

Opportunity Title: EPA Fellowship in National Wetland Condition Assessment

Plant Ecology

Opportunity Reference Code: EPA-ORD-CPHEA-PESD-2024-02

Organization U.S. Environmental Protection Agency (EPA)

Reference Code EPA-ORD-CPHEA-PESD-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 <u>here</u> for detailed information about recommendations.

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

Application Deadline 9/27/2024 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 available at the Environmental Protection Agency (EPA), Office of Research and Development (ORD), Center for Public Health and Environmental Assessment (CPHEA), Pacific Ecological Systems Division (PESD) in Corvallis, Oregon.

Research Project: This effort will explore research questions using national plant datasets collected as part of the National Wetland Condition Assessment (NWCA), which is the nation's largest and most comprehensive survey of wetland condition and characteristics across the conterminous US. The NWCA, coordinated by the EPA with states and tribes, collects physical, chemical, and biological data from wetlands across the conterminous United States every five years. For each survey in 2011, 2016, and 2021, vegetation data (including plant taxonomic identification, species richness, and species abundance, among other data) were collected by field crews at approximately 1,000 sites. Combined with existing ancillary data about plant species, such as plant species traits and floristic quality analysis, the NWCA vegetation dataset provides an unparalleled opportunity to explore research questions to understand the drivers of wetland plant communities and ecological integrity.

This research will bring together the existing NWCA vegetation data and other monitoring data from the NWCA. Potential research questions may focus on developing plant indicators of condition and to evaluate the responses of plants to stressors such as excess nutrients, climate change, and anthropogenic disturbance across the conterminous US. The data



OAK RIDGE INSTITUTE

Generated: 6/30/2024 11:27:36 AM



Opportunity Title: EPA Fellowship in National Wetland Condition Assessment

Plant Ecology

Opportunity Reference Code: EPA-ORD-CPHEA-PESD-2024-02

collected also allows the exploration of questions about plant community dynamics such as species interactions and the relationship of these interactions to ecosystem, hydrologic, and soil characteristics in wetlands. The ORISE fellow will be involved in the design of data analyses and in identifying research questions to pursue in this work.

Learning Objectives: Under the guidance of a mentor, research activities may include:

- Using R programming language to assemble and analyze NWCA vegetation data within the conterminous United States.
- Collaborating on the development of a vegetation indicator of wetland condition and evaluating responses of vegetation to stressors.
- Meeting and collaborating on related NWCA activities with scientists at PESD and across EPA.
- Conducting scientific synthesis, data analysis, manuscript preparation, literature searches, and presentations to technical and non-technical audiences.
- The research participant will have the opportunity to learn about EPA's programs related to the National Aquatic Resource Surveys
 (NARS https://www.epa.gov/national-aquatic-resource-surveys), which includes the NWCA (https://www.epa.gov/national-aquatic-resource-surveys/national-wetland-condition-assessment-2016-technical-support

Mentor(s): The mentor for this project is Amanda Nahlik (nahlik.amanda@epa.gov). If you have questions about the nature of the research, please contact the mentor.

Anticipated Appointment Start Date: Spring/Summer 2024. 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 upon EPA recommendation and subject to availability of funding.

Level of Participation: This 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.

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

Generated: 6/30/2024 11:27:36 AM



Opportunity Title: EPA Fellowship in National Wetland Condition Assessment

Plant Ecology

Opportunity Reference Code: EPA-ORD-CPHEA-PESD-2024-02

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.ORD@orau.org and include the reference code for this opportunity.

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

Preferred skills and/or experience:

- Solid background in plant ecology and approaches and methods.
- Experience in vegetation classification and plant species interactions.
- Experience with R statistical software and working with large datasets.
- · Experience with spatial datasets and GIS.
- · Excellent written verbal and written communication skills.
- · Demonstrated skills working in a group setting.
- Capable of critically evaluating 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.
- Academic Level(s): Graduate Students, Postdoctoral, or Post-Master's.
- Discipline(s):
 - Chemistry and Materials Sciences (6.
 - Earth and Geosciences (3)
 - Engineering (1 <)
 - Environmental and Marine Sciences (14 🎱)
 - Life Health and Medical Sciences (15 🎱)
 - Mathematics and Statistics (4_②)

Affirmation I have lived in the United States for at least 36 out of the past 60 months. (36 months do not have to be consecutive.)

Generated: 6/30/2024 11:27:36 AM