

**Ph.D. Graduate research assistantship (GRA)**  
**The Shekoofa Crop Physiology and Water Management Lab**  
Department of Plant Sciences, University of Tennessee



Field plots and controlled-environment setups at UT's  
Ag Research and Education Centers in Milan and Jackson, TN

**Location:** West Tennessee Research and Education Center-Jackson, TN with coursework undertaken at main campus in Knoxville, TN

**Responsibilities:** The University of Tennessee is seeking a Ph.D. student to conduct research that integrates crop physiology, genetics and deep learning methods to explore opportunities that will result in reduced floral abortion in soybean plants challenged by different climatic conditions. Our team [collaborative work with colleagues at Texas Tech Univ., Kansas State Univ., Univ. of Missouri] seeks a motivated, enthusiastic, and intellectually curious individual to work in controlled (greenhouse) and field environments. The successful applicant will provide guidance and implementation of experiments that will be designed to minimize floral abortion in soybean plants with the goal of enhancing crop yield potential, while incorporating image-based machine learning tools into methods that facilitate high throughput phenotyping. Opportunities for teaching, outreach, and travel to professional meetings will be available.

Students in Plant Sciences at the University of Tennessee are expected to understand and be ethical in the conduct of their research. The successful candidate will have:

- a M.S. degree in agronomy, plant science, agricultural engineering, or closely related field
- strong writing skills
- manuscripts prepared for publication and/or published in peer-refereed journal(s)
- strong oral communication skills and ability to work with a diverse group of faculty, staff, and students to conduct research in row-crop field and controlled environment (greenhouse and laboratory) systems

Interested applicants should be prepared to share their intellectual curiosity and demonstrate their motivation and desire to learn on-the-job. Additional highly desirable qualifications that applicants can address in the letter of interest include strong academic record, experience in row crops, strong organizational skills, ability and self-motivation to work independently while accomplishing high quality tasks in a timely fashion.

**Closing Date:** Screening of applicants will begin immediately and continue until filled. Domestic applicants may have the opportunity to begin in Summer 2023 hourly employment prior to Fall 2023 semester enrollment. International applicants may begin as early as possible, depending on when complete applications are received.

**Contact:** Please contact Dr. Avat Shekoofa ([ashekoof@utk.edu](mailto:ashekoof@utk.edu)) if interested in this opportunity. Applicants will need to prepare a letter of interest, C.V. and contact information for three references that will be a part of their online application. Information about acceptance into the graduate school at the University of Tennessee can be found at: [www.gradschool.utk.edu](http://www.gradschool.utk.edu)

**The University of Tennessee** is a land grant university with an enrollment of over 27,800. The Plant Sciences Department is located on the Agricultural Campus with lab facilities, greenhouse space, and nearby field space to support active production research. The University of Tennessee also has ten research and education centers which facilitate statewide agricultural research. **Knoxville, Tennessee** is a vibrant community, with a population of approximately 183,270. This community boasts a thriving music and arts scene, along with plenty of opportunities for outdoor adventures in the nearby Great Smoky Mountains National Park.

**Useful web sites to learn more about the University of Tennessee and the city of Knoxville:**

The University of Tennessee: [www.utk.edu](http://www.utk.edu)

Department of Plant Sciences: [www.plantsciences.utk.edu](http://www.plantsciences.utk.edu)

UT Agronomic Variety Trials: [www.varietytrials.tennessee.edu](http://www.varietytrials.tennessee.edu)

UT Crops: [www.utcrops.com](http://www.utcrops.com)