Opportunity Title: USFS Postdoctoral Research and Data Analysis Fellowship for Wildland Fire & Fuels Treatment Outcome

Opportunity Reference Code: USDA-USFS-PSWRS-2023-0370

Organization	U.S. Department of Agriculture (USDA)
Reference Code	USDA-USFS-PSWRS-2023-0370
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.

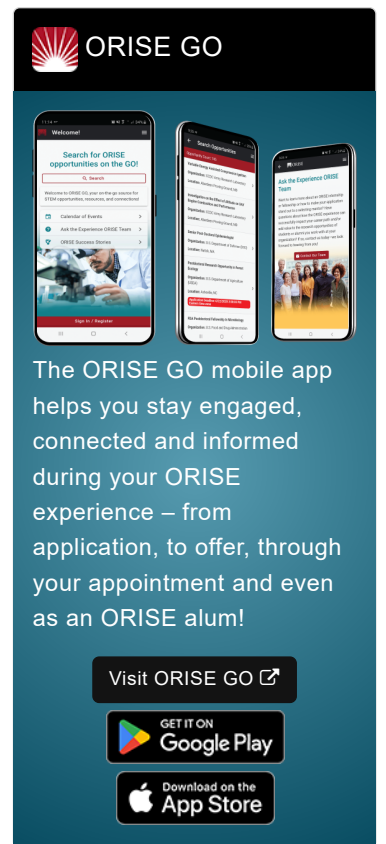All documents must be in English or include an official English translation.

Application Deadline	9/15/2023 3:00:00 PM Eastern Time Zone
Description	***Applications will be reviewed on a rolling-basis.**

USFS Office/Lab and Location: A fellowship opportunity is available within the US Department of Agriculture (USDA) Forest Service (USFS) with the Pacific Southwest Research Station located in Redding, California. **Office space is available at the Redding Lab. Remote participation may be considered.**

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 USDA Forest Service's Pacific Southwest Research Station (PSW) is seeking a Postdoctoral Fellow and a Data Analysis Fellow, both preferably with experience in fire ecology/fire science, to collaborate with scientists at all USFS research stations on a National research effort to help evaluate the effectiveness of fuel reduction treatments, including mechanical thinning and prescribed fire, through case studies of wildfires interacting with those treatments. The objective of the project is to better understand the conditions under which treatments produce desirable outcomes, including reduction in fire severity, successful

containment of fire spread by suppression operations, as well as reduction in wildfire impacts to homes and other infrastructure, to inform future adaptive management in a changing climate. The project involves both methodological development that will allow for future comparisons across geographic regions, and analysis of case studies. The two participants will take on different roles (flexible and to be determined, based on strengths and interests), but each will gain experience with data acquisition and data analysis, as well as collaborating in the writing of manuscripts.

Learning Objectives: Under guidance from the mentor, the participants will learn:

- To better understand how fuel treatments including mechanical thinning and prescribed fire influence wildfire outcomes
- To enhance collaborative skills as a member of a scientific team by helping to formulate research questions that meet needs of resource and fire managers, and plan data acquisition, collection, and analysis
- To gain experience analyzing large datasets, and translating quantitative scientific results into products that enhance forest and fire management capabilities
- To extend natural resource information-sharing capabilities by collaborating on the preparation of manuscripts for publication in peer-reviewed journals and communicating study results to scientists and forest managers via meetings, presentations, webinars, and field tours

Mentor: The mentor for this opportunity is Eric Knapp (eric.e.knapp@usda.gov). If you have questions about the nature of the research, please contact the mentor.

Anticipated Appointment Start Date: October 2023. 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 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 annual stipend is $85,000 for candidates with a Ph.D. and $66,500 for a candidate with an MS degree. Both will be provided health insurance, a travel allowance, supplies budget, and a USFS computer.**

Citizenship Requirements: This opportunity is available to U.S. citizens and Lawful Permanent Residents (LPR).

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 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 [ORISE.USFS.PSWRS@orau.org](#) and include the reference code for this opportunity.

Qualifications	The qualified candidate should have received a master's (Data Analysis Fellow) or doctoral degree (Postdoctoral Fellow) in one of the relevant fields, or be currently pursuing one of the degrees with completion by the start of their appointment. Degree must have been received within five years of the appointment start date.

Applicants in the latter stages of completing a degree will also be considered in some circumstances. For clarification, please inquire with the mentor listed in the posting.

Preferred skills:

- Demonstrated experience in data management and statistical analysis of ecological and/or fire-science related datasets
- Experience with Geographic Information Systems (GIS) and fire severity mapping products
- Evidence of scientific and technical writing for peer-reviewed publication
- Experience presenting on natural resource topics to both scientific and general/manager audiences
- Demonstrated understanding of fire ecology and/or fire science
- Some background or training in fire management, including basic NWCG (National Wildfire Coordinating Group) firefighter training (S-130, Firefighter Training and S-190, Introduction to Wildland Fire Behavior) a plus, but not necessary
- Capacity to perform both independently and as part of a team
- Ability to prioritize multiple projects and activities within project deadlines
- Interest in science applied to management questions

Eligibility Requirements

- **Citizenship:** LPR or U.S. Citizen
- **Degree:** Master's Degree or Doctoral Degree.
- **Discipline(s):**
  - **Computer, Information, and Data Sciences** (2 👁)
  - **Earth and Geosciences** (5 👁)
  - **Engineering** (4 👁)
  - **Environmental and Marine Sciences** (6 👁)
  - **Life Health and Medical Sciences** (7 👁)
  - **Mathematics and Statistics** (6 👁)
  - **Other Non-Science & Engineering** (1 👁)
  - **Physics** (1 👁)

- **Veteran Status:** Veterans Preference, degree received within the last
  120 month(s).