

Opportunity Title: Biological Science Research Opportunity

Opportunity Reference Code: ARS-MPPL-2016-0156

Organization U.S. Department of Agriculture (USDA)

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How to Apply A complete application package 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. Selected candidate must provide proof of completion of the degree before the appointment can start. Proof must be sent to ORISE directly from the academic institution including graduation date and degree awarded. All transcripts must be in English or include an official English translation.
- A current resume/CV

If you have questions, send an email to USDA-ARS@orau.org. Please include the reference code for this opportunity in your email.

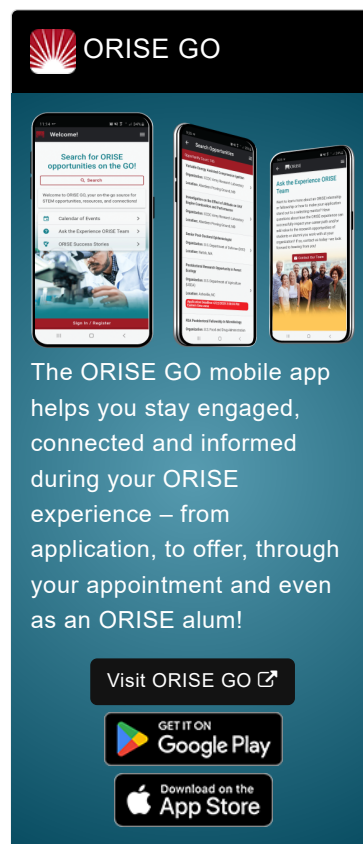
Description A Biological Science research opportunity is available with the U.S. Department of Agriculture (USDA) Agricultural Research Service (ARS) Molecular Plant Pathology Laboratory (MPPL) in Beltsville, Maryland. The participant will be involved in team research aimed at the molecular-genetic improvement of sugar beet, a major US crop. The incumbent will perform a variety of duties in support of research in the areas of plant transformation and beneficial gene reconstruction aimed toward management and control of agriculturally important plant diseases. The incumbent will investigate the use of gene transfer technology for delivering foreign genes into plant cells as a means of improving insect and disease resistance and altering biochemical pathways important in plant defense responses.

The appointment is full-time for eight months and may be renewed based upon recommendation of the ARS and availability of funding. The selected applicant will receive a stipend as support for their living and other expenses during this appointment. Stipend rates are determined by ARS officials, and are based on the applicant's academic and professional background. The participant must show proof of health and medical insurance. Health insurance can be obtained through ORISE. The participant will not enter into an employee/employer relationship with ORISE, ORAU, USDA, ARS, or any other office or agency. Instead, the participant will be affiliated with ORISE for the administration of the appointment through the ORISE appointment letter and Terms of Appointment.

While participants will not enter into an employment relationship with ARS, this position requires a pre-employment check and a full background investigation.

This opportunity is available to U.S. citizens.

This is an equal opportunity program open to all qualified individuals without regard to race, color, age, religion, sex, sexual orientation, gender



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identity, national origin, mental or physical disability, covered veteran's status or genetic information.

For more information about the ARS Research Participation Program, please visit the [Program Website](#).

Qualifications Four year course of study above the high school level leading to a bachelor's degree with a major study or at least 24 semester hours in any combination of courses such as biology, chemistry, statistics, physics, mathematics or other closely related field which demonstrates the knowledge, skills, and abilities required by this position OR have a combination of education and specialized experience such that when the two are added, they equal at least 100%. Degree must be received within five years of the desired starting date. The ideal candidate will have:

- Knowledge of the principles and practices of plant molecular and biological research.
- Ability to perform plant transformation technology, molecular techniques such as plant and microbe nucleic acid (DNA/RNA) extraction and analysis, PCR, recombinant RNA/DNA and protein analysis, microbiology, plant physiology and plant cell tissue culture using sterile techniques.
- Ability to conduct insect and microbial bioassay experiments with plants and maintain greenhouse grown plants.
- Ability to obtain, tabulate, statistically analyze and summarize research data.
- Knowledge and understanding of the application of instrumentation used in analyses so that prescribed procedures can be modified to accommodate existing sampling and analytical conditions.
- Operation and maintenance of equipment systems common to the specific area of research being conducted which may be calibrated and synchronized to achieve desired results.
- Ability to follow assigned protocols and recognizes and reports abnormal or unexpected results.
- Ability to schedule and independently carry out work assignments.
- Knowledge of safe laboratory procedures.

- Eligibility Requirements**
- **Citizenship:** U.S. Citizen Only
 - **Degree:** Bachelor's Degree.
 - **Discipline(s):**
 - **Life Health and Medical Sciences** ([8](#) )