Opportunity Title: EPA Assessing Resilient Fish Populations Research Opportunity
Opportunity Reference Code: EPA-ORD-CPHEA-PESD-2020-01

Organization	U.S. Environmental Protection Agency (EPA)
Reference Code	EPA-ORD-CPHEA-PESD-2020-01
How to Apply	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	8/14/2020 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), Pacific Ecological Systems Division (PESD) located in Corvallis, Oregon. **Research Project:** This interdisciplinary project pairs ecological and hydrological science with mechanistic and simulation modeling, which would provide a research participant the unique opportunity to participate in research to enhance understanding of the relative risks of various stressors on aquatic systems and inform protection actions for habitat resilience and restoration actions for habitat and fish recovery. The research participant will have the opportunity to contribute to watershed research at the Pacific Ecological Systems Division to support modeling of stream and landscape attributes as influenced by various stressors, and subsequent projected effects on fish assemblages. This research aims to develop a quantitative foundation for integrating physical and ecological data that is required to improve our capacity to make strategic decisions regarding important current and future policy needs supporting the EPA's capacity to protect the nation's water resources as mandated under the federal Clean Water Act. The research may involve statistical analysis to characterize spatial and temporal aspects of aquatic environments, including temperature, flow, and physical features. Simulation modeling of fish populations will be an important component of this research.

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Simulation modeling of alternative futures may be used as a means to evaluate potential environmental effects of management options. Application of process-based models of stream temperature, sediments, and/or nutrients may also be involved. The research will primarily be conducted using existing datasets but some field data collection may be required.

Learning Objectives: The research participant will have the opportunity to interact with a team of aquatic ecologists, hydrologists, ecological modelers, and other environmental scientists, which would provide the opportunity to be involved in the following research activities:

- Conducting data analysis, documenting code, and interpretation of results.
- Conducting and documenting quality assurance and review of data analysis and databases.
- Preparing reports, presentations, and summaries of data.
- Presenting results at professional meetings.
- Publishing results.

Mentor(s): The mentor for this opportunity is Dr. Joseph Ebersole (ebersole.joe@epa.gov). If you have questions about the nature of the research please contact the mentor(s).

Anticipated Appointment Start Date: September 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 additional years 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.

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 be currently pursuing or have received a master's or doctoral degree in one of the relevant fields. Degree must have been received within five years of the appointment start date.

Preferred skills:

- Knowledge of watershed science and aquatic ecology
- Experience in simulation and statistical modeling at varying spatial scales using standard statistical languages such as R, Stata, or Python to support simulation modeling of physical or ecological systems
- Exceptional data management skills
- Documenting activities and writing reports and scientific manuscripts
- Exceptional writing and verbal communication skills and public speaking experience
- Ability to search electronic literature and critically evaluate the quality of published science

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):**
  - **Earth and Geosciences** (1 👁)
  - **Engineering** (1 👁)
  - **Environmental and Marine Sciences** (8 👁)
  - **Life Health and Medical Sciences** (3 👁)
- **Veteran Status:** Veterans Preference, degree received within the last 120 month(s).