Opportunity Title: EPA Fellowship on Health Benefits of Reducing Pollution
Opportunity Reference Code: EPA-OP-NCEE-2024-02

Organization U.S. Environmental Protection Agency (EPA)

Reference Code EPA-OP-NCEE-2024-02

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 4/30/2024 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 training opportunity is currently available at the U.S. Environmental Protection Agency's (EPA) Office of Policy (OP)/National Center for Environmental Economics (NCEE), located at EPA Headquarters in Washington, DC.

The mission of EPA is to protect human health and the environment. EPA works to ensure that: Americans have clean air, land and water; National efforts to reduce environmental risks are based on the best available scientific information; Federal laws protecting human health and the environment are administered and enforced fairly, effectively and as Congress intended; Environmental stewardship is integral to U.S. policies concerning natural resources, human health, economic growth, energy, transportation, agriculture, industry, and international trade, and these factors are similarly considered in establishing environmental policy; All parts of society have access to accurate information sufficient to effectively participate in managing human health and environmental risks; Contaminated lands and toxic sites are cleaned up; and chemicals in the marketplace are reviewed for safety.

EPA's National Center for Environmental Economics (NCEE) specializes in analyzing the costs, benefits, and economic impacts of environmental regulations and policies. NCEE is recognized for identifying and pursuing new research to develop improved methods for measuring the economic consequences of environmental outcomes.

Research Project: One key area for NCEE is the benefits analysis of

reduced exposure to environmental contaminants. While some environmental policies, particularly those involving criteria air pollutant controls and some toxics (e.g., lead) have well-developed tools for benefits analysis, for most other contaminants there are fewer tools with which to evaluate the benefits of exposure reductions, particularly pollutants addressed under the Toxic Substances Control Act. EPA has a strong interest in research that expands methods and data for performing benefits analysis for such contaminants.

This goal of this research project is to improve EPA's ability to quantify the human health benefits of reducing exposure to toxic chemicals, particularly for non-cancer effects. This would include applying recent methods for quantifying dose-response or incidence-response functions for humans where the evidence base may be limited to animal studies. We anticipate applying methods developed by the World Health Organization (https://www.who.int/publications/i/item/9789241513548) to estimate dose-response functions and economic benefits of exposure reduction for one or more chemicals. For example, WHO's "approximate probabilistic analysis tool" (APROBA) is a publicly available spreadsheet-based tool for estimating risks that has not yet been widely applied for benefits analysis.

Learning Objectives: The research fellow will engage in one or more specific research activities. These may include, but are not limited to, studying exposures and health effects of selected environmental contaminants and associated economic benefits of reducing exposures; reviewing and assessing the health and/or economics literature on key health endpoints and the extent to which they can be included in benefits analysis; evaluating alternative risk assessment methods for specific contaminants, exposure, and health endpoints or for application more broadly; or applying benefits analysis to policies, projects or programs dealing with environmental health issues.

Through this project the research fellow will learn about:

- Economic and scientific methods used by the US EPA to estimate changes in exposure, health risks, and economic outcomes.
- The policy making process at EPA and the federal government, and how scientific assessments, including risk assessment and economic analysis, are applied to evaluating environmental policy.

Mentor: The mentor for this opportunity is Jennifer Bowen (bowen.jennifer@epa.gov). If you have questions about the nature of the research, please contact the mentor.

Anticipated Appointment Start Date: Summer 2024. All start dates are flexible and vary depending on numerous factors. Click **here** for detailed information about start dates.

Appointment Length: Appointment initially is for one year but may be renewed upon EPA recommendation and subject to availability of funding.

Level of Participation: The appointment is full-time.

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.

Qualifications

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.

The qualified candidate should have received a master's degree or doctoral degree in one of the related fields or be currently pursuing the degree with completion before the appointment start date. Degree must have been received within the past 5 years.

Preferred skills:

- Strong quantitative skills
- Experience using analytic software (e.g., STATA, R, or Matlab) for data management and analysis

Eligibility Requirements

- **Citizenship:** U.S. Citizen Only
- **Degree:** Master's Degree or Doctoral Degree received within the last 60 months or anticipated to be received by 6/30/2024 6:00:00 PM.
- **Discipline(s):**
  - **Computer, Information, and Data Sciences** (1 👁)
  - **Environmental and Marine Sciences** (2 👁)
  - **Life Health and Medical Sciences** (4 👁)
  - **Mathematics and Statistics** (3 👁)
  - **Other Non-Science & Engineering** (1 👁)
  - **Social and Behavioral Sciences** (2 👁)