Vacancy for a PhD fellow Mechanisms of host-symbiont interactions



Diploma - Master degree in Biology, Biotechnology, Bioscience engineering, or related field

Job description - We are offering a PhD scholarship to unravel the molecular-genetic mechanisms of host-symbiont interactions. Endosymbiotic *Wolbachia* bacteria commonly infect arthropods and can spread rapidly through host populations by inducing cytoplasmic incompatibility (CI). The strength of CI varies widely across biological systems and numerous hypotheses have been put forward to explain the underlying mechanisms. This project will contribute to resolving the genetic, molecular, and biochemical mechanisms that shape CI strength from the perspective of *Wolbachia* and host. To more fully understand the evolution of *Wolbachia*-induced CI, these mechanisms will be dissected using multiple genetic model systems.

The successful applicant will be hosted at the Terrestrial Ecology research group, Department of Biology, Ghent University, Belgium. He/she/they will work within a dynamic and complementary ERC research team that focuses on understanding the evolution and mechanistic basis of hybrid dysfunction. The scholar is expected to start between June and August 2023. The position is funded by an ERC Starting Grant (HYBRIPEST).

Job profile - Candidates should have a strong background in evolutionary and molecular biology. Previous training in genetics and molecular biology techniques will be seen as an advantage. Applicants must be highly motivated, driven to perform state-of-the-art research, and exhibit excellent written and spoken English skills. Applicants must work independently but effectively within a team. The position is available for a four-year period, pending a positive intermediate evaluation. To assess student qualifications, emphasis will also be laid on previous publications (if any) and relevant research experience. We aim to hire students that reflect the diversity of society and thus welcome applications from all qualified candidates regardless of personal background.

How to apply - Applications should include a CV, full details of three references, and a motivation letter describing research interests and goals, the intended start date, and previous research experience. The documents should be sent as a single PDF to nicky.wybouw@ugent.be before March 1, 2023.