

Opportunity Title: USDA-ARS Fellowship in Cotton Quality and Innovation Research

Opportunity Reference Code: USDA-ARS-SEA-2026-0393

Organization U.S. Department of Agriculture (USDA)

Reference Code USDA-ARS-SEA-2026-0393

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 12/4/2026 3:00:00 PM Eastern Time Zone

Description *Applications are reviewed on a rolling-basis.

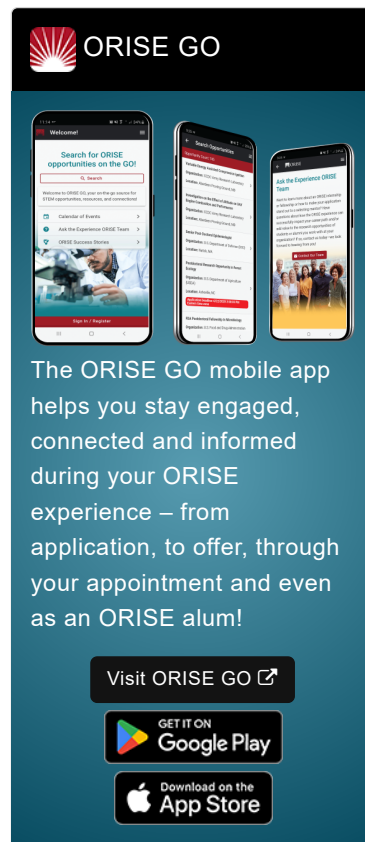
ARS Office/Lab and Location: A research opportunity is currently available with the U.S. Department of Agriculture (USDA), Agricultural Research Service (ARS), located in New Orleans, Louisiana.

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: The Cotton Quality and Innovation Research Unit (CQI) will approach this problem by identifying, modifying and developing valuable functionality in cotton that will target markets where the value of domestic cotton products is assessable and shows greatest promise for high value and volume consumption.

The development of value-added functionality will have particular focus on:

- Skin-contacting fabrics with wound healing and antimicrobial abilities;
- Nanomaterials that enhance agricultural crop protection, and;
- Material strength and high specific surface area performance value.



Opportunity Title: USDA-ARS Fellowship in Cotton Quality and Innovation
Research

Opportunity Reference Code: USDA-ARS-SEA-2026-0393

You will be focused on understanding the cotton based (barrier protective) nanofiber materials and related applications.

Learning Objectives: You will learn many innovative techniques (electrospinning and microencapsulation) related to the chemical modification of cotton and other natural fibers, nanoparticle synthesis and applications, and a deeper understanding of industrial pilot scale manufacturing techniques for woven and nonwoven fabrics through interactions and collaborations with commercial stakeholders. To accomplish this, you will learn from a research team that includes chemists, textile engineers, and material scientists. When completed, you will have a thorough understanding of chemical modifications and finishings of cotton fiber textiles.

Mentor(s): The mentor for this opportunity is Sechin Chang (sechin.chang@usda.gov).
If you have questions about the nature of the research, please contact the mentor(s).

Anticipated Appointment Start Date: May 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@ornl.gov and include the reference code for this opportunity.

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

Stipend \$40,700.00 Yearly

Point of Contact [Janeen](#)

- Eligibility Requirements**
- **Citizenship:** U.S. Citizen Only
 - **Degree:** Bachelor's Degree or Master's Degree.
 - **Discipline(s):**
 - **Chemistry and Materials Sciences** ([4](#) )
 - **Life Health and Medical Sciences** ([3](#) )