

Opportunity Title: USDA-ARS Vector Entomology Postdoctoral Fellowship
Opportunity Reference Code: USDA-ARS-2021-0161

Organization U.S. Department of Agriculture (USDA)

Reference Code USDA-ARS-2021-0161

How to Apply ***Connect with ORISE...on the GO!*** Download the new ORISE GO mobile app in the Apple 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. All transcripts must be in English or include an official English translation. 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.

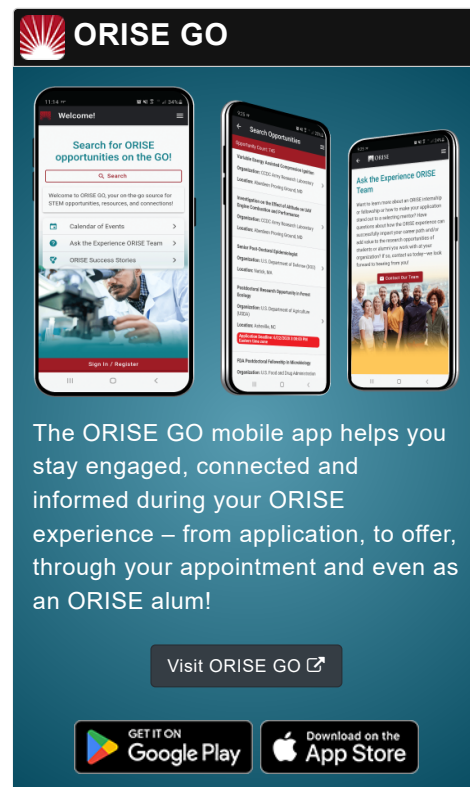
Application Deadline 11/5/2021 3:00:00 PM Eastern Time Zone

Description *Applications may be reviewed on a rolling-basis and this posting could 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 Charleston, South Carolina.

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: This research project is being conducted to decipher molecular mechanisms involved in whitefly-endosymbiont-virus-plant interactions and to develop novel biotechnology tools that are capable of managing whiteflies and whitefly transmitted viruses in vegetable crops. The participant will be involved in research to: 1) Identify and characterize genomics and genetics factors in whiteflies that facilitate efficient virus transmission from whiteflies to plants that contributes to viral diseases in vegetable crops, 2) Develop novel genomics based biotechnologies that would impede virus acquisition and transmission from whiteflies to plants, and 3) Investigate biobased whitefly management strategies, such as plant genetic



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resistance and biological controls, that might be employed to decrease threats from whiteflies and associated viruses. In conducting these activities, the participant will use multidisciplinary methods including genomics and other omics-based tools, insect genetics, plant tissue cultures, analytical and biochemical methods, next generation sequencing, molecular marker development, and molecular and conventional cytogenetics. The participant will be invited to travel to participate in subject relevant conferences and workshops as feasible.

Learning Objectives: In conducting the activities of this research project, the participant will obtain diverse experiences while interacting with multi-disciplinary researchers on entomology, plant genetics, chemistry, horticulture, and plant pathology subjects. The participant will be invited to travel to participate in subject relevant conferences and workshops as feasible.

Mentor(s): The mentor for this opportunity is Alvin Simmons (Alvin.simmons@usda.gov). If you have questions about the nature of the research please contact the mentor(s).

Anticipated Appointment Start Date: August 2021. 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.

Citizenship Requirements: This opportunity is available to U.S. citizens and Lawful Permanent Residents (LPR) 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 USDA-ARS@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, or be currently pursuing the degree with completion by July 1, 2021.

Preferred skills:


- Entomology
- Plant Pathology
- Plant Virology
- Molecular Biology

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- Genomic Methods
- Host-Insect-Virus Interaction
- Endosymbionts
- Growing Plants

**Eligibility
Requirements**

- **Citizenship:** LPR or U.S. Citizen
- **Degree:** Doctoral Degree.
- **Discipline(s):**
 - **Life Health and Medical Sciences** (13 )