Graduate Research Assistant in Sustainable Specialty Crop Production

A Ph.D. research assistantship is available in the Department of Agronomy and Horticulture at the University of Nebraska – Lincoln for a student interested in sustainable specialty crop production. The graduate research assistant will work as part of Dr. Sam Wortman’s research team to develop bio-based, renewable management tactics for local, urban, and organic specialty crop farmers that increase crop yield and quality, and reduce labor without jeopardizing environmental quality. The graduate research assistant will provide leadership for and conduct dissertation research on a novel bio-based mulch production system for spinach, lettuce, carrots, and strawberries. The goal for the research project is to leverage the unique properties of bio-based mulch to seed and root vegetables and strawberry runners directly on and through the mulch membrane. We will explore the effects of this biomulch system on weed control, soil nitrogen and water dynamics, incidence of plant and human pathogens, crop yield and quality, and labor logistics and profitability.

Position responsibilities will include: 1) scientific literature review, 2) designing and executing research protocols, 3) managing specialty crops and maintaining field research plots on campus and farms in eastern Nebraska, 4) collaborating with USDA-ARS scientist Dr. Lisa Durso to study pathogens in soil and the crop rhizosphere, 5) collecting, analyzing, and interpreting field and lab data, and 6) preparing results for publication in refereed journals and presentation at grower and academic conferences.

Qualifications: 1) Bachelor’s degree in horticulture, agronomy, crop sciences, agroecology, soil science, biology, chemistry, biochemistry, ecology, environmental sciences, or a related field; 2) excellent written and oral communication skills; 3) self-motivated and ability to work independently and as part of a team; 4) previous research experience and M.S. degree is preferred (though highly qualified applicants may be eligible to bypass M.S. degree into Ph.D. program).

Graduate Research Assistantship annual stipend for Ph.D. students: $27,540

Tuition waiver: A tuition waiver of up to 12 credit hours per semester and 12 credit hours during summer sessions is provided with the graduate research assistantship.

Health insurance: Students on assistantships are provided health insurance at a reduced rate.

Applications: Review of applications will begin September 1, 2020 and continue until the position is filled. Interested students should send the following application materials to Dr. Sam Wortman (swortman@unl.edu): 1) one-page statement of interest that includes qualifications and career goals, 2) most recent academic transcripts (unofficial), 3) resume or C.V., 4) contact information for three professional references, and 5) GRE scores (preferred, but not required for consideration). Successful applicant will be contacted and encouraged to formally apply for graduate studies in the Department of Agronomy and Horticulture. Admission instructions can be found at: http://agronomy.unl.edu/futuregraduate.

Questions about graduate studies in the department or the admissions process can be directed to Dr. Keenan Amundsen, the Graduate Chair in the Department of Agronomy and Horticulture (E-mail: AGRO_HORT_GradChair@unl.edu).

UNL is committed to a pluralistic campus community through Affirmative Action and Equal Opportunity. UNL does not discriminate in its employment, admissions or related service programs. Affirmative Action/Equal Opportunity/Diversity questions may be directed to the Office for Affirmative Action and Diversity Programs, 127 Administration Building, P. O. Box 80437, UNL, Lincoln, NE 68588-0437, or by telephoning 402/472-3417 (or TDD, 402/472-9522). Employment eligibility verification is required for all new hires pursuant to the Immigration and Control Act of 1986. We assure reasonable accommodation under the Americans with Disabilities Act.