





### PhD Student position in the Laboratory of Intracellular Immunity (Project title: Intracellular mechanisms of innate immunity)

We are inviting applications for a PhD student in the area of innate immunity and host-pathogen interactions to join the Laboratory of Intracellular Immunity at the Institute of Biochemistry and Biophysics Polish Academy of Sciences in Warsaw. You will be offered the opportunity to participate in cutting edge research programme aiming to understand the molecular details of how cell-intrinsic and cytokine-enhanced immunity protects interior of the host cell against bacterial and fungal invasion, and how pathogens evade the intracellular immune system.

The newly created laboratory is led by Dr Michal Wandel, who for the previous 12 years carried out research in Cambridge, UK at the MRC Laboratory of Molecular Biology and University of Cambridge. The laboratory implements the scientific culture and research practices established in those world-leading institutes, is integrated into the EMBO Young Investigator Network, and well-funded by NAWA, NCN (Polish science foundations) and EMBO.

We are seeking an open-minded, independent and highly motivated PhD student who will endeavour to identify host restriction factors required for defence against pathogenic microorganisms using state-of-the-art approaches, determine the specific mechanism of action of novel immunity factors, understand their effector functions, downstream signalling and proinflammatory potential. Candidates with interests in mammalian mechanisms of pathogen recognition and/or microbial pathogenesis are encouraged to apply. Under appropriate supervision the candidate will be able to influence the direction of the project depending on their abilities and potential, and will be expected to manifest an increasing degree of intellectual independence throughout the project.

IBB PAS is one of the top-ranked (A+) Polish research institutes located within the unique multidisciplinary environment of the large biomedical campus. Research topics at IBB PAS cover the wide area of molecular biology, biochemistry, biophysics, physiological chemistry, and bioinformatics. The institute is equipped with state-of-the-art technology, has excellent core facilities (e.g. mass spectrometry, DNA synthesis and sequencing, transcriptomic, fluorescent microscopy, NMR), supportive administration and strives for internationalization of the Institute through the "Welcome to IBB Centre". The IBB PAS offers language courses, including polish for foreigners, to facilitate the integration of researches from foreign countries.

#### We offer:

Opportunity to work on an ambitious and biomedically relevant scientific problem using a broad range of molecular and cell biology, genetics, proteomics, biochemistry and microbiology techniques in a young, active team, and stimulating, international and multi-disciplinary research environment. Scientific training and academic mentorship.

Networking and development opportunities through the leader's EMBO YIP membership.

The position is funded by the Polish National Science Centre (NCN) OPUS grant, full-time, for 4years with focus on research (no teaching obligations). The position start date is 1<sup>st</sup> October 2021.

Stipend: 60000 PLN/year gross, corresponding to ~3700 PLN/month net pay, with health insurance and benefits.







# Key duties and responsibilities:

- undertake research aimed at understanding the intracellular response to invasion by pathogens

- identify, develop, modify and apply a broad range of approaches and methods to pursue the

research objectives (independently and in collaboration with other group members)

- participate in experimental design and data analysis
- writing thesis, and contribute to the data preparation and writing of manuscripts
- assist in the training of junior lab members
- actively participate in lab meetings, scientific seminars and conferences

### **Qualifications:**

Master's degree or equivalent experience (or perspective of obtaining it), a solid knowledge and familiarity with laboratory techniques in either molecular biology, biochemistry, immunology, cell biology, microbiology or a related life science discipline and demonstrated scientific productivity (ideally having published at least once in an international, peer-reviewed journal). Research experience in either fungal biology, intracellular signalling, high-throughput assays, proteomics, or bioinformatics is a strong advantage.

We seek candidates with scientific curiosity and creativity, motivation and passion for science and experimental work, and excellent oral and written communication skills in English. Independent and analytical thinking, structured work organization, and a good team spirit are expected. The ideal candidate has the ability to formulate testable hypotheses to provide insight on complex biological problems, understands good experimental design and proper data interpretation, as well as has strong presentation skills (ideally having presented on at least one international conference). Previous success in funding applications, mobility and research experience abroad is an advantage.

Eligibility for PhD studies in Poland.

# How to apply:

Interested candidates should send: a cover/motivation letter (max 1 page); their CV including the list of publications with a short description of the applicant's key achievements, conducted research projects and used methodology; copy of diploma and list of academic grades (if available), and names and contact details of at least one referee familiar with candidate's scientific abilities including their direct MSc supervisor (all in a single .pdf file) to: <u>mwandel@ibb.waw.pl</u> with the subject "Application for NCN PhD 2021 and your first and last name".

Please include the following statement: "I hereby give consent for my personal data included in my application to be processed for the purposes of the recruitment process under the Personal Data Protection Act from 29th August 1997."

Deadline: 22nd July 2021, early applications encouraged. We will only contact selected candidates, who will be invited for an interview and asked to present their work (possibly on-line). We strive for gender and diversity equality and welcome applications from all backgrounds.

Lab webpage: https://ibb.edu.pl/en/laboratory/dr-michal-p-wandel/ Dr Michal Wandel ORCID iD: <u>https://orcid.org/0000-0002-5275-5881</u>