Laboratory of Plant Pathogenesis

2 Post-doc positions are available in National Science Centre funded project to study molecular plant-microbe interactions with special focus on small RNA machinery.

P**roject title: "**Novel aspects of virulence mechanisms of HopBF1, a bacterial effector that targets host HSP90 protein**"**

Institution: Laboratory of Plant Pathogenesis, Institute of Biochemistry and Biophysics, PAS, Warsaw, POLAND

Maximum period of position agreement: 48 months

Positions start on: the first quarter 2021

HopBF1 is an effector secreted by *Pseudomonas syringae* to interfere with plant defense system. As we have recently published in *CELL*, the effector targets eukaryotic HSP90 protein in a "betrayal-like" mechanism. First, it mimics HSP90 client to undergo maturation. Subsequently, the activated HopBF1 phosphorylates a highly conserved serine residue of the chaperone and thereby inhibits its ATPase activity. Unexpectedly, we found that local expression of HopBF1 leads to symptom development in distal plant parts. In this project we would like to identify the nature of the molecule that relays a signal from the local leaves expressing HopBF1 to the systemic leaves, which display phenotypic abnormalities.

Candidates Profile:

- Candidates should hold a PhD in biological sciences and solid background in the field of RNA biology. Demonstrated experience in RNAseq–based techniques, and expertise in managing and analysis of extensive datasets will offer an advantage. Background knowledge of plant pathology is desirable, though not required.
- scientific achievements including publications in recognized international scientific journals
- creativity, excellent teamwork, time management and organizational skills
- fluent in English written and spoken

Applicants should provide the following documents in a single pdf file:

- curriculum vitae incl. a list of publications and expertise

- a motivation letter

- a copy of PhD diploma

- contact addresses of two referees

Applications in English or in Polish should be sent to dr. Magda Krzymowska krzyma@ibb.waw.pl.

Closing date: 31.01.2021

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.