

Opportunity Title: USDA-ARS Postdoctoral Research in Postharvest Pathology Fellowship
Opportunity Reference Code: USDA-ARS-2022-0182

Organization U.S. Department of Agriculture (USDA)
Reference Code USDA-ARS-2022-0182
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 6/20/2022 3:00:00 PM Eastern Time Zone

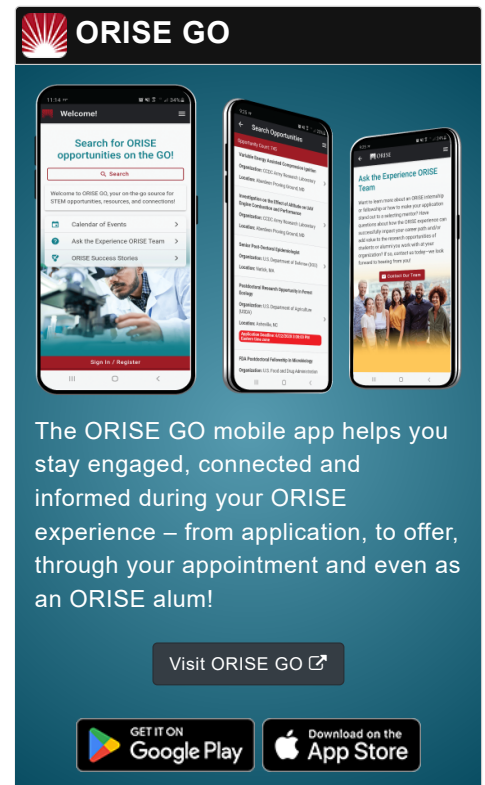
Description *Applications will be reviewed on a rolling-basis.

ARS Office/Lab and Location: A postgraduate research opportunity is available with the U.S. Department of Agriculture (USDA), Agricultural Research Service (ARS), at the Food Quality Laboratory located in Beltsville, Maryland.

The Food Quality Laboratory is part of the USDA's Beltsville Agricultural Research Center (BARC). BARC has fully equipped modern laboratories located on a 6,000 acre campus only 10 miles from Washington, D.C. There are hundreds of scientists conducting agricultural research at the Center. The University of Maryland at College Park, MD is located 3 miles from our research facility. In addition, the National Institutes of Health, American University, Joh Hopkins University, and University of Maryland, Baltimore County are in close proximity to our laboratory. This allows access to professional advice on scientific matters, to equipment, and availability to a full array of seminars, workshops, and conferences.

Research Project: This project's ultimate goal is to develop fundamental knowledge and translate findings into technologies for solving fruit decay and mycotoxin issues that can result in higher consumption and concomitant reduction of fresh-produce losses and waste.

The selected participant with a background in plant pathology, microbiology, genetics and/or molecular biology will be involved in targeted forward and reverse genetics to gain additional knowledge on genes, pathways, and chemical signatures



Opportunity Title: USDA-ARS Postdoctoral Research in Postharvest Pathology Fellowship

Opportunity Reference Code: USDA-ARS-2022-0182

mediating interactions of the fungus with the fruit host.

Learning Objectives: Under the guidance of a mentor, relevant learning objectives for this research will be two or three of the following (or alternatives related to them):

1. Determine the function(s) of specific fungal genes in fruit decay and mycotoxin production using omics and functional genetic approaches.
2. Translate fungal mutants with avirulence atoxigenic phenotypes into next generation biological control agents to block fruit decay and mycotoxin production.
3. Test and optimize new organic compliant, next generation, and current control measures to limit fungal populations on storage containers, fruit surfaces and in packinghouse environments.

There will be plenty of opportunities for the participant's training and testing in different methodologies, using diverse facilities, including laboratory spaces that are well established and others that are initiating research work, as well as pilot food processing plants, growth chambers, industry partners, and greenhouse units.

Mentor(s): If you have questions about the nature of the research, please contact Dr. Wayne Jurick (wayne.jurick@usda.gov) or Jorge Fonseca (jorge.fonseca@usda.gov).

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 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(s) will receive a monthly stipend commensurate with educational level and experience. **A health insurance supplement may be provided.**

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. However, this position requires a pre-employment check and a full background investigation. Proof

Opportunity Title: USDA-ARS Postdoctoral Research in Postharvest Pathology Fellowship

Opportunity Reference Code: USDA-ARS-2022-0182

of health insurance is required for participation in this program. Health insurance can be obtained through ORISE.

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

Questions: Please visit our [Program Website](#). After reading, if you have additional questions about the application process please email USDA-ARS@ora.ou.edu and include the reference code for this opportunity.

Qualifications

The qualified candidate should be currently pursuing or have received a doctoral degree in one of the relevant fields (e.g. Plant Pathology, Microbiology, Molecular Biology, Genetics) before the appointment start date.

Preferred skills:

- Proven track record of publication in peer-reviewed journals
- Solid wet laboratory skills
- Excellent written and oral communication skills, evidenced by presentations at professional society meetings
- Ability (or potential) to determine when and what to monitor to identify gaps of information that can result in potential use for industry and society

Eligibility Requirements

- **Degree:** Doctoral Degree.
- **Discipline(s):**
 - **Life Health and Medical Sciences** (48 👁)