Opportunity Title: USDA-ARS Molecular Biology/Mass Spectrometry/Protein Chemistry Postdoctoral Research Opportunity
Opportunity Reference Code: USDA-ARS-SEA-2026-0301

Organization U.S. Department of Agriculture (USDA)

Reference Code USDA-ARS-SEA-2026-0301

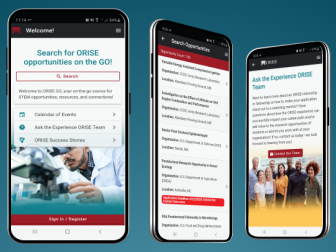
How to Apply ***To submit your application, scroll to the bottom of this opportunity and click APPLY.***

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
- A copy of an abstract or reprint of an article

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

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Application Deadline 12/18/2026 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 New Orleans, Louisiana.

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: A new opportunity in Molecular Biology, Mass-Spectrometry, and Protein Engineering Research is available within the Food Processing and Sensory Quality (FPSQ) Unit in New Orleans, LA. The research will focus on protein chemistry and mass-spectrometry to characterize peanut and tree nut allergens and the interactions between food allergens and antibodies that cause food allergies.

You will be a part of a research team that conducts basic and applied

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research characterizing food allergen structure. The overall objective is to leverage mass-spectrometry and molecular biology to identify unique features of peanut and tree nut allergens. You must be willing to learn and apply molecular biology concepts to characterize immunoglobulin-E (IgE) binding to food allergens.

Learning Objectives: Under the guidance of your mentor, you will:

1. Develop knowledge of the sequence and structural characteristics of peanut and tree nut allergens.
2. Learn how food processing methods may alter allergen structure, functionality, and potency.
3. Gain experience identifying and evaluating targets for allergen detection using mass spectrometry approaches.
4. Build understanding of analytical methods used to improve food allergen detection and characterization.

Mentor(s): The mentor for this opportunity is Chris Mattison (chris.mattison@usda.gov). If you have questions about the nature of the research, please contact the mentor(s).

Anticipated Appointment Start Date: 2026/2027. 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.Southeast@orau.org and include the reference code for this opportunity.

Qualifications The qualified candidate should have received a doctoral degree in the one of the relevant fields (e.g. molecular biology, biochemistry, or cellular biology). Degree must have been received within the past five years.

Equal consideration will also be given to those with a doctoral degree in chemical biology,

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chemical computing, computational biology, or protein engineering with hands on experience in mammalian cell culture, protein engineering, molecular biology, cell biology, or biochemistry related research.

Preferred skills:

- Demonstrated experience in mass-spectrometry, molecular biology, protein engineering, and/or protein chemistry.

Stipend $74,678.00 Yearly

Point of Contact Janeen

Eligibility Requirements

- **Citizenship:** U.S. Citizen Only
- **Degree:** Doctoral Degree received within the last 60 month(s).
- **Discipline(s):**
  - **Life Health and Medical Sciences** (17)