



PhD student position in brassinosteroid transport

About the lab

The VIB-Ugent Center for Plant Systems Biology (PSB) is a world-leading plant science institute located at the heart of a renowned Plant Biotech campus in Ghent, Belgium. Its mission is to integrate genetics, cell biology, genomics, and bio-computing to unravel plant biological processes and to further translate this knowledge into value for society. Please visit us at www.psb.ugent.be for more information.

Jenny Russinova lab at PSB focuses on research on brassinosteroid hormones (<https://www.russinovalab.be>).

Job description

Brassinosteroids are steroidal phytohormones that regulate plant development and physiology, including adaptation to environmental stresses. They are synthesized in the cell interior and exported across the plasma membrane to bind receptors at the cell surface. We recently discovered that members of the ATP-binding cassette (ABC) transporter superfamily, ABCB19 and ABCB1, previously linked to auxin export, also function as brassinosteroid exporters, and we resolved their structures (Ying et al., 2024, Science; Wei et al., 2025, Plant Communications; Hu et al., 2025, Trends Biochem. Sci.). With this PhD project, we aim to unravel the molecular bases underlying brassinosteroid transport and its coupling with signalling, as well as the roles of phosphorylation in these processes and in the regulation of transporter activity and substrate specificity.

We are looking for a motivated PhD student to investigate brassinosteroid transport mechanisms by combining live-cell imaging, phosphoproteomics, and CRISPR-based screens.

Profile

Essential

Master's degree in Plant Biotechnology, Plant Physiology, Biology, Molecular Biology, Physiology, or a related discipline. You are fluent in English spoken and written (at least a B2 level of proficiency).

Desirable but not required

Experience in work with Arabidopsis, plant development and plant hormone biology

Key personal characteristics

Highly motivated, hardworking and passionate about driving and performing research and associated laboratory tasks

You have excellent interpersonal communication skills and strong time-management skills.

You must be very meticulous, proactive, independent, and self-motivated.

You are a team player and can take responsibility.

You are enthusiastic to be part of a dynamic research lab.

We offer

A 4-year PhD position through Ghent University

A working climate, in which trust, international collaboration, and commitment are essential.

Access to state-of-the art tools and infrastructure within an excellence-based research institute.

A stimulating and supportive international research environment.
Various training opportunities to broaden your expertise and skills

How to apply?

If you are interested in performing high quality science related to plant hormones, please use the online VIB application tool.

Make sure your application includes:

A detailed CV

A one-page summary of past research activities

A one-page motivation letter, describing how your expertise and ambitions match the research theme

The names and contact details of two to three referees.

Applications by email will not be considered.

A first review of applications will start immediately. A short list of applicants will be selected based on the CV and motivation letter. Shortlisted applicants will be invited for interviews.

Applications are welcome until the position is filled.