

The Laboratory of Plant Pathogenesis (<https://plantpath.ibb.edu.pl>) seeks a motivated and curious postdoctoral researcher to join the project entitled “Mitigation of climate change effect on crop plants’ immunity by engineering the thermostability of plant immune receptors”. The project is funded by the Polish National Science Centre under OPUS 24 grant 2022/47/B/NZ9/02224.

Our laboratory focuses on uncovering crucial components of plant defence signalling networks by utilizing advanced molecular biology and biochemistry techniques. Our main objective is identifying and characterising the mechanisms that regulate plant immunity. We are specifically interested in discovering new plant R immune receptors, determining their functions, and identifying recognizable effector factors and interaction partners (Grech-Baran et al., 2020; 2022).

This project is based on our previous expertise but will expand our research interests by exploring the mechanisms by which elevated temperature affects the function of crop plant immune receptors. This project aims to effectively design selected plant immune receptors so that they would be able to trigger an immune response at elevated temperatures.

### **Job description**

The successful applicant will be responsible for executing laboratory-based research within the project. They will be responsible for mutating, isolating and purifying selected R proteins, conducting *in vitro* protein thermostability assays, and investigating resistance *in vivo* using different experimental approaches. The successful candidate should actively contribute to writing scientific papers, including data analysis, and present the project at internal and external meetings.

### **Requirements for the candidate:**

- Holds a Doctoral degree/ PhD in biology, chemistry, biochemistry or related life science field for not more than 7 years before the position announcement.
- Is proficient in spoken and written English.
- Has solid knowledge of molecular biology, plant physiology and/ or biochemistry.
- Demonstrated skills in protein purification and proteomic data analysis.
- microscale thermophoresis will be an asset but is not mandatory.
- Previous experience with phytopathology and virology is mandatory.
- Can present research achievements including at least one publication in an international journal.

### **We offer:**

- Full-time employment contract for 4 years.
- Gross salary of about Salary: 140 000 PLN/year gross gross.
- Work in a young, active team in a collaborative work environment.
- Supportive English-speaking administration and help with visa application if needed.
- Benefits include a reduced rate for an individual medical care package and membership in the MultiSport program, free polish language course offered for foreigners

### **How to apply:**

The application (merged in a single PDF file) in English or Polish should be sent to dr Marta Grech-Baran ([mgrech@ibb.waw.pl](mailto:mgrech@ibb.waw.pl)). It should contain a CV including scientific achievements and a list of publications, a cover letter describing your research experience (with the description of the methodology used) and interests, a copy of PhD diploma and the contact addresses of two referees.

All applications must contain the following statement to allow us to process your data: "I hereby give consent for my data included in the job offer to be processed for recruitment under the Data Protection Act 1997 (Dz. U. 2002 no. 101, item 926 with subs. changes)."

The deadline for applications **is December 31st, 2023.**

The evaluation process will start immediately upon receipt of the applications. Selected candidates will be invited for an interview. The competition may be extended until the finding of a suitable candidate.