

PhD Position “Maximizing Photosynthetic Efficiency in Maize”

The chair of plant breeding at the Technical University of Munich / TUM School of Life Sciences Weihenstephan invites applications for a PhD position TV-L E13 (65%), starting as soon as a suitable candidate is found.

Research in the plant breeding group is focused on the development of molecular and statistical tools for plant breeding as well as on genome analysis in crop plants.

Project description:

"FullThrottle" is a collaborative project combining physiology, biochemistry, molecular biology and genetics to investigate the factors affecting the rate and efficiency of C4 photosynthesis. Maize introgression lines will be used to identify and characterize QTL for photosynthesis-related traits and to investigate their relation to drought stress tolerance. Detailed analysis will focus on physiological parameters and transcript profiling in well-watered and drought stress conditions. The results will be integrated with those obtained by other partners in the project to provide a comprehensive analysis of photosynthesis efficiency in maize. We are looking for a highly capable and motivated candidate to take on a challenging but potentially very rewarding research subject.

The successful applicant is expected to have:

- Diploma or Master's degree in biology, molecular biotechnology, plant physiology or related disciplines (above average grades)
- Background in genetics, molecular biology and biochemistry is advantageous
- Interest in photosynthesis and plant stress physiology
- Willingness to carry out both field and laboratory work
- Very good English (oral and written), German is an advantage
- Ability to work in a team and to collaborate with other research groups

We offer:

- An interdisciplinary working environment in a team of molecular and statistical geneticists
- Active exchange and collaboration with partners from academia and industry in a field of constant technical and methodological development
- Advanced education in molecular genetics, bioinformatics and plant breeding in courses and summer schools
- Employment contract with the German public service salary TV-L E13 (65%), for three years

The Technical University of Munich is committed to increasing the proportion of women in research and education and thus explicitly invites qualified female scientists to apply for this position. Preference will be given to disabled candidates with essentially the same qualifications.

Contact:

Applications with the usual supporting information (letter of motivation, CV, certificates, transcripts, credentials, etc. in a single pdf file) should be submitted by Email to jobs.z7x.wz@tum.de, **subject matter: “PhD Position on Maximizing Photosynthetic Efficiency in Maize 17.2”**. Application will be open until the position is filled.

For more information please see: <http://www.plantbreeding.wzw.tum.de>

For questions related to the position and further background information please contact Dr. Claudiu Niculaes, Plant Breeding, TUM, claudiu.niculaes@tum.de.