



**Institute of Plant Breeding, Seed Science and Population Genetics (350)**  
**Research Group Crop Biodiversity and Breeding Informatics**  
Prof. Dr. Karl Schmid

## **PhD position: Genomic selection in barley pre-breeding**

A position as a research associate E13 TV-L (65%, 3 years) with the possibility to obtain a PhD degree is available in our research group.

We will characterize a large set of barley doubled haploid (DH) lines generated from crosses between elite varieties and genetic resources (wild and domesticated barley) in multilocation trials. Genotyping, transcriptome and metabolome data will be generated for genetic mapping and genomic prediction to investigate the usefulness of genetic resources for improving product quality and stress tolerance by genomic selection.

The project involves public and private partners and is funded by the German Ministry of Agriculture. It offers the opportunity to address basic research questions in crop plant adaptation and genetics, but also provides first hand insights into practical plant breeding in an international context.

**Requirements:** A Masters degree in agricultural sciences, plant breeding, plant genetics, bioinformatics or related fields. The ideal candidate has a genuine interest in plant breeding and quantitative genetics with a strong motivation to use state-of-the art analytical methods (e.g., mixed models). An independent working style and very good team and organisation skills are required for this collaborative project. Previous experience in the analysis of large data sets using R or Python, and a solid knowledge of plant genomics, quantitative genetics and mixed models are highly advantageous.

**Tasks:** The work includes the design of experiments, the coordination of genotyping and transcriptome analyses, the statistical analysis of scientific data, and the writing of publications. The position will be located in Hohenheim and requires some travel to field sites and project partners.

Please upload your application as a single PDF document that contains a cover letter, CV, letter of motivation, addresses of at least two references, and grade transcripts using this link: <http://bit.ly/barley-job>. Review of applications will begin on **25. June 2018** and continue until the position is filled. The earliest possible starting date is 1 August 2018.

**For further information, please contact:** Prof. Karl Schmid, E-Mail: [karl.schmid@uni-hohenheim.de](mailto:karl.schmid@uni-hohenheim.de), Phone: +49 711 459 23487, Web: <http://evoplant.uni-hohenheim.de>

Literature: Hübner et al. (2015) BMC Plant Biol DOI:0.1186/s12870-015-0528-z;  
Thorwarth et al. Theor Appl Genet (2017) DOI 10.1007/s00122-017-2917-1

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