Opportunity Title: USDA-ARS Post-Graduate Fellowship in Data Science/Computational Biology/Bioinformatics
Opportunity Reference Code: USDA-ARS-PWA-2025-0184

Organization U.S. Department of Agriculture (USDA)

Reference Code USDA-ARS-PWA-2025-0184

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.

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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 fellowship opportunity is available in the USDA-ARS Tropical Pest Genetics and Molecular Biology Research Unit 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 mission of the Tropical Pest Genetics and Molecular Biology Research Unit is to develop new technologies in pest management, improve molecular diagnostics, and enhance biocontrol agents to support American agriculture and protect it from invasive tropical pests.

Research Project: The research project will be focused on developing reproducible pipelines and workflows for genomic analysis in functional and population genomics. The lab uniquely hosts a complete production scale genomics laboratory, including all current sequencing technologies and

tools. We develop and apply both emerging tools and techniques to insect genomics and have resources to support development of rich datasets for asking complex questions and collaborate broadly across many different research communities. Computational resources are available for large-scale analyses allowing for a unique opportunity for a fellow to obtain unique training and experiences to fit into their professional development.

Learning Objectives: This research fellow will gain experience in bioinformatics and computational biology, with the focus on arthropod genomics and genetics. The fellow will learn the use of workflow tools, development environments, and resources to contribute to and implement shared bioinformatic workflows. Experiences may extend into training on Machine Learning and AI models as appropriate. Skills to be gained may be in developing and maintaining containers (apptainer/singularity), workflows (nextflow, snakemake), and repositories (github) that can be implemented on high performance computing resources.

Mentor(s): The mentor for this opportunity is Scott Geib (scott.geib@usda.gov). If you have questions about the nature of the research, please contact the mentor(s).

Anticipated Appointment Start Date: January 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 part time.

Participant Stipend: The participant will receive a monthly stipend commensurate with educational level and experience. **The anticipated stipend range is $1,000 – $1,500 monthly.**

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.

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

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master's degree in the one of the relevant fields (biotechnology, biology, entomology, agricultural science, data science, computer science or related degrees).

Preferred skills:

- Experience with command line, scripting, and basic bioinformatics.
- Basic skills in bioinformatics and computational biology, such as familiarity with shell scripting, python, R, and use of high performance computing resources.

Stipend $1,000.00 – $1,500.00 Monthly

Point of Contact Janeen

Eligibility Requirements

- **Citizenship:** U.S. Citizen Only
- **Degree:** Master's Degree.
- **Discipline(s):**
  - **Computer, Information, and Data Sciences** (17 👁)
  - **Life Health and Medical Sciences** (51 👁)
  - **Mathematics and Statistics** (2 👁)
  - **Science & Engineering-related** (2 👁)