Opportunity Title: USDA-ARS Biochemistry Fellowship for Protein Purification
Opportunity Reference Code: USDA-ARS-PA-2026-0004A

Organization U.S. Department of Agriculture (USDA)

Reference Code USDA-ARS-PA-2026-0004A

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 3/27/2026 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 Manhattan, Kansas.

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.

The National Bio and Agro-Defense Facility (NBAF) in Manhattan, KS is a state-of-the-art facility operated by the U.S. Department of Agriculture (USDA) that is designed to help protect the nation's agriculture, farmers and citizens against the threat and potential impact of serious animal diseases. The Biologics Development Module (BDM) is a unique applied research laboratory space within NBAF tasked with the mission of transitioning research developments into products. The BDM operates at a BSL-2 level of biosafety and is equipped to provide the needed functions to de-risk veterinary countermeasure product development.

Opportunity Title: USDA-ARS Biochemistry Fellowship for Protein Purification
Opportunity Reference Code: USDA-ARS-PA-2026-0004A

Research Project: The BDM is partnering in collaboration with other USDA researchers to develop new vaccine candidates for various veterinary viruses, and antibody and protein purification is an important part of vaccine development. Several successful vaccine candidates have been created and need to undergo further product development to demonstrate safety and efficacy. The candidate selected will have the opportunity to participate on a project that consists of research and development on purification of antibodies, antigens and other proteins of interest that aid in developing vaccines and biologics.

The participant will collaborate on this project under the guidance of the Analytical Chemist in the BDM. They will have the opportunity to be part of research and analysis of protein purification, including expression, downstream processing and modification. They may also have the opportunity to participate in other aspects of vaccine development.

Learning Objectives: The participant will learn how to:

- Prepare culture supernatants and cell lysate samples for purification by ultrafiltration, dialysis, diafiltration and protein precipitation
- Set up, develop and optimize protein purification methods using chromatography equipment
- Purify protein samples using immunoaffinity, metal affinity, size exclusion, and/or ion exchange chromatography methods
- Further process and characterize purified protein samples by ultrafiltration, diafiltration and spectrophotometric methods
- Conjugate proteins on solid support or with fluorescent molecules
- Collect and maintain data in a laboratory notebook
- Collaborate with cross-disciplinary teams related to the project

Mentor(s): The mentor for this opportunity is Teshome Aboye (teshome.aboye@usda.gov). If you have questions about the nature of the research, please contact the mentor(s).

Anticipated Appointment Start Date: Early 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. **The anticipated stipend range is $47,963 - $105,384 annually.**

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

Opportunity Title: USDA-ARS Biochemistry Fellowship for Protein Purification
Opportunity Reference Code: USDA-ARS-PA-2026-0004A

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.Plains@orau.org and include the reference code for this opportunity.

Qualifications The qualified candidate should be currently pursuing or have received a bachelor's, master's, or doctoral degree in the one of the relevant fields.

Preferred skills:

- Experience in a Biosafety Level 2 (BSL-2) laboratory recommended.
- Experience with protein separation, chromatography, protein expression is desired.
- Good chemical safety background is beneficial.

Stipend $47,963.00 – $105,384.00 Yearly

Point of Contact Janeen

Eligibility Requirements

- **Citizenship:** U.S. Citizen Only
- **Degree:** Bachelor's Degree, Master's Degree, or Doctoral Degree.
- **Discipline(s):**
  - **Chemistry and Materials Sciences** (2 👁)
  - **Life Health and Medical Sciences** (2 👁)
  - **Mathematics and Statistics** (1 👁)