

**Opportunity Title:** USFS Fellowship in Wildland Fire Management Research and Data Analytics

**Opportunity Reference Code:** USDA-USFS-RMRS-2023-0478

**Organization** U.S. Department of Agriculture (USDA)

**Reference Code** USDA-USFS-RMRS-2023-0478

**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. Click [Here](#) for detailed information about acceptable transcripts.
- A current resume/CV
- an abstract, reprint of an article, or a writing sample
- Two educational or professional recommendations.

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

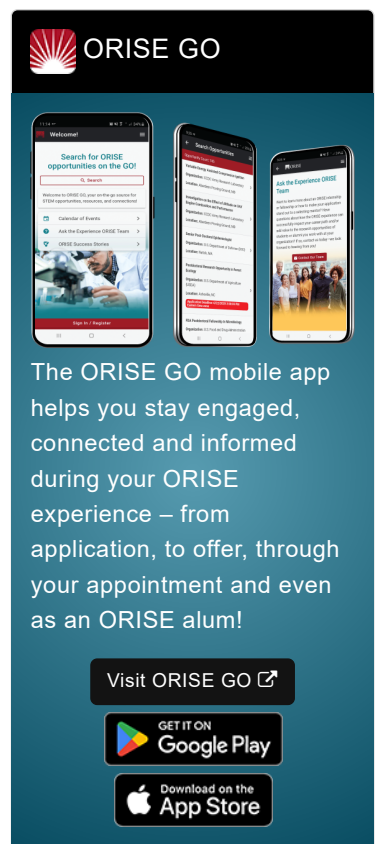
**Application Deadline** 10/25/2024 11:59:00 PM Eastern Time Zone

**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) within the Rocky Mountain Research Station (RMRS). **This opportunity is remote/virtual.** Participants must ensure reliable internet connectivity and a productive work environment. Those granted computer access must fulfill all U.S. Forest Service Requirements for mandatory security awareness and role-based advance security training and sign all applicable U.S. Forest Service statements of responsibilities.

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.

The Wildland Fire Management Research, Development, and Application Program ([WFM RD&A](#)) is an interagency program responsible for promoting the application of wildland fire science and for the development of decision support tools for the wildland fire community. Currently, the WFM RD&A team is responsible for the development and maintenance of the Wildland Fire Decision Support System (WFDSS), the Interagency Fuel Treatment Decision Support System (IFTDSS), and the Fire Modeling Services



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Framework (FMSF). These decision support tools incorporate the latest authoritative wildland fire research and data to streamline incident support and fuel treatment planning.

**Research Project:** The WFM RD&A Data Management Team is responsible for analyzing, interpreting, and managing a large collection of spatial datasets for inclusion in both the WFDSS and IFTDSS applications. As a member of the WFM RD&A Data Management Team, the participant will:

- Evaluate new authoritative datasets for inclusion into WFDSS and IFTDSS and report on the findings.
- Analyze and report on changes to existing datasets currently referenced within WFDSS and IFTDSS.
- Utilize research findings to assist with the update of datasets within the WFDSS and IFTDSS applications.
- Collaborate with the application teams to research and resolve data-related application defects.
- Research and assist in the implementation of new technological advances that can streamline data management and monitoring within the WFM RD&A program.

**Learning Objectives:** Through this opportunity, the participant will gain an understanding of:

- Wildland fire science, management principles, data management systems, and decision support tools
- The Agile software development methodology
- Geospatial data analysis, visualization, and management tools (Esri ArcGIS Pro, ArcGIS Online, FME, Python)

**Mentor:** The mentor for this opportunity is Amanda Rumsey ([amanda\\_rumsey@nps.gov](mailto:amanda_rumsey@nps.gov)). If you have questions about the nature of the research, please contact the mentor.

**Anticipated Appointment Start Date: November 2024.** Start date is flexible and will depend on a variety of factors.

**Appointment Length:** The appointment has an end date of May 30, 2025 but may be extended upon recommendation of USFS and is contingent on the availability of funds.

**Level of Participation:** The appointment is part-time or full-time.

**Participant Stipend:** The participant will receive a monthly stipend commensurate with educational level and experience. Includes a health insurance supplement.

**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

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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.RMRS@orau.org](mailto:ORISE.USFS.RMRS@orau.org) and include the reference code for this opportunity.

**Qualifications** The qualified candidate should be pursuing or have received a bachelor's, master's, or doctorate degree in one of the relevant fields. Received degree must have been received within the past five years.

**Highly Preferred Qualifications:**

- Programming experience (Python or R are preferable)
- Working knowledge of Feature Manipulation Engine (FME) software
- GIS developer experience
- Familiarity with relational databases and querying languages (SQL)
- Proficiency in Esri's suite of GIS software (ArcGIS Desktop, ArcGIS Pro, etc.)
- Experience creating and publishing datasets and/or applications on Esri's ArcGIS Online platform
- Experience with Esri-supported data formats (geodatabases, TIFFs, shapefiles)

- Eligibility Requirements**
- **Citizenship:** U.S. Citizen Only
  - **Degree:** Bachelor's Degree, Master's Degree, or Doctoral Degree received within the last 60 months or currently pursuing.
  - **Discipline(s):**
    - **Computer, Information, and Data Sciences** ([8](#) 👁)
    - **Earth and Geosciences** ([6](#) 👁)
    - **Environmental and Marine Sciences** ([9](#) 👁)
    - **Life Health and Medical Sciences** ([8](#) 👁)
    - **Mathematics and Statistics** ([2](#) 👁)
    - **Physics** ([1](#) 👁)
    - **Social and Behavioral Sciences** ([3](#) 👁)
  - **Veteran Status:** Veterans Preference, degree received within the last 120 month(s).