Opportunity Title: USDA-ARS Postdoctoral Fellowship for Fresh Produce Safety Research
Opportunity Reference Code: USDA-ARS-NEA-2026-0405

Organization U.S. Department of Agriculture (USDA)

Reference Code USDA-ARS-NEA-2026-0405

How to Apply ***To submit your application, scroll to the bottom of this opportunity and click APPLY.***

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.

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Application Deadline 1/1/2027 3:00:00 PM Eastern Time Zone

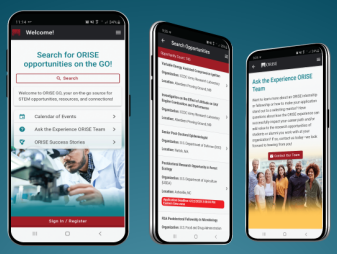
Description ***Applications are reviewed on a rolling-basis and applications may close before the deadline.**

ARS Office/Lab and Location: Postdoctoral research opportunities (3) are currently available with the U.S. Department of Agriculture (USDA), Agricultural Research Service (ARS), Beltsville Agricultural Research Center (BARC), Environmental Microbial Food Safety Laboratory (EMFSL) located in Beltsville, Maryland (Pending relocation to ARS Eastern Regional Research Center, Wyndmoor, PA).

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 overall aims of the research projects are to generate scientific information on improving fresh produce safety. Current projects include characterization, prevention, and mitigation of foodborne pathogen survival and persistence on fresh produce and in the processing environments. Under the guidance of a mentor, you will have the opportunity to be involved in the following research areas: 1) Assessing and

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improving fresh produce postharvest washing, packing, and storage practices; 2) Multi-species biofilm characterization and mitigation; and 3) Control of Cyclospora at pre- and post-harvest environment in fresh produce production, and 4) Improving the detection of foodborne pathogens. Assessing and mitigating risks of foodborne pathogens in controlled environment agriculture (CEA) systems. Conventional microbiological, advanced molecular biological, and multi-omics approaches will be applied. You will also collaborate on other research projects aimed at improving fresh produce safety.

Learning Objectives: Under the guidance of a mentor, your learning activities may include:

- Gain experience collaborating with mentors and team leaders to design scientific studies and develop research plans.
- Build skills in executing studies according to established protocols and adapting research plans as needed based on emerging findings or operational considerations.
- Develop proficiency in collecting, managing, and analyzing data to test hypotheses and draw preliminary conclusions.
- Strengthen scientific communication skills by collaborating closely with mentors and team leaders to interpret, document, and report research findings.

Mentor(s): The mentor for this opportunity is Xiangwu Nou (xiangwu.nou@usda.gov). If you have questions about the nature of the research, please contact the mentor(s).

Anticipated Appointment Start Date: January 4, 2027. 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.

Citizenship Requirements: This opportunity is available to U.S. citizens 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.Northeast@orau.org and include the reference code for

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this opportunity.

Qualifications The qualified candidate should have received or be currently pursing a doctoral degree in one of the relevant fields.

Applicants are comprehensively evaluated based on educational and professional experience including school performance, research productivity and professional recommendations.

Preferred skills:

- Strong commitment to food safety improvement and high capability in conducting independent and team research.
- Knowledge and experience in bacteriology, parasitology, biofilm technology, and fresh produce processing
- Knowledge and experience in metagenomic analyses of food or environmental microbiota, metatranscriptomic analyses for deciphering microbiological interactions, and advanced microscopy
- Statistical analyses of experimental data
- Designing detailed experimental plans, conducting microbiological assays, interpreting experimental data, and experiment troubleshooting
- Safely handling foodborne pathogens and hazardous chemicals
- Safely operating laboratory equipment such as autoclave, high speed centrifuge, produce cutting machinery
- Strong verbal and written communication skills, with demonstrated capability of scientific presentations such as seminars and well-written manuscripts
- Application of AI tools.

Stipend $82,289.00 – $88,296.00 Yearly

Point of Contact Janeen

Eligibility Requirements

- **Citizenship:** U.S. Citizen Only
- **Degree:** Doctoral Degree.
- **Discipline(s):**
  - **Life Health and Medical Sciences** (51 👁)