

**Opportunity Title:** USDA-ARS Molecular Biology and Toxicology Fellowship

**Opportunity Reference Code:** USDA-ARS-PW-2024-0090

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

**Reference Code** USDA-ARS-PW-2024-0090

**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
- 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
- Contact information of two educational or professional references

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

**Application Deadline** 5/24/2024 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) Commodity Protection and Quality Research Unit of ARS, located at Parlier (Fresno Area), California.

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 Commodity Protection and Quality Research Unit is to develop new and improved management strategies for insect and plant pathogen pests associated with fresh and stored horticultural commodities, to meet domestic and foreign export market requirements, and to develop means to maintain the postharvest quality of these commodities.

**Research Project:** Project opportunities include:

- Participates as a team member with the Research Entomologist in all phases of the research process
- Performs routine and recurring techniques such as nucleic acid extraction, quantitative polymerase chain reaction, insect



**Opportunity Title:** USDA-ARS Molecular Biology and Toxicology Fellowship

**Opportunity Reference Code:** USDA-ARS-PW-2024-0090

nanoinjections, toxicological bioassays etc. using a variety of specialized equipment.

- Determines proper experimental approach, adapts, modifies or develops new molecular and toxicological techniques and/or procedures to satisfy the needs of the research project.
- Maintains, calibrates and modifies equipment and automated systems used for test and evaluation procedures.
- Performs nonstandard tests and assays which may require adaptation from published literature
- Keeps detailed records of experimental data.
- Tabulates, statistically analyzes and summarizes data using personal computers and software packages.

**Learning Objectives:** Throughout the course of this fellowship, the participant will have the opportunity to gain experience in multidisciplinary research on developing innovative management strategies for insect pests associated with fresh and stored horticultural commodities.

**Mentor(s):** The mentor for this opportunity is Raman Bansal ([raman.bansal@usda.gov](mailto:raman.bansal@usda.gov)). If you have questions about the nature of the research, please contact the mentor(s).

**Anticipated Appointment Start Date: May 2024.** 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 current stipend for this opportunity is \$39,688-\$63,914 per year plus a supplement to offset a health insurance premium**

**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.

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

**Opportunity Title:** USDA-ARS Molecular Biology and Toxicology Fellowship

**Opportunity Reference Code:** USDA-ARS-PW-2024-0090

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 have received a bachelor's, master's, or doctoral degree in one of the relevant fields.

Depending on the research project objectives, the selected candidate may need to operate a government owned vehicle (GOV) and will be required to show proof of a valid U.S. State Driver's License and provide proof of an active U.S. auto insurance policy.

**Preferred skills:**

- Experience handling, rearing, and maintaining insects
- Experience conducting molecular biology, biochemistry, genetics, and/or toxicology research
- Experience performing genomics research such as gene silencing and gene editing

- Eligibility Requirements**
- **Degree:** Bachelor's Degree, Master's Degree, or Doctoral Degree.
  - **Discipline(s):**
    - **Chemistry and Materials Sciences** ([12](#) 👁)
    - **Computer, Information, and Data Sciences** ([8](#) 👁)
    - **Life Health and Medical Sciences** ([51](#) 👁)
    - **Mathematics and Statistics** ([4](#) 👁)
    - **Physics** ([3](#) 👁)

**Affirmation** I affirm that:

I am a US Citizen, OR

I am a non-US Citizen currently living in the United States