

**Full Job Description:**

A graduate research assistantship (GRA) leading to a Ph.D. in Plant Molecular Biology is available in Plant Science Department at South Dakota State University (SDSU). The GRA will work as part of a team on NSF- and USDA/NIFA-funded projects to clone and characterize naturally occurring genes responsible for seed dormancy from weedy rice. Seed dormancy is a key adaptive trait of both fundamental and agricultural importance, as it regulates the timing of germination for wild species, contributes to the persistence of weeds in agro-ecosystems, and provides cereal crops with the resistance to pre-harvest sprouting. Several quantitative trait loci (QTL) associated with seed dormancy have been isolated as single Mendelian factors from weedy into cultivated rice and some of them map-based cloned in the Seed Molecular Biology Laboratory. The GRA will be involved in cloning additional seed dormancy QTL and characterizing QTL underlying genes for molecular/physiological pathways. Applicants must have received basic training in plant genetics, molecular biology, physiology, or biochemistry. Experience in QTL mapping/cloning or RNA-seq/microarray analysis is preferred. The flexibility to work independently or as a team member and good communication and writing skills are required.

To apply, please send your C.V., a cover letter, and contact information for three references to Dr. Xingyou Gu by email ([Xingyou.gu@sdstate.edu](mailto:Xingyou.gu@sdstate.edu)). Selection for the GRA position will be based on basic and preferred qualifications and working experience.