UNIVERSITY OF HOHENHEIM

Institute of Plant Breeding, Seed Science and Population Genetics (350)

The **Research Group Crop Biodiversity and Breeding Informatics** invites applications for a

PhD Position / Research associate (TV-L E13 65%)

to conduct research on the **reproductive biology and genetics of quinoa** under the supervision of Prof. Karl Schmid. The position is funded by the collaborative project „QUIZ – Breeding of quinoa for cultivation in Germany". Project partners are the Institute of Plant Breeding at the University of Kiel, the Plant Reproductive Biology Group at IPK Gatersleben and private companies.

The research associate will characterize phenotypic variation in reproductive traits of quinoa (*Chenopodium quinoa*) and use genetic mapping to identify relevant genes in suitable genetic material. The main objective is to improve the efficiency of quinoa breeding and to design novel breeding strategies that enable to develop high-yielding and adapted quinoa varieties for cultivation in Central Europe. This project builds upon earlier work and resources by the project partners, see: DOI:10.7554/eLife.66873, DOI:10.3389/fpls.2022.916067, DOI:10.1007/s10681-023-03155-8

We look for highly motivated applicants with the following qualifications and characteristics:

- Master degree in biology (botany, genetics), crop science (plant breeding) or related fields
- A strong interest in the biology and quantitative genetics of plant reproduction and breeding
- Experience in experimental work with plants (in particular crossing and phenotyping)
- Basic skills in data science: R/Python scripting, data management and quantitative analysis
- Strong willingness to learn and apply current methods of plant phenotyping (using deep learning) and genetic mapping
- Independent working style and good self-organization
- Very good communication and team working skills

We offer:

- Working in an international research group, which is member of the Competence Unit for Plant Breeding and the Computational Science Hub
- Opportunities for additional scientific training and presentation of your research
- Improving your professional skills within our graduate program of the agricultural faculty
- The opportunity to build a professional network in the public and private plant breeding sector
- Working on a beautiful university campus in a major city with a rich cultural life and a diverse natural environment

The position is available immediately and funded for 36 months. Please submit your application as a single PDF file that includes a CV, letter of motivation, transcript of records and names of references by e-mail with the subject line „QUIZ" to Anja Oehlmann (anja.oehlmann@uni-hohenheim.de). Review of applications will begin on **31 March 2023** and will continue until the position is filled.

For further information and informal inquiries, please visit our website (http://evoplant.uni-hohenheim.de) or contact Karl Schmid (karl.schmid@uni-hohenheim.de).