PhD positions in Population Genetics

Over the past years, Vienna has developed into one of the leading centres of population genetics. The Vienna Graduate School of Population Genetics has been founded to provide a training opportunity for PhD students to build on this excellent on-site expertise.

We invite applications from highly motivated and outstanding students with a background in one of the following disciplines: bioinformatics, statistics, evolutionary genetics, functional genetics, theoretical and experimental population genetics. Students from related disciplines, such as physics or mathematics are also welcome to apply.

Topics include:

- Contribution of transposable elements to adaption during experimental evolution.
- Detection of adaptive gene introgression.
- Efficient detection of variants of polygenic adaptation in Drosophila experimental evolution.
- Evolution of gene expression.
- Footprints of polygenic adaptation.
- Functional characterization of adaptive QTLs.
- Historical demography in horses.
- Incipient speciation during adaptation to a new environment.
- Inference of selection parameters using whole genome data.
- Microbiome evolution in Drosophila.
- Multi-measurement experimental evolution: How to combine evidence from different sources?
- Polygenic adaptation: The roles of pleiotropy and epistasis.
- Population genomic footprints and drivers of repeated trait shifts during adaptive radiation.
- Sequence diversity in mammalian Y chromosomes.
- The genetics of local adaptation in Arabidopsis thaliana.
- The molecular basis of recurring, multi-trait adaptation to substrate.
- The role of a nascent sex chromosome on interspecific patterns of allele sharing.
- The sources of variation fueling adaptive radiation after long-distance dispersal.
- Transposon polymorphism in Arabidopsis thaliana.
- Within-species consequences of genomic interactions in ecologically important species.

Only complete applications (application form, CV, motivation letter, university certificates, indication of the two preferred topics in a single pdf) received by February 14, 2019 will be considered. Two letters of recommendation need to be sent directly by the referees. Accepted PhD students will receive a monthly salary based on currently EUR 2.112 before tax according to the regulations of the Austrian Science Fund (FWF).

All information about the about available topics, the training program and the application procedure can be found at www.popgen-vienna.at