

**Opportunity Title:** USDA-FS Wildland Fire and Smoke Research Fellow

**Opportunity Reference Code:** USDA-FS-PNWRS-2025-0055

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

**Reference Code** USDA-FS-PNWRS-2025-0055

**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!

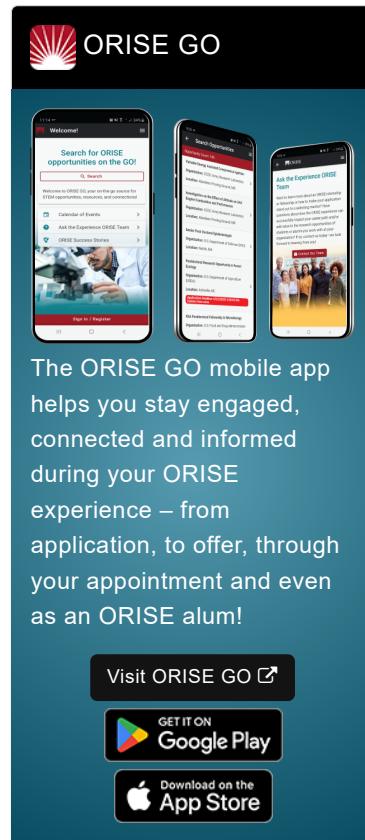
**Application Deadline** 10/3/2025 3:00:00 PM Eastern Time Zone

**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 Pacific Northwest Research Station (PNWRS) located in Seattle, Washington.

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 supports nature in sustaining life. This is the purpose that drives the agency's mission and motivates 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: collaborating 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:** Wildland fires emit a wide variety of trace gases and aerosols which are harmful to human health. When wildfires occur, millions of people may be exposed to unhealthy and sometimes hazardous air quality conditions, often for days or weeks. Yet, wildland fire is also a



**Opportunity Title:** USDA-FS Wildland Fire and Smoke Research Fellow

**Opportunity Reference Code:** USDA-FS-PNWRS-2025-0055

natural part of many ecosystems. Prescribed burning is used in various regions of the US to maintain ecosystem health, as well as a means of protecting people and resources from wildfire.

We are looking for a fellow to participate in a project that seeks to substantially upgrade and expand the suite of tools available for documenting and forecasting wildland fire smoke transport and dispersion. The project objective is to improve both wildfire and prescribed fire operational decision support in various landscapes. They will interact with a team focused on developing new systems and novel techniques and tools, such as improving smoke modeling systems through a variety of means. This may include multi-model approaches, statistical and machine learning, coupled fire behavior/fire atmosphere modeling, air quality modeling, and system evaluation. Depending on their skills and interests, they can participate in various aspects of the project, including an upgraded fire tracking system; improved estimates of fire emissions that include uncertainty bounds suitable to emissions inventories; and more accurate and advanced smoke modeling capabilities.

**Learning Objectives:** The fellow will develop professionally while engaging in research-operational partnerships and learning about systems involving air quality monitoring, fire emissions, and smoke modeling developed through the USFS Fire and Aviation Management-led Interagency Wildland Fire Air Quality Response Program. They will gain experience with complex datasets from surface observational systems, remote sensing systems, including recent NOAA and NASA satellite launches, and computer modeling systems.

**Mentor:** The mentors for this opportunity are Susan O'Neill ([susan.oneill1@usda.gov](mailto:susan.oneill1@usda.gov)), Sim Larkin ([sim.larkin@usda.gov](mailto:sim.larkin@usda.gov)), Tony Bova ([anthony.bova@usda.gov](mailto:anthony.bova@usda.gov)), Brian Potter ([brian.potter@usda.gov](mailto:brian.potter@usda.gov)). If you have questions about the nature of the research, please contact the mentors.

**Anticipated Appointment Start Date: Summer 2025.** Start date is flexible and will depend on a variety of factors.

**Appointment Length:** The appointment will initially be for one year 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 competitive monthly stipend commensurate with educational level and experience. Relocation costs may also be provided

**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

**Opportunity Title:** USDA-FS Wildland Fire and Smoke Research Fellow

**Opportunity Reference Code:** USDA-FS-PNWRS-2025-0055











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

**Qualifications** The qualified candidate should be pursuing or have received a doctoral degree in the one of the relevant fields. Degree must have been received within the past five years, or be pursuing and anticipated to be completed by the start of the appointment date.

**Point of Contact** [Justina](#)

- Eligibility Requirements**
- **Degree:** Doctoral Degree received within the last 60 months or currently pursuing.
  - **Discipline(s):**
    - **Chemistry and Materials Sciences** ([12](#) )
    - **Communications and Graphics Design** ([3](#) )
    - **Computer, Information, and Data Sciences** ([17](#) )
    - **Earth and Geosciences** ([17](#) )
    - **Engineering** ([19](#) )
    - **Environmental and Marine Sciences** ([14](#) )
    - **Life Health and Medical Sciences** ([11](#) )
    - **Mathematics and Statistics** ([11](#) )
    - **Physics** ([16](#) )
    - **Social and Behavioral Sciences** ([7](#) )