

## PhD position on 'Molecular host-symbiont interactions in grain pest beetles'

Several Silvanid and Bostrichid grain pest beetles engage in symbiosis with single or multiple Bacteroidetes bacteria. These bacteria were shown to enhance cuticle synthesis and thereby contribute to desiccation resistance in the saw-toothed grain beetle *Oryzaephilus surinamensis*. The group around Dr. Tobias Engl at the Evolutionary Ecology department of the Johannes Gutenberg University Mainz offers a 3-year PhD position (65% TV-L EG13) to elucidate symbiont functions and host-symbiont interactions across several Silvanid and Bostrichid beetles by symbiont genome sequencing, experimental manipulation of the symbiosis, transcriptome sequencing, and RNA interference experiments.



We are looking for a highly motivated student with an MSc degree in biology, molecular biology or bioinformatics (or equivalent), excellent English speaking and writing skills and a deep interest in the evolutionary ecology of insect-microbe interactions. Previous experience with insect rearing, microbiology, molecular biology, and/or bioinformatics techniques are of advantage.

We offer a dynamic, international working group with broad expertise and state-of-the-art equipment in entomology, microbiology, molecular biology, and chemical analytics at the new Biocenter I of the Johannes Gutenberg-University in Mainz. The research group is integrated into the recently established Institute for Organismic and Molecular Evolution. Mainz is a charming, medium-sized, historic city situated at the river Rhine, in close vicinity to the Frankfurt metropolitan area.

Applications should include a cover letter (1-2 pages) describing the motivation, previous research activities and current research interests of the applicant; the CV of the applicant (with BSc/MSc grades, publications if applicable); and two reference letters. Please send all documents as a single PDF file (except for the references, which should be sent directly by the referees) before February 20th, 2018 to Dr. Tobias Engl ([tengl@uni-mainz.de](mailto:tengl@uni-mainz.de)). The PhD position is available at the earliest convenience.

The Johannes Gutenberg University of Mainz is interested in increasing the number of women in science. Applications from women are therefore strongly encouraged. Qualified candidates with disabilities will be preferred.