

The <u>IPK</u> is one of the world's leading international institutions in the field of plant genetics and crop science. Its research program and services contribute significantly to conserving, exploring and exploiting crop diversity. Its research goals are driven by the need to ensure an efficient and sustainable supply of food, energy and raw materials, thereby addressing a major global ecological challenge.

Postdoctoral scientist (f/m/d) in the field of Molecular Biology

The research group Molecular Plant Nutrition at IPK is seeking a highly motivated Postdoctoral Research Associate to study the regulation of root growth and nutrient uptake by hormone signaling pathways in barley. Our research group investigates the transport and metabolism of nutrients and their role in physiological and morphological adaptations of plants to stress or agricultural production conditions. The present project will integrate molecular biology approaches (including protein-protein and protein-DNA interactions of candidate genes) and functional analyses with CRISPR/Casedited plants.

Your tasks:

- Clone and express genes in various systems (e.g., tobacco leaves, protoplasts and yeast).
- Characterize the molecular function, biochemical activity, protein-protein interactions or transcriptional activation activity of candidate proteins.
- Establish and implement methodologies for the characterization of proteins.
- Perform the phenotypic and physiological characterization of transgenic and CRISPR/Cas-edited barley plants
- Write manuscripts and present work at seminars and conferences.

Your qualifications and skills:

- You have a Ph.D. degree in plant sciences, molecular biology, biochemistry or closely related fields.
- You have in-depth knowledge of molecular biology and protein characterization.
- You have a very good scientific publication record, with at least one article published as first author in a highly reputed peer-reviewed journal.
- You have prior experience with at least three of the following approaches: yeast one-hybrid (Y1H), yeast two-hybrid (Y2H), split-luciferase complementation (split-LUC), Co-Immunoprecipitation (Co-IP), chromatin immunoprecipitation (ChIP), trans-activation assays.
- You have very good command of English (both spoken and written).
- Ideally you have a good knowledge of plant physiology, especially in phytohormone signaling and/or plant nutrition.
- Skills in statistics and the use of R are beneficial.

You fit to us:

- If you are able to work collaboratively, independently and in a goal-oriented manner.
- If you have strong scientific curiosity and motivation.
- if you have strong writing and oral communication skills.

We offer you:

- A working environment with a wide range of personal and professional development opportunities.
- Excellent infrastructure with modern laboratory equipment and phenotyping facilities.
- A stimulating research environment in one of the top crop research institutes in Europe with frequent exchange with other researchers and support from qualified colleagues.
- A full-time position with 40 hours per week starting immediately, currently limited for at least 24 months.
- Remuneration and benefits according to the German Public Service regulation (TV-L) up to salary-level E13, depending on qualification.









If you need further information feel free to contact **Dr. Ricardo Giehl** Tel.: +49 (0) 39482 5-293 or **Prof. Dr. Nicolaus von Wirén** Tel.: +49 (0) 39482 5-602.

What you need to know:

For us, your qualifications and strengths count. Therefore, everyone is welcome – independent of gender, origin, age, or disability. The IPK is striving to increase the proportion of women in sectors where they are underrepresented and, therefore, explicitly encourages qualified women to apply. Our institute has been certified for Career and Family ("berufundfamilie"), and we offer family-friendly working conditions and flexible working hours. The IPK has set a goal to employ more people with disabilities. Qualified applicants with a disability will be given preference.

Your application:

We are looking forward to receiving your online-application (http://www.ipk-gatersleben.de/en/job-offers/) by **12.04.2024.** If you have questions or require more information, please contact **Kerstin Schweigert** (jobs@ipk-gatersleben.de). Please indicate the reference number **13/02/24** in your correspondence.

Foreign qualifications must carry out an equivalence test in Germany, which is subject to a fee. This must be presented in the event of a later hiring: https://www.kmk.org/zab/central-office-for-foreign-education/statement-of-comparability-for-foreign-higher-education-qualifications.html







