Position: Postdoctoral Fellow in Plant Population Genomics (Full Time) – Ellison Lab

Position Description:

A postdoctoral position is available in the laboratory of Shelby Ellison, in the Department of Horticulture at the University of Wisconsin, Madison. The Ellison lab conducts research on plant domestication, genetics, and breeding in alternative crops. Major areas of research include determining the genetic basis of traits selected for during domestication and improvement, characterizing germplasm to maximize *in situ* and *ex situ* preservation efforts, investigating the role of genotypic diversity and phenotypic plasticity in plant adaptation, and developing novel phenotyping methodologies for emerging crops.

This opening is for a highly motivated postdoctoral fellow with expertise in one or more of the following areas: genetics, genomics, population genetics, molecular biology, quantitative genetics, plant research, field research. All candidates must have received a Ph.D. in a relevant field. The postdoc will be based at the University of Wisconsin, Madison campus and have access to all the resources available through the Horticulture Department. The position is available for 1 year with the possibility of renewal for a second and third year and will include a competitive salary and full benefits.

Interested candidates please contact Shelby Ellison at slrepinski@wisc.edu. Applications should include: a cover letter, a brief description of past research accomplishments and future research goals, CV, and contact information for three references. To learn more about the Ellison Lab, visit our webpage. For more about the University of Wisconsin, Madison, please see here: https://www.wisc.edu/

Basic Qualifications:

- Ph.D. in plant breeding, bioinformatics, quantitative/statistical/population genetics, or a related discipline
- Experience with project management and experimental design
- Demonstrated expertise analyzing highly-dimensional genomic and phenomic datasets

Responsibilities:

- Collaborate with a large and diverse team of researchers and citizen scientists to characterize genotypic and phenotypic diversity in feral hemp (*Cannabis sativa* L) populations
- Develop cost-effective phenotyping methods for quality and yield traits in hemp
• Model kinship, structure and diversity within feral and landrace hemp populations
• Participate in experimental design, data collection, processing, and analysis
• Supervise technical staff/teams/students
• Assist with permitting and reporting to state authorities and funding agencies
• Produce peer-reviewed publications and develop grant proposals for additional funding for research, education, and outreach activities
• Work with the team to create outreach and education publications

A successful applicant will have most of the following:

• Extensive independent research experience
• Creativity and independence
• Genetic or molecular lab experience
• Bioinformatics, or statistical genetics experience
• Field or greenhouse research experience
• Excellent communication skills, both written and oral
• Able to organize, multitask time efficiently and work both independently and collaboratively within a multidisciplinary and interactive research environment
• Effective writing and communication skills, meticulous record keeping
• Advanced knowledge of quantitative, population, and statistical genetics with experience in training and using genomic prediction models
• Evidence of capacity for program management, collaborative research, and interactions with stakeholders

The University of Wisconsin, Madison, College of Agricultural and Life Sciences (CALS) is an international leader in food and agriculture, the fundamental life sciences, climate, and human and community health and well-being. Through research, teaching, and outreach, CALS strives to lead in science, innovation, and collaboration that improves life and sustains the natural world. The UW-Madison, CALS, the Department of Horticulture, and Ellison research group are committed to maintaining and growing a culture that embraces diversity, inclusion and equity, believing that these values are foundational elements of our excellence and fundamental components of a positive and enriching learning and working environments for all students, faculty and staff. We promote excellence through diversity and encourage all qualified individuals to apply.