue samples. They measured 36 PFAS in the livers of 31 juvenile seabirds found dead off the coasts of Massachusetts, Rhode Island, and North Carolina.

### BROWN Partners Publish Book on Land Reuse Strategies

Members of the [Brownfields and Reuse Opportunity Working Network \(BROWN\)](#), including SRP Health Scientist Administrator Michelle Heacock, collaborated in the newly published ebook [Land Reuse and Redevelopment: Creating Healthy Communities](#). This free textbook raises awareness of how safe land reuse can contribute to community resilience, partnerships, and sustainability. Each section of the book highlights strategies to safely restore contaminated properties.

emerging global environmental threats such as, but not limited to, infectious disease, known/emerging chemical contaminants, and/or climate change. Aspiring candidates may be developing and applying technologies such as environmental monitoring, mapping, or other means of exposure assessment that engage and empower marginalized local communities in protecting their own health. Applications received by **December 4** will receive full consideration. For more information and to apply see the [job description](#).

### University of Louisville Seeks Research Assistant

The Envirome Institute (EI) at the University of Louisville is accepting applications for a Research Scientist to work as a team member of the Flow Cytometer Core. The EI houses several dynamic Centers and investigators whose collective goal is to understand how exposure to environmental chemicals, particulates, and volatiles impact health. The Research Scientist will oversee operations of the Flow Cytometry Core and assist EI investigators in analyzing cellular function and phenotype in human clinical and animal studies. Successful candidates are expected to develop new flow panels, prepare flow cytometry SOPs, and present at internal, institutional, and external meetings.

The qualified candidate should have Ph.D. with seven years of applied research

## UNM METALS Research Cited in Tribe's Assessment Report

The [2020 Navajo Nation Maternal and Child Health Assessment](#) published by the Navajo Native American Research Center for Health cited research conducted by the University of New Mexico SRP Center. The research shows that mine waste on the Navajo Nation's reservation is now found in nanoparticles that [can readily move through air and be inhaled](#), can [migrate into deep and surface water sources](#), and can be [taken up into plants](#), suggesting wide potential for exposure.

## Rebuli Authors Article on COVID-19

University of North Carolina at Chapel Hill SRP Center researcher Megan Rebuli wrote a piece for [The Conversation](#) on why males may have a worse response to COVID-19. As a respiratory toxicologist, Rebuli discussed sex-specific responses to COVID-19 that suggests men are more vulnerable and suffer more from the disease.

## Grandjean Quoted by NOVA PBS

University of Rhode Island SRP Center project leader Philippe Grandjean was quoted in a [NOVA article](#) about the persistence of PFAS in the environment. Grandjean spoke about inflammation and metabolic changes in children who are developmentally exposed to PFAS. He has authored [several papers](#) on PFAS exposure from breast milk.

## Stapleton Picked up by Media

Duke SRP Center researcher Heather Stapleton was quoted by [The News & Observer](#) and [North Carolina Health News](#) following a [virtual town hall event](#) discussing PFAS contamination in North Carolina drinking water. The research presented at the event and summarized in the articles stems from an [SRP-funded project](#) Stapleton leads on early life exposure to hazardous chemicals.

## UA SRP PFAS Research Picked up by Geological Society

Researchers Mark Brusseau and Bo Guo with the University of Arizona SRP Center were quoted in a recent article on PFAS by [The Geological Society of America](#). The article discusses the persistence of PFAS in the environment, specifically soil. Brusseau leads an [SRP-funded study](#) on migration and attenuation of mine-drainage contaminants in groundwater.

## Sansom Quoted on TWRI Articles

Texas A&M University SRP researcher Garrett Sansom was interviewed and quoted in two recent articles by the Texas Water Resources Institute. In the [first article](#), Sansom discusses his projects on water insecurity in Texas. In the [second article](#), Sansom discusses ongoing efforts to investigate and address

experience in a related field.

A Master's degree and ten years of applied research experience may be substituted for the requirements noted. For further details and to apply see the [job description](#).

### Faculty Position in Environmental and Forest Science - University of Washington

The University of Washington School of Environmental and Forest Sciences seeks to hire a Wildlife Human Dimensions Scientist. This scientist will hold a full-time (100% FTE) position as Assistant Unit Leader on a 12-month, multi-year basis, and will also hold the title of either Assistant Professor Without Tenure or Associate Professor Without Tenure. Successful candidates will contribute to the mission of the School of Environmental and Forest Sciences by advising graduate and/or postdoctoral researchers from diverse backgrounds and cultures, by teaching one graduate-level course per year in their area of expertise, and by engaging in professional service. Applications are due **December 12**. For more information and to apply see the [job description](#).

### CURRENT RESEARCH BRIEF

#### [SRP Research Brief 312:](#)

Improved Sequencing Method Leads to Advancements in Toxicology Research (Rance Nault, Michigan State University)

Past [Research Briefs](#) are available on the SRP

exposure to PFAS in Houston.

## TRAINEE SPOTLIGHT

### Sanchez Reflects on Diversity Supplement

Tiffany Sanchez, a former Columbia University SRP Center postdoctoral trainee, was recently appointed as assistant professor at Columbia in the department of environmental health sciences.



Sanchez completed her postdoctoral research under the direction of Columbia SRP Center project leader Ana Navas-Acien. As part of her SRP project, she examined the extent to which dietary arsenic exposure via rice consumption might be associated with different health outcomes, including cancer and asymptomatic markers of lung disease and cardiovascular disease.

In two studies published earlier this year, Sanchez and her team investigated arsenic-related [cardiovascular effects](#) and [cancer development](#) based on rice intake.

While a trainee at Columbia, Sanchez received one of SRP's first [Research Supplements to Promote Diversity in Health-Related Research](#). After receiving this award, she was able to present her subsequent research on identifying intermediary pulmonary effects among Bangladeshi adolescents with known water arsenic exposure at the 2015 SRP Annual Meeting. She credits this supplement for her drive and confidence in reaching for new opportunities.

Now, as an assistant professor at Columbia, Sanchez focuses on the respiratory health effects of environmental exposures and their underlying molecular mechanisms. Her proficiency in exposure analysis and interest in lung disease allows for multidisciplinary, translational research, and sophisticated data analysis. She is also collaborating with others on studies to investigate the respiratory consequences of secondhand tobacco smoke. These studies will increase understanding about the risks associated with cigar, pipe, and cigarette use in adulthood.

Sanchez is also interested in integrating data science into environmental health sciences' curriculum. She chairs a cross-departmental curricula development project between the departments of environmental health sciences and biostatistics at Columbia. The goal of this project is to develop sustainable and integrative initiatives to bring graduate students in environmental health to a higher level of quantitative fluency and engagement with data science.

Away from Columbia, Sanchez has participated as a judge at the

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

### [UNC ESE Centennial Seminar with William Suk](#)

December 14-15, 2020  
Virtual Conference

### [2020 SRP Annual Meeting](#)

December 14-15, 2020  
Virtual Conference

### [Virtual Technology Fair: NIEHS Environmental Remediation and Monitoring Tool Grantee Showcase](#)

December 16, 2020  
12:30-4:30 p.m. ET

### **SRP Data Science Mini-Workshop**

December 16, 2020  
Virtual Workshop

### [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](#)

October 17-20, 2021  
Montreal, Canada

### [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](#).

New York City Science and Engineering Fair. Now during the pandemic, she has started growing a variety of chili peppers and has blended up a myriad of fresh salsas.

## HOT PUBLICATION

### New Technique Predicts the Potential Effects of Chemical Mixtures

In a recent collaboration, University of California, Berkeley SRP and Boston University SRP researchers developed an approach to [predict the potentially harmful effects chemicals mixtures](#) have on a molecular pathway involved in the body's stress response. This publication stems from an SRP [K.C. Donnelly Externship](#)

The group tested a novel approach called Generalized Concentration Addition (GCA). GCA is a chemical analytical approach that uses mathematical functions to predict the joint effect of co-exposures.

The authors applied GCA to a mixture of synthetic glucocorticoids, a class of steroid hormones that respond to stress in the body and reduce inflammation, in an in vitro bioassay. Synthetic glucocorticoids are used as anti-inflammatory and immunosuppressive drugs. These hormones act as ligands by binding to the glucocorticoid receptor (GR), a steroid receptor present in almost every cell in the human body.

In a previous study, the group demonstrated that [GCA successfully predicts the activity of a mixture of ligands](#) that bind to receptors with one binding site. However, steroid receptors introduce complexity since they have two binding sites.

The researchers found that their modified GCA approach can successfully be applied to ligands that activate GR and can accommodate mixtures containing different types of ligands.

To evaluate the efficacy of GCA to predict the GR modifying behavior of mixtures, the researchers also generated experimental data. They found that GCA effectively quantified the activity of glucocorticoids mixtures and characterized their modifying effect on GR activation.

These findings are relevant for predicting the effects of exposures since several environmental compounds, such as heavy metals, are also capable of modifying GR signaling.

## AWARD WINNERS

### Newman Receives Presidential Fellows Award

Texas A&M University SRP Center CEC leader Galen Neman was honored with the [2020 Presidential Impact Fellows Award](#), one of the most prestigious awards presented to Texas A&M faculty. The award recognizes outstanding faculty members who embody the university's commitment to advancing

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.

knowledge through transformation learning, innovation, and impact for Texas and the world.

### **King Wins New Investigator Award at EMGS Meeting**

Duke SRP trainee Dillon King was awarded the 2020 Student and New Investigator Travel Award at the annual [Environmental Mutagenesis & Genomics Society](#) (EMGS) meeting. The award assists outstanding students and new investigators to attend the EMGS Annual Meeting. In addition to the award, Dillon gave a talk titled "Analysis of Illumina 450K DNA Methylation in NEST Cord Blood Reveals Sex Differences at Mitochondrial Genes in the Nuclear Genome". She is mentored by SRP researcher Joel Meyer.

### **Mudd-Martin Receives Award to Address Health Issues in Rural Kentucky**

Gia Mudd-Martin, co-leader of the University of Kentucky SRP Center Community Engagement Core, [received an award](#) from the NIH Office of the Director and the NIH Institute of Nursing Research. This award will help to address health issues in rural Kentucky. Mudd-Martin is testing the effectiveness of two interventions aimed at encouraging healthy behaviors such as physical activity, healthy eating, and smoking cessation for rural Kentucky populations.

### **Furlong Receives Grant to Develop Diagnostic Test for COVID-19**

University of Washington SRP Center project leader Clement Furlong and colleagues received a grant from the NIH [Rapid Acceleration of Diagnosis Initiative](#). The award will allow them to prototype a protocol for rapid screening of COVID-19 from nasal swab samples using a portable biosensor.

### **Oregon Trainees Receive Awards for Outstanding Presentations**

Oregon State University SRP trainees in Robyn Tanguay's lab, Subham Dasgupta and Prarthana Shankar, received awards at the Pacific Northwest Association of Toxicologists Annual Meeting. Dasgupta received the Best Postdoctoral Presentation Award for his presentation titled "Impacts of a 5G-level 3.5 GHz radiofrequency radiation on zebrafish embryonic development." Shankar received the Best Graduate Student Presentation Award for her presentation titled "Network Analysis of Zebrafish Transcriptome Identifies Keystone Genes and Pathways Responding to Toxicant Exposure."

## **FUNDING OPPORTUNITIES**

### **Opportunities for COVID-19 Partnerships**

The NIEHS Worker Training Program (WTP) recently released a [Notice of Special Interest \(NOSI\): Promoting Health, Safety, and](#)

[Recovery Training for COVID-19 Essential Workers and their Communities](#). This is a supplement opportunity for [WTP-funded grantees](#) to partner with local worker centers and community organizations specifically targeting under served and disadvantaged communities with higher than average COVID-19 transmission rates. The objective of the partnerships would be to increase the education and awareness of COVID-19 health risks and promote the integration and connectedness to needed public health resources such as testing, contact tracing, and the adoption of effective infection control measures.

SRP grantees may wish to explore whether there may be synergy between current SRP activities and that of WTP's grantees upon which to build partnerships in response to this opportunity. Eligible applicants must submit proposals by **December 30, 2020**.

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

NIH announced a collaboration with the National Science Foundation (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 **February 16, 2021**, with subsequent dates **November 10, 2021** and **November 10, 2022**. For more information refer to the [NSF Smart Health website](#).

### **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 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 conduct research and 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, 2020**.

### **NIH Applicant Assistant Program**

NIH has initiated an [Applicant Assistance Program \(AAP\)](#) for current and future entrepreneurs developing innovative technology ideas who would like assistance in developing a

competitive small business grant application to NIH. NIH is particularly interested in applications from socially/economically disadvantaged small businesses, women-owned small business, and small businesses located in under-represented states. Technologies must be aligned with topic areas of NIH Institutes and Centers, including [NIEHS](#). Applications are due **December 10, 2020 at 5:00 p.m. ET.** through the [AAP Application Portal](#).

A Q&A webinar will be held on December 9, 2:00 - 3:30 p.m. ET. To register, please see [webinar page](#). Note: This AAP cycle supports applications for the April 5, 2021 SBIR submission date.

### **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 Funding Opportunities 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 **January 4, 2021**, with subsequent due dates at the beginning of each month until May 3, 2021.

### **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 **February 12, 2021**.

### **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 **March 8, 2021**.
- [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 **March 8, 2021**.

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, 2020**.

### **Biomedical Knowledgebase (U24 – Clinical Trials Not Allowed)**

The [Biomedical Knowledgebase \(U24 – Clinical Trials Not Allowed\)](#) 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 knowledge base. Applications

that have a significant focus on software or tool development are not appropriate for this activity. The next application due date is **January 25, 2021**.

### **Biomedical Data Repository (U24 – Clinical Trials Not Allowed)**

The [Biomedical Data Repository \(U24 – Clinical Trials Not Allowed\)](#) 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. The next application due date is **January 25, 2021**.

## **INTERAGENCY NEWS**

### **EPA Releases the Tribal Lead Curriculum**

The Environmental Protection Agency (EPA) partnered with over 200 tribal groups to release the “Lead Awareness in Indian Country: Keeping our Children Healthy!” curriculum to expand understanding about childhood lead exposure. The curriculum provides an extensive set of practical, on-the-ground, and community-based tools to reduce childhood lead exposure in communities. Outreach materials and learning modules are open-access resources available for download on the [EPA's website](#).

## **DATA SCIENCE AND DATA SHARING**

### **NIH Policy for Data Management and Sharing**

As a reminder, NIH recently released the final [NIH Policy for Data Management and Data Sharing](#) to promote the management of scientific data generated from NIH-funded or conducted research. This policy addresses the requirements of data management and sharing plans, emphasizes good data management practices, and provides guidance on the sharing of NIH-funded scientific data. NIH will continue to engage the community to support the change and implementation of this new Policy. This replaces the 2003 Data Sharing Policy and will take effect January 25, 2023.

The related announcement on selecting a data repository, [NOT-OD-21-016](#) provides useful information on choosing suitable data repositories for preservation and sharing of scientific data, including links to [discipline-specific repositories](#) and [generalist repositories](#) compiled by NIH.

## SRP Centers Collaborate on a New Interactive Dashboard

The [Toxics Mobility Vulnerability Index \(TMVI\)](#) dashboard was developed by Galen Newman and Matthew Malecha at the Texas A&M University SRP, in conjunction with the UC San Diego and Brown University Superfund Centers. The TMVI overlays impervious surfaces, flood risk, vacant land, public health outcomes, industrial land uses, and social vulnerability ranks into a singular census tract-scaled output evaluating threat levels of contaminant transferal during flood events for Harris County, Texas, San Diego County, California, and the state of Rhode Island.

## Boston University Releases MapGAM

SRP researchers at Boston University recently published an article that introduces and illustrates the [MapGAM package](#). This single R package allows for estimating, predicting, and visualizing how the interaction of multiple exposures can change risk patterns of public health concern.

## New Methodology to Assess the FAIRness of Research Data

The Research Data Alliance (RDA) FAIR Data Maturity Model Working group recently reported a [set of indicators with priorities and guidelines](#) that can be used to make the results of research data and FAIRness assessments comparable.

## CyVerse Fall 2020 Webinar Series

The CyVerse Fall 2020 webinar series started September 11 and will continue every other Friday through December 4. The webinars are run by data science experts and aim to help scientists use CyVerse's computational resources for their research goals.

In the next session, which will be held **December 4, 1:00 – 1:30 p.m. ET**, presenters will demonstrate how to use CyVerse to run Kallisto software to do RNA-Seq analysis on your genomics data. To register, please see the [webinar page](#).

If you missed the previous sessions, you can access the webinar archive on the [Seminar Series YouTube Channel](#).

[CyVerse](#) is a platform maintained at the University of Arizona consisting of cyberinfrastructure tools designed to handle large datasets and complex analyses. Their mission is to provide tools to enable data-driven life sciences research. The platform is used by the University of Arizona SRP Data Management and Analysis Core, led by Aikseng Ooi and Nirav Merchant.

Learning materials and tools can be accessed through [CyVerse Learning Center](#).



SRP researchers are partnering with community groups to assess exposure to chemicals in soil. In response to concerns about health effects from abandoned uranium mines, University of New Mexico grantees took samples from soil and plants in the Pueblo of Laguna (left). Led by Garret Sansom, Texas A&M trainees collected soil samples within a confirmed cancer cluster in proximity to a creosote plant in Houston, TX (right).