

PhD Position in Photosynthesis Research

The chair of plant breeding at the Technical University of Munich / TUM School of Life Sciences Weihenstephan invites applications for a PhD position in photosynthesis research starting November 1, 2016, or later.

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

Project description:

Maize is one of the most important crop plants on the planet and it has the most efficient mode of photosynthesis - C₄. However, the theoretical solar conversion efficiency is far from being achieved even in intensively managed maize cultures. Our aim is to identify genes that are associated with photosynthetic efficiency in maize, with the ultimate goal to translate this knowledge into next generation breeding strategies. The candidate will focus on developing tools to screen genetically diverse populations for water use efficiency and photosynthetic efficiency. The work includes expression analysis, assessment of biomass, transpiration, photosynthesis, agronomic traits and QTL mapping.

The successful applicant is expected to have:

- Diploma or Master's degree in biology, agricultural sciences 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 plant breeders, molecular geneticists, statisticians and bioinformaticians
- 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, credentials, etc. in a single pdf file) should be submitted by Email to jobs.z7x.wz@tum.de, **subject matter: "PhD Position in Photosynthesis Research 16.4"**. 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