

Opportunity Title: USDA-ARS Plant Genetic Resources Fellowship

Opportunity Reference Code: USDA-ARS-2022-0194

Organization U.S. Department of Agriculture (USDA)

Reference Code USDA-ARS-2022-0194

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. 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.

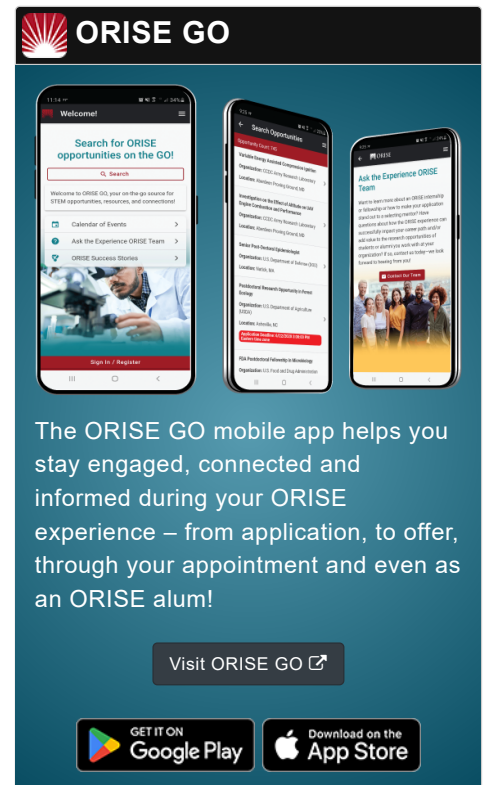
Application Deadline 11/18/2022 3:00:00 PM Eastern Time Zone

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 Beltsville, Maryland.

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 Woody Landscape Plant Germplasm Repository (WLPGR) is the USDA-ARS designated gene bank for over 200 genera of temperate trees, shrubs, and lianas. The WLPGR is responsible for the collection, characterization, maintenance, regeneration, and distribution of germplasm and associated information in order to benefit plant conservation and the broader scientific community. The selected participant will be involved in genetic and phenotypic analysis of select woody plant genera; analysis and curation of germplasm collections within the GRIN Global database; manuscript preparation and

ORISE GO

The ORISE GO mobile app helps you stay engaged, connected and informed during your ORISE experience – from application, to offer, through your appointment and even as an ORISE alum!

Visit ORISE GO

GET IT ON Google Play

Download on the App Store

Opportunity Title: USDA-ARS Plant Genetic Resources Fellowship

Opportunity Reference Code: USDA-ARS-2022-0194

statistical analysis; collection, propagation, regeneration, mapping, and management of woody plant germplasm samples.

Learning Objectives:

- Develop understanding of National Plant Germplasm System, and the value of gene bank management
- How to leverage genetic, taxonomic, and geospatial research to effectively curate a diverse gene bank
- How to conduct gap analysis of germplasm holdings using accession-level data from ex-situ collections
- How to use GRIN Global software; how to create new accessions, filter and query data, and incorporate supplemental information including molecular marker data
- How to map physical collections using GIS technology and ArcGIS software
- How to manage highly diverse taxa including methods for seed and asexual propagation, controlled pollination, tissue cryopreservation, herbarium vouchering, and multisite-management with external collaborators
- Interact with other National Plant Germplasm System curators to learn about alternative approaches for gene bank management of agronomic crops

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

Anticipated Appointment Start Date: **2022.** Start date subject to change based on a variety of reasons, and start date may be flexible to accommodate the needs of a qualified candidate.

Appointment Length: The appointment will initially be for one year, but may be extended 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 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@orau.org and include the reference code for this opportunity.

Opportunity Title: USDA-ARS Plant Genetic Resources Fellowship






Opportunity Reference Code: USDA-ARS-2022-0194

Qualifications The qualified candidate should be currently pursuing or have received a master's or doctoral degree in one of the relevant disciplines.

Preferred Skills:

- Experience conducting scientific research in one or more of the following fields: genetics, plant biology, plant breeding
- Strong proficiency with computers including management of large datasets and data analysis
- Experience with database management software or digital asset management
- Desire to learn about science-driven plant collections curation and germplasm management

**Eligibility
Requirements**

- **Citizenship:** U.S. Citizen Only
- **Degree:** Master's Degree or Doctoral Degree.
- **Discipline(s):**
 - **Computer, Information, and Data Sciences** (2 )
 - **Earth and Geosciences** (1 )
 - **Environmental and Marine Sciences** (4 )
 - **Life Health and Medical Sciences** (11 )
 - **Mathematics and Statistics** (2 )