Faculty
of Science

Olomouc 15.01.2026

The Dean of the Faculty of Science announces a selection procedure for the job position of

Researcher (Ph.D. position): Cytokinin trafficking & signalling in plants

Research Field: Plant biology, molecular biology, biochemistry, biotechnology or related fields
Number of Posts: 1
Researcher Profile: First Stage Researcher (R1)
Department/Facility: Laboratory of Growth Regulators
Type of contract: Fixed-term contracts
Job Status: Full-time
Hours per Week: 40
Location: Šlechtitelů 27, Olomouc
Offer Starting Date: After an agreement

Department/Facility description

https://lgr.upol.cz/en/

Job Profile

Project description:
How do plants decide when to grow, pause, or reprogram their metabolism under stress? In our lab, we explore the "decision-making language" of plants – with a focus on cytokinins, their signalling networks, transport routes, and the downstream developmental and stress responses they control. Importantly, cytokinin signalling is not confined to plants. Cytokinins appear to be part of a broader, cross-kingdom chemical vocabulary, as several microbes can also produce these growth regulators. Among this project's aims is to better characterize cytokinin root transporters that may contribute to the communication between microbes and plants.

Key approaches may include:

- Genetic and molecular dissection of hormone transport/signalling modules
- Reporter lines and quantitative imaging, including confocal microscopy
- Transcriptomics and proteomics with integrative data interpretation/model building
- Targeted hormone-related + tracer-based approaches

Tasks and responsibilities
You will:

- Design and conduct experiments in Arabidopsis and barley
- Perform molecular cloning and genome engineering (CRISPR/Cas), qPCR, and work with reporter lines
- Carry out phenotyping, imaging, and hormone-related assays/tracing
- Contribute to transcriptomic/proteomic experiments and integrative analysis
- Present results, write manuscripts, and build a clear biological model

Requirements

Candidate profile (required):

Genius loci...

- Master's degree (or equivalent) in plant biology, molecular biology, biochemistry, biotechnology or related fields
- Solid practical skills in molecular biology and/or plant experimental work
- Good written and spoken English
- Motivation for a Ph.D. and ability to work both independently and collaboratively

Desirable (nice to have):

- Experience with confocal microscopy, plant transformation, or reporter-based imaging
- Basic data analysis skills (R/Python), statistics, or omics/bioinformatics
- Prior experience with hormone biology/plant signalling/transport

What we offer

- Fully funded Ph.D. project supported by a GA ČR grant (basic research funding)
- A project that can be shaped to your strengths, with supportive supervision and international collaborations
- Access to modern infrastructure at the Faculty of Science and the broader LGR environment
- A stimulating research setting in the historic university city of Olomouc
- Employment / Ph.D. enrolment
- Type: full-time Ph.D. student position (typically up to 4-5 years; according to UP doctoral programme rules)

Documents requested

CV in English

Cover letter

Contact details of two referees

Summary of MSc thesis/research experience (optional but encouraged)

Copy of degree certificate and transcript of records (if available at the time of application)

If you are interested in this position, please, fill in the contact form and attached the requested documents no later than 30.04.2026.

Contact person

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Additional Information

Applications are welcome from candidates worldwide; applicants currently based in the EU may find administrative onboarding simpler.

The Palacký University reserves the right not to fill the position in an exceptional case without giving any reason or to cancel the selection procedure.