

# PhD position in Ecological Genomics



Motivated students of plant evolution are invited to apply for a PhD position within our projects on the ecological genomics of duplicated genes.

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## Responsibilities

This research will extend our understanding of plant adaptation and speciation across natural landscapes. It will contribute to answering fundamental questions in evolutionary biology such as: What are the main molecular drivers of genome evolution? How do ecological constraints shape genomes? What is the significance of whole-genome duplication for biodiversity?

The PhD project will experimentally address the phenotypic and transcriptional plasticity in populations of Buckler Mustard from different environments. In particular, the candidate will generate high-throughput sequence data from experimental populations of diploid and polyploid lineages and assess the impact of duplicated genes along with environmental changes on adaptation to contrasted ecological niches. In collaboration with a postdoc focused on the molecular underpinnings of genome dynamics, the candidate will disentangle the contributions of genomic and environmental factors in driving radiation in the Alps.

## Requirements

The project necessitates to proactively deal with multiple tasks going from field work to in silico analyses. The ideal candidate will thus be well organized and creative, collaborative and used to handle large datasets towards integrated results. A solid background in evolutionary genomics and practice in computational biology represent strong assets. Experience with field work and molecular routines such as nucleic acid extraction and RT-qPCR is a plus. Excellent presentation in (written and oral) English is crucial. A master degree in a relevant field and a valid (international) driver's license is required.

## Further information

We offer a stimulating environment within an international research community benefitting from excellent infrastructure at the Institute of Plant Sciences, University of Bern. The working language is English. Most of the candidate's time will be dedicated to research, with ample opportunities for training within and beyond various doctoral programs. There is additionally the possibility of supervising undergraduate students.

This position is funded by the Swiss National Science Foundation for a maximum of four years. The anticipated starting date is July 2018 (or soon thereafter). Please, **send your application as a single pdf to Prof. Christian Parisod** ([christian.parisod@ips.unibe.ch](mailto:christian.parisod@ips.unibe.ch)). It must include: (i) a letter describing your past research experience and explaining your particular skills and motivation for this position, (ii) an abstract of your master thesis, (iii) a current CV (with publications; if any), and (iv) contact details of two referees. Applications should be submitted before May 31<sup>st</sup> 2018, but will be considered until the position is filled.