



Postdoctoral Researcher

Population, evolutionary and ecological genomics

(100% TvL-E, 3 years initially, with possible extension)

In the group of **Professor Dr. Ute Krämer, Chair of Molecular Genetics and Physiology of Plants**, Ruhr University Bochum. We are looking for a highly motivated researcher (PhD) with a strong background in the **computational analysis of nucleotide sequence data**, and with specific expertise in **evolution, genome analysis, genetics** or **transcriptional networks**. The successful candidate will make substantial contributions to one or several ongoing projects addressing the genetic basis of **local adaptation** and **rapid evolution** in the **extremophile plant species *Arabidopsis halleri* (1, 3)**. Activities could include, for example, population genomics and demographic analyses, genome assembly, genome annotation and genome analysis (e.g. structural variation), or the analysis of large-scale transcriptome data and transcriptional networks in *A. halleri*. The work will take advantage of the enormous within-species trait diversity among ca. 850 field-collected *A. halleri* accessions in our lab, which originate from 165 well-characterized field sites and were edaphically and ionomically indexed in the field (2). Large-scale datasets from short-read and long-read genome re-sequencing, transcriptomic and phenotypic data are available and under analysis in our lab through **ERC Advanced Grant LEAP-EXTREME**.

The successful candidate will have excellent **programming skills** using **R/bioconductor, Python** or **Perl**, and will have demonstrated the ability to **manage** and **work with large-scale biological datasets**, to **cooperate** and **communicate** within an **interdisciplinary research team** and to **work independently**. We offer a long-term contract with a possibility of extension, the opportunity for professional development towards an independent career, and a salary at TvL-E13 or E14 (depending on project-specific qualifications).

We are a highly interactive and international enthusiastic group of researchers from a variety of disciplines (<http://www.rub.de/mgpp/kraemer.html>), with access to an excellent research infrastructure, also through **TRR 341 "Plant Ecological Genetics"**. A contribution to teaching in our **Faculty of Biology and Biotechnology** is expected. **Ruhr University Bochum (RUB)** is among the **leading research universities** in Germany. As a modern reform-oriented University hosting ca. **40,000 students**, RUB bundles the entire scope of scientific disciplines on a **single campus**. Bochum is a medium-sized city of around 300,000 inhabitants positioned in the **heart of Central Europe**, within the Rhein-Ruhr metropolitan region of more than 5 million inhabitants. Short- and long-distance **public transport** is seamless, with fast access to the neighbouring **countryside** as well as the **cultural programme** in the Rhein-Ruhr area. The University provides outstanding **family support** and **day-care facilities**.

Please send your application, including a **cover letter** summarizing your expertise and research interests, a **CV**, a list of **publications, degree certificates** and the **summary** of your PhD thesis, to Prof. Dr. Ute Krämer (Ute.Kraemer@rub.de, please cc to: mgpp@rub.de; please contact us with any specific questions) by email; use subject line "**Application MGPP-2022A, ANR 1089**". Closing date is 31 October 2022. Start date between ca. 12/22 and 02/23 (negotiable).

References

1. Hanikenne M, *et al.* (2008) *Nature* **453**: 391-395. DOI: 10.1038/nature06877; 2. Stein RJ, *et al.* (2017) *New Phytol* **213**: 1274-1286. DOI: 10.1111/nph.14219; 3. Hanikenne M, *et al.* (2013) *PLoS Genet* 9(8):e1003707. DOI: 10.1371/journal.pgen.1003707.