

Opportunity Title: USDA-ARS Postdoctoral Fellowship in Plant Biotechnology

Opportunity Reference Code: USDA-ARS-2022-0033



Organization U.S. Department of Agriculture (USDA)

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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 3/2/2023 3:00:00 PM Eastern Time Zone

Description *Applications are reviewed on a rolling-basis and this posting could close before the deadline.

ARS Office/Lab and Location: A postdoctoral fellowship is currently available with the U.S. Department of Agriculture (USDA), Agricultural Research Service (ARS), Crop Improvement and Genetics Research Unit located in Albany, California.

Research Project: The research project is focused on performing genetic engineering of grapevine (*Vitis vinifera*) and potentially other plants with the goal of producing plants with novel desirable traits. Tissue culture and Agrobacterium-mediated transformation techniques will be developed and utilized to introduce genes of interest and CRISPR editing components into the transgenic plants.

Learning Objectives: The participant will learn and use multiple molecular biology and plant biotechnology-related tools and techniques including plasmid vector design and assembly, GAANTRY gene stacking, plant genetic engineering, plant tissue culture, genome editing and transgenic plant characterization techniques. New technologies and approaches that improve the efficiency of performing plant genome engineering may also potentially be developed.

Mentor: The mentor for this opportunity is Roger Thilmony (roger.thilmony@usda.gov). If you have questions about the nature of the research please contact the mentor.

Anticipated Appointment Start Date: 2022. 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(s) will receive a yearly stipend ranging from \$67,000-\$81,000, 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

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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.



Qualifications

The qualified candidate must have received a doctoral degree in plant biotechnology or a plant biology-related field.

Preferred skills:

- Demonstrated experience in plant biotechnology research (e.g. plant tissue culture, Agrobacterium-mediated transformation, growth of plants in chambers and greenhouses)
- Demonstrated skill and practical experience in molecular biology techniques (e.g., nucleic acid purification, gene amplification and cloning, bioinformatic analysis of genomic data, qRT-PCR, microbial transformation, growth and manipulation)
- Knowledge and experience in plant biology, genetics, plant physiology, genomics, microbiology, and/or molecular biology
- Demonstrated experience in design of experiments, development of laboratory protocols and keeping a thorough and detailed laboratory notebook
- Ability to work independently as well as part of a team, with good oral and written communication skills to keep team members informed and disseminate results at meetings and in refereed scientific journals

Eligibility Requirements

- **Degree:** Doctoral Degree.
- **Discipline(s):**
 - **Environmental and Marine Sciences** (1 )
 - **Life Health and Medical Sciences** (24 )