RUB RUHR-UNIVERSITÄT BOCHUM

Advanced Grant of the
European Research Council

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The Krämer lab is inviting applications for

Researcher in Molecular Plant Sciences

(3 years, salary based on TVL E13)

(open to applications for a **Postdoc** or **PhD student** position)

Our research focuses on the development of a molecular understanding of how plants maintain **metal homeostasis** based on the model systems ***Arabidopsis halleri*** and ***Arabidopsis thaliana***. In our group, we bring together **molecular biology, cell biology, biochemistry, genetics, plant physiology, genomics, genome analysis, and fieldwork**, often pursuing **comparative approaches** analyzing **natural diversity**. Part of our research aims to uncover the molecular mechanisms underlying heavy metal hyperaccumulation and hypertolerance, as well as local adaptation, in the **extremophile species *A. halleri***. In our work on ***A. thaliana***, we aim to gain fundamental insights into how plants maintain the homeostasis of the essential nutrient metals **iron, zinc and copper**, and into how central **metal-dependent functions** are **integrated with metabolism, growth, development and responses to abiotic and biotic environmental stress**. The results of our research are applicable in **phytoremediation**, **phytomining**, **crop biofortification**, and **crop safety**.

The successful applicant will work on **analyzing the molecular function(s) and interactions of genes/proteins that underlie the growth and survival of plants in a demanding and dynamic environment**. We also expect a contribution to **teaching** and internal **organization/administration** of our Chair and our Faculty of Biology and Biotechnology, commensurate with the academic degree obtained so far. The successful applicant will be part of a highly supportive interdisciplinary and international research group (http://www.rub.de/mgpp/kraemer.html) and will have access to an outstanding research infrastructure.

Applicants **must have profound knowledge** and **practical experience** in **molecular biology** and **molecular cloning**. Expertise in **microscopy and live imaging** of proteins and metal ions in plant cells and organs, **plant transformation**, **genome editing**, and/or **protein biochemistry** is highly advantageous. A **keen interest** in **thinking about** and **experimentally exploring novel biology**, and a firm **dedication to research and publication** are pre-requisites. We expect researchers to have an **independent**, **creative** and **proactive working style**, and to interact within our team and beyond. After 3 years, an extension of the employment is possible at the Postdoc level, depending on performance.

Please refer to details here: https://uni.ruhr-uni-bochum.de/de/stellenangebote (German) and http://www.rub.de/mgpp/kraemer.html (English translation & more → **JOBS** on the right).

We are looking forward to receiving your **application** addressed to **Prof. Dr. Ute Krämer**, Chair of Molecular Genetics and Physiology of Plants, Faculty of Biology and Biotechnology, Ruhr-University Bochum, Germany, including **cover letter**, **CV**, **publication list**, **and degree certificates** (email mgpp@rub.de). Please specify in your cover letter **the job id. ANR 3155**, and whether you are applying at the **Postdoc** (**holding PhD degree** in plant molecular biology, or comparable) or at the **PhD student** (**holding MSc** or a **very good BSc** degree in plant molecular biology, or comparable) level. **Deadline** for applications is **May 24, 2024** (expected starting date is **1st October to 1st November 2024**).

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