The Research Group of Plant Ecological Genomics (http://plantgenomics.univie.ac.at) of the Department for Botany and Biodiversity Research at the University of Vienna, Austria is recruiting a

PhD student in Plant Evolutionary Biology (m/f)

Whole genome doubling and hybridization profoundly shaped plant genome evolution. However, to be successful, first generations allopolyploids must quickly adjust their genome and function, thereby altering their ecological properties and adaptive success, as a function of their environment. The duplicated nature of polyploids buffers more effectively deleterious alleles and provides genome-wide opportunities for adaptive evolution. Recurrent origins of polyploids are widespread and provide natural replicates to study mechanisms of rapid adaptation to divergent environments.

A 3-years PhD position funded by the Austrian Science Fund (FWF) is immediately available in our group, focusing of a fairly young polyploid group in *Dactylorhiza*, comprising sibling European orchids with divergent ecological preferences. Specifically, to complement ongoing analyses of the nature of the extant molecular diversity in the *Dactylorhiza* allopolyploids, we will interrogate the adaptive value of this diversity within reciprocal transplant experiments in the Alps and Scandinavia. We will shed light on the links between genotype, epigenotype and environmental conditions, by focusing on the environmental sensitivity of gene expression (with RNAseq) and of post-transcriptional regulation by small RNAs (with smRNAseq), exploring also in detail the link between DNA methylation patterns, TE activity and expression of duplicated genes.

The candidate should have

- a background in computational or experimental fields, such as bioinformatics, experimental population genetics, evolutionary/functional genetics, molecular ecology or similar;
- high motivation, enthusiasm and interest in new developments in the field;
- an excellent academic track record;
- a demonstrated computer literacy, including R knowledge or Unix;
- preferred: experience with NGS methodology (wet lab and/or bioinformatics);
- excellent organization and communication skills;
- fluency in English (NB German knowledge is not essential);
- driving license class B (for field work).

We are an international team with English as the working language. The successful candidate will highly benefit from the advantages of being integrated in the Vienna Graduate School of Population Genetics (http://www.popgen-vienna.at). The position offers in addition a competitive salary (according to experience min. €28,500 per year before tax, including social and health insurance), the opportunity to attend at least one workshop/summer school and two international conferences, and to shortly visit one of the labs of our international collaborators. Field work across large Western European areas will be undertaken for ca one month every year.

To be considered please send your application as a single pdf file to ovidiu.paun@univie.ac.at, including a motivation letter with a statement of research interests (max. 2 pages), your CV and if applicable publication list, university certificates including grades, and the names and contacts of three referees. Please note: Incomplete applications will not be considered.

Screening of applications will begin immediately and will continue until the position is filled. The latest preferred start date is October 1st, 2017.