Opportunity Title: Postdoctoral Research Opportunity - Plant Molecular Biologist
Opportunity Reference Code: ARS-GCPRU-2015-0134

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 Plant Molecular Biologist research opportunity is available with the U.S. Department of Agriculture (USDA) Agricultural Research Service (ARS) Global Change and Photosynthesis Research Unit (GCPRU) in Urbana, Illinois.

The postdoctoral position will conduct research to improve energy use efficiency as a strategy to improve yield potential in C3 crops. The central research approach will be to introduce transgenes or employee other molecular genetic manipulations of the photosynthetic, respiratory and/or photorespiratory pathways to establish proof of concept of improved energy use efficiency in tobacco plants in both greenhouse and field studies. Proof of concept testing will include molecular, metabolic and physiological characterization of greenhouse grown plants followed by field testing of the most promising candidates. The incumbent will also contribute as member of multi-laboratory team with the overall goal of developing a computational engineering framework for selecting systems and synthetic approaches to increasing crop net photosynthesis, practical engineering of the selected changes, and molecular, biochemical and whole crop physiological phenotyping in the laboratory and field.

The appointment is full-time for one year and may be renewed based upon recommendation of the ARS and availability of funding. The annual stipend rate for this position is $ 58,662. This rate includes a stipend supplement to offset the cost of a health insurance plan. The participant must show proof of health and medical insurance. Health insurance can be obtained through ORISE. Relocation expenses up to $3,000 will be

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reimbursed, with prior approval. The participant will not enter into an employee/employer relationship with ORISE, ORAU, USDA, 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, 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.

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

To be eligible, applicants must have received a doctorate degree in molecular biology/genomics within five years of the desired starting date. Equivalent molecular training in another eukaryotic system with a preference toward plant molecular biology/genetics is required as is peer reviewed published work utilizing this expertise. Demonstrated background in photosynthesis, respiration or photorespiration is desirable. Good oral and written communication skills coupled with the ability to work independently and cooperatively are required. Skills in computational modeling, informatics, gene expression analysis, metabolic profiling, leaf gas exchange and/or plant physiology/biochemistry are desirable.

Eligibility Requirements

- **Degree:** Doctoral Degree.
- **Discipline(s):**
  - **Life Health and Medical Sciences** (3 👁)