Opportunity Title: EPA Health Impacts of Environmental Exposures Fellowship
Opportunity Reference Code: EPA-ORD-CPHEA-PHITD-2020-06

Organization U.S. Environmental Protection Agency (EPA)

Reference Code EPA-ORD-CPHEA-PHITD-2020-06

How to Apply ***Connect with ORISE...on the GO!*** Download the new ORISE GO mobile app in the Apple App Store 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
- Transcript(s) – For this opportunity, an unofficial transcript or copy of the student academic records printed by the applicant or by academic advisors from internal institution systems may be submitted. All transcripts must be in English or include an official English translation. Click here for detailed information about acceptable transcripts.
- A current resume/CV, including academic history, employment history, relevant experiences, and publication list
- Two educational or professional recommendations. Click here for detailed information about recommendations.

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

Application Deadline 10/20/2020 3:00:00 PM Eastern Time Zone

Description ***Applications may be reviewed on a rolling-basis and this posting could close before the deadline.** Click **here** for information about the selection process.

EPA Office/Lab and Location: A research opportunity is available at the Environmental Protection Agency (EPA), Office of Research and Development (ORD), Center for Public Health Environmental Assessment (CPHEA), Public Health and Integrated Toxicology Division (PHITD) located in Chapel Hill, North Carolina.

Research Project: The research participant will have the opportunity to collaborate with a team of EPA scientists on research efforts describing health effects of long term exposures. Health effects are characterized through hospitalizations, cognitive function, progression of diseases, birth outcomes, and prescription usage. This research group is interested in a range of environmental exposures including air pollution, wildfire smoke, water contaminants, and heavy metals. Research activities related to this project will involve characterization of spatial and temporal distribution of exposures, analysis of spatial and temporal associations between the outcome and the exposure, and performing health risk assessment. Methodological considerations will include addressing spatially and temporally varying confounding, characterizing direct, indirect, and spillover effects, and identifying the role of mediators.

Learning Objectives: Under the guidance of a mentor, the participant will have the opportunity to be part of a multidisciplinary team of investigators that are studying impacts of environmental exposures on human population well being and health. Research activities may include:

- Learning how to implement statistical models to assess health risks and

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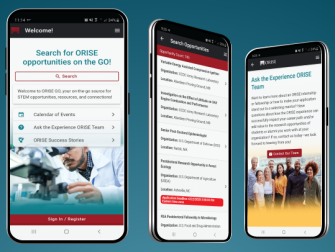
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interpretation of results
- Learning how to develop spatial and temporal exposure surfaces
- Learning how to prepare written documents, including documentation of analysis, data handling procedures, and statistical summaries of analytic results
- Presenting at professional meetings
- Preparation of manuscripts, presentations, and summaries of the data.

The research participant will be able to learn a broad variety of skills related to statistical approaches to analysis of geospatial and temporal trends, managing and utilizing large datasets, managing and utilizing health data, formulating research questions, and preparing manuscripts for publication in peer reviewed journals.

Mentor(s): The mentor for this opportunity is Ana Rappold (rappold.ana@epa.gov). If you have questions about the nature of the research please contact the mentor(s).

Anticipated Appointment Start Date: December 2020. All start dates are flexible and vary depending on numerous factors. Click **here** for detailed information about start dates.

Appointment Length: The appointment will initially be for one year and may be renewed up to three or four additional years upon EPA recommendation and subject to availability of funding.

Level of Participation: The appointment is part-time (30 hours per week).

Participant Stipend: The participant will receive a monthly stipend commensurate with educational level and experience. 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.

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

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

Qualifications The qualified candidate should have received a master's degree in one of the relevant fields, or be currently pursuing a master's degree with completion by December 2020. Degree must have been received within five years of the appointment start date.

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Candidates who are currently pursuing their doctoral degree are encouraged to apply.

Preferred skills:

- Completed coursework and/or experience in applying statistical methods in analyzing data, particularly causal methods.
- Completed coursework and/or experience using geospatial methods
- Completed coursework and/or experience in environmental or health risk assessment methods.
- Proficiency in R or Python language programming.
- Proficiency in Bayesian hierarchical methods, spatial models, time series, or machine learning approaches.
- Strong written, oral, and electronic communication skills.

Eligibility Requirements

- **Citizenship:** U.S. Citizen Only
- **Degree:** Master's Degree or Doctoral Degree received within the last 60 months or currently pursuing.
- **Discipline(s):**
  - **Computer, Information, and Data Sciences** (1 👁)
  - **Engineering** (1 👁)
  - **Environmental and Marine Sciences** (2 👁)
  - **Life Health and Medical Sciences** (3 👁)
  - **Mathematics and Statistics** (10 👁)
  - **Social and Behavioral Sciences** (1 👁)
- **Veteran Status:** Veterans Preference, degree received within the last 120 month(s).

Affirmation I will have received a master's degree by December 2020 or I am currently pursuing a doctoral degree.