

**IBCH PAS RECRUITMENT PROCEDURE NO. 5/2023/SN
FOR THE POSITION OF A POSTDOCTORAL RESEARCH ASSISTANT**

INSTITUTION: Institute of Bioorganic Chemistry Polish Academy of Sciences
Department of Molecular Genetics
CITY: Poznan
ADDRESS: Noskowskiego 12/14, 61-704 Poznan
POSITION TYPE: assistant professor (post-doc)
AVAILABE VACANCIES: 1
SCIENTIFIC DISCIPLINE: biology
PUBLICATION DATE: **April 7, 2023**
APPLICATION DEADLINE: **May 8, 2023**
WEBSITE: <http://www.ibch.poznan.pl>

Key words: cancer, genetics, non-coding regions

Research topic: Cancer encompasses a broad spectrum of heterogeneous diseases whose development (i.e., initiation, promotion, and progression) is associated with the accumulation of numerous genetic alterations in the cancer genome, which is the hallmark of all cancers. Numerous large cancer genome sequencing studies (mostly whole-exome sequencing, WES) have been performed, and hundreds of cancer-driving genes and thousands of cancer-driving mutations have been detected. Some of these genes/mutations, e.g., EGFR, BRAF, and JAK2, serve as important biomarkers for cancer-targeted therapies. As the overwhelming majority of the cancer genome studies have focused on protein-coding exons of protein-coding genes, the overwhelming majority of identified cancer driver mutations are in protein-coding sequences, which encompass barely 2% of the genome. To date, however, very little (close to nothing) is known about somatic mutations in the vast area of the non-coding part of the genome. Therefore, in this project, we are going to explore the hypothesis that there are numerous cancer-driving mutations in the non-coding part of the genome particularly in sequences coding for non-coding parts of RNA and non-coding RNAs. In this project in a large panel of cancer (predominantly lung cancer) samples, we will look for and characterize somatic mutations in untranslated regions of protein-coding genes (5'UTRs, 3'UTRs, and introns) and long non-coding RNAs (lncRNAs), to identify potential non-coding cancer drivers. Some of these drivers may become cancer biomarkers or event targets of cancer therapies.

We offer the position of a Assistant Professor (post-doc) within OPUS 20 research project No. **2020/39/B/NZ5/01970** entitled: *Identification of cancer-driver mutations in non-coding parts of protein-coding genes and long non-coding RNA genes*, financed by the National Science Center.

Principal Investigator: Prof. Piotr Kozlowski

Project description

The main goal of the project is analysis and functional characterization of cancer somatic mutations in non-coding regions of protein-coding genes, i.e., 5'UTRs, 3'UTRs, and introns as well as in selected long non-coding RNAs (lncRNAs). The first step of the project will be extended whole-exome sequencing (WES+) of a large group of cancer and corresponding normal samples. We will also analyse external cancer genomic data, e.g., from a project as The Cancer Genome Atlas (TCGA).

Institute of Bioorganic Chemistry Polish Academy of Sciences (IBCH PAS) is one of the leading research entities specialized in chemistry, molecular biology and biomedicine in Poland (the number and quality of research papers published and grants awarded). The job will be performed in a young, dynamic group, providing opportunities for

successful publishing of research results. A position in the project is a great chance to develop and gain further experience in genetics and computational biology, and also access to cutting-edge technologies. Work and experience attained at IBCH PAS, and within the group in which the project will be implemented, give a solid ground for future applications for various types of grants or further independent positions and academic degrees.

I. Requirements for the candidates:

1. A PhD degree (or equivalent) in molecular biology, computational biology, biotechnology, biochemistry, medicine, or related sciences*.
2. Well-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).
3. Experience in molecular genetics of cancer or/and computational biology or/and biostatistics.
4. Strong motivation for work and commitment to project implementation.
5. Good command of English, enabling efficient communication and preparation of research papers.

*In accordance with the requirements of the National Science Center, only those candidates who received their PhD degree no earlier than 7 years prior to the date of employment within the research project, excluding parental or related leaves governed by the stipulations of the Labor Code, rehabilitation period associated with rehabilitation allowances or other rehabilitation benefits, are eligible for recruitment. In such cases, the aforementioned 7-year period shall be extended by additional 18 months for every descendant or adoptee. Female applicants may choose the way of justifying breaks in their research career, which is more favorable in a given case.

Pursuant to the regulations of the National Science Center, only candidates who obtained their PhD degree at an institution other than the Institute of Bioorganic Chemistry, PAS, are eligible for the position.

II. Job responsibilities

Planning and performing experiments.

Data analysis and interpretation.

Composing and assisting in manuscript preparation.

Critical literature reading.

Presenting results at seminars and scientific meetings.

Guiding students.

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. CV featuring information on the candidate's scientific track record, including the 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.

In addition, depending on the candidate's track record, the application may contain:

- list of additional papers;
- list of patents;
- information on the previously managed projects or participation in project implementation;
- information on the accomplished research internships;
- information on the awarded prizes and distinctions.

3. Copy of the doctoral diploma.
4. Preferable contact details of potential referees.

IV. Applications must be submitted via the eRecruiter portal, using the link below:

<https://system.erecruiter.pl/FormTemplates/RecruitmentForm.aspx?WebID=684c06ea5c7043df9fc4f4b5beb65829>

V. The submission deadline is May 8, 2023.

VI. Following preliminary verification, on the basis of the application documents, selected candidates will be invited to an interview, as a result of which a candidate recommended for employment shall be appointed. The main criteria, taken into consideration during the selection of the candidates, will be: (i) research output (research papers published), (ii) compliance of the previous experience with the tasks planned within the framework of the project (in the following order: genetics, cancerous diseases, some other experience in molecular biology/biotechnology or computational biology), (iii) experience gained during a long-term, foreign internship.

VII. The recruitment procedure shall be concluded no later than on **May 26, 2023**.

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

Employment is available instantly (depending on the result of the recruitment procedure).

The position is available for the period of 15 months, with possible extension.

The estimated gross salary is ca. 8 150 PLN/month.

For additional information please contact the Principal Investigator:

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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 Poznań; 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 Poznań, 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.