Opportunity Title: USFS Ecology Fellowship with the Pacific Northwest Research Station

Opportunity Reference Code: USDA-USFS-2023-0239

Organization	U.S. Department of Agriculture (USDA)
Reference Code	USDA-USFS-2023-0239
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 package 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. Selected candidate must provide proof of completion of the degree before the appointment can start. Click **Here** for detailed information about acceptable transcripts.
- A current resume/CV
- Two educational or professional recommendations. At least one recommendation must be submitted in order for the mentor to view your application.

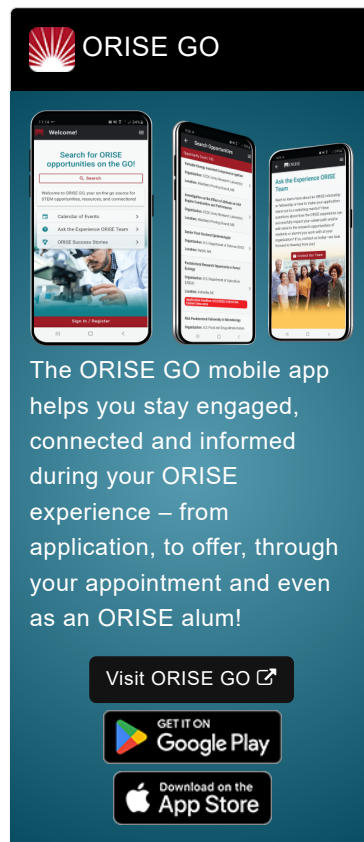All documents must be in English or include an official English translation.

Application Deadline	9/1/2023 4:01:23 PM Eastern Time Zone
Description	***Applications will be reviewed on a rolling-basis.**

USFS Office/Lab and Location: A fellowship opportunity is available with the US Department of Agriculture (USDA) Forest Service (USFS) located in Wenatchee, Washington.

At the heart of the U.S. Forest Service's mission is their purpose. Everything they do is intended to help sustain forests and grasslands for present and future generations. Why? Because their stewardship work supports nature in sustaining life. This is the purpose that drives the agency's mission and motivates their work across the agency. It's been there from the agency's very beginning, and it still drives them. To advance the mission and serve their purpose, the U.S. Forest Service balances the short and long-term needs of people and nature by: working in collaboration with communities and our partners; providing access to resources and experiences that promote economic, ecological, and social vitality; connecting people to the land and one another; and delivering world-class science, technology and land management.

Research Project: The appointment provides modeling, coding, and database expertise in support of projects incorporating complex, ecological models, with a particular focus on decision support modeling to help direct strategic management decisions towards improving the value and sustainability of restoration treatments. The selected applicant will assist in spatial data wrangling and cleaning, statistical modeling, spatial decision support model development, and integration with existing web applications for dissemination to potential land management users. The appointment involves interfacing with collaborators from a variety of

government, nongovernment, and university entities.

Additional research activities include:

- Gathers, analyzes, and interprets spatial ecological data. Performs statistical analysis including machine learning, multivariate statistics, time-series analyses, and statistical distribution fitting. Performs quality assurance/quality control assessments. Integrates data within a decision support, fuzzy logic modeling framework to identify priority restoration areas to achieve multiple resource benefits. Develops proposals, writes internal progress reports, publishes findings in the peer-reviewed literature, assists in web application development.
- Incorporates ecological datasets into statistical and GIS modeling workflows including multivariate statistics, regression modeling, and machine learning for prediction, interpretation, and synthesis.
- Provides technical advice and expertise on related projects. Keeps updated with latest developments in the ecological literature, computer technology, and landscape management challenges. Assists in developing workflow improvements via program development and scripting routines.

Learning Objectives: As a result of this training the participant will improve their skills in geostatistical modeling, statistical design and analysis, decision support model development, scripting in R and python, web development and design, manuscript preparation and writing, and science delivery and application.

Mentor: The mentor for this opportunity is Nicholas Povak (nicholas.povak@usda.gov). If you have questions about the nature of the research, please contact the mentor.

Anticipated Appointment Start Date: 2023; start date is flexible (earlier or later).

Appointment Length: The appointment will initially be for one year but may be extended upon recommendation of USFS and is contingent on the availability of funds.

Level of Participation: The appointment is full-time.

Participant Stipend: The participant will receive a monthly stipend commensurate with educational level and experience. **The current stipend for this opportunity is $57,118 / year, or $4,759.83 / month. The cost of monthly health insurance will be provided in addition to that amount.**

Citizenship Requirements: This opportunity is available to U.S. citizens only.

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

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through an interagency agreement between DOE and USFS. Participants do not become employees of USDA, USFS, 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 visit our [Program Website](). After reading, if you have additional questions about the application process please email [USForestService@orise.orau.gov]() 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 the past four years.

Preferred Skills/Experience:

- This appointment is suited for those who have experience in landscape ecology, landscape simulation modeling, machine and statistical modeling, and decision support applications.
- Candidates who can operate independently while participating in the collaborative culture of the team are encouraged to apply.
- The successful candidate will be self-motivated and will have a high demonstrated capacity for writing, research communication, and publication.
- Web application development experience is desired but not a requirement.

Eligibility Requirements

- **Citizenship:** U.S. Citizen Only
- **Degree:** Master's Degree or Doctoral Degree received within the last 48 months or currently pursuing.
- **Discipline(s):**
  - **Computer, Information, and Data Sciences** (2 👁)
  - **Earth and Geosciences** (3 👁)
  - **Environmental and Marine Sciences** (4 👁)
  - **Life Health and Medical Sciences** (4 👁)
  - **Mathematics and Statistics** (2 👁)
  - **Social and Behavioral Sciences** (2 👁)