

Opportunity Title: EPA Fellowship to Research, Analyze, and Apply Environmental Data to Address Health and Environmental Justice Opportunity Reference Code: EPA-REG5-LCRD-2023-02

Organization U.S. Environmental Protection Agency (EPA)

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How to Apply Connect with ORISE...on the GO! Download the new ORISE GO mobile app in the Apple or Google Play Store to help you stay engaged, connected, and informed during your ORISE

experience and beyond!

A complete application consists of:

- An application
- Transcripts <u>Click here for detailed information about acceptable transcripts</u>
- A current résumé/CV, including academic history, employment history, relevant experiences, and publication list
- A Writing Sample (upload in Writing Sample area): Please provide one
 or more previous examples of science writing as well as a brief
 description of any experience with community-based initiatives
- Two educational or professional references

All documents must be in English or include an official English translation.

If you have questions, send an email to ORISE.EPA.REG@orau.org. Please include the reference code for this opportunity in your email.

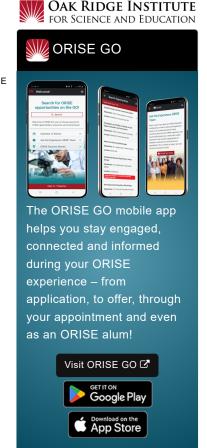
Application Deadline 4/6/2023 6:00:00 AM Eastern Time Zone

Description *Applications may be reviewed on a rolling-basis. Click here for information about the selection process.

EPA Office/Lab and Location: A research opportunity is available at the U.S. Environmental Protection Agency's (EPA), Region 5, Land, Chemicals, and Redevelopment Division (LCRD), Chemicals Management Section located in Chicago, Illinois.

Research Project: The participant will research and analyze environmental data to locate potential underserved communities. The findings will then be presented (by the participant) to EPA scientists and managers for potential utilization. The participant will then identify community representatives to engage for environmental justice outreach and education and will actually collaborate with representatives to identify and address community needs to reduce exposures to lead-based paint and pesticides. By identifying these underserved communities, EPA, including the participant, can then collaborate with the communities to potentially reduce exposures to lead-based paint. In doing so, will help fulfill EPA's mission to protect public health and the environment. The participant may also support quality assurance activities to ensure that data is accurate; lead renovation and abatement research; and children's health and healthy homes efforts.

Additional research opportunity will involve analyzing environmental chemical data to find potential vulnerable environmental justice communities. By identifying these chemical hot spots, the participant will conduct research to determine how best to communicate this risk to other EPA decision-makers





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for potential clean-up and/or pollutant release reduction. A preferred candidate will have experience in, or a willingness to learn: a computer programming language (such as Java, database SQL, Python, R, VBA, or some other code to analyze environmental data); ESRI mapping geographic information systems (GIS); environmental data analysis using MS Excel or similar; presenting data to both technical and non-technical audiences and community outreach.

Learning Objectives: The selected applicant will learn how to apply scientific and technical knowledge in the field of public health, while learning how to collect relevant statistical data, interpret results, and communicate those results to EPA employees, state environmental agencies, and tribal representatives. The participant will develop and implement community-based initiatives. Through this project, the participant will have the opportunity to:

- Observe how science is used at the EPA, particularly to address environmental issues with disparate effects.
- Learn how EPA utilizes (and quality assures) public health data.
- Learn about existing EPA environmental tools.
- · Develop skills for community-based initiatives.
- Develop skills in scientific/technical writing and presentations.
- Learn technical functions of Geographic information system (GIS) and apply GIS skills.

<u>Mentor(s)</u>: The mentor to contact for questions about this opportunity is Donia Moustafa (<u>moustafa.donia@epa.gov</u>). If you have questions about the nature of the research please contact the mentor(s).

<u>Anticipated Appointment Start Date</u>: Spring 2023. All start dates are flexible and vary depending on numerous factors. Click <u>here</u> for detailed information about start dates.

<u>Appointment Length</u>: The appointment may initially be for one year and may be renewed upon EPA recommendation and subject to availability of funding.

Level of Participation: The appointment is full-time.

<u>Participant Stipend</u>: The participant will receive a monthly stipend commensurate with educational level and experience. The current yearly stipends for this opportunity are ~\$52,000 (BS), ~\$63,000 (MS), and ~\$76,000 (Ph.D.). Click here for detailed information about full-time stipends.

EPA Security Clearance: Completion of a successful background investigation by the Office of Personnel Management (OPM) is required for an applicant to be on-boarded at EPA.

<u>ORISE Information</u>: This program, administered by ORAU through its contract with the U.S. Department of Energy (DOE) to manage the Oak



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> Ridge Institute for Science and Education (ORISE), was established through an interagency agreement between DOE and EPA. Participants do not become employees of EPA, DOE or the program administrator, and there are no employment-related benefits. Proof of health insurance is required for participation in this program. Health insurance can be obtained through ORISE.

> ORISE offers all ORISE EPA graduate students and Postdocs a free 5 year membership to the National Postdoctoral Association (NPA).

> The successful applicant(s) will be required to comply with Environmental, Safety and Health (ES&H) requirements of the hosting facility, including but not limited to, COVID-19 requirements (e.g. facial covering, physical distancing, testing, vaccination).

> Questions: Please see the FAQ section of our website. After reading, if you have additional questions about the application process, please email ORISE.EPA.REG@orau.org and include the reference code for this opportunity.

Qualifications The qualified candidate should be currently pursuing or have received a bachelor's or master's degree in one of the required fields (Environmental Science, Physical or Health Science, Public Health, Environmental Engineering, Environmental Justice, Anthropology, Social Sciences, Epidemiology). Most recent degree must have been received within five years of the starting date.

> The following preferred skills or experience would be favorable for a potential candidate:

- Understanding and communicating (verbally and written) science, data, and/or policy to non-technical audiences;
- Geographic information systems and data analysis to identify underserved communities;
- · Environmental data analysis;
- · Development and implementation of public health or community initiatives:
- · Understanding of systemic inequalities contributing to environmental justice issues (personal or professional experience is a plus).

Eligibility Requirements

- Citizenship: LPR or U.S. Citizen
- Degree: Bachelor's Degree, Master's Degree, or Doctoral Degree received within the last 60 months or anticipated to be received by 6/16/2023 11:59:00 PM.
- Discipline(s):
 - Chemistry and Materials Sciences (12 ○)
 - Communications and Graphics Design (6.4)
 - Computer, Information, and Data Sciences (4_●)
 - Earth and Geosciences (10 ●)
 - o Engineering (22 ●)
 - Environmental and Marine Sciences (10.4)



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- Life Health and Medical Sciences (<u>48</u>.
- Mathematics and Statistics (2_●)
- Physics (<u>16</u> ●)
- Science & Engineering-related (1_●)
- Social and Behavioral Sciences (29 ●)