

Opportunity Title: USDA-ARS Postdoctoral Research - Emerging Food Processing and Preservation Technologies

Opportunity Reference Code: USDA-ARS-NEA-2026-0279

Organization U.S. Department of Agriculture (USDA)

Reference Code USDA-ARS-NEA-2026-0279

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.

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!"

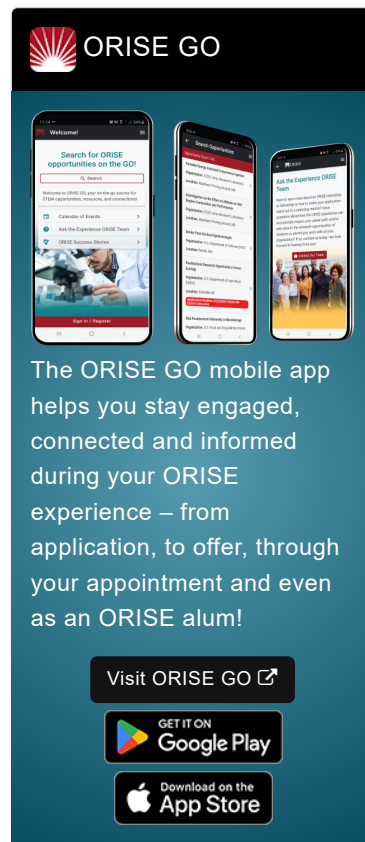
Application Deadline 9/11/2026 3:00:00 PM Eastern Time Zone

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 Wyndmoor, Pennsylvania.

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: You will have the opportunity to participate in research focused on the development of emerging processing and preservation interventions to control foodborne pathogens (*Salmonella* spp., *Escherichia coli*, *Listeria monocytogenes*) in products such as eggs, and fresh produce and food-contact surfaces at the USDA, Agricultural Research Service, Eastern Regional Research Center with the Characterization and Interventions for Foodborne Pathogens (CIFP) Research Unit in Wyndmoor, PA. The mission of the CIFP research unit is to investigate several areas of food safety problems related to contamination with pathogens including



Opportunity Title: USDA-ARS Postdoctoral Research - Emerging Food Processing and Preservation Technologies

Opportunity Reference Code: USDA-ARS-NEA-2026-0279

stress response, evolution, biofilm formation, antimicrobial resistance, intervention technologies and rapid detection. The research focus of this subgroup is on the development and use of emerging interventions such as ultrasound, cold plasma, light technologies and natural antimicrobials to inactivate pathogens such as *Salmonella* spp., *E. coli*, *L. monocytogenes* in food products (eggs, fruits and vegetables, nuts) and food-contact surfaces. The control of foodborne pathogens without affecting the overall quality of the food products is the desired goal.

Learning Objectives:

- Learn to investigate and resolve food safety problems related to microbial inactivation in complex food products and surfaces
- Gain experience on the development and use of emerging food processing and preservation interventions according to the food product
- Develop skills in food microbiology applied to biofilm formation, removal and sanitation of food - contact surfaces
- Learn to optimize processes related to emerging interventions to control pathogens such as *Salmonella* spp., *E. coli*, and *L. monocytogenes*, in diverse food commodities
- Build competency in BSL-2 lab practices, including safe handling of foodborne pathogens
- Gain experience in food quality analysis after the use of novel interventions
- Develop the ability to identify food safety challenges associated to food processing environments

Mentor(s): The mentor for this opportunity is Luz Daniela Bermudez-Aguirre (daniela.bermudez@usda.gov). If you have questions about the nature of the research, please contact the mentor(s).

Anticipated Appointment Start Date: September 2026. 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 will receive a monthly stipend commensurate with educational level and experience.

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

Opportunity Title: USDA-ARS Postdoctoral Research - Emerging Food Processing and Preservation Technologies

Opportunity Reference Code: USDA-ARS-NEA-2026-0279

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 this opportunity.

Qualifications The qualified candidate should be currently pursuing or have received a doctoral degree in the one of the relevant fields. Degree must have been received within the past five years or anticipated to be received by the end of this year.

Point of Contact [Janeen](#)

- Eligibility**
- Requirements**
- **Citizenship:** U.S. Citizen Only
 - **Degree:** Doctoral Degree received within the last 60 months or currently pursuing.
 - **Discipline(s):**
 - **Engineering** ([2](#) 👁)
 - **Life Health and Medical Sciences** ([3](#) 👁)