

Opportunity Title: USDA-ARS Sustainability Agroecosystem Internship

Opportunity Reference Code: USDA-ARS-SE-2023-0149A

Organization U.S. Department of Agriculture (USDA)

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How to Apply *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!

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

Application Deadline 1/19/2024 3:00:00 PM Eastern Time Zone

Description *Applications may be reviewed on a rolling-basis and this posting could close before the deadline.

ARS Office/Lab and Location: A research opportunity is currently available with the U.S. Department of Agriculture (USDA), Agricultural Research Service (ARS), Water Quality and Ecology Research Unit located in Oxford, Mississippi.

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: Throughout the course of this research project, the participant will collaborate with a USDA-ARS scientist in research programs focused, in general, on enhancing the sustainability of agroecosystems in the Lower Mississippi River Basin (LMRB) in Mississippi. Under the guidance of a mentor, the participant will be involved in the following activities:

1. The participant will collaborate in conducting experiments in the field and laboratory incubators investigating the impacts of different aquaculture system designs and/or water management in rowcrop fields on denitrification and water quality in the LMRB.
2. The participant will assist scientists in field sampling, sediment core incubations, dissolved gas and nutrient analysis, and measurement of pond sediment properties. The participant will assist in data processing,



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storage, and interpretation using personal computers and software packages.

Learning Objectives: Through this opportunity, the participant will gain experience in scientific research, specifically:

1. Become familiar with different water quality parameters, nutrient analyses, automated sensor components, maintenance, and data collection procedures.
2. Develop skills for water quality and dissolved gas data collection, analysis, and interpretation.

Mentor(s): The mentor for this opportunity is Jason Taylor (Jason.taylor@usda.gov). If you have questions about the nature of the research, please contact the mentor(s).

Anticipated Appointment Start Date: **December 2023/early 2024 or as soon as a qualified candidate is identified.** Start date is flexible and will depend on a variety of factors.

Appointment Length: The appointment will initially be for three months, 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, Lawful Permanent Residents (LPR), and foreign nationals. Non-U.S. citizen applicants should refer to the [Guidelines for Non-U.S. Citizens Details page](#) of the program website for information about the valid immigration statuses that are acceptable for program participation.

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 have a bachelor's degree or master's degree received within the last 60 months or be currently pursuing.

Skills or interests in sediment core collection and water quality monitoring would be considered favorable.

- Eligibility Requirements**
- **Degree:** Bachelor's Degree or Master's Degree received within the last 60 months or currently pursuing.
 - **Discipline(s):**
 - **Environmental and Marine Sciences** ([4](#) )

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- **Life Health and Medical Sciences** ([4](#) 👁)