

Opportunity Title: USDA-ARS Research Opportunity in Laboratory Analyses and Plant Evaluations

Opportunity Reference Code: USDA-ARS-2022-0248

Organization U.S. Department of Agriculture (USDA)

Reference Code USDA-ARS-2022-0248

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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 8/16/2022 3:00:00 PM Eastern Time Zone

Description *Applications are 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), Sugarcane Research Unit located in Houma, Louisiana.

Research Project: This project is part of a grant funded by the U.S. Department of Energy entitled "Sustainable Herbaceous Energy Crop Production in the Southeast United States". The grant is for the development of a comprehensive assessment of biomass productivity, economic viability, and environmental sustainability of advanced energycane and biomass sorghum genotypes in the southeast United States. The overall goal of the grant is to optimize sustainable biomass supply from energycane over diverse environments, to characterize the growth and biomass dynamics of energy crops, quantify the impact of these crops on environmental sustainability in marginal lands, and to develop best management practices for biomass production, harvesting, and storage.

Learning Objectives: The selected candidate will participate in field and laboratory research to assess cane yield and quality traits and to evaluate soil microbial profiles. The participant will gain hands-on laboratory experience and learn laboratory techniques (e.g. filtration, pipetting, preparation of solutions, recording and compiling data, etc.) and how to use standard laboratory equipment (e.g. spectrophotometer, pH meters, PCR, centrifuge, HPLC, etc.). In addition, he/she will learn to properly evaluate and collect data for field-based scientific experiments including field plot designs and sampling protocols. This research opportunity will teach the participant skills necessary for future work in the field of biological science.

Mentor(s): The mentor for this opportunity is Anna Hale (anna.hale@usda.gov). If you have questions about the nature of the research please contact the mentor(s).

Anticipated Appointment Start Date: 2022. Start date is flexible and will depend on a variety of factors.



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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 and continuing research opportunities.

Level of Participation: The appointment is part-time (20 hours per week).

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 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 USDA-ARS@ornl.gov and include the reference code for this opportunity.

Qualifications The qualified candidate should be currently pursuing a high school diploma or a bachelor's degree, with an interest in a career in science.

Preferred skills:

- Ability to pay careful attention to detail
- Manual dexterity
- Ability to walk and carry 20-30 pounds over uneven terrain
- Ability to keep accurate notes

- Eligibility Requirements**
- **Citizenship:** U.S. Citizen Only
 - **Degree:** Currently pursuing a High School Diploma/GED, Associate's Degree, or Bachelor's Degree.
 - **Discipline(s):**
 - **Chemistry and Materials Sciences** ([1](#)👁)
 - **Life Health and Medical Sciences** ([7](#)👁)