



PhD position 210b-2019-1 – Developmental basis of orchid floral form

A PhD position is open for a highly motivated student with a keen interest in evolutionary developmental biology of flowers, and a solid knowledge of genomics and bioinformatics/statistics.

The successful candidate will be part of a team investigating the ecological, molecular and genomic basis of pollinator-mediated reproductive isolation and ecological speciation between sexually deceptive orchids of the genus *Ophrys*. The project seeks to identify key genes underlying the developmental genetic basis of pollinator-relevant floral traits, particularly floral form, using micro-evo-devo and ecological/evolutionary genomic approaches to floral development. In particular it will employ RNA-Seq (mRNA, small RNAs) using state of the art NGS platforms and intersect sequence variation and expression data with 3D micro-computed tomography data on floral form. For background information on the study system, please see e.g. Schlüter & Schiestl (2008, *Trends Plant Sci.*), Schlüter & al. (2011, PNAS) and Sedeeq & al. (2013, *PLoS One*; and 2014, *Mol. Ecol.*; 2016, *Curr. Biol.*).

The ideal candidate should be highly motivated and able to articulate her/his motivation for this project clearly. S/he should be well organised, with a thorough understanding of evolutionary biology, genomics and molecular biology, and would ideally have an interest in floral development and orchid pollination. The candidate is expected to be proficient in statistical data analysis, with a good working knowledge of R and proven experience in bioinformatics, ideally with an ecological genomics background. Programming/scripting skills in other languages are an advantage. Since the student will have to prepare libraries for Illumina sequencing, laboratory skills working with RNA are necessary; previous experience with NGS technology are desirable. Proficiency in English and good communication skills are essential, as is a completed MSc degree (or equivalent) in biology, molecular biology or a related discipline, and the proven ability to carry out research independently. German language skills are a plus.

We offer a 3-year position as a PhD student at the University of Hohenheim, Germany (initial salary level 50% TVL-E13), an innovative and international research university in the south of Stuttgart. The pleasant campus is close to the airport and hosts a well equipped research infrastructure, a baroque palace, and rambling parks. The successful candidate will be a member of the Institute of Botany (future Institute of Biology) and will work in a young, active and interdisciplinary environment and will have access to state-of-the-art tools and techniques. The University of Hohenheim seeks to increase the proportion of women in research and teaching and strongly encourages qualified female scientists to apply. With equal qualifications, preference will be given to candidates with disabilities.

Your application should consist of a letter of motivation (1-2 pages), your CV and (if applicable) publication list, and the names and e-mail addresses of three academic referees. The letter of motivation should detail why you are personally interested in the project, why you find it relevant and why you think you are well-suited to undertake it. Please send your application (or any requests for further information) electronically to Prof. Philipp Schlüter (sekretariat-210@uni-hohenheim.de) as a single PDF file. Screening of applications will begin on 1 April 2019 and continue until the position is filled. The position is available from 1 June 2019.