

## PhD position on comparative genomics in butterflies

### Unravel the genomic architecture and evolutionary impact of chromosomal fusion and fission in Lepidoptera

Barriers to gene flow that lead to reproductive isolation are essential for speciation. Large-scale genomic rearrangements through chromosomal fusion and fission may represent such barriers, but the underlying genomic features and their contribution to speciation are poorly understood. This project aims to resolve the genomic architecture and evolutionary impact of chromosomal fusion and fission in one of the most karyological diverse groups of butterflies – *Erebia*. You will generate chromosome-scale genome assemblies and analyse them with comparative genomic and phylogenomic methods. The goal is also to assess the impact of these chromosomal rearrangements on rates of speciation. The prospective PhD student will be supervised by Kay Lucek and be part of the Biodiversity Genomics group at the University of Neuchâtel in Switzerland.

**Your profile:** Enthusiastic, self-driven, responsible, and highly-motivated; excellent communication and interpersonal skills in verbal and written English; a strong work ethic. The ideal candidate brings strong conceptual thinking together with profound genomic and/or bioinformatic skills. Applicants should have a Master degree in evolutionary biology, genomics, bioinformatics, or close related fields.

**We offer you:** A cutting-edge, four-year position fully funded by the Swiss National Science Foundation (SNSF), based at the Institute of Biology, University of Neuchâtel, Switzerland. The Institute offers a vibrant and interdisciplinary research environment, combining a broad spectrum of research activities in life sciences, including evolutionary genetics, conservation, ecology and microbial biology. Salary and social benefits are provided according to University of Neuchâtel rules. Neuchâtel is an enchanting historic Swiss city, well connected and offering a broad range of cultural and recreational activities.

**Starting date:** The anticipated starting date is the 1<sup>st</sup> of August 2022, with some flexibility.

**Application:** Motivated applicants should submit (1) a one-page letter describing yourself, your career goals, and your match to the above-mentioned project, (2) a CV describing your education, publications, and relevant work experience, (3) copies of undergraduate and masters/diploma transcripts, and (4) contact information of two references. The application deadline is **22<sup>nd</sup> of April 2022**. Please, send all the information in a single PDF to Kay Lucek ([kay.lucek@unibas.ch](mailto:kay.lucek@unibas.ch)).