Open PhD position – Centre of the Region Haná for Biotechnological and Agricultural Research / Palacký University in Olomouc

We are looking for a motivated PhD student to support our research activity oriented on use of barley and tobacco as production platforms. The research activity will require a broad range of skills from molecular biology to protein isolation and evaluation of the biological activity of the prepared compounds. In particular, the PhD candidate will follow these research objectives:

i) Develop an optimal expression strategy for large-scale production of recombinant proteins in the barley endosperm. To this end, antimicrobial peptides such as human cathelicidin will be expressed with selected protein tags and specific secretion and accumulation of the recombinant product in target organelles will be evaluated using GFP-based localization studies.

ii) Testing of the production and stability of protein fusions in transient systems (tobacco leaves, Arabidopsis thaliana).

iii) Design and optimization of purification procedures for each type of the production strategy (affinity chromatography, flotation centrifugation, HPLC...). Testing of the biological activity in selected assays.

The position is available from mid 2018 and includes:

- A fully funded PhD contract (3-4 years) and secured project funding
- Being part of an international group of young scientists in new research facilities with state-of-the-art equipment at the Palacký University in Olomouc
- Working with GMO crops in our greenhouses as well as in field conditions
DESIRED SKILLS AND EXPERIENCE

- applicants must hold or anticipate to receive a Master’s degree or equivalent in biology, biochemistry, physiology or other relevant fields
- at least basic experience with molecular cloning
- experience in protein biochemistry is recommended but not required
- good communication skills in English language
- good spirits, enthusiasm and ability for teamwork are very welcome

ABOUT THE EMPLOYER

Palacký University Olomouc is a university with long-standing tradition. Founded in the 16th century, it is the oldest university in Moravia and the second-oldest university in the Czech Republic. Today it is a modern higher education facility with a wide range of study programmes and copious scientific and research activities.


Prospective candidates should send their CV, contact information for references together with a short motivation letter stating why you would be interested in the above research project. Please contact directly Dr. Ondrej Plihal (ondrej.plihal@upol.cz).