

**Opportunity Title:** USAD-ARS Postdoctoral Fellowship in Plant Genomics

**Opportunity Reference Code:** USDA-ARS-PWA-2025-0100

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

**Reference Code** USDA-ARS-PWA-2025-0100

**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

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** 10/24/2025 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 Hilo, Hawaii.

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.

The Tropical Plant Genetic Resources and Disease Research Unit (TPGRDRU) is located in Hilo, HI and is part of the Pacific West Area. TPGRDRU conducts both basic and applied research to safeguard and improve tropical fruit, nut, and beverage crops. Scientists at TPGRDRU specialize in diverse fields, such as horticulture, biotechnology, molecular genetics and genomics, plant pathology, plant physiology, and nematology, working to enhance crop improvement and address critical challenges facing tropical agriculture.



**Opportunity Title:** USAD-ARS Postdoctoral Fellowship in Plant Genomics

**Opportunity Reference Code:** USDA-ARS-PWA-2025-0100

**Research Project:** The ORISE participant will employ genomics approaches to pinpoint and validate genomic regions conferring resistance to coffee leaf rust (CLR). This research will support the development of new coffee varieties that are resistant to CLR while maintaining high cupping quality. Additionally, the participant will assess genetic diversity and population structure of tropical and subtropical fruit, nut, and beverage germplasm collections to inform advanced breeding strategies and improve germplasm management.

**Learning Objectives:** The participant will partner with the mentor to learn more about:

- NGS library construction for genome and transcriptome sequencing.
- Marker-trait association analysis to identify genetic variations associated with important traits such as disease resistance and fruit quality.
- Bioinformatics analysis of genomic features and genetic diversity in tropical fruit germplasm collections.
- Handling large genomics datasets.
- Preparation of data for scientific reports and manuscripts.

**Mentor(s):** The mentor for this opportunity is Qingyi Yu ([qingyi.yu@usda.gov](mailto:qingyi.yu@usda.gov)). If you have questions about the nature of the research, please contact the mentor(s).

**Anticipated Appointment Start Date: October 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 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 is \$77,000 annually.**

**Citizenship Requirements:** This opportunity is available to U.S. citizens and Lawful Permanent Residents (LPR) 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.

**Questions:** Please visit our [Program Website](#). After reading, if you have additional questions about the application process, please

**Opportunity Title:** USAD-ARS Postdoctoral Fellowship in Plant Genomics

**Opportunity Reference Code:** USDA-ARS-PWA-2025-0100

email [ORISE.ARS.PacificWest@orau.org](mailto:ORISE.ARS.PacificWest@orau.org) and include the reference code for this opportunity.


**Qualifications** The qualified candidate should be currently pursuing or have received a doctoral degree in the one of the relevant fields. Degree must have been received within the past three years or anticipated to be received by 10/1/2025.

**Preferred skills:**

- Experience with marker-trait association analysis such as QTL or GWAS analysis.
- Experience with advanced sequencing technologies.
- Experience in population genetic analysis.
- Familiar with molecular biology techniques and preparation of genome sequencing libraries.
- Familiar with NGS and high-throughput genotyping technologies and identification of candidate genes affecting traits of interest.

**Stipend** \$77,000.00 Yearly

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

- Eligibility**
- **Citizenship:** LPR or U.S. Citizen
- Requirements**
- **Degree:** Doctoral Degree received within the last 36 months or anticipated to be received by 10/1/2025 12:00:00 AM.
  - **Discipline(s):**
    - **Life Health and Medical Sciences** ([8](#) )