

IPK Gatersleben is a large, internationally recognized centre of plant research that addresses problems of modern biology with an emphasis on crop plants. Our international workforce integrates a broad diversity of disciplines used to elucidate the determinants of important plant properties and the mechanisms underlying processes of plant development, metabolism, and interactions with the environment. Acquired knowledge is used to contribute to the generation of genetic and biotechnological tools and to the comprehensive use of plant-genetic resources to optimize crop traits in sustainable agricultural plant production. Frequently, this involves co-operation with various national and international universities and research institutions as well as private enterprises.

For the working group of Metalloid transport we are looking for a

Post-Doc in Molecular Plant Nutrition (f/m)

Employment starting up on 01.05.2013 and is limited for 36 months (contract prolongation possible).

Research in the Metalloid Transport group focuses on the identification of mechanisms regulating the boron (B) nutritional status in rapeseed and Arabidopsis and their implications for the development of B-efficient genotypes. One key focus will be on mechanisms controlling B uptake and allocation from the level of the whole plant down to the cellular level. Another key focus will be on the elucidation of the mostly unknown impact of the B nutritional status on gene regulation and metabolism. The crosstalk between B regulation and that of other metalloids will be assessed. To this aim, a combination of detailed physiological analyses, transcriptomic and metabolomic profiling, transport studies and targeted molecular analyses will be employed.

Your tasks:

To resolve the mostly unknown impact of the B nutritional status on gene regulation and metabolism, a transcript and metabolite profile of B-sufficient and B-deficient rapeseed plants will be generated. You will set-up, perform and analyse a microarray/RNA seq experiment and qPCR profiling. Furthermore, you will elucidate the potential differential regulation of key transporters in response to different metalloid stress conditions. Another focal point will be the performance of the phenotypic and analytical screen of an Arabidopsis transcription factor knockout collection for abnormalities in responses to the B nutritional status to identify key regulator genes involved in adaptive B responses.

Your qualification:

We are seeking for a scientist with a PhD degree in Biology or related disciplines who is highly motivated, productive and has demonstrated high-level competence in at least one area of core importance for the project. Working tasks demand an experienced molecular biologist who is highly goal-oriented, a strong team player and enjoys plant work. Fundamental know-how and experience in microarray-experiments, qPCR, biochemistry, elemental analyses and/or cell biology is preferable. You should be able to independently develop and conduct a clear, focused and successful research project. An excellent publication record, the willingness and ability to learn new methodologies and to advance scientific knowledge and strong communication skills including the ability to speak and write in English are required.

If you need further information feel free to contact Gerd Patrick Bienert. You currently reach him under **gerd.bienert@uclouvain.be** or phone **0032 (0) 472 545753**.

IPK is an equal opportunities employer. Handicapped persons will be preferred when equally qualified. Gross salary will be up to 100% TV-L E13.

Your application:

Please send your application (incl. motivation letter (statement of interest and future goals), CV with publication list, methodical skills and names and contact information of three references) as soon as possible and latest until **01.03.2013** to Ms. Gläser citing the **reference number 08/01/13**. Please contact her also for questions regarding the application and selection procedure.

Leibniz Institute of Plant Genetics and Crop Plant Research (IPK)

Ms. Gläser

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