zintellect
climb higher

Opportunity Title: USDA-ARS Plant Pathogen Research Opportunity in Citrus: Developing Solutions to Citrus Greening Disease
Opportunity Reference Code: USDA-ARS-2022-0298

Organization U.S. Department of Agriculture (USDA)

Reference Code USDA-ARS-2022-0298

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
- Two educational or professional recommendations

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

Application Deadline 10/10/2022 3:00:00 PM Eastern Time Zone

Description ***Applications may be 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), at the Horticultural Research Laboratory located in Fort Pierce, Florida.

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: Citrus greening disease continues to threaten the citrus industry in the United States. To develop solutions for the growers, we have been awarded a $15 million grant for USDA, National Institute for Food and Agriculture (NIFA) of which the mentor is the lead. This grant is for the development of a bioassay pipeline and delivery solutions to identify therapeutic molecules that can reduce or eliminate the adverse effects of citrus greening disease on U.S. citrus. We have developed novel bioassay and delivery methods that we are validating and using in developing a therapeutic cure for this devastating disease and wish to use the ORISE program to develop and train the next generation of researchers on our novel biotechnology based strategies.

Learning Objectives: The candidate will be conducting experiments in lab,

greenhouse, and field. They will be trained in molecular biology techniques, novel plant symbiont development, and plant based disease screening bioassays.

Mentor: The mentor for this opportunity is Robert Shatters (robert.shatters@usda.gov). If you have questions about the nature of the research please contact the mentor.

Anticipated Appointment Start Date: September 1, 2022. Start date is flexible and will depend on a variety of factors.

Appointment Length: The appointment will initially be for three 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.

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 email USDA-ARS@orau.org and include the reference code for this opportunity.

Qualifications

The qualified candidate should have received a bachelor's degree in one of the relevant fields (e.g. Molecular Biology, Genetics).

Preferred Skills:

- Basic understanding of host-pathogen interactions interactions
- Technical experience at conduction of nucleic acid isolations and conduction of PCR and RT-PCR analysis
- Experience in working with plant samples and plant bacterial interactions

Eligibility Requirements

- **Degree:** Bachelor's Degree.
- **Discipline(s):**
  - **Life Health and Medical Sciences** (8 👁)