Academic Job Description
Plant Breeding and Genetics Section
Postdoc Position in Quantitative Genetics at Cornell University

Position Function

The School of Integrative Plant Science at Cornell University is seeking a highly motivated postdoctoral associate to conduct studies in the modeling of complex genotype-by-environment interactions and the implementation of genomic selection in crop breeding programs. The position is located in the Plant Breeding and Genetics Section. The successful applicant is expected to apply advanced modeling techniques to phenotypic, genomic, and environmental data to estimate genetic parameters related to plant responses to environmental stresses. In collaboration with the Gore lab at Cornell, the phenotypic data sets have been collected by ionomic and metabolomic profiling technologies, along with field-based high-throughput phenotyping systems built on the integration of imaging and robotic platforms. In addition to modeling plant stress responses, the position will work closely with collaborators at CIMMYT to optimize the implementation of genomic selection in African maize breeding programs.

The position is anticipated to start in January 2018 and the search will continue until the position is filled. Salary is competitive and commensurate with background and experience. Benefits package is included.

Anticipated Division of Time

| Model development and data analysis | 60% |
| Breeding program design            | 20% |
| Communication and coordination with collaborators | 10% |
| Training of lab members and collaborators in quantitative genetics | 10% |

Requirements
Requirements include a Ph.D. in plant or animal breeding, population genetics, statistics, computer science or computation-related fields with an interest in plant breeding applications.

Preferred Specific Skills
Mixed models, Bayesian methodology, genomic selection, sequence alignment and variant calling methods, variant imputation methods, and programing experience in Fortran, C, or Python.

How to Apply Application: Candidates are encouraged to send a statement of research interest, curriculum vitae, and contact information for three references to Dr. Kelly Robbins (krr73@cornell.edu).