Job Requisition: R-059098 Assistant Professor Controlled Environment Plant Breeder

Supervisory Organization: 06113008 Dallas (Daniel Leskovar)

Internal: P-171192 Assistant Professor Controlled Environment Plant Breeder

Job Posting Title: Assistant Professor Controlled Environment Plant Breeder

Recruiting Start Date: 02/08/2023
Target Hire Date: 06/01/2023

Location: Texas A&M AgriLife Research and Extension Center at Dallas

Position Description
Texas A&M AgriLife Research & Extension Center, Dallas (https://dallas.tamu.edu) is seeking a motivated and visionary Urban Ag and Controlled Environment Plant Breeder at the Assistant Professor level. The appointment is 100% effort with AgriLife Research and is 12-month, base-funded position. The successful candidate will have a strong physiology and molecular genetics background to establish and lead a national and international research program in plant breeding for small fruits and vegetable crops in Controlled Environment Agriculture (CEA), specifically greenhouses and indoor farms. The candidate is expected to develop resilient plant varieties with important traits adaptable to CEA such as high light use efficiency, canopy architecture that could facilitate mechanization and automation, and disease resistance. The candidate is expected to use a combination of traditional plant breeding methods and molecular breeding approaches, including genomics (e.g., gene editing) and high-throughput phenotyping technologies to accelerate the process of developing these CEA crops and allow for improving targeted agronomic-quality-nutritional traits to meet specific market needs.

This position will develop a critical program that will be integrated with a Research and Extension team involved in translational and applied research in plant immunity, horticulture, mechanization, entomology, and physiology that is charged with providing knowledge, approaches, and varieties that will enhance the urban Ag industry in Texas and beyond. The incumbent will be expected to attract extramural funding, establish a strong research publication record, mentor undergraduate and graduate students, particularly students from under-represented groups. Participation in professional development efforts at an appropriate level of service to the center, agency, university, and/or profession is expected. The candidate will be encouraged to collaborate with other AgriLife Research Scientists and Extension Specialists at centers around the State, and to interact with academic departments on the various Texas A&M University System campuses.

Responsibilities

- Conduct applied and basic research in plant breeding targeting traits for CEA conditions and high nutritional density.

- Provide leadership and team building with multi-disciplinary Research Scientists and Extension Specialists to address key urban agricultural issues affecting the industry and farmers.

- Develop and/or lead research teams to apply for internal and external research grant opportunities with the involvement of research faculty from AgriLife Research and AgriLife Extension, as well as other research institutions.

- Develop CEA varieties and breeding methods using molecular and phenomic approaches to enable sustainable, affordable, nutritious, and high-quality fruits and vegetables for the citizens of Texas.

- Train and mentor the next generation of plant breeders, including students and Post-Docs.

- Publish in high-impact peer-reviewed journals.

Qualifications
Required
Education – Ph.D. or equivalent doctoral terminal degree in plant breeding or related discipline

- Relevant experience in plant breeding

- Relevant experience in plant physiology or molecular biology

- Evidence of peer-reviewed publication history

- Excellent verbal and written communication skills

- Experience writing or assisting submission of competitive grants

Preferred

- Postdoctoral experience

- Relevant experience in plant breeding on fruits and vegetables (e.g., physiological traits, quality, nutritional content)

- Experience in plant physiology and molecular biology for controlled environments and protected cultivation of fruits and vegetables

- Knowledge of genomics – gene editing applications

- Expertise or knowledge on the use of sensors for the detection of desirable plant traits (e.g., plant architecture, stress tolerance, color, etc.)

- Demonstrated success in securing external grants and contracts

- Participation in professional societies

- Evidence to engage with stakeholder groups, identify critical issues, and act on those needs through research activities that resolve problems

The Dallas AgriLife Research and Extension Center is committed to improving and promoting healthy food systems and the quality of life in urban communities and to providing solutions to current and emerging problems in Urban Ag through basic and applied research. The main objectives in the Urban Agriculture program are to: develop climate-resilient, safe, and resource-use-efficient crops for the growing urban population; increase production efficiency of controlled environments; accelerate crop genetic improvement through automated high-throughput phenotyping and genomics-assisted breeding; and strengthen the Urban Ag economy and the social well-being, by addressing food deserts and food insecurity. The center is committed to diversity and inclusion and expects the successful candidate to contribute to that vision and commitment.

The successful candidate would become a member of the Department of Horticulture located in College Station and expected to train graduate students in the discipline as a member of the Graduate Faculty.

Location
Texas A&M AgriLife Research and Extension Center at Dallas, 17360 Coit Road, Dallas, Texas 75252

Texas A&M AgriLife
With oversight by the Office of the Vice Chancellor, Texas A&M AgriLife, a member of the Texas A&M University System, includes: Texas A&M AgriLife Extension Service, Texas A&M AgriLife Research, College of Agriculture & Life Sciences at Texas A&M University, Texas A&M Forest Service, and Texas A&M Veterinary Medical Diagnostic Laboratory.

Texas A&M AgriLife Research is the leading research and technology development agency in Texas for agriculture, natural resources, and the life sciences. Our discoveries yield economic, environmental, and health benefits that are key to our state's success and vital to the lives of its citizens. With 13 Research and Extension Centers throughout the state, AgriLife Research is dedicated to research that improves the Texas economy and lives of local and state-wide stakeholders through research encompassing the Agriculture and Food Value Chain.

Texas A&M AgriLife Extension Service provides programs, tools and resources on a local and statewide level that teach people improved agriculture and food production, advanced health practices, environmental protection, economic and youth programs. Health and wellness programs focus on diabetes education, nutrition, exercise, food safety, child safety and injury prevention, and early cancer detection.

Applicant Instructions
Apply at https://tamus.wd1.myworkdayjobs.com/en-US/AgriLife_Research_External/details/Assistant-Professor-Controlled-Environment-Plant-Breeder_R-059098. An application should contain:

1) A cover letter,
2) A statement of research for the position (2-page limit),
3) A statement of diversity and inclusion for the position (1-page limit),
4) A current resume or curriculum vitae, and
5) Contact information for three references

Review of applications will begin April 1, 2023, and will continue until the position is filled.

Questions?
Address inquiries to Search Committee Chairs:

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