

Opportunity Title: USDA FS Measuring Live Wildland Fuel Characteristics

Fellowship

Opportunity Reference Code: USDA-FS-RMRS-2025-0199

Organization U.S. Department of Agriculture (USDA)

Reference Code USDA-FS-RMRS-2025-0199

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.

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!

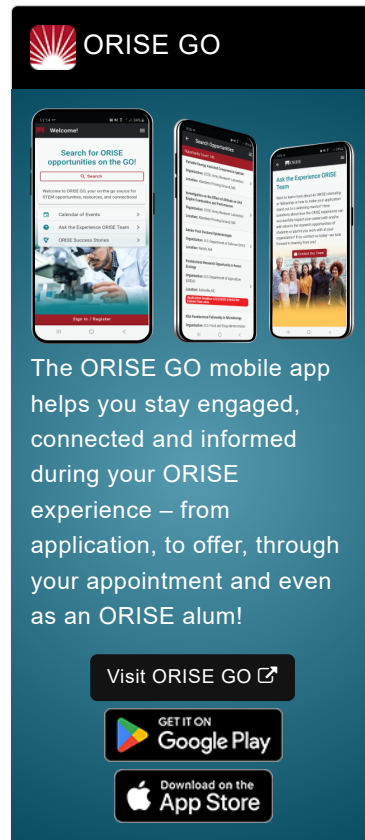
Application Deadline 1/30/2026 3:00:00 PM Eastern Time Zone

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 Rocky Mountain Research Station (RMRS) located in Missoula, Montana.

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: This project involves the exploration of the thermal, physical and chemical characteristics of live fuels and the characterization of their seasonal variations across the grasses, shrubs and trees of the Intermountain Western United States. It will leverage field and laboratory



Opportunity Title: USDA FS Measuring Live Wildland Fuel Characteristics

Fellowship

Opportunity Reference Code: USDA-FS-RMRS-2025-0199

measurements to develop novel characterizations of the thermal degradation of live fuels in a format that is suitable for inclusion into kinetic models and computation fluid dynamics-based fire behavior simulators. Ultimately, this new knowledge will guide the implementation of new characterizations of live fuels in fire behavior models and this information can improve our ability to predict the spread and intensity of wildfires and prescribed fires.

Learning Objectives: The program participant will learn a variety of new skills to measure live wildland fuel characteristics in the field and in the laboratory. These measurements will include: live fuel moisture content, specific leaf area, relative water content, crude fat analysis, non-structural carbohydrates, water potential, and hydraulics. The participant will also learn how to prepare samples for microscopy to resolve surface area to volume relationships. Additionally, they will receive instruction in the use of thermal characterization test equipment such as thermal gravimetric analysis and oxygen bomb calorimetry. The participant will be introduced to modern techniques used to characterize the thermal degradation of live wildland fuels in fire behavior models. They will also have opportunities to strengthen their data management, statistical analysis, and technical writing skills by summarizing results for peer reviewed publications.

Mentor: The mentor for this opportunity is Matt Jolly (william.jolly@usda.gov). If you have questions about the nature of the research, please contact the mentor.

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

Appointment Length: The appointment will initially be for six months but may be extended upon recommendation of USDA Forest Service and is contingent on the availability of funds.

Level of Participation: The appointment is part time.

Participant Stipend: The participant will receive a monthly stipend commensurate with educational level and experience. **The anticipated stipend range is \$1,100 - \$1,273 monthly.**

Citizenship Requirements: This opportunity is available to U.S. citizens, Lawful Permanent Residents (LPR), and foreign nationals. Non-U.S. citizen applicants should refer to the [Guidelines for Non-U.S. Citizens Details page](#) of the program website for information about the valid immigration statuses that are acceptable for program participation. Foreign national candidates may have a mandatory in-person requirement depending on visa status.

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-

Opportunity Title: USDA FS Measuring Live Wildland Fuel Characteristics

Fellowship

Opportunity Reference Code: USDA-FS-RMRS-2025-0199

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

Qualifications The qualified candidate should be currently pursuing a bachelor's degree in the one of the relevant fields.

Preferred skills:

- Self-motivated
- Able to and interested in learning new tools, techniques and skills
- Ability to collaborate as part of a dynamic team or students, professionals and scientists.

Stipend \$1,100.00 – \$1,273.00 Monthly

Point of Contact [Michele](#)

Eligibility • **Degree:** Currently pursuing a Bachelor's Degree.

Requirements • **Discipline(s):**

- **Environmental and Marine Sciences** ([4](#) 👁)
- **Life Health and Medical Sciences** ([2](#) 👁)