

Opportunity Title: USDA-ARS Research Opportunity on Bees and Plants

Opportunity Reference Code: USDA-ARS-MW-2023-0197

Organization U.S. Department of Agriculture (USDA)

Reference Code USDA-ARS-MW-2023-0197

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A complete application consists of:

- An application
- Transcripts – [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 9/29/2023 3:00:00 PM Eastern Time Zone

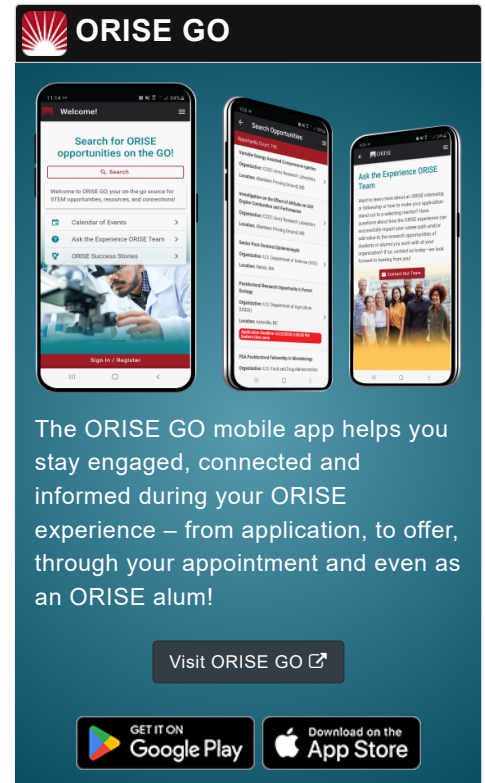
Description *Applications are reviewed on a rolling-basis.

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

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: Research in the laboratory concentrates on plant/pollinator interactions and how bees make decisions when they forage and how these decisions affect the movement of genes via pollen. Bee decisions include selecting a patch to forage in, and plants within patches. We also examine plant traits that affect bee behavior and the mating system of a plant, including inbreeding depression. We research mostly alfalfa, both cultivated and feral populations. We study leaf-cutting bees, honeybees, and bumble bees. A goal of the research is to improve our understanding of how bees move genes, of particular interest genetically engineered genes, via pollen. We are also interested in how environmental factors can affect plant traits and consequently bee behavior, and ultimately gene flow.

Under the guidance of a mentor, the research will involve bee



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behavior experiments in the field, greenhouse or large cages, and data collection of plant traits, mostly in a greenhouse environment but some in the field. Maintenance of plants and bees will also be ongoing and part of the learning experience.

Learning Objectives: The participant will learn and improve skills on examining and recording various bee foraging behaviors and plant traits affecting bees and mating system of plants. The participant will improve skills in experimental design, creating effective data sheet, entering and maintaining data, observing pollinator behavior, and learn techniques to measure and quantify plant traits and rewards. The participant will develop skills to perform tasks alone as well as in a group setting. Opportunities for data analyses will exist.

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

Anticipated Appointment Start Date: June 2023. 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.

Citizenship Requirements: This opportunity is available to U.S. citizens and Lawful Permanent Residents (LPR) 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.Midwest@oraui.org and include the reference code for this opportunity.

Qualifications

The qualified candidate should have received a bachelor's or master's degree in one of the relevant fields or be currently pursuing one of the degrees with completion prior to start of appointment. Degree must have been received within the past five years.



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Preferred skills:

- Prior experience working with bees or plants is highly desirable.
- Basic knowledge of bee behavior is a plus.
- Basic knowledge of statistics is also a plus

**Eligibility
Requirements**

- **Citizenship:** LPR or U.S. Citizen
- **Degree:** Bachelor's Degree or Master's Degree received within the last 60 months or currently pursuing.
- **Overall GPA:** 3.00
- **Discipline(s):**
 - **Environmental and Marine Sciences** (1 )
 - **Life Health and Medical Sciences** (14 )