

Opportunity Title: USDA-ARS Postdoctoral Fellowship in Insect Molecular Biology

Opportunity Reference Code: USDA-ARS-PWA-2026-0007

Organization U.S. Department of Agriculture (USDA)

Reference Code USDA-ARS-PWA-2026-0007

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 3/13/2026 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 Maricopa, Arizona.

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: A research opportunity is available for a motivated postdoctoral fellow interested in applying contemporary functional genomics approaches (CRISPR, RNAi, transgenics, omics, etc.) in cotton insect pests. Projects are focused on genetic-based sterilization techniques and elucidating the molecular factors critical for resistance to *Bacillus thuringiensis* (Bt) toxins/crops. In both cases, an interest in the potential application of arthropod gene-drive systems and their application in agricultural pest systems is highly desirable.

 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

Opportunity Title: USDA-ARS Postdoctoral Fellowship in Insect Molecular

Biology

Opportunity Reference Code: USDA-ARS-PWA-2026-0007

Learning Objectives: The overall research goal of the group is to develop new pest management strategies that can augment and enhance current approaches. As such, we seek applicants interested in contributing to an environment that values creative thinking and finding innovative solutions to unconventional problems. By collaborating closely with members of our interdisciplinary research team, the successful applicant will gain invaluable hands-on experience to all phases of the research process. This includes opportunities in:

- Elucidating molecular mechanisms/pathways driving biology in non-model insect pests
- Expanding skills and practical knowledge of experimental design and data analysis
- Refining micro- and nano-injection systems for specific developmental stages
- Designing and constructing vectors, guide RNAs, and double-stranded RNAs
- Applying and adapting genetic manipulation methodologies and/or methods from published literature to new insect systems
- Managing and interpreting experimental data
- Preparing manuscripts and presenting at professional meetings

This comprehensive training opportunity will prepare the successful applicant for future research opportunities and careers in the research field. Previous postdoctoral fellows have matriculated to positions within private industry and government research.

Mentor(s): The mentor for this opportunity is Jimmy Hull (joe.hull@usda.gov). If you have questions about the nature of the research, please contact the mentor(s).

Anticipated Appointment Start Date: April 30, 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 \$60,000 - \$65,000 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,

Opportunity Title: USDA-ARS Postdoctoral Fellowship in Insect Molecular

Biology

Opportunity Reference Code: USDA-ARS-PWA-2026-0007

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, preferably anticipated to be received by spring 2026.

Preferred skills:

- Experience with insect transgenesis, embryonic microinjections, CRISPR/Cas9 gene editing, and/or insect sex differentiation

Stipend \$60,000.00 – \$65,000.00 Yearly

Point of Contact [Janeen](#)

Eligibility • **Citizenship:** U.S. Citizen Only

Requirements • **Degree:** Doctoral Degree.

- **Discipline(s):**
 - **Life Health and Medical Sciences** ([L](#))