



PhD and Postdoc Positions in the ERC Funded Project: DIVERSIPHAGY



Research: Our group at the ZMBP Tübingen is interested in the role of protein homeostasis networks in plant-microbe interactions. In our interdisciplinary group, using cell biological, biochemical and genetic approaches, we are studying the intimate interplay between protein synthesis, trafficking and degradation and how these pathways co-ordinate their functions to regulate plant immunity.

In the ERC funded project **DIVERSIPHAGY** we want to obtain a holistic picture of the role of autophagy in plant-microbe interactions by utilizing bacterial, genetic and cellular diversity. Our central questions are:

- *How does the bacteriome impact autophagy in shoots and roots?*
- *Can we use the bacteriome to identify the autophagy degradome and autophagy factors?*
- *Does cell-type specific modulation of autophagy influence plant-bacteria interactions?*

Within our project, we plan to use a mixture of state-of-the-art approaches including cell biology, proteomics, metabolomics, single-cell transcriptomics and cell-type specific reverse genetic screens.

Requirements:

We are looking for **Postdocs** and **PhD students** (f,m,d) with proven expertise in molecular biology. For the postdoc position prior experiences with methods to study plant/root-microbe interactions (pathogenic or beneficial), microbial reconstitution assays (SynComs) or microbiome analysis are advantageous. Excellent English communication skills as well as teamwork abilities are expected. A master's degree in molecular biology, biochemistry or corresponding is required for PhD candidates. The work will include microbial, cell biological (confocal microscopy), biochemical (proteomics), genetic (cell-type specific CRISPR-Cas) and single-cell transcriptomic approaches using *Arabidopsis* and pathogenic/beneficial bacteria as model organisms.

More information can be found on our lab homepage: <http://theustunlab.com/>

The positions are available from **03/2021**. Reviewing of applications will begin immediately and the position will remain open until a suitable candidate is found. Please send your application by email no later than **January 8th, 2021** as a composite pdf-file in English. Please include a **letter of motivation** with your research interests, **small research proposal/idea** (max ½-1 page), **CV**, name and addresses of at least **two referees** via email: suayib.uestuen@zmbp.uni-tuebingen.de

The ZMBP is a world - class center for Plant Biology research and is situated in a brand-new and well-equipped building in the University of Tübingen science campus. The University of Tübingen is an equal opportunity employer and particularly welcomes applications from qualified women. Equally qualified applicants with disabilities will be given preference. The employment will be carried out by the central administration of the University of Tübingen.