

**Opportunity Title:** USDA-ARS Postdoctoral Fellowship on Feral Alfalfa, Bees, and Microbes

**Opportunity Reference Code:** USDA-ARS-2022-0024

**Organization** U.S. Department of Agriculture (USDA)

**Reference Code** USDA-ARS-2022-0024

**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.

**Description** \*Applications will be reviewed on a rolling-basis, and this opportunity will remain open until filled.

**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 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:** The project examines populations of feral alfalfa with a particular interest on differences in pollen and nectar microbiomes of glyphosate resistant (GR) and non-GR plants and on the effects of water availability and temperature on pollen and nectar provisions and their microbiomes, and the subsequent impact on bee foraging and bee health.

Project activities include the design of experiments, gathering of data, and performing data analyses to quantify microbiomes of pollen and nectar in feral alfalfa (GR and non-GR) and determine the impact of water availability and temperature on pollen and nectar provisions and their microbiomes and potential impact on bee foraging and bee health.

**Learning Objectives:** The participant will learn and increase their expertise in the process of experimental design, data collection, data analyses and data presentation (oral and written).

**Mentor(s):** The mentor for this opportunity is Johanne Brunet ([Johanne.brunet@usda.gov](mailto:Johanne.brunet@usda.gov)). If you have questions about the nature of the research please contact one of the mentors.



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**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 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. **The annual stipend will be \$52,000 and a travel allowance of \$1,200 will also be provided to present results from this research at meetings.**

**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 [USDA-ARS@ornl.gov](mailto:USDA-ARS@ornl.gov) and include the reference code for this opportunity.

**Qualifications** The qualified candidate should have received a doctoral degree in one of the relevant fields.

Preferred skills:

- Knowledge of experimental design, DNA extraction, DNA quantification and PCR
- Bioinformatics, especially as it relates to ITS and 16S analyses
- Microbial ecology in the context of plant-microbe interactions
- Previous experience with scientific writing
- Previous experience working with bees and with statistics

**Eligibility Requirements**

- **Degree:** Doctoral Degree.
- **Discipline(s):**
  - Life Health and Medical Sciences ([I](#) )