

Link to Position Posting:

[K-State Careers](#)

<https://careers.k-state.edu/cw/en-us/job/516989/assistant-professor-quantitative-genetics>

About this Role

The Agronomy Department at Kansas State University is seeking an Assistant Professor, 12-month, tenure-track faculty position with 80% research and 20% teaching appointment, to develop a strong, innovative research and teaching program in theoretical Quantitative Genetics with focus on developing novel statistical and quantitative modeling approaches to genomic and phenomic data collected in crop genetics and breeding programs. This position will apply these models for understanding the genetic mechanisms underlying variation in major agronomic traits, including but not limited to crop adaptation and productivity, and apply these models for predictive breeding to accelerate development of improved crop varieties. This position will be expected to collaborate with crop breeding, genomics, and phenomics teams to apply machine learning and artificial intelligence (AI) to leverage large-scale datasets for mechanistic understanding and trait prediction under changing environments. This position is expected to develop collaborative ties to programs across departmental and college boundaries. The incumbent will develop new courses for graduate students in application of advanced modeling approaches, including machine learning and AI, to crop improvement. The incumbent will develop graduate level courses to support the teaching mission of the Department of Agronomy, Interdepartmental Genetics Program, and College of Agriculture in the area of quantitative genetics. The developed courses will provide training opportunities for graduate students in one or more of the following areas: 1) crop quantitative genetics, 2) application of AI-based methods to crop genetics and breeding, 3) modeling crop genotypes, development, and physiology in relationship to the target selection environment. The incumbent will be expected to leverage K-State's breeding and genetic programs for the climate resilient cereals of sorghum, canola, wheat, and soybeans. The incumbent must be able to work in a multicultural setting and create an environment that fosters collegiality, diversity, and teamwork.