



The Plant Evolutionary Ecology group at the University of Tübingen in Germany offers

Two PhD positions in evolutionary ecology of plant microbiomes

Both positions are within the framework of the newly established DFG priority programme 2125 "[Deconstruction and Reconstruction of the Plant Microbiota \(DECrypT\)](#)" which focuses on molecular mechanisms governing plant-microbe interactions and assembly of plant-associated microbiomes, and on their ecological and evolutionary relevance.

PhD position 1 will study the natural microbiome of *Lotus corniculatus*, and the influences of habitat, plant genotype and other drivers on its composition. The project is in collaboration with the [lab of Eric Kemen](#) at University of Tübingen, and it is associated with the [Biodiversity Exploratories](#) where field sampling will take place. The work in this project will be a combination of plant ecological experiments with microbial lab work, bioinformatic analyses of plant and microbiome sequencing data, and some field work.

PhD position 2 is about microbe-microbe interactions in *Arabidopsis thaliana*, in particular whether and how a resident microbiome prevents colonization and/or pathogenicity of *Pseudomonas* bacteria in *A. thaliana*, and how these interactions depend on plant genotype and plant species, and on environmental conditions. The project is in collaboration with the [lab of Detlef Weigel](#) at the MPI for Developmental Biology in Tübingen. It will combine lab work with a series of controlled plant-microbe experiments.

Both PhD positions offer excellent opportunities for collaboration with the direct project partners nearby and with other groups in DECrypT through annual meetings and workshops. Both PhD students will join the Evolution and Ecology Research School Tübingen ([EVEREST](#)).

We are looking for students with a background in plant, microbial or molecular ecology who like to work in a team, explore new questions about plant microbiomes, and to learn new experimental and bioinformatic methods. Previous experience with NGS and bioinformatics is a plus in particular for PhD position 1. The successful candidates should have a MSc in biology, good analytical skills, and a good command of English. The positions are funded for 3 years. Salary is at the scale 13 TV-L (65%). Starting date is spring 2019.

The University of Tübingen is one of the oldest and most respected universities in Germany, and Tübingen a beautiful university town with a high quality of life. The [Plant Evolutionary Ecology group](#) at the University of Tübingen studies the ecology, evolution and biotic interactions of plants in a changing environment.

If you are interested in this position, please send your CV, along with a letter of motivation and the contact details of two references [as a single PDF](#) to oliver.bossdorf@uni-tuebingen.de. Deadline for applications is 31 March 2019. For questions, please use the same email address as above. The University of Tübingen seeks to raise the number of women in research and teaching and therefore urges qualified women to apply for these positions. Equally qualified applicants with disabilities will be given preference.