

Opportunity Title: USDA- ARS Postdoctoral Barley and Oat Fellowship

Opportunity Reference Code: USDA-ARS-PWA-2025-0183

Organization U.S. Department of Agriculture (USDA)

Reference Code USDA-ARS-PWA-2025-0183

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
- A copy of an abstract or reprint of an article

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

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Application Deadline 2/13/2026 3:00:00 PM Eastern Time Zone

Description ***Applications are reviewed on a rolling-basis.**

ARS Office/Lab and Location: A research opportunity is currently available with the U.S. Department of Agriculture (USDA), Agricultural Research Service (ARS), located in Aberdeen, Idaho.

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.

Research Project: This appointment is supported by the USDA-ARS barley and oat research project in Aberdeen whose goals are to enhance barley and oat productivity, quality, and stress resistance by combining traditional, molecular, and genomics methods. The fellow will collaborate with other scientists in the unit and other institutes in the United States to help develop genetic, genomic and molecular resources for characterizing the key genes associated with the resistance to biotic and abiotic stresses in barley and oats for supporting the small grains breeding research in ARS



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Aberdeen. The research activities the selected candidate will be involved with include:

- Evaluate barley stripe rust (BSR) resistance in cultivated and wild barley and identify the genomic regions associated with BSR resistance.
- Develop genetic populations and map the genes related to barley grain quality and hessian fly resistance.
- Conduct genetic and genomic analysis to identifying the quantitative trait loci (QTL) associated the drought tolerance, crown rust resistance and other important traits in oats.
- Participate in data collection and genetic analysis of FHB resistance.
- Write manuscripts and present research at scientific conferences.

Learning Objectives: The participant will receive training in plant genomics, plant genetics and breeding, and will gain experience to collaborate with national scientists in comparatively analyzing plant genomes and molecular biology. The participant will also have opportunities to attend scientific conferences for presenting their research data and establish collaborative networks. Additionally, the participant will get chance to learn barley and understand the needs of the stakeholders.

Mentor(s): The mentors for this opportunity are Dongying Gao (dongying.gao@usda.gov) and Kathy Esvelt Klos (kathy.klos@usda.gov). If you have questions about the nature of the research, please contact the mentors

Anticipated Appointment Start Date: June 2026. 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 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 anticipated stipend range is \$76,403 - \$83,795 annually.**

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 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.

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Questions: Please visit our [Program Website](#). After reading, if you have additional questions about the application process, please email ORISE.ARS.PacificWest@ornl.gov and include the reference code for this opportunity.




Qualifications The qualified candidate should have received or be pursuing a doctoral degree in one of the relevant fields (e.g., Plant Genetics, Agronomy, Genomics, Bioinformatics, Biology).

Preferred Skills:

- Experiences and expertise to analyze high through put data sets including short- and long-read genomic and transcriptomic data, marker development, linkage mapping analysis, DNA and RNA extraction, field research experience, and develop or apply new software for data mining.
- Experiences with analyzing genomic data sets with the related pipelines.

Stipend \$76,403.00 – \$83,795.00 Yearly

Point of Contact [Janeen](#)

- Eligibility**
- **Citizenship:** U.S. Citizen Only
- Requirements**
- **Degree:** Doctoral Degree.
 - **Discipline(s):**
 - **Chemistry and Materials Sciences** ([1](#) )
 - **Computer, Information, and Data Sciences** ([1](#) )
 - **Life Health and Medical Sciences** ([5](#) )