JUSTUS-LIEBIG-UNIVERSITÄT GIESSEN

The Justus Liebig University Giessen (JLU), founded in 1607, is a research university with a rich tradition. Inspired by curiosity about the unknown, we enable around 26,500 students and 5,700 employees to advance science for the benefit of society. Join us in breaking new ground and writing success stories - your own and those of our university.

Support us as soon as possible in a part-time position (65%) as

Research Associate (m/f/d)
for the Field of Insect Biotechnology

The position is part of the externally funded DFG project: "Developing genetic sexing for mosquito vector control in *Aedes* species" and is limited in accordance with § 2 WissZeitVG and § 72 HessHG, with the opportunity for academic qualification at the Chair of Insect Biotechnology in Plant Protection at the Faculty of Agricultural Sciences, Nutritional Sciences, and Environmental Management. The salary is in accordance with the collective labour agreement of the State of Hessen (E 13 TV-H).

As long as the maximum permissible duration of a fixed-term contract is not exceeded, you will be employed for a period of 3 years.

Your Tasks at a Glance

As part of a DFG-funded project, you will develop and evaluate innovative systems for species-specific mosquito control within the framework of the Sterile Insect Technique (SIT). The specific goal of this project is to develop a temperature-dependent lethality system in *Aedes* mosquito species (*Aedes aegypti* and *Aedes albopictus*) through targeted, knowledge-based mutagenesis and subsequent phenotype testing. Mutations with suitable phenotypes will be further developed into a "genetic sexing strain," which will then be evaluated for its suitability for reliable and 100% gender separation in *Aedes*.

In coordination with the group leaders, you will establish the project plan with milestones and scheduling, independently plan experiments and experimental designs, conduct experiments, analyze results, and troubleshoot if necessary. Your responsibilities will also include overseeing and optimizing insect breeding and developing new techniques for transgenic modification and chromosomal restructuring in *Aedes* mosquitoes. You will prepare your results for publication in scientific journals and for presentation at conferences, thereby making an important contribution to optimizing strategies for SIT programs.

The provision of academic services (including the processing of a research project financed by third party funds on a temporary basis) also serves your academic qualification.

Your Qualifications and Competencies

- Completed academic degree (M.Sc.) in biology, biochemistry, or a related field
- Sound knowledge of CRISPR, transgenesis, gene expression, genome organization, and genome modification
- Practical experience in molecular biology, particularly with PCR and cloning techniques as well as sequence data analysis
- Prior knowledge of insect genetics and sex development, ideally in mosquitoes, as well as experience in insect rearing, is advantageous
- We are looking for a motivated, resilient and highly organized individual with strong fine motor skills, e.g., for embryo injections
- Very good English skills are required, basic German skills are advantageous

- Strong teamwork skills, excellent oral and written communication, enjoyment of independent work and problem-solving, proficiency in MS Office, good statistical knowledge, and an interest in project management complete your profile

Our Offer to You

- A varied role with flexible working hours and opportunities for academic and personal development
- Free use of public transportation (Hesse State Ticket)
- More than 100 seminars, workshops, and e-learning courses per year for personal development, as well as a wide range of health and sports programs
- Remuneration according to TV-H, company pension scheme, child allowance, and special payments
- Good compatibility of family and career (certificate "audit familiengerechte hochschule")

For further inquiries, Prof. Dr. Marc Schetelig is available via email (marc.schetelig@agrar.uni-giessen.de).

JLU aims to employ more women in academic research. We therefore particularly encourage female candidates to apply. JLU is regarded as a family-friendly university. Applicants with children are very welcome. Applications from disabled people of equal aptitude will be given preference.

You want to break new ground with us?
Apply via our **online form** by **March 9th, 2025**, indicating reference number 150/09. We look forward to receiving your application.