

Laboratory of Plant Protein Phosphorylation is opening a call for a position of

## Postdoctoral Researcher

The selected person will join the project

"The SnRK2 kinases as key proteins in seeds biology- unraveling new molecular mechanisms determining seed germination abilities and the entrance into secondary dormancy state" funded by the National Science Center

Grant OPUS 23 headed by dr Anna Kulik

In nature, all living organisms must continuously sense their surroundings and react to occurring changes. In cells information about these changes is transmitted to all cellular compartments including the nucleus by multiple phosphorylation cascades maintained by protein kinases. Sucrose Non-Fermenting 1 Related Protein Kinases (SnRK2s) are plant-specific enzymes devoted to control responses to water deprivation. SnRK2s signaling pathways are highly conserved across plant species and play a key role in plant functioning at multiple developmental stages. Although, our knowledge about SnRK2s role in seeds is still very incomplete. Why seeds are so important? In the world of sexually reproducing plants production of high quality seeds is an essential feature for the survival of the species. To ensure optimal and proper development of the embryo and future seedling seeds must strictly control the complex process of dormancy and germination in time and space. In the project, we will study the impact of SnRK2 kinases on seed viability over time, which is also known as seed longevity. We will also unravel new control mechanisms and networking between SnRK2s and their selected regulators in seeds, among others the Delay of Germination 1 (DOG1) protein and selected transcription factors.

## **Requirements for the candidate:**

- A PhD in biology/biochemistry/molecular biology or a related subject.
- A demonstrable passion for science and research.
- Ability to work both independently (under appropriate supervision) and as part of a collaborative and interdisciplinary team, including training junior researchers in lab methods and collaborating in team goals.
- •Demonstrable hands-on experience in protein biochemistry methods (including coimmunoprecipitation, western blotting, protein-protein interactions analysis).
- Demonstrable hands-on experience in molecular biology methods (including RT-qPCR, RNA handling, molecular cloning, plant transformation, transactivation assays with reporter genes).
- Knowledge and experience with bioinformatics analyses (e.g. RNAseq and mass spectrometry data analysis).
- Experience in seed molecular biology and plant stress response research would be an advantage, but is not mandatory.
- Proficiency in spoken and written English.
- The candidate must meet the formal criteria of the competition set by the National Science Centre.

#### We offer:

- A full-time employment contract for 24 months, starting from March 1<sup>st</sup> 2023.
- Gross gross salary of 11 600 PLN/month. Net salary depends on individual circumstances influencing tax.
- A position with 100% focus on research (no teaching obligations) in a leading, well-equipped, laboratory and in a friendly, versatile and experienced in plant biochemistry team.
- Cooperation with specialists in the field of undertaken research.
- Good work-life balance culture.

### **Informal inquiries:**

Informal inquiries are very welcome. Please send an email to anja@ibb.waw.pl including any questions, a brief description of your motivation and other relevant information.

# **How to apply:**

The application, in English, should be sent to Dr. Anna Kulik (anja@ibb.waw.pl) by February 5<sup>th</sup> 2023. Please include the subject heading "Postdoc application" in your e-mail. The application must be written in English, and should contain a scientific CV (up to 6 pages), a cover letter with a description of the applicant's key achievements and motivation (up to 2 pages), and contact details for 2 potential academic referees, including your PhD supervisor. All documents should be merged in a single pdf file.

Selected candidates will be invited for an interview (possibly on-line). Applications submitted after the deadline will be not considered.

Please include the following statement in your application: "I hereby give my consent for the processing of my personal data by the Institute of Biochemistry and Biophysics PAS with its seat in Warsaw Pawińskiego 5a, 02-106 hereinafter referred to as the Institute for the purpose of the recruitment process and for future recruitment processes conducted by the Institute under Art. 23 ust 1 pkt 1 of the Personal Data Protection Act dated on 29 August 1997, consolidated text: Journal of Laws 2016, item 922 with further amendments and under Art. 6 ust.1 lit. a of Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard of the processing of personal data and on the free movement of such GDPR (Dz. U. UE. L. z 2016 r. Nr 119)".