Opportunity Title: USDA-ARS Postdoctoral Fellowship in Tropical Fruit Genomics
Opportunity Reference Code: USDA-ARS-PWA-2026-0435

Organization U.S. Department of Agriculture (USDA)

Reference Code USDA-ARS-PWA-2026-0435

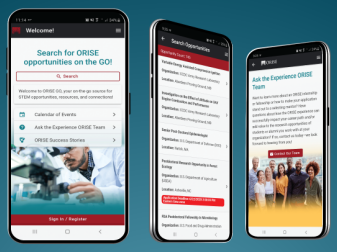
How to Apply ***To submit your application, scroll to the bottom of this opportunity and click APPLY.***

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!"

OAK RIDGE INSTITUTE FOR SCIENCE AND EDUCATION
ORISE GO

The ORISE GO mobile app helps you stay engaged, connected and informed during your ORISE experience – from application, to offer, through your appointment and even as an ORISE alum!
Visit ORISE GO
GET IT ON Google Play
Download on the App Store

Application Deadline 1/15/2027 3:00:00 PM Eastern Time Zone

Description ***Applications are reviewed on a rolling-basis and applications may close before the deadline.**

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, helping to enhance crop improvement and address challenges facing tropical agriculture.

Research Project: During this research experience, you will gain exposure

to genomics-based approaches used to investigate resistance to coffee leaf rust (CLR) and support the development of improved coffee varieties with desirable agronomic and cupping quality traits. Under the guidance of a mentor, you will learn how genomic regions associated with disease resistance are identified, evaluated, and validated within plant breeding and genetics research programs.

You will also gain experience analyzing genetic diversity and population structure within tropical and subtropical fruit, nut, and beverage germplasm collections. Through participation in laboratory, computational, and data analysis activities, you will develop an understanding of how genomic information is applied to breeding strategy development, germplasm characterization, and long-term crop improvement efforts.

Learning Objectives: Under the guidance of a mentor, you will learn about:

- Genomics and molecular approaches used to study disease resistance in crop species
- Methods for identifying and evaluating genomic regions associated with coffee leaf rust resistance
- Genetic diversity and population structure analysis within germplasm collections
- Bioinformatic and statistical approaches used in plant genetics and breeding research
- Collection, organization, and interpretation of genomic and phenotypic data
- Scientific communication through presentations, research summaries, and collaborative discussions related to plant genomics and breeding research

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

Anticipated Appointment Start Date: January 2027. 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.

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,

Opportunity Title: USDA-ARS Postdoctoral Fellowship in Tropical Fruit Genomics
Opportunity Reference Code: USDA-ARS-PWA-2026-0435

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.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 (plant genetics, plant genomics, plant biology, or a closely related field). Degree must have been received within the past five years or anticipated to be received by 8/31/2027.

Preferred skills:

- Demonstrated experience in genomics, quantitative genetics, or molecular breeding.
- Experience with advanced sequencing technologies and high-throughput genotyping platforms.
- Proficiency with bioinformatics tools and pipelines used in plant genomics research.
- Experience in population genetic analysis and interpretation of genetic diversity.
- Familiar with molecular biology techniques, including high-molecular-weight DNA extraction and sequencing library preparation.
- Experience with marker–trait association approaches such as QTL mapping, GWAS, or linkage analysis.
- Strong record of scientific publication and communication.

Stipend

$77,964.00 Yearly

Point of Contact

Janeen

Eligibility Requirements

- **Citizenship:** U.S. Citizen Only
- **Degree:** Doctoral Degree received within the last 60 months or anticipated to be received by 8/31/2027 12:00:00 AM.
- **Discipline(s):**
  - **Life Health and Medical Sciences** (12 👁)