Ph.D. Graduate Student Assistantship Available at the Pennsylvania State University

The Penn State’s Department of Plant Science ([https://plantscience.psu.edu/](https://plantscience.psu.edu/)) is seeking a highly motivated Ph.D. graduate student who will conduct research on agronomic biofortification techniques of vegetable crops within the framework of a collaborative interdisciplinary project aimed at developing sustainable solutions for assuring food and nutrition security in the face of major catastrophic events. Using agronomic and laboratory procedures for plant physiological and biochemical analysis, the primary goal of the research will be to assess the effect of agronomic biofortification techniques and UV radiation and/or limiting environmental light conditions on the ionome and secondary metabolite profile of selected vegetables crops taking into consideration agronomic and physiological aspects of the crops examined as well as critical aspects of human nutrition.

The candidate will be supervised by Dr. Francesco Di Gioia and Dr. Erin Connolly and will be working with an interdisciplinary team of researchers with expertise in plant biology, food science, ecosystem science and management, environmental engineering, and economics, ethics, and human behavior. Primary work location will be the main Penn State campus located at State College, in central Pennsylvania.

The profile of the successful candidate for this position includes:

- Educational background: B.S. and preferably M.S. in horticultural science, plant biology, or closely related field.
- Research experience on issues related to plant nutrition and/or physiological aspects of plant response to radiation and/or abiotic stress conditions.
- Strong quantitative and qualitative skills in fields related to plant science, plant physiology, plant nutrition, and biochemistry.
- Ability to formulate research hypothesis, design and conduct greenhouse and laboratory experiments, collect, interpret, and summarize data, and solve research issues.
- Ability to use software and execute procedures for plant mineral and phytochemical analysis, image analysis, environmental monitoring, and statistical analysis.
- Ability to collaborate effectively with members of an interdisciplinary research team.
- Excellent oral and written English communication skills.

If interested and for more information, please contact Dr. Francesco Di Gioia ([fxd92@psu.edu](mailto:fxd92@psu.edu)) and Dr. Erin Connolly ([elc18@psu.edu](mailto:elc18@psu.edu)). Candidates should submit an application for admission to the Penn State Agricultural and Environmental Plant Science (AEPS) Ph.D. program and must provide a cover letter that summarizes relevant experience and specific reasons for interest in the position, along with a CV that includes contact information for three references (name, position, telephone number, and e-mail address). Applicants must submit transcripts from their B.S. and M.S. degree programs and meet the admission requirements of the AEPS program.