

# Opportunity Title: USDA-ARS Chemistry Research Unit Molecular Biology

Internship

Opportunity Reference Code: USDA-ARS-SE-2024-0018

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

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A complete application consists of:

- An application
- Transcripts <u>Click here for detailed information about acceptable transcripts</u>
- 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 2/16/2024 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), located in Gainesville, 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:** The participant will assist in plant molecular biology and plant genetics experiments aimed at generating fundamental knowledge of the genes, hormone signals, and chemical pathways underlying plant resistance to pests. Examination of plant-insect and plant-pathogen interactions will be conducted in lab-, greenhouse-, and field-based assays wherein insect or fungal pests will be applied to corn plants and samples will be analyzed to help determine metabolic and gene expression changes in the plants.

**Learning Objectives:** The participant will gain experience in genetics, analytical chemistry, and molecular biology.

**Mentor(s):** The mentor for this opportunity is Charles Hunter (<u>charles.hunter@usda.gov</u>). If you have questions about the nature of the research, please contact the mentor(s).

Anticipated Appointment Start Date: February 16, 2024. Start date is

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flexible and will depend on a variety of factors.

Appointment Length: The appointment will initially be for 6 months, but may be renewed upon recommendation of ARS and is contingent on the availability of funds.

Level of Participation: The appointment is part 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 ORISE.ARS.Southeast@orau.org and include the reference code for this opportunity.

Qualifications The qualified candidate should have received or be pursuing a bachelor's or associate's degree in one of the relevant fields. Degree must have been received within the last five years.

### Preferred skills:

- Undergraduate student with strong interest or knowledge in biology, chemistry, microbiology, good with bugs and plants, comfortable with laboratory instrumentation.
- Good observation, communication, and documentation skills, and demonstrates a capacity for creative, independent, and deductive thinking.
- Eligibility Citizenship: LPR or U.S. Citizen

# Requirements

- Degree: Associate's Degree or Bachelor's Degree received within the last 60 months or currently pursuing.
- Discipline(s):
  - Chemistry and Materials Sciences (1. )
  - Life Health and Medical Sciences (5 (2))
- Age: Must be 18 years of age
- Veteran Status: Veterans Preference, degree received within the last 120 month(s).