

**Opportunity Title:** Plant Pathology Laboratory Research Opportunity

**Opportunity Reference Code:** ARS-ICCDRU-2016-0030-02

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

**Reference Code** ARS-ICCDRU-2016-0030-02

**How to Apply** A complete application package 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. Selected candidate must provide proof of completion of the degree before the appointment can start. Proof must be sent to ORISE directly from the academic institution including graduation date and degree awarded. All transcripts must be in English or include an official English translation.
- A current resume/CV

If you have questions, send an email to [USDA-ARS@orau.org](mailto:USDA-ARS@orau.org). Please include the reference code for this opportunity in your email.

**Description** A plant pathology laboratory research opportunity is available with the Insect Control and Cotton Disease Research Unit (ICCDRU) in College Station, Texas.

*Fusarium oxysporum* f. sp. *vasinfectum* (Fov) race 4 is a new biotype that threatens cotton production in the U.S. The Insect Control and Cotton Disease Research Unit (ICCDRU) has developed methods to test cotton germplasm for resistance to this pathogen. Preliminary results indicate the occurrence of resistance among segregating populations in the Unit's germplasm collection. The selected candidate will:

- Assist in conducting trials to identify additional resistant and susceptible cotton germplasm including germplasm released by the Unit that shows resistance to nematodes in growth chambers.
- Use simple sequence repeat (SSR) markers to locate resistance genes on chromosomes.
- Provide selected seed for field testing in infested fields in California.
- Test germplasm for resistance to nematodes.

The long term goal of the research is to release agronomically elite cotton germplasm with resistance to both Fov race 4 and nematodes.

The appointment is full-time for six months and may be renewed based upon recommendation of the ARS and availability of funding. The selected applicant will receive a stipend as support for their living and other expenses during this appointment. Stipend rates are determined by ARS officials, and are based on the applicant's academic and professional background. The participant must show proof of health and medical insurance. Health insurance can be obtained through ORISE. The participant will not enter into an employee/employer relationship with ORISE, ORAU, USDA, ARS, or any other office or agency. Instead, the participant will be affiliated with ORISE for the administration of the appointment through the ORISE appointment letter and Terms of



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Appointment.

While participants will not enter into an employment relationship with ARS, this position requires a pre-employment check and a full background investigation.

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.

This is an equal opportunity program open to all qualified individuals without regard to race, color, age, religion, sex, sexual orientation, gender identity, national origin, mental or physical disability, covered veteran's status or genetic information.

For more information about the ARS Research Participation Program, please visit the [Program Website](#).

**Qualifications** To be eligible, applicants must have received a Bachelor of Science Degree in the Biological, Life, or Bioenvironmental Sciences with training in plant pathology and microbiology.

Knowledge of the following items is preferred.

- Growing plants under a greenhouse regime
- Programing growth chambers including light, and temperature regimes
- Preparation of pasteurized planting soil
- Disinfecting pathogen infected soil
- Culturing plant pathogenic microorganisms
- Isolation and inoculating plants with pathogens
- Experience in safe handling of plant pathogens that are not present in the College Station, Texas geographical area

An EPA Certified to apply pesticides is desirable.

- Eligibility**
- **Degree:** Bachelor's Degree.
- Requirements**
- **Discipline(s):**
    - **Environmental and Marine Sciences** ([1](#)👁)
    - **Life Health and Medical Sciences** ([1](#)👁)