



Post-doc position is available in NCN funded project (OPUS grant) to study molecular plant-microbe interactions.

Project title: *“Isolation of resistance genes to PVY infection, useful in potato (*Solanum tuberosum* L) breeding and its functional analysis”*

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

Maximum period of position agreement: 12 months

Position starts on: 01 July 2020

The potato virus Y (PVY) is one of the main pathogens responsible for great losses in potato yield both in Poland and other countries around the world. In this project, we will attempt to isolate genes conferring extreme resistance (ER) from the genomes of various potato cultivars. In order to find the genes responsible for ER, we will use the most advanced plant gene isolation techniques such as: RenSeq (Resistance gene enrichment sequencing) or the third-generation long read PacBio SMRT (Pacific Biosciences Single-Molecule Real Time sequencing) sequencing. A new techniques were developed to accelerate cloning of genes from large eukaryotic genomes. In parallel to this high-throughput molecular approach we will develop a biological system to provide new insights into ER type of defense. The aim of this project is to underpin critical components of plant defense signaling network through the use of cutting edge approaches in molecular biology and biochemistry.

The project is performed in the tight collaboration with The Sainsbury Laboratory in Norwich, UK

Candidates Profile:

- Candidates should hold a PhD with relevant experience in the field of genetics and agronomy and practical experience in plant phytopathology especially plant virology,
- scientific achievements including publications in recognized international scientific journals,
- willingness to collaborate with other scientists and foreign laboratories,
- fluent in written and spoken English.

Applicants should provide the following documents:

- curriculum vitae incl. a list of publications and expertise
- a motivation letter
- a copy of PhD diploma
- a reference letter

Applications in English or in Polish should be sent to Prof. Jacek Hennig, jacekh@ibb.waw.pl.

Closing date: 14.06.2020