

Vacancy for a PhD fellow
Mechanisms of hybrid defects



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

Job description - We are offering a PhD scholarship to unravel the mechanistic basis of hybrid defects. Hybrid defects, such as hybrid mortality and sterility, are post-zygotic isolation barriers that drive speciation by reducing gene flow. These defects can evolve rapidly and occur within species and between incipient species that hybridize. The underlying processes have captivated evolutionary biologists since the early 20th century. This project will contribute to resolving the genetic and molecular mechanisms that shape divergent hybrid defects within a three-species model system. We will test how nuclear incompatibilities interact with symbiont-mediated incompatibilities. We will also unravel how polygenic hybrid dysfunction is regulated, further uncovering the early enigmatic speciation processes.

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 nuclear- and symbiont-mediated 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.