

The University of Nebraska-Lincoln is seeking a Postdoctoral Research Associate to manage an interdisciplinary project on maize water- and nitrogen-use efficiency. The objectives of the project are: 1) Develop a data-driven guide for managing irrigation and nitrogen (N) application rates across a range of commercially available hybrids; 2) Dissect drought tolerance into a series of related components to better illuminate its genetic architecture and identify sources of favorable alleles. The latter objective will be accomplished using nondestructive high-throughput phenotyping technologies both in the greenhouse and field settings. An association mapping approach will be taken on a large panel of testcrossed inbred lines. The successful candidate will interface with another postdoc focusing on the molecular physiology and transcriptional profile of a subset of lines with unique drought responses. The successful candidate, therefore, will have the opportunity to study drought tolerance from many angles, preparing them well for multi-disciplinary strategies to solve such complex problems.

The successful candidate will have experience and knowledge in agronomy, plant breeding, and genetics. Knowledge of statistics, experimental design, and quantitative genetics is strongly desired. The successful candidate should be comfortable managing field plots and collecting data in the field. Also, frequent travel will be necessary during the summer months. Funding is ensured for two years; extensions are possible. A start date before May 1, 2012 is preferred.

Send a cover letter, CV, and a list of at least three references to Dr. Aaron Lorenz ([alorenz2@unl.edu](mailto:alorenz2@unl.edu)). Questions can also be directed to Dr. Lorenz. Applicant screening will begin Jan. 30, 2012.