

Superfund Research Program *e-Posted Notes*

January 15, 2021 (Issue 204)

HEADLINES

SRP Annual Meeting

The NIEHS Superfund Research Program (SRP) 2020 Annual Meeting, held virtually, December 14-15, by the Texas A&M University SRP Center, brought together more than 660 researchers, administrators, trainees, and partners from across the country to share findings and discuss their experiences. Thanks to everyone involved and a special note of thanks to the organizers from Texas A&M University for making the meeting such a success! There will be a Special Edition e-Posted Notes coming out in February for more details on presentations, award winners, and other highlights from the exciting event.

KC Donnelly Externship Applications 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). 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.

A letter of intent must be submitted to Brittany Trottier (brittany.trottier@nih.gov) and your respective Program Officer by March 1. Supplement applications are due April 1. For more information about the application process, see this [NIH Notice of Special Interest](#).

SRP Announces Changes to the Administrative Supplements to Promote Diversity Application Process

SRP has updated its diversity supplement process. SRP has, for some time now, offered diversity supplements through the general supplement program to enhance diversity of the research workforce. We would like to announce that we now participate in [PA-21-071 Research Supplements to Promote Diversity in Health-Related Research](#). PA-21-071 is the NIH-wide Program Announcement. This update does not change the goals of the

EMPLOYMENT OPPORTUNITIES

Program Officer Opportunities – NIDDK

The National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK) is hiring program officials with expertise in translational research involving stem cell biology, regenerative medicine, and human pathophysiology as it relates to Diabetes, Endocrinology and Metabolic Diseases. Successful applicants should have a doctoral degree and significant research experience. **Applications are due January 27.** For more information and to apply, see the job announcements:

- [GS-12/13/14 Health Scientist](#)
- [GS-15 Non-Supervisory Health Officer](#)
- [GS-15 Supervisory Health Scientist Administrator \(Program Officer/Scientific Review Officer\)](#)

For more information about the positions, email niddkdemojobopening@mail.nih.gov

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

supplements, but it does mean small changes to the submission process. Requests may be up to \$50,000 total costs per year for up to two years and will be accepted on a monthly basis on the first day of the month.

Only one supplement application submission is permitted per grantee per year. Please visit the [SRP Diversity Supplements webpage](#) for more information and speak with your Program Officer if you are interested and/or if you have any questions.

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 crisis and serve as a platform for presentations for researchers around the country, including several from SRP. The first session, titled “Routes of Transmission and Exposure Mitigation,” took place January 13. The next three sessions will be held via Zoom from noon – 1:30 p.m. EST, as follows:

- Mental Health Impacts of COVID-19 Response - February 24, 2021
- Addressing COVID Challenges with Community Partners - February 25, 2021
- COVID-19, Social Vulnerability, and Environmental Injustice - March 2, 2021

For more information, and to register please visit the [symposium webpage](#).

IN THE NEWS

NIEHS SRP News Stories

Visit the SRP page for more stories about the program:

- [SRP Centers Expand Scope to Address COVID-19 Research Needs](#): SRP provided supplemental funding to four centers to expand the focus of their research to address critical knowledge gaps related to exposure to the SARS-CoV-2 virus and its disease, COVID-19. Together, the projects demonstrate the scientific diversity in SRP and how researchers can leverage the program’s research infrastructure when public health emergencies arise.
- [SRP Small Business Successfully Deploys Water Testing Technology at the NIH Campus](#): SRP-funded small business OndaVia, Inc. successfully implemented their water analysis system at the NIH campus in Bethesda, Maryland. The system uses spectroscopy and nanotechnology to provide instrumentation for rapid, on-site, easy to use, and inexpensive laboratory-grade testing of chemicals in water.

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 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.

Applications will be reviewed until the position is filled. For more information and to apply see the [job description](#).

University of Louisville Seeks Research Scientist

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 Cytometry Core. The EI houses several dynamic Centers and investigators whose collective

Quetawki's Artwork Selected for a MOCNA Exhibition

A painting by Mallery Quetawki, local artist-in-residence at the University of New Mexico SRP, that depicts a connection between earth and body related to uranium exposure is part of the traveling exhibit "[Exposure: Native Art and Political Ecology](#)." The exhibit will be at the Museum of Contemporary Native Arts (MOCNA) in the summer of 2021. Quetawki works with the center to communicate complex environmental health concepts through Tribal symbolism.

Stapleton Featured in New York Times Story

Duke University SRP project leader Heather Stapleton was featured in a [New York Times story](#) on flame retardants exposures in early life. In the article, Stapleton describes her career interests, current research projects, and the public health implications of her research findings.

Khachatryan Featured in Research Spotlight

Louisiana State University (LSU) SRP Material Core leader Lavernt Khachatryan was interviewed by LSU Chemistry about his research on environmentally persistent free radicals and learning where they come from. In the [article](#), Khachatryan states that the next step for his research team is to figure out how to eliminate these pollutant particles in industrialized zones.

Schaider Quoted in the Boston Globe

University of Rhode Island SRP grantee Laurel Schaider was recently quoted by a [Boston Globe article](#) about per- and polyfluoroalkyl substances (PFAS) contamination in drinking water in Massachusetts. The article discusses elevated levels of contamination in the water of towns where a pesticide containing PFAS is used to kill mosquitoes. Schaider leads an SRP-funded study to evaluate PFAS exposures and immune system effects in children residing in communities with PFAS water contamination.

Di Giulio Lab Featured in Duke Today Article

Duke University SRP trainees in Richard Di Giulio's lab, Melissa Chernick and Lindsay Jasperse, were featured in a [Duke Today article](#) about restarting laboratory work in the midst of the COVID-19 pandemic. Di Giulio is the director of the Duke SRP Center and leads a [long-running research project](#) at the Elizabeth River in Virginia to study how native killifish respond to polycyclic aromatic hydrocarbons (PAHs) contamination.

Rhode Island SRP Trainee Highlighted for PFAS Research

Anna Mason, a trainee in Rainer Lohman's lab at the University of Rhode Island SRP Center, was highlighted in a [phys.org story](#). In the article, Mason is interviewed about her research on PFAS in seabirds from Massachusetts, Rhode Island, and North Carolina.

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 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](#).

CURRENT RESEARCH BRIEF

[SRP Research Brief 313](#): New Model to Examine PFAS Sheds Light on Lipid Disruption Mechanisms

Past [Research Briefs](#) are available on the SRP website. To receive the monthly Research Briefs or to submit ideas, email Michelle Heacock (heacockm@niehs.nih.gov).

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

EVENTS

[COVID-19 Research Response Symposium Session II: Mental Health Impacts of COVID-19 Response](#)

February 4, 2021
Virtual Conference

[Impact of Environmental Exposures on the Microbe and Human Health](#)

Mason observed high levels of perfluorooctanesulfonic acid (PFOS), which was phased out in early 2000, in birds across all three sites. These findings illustrate how these chemicals can remain in the environment and animal tissues for many years.

Rusyn Interviewed on Pre-hurricane Chemical Releases

Texas A&M SRP Center Director Ivan Rusyn was [interviewed by Reform Austin](#) on precautionary measures to mitigate releases in pre-hurricane scenarios. In the article, Rusyn talks about the potential release of hazardous pollutants from an uncontrolled catastrophic event in case of a power loss or flooding.

Lewis and Shey Quoted in Sierra Magazine

University of New Mexico SRP grantees Johnnye Lewis and Chris Shuey were quoted in [Sierra magazine's article](#) on issues regarding uranium mine waste cleanup and exposure to heavy metals for communities living in proximity to mine wastes. The article highlights the decades long struggle of Navajo Nation residents dealing with exposure to uranium from abandoned mines and their worries that the mines will reopen.

Lohmann Quoted in C&E News

University of Rhode Island SRP Center Director Rainer Lohmann was quoted in an [article in Chemical & Engineering News](#) about his recent [publication on PFAS exposure](#). Lohmann and team found a high likelihood of exposure to PFAS through the production of materials containing a family of polymers that provide waterproofing to products such as rain jackets.

Duke Trainees Post Videos Summarizing Research

Duke University SRP trainee Tess Leuthner and former trainee Jessica Hartman from Joel Meyer's lab worked with the center's Research Translation Core staff to record and post videos summarizing their research and its importance. Leuthner's video is titled "[What are the long-term effects of persistent, low-level exposures of chemicals on DNA?](#)" Hartman titled her video "[Not just a rat in a cage: how lifestyle factors impact toxicological outcomes.](#)"

TRAINEE SPOTLIGHT

Wang Uncovers Mechanisms of Cadmium Toxicity in the Adult Brain

Hao Wang, a trainee at the University of Washington SRP Center under the mentorship of Zhengui Xia is studying the effects of heavy metal exposure on the brain. Specifically, he is interested in the neurotoxic effects and potential mechanisms of cadmium

[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

[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](#).

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



on hippocampus-dependent learning and memory, as well as olfaction. Cadmium is a metal extracted in the production of other metals like zinc and lead and can be found in batteries and auto paint.

Elevated cadmium levels have been observed in drinking water sources near sites with a history of contamination like the Duwamish River in Washington. Wang observed that [cadmium exposure is linked to impaired neurogenesis](#), the production of new functional neurons in the hippocampus region of the brain. Since hippocampal neuron development has been associated with cognitive decline, these findings may have implications for neurodegenerative diseases associated with environmental exposures.

In recent publications, Wang and team demonstrated that inducing activation of adult neurogenesis in the region of the brain involved in cognition and olfaction can rescue adult mice from cadmium-impaired [memory](#) and [olfaction](#). These findings demonstrate the possibility of rejuvenating impaired learning and memory from environmental exposure to cadmium and other heavy metals.

Wang is also a recipient of the [2020 K.C. Donnelly Externship Award Supplement](#). This award will allow him to travel to the University of California, Davis SRP Center to work on an externship under the leadership of SRP researcher Bruce Hammock. Wang will study the mechanisms by which cadmium impairs adult neurogenesis.

Through this externship, Wang hopes to learn advanced chemistry and data analysis skills to provide new insight into cadmium neurotoxicity. He is confident this experience will help him to build a larger network of colleagues and greater opportunities for collaboration in the future.

Additionally, Wang recently won second place for Best Postdoctoral Presentation at the 2020 Regional Society of Toxicology Pacific Northwest Association of Toxicologists (PANWAT) annual meeting. His talk was titled “Inducible and conditional stimulation of adult hippocampal neurogenesis rescues mice from Cd-induced hippocampus-dependent memory deficits.”

A passionate mentor, Wang is involved in some of the University of Washington SRP Center’s Research Translation and

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.

Community Engagement Core activities. He is involved with the [Duwamish Valley Youth Corps](#), a program that invites minority high school students to the university to discuss the benefits of a college education and share the center's latest environmental health studies. He also leads tours for college graduates participating in a CDC-funded internship who are interested in environmental and public health.

Outside of the lab, Wang likes to travel and play sports. He is a big soccer fan and enjoys playing the sport in his free time.

HOT PUBLICATION

Investigating the Endocrine Disrupting Potential of PAHs During Pregnancy

Northeastern University SRP Center researchers provided new insights into the endocrine disrupting potential of PAHs during pregnancy in a prospective [human pregnancy cohort study](#). Biomarkers of PAH exposure are associated with various health endpoints including asthma, breast cancer, cardiovascular disease, and reduced sperm quantity. Although PAHs have been suggested as endocrine disrupting compounds in previous animal and in vitro studies, human studies are currently lacking.

Researchers utilized data on 659 pregnant women from the Puerto Rico Testsite for Exploring Contamination Threats (PROTECT) longitudinal birth cohort in Puerto Rico. They assessed associations between repeated measures of certain urinary hydroxylated PAH (OH-PAH) metabolites and serum hormones during gestation, as OH-PAHs have been shown to be reliable biomarkers of PAH exposure. Gestational age and fetal sex were analyzed as well.

The team found that PAH exposure resulted in decreased concentrations of male and female sex hormones. They also found that changes in hormone concentrations were dependent on fetal sex and gestational age. Because a balance of critical hormones is necessary for endocrine regulation of pregnancy and fetal development, these hormone changes may have pregnancy and labor consequences with potential implications for fetal and child health.

According to the researchers, these findings demonstrate the importance of studying PAH exposures during pregnancy and highlight the potential complexity of their impacts on human pregnancy. Future research will aim to assess relationships between PAH exposures and adverse birth outcomes within the PROTECT cohort, and to understand how PAH exposures may be related to and interact with other environmental exposures.

AWARD WINNERS

Trainees Receive Presentation Awards

Louisiana State University SRP Center trainee Ankit Aryal won

third place for a poster he presented at the South-Central Chapter of the Society of Toxicology's annual meeting. His poster was titled, "Vascular endothelial injury after inhalation of combustion-derived environmentally persistent free radicals is mediated via AhR activation."

Trainee Leuthner Receives Duke University Awards

Duke University trainee Tess Leuthner was awarded the Anne T. and Robert M. Bass Instructional Fellowship from the Duke University Graduate School in addition to a Duke University School of Medicine Core Facility Voucher. With the fellowship, Tess will be the instructor of record for the new course, "One Environmental Health Seminar." The voucher will apply to a project titled, "What role do chemical pollutants have in mitochondrial DNA mutagenesis?"

Wiesner Named to Worldwide List of Researchers

Mark Wiesner, a Duke University SRP Center researcher, was named to the 2020 list of the world's Most Highly Cited Researchers. Citation rate, as tracked by Clarivate's Web of Science, is a measure of a study's importance and, by extension, a researcher's eminence in their field. Wiesner is a co-investigator on a SRP project exploring bioremediation of developmental toxicants in sediment.

Award Given to Interdisciplinary Team Including SRP Researcher

Heather Stapleton, project lead for the Duke University SRP Center, was part of a team of researchers that received a Duke Institute of Brain Sciences Germinator Award. The award will support a study to explore how chemical exposure affects children's brains and whether simultaneous exposure to multiple toxicants produce greater harm.

NASA Award Won by UNM SRP Researcher

University of New Mexico SRP Center researcher Adrian Brearley received an award from the National Aeronautics and Space Administration (NASA) Planetary Major Equipment and Facilities Program. The award allowed for the acquisition of an electron energy loss spectrometer for an analytical transmission electron microscope for studies of planetary materials. This new resource will allow the researchers to perform more detailed imaging in samples from mine wastes.

Rudel Receives Research Support Scholarship

Holly Rudel, a trainee at the Harvard School of Public Health SRP Center, was awarded a Larson Aquatic Research Support Scholarship from the American Water Works Association. The scholarship provides support and encouragement to outstanding graduate students preparing for careers in the fields of science or engineering.

URI SRP Center Director Lohmann Selected as Fulbright Scholar

University of Rhode Island SRP Center Director Rainer Lohmann was selected as a Fulbright Scholar. His research will primarily address the thematic area Community Dimensions of Health and will help communities to improve and sustain human health in the Arctic. He will collaborate with Faroe Hospital System researchers and focus on PFAS in residential settings. He will also set up long-term monitoring of pollutants in the air and water of the Faroe Islands.

Karletta Chief Receives AGU Ambassador Award and Conferred Fellowship

Karletta Chief, University of Arizona SRP Center Community Engagement Core leader, received the American Geophysical Union (AGU) Ambassador Award and a conferred fellowship. Chief received the award and fellowship for pioneering engagement and partnership with Indigenous communities which led to transformative outcomes for Native American tribes and institutions.

PROTECT Researcher Diversity Supplement

Northeastern University SRP Center trainee and Puerto Rico Test site for Exploring Contamination (PROTECT) collaborator Nancy Cardona was awarded an NIH supported Environmental influences on Child Health Outcomes (ECHO) Diversity Supplement. She will use the award to study how phthalate exposure levels relate to lifestyle factors during the gestational period and how they affect infancy and childhood in Latina Women. Cardona will analyze PROTECT and ECHO data alongside other aggregated sources of exposure to better understand the determinants of consumer choices and how these relate to health disparities.

Cormier Receives NIH RADx-UP Award

Louisiana State University SRP grantee Stephanie Cormier and collaborators at the Louisiana Clinical and Translational Sciences Center received a NIH [Rapid Acceleration of Diagnosis for Underserved Populations \(RADx-UP\)](#) grant. With this grant the team will identify important correlates of COVID-19 testing rates such as age, sex, race, employment, and household income to understand perceptions and attitudes related to testing access in five urban underserved communities.

FUNDING OPPORTUNITIES

International Research Scientist Development Award (K01)

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

- [International \(K01\) 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 (LMIC). 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**. For more information, visit the [IRSDA Webpage](#).

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. Applications are due **March 1, 2021**. For more information, visit the [FIRST Program webpage](#).

A [pre-application webinar](#) is scheduled for Monday, January 25, 2021 from 2:00 – 4:00 p.m.

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 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 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 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, the SARS-CoV-2 virus. The next due date is **February 1, 2021** with subsequent due dates at the beginning of each month until May 3, 2021.

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, 2021**.

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 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.

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 knowledgebase. 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**.

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

Healthy People 2030

The U.S. Department of Health and Human Services Office of Disease Prevention and Health Promotion launched the Healthy People 2030 [Leading Health Indicators](#) and [Overall Health and Well-Being Measures](#). Healthy People 2030 includes 355 measurable objectives to promote and strengthen efforts, including research programs, to improve health and well-being over the next decade. For more information and to learn more about the core objectives, see the [initiative's webpage](#).

DATA SCIENCE AND DATA SHARING

OGC Seeks Information Concerning the Use of Spatial Data During Health Emergencies

The Open Geospatial Consortium (OGC), in support of the [OGC Health SDI Concept Development Study](#), is seeking information

about capturing, mapping, analyzing, modeling, and sharing spatial data during health emergencies. This will support the development of a Health Emergencies Data Model and the design of a Health Spatial Data Infrastructure to increase the preparedness and support the responses to major health emergencies. Responses are due by January 29, 2021. For more information, visit the [OGC press release](#).

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 careers 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 18-19, break for the weekend and resume on February 22-24. 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](#).

TAMU Uses Data-processing Algorithms to Improve Characterization of PFAS

SRP researchers at Texas A&M University (TAMU) recently published a study [characterizing both known and unknown PFAS](#) in aqueous film-forming foams used in firefighting. The authors rapidly characterized PFAS using a workflow that enables untargeted analysis of complex formulations followed by feature identification using data-processing algorithms. This work demonstrates that using analytical sample analysis and data processing can enhance exposure assessments when responding to environmental emergencies where PFAS contamination is suspected.

New Survey Seeks Input on Metrics for Biomedical Data Resources

The National Institutes of Health (NIH) [announced it is seeking input](#) from data resource funders and managers through a short survey on metrics for biomedical data resources. With the publication of [NIH's Data Management and Sharing Policy](#), the NIH Office of Data Science Strategy (ODSS) would like a better understanding of the existing and desired metrics that resource managers use to judge the usage and impact of data resources. Survey responses will be capped at 300. Submitters are encouraged to share their responses as soon as possible to ensure input is received.

Research Data Alliance Announces New Community of Practice Group

The Research Data Alliance (RDA) has announced a new category of groups within its organization, [Communities of Practice \(CoP\)](#), that will provide the opportunity to investigate, discuss, coordinate, and provide knowledge and skills within a specific discipline and or research domain. Of particular interest, CoPs will offer a forum to discuss data-related trends and challenges for members to learn from individuals' experiences and collaborate on implementing solutions. These CoPs will be implemented in the first quarter of 2021. For further information, please see the [Framework for the Creation and Management of RDA Communities of Practice \(CoPs\)](#).

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 both a virtual and an in-person 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.

PIDapalooza 2021

The [Open Festival of Persistent Identifiers](#), PIDapalooza, will be held as a virtual 24-hour nonstop event on January 27. The idea behind PIDapalooza is that participating organizations share their knowledge of persistent identifiers and the metadata that connects them. Organizations in attendance will include California Digital Library, Crossref, DataCite, NISO, and ORCID. This is a free event, but registration is required. For more information and to register please see the [event page](#).

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](#), 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](#).

PHOTO OF THE MONTH



The Brown University SRP Community Engagement Center hosted a Community Partner Volunteer Day at the Narragansett Indian tribal farm. Trainees collaborated with garden community partners and spent 10 hours working on the farm.