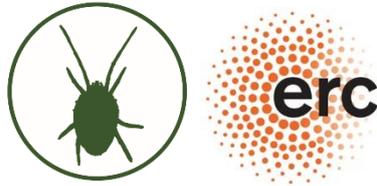


Vacancy for a post-doctoral researcher

The molecular-genetic basis of symbiont- and nuclear-associated hybrid defects



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

Job description - We are offering a post-doctoral researcher position to unravel the molecular-genetic mechanisms of hybrid defects. Hybrid defects, such as hybrid mortality and sterility, are reproductive isolation barriers that contribute to speciation by reducing gene flow. We will focus on both **microbe-** and **nuclear-**associated incompatibilities. Endosymbiotic *Wolbachia* bacteria commonly infect arthropods and can spread rapidly through host populations by inducing cytoplasmic incompatibility (CI). Nuclear incompatibilities can evolve rapidly and occur within species and between incipient species that hybridize. This project will contribute to resolving the genetic, molecular, and biochemical mechanisms that shape divergent hybrid defects within a three-species model system. We will test how certain nuclear incompatibilities interact with *Wolbachia*-mediated CI and how these determine interspecific introgression on a genome-wide level. We will also unravel how polygenic hybrid dysfunction is regulated, further uncovering the early enigmatic speciation processes. We will implement various genetic models, including *Drosophila*, *E. coli*, and *Tetranychus*.

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. The post-doctoral researcher is expected to start between August and December 2023. The position is funded by an ERC Starting Grant (HYBRIPEST).

Job profile - Candidates should have a strong background in molecular and computational biology. Previous experience in genetics, genomics, and molecular biology techniques is strongly desired. 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 two-year period, with possibilities for extension. To assess qualifications, emphasis will also be laid on publications and relevant research experience. We aim to hire researchers that reflect the diversity of society and thus welcome applications from all qualified candidates regardless of personal background.

How to apply - Apply online through the Ghent University e-recruitment system before April 3, 2023. We do not accept late applications or applications that are not submitted through the online system. 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.