

IBCH PAS RECRUITMENT PROCEDURE NO. 13/2021/SN FOR THE POSITION OF A POSTDOCTORAL RESEARCH ASSISTANT

INSTITUTION: Institute of Bioorganic Chemistry, PAS
CITY: Poznan
POSITION: Research assistant/assistant professor (post-doc)
POSITIONS AVAILABLE: 1
SCIENTIFIC DISCIPLINE: biological sciences
PUBLICATION DATE: 15.07.2021
APPLICATION DEADLINE: 17.08.2021
IBCH PAS WEBSITE: <http://www.ibch.poznan.pl>

We offer an assistant professor (post-doc) position at the Department of Plant Functional Metabolomics. The employed person will become a co-investigator in the **OPUS 18 project no. 2019/35/B/NZ1/03731**, entitled “**Interspecies metabolic engineering as a tool to investigate immune functions of plant specialized metabolites**”, funded by National Science Centre

Department Head and project Principal Investigator: Prof. Paweł Bednarek

KEY WORDS: Specialized metabolites, plant immunity, metabolic engineering, *Arabidopsis thaliana*

I. Requirements for the candidates:

1. A PhD degree (or equivalent) in plant molecular biology, biotechnology or biochemistry
2. Documented research output in the form of research papers, published in distinguishable research journals (found in the Web of Science database, including those with first authorship), and presentations at conferences.
3. Experience in molecular biology techniques (molecular cloning, qRT-PCR, western blot) and/or biochemical techniques (chromatography).
4. Interest in developing own skills and teamwork ability.
5. Proficiency in spoken and written English.

II. Duties in project:

1. Engineering of metabolic pathways including plasmid preparation, generation and selection of respective transgenic lines
2. Initial characterization of obtained transgenic lines (gene expression, protein levels and metabolite production).
3. Investigation of immune responses of selected lines.
4. Tight collaboration with the remaining team members including supervision of a PHD student.
5. Processing of the obtained results, data management, internal reporting, dissemination of results and manuscript preparation.

III. Required documents:

1. Letter of application to the Director of IBCH PAS with a statement confirming that the Institute shall be the candidate's primary place of employment, along with a consent for the Institute to include the recruited employer in the N figure.
2. Copy of the doctoral diploma, or an official letter confirming approaching date of the PhD defense.
3. Scientific CV encompassing track record of previous education and employment, and list of papers published in journals listed in the Web of Science (WoS) database, stating the IF in accordance with WoS, number of citations and the H-index.
4. Contact details of at least one, previous scientific supervisor or another researcher who can deliver a letter of recommendation.

IV. Applications should be submitted via the eRecruiter portal at:

<https://system.erecruiter.pl/FormTemplates/RecruitmentForm.aspx?WebID=cbcf7e3be2d84730958eda9eb6d49bb9>

V. Submission deadline is **17.08.2021**

VI. Following preliminary verification, on the basis of the application documents, selected candidates may be invited to an interview, as a result of which a candidate recommended for employment shall be appointed with a position of research assistant or assistant professor. The main criteria, taken into consideration during the selection of the candidates, will be: (i) research output (research papers published) and (ii) compliance of the previous experience with the tasks planned within the framework of the project.

VII. The recruitment procedure shall be concluded no later than **31.08.2021**

VIII. Employment shall take place in compliance with the provisions of the Labor Code of Poland.

Position is available from October 1st, 2021. Maximum period of contract agreement: 36 months. Remuneration (gross/month): 3 600 PLN (research assistant) or 4 700 PLN (assistant professor) and additionally 1 300 PLN from the OPUS project budget.

Project description

Plant specialized metabolites constitute an unusually large group of structurally diversified compounds that contribute to the interactions of plants with the environment, including plant immunity. Of note, the phylogenetic occurrence of particular plant secondary products is frequently restricted to particular lineages, such as a family or genus. It has been shown that particular specialized metabolites restrict pathogen growth at clearly defined infection stages. Some of them control entry (penetration) of pathogens into plant tissue while some others can restrict spread of the pathogen from initially colonized cells. However, it is not clear to which extend this is defined by temporal and spatial expression patterns of genes encoding respective biosynthetic enzymes, and to which extend by unique properties of particular metabolites.

In this project we would like to investigate to which extend spatial and temporal production patterns, and host genetic background determines function of particular specialized metabolites that are derived from the aromatic amino acid tryptophan. To check functions of these compounds we will use defined mutants of the model plant *Arabidopsis* that are depleted from their native defensive metabolites and consequently are highly susceptible to infection. We will engineer biosynthesis of specialized metabolites from other species in these mutants using specific regulatory sequences supporting production of respective enzymes at strictly defined stages of infection. Subsequent analysis of susceptibility of obtained transgenic lines will answer the questions (i) to which extend "foreign" metabolites can overtake the function of native compounds in plant immunity and (ii) to which extend precise function of particular compounds depends on their spatial and temporal production patterns.

For additional information please contact the Principal Investigator:

Prof. Paweł Bednarek

e-mail: bednarek@ibch.poznan.pl

Information clause:

Pursuant to the stipulations of the regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation), further referred to as GDPR, we hereby inform that:

- *The Institute of Bioorganic Chemistry, Polish Academy of Sciences, seated in Noskowskiego St. 12/14, 61-704 Poznan; REGON 000849327, NIP 777-00-02-062 is the administrator of the collected personal data (further referred to as the Institute).*
- *The Administrator appointed a Data Protection Officer, who can be contacted in writing, via traditional mail, by sending a letter to the following address: Z. Noskowskiego St. 12/14, 61-704 Poznan, or by sending an e-mail to: dpo@ibch.poznan.pl.*
- *The personal data of the candidates is processed for the purposes of fulfilling the tasks of the administrator, associated with conducting the recruitment procedure for a vacant position.*
- *The legal basis for processing personal data is the Act of 26 June 1974 – The Labor Code, Act of 30 April 2010 on the Polish Academy of Sciences or the consent of the person whose data shall be subjected to processing.*
- *Your personal data shall be subjected to processing for period of 3 months upon the date of decision of the recruitment committee. Following this period, the data will be irretrievably and effectively destroyed.*
- *The personal data of the candidates shall not be transferred to any third country.*
- *The person whose data shall be subjected to processing has the right to:*
 - *request access to his/her personal data, and to amend it or delete it, pursuant to articles 15-17 of GDPR;*
 - *limit data processing, in the events stipulated in article 18 of GDPR;*
 - *data transferring, pursuant to article 20 of GDPR;*
 - *withdraw consent at any moment, without influencing compliance with the law of the processing that was executed prior to consent withdrawal;*
 - *file a complaint to the Inspector General for Personal Data Protection.*

Providing personal data in the scope stipulated in article 22 (1) of the Act of 26 June 1974 – The Labor Code is mandatory, whereas providing data in a broader scope is voluntary and requires consent for its processing.