

**Opportunity Title:** USDA-ARS Plant Genetic Resources Fellowship

**Opportunity Reference Code:** USDA-ARS-2021-0251

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

**Reference Code** USDA-ARS-2021-0251

**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 are reviewed on a rolling-basis and this posting 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) at the U.S. National Arboretum's Woody Landscape Plant Germplasm Repository located in Beltsville, Maryland.

**Research Project:** Under the guidance of a mentor, the participant will be involved in the following opportunities: collecting and analyzing data from field plots; collaborating with Lead Scientist in seed collection, maintenance, and distribution; entering and manipulating data in the GRIN database; propagating plants from cuttings and seeds; setting up experiments in the lab and field; and writing summaries of results and methods.

**Learning Objectives:** Participant will develop an understanding of repository operations within the National Plant Germplasm System (NPGS), and during their experience will learn how to make proper seed collections, clean seed, prepare seed for cold storage, and conduct tests related to seed germination and seed viability. The participant will also learn how to conduct gap analysis of field collections using taxonomic and accession-level data from the US National Arboretum and its external collaborators. The participant will learn GRIN Global 'Curator Tool' software, including how to create new accessions, conduct reviews of germplasm holdings, and fulfill orders to external stakeholders. The participant will develop skills in GIS technologies by conducting mapping of field tree collections and interpreting the data using ArcGIS software. The participant will learn different approaches to propagation in a greenhouse environment, including methods for seed dormancy breaking, rooting vegetative cuttings, and bench grafting. The participant will learn how to conduct plant evaluation trials from experimental design, data collection, and data analysis, and develop relationships with collaborators that conduct parallel evaluations.

**Mentor(s):** The mentor for this opportunity is Todd Rounsaville ([todd.rounsaville@usda.gov](mailto:todd.rounsaville@usda.gov)). If you have questions about the nature of the research please contact the mentor(s).

**Anticipated Appointment Start Date:** **October 2021.** Start date is flexible and will depend on a variety of factors.



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**Appointment Length:** The appointment(s) 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(s) 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](mailto:USDA-ARS@ornl.gov) and include the reference code for this opportunity.

**Qualifications** The qualified candidate should have received a master's degree in one of the relevant fields, or be currently pursuing the degree with completion within the next six months.

- Eligibility Requirements**

- **Citizenship:** U.S. Citizen Only
  - **Degree:** Master's Degree.
  - **Discipline(s):**
    - **Environmental and Marine Sciences** ([4](#) )
    - **Life Health and Medical Sciences** ([4](#) )