Opportunity Title: USDA-ARS Postdoctoral Research Fellow (CERCA)
Opportunity Reference Code: USDA-ARS-2022-0409

Organization U.S. Department of Agriculture (USDA)

Reference Code USDA-ARS-2022-0409

How to 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.

Application Deadline 4/20/2023 3:00:00 PM Eastern Time Zone

Description ***Applications may be 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 Columbia, Missouri.

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 CERCA (Circular Economy that Reimagines Corn Agriculture) project is a large multi-institutional project aimed at transforming US grain farmland into a net-negative component of a circular bio-economy and reducing global greenhouse gases. The ultimate aim of the project is to develop corn that can survive and thrive in early season plantings and has reduced environmental impacts.

The fellow will design, conduct, and publish experiments in the field, growth chamber, greenhouse and lab to determine how different corn genotypes and corn wild relatives perform photosynthesis under cold conditions and identify genes, pathways, and mechanisms for breeding, engineering, and testing in elite maize cultivars. Experience in plant physiology, molecular biology, photosynthesis, and/or plant sensing are preferred but not required.

The fellow will participate as a member of the CERCA project, attend weekly zoom meetings with members of the group from around US, and occasionally travel to meet and collaborate in person with those members.

Learning Objectives: The fellow will learn leadership, teamwork, and collaboration skills by

Opportunity Title: USDA-ARS Postdoctoral Research Fellow (CERCA)
Opportunity Reference Code: USDA-ARS-2022-0409

participating in a large multidisciplinary project and interacting regularly with industry, academic, and government researchers. Members of the CERCA project team have a strong record of jointly training graduate and postdoctoral researchers that have gone on to research and leadership roles in industry, government, and academia. Technical training in plant genetics, physiology, computational biology, high-throughput phenotyping, and other areas will be provided as needed and desired.

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

Anticipated Appointment Start Date: 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 two years, 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.CERCA@orau.org and include the reference code for this opportunity.

Qualifications

The qualified candidate should have received a doctoral degree in one of the relevant fields, or be currently pursuing the degree with completion before the appointment start date. Degree must have been received within the past five years.

Preferred Skills:

- Experience working on photosynthesis.
- Experience performing and interpreting RNAseq, Proteomics and/or gene network analysis.

Eligibility Requirements

- **Degree:** Doctoral Degree received within the last 60 months or currently pursuing.
- **Discipline(s):**
  - **Environmental and Marine Sciences** (2 👁)
  - **Life Health and Medical Sciences** (15 👁)
- **Veteran Status:** Veterans Preference, degree received within the last 120 month(s).

Opportunity Title: USDA-ARS Postdoctoral Research Fellow (CERCA)
Opportunity Reference Code: USDA-ARS-2022-0409