HEADLINES

SRP External Use Cases Workshop and Trainee "Hacky" Hour

SRP will host a workshop, February 18-19, for data science supplement External Use Cases (EUCs) to share details and lessons learned about the advancements made towards data interoperability using SRP data sets. During the workshop, EUCs will share experiences and successes and make recommendations for best practices and needs for data management, sharing, and integration strategies. 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. For more information, please contact Michelle Heacock (heacockm@niehs.nih.gov).

There will also be an EUC Trainee "Hacky" Hour to precede the workshop on February 17 from 4:00 – 5:00 p.m. EST. During this event, trainees will have the opportunity to introduce themselves and share their EUC experiences. You should have received an email announcement from Danielle Carlin. Please encourage your EUC trainees to join! For more information, contact Danielle Carlin (danielle.carlin@nih.gov).

Virtual Technology Fair for Small Business Grantees – Video Playlist Available

On December 16, SRP hostel a Virtual Technology Fair featuring innovative remediation and monitoring tools being developed by NIEHS-funded small business grantees. During the event, 16 small businesses introduced their technologies that have the potential of protecting health through preventing harmful exposures. A recorded archive of these presentations is now available in an NIEHS playlist on YouTube. For details about each technology and grantee contact information, see the Virtual Technology Fair Meeting Book.

Notice of Special Interest for the KC Donnelly Externship

The Notice of Special Interest (NOSI) for the KC Donnelly Externship has been published in the NIH Guide. Please refer to the NOSI (NOT-ES-21-005) to see the changes to the application

EMPLOYMENT OPPORTUNITIES

University of Southern California Seeks a Postdoctoral Research Fellow

The Division of Environmental Health in the Department of Preventive Medicine at the University of Southern California is seeking a postdoctoral research fellow in Environmental Justice and Health Disparities. The fellow will conduct investigations around community-driven epidemiology for environmental justice in both rural and urban contexts. The successful candidate will begin work in Summer 2021 and should have experience in and/or commitment to working with individuals from diverse backgrounds and members of underrepresented groups.

Review of applications will commence **February 15**. For more information and to apply email Professor Jill Johnson (jillj@usc.edu) with the subject line "EJ Postdoctoral Fellowship." To learn more about the Department of Preventive Medicine, please visit the Department website.

CURRENT RESEARCH BRIEF

SRP Research Brief 314: Triclosan and a High-fat Diet Worsen Liver Disease in Mice

Past Research Briefs are available on the SRP website. To receive the monthly Research Briefs or to

submission process and other slight changes to what is included in the application. The deadline for the letter of intent has been extended to March 1, and supplement applications are due April 1.

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). To see what projects have been pursued in the past, please visit the **SRP KC Donnelly website**. Please contact Brittany Trottier (brittany.trottier@niehs.nih.gov) and your respective Program Officer if you have any questions.

Lindsey Martin Discusses Implementation Science

During the January SRP Research Translation/Community Engagement Core webinar, SRP grantees had the opportunity to hear from Lindsey Martin, a program officer in the NIEHS Division of Extramural Research & Training (DERT) Population Health Branch. Martin supports a broad environmental health portfolio with a special focus on environmental health disparities, community-based research approaches, and a new area with DERT focused on implementation/dissemination sciences.

Martin explained how implementation science promotes the adoption and integration of evidence-based practices into routine health care and public health settings to address the gap between scientific discovery and real-world practice. During the presentation, she shared how implementation science approaches and theories may be useful in achieving the objectives stated in the 2020 SRP Strategic Plan, like promoting stakeholder engagement and for prevention and intervention activities. Additionally, Martin compiled a list of resources for SRP grantees to learn more about how leveraging implementation science can improve the impact of their research on public health.

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:

- Superfund Research meeting focuses on community, cutting-edge science: Participants in the program's annual event joined virtual poster sessions, scientific presentations, technology fairs, and resource sharing.
- Extramural Paper of the Month: Edible sorbents protect against PFAS toxicity: Edible nutrient-amended sorbents can reduce bioavailability and toxicity of per- and polyfluoroalkyl substances (PFAS) ingested via contaminated water and food, found NIEHS grantees. Clay-based sorbents bind toxins in the stomach and intestine, thereby reducing exposure.

EVENTS

EUC Trainee Hacky Hour
February 17, 2021
4-5 p.m. ET

SRP EUC Lessons Learned/Recommendations Workshop
February 18-19, 2021
Virtual Conference

Impact of Environmental Exposures on the Microbe and Human Health Workshop
February 23-24, 2021
Virtual Conference

COVID-19 Research Response Symposium Session III: Addressing COVID Challenges with Community Partners
February 25, 2021
Virtual Conference

COVID-19 Research Response Symposium Session IV: COVID-19, Social Vulnerability, and Environmental Injustice
March 2, 2021
Virtual Conference

Society of Toxicology Annual Meeting & ToxExpo
March 12-26, 2021
Virtual Conference

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

Developing Medical Countermeasures to Treat the Acute and Chronic Effects of Pulmonary Chemical Injuries
October 13-15, 2021

Visit the SRP page for more stories about the program:

- [New Approach to Remove Chemicals from Animal Derived Foods](): In a new study, funded in part by SRP, researchers improved an approach to remove persistent organic pollutants (POPs) from foods of animal origin. Michael Denison from the University of California, Davis SRP Center collaborated with a team of researchers from the European Union Reference Laboratory to test several laboratory methods and develop an improved method for the extraction of lipids and associated POPs bound to animal tissue.
- [Annual Meeting Satellite Workshops Boost Collaboration:]() Two workshops, held December 16 as part of the first NIEHS Superfund Research Program (SRP) virtual annual meeting, provided forums to delve into data science issues and showcase innovative remediation and detection technologies.

Quetawki Quoted in American Indian STEM Magazine

Local artist-in-residence at the University of New Mexico (UNM) SRP Center Mallery Quetawki was [quoted in Winds of Change](), a digital magazine published by the American Indian Science and Engineering Society (AISES). In the article, Quetawki explains how her work is at the intersection of art and public health because her objective is to Indigenize health-related messaging for Native communities.

Horney Talks Big Data

TAMU SRP Center researcher Jennifer Horney was [interviewed for an Environmental Health Perspectives article]() about an open-source data set designed to help epidemiologists understand the health risks associated with tropical cyclones. Horney discussed how this type of big data approach may not fully account for social vulnerability. She explained that factors such as people's housing, their ability to understand warnings and alerts, and access to vehicles should be part of the equation.

Stapleton Featured in EcoWatch story

Duke University SRP Center researcher Heather Stapleton was [featured in an EcoWatch article]() about her lab's research on the efficacy of various filters at removing PFAS compounds from drinking water. She noted that the most effective filters are also the most expensive, which can lead to disparities in exposure and mitigation efforts.

UNM Researchers Featured in Stanford Article

UNM SRP Center Community Engagement Core lead Chris Shuey, researcher Johnnye Lewis, and trainee Cherie DeVore were featured in a [news story]() by Stanford University's Bill Lane Center for the American West. The article references research done on health effects of uranium exposure among Navajo people living near abandoned mines.

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.

Gastelum Publication Progresses PAH Projects

Grady Gastelum, a former trainee at the Baylor College of Medicine SRP Center under the mentorship of Bhagavatula Moorthy, studied the role of cytochrome P450 enzymes in polycyclic aromatic hydrocarbon (PAHs)-induced lung cancer. Cytochrome P450 (CYP) enzymes are essential for the metabolism of many medications as well as toxins like PAHs.

CYP enzymes catalyze PAHs into reactive products that may cause DNA mutations, which can lead to cancer. In a recent study, Gastelum observed the opposing roles of CYP subfamily enzymes, CYP1A1 and CYP1A2, in PAH-induced lung cancer. Results showed that mice lacking CYP1A1 were less likely to develop lung cancer, whereas mice lacking CYP1A2 were more likely to develop cancer.

The insights gained from this paper shed light on how dietary fish oil may protect against cancer caused by PAHs as fish oil has been shown to affect CYP levels. Moving forward, this research has the potential to show that dietary fish oil is a potent inhibitor of PAH-induced lung cancer.

Gastelum graduated last fall and is currently looking for a biotech industry position that focuses on synthetic biology. He is specifically interested in joining a team that focuses on engineering microbes to increase sustainability within society. For example, using microbes to produce the chemicals required in common household products or to break down plastic so it can be repurposed.

Outside of the lab, Gastelum enjoys hiking, landscape and night photography, and exploring new breweries and restaurants with friends. Post pandemic, he and his wife plan to travel across the United States to enjoy the many national parks and take a trip to India and Japan.

New Strategy to Predict Arsenic Contamination in Agricultural Fields

Columbia University SRP Center researchers demonstrated a process to more effectively measure concentrations of arsenic in soil. The procedure will allow rice farmers to identify where and to what extent their fields are affected by arsenic in soil and make informed decisions about interventions and best farming practices.

In Bangladesh, arsenic-contaminated groundwater is used extensively to irrigate rice fields. Arsenic from irrigation water accumulates in soil over time and can be taken up by plants, negatively impacting crop productivity and reducing yield.

The team collected soil samples from 21 rice fields in Bangladesh during rice growing seasons over the course of three years. They adapted a [low-cost field kit](#) used to measure arsenic concentration in well water to measure the fraction of arsenic in collected soil samples that is leachable in water. By comparing the field kit results against measurements performed using more expensive X-ray fluorescence spectrometry, the team confirmed the validity and accuracy of the approach.

According to the researchers, a set of measurements obtained for one rice growing season should remain valid for several seasons because the level of arsenic in soil reflects at least a decade of accumulation.

The researchers also developed mathematical models to calculate the probability the average soil arsenic concentration in a plot is above a certain threshold based on the results from field kits. According to the authors, this process will allow farmers to predict whether the extent of arsenic contamination within portions of their fields is above or below a certain threshold for intervention.

AWARD WINNERS

SRP Researchers Receive 2021 Society of Toxicology Awards

UNM SRP Center Director Johnnye Lewis was announced as the recipient of the 2021 Society of Toxicology (SOT) Public Communications Award for her work with tribal communities in the Southwest. Lewis was recognized for her major contributions to broadening awareness of environmental health issues, especially regarding uranium mining, in tribal populations.

University of North Carolina at Chapel Hill SRP Center Director Rebecca Fry was awarded the 2021 SOT Translational Impact Award. Fry was recognized for her leadership and multidisciplinary efforts to use translational research and community engagement to promote public health in the area of developmental toxicants.

Swager Named Fellow of the National Academies of Inventors

Massachusetts Institute of Technology (MIT) SRP researcher Timothy Swager was recently named a Fellow of the National Academy of Inventors. This distinction recognizes academic inventors for their dedication to the welfare of society and improving general quality of life through fostering a spirit of innovation. The MIT SRP Center [posted a blog](#) to honor Swager and celebrate several of his inventions to measure the

concentrations of toxicants and optimize remediation strategies.

Beykal Wins Poster Award at American Institute of Chemical Engineers Annual Meeting

Texas A&M University (TAMU) trainee Burcu Beykal was awarded the Computing & Systems Technology Division Director's Award for an outstanding poster presented at the 2020 American Institute of Chemical Engineers Annual Meeting. Beykal's poster was titled "Data-driven optimization of integrated planning and scheduling problems under demand uncertainty."

Duke Trainee Wins Dean's Award for Excellence in Mentoring

Duke SRP trainee Tess Leuthner was one the recipients of the 2021 Dean's Award for Excellence in Mentoring. The award recognizes Duke University faculty and students for outstanding efforts in mentoring and teaching. Leuthner is mentored by SRP grantee Joel Meyer.

FUNDING OPPORTUNITIES

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. The application deadline is April 15, 2021. Proposals are due **April 15, 2021** and should be submitted to telomerenetwork@gmail.com. If you have any questions, please email Elissa Epel (elissa.epel@ucsf.edu) or Stacy Drury (sdrury@tulane.edu).

Environmental Security Technology Certification Program Solicitation

The Department of Defense's (DoD) Environmental Security Technology Certification Program (ESTCP) released a solicitation requesting pre-proposals for innovative technology demonstrations that address DoD environmental and installation energy requirements as candidates for funding. Researchers from Federal organizations, universities, and private industry are invited to apply. To be eligible for consideration, parties wishing to respond to this announcement must submit a pre-proposal by 2:00 pm ET on **March 4, 2021**. For more information and application instructions, see the ESTCP solicitation.

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. SRP grantees with human samples from 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, 2021**. For questions related to the application process, contact HHEARHelp@Westat.com. If you have any questions about the HHEAR program, please contact Michelle Heacock (heacockm@niehs.nih.gov).

International Research Scientist Development Award (K01)

The Fogarty International Center has reissued two Funding Opportunity Announcements for the International Research Scientist Development Award:

- International Research Scientist Development Award (IRSDA) (K01) Independent Clinical Trial Not Allowed (PAR-21-104)
- International Research Scientist Development Award (IRSDA) (K01) Independent Clinical Trial Required (PAR-21-105)

The purpose of these awards is to provide support to postdoctoral research scientists and junior faculty based at U.S. institutions for an intensive, mentored global health research career development experience in a low- or middle-income country. Investigators from any health-related discipline who propose career development activities and a research project that is related to the health priorities of low- or middle-income countries are invited to apply. Applications are due **March 9, 2021.** More information can be found on **FIC's IRSDA Webpage**, including answers to Frequently Asked Questions.

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

The National Science Foundation (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. Letters of intent are due **April 1, 2021,** and preliminary proposals are due **April 29, 2021**. For more information, and to apply, see the NSF program

NSF Campus Cyberinfrastructure

The NSF Campus Cyberinfrastructure invests in coordinated campus-level networking and cyberinfrastructure improvements, innovation, integration, and engineering for science applications and research projects. Academic and research institutions are invited to apply for funding for data-driven networking infrastructure, regional connectivity, network integration and applied innovation, campus computing, and planning and coordination activities to meet cyberinfrastructure goals. Applications are due **March 1, 2021**. For more information, see the related [NSF program solicitation](#).

NSF EarthCube

NSF released a solicitation for application for EarthCube funding to advance geosciences research. EarthCube is a community-driven activity sponsored through a partnership between the NSF Directorate for Geosciences and the Office of Advanced Cyberinfrastructure to transform research in the academic geosciences community. EarthCube aims to create a well-connected and facile environment to share data and knowledge in an open, transparent, and inclusive manner to accelerate our ability to understand and predict the Earth system. Applications are due **March 2, 2021**. For more information and to apply, see the related [NSF program solicitation](#).

HEAL Initiative: HEALthy Brain and Child Development Data Coordinating Center (U24)

NIH seeks applications for a Data Coordinating Center for the HEALthy Brain and Child Development (HBCD) Study. The center will perform quality control, data curation, and analysis from the measures collected from research sites to measure progress and maximize comparability across individual research sites for the HBCD longitudinal study. The successful applicant will propose a secure bioinformatics platform for data storage, harmonization, and sharing that enables effective communication of detailed research data, tools for data access and analysis, supporting documentation, and necessary training materials. Letters of intent are due **March 1, 2021,** and applications are due **March 31, 2021.** For more information, refer to the [NIH Funding Opportunity Announcement](#).

SERDP Exploratory Development Proposals

The Strategic Environmental Research and Development Program (SERDP) Exploratory Development (SEED) program released two solicitations for funding for research and development projects to develop innovative technologies and methods for:

- [Detection, classification, and remediation of military munitions underwater (MRSEED-22-S1)](#)

- [Critical mineral and rare earth element recovery, recycling, and reuse (WPSEED-22-S1)](#)

Researchers from federal organizations, universities, and private industry are invited to apply. To be eligible for consideration, full proposals must be submitted by **March 4, 2021,** at 2:00 p.m. ET. For more information and to apply, see the [SERDP SEED solicitation](#).

NIH Faculty Institutional Recruitment for Sustainable Transformation (FIRST) Program: FIRST Cohort

NIH announced a new funding opportunity titled "[NIH Faculty Institutional Recruitment for Sustainable Transformation (FIRST) Program: FIRST Cohort](#)". First provides funding for NIH-funded universities to hire a cohort of faculty members in a specific discipline, with the specific goal of fostering a diverse and inclusive environment for biomedical research. A [pre-application webinar](#) took place on Monday, January 25, 2021, from 2:00 – 4:00 p.m. Applications are due **March 1, 2021**. For more information, visit the [FIRST Program webpage](#).

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 **June 5, 2021**.

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 informational will be released through a Funding Opportunity Announcement in early Spring 2021 with and 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 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 due dates **November 10, 2021** and **November 10, 2022**. For more information, refer to the [NSF Smart Health website](#).

NIH Pilot Projects Enhancing Utility and Usage of Common Fund Data Sets (R03)

NIH announced a new funding opportunity for [Pilot Projects Enhancing Utility and Usage of Common Fund Data Sets (R03)](#). This solicitation provides resources to demonstrate and enhance the utility of selected Common Fund data sets, including generating hypotheses and catalyzing discoveries. Award recipients are asked to provide feedback on the utility of the Common Fund data resources. Applications are due **February 19, 2021**.

NSF Harnessing the Data Revolution: Data Science Corps

The NSF [Data Science Corps](#) funding opportunity enables education and workforce development by focusing on building capacity for harnessing the data revolution at the local, state, and national levels. This solicitation prompts the community to envision creative educational pathways that will transform data science education and expand the data science talent pool by enabling the participation of undergraduate and master's degree students with diverse backgrounds, experiences, skills, and technical maturity in the Data Science Corps. Applications are due **February 12, 2020**.

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](#). 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 were 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.

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.

INTERAGENCY NEWS

EPA Environmental Justice and Systemic Racism Speaker Series

EPA is launching the Environmental Justice (EJ) and Systemic Racism Speaker Series. This series explores how understanding and addressing the roots of disproportionate environmental and public health impacts is key to integrating EJ in the policies and programs of EPA and other environmental agencies. The first of five sessions will take place on March 4, 2021, and will highlight [The Mapping Inequality Project](#), a unique collaboration on redlining and current environmental challenges that provides publicly-accessible digitized versions of redlining maps for about

200 cities. Future topics will include: Title VI and civil rights program, EJ research and analysis, and rural inequalities. For more information, please visit the [event registration page](#).

Compounding Environmental Health Crises: COVID-19 Research Response Symposium

The inaugural symposium of the NIEHS Disaster Research Response Environmental Health Sciences Network, titled "Compounding Environmental Health Crises: COVID-19 Research Response," will be held over the course of early 2021. The symposium will focus on the environmental health dimensions of the COVID-19 crises and serve as a platform for presentations for researchers around the country, including several from SRP. To access a recorded archive of the first two sessions, and to register please see the [symposium website](#). The next sessions will be held via Zoom from noon – 1:30 p.m. EST, as follows:

- Addressing COVID Challenges with Community Partners – February 25, 2021
- COVID-19, Social Vulnerability, and Environmental Injustice – March 2, 2021

DATA SCIENCE AND DATA SHARING

ODSS Data Sharing and Reuse Seminar

The NIH Office of Data Sharing (ODSS) is launching a new webinar series to highlight exemplars of data sharing and reuse. The monthly series will highlight researchers who have taken existing data and found innovative ways to reuse it or generate new findings. The first session titled An Open Ecosystem for Data Sharing in Human Neuroscience will take on place on February 12. The seminar will be presented by Russ Poldrack from Stanford University, who will discuss data sharing efforts related to the [OpenNeuro](#) project and lessons learned in the neuroimaging community. To register, see the [event webpage](#).

Love Data Week

Love Data Week, an annual week-long international celebration of all things data, will be held virtually February 8 -12, 2021. The purpose of this event is to raise awareness and build a community to engage on topics related to research data management, sharing, preservation, reuse, and library-based research data services. Throughout the week, participating institutions will host webinars and workshops to share practical tips, resources, and stories to help researchers at any stage in their career use good data practices. Check out these SRP Center Institutions hosting events throughout the week: [Brown University](#), [Harvard University](#), [Michigan State University](#), [University of California- Berkeley](#), [University of California- Davis](#), [University of California- San Diego](#).

Columbia University Shares Water Arsenic Dataset

SRP researchers at Columbia University recently published a study [characterizing potential inequalities in arsenic exposure](#) over time and across sociodemographic groups and created an online interactive map of arsenic contamination to improve accessibility and results dissemination. Datasets of arsenic concentrations at the county level and a reproducible R archive of analyses are publicly available via [GitHub](#).

COVID-19 Pandemic Vulnerability Index Dashboard

In a [recent publication](#), NIEHS scientists and SRP-funded researchers from North Carolina State University and TAMU described a collaboration to develop the COVID-19 Pandemic Vulnerability Index (PVI) Dashboard. This publicly available tool is constantly updated with pandemic-related datasets, such as infection rates and current interventions, to identify areas especially vulnerable to the disease and guide informed local responses.

Community Approaches for Integrating Environmental Exposures into Human Models

In a [recent publication](#), a multidisciplinary group of scientists who attended the Computable Exposures Workshop introduced a community-driven data model for describing environmental exposures and linking them to existing models of human disease. The authors describe community data-reporting standards and a preliminary data model that uses existing ontologies to represent exposure events and links environmental exposures to other data types.

International Open Science Conference

The eighth [Open Science Conference](#) of the Leibniz Research Alliance will take place February 17-19. The annual conference is dedicated to the Open Science movement and provides a unique forum for researchers, policy makers, and other stakeholders to discuss the latest and future developments in Open Science. The focus of this year's conference is the effects and impact of global crises and associated societal challenges to open research practices and science communication in the context of data science.

A pre-conference event dedicated to the Open Science movement will take place on February 16. The [Barcamp Open Science](#) is open to everybody interested in learning more about and sharing experiences on practices in open research practices and data sharing.

DataOne Monthly Webinar Series

The Data Observation Network for Earth (DataONE), a community-driven program providing access to data across multiple member repositories, hosts cutting-edge discussions in research data management at their monthly webinars. Sessions are held during the academic year on the second Tuesday of

every month from 12-1 pm EST. These webinars focus on topics such as open science, the role of the data lifecycle, and achieving innovative science through shared data and ground-breaking tools. The next session in the DataOne Webinar Series will take place on February 9, 2021. If you missed the previous sessions, recordings are available on the [webinar series webpage](#).

Reproducible Research Techniques for Synthesis

Registration is now open for the intensive, five-day Reproducible Research Techniques for Synthesis immersion virtual course. The course will enable researchers across career stages and fields to gain fundamental data science skills in support of open, reproducible research techniques. The course will cover topics such as managing data for better use, building reproducible workflows using R and Git, and communicating results within the framework of synthesis science. The course will take place on February 25-26, break for the weekend and resume on March 1-3. This is an opportunity for students, researchers, data managers, and others to reinforce or expand their learning and become familiar with current best practices and tools in data science and open science. To learn more and register please visit the [course webpage](#).

Research Data Alliance 17th Annual Meeting

The theme of [RDA's 17th Plenary Meeting](#) will be Opening Data for Global Challenges. The meeting, which will take place on April 20-22 and will be held as a fully virtual event, is being hosted by the Digital Curation Centre in collaboration with Jisc and STFC-UKRI in Edinburgh, Scotland. The plenary 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.

CyVerse Learning – Spring 2021 FOSS Online

Foundational Open Science Skills (FOSS) is a novel training designed to teach principal investigators and their lab teams the principles, practices, and how to's for doing collaborative open science using cutting-edge, open-source cyberinfrastructure. The 10-week virtual workshop will take place from February 9 – April 21 in the format of weekly 2-hour sessions held live and will combine lectures, presentations, short breakouts, and hands-on tutorials. The registration deadline is **February 8**. To see the curriculum and to register, please see the [course webpage](#).

This training is hosted by [CyVerse](#), a platform maintained at the University of Arizona that has cyberinfrastructure tools designed to handle large datasets and complex analyses. Their mission is to provide tools to enable data-driven life sciences research. The CyVerse 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](#).

Open Research Week 2021

The University of Liverpool, Edge Hill University, and Liverpool John Moores University announced their Open Research Week 2021 will take place on February 9-11. They will host nine virtual events over three days with the purpose of sharing ideas of best research practices by opening access to results, data, protocols, and other aspects of the research process. Those unable to attend, but still interested in the content, will be able to access a recording after each event takes place. Registration is required for each event, which can be booked individually. To find details and links to all events, and to register, see the [Open Research Week webpage](#).

Save the Date: International Data Week 2021

The International Science Council's Committee on Data (CODATA) and World Data System, and the Research Data Alliance announce that the 2021 edition of [International Data Week](#) will be held on November 8-11, 2021, both virtually and on-site 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 Plenary Meeting and SciDataCon 2021. 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 March 31, 2021. For more information and to submit session proposals, see the [SciDataCon 2021](#) website.

Recordings Available – International FAIR Convergence Symposium

A recorded archive of the 2020 International FAIR Convergence Symposium held November 27 - December 4, 2020, is [now available](#). The event brought 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 and the COVID-19 pandemic.

GO FAIR US Webinar Series – Recording Available

A recording of the latest webinar from the GO FAIR US webinar series titled FAIR & Research Software held on January 14, 2021, is [now available](#). The main theme of this webinar was how to best apply FAIR principles to research software and what can be done to make software FAIR(er).

Duke University SRP Center postdoctoral researcher Lindsay Jasperse collects the day's new embryos from the zebrafish colony in Richard Di Giulio's lab in the Levine Science Research Center.