Opportunity Title: USDA Forest Service Postdoctoral Fellowship: Future Effects of Insects and Diseases on Forest Conditions
Opportunity Reference Code: USDA-FS-SRS-2026-0148

Organization U.S. Department of Agriculture (USDA)

Reference Code USDA-FS-SRS-2026-0148

How to Apply ***To submit your application, scroll to the bottom of this opportunity and click 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. 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. 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.

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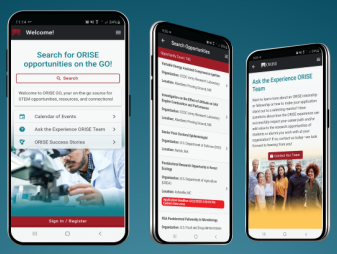
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Application Deadline 6/12/2026 3:00:00 PM Eastern Time Zone

Description ***Applications will be reviewed on a rolling-basis.**

USDA Forest Service Office/Lab and Location: A fellowship opportunity is available with the US Department of Agriculture (USDA) Forest Service (FS) within the Forest Service Southern Research Station (SRS) located in Research Triangle Park, North Carolina.

At the heart of the USDA 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 USDA 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: A Postdoctoral Fellow will participate in a project focused on analyzing forest change and disturbances on U.S. forests. In this project, we will collaboratively develop one or more models of the effects of insect or disease disturbances on forests across the U.S. based

on forest inventory data and use a forest simulation model to project the future effects of those agents on forests between now and 2080.

Many threats, including both native and invasive insects and diseases, are already affecting forests in the U.S. and have the potential to increase in the future. Researching collaboratively with our team, you will analyze forest inventory data, along with ancillary data including gridded climate data, remotely sensed information, land use, human population and income, global trade, and biophysical data. We will develop one or more sub-models within the Forest Service's Forest Dynamics Model (FDM) that captures the effects of insect and/or disease agents. We will use the FDM to project future forest conditions and analyze the effects of those insect and disease agents on attributes such as ecological integrity, including metrics related to forest structure, species composition, and biodiversity. We will also look for forests that are projected to be less affected by insects and diseases or that may offer resistance or resilience in the face of insect and disease impacts. Our study area will encompass all forests in the conterminous US.In this project, you will have the opportunity to continue your professional development. We will produce information on threats to forests that can inform decision-making by forest managers, planners, and policy makers. This project will inform the Forest Service's Resources Planning Act (RPA) Assessment.

Learning Objectives: The participant will have the opportunity to hone many aspects of their scientific skillset while participating collaboratively with Southern Research Station researchers. Learning activities will include:

- Learning to analyze forest inventory data to develop empirical models that quantify the effects of insect or disease agents on forests;
- Gaining experience applying empirical model results within simulation models to project the future impacts of these agents on forest conditions under global change scenarios;
- Developing skills in risk assessment to determine which forests may be less vulnerable to insect and disease disturbances;
- Building collaborative and communication skills with partners within the Forest Service, academia, and other agencies to share findings and exchange knowledge and;
- Contributing to and learning the process of writing multiple peer-reviewed publications that disseminate research results.

Mentor: The mentors for this opportunity are Jennifer Costanza (jennifer.costanza@usda.gov), Frank Koch (frank.h.koch@usda.gov), and Kevin Potter (kevin.potter@usda.gov). If you have questions about the nature of the research, please contact the mentors.

Anticipated Appointment Start Date: Summer or Fall 2026. Start date is flexible and will depend on a variety of factors.

Appointment Length: The appointment will initially be for two years but

may be extended upon recommendation of USDA Forest Service 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 anticipated stipend is $78,000 annually.**

Citizenship Requirements: This opportunity is available to U.S. citizens and Lawful Permanent Residents (LPR) 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 through an interagency agreement between DOE and USDA Forest Service. Participants do not become employees of USDA, USDA Forest Service, 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 ORISE.USFS.SRS@orau.org and include the reference code for this opportunity.

Qualifications The qualified candidate should be currently pursuing or have received a doctoral degree in the one of the relevant fields (e.g. Ecology, Forestry, Climatology, Geography). Degree must have been received within the past four years, or anticipated to be received by 9/30/2026.

Preferred Skills:

- Data analysis and modeling skills, especially related to the effects of forest insects, diseases, climate and/or other disturbances on ecosystems at broad scales, and experience with Forest Inventory and Analysis (FIA) data.
- Data management skills and demonstrated experience managing, standardizing, synthesizing, and visualizing large, disparate natural resource (e.g., forest inventory, climate, land use, soils, elevation) data sets in R or Python as well as GIS software such as QGIS or ArcGIS Pro.
- Knowledge of US forest ecosystems and background in analyzing forest structure, stand dynamics, biodiversity, and/or other aspects of forest conditions.
- A background in threats to forest ecosystems, including changing forest disturbance regimes, climate extremes, land-use change and/or socioeconomic drivers.
- Oral and written communication skills and demonstrated experience as lead author of peer-reviewed natural resources publications.

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Stipend $78,000.00 Yearly

Point of Contact Michele

Eligibility Requirements

- **Citizenship:** LPR or U.S. Citizen
- **Degree:** Doctoral Degree received within the last 49 months or currently pursuing.
- **Discipline(s):**
  - **Chemistry and Materials Sciences** (12)
  - **Communications and Graphics Design** (2)
  - **Computer, Information, and Data Sciences** (17)
  - **Earth and Geosciences** (21)
  - **Engineering** (29)
  - **Environmental and Marine Sciences** (14)
  - **Life Health and Medical Sciences** (51)
  - **Mathematics and Statistics** (11)
  - **Physics** (16)
  - **Science & Engineering-related** (2)
  - **Social and Behavioral Sciences** (29)