Opportunity Title: USDA-ARS Postdoctoral Fellowship for Modeling Soil Carbon Response to Biochar Addition
Opportunity Reference Code: USDA-ARS-PW-2023-0426

Organization	U.S. Department of Agriculture (USDA)
Reference Code	USDA-ARS-PW-2023-0426
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 consists of:

- An application
- Transcripts – 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

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

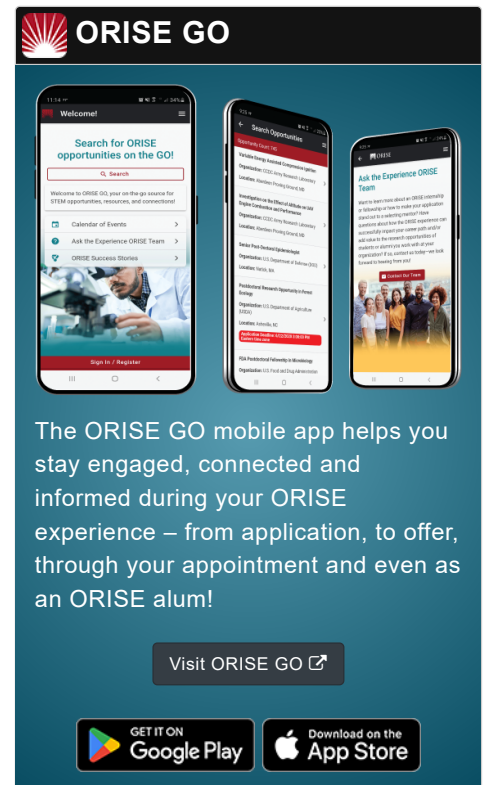|	
Application Deadline	12/22/2023 3:00:00 PM Eastern Time Zone
Description	***Applications may be reviewed on a rolling-basis.**

ARS Office/Lab and Location: A postdoctoral research associate opportunity is available within the U.S. Department of Agriculture (USDA), Agricultural Research Service (ARS), with the Forage Seed and Cereal Research Unit (FSCRU) located in Corvallis, Oregon.

The Agricultural Research Service (ARS) is the U.S. Department of Agriculture's chief scientific in-house research agency with a mission to find solutions to agricultural problems that affect Americans every day from field to table. ARS will deliver cutting-edge, scientific tools and innovative solutions for American farmers, producers, industry, and communities to support the nourishment and well-being of all people; sustain our nation's agroecosystems and natural resources; and ensure the economic competitiveness and excellence of our agriculture. The vision of the agency is to provide global leadership in agricultural discoveries through scientific excellence.

USDA-ARS-FSCRU offices and laboratories are located on Oregon State University campus and the mission of our unit is to develop fundamental and applied knowledge used to enhance crop productivity, environmental stewardship, and economic sustainability for the efficient production of turf, forage, and cover crop seeds. The unit also conducts research on the influence of soil amendments on crop productivity and soil health. This research is more broadly applied across geographical regions and cropping systems.

Research Project: The primary research project seeks to develop a stand-alone, open-source, life cycle analysis/greenhouse gas emission model and to integrate it with existing online decision

support tools. This model will provide farm-scale estimates of the net climate impact from the production and application of biochars into agricultural soils. Additionally, the research associate will have the opportunity to serve as an American Farmland Trust Postdoctoral Research Fellow. The AFT Research Fellows Program seeks to empower the next generation of university-trained leaders to create meaningful positive change toward a new conventional agriculture: one that is climate-smart, diverse, soil health promoting, equitable, and environmentally, economically, and socially sustainable. The program seeks to help rising leaders build capacity to have impact through broad interdisciplinary, cross-sector engagement that spans research, on-the-ground implementation, outreach, coalition building, and policy for implementation and driving change.

Learning Objectives: The research associate will have further opportunities to develop skills to model and assess the influence of management practices on soil carbon by participating in or designing other studies, publishing peer-reviewed papers, collaborating with other scientists at the USDA-ARS, Washington State University, Oregon State University, American Farmland Trust, US Biochar Initiative and other institutions nationally and internationally, and attending and presenting research at professional meetings.

Mentor: The mentor for this opportunity is Kristin Trippe (kristin.trippe@usda.gov). If you have questions about the nature of the research, please contact the mentor.

Anticipated Appointment Start Date: January 2024. 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 renewed upon recommendation of ARS 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 stipend for this opportunity is $74,137 per year plus a health insurance stipend.**

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.

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 ARS. Participants do not become employees of USDA, ARS, 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.

<u>Questions</u>: Please visit our Program Website. After reading, if you have additional questions about the application process, please email ORISE.ARS.PacificWest@orau.org and include the reference code for this opportunity.

Qualifications

The qualified candidate should have received a doctoral degree in one of the relevant fields (e.g. Soil Science, Computer Science), or be currently pursuing the degree to be received prior to start of appointment.

Prior experiences that would be beneficial to this opportunity are as follows:

- Experience in design, conduct, and statistical analysis of experiments and management of large data set
- Scientific writing skills via publication record
- Excellent interpersonal communication and organizational skills
- Ability to work independently and as part of a team with diverse perspectives
- Experience in basic coding in R and Python, and familiarity with current statistical software programs.
- A desire to collaborate with a national non-profit to bring about research-informed, positive change toward a new conventional agriculture.

Eligibility Requirements

- **Degree:** Doctoral Degree.
- **Discipline(s):**
  - **Computer, Information, and Data Sciences** (17 👁)
  - **Environmental and Marine Sciences** (3 👁)
  - **Life Health and Medical Sciences** (6 👁)