

# Postdoctoral position in Plant Biology, Evolution and Genomics

## University of Liège/Brussels (Belgium)

A 2-year postdoctoral position funded by the FNRS is available starting in 2024 to join a collaborative project between Marc Hanikenne (ULiège) and Nathalie Verbruggen (Free University of Brussels ULB), which focuses on characterizing the mechanisms by which metallophytes adapt to metal-polluted soils at the epigenetic and genetic levels using Omics approaches.

The successful candidate should be able to work independently and cooperatively within a team and is expected to interact with international collaborators. The candidate is expected to start as early as possible and by April 1<sup>st</sup> 2024 at the latest.

Extensive expertise in bioinformatics is required, with an emphasis on the analysis of sequencing data, together with skills in molecular biology. Applicants must have a PhD and must have published at least one first-author research paper in top ranking scientific journals to be considered. Knowledge of the English language is required.

The host lab is located at the Plant Biology Institute in Liège: <https://tinyurl.com/Translational-Plant-Biology>.

The campus offers state-of-the-art equipment in genomics, imaging, high performance computing, plant growth facilities and phenotyping.

**Applications**, including motivation letter, CV, contact details (with name, email, address, phone number) of at least 2 references and copies of relevant certificates (e.g. MSc, BSc, language), should be addressed to [nathalie.verbruggen@ulb.be](mailto:nathalie.verbruggen@ulb.be) and [marc.hanikenne@uliege.be](mailto:marc.hanikenne@uliege.be), by January 15, 2024. Please contact the same addresses with any questions.

Prof. Nathalie Verbruggen	Prof. Marc Hanikenne
Full Professor	Professor
Physiology and Molecular Genetics of plants	Translational Plant Biology
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### Recent publications relevant to the project

- AN X., TOTOZAFY J.-C., PEAUCELLE A., JONES C.Y., WILLATS W.G.T., HÖFTE H., CORSO M., VERBRUGGEN N. Contrasting Cd accumulation of *Arabidopsis halleri* populations: a role for (1→4)-β-galactan in pectin. *J Hazard Mater.* 445, 130581 (2023)
- RIVIÈRE Q., CORSO M., CIORTAN M., NOËL G., VERBRUGGEN N., DEFRANCE M. Exploiting Genomic Features to Improve the Prediction of Transcription Factor-Binding Sites in Plants. *Plant and Cell Physiology* 63(10), 1457-1473 (2022)
- CORSO M., AN X., JONES C.Y., GONZALEZ-DOBLAS V., SCHVARTZMAN M.S., MALKOWSKI E., WILLATS W.G.T., HANIKENNE M. AND VERBRUGGEN N. Adaptation of *Arabidopsis halleri* to extreme metal pollution through limited metal accumulation involves changes in cell wall composition and metal homeostasis. *New Phytologist* 230, 669-682 (2021)
- SZOPIŃSKI M., SITKO K., RUSINOWSKI S., ZIELEŹNIK-RUSINOWSKA P., CORSO M., ROSTAŃSKI A., ROJEK-JELONEK M., VERBRUGGEN N. AND MAŁKOWSKI E. Different strategies of Cd tolerance and accumulation in *Arabidopsis halleri* and *Arabidopsis arenosa*. *Plant, Cell & Environment* 43, 3002-3019 (2020)
- SPIELMANN J, AHMADI H, SCHEEPERS M, WEBER M, NITSCHKE S, CARNOL M, BOSMAN B, KROYMANN J, MOTTE P, CLEMENS S, AND HANIKENNE M (2020) The two copies of the zinc and cadmium ZIP6 transporter of *Arabidopsis halleri* have distinct effects on cadmium tolerance. *Plant Cell Environ* 43:2143-2157 (2020)
- CORSO M., SCHVARTZMAN M.S., GUZZO F., SOUARD F., MALKOWSKI E., HANIKENNE M., VERBRUGGEN N. Contrasting cadmium resistance strategies in two metal-tolerant populations of *Arabidopsis halleri*. *New Phytologist* 218, 283-297 (2018)
- SCHVARTZMAN M.S., CORSO M., FATAFTAH N., SCHEEPERS M., NOUET C., BOSMAN B., CARNOL M., MOTTE P., VERBRUGGEN N., HANIKENNE M. Adaptation to high Zinc depends on distinct mechanisms in metal-tolerant populations of *Arabidopsis halleri*. *New Phytologist* 218, 269-282(2018)