**Opportunity Title:** USDA ARS Honey Bee Breeding and Resistance Traits Tech Transfer
**Opportunity Reference Code:** USDA-ARS-SEA-2025-0104

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

**Reference Code** USDA-ARS-SEA-2025-0104

**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
- A copy of an abstract or reprint of an article

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

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**Application Deadline** 11/7/2025 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 Baton Rouge, Louisiana.

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.

This opportunity will take place at the USDA-ARS Honey Bee Breeding, Genetics, and Physiology Research Laboratory located in Baton Rouge, LA. Scientists at the lab are addressing honey bee health issues by breeding honey bee stocks with improved resilience and resistance to pests, pathogens, and environmental toxins. Development of improved, healthy, and productive honey bee stocks will help mitigate the effects of disease and climate change, improving the food supply at local, national and global levels.

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For more information see the facility website.

**Research Project:** Research in this group focuses on individual and social mechanisms of disease and parasite resistance in honey bees, including resin/propolis use, hygienic behavior and genetic diversity. The project aims to add to this advance line of research by developing advanced breeding strategies to improve adoption of resistance traits in the beekeeping industry. Overall the goal is to mitigate effects of the threats facing honey bees and the beekeeping industry through increased knowledge, development of novel methods to enhance phenotype assessments, and ultimately breeding better bees.

Given currently extreme colony losses that beekeepers are experiencing along with failing miticide treatments, supporting natural resistance mechanisms is key. Specifically, this opportunity will allow the participant to collaborate on research related to developing marker assisted selection and genomic selection tools to improve the ability of beekeepers to breed for mite resistance traits. The participant will collaborate with lead researchers to learn and develop experimental designs, collect and analyze behavioral and molecular based data, and collaborate on interpretation and communication of results. This will include learning advanced molecular techniques, developing and learning novel behavioral assays, and beekeeping husbandry from and with a team of highly experienced researchers and technicians.

**Learning Objectives:** The participant will engage with beekeeping and public stakeholders to develop communication skills, have the opportunity to attend scientific and stakeholder conferences, able to attend virtual and in person statistical workshops and have access to the various trainings available within the USDA. Being part of the USDA-ARS Baton Rouge Bee Lab will give the participant access to not just ARS resources, but a world-renowned team of honey bee research experts and their networks.

**Mentor(s):** The mentor for this opportunity is Michael Simone-Finstrom (michael.simonefinstrom@usda.gov). If you have questions about the nature of the research, please contact the mentor(s).

**Anticipated Appointment Start Date: September 2025**. Start date is flexible and will depend on a variety of factors.

**Appointment Length:** The appointment will initially be for two years, 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 $72,000 - $75,000 annually.**

**Citizenship Requirements:** This opportunity is available to U.S. citizens

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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.Southeast@orau.org and include the reference code for this opportunity.

**Qualifications**

The qualified candidate should have received a doctoral degree in one of the relevant fields. Degree must have been received within the past five years.

**Preferred skills:**

- Honey bee experience, performing in a laboratory and in field with individual bees and colonies
- Basic molecular laboratory skills (e.g. pipetting, PCR, qPCR)
- Familiarity with principles of animal behavior studies and honey bee disease epidemiology
- Experience communicating and working directly with stakeholders (e.g. beekeepers)

**Stipend**

$72,000.00 – $75,000.00 Yearly

**Point of Contact**

Janeen

**Eligibility Requirements**

- **Citizenship:** U.S. Citizen Only
- **Degree:** Doctoral Degree received within the last 60 month(s).
- **Discipline(s):**
  - **Life Health and Medical Sciences** (4 👁)
- **Veteran Status:** Veterans Preference, degree received within the last 120 month(s).