

The Institute of Systematic Botany & Mycology, Group Systematics, Biodiversity & Evolution of Plants at the Ludwig-Maximilians-University Munich is offering a DFG funded postdoc position in the framework of the DFG-project “Evolution of C₄ gene regulation in succulent and salt-tolerant C₄ lineages” lead by Prof. Gudrun Kadereit.

Postdoc

TVL-E13, 100% - for 2 years; open from 1st of February 2021

Evolution of C₄ gene regulation in Salsoleae (Amaranthaceae)

In this project, laser-assisted microdissection will be used to sequence mesophyll and kranz cell specific RNA and compare tissue specific transcriptome profiles in closely related C₃, C₄ and intermediate target species of two succulent and salt-tolerant plant lineages. This approach will allow us to gain novel insights in the regulation and localized expression of C₄ key genes and reveal co-expressed regulatory genes. Furthermore, developmental screens of species which change their photosynthesis while they age will greatly help to identify regulatory candidate genes as up- or down-regulation of genes can be directly correlated to the change of photosynthetic type within one individual. We expect novel insights into the convergent evolution of gene regulation in plants performing the C₄ pathway. The results of this project will have strong implications for the current model of C₄ evolution as well as for the evolution of complex traits in general.

We are searching for a candidate interested in transcriptomics, gene regulation, photosynthesis, evolution, bioinformatics and microscopy with a PhD and a background in wet lab RNA procedures, microdissection, RNASeq and bioinformatic analyses of transcriptome data. Good English language skills are required.

Place of work will be the Institute of Systematic Botany & Mycology at the LMU Munich, Menzingerstraße 67, 80638 Munich, Germany. We cooperate in this project with Dr. Anja Schmitt (COS-University Heidelberg).

Please submit the following (in English):

- Short Cover Letter / Motivation
- CV (incl. list of publications and the names of one or two references)
- Certificates

The submission deadline is **December 13th 2020**.

Please submit your application per Email (in one PDF, max. 5MB) to clausing@uni-mainz.de.

For questions please contact Prof. Gudrun Kadereit (clausing@uni-mainz.de).

The Ludwig-Maximilians-University Munich is an equal opportunities employer and particularly encourages applications from women who are under-represented in the University at this level/ in this discipline. Additionally, handicapped applicants will be preferred if equally qualified.