

PhD Position in Symbiotic Speciation, Genetics & Microbiology at the Medical University of Vienna, Austria

A PhD position funded by the Austrian Science Fund (FWF) is available to study the impact of the endosymbiotic bacteria

Wolbachia

on physiology, sexual behavior and de novo speciation of the model system

Drosophila

. This intracellular bacterium is well known as the prime reproductive parasite of insects by causing cytoplasmic incompatibilities, feminization, parthenogenesis or male killing, but depending on their evolutionary stage, it also can provide adaptive fitness benefits to insect hosts, such as nutritional provisioning or pathogen protection. We recently found that in some

Drosophila

species

Wolbachia

specifically colonize defined host brain regions that orchestrate sexual behavior of male and female flies. Furthermore we found that even slight perturbations of this intimate host-symbiont homeostasis can foster de novo speciation of

Drosophila

in the wild plus under experimental conditions in our laboratory. In this newly started FWF research project we aim to decipher the temporal and functional dynamics of this

Wolbachia-Drosophila

symbiosis in two different *Drosophila* systems, which are currently under speciation in the Neotropics. The successful candidate will be embedded in the highly multidisciplinary and collaborative environments at the Department of Cell and Developmental Biology of the Medical University of Vienna. Applicants should hold a master's degree in biology, genetics, microbiology, or a related discipline. We are looking for enthusiastic scientists with proficient communication skills, who are good team players. Previous experiences with DNA & RNA techniques, sequence analyses, fly work, FISH assays, immunocytochemistry and/or microscopy techniques are advantageous. Please send applications (including CV, a letter of intent and contact information of at least two referees) to the address below. Informal enquiries are welcome. Contact: Wolfgang Miller, Lab Genome dynamics, Center of Anatomy and Cell Biology, University of Vienna, Austria E-Mail:

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