

**Opportunity Title:** FDA Microbiology Fellowship  
**Opportunity Reference Code:** FDA-CFSAN-2021-0023

**Organization** U.S. Food and Drug Administration (FDA)



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**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
- Transcripts – [Click here for detailed information about acceptable transcripts](#)
- A current resume/CV, including academic history, employment history, relevant experiences, and publication list
- One educational or professional recommendation

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

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

**Application Deadline** 8/15/2021 3:00:00 PM Eastern Time Zone

**Description** \*Applications will be reviewed on a rolling-basis and the opportunity will close once a qualified candidate is identified.

A research opportunity is currently available with the U.S. Food and Drug Administration (FDA), Center for Food Safety and Applied Nutrition (CFSAN), Office of Regulatory Science (ORS). This project will be conducted at the phtotron facility at North Carolina State University located in Raleigh, North Carolina.

The goals of this project are to study the complex interactions of human pathogens such as *Salmonella*, shiga-toxin producing *E. coli* and *L. monocytogenes* with produce commodities in the pre-harvest environment.

Under the guidance of a mentor, the participant will:

- Learn North Carolina State University biosafety procedures for conducting research in a biosafety level 3 phytotron facility
- Learn advanced aseptic techniques used for the growth of plants in a BSL-3P level greenhouse
- Learn techniques to inoculate plants with pathogens at varying stages of growth
- Learn microbiological and molecular techniques to identify pathogens present on or in plants
- Learn proper use of the following equipment: Agilent 2100 Bioanalyzer, BioRad CFX96, and Percival AR-41L3 environmental growth chamber
- Participate in the development of protocols for assays to identify enteric pathogen contamination within various plant tissues
- Contribute to data management on all above stated projects as well as other research related activities
- Follow experimental protocols and document findings in a laboratory notebook
- Communicate with mentors on a daily basis
- Collaborate with mentors to prepare reports for communicating results to CFSAN, FDA, and the scientific community

**Anticipated Appointment Start Date:** July 2021 (start date is flexible)

This program, administered by ORAU through its contract with the U.S. Department of Energy to manage the Oak Ridge Institute for Science and Education, was established through an interagency agreement between DOE and FDA. The initial appointment is for one year, but may be renewed upon recommendation of FDA contingent on the availability of funds. The participant will receive a monthly stipend commensurate with educational level and experience. **A travel/training allowance up to \$3,500 will be provided.** Proof of health insurance is required for participation in this program. The appointment is full-time at FDA in the College Park, Maryland, area. Participants do not become employees of FDA, DOE or the program administrator, and there are no employment-related benefits.

Completion of a successful background investigation by the Office of Personnel Management is required for an applicant to be on-boarded at FDA. OPM can complete a background investigation only for individuals, including non-US Citizens, who have resided in the US for a total of

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three of the past five years.

FDA requires ORISE participants to read and sign their FDA Education and Training Agreement within 30 days of his/her start date, setting forth the conditions and expectations for his/her educational appointment at the agency. This agreement covers such topics as the following:

- Non-employee nature of the ORISE appointment;
- Prohibition on ORISE Fellows performing inherently governmental functions;
- Obligation of ORISE Fellows to convey all necessary rights to the FDA regarding intellectual property conceived or first reduced to practice during their fellowship;
- The fact that research materials and laboratory notebooks are the property of the FDA;
- ORISE fellow's obligation to protect and not to further disclose or use non-public information.

**Qualifications** The qualified candidate should have received a bachelor's, master's or doctoral degree in one of the relevant fields, or be currently pursuing one of the degrees with completion by August 2021. Degree must have been received within the past five years.

Preferred skills/experience:

- Competent in conventional and molecular foodborne microbiology techniques
- Experience in growth and maintenance of plants in the field and in artificial growing environments
- Experience in plant molecular biology
- Knowledge/experience with characterizing host-pathogen interactions
- Excellent written and oral communication skills

**Eligibility Requirements**

- **Citizenship:** U.S. Citizen Only
- **Degree:** Bachelor's Degree, Master's Degree, or Doctoral Degree received within the last 60 months or anticipated to be received by 8/31/2021 11:59:00 PM.
- **Discipline(s):**
  - Life Health and Medical Sciences (47 

**Affirmation** Have you lived in the United States for at least 36 out of the past 60 months? (36 months do not have to be consecutive.)