

**IBCH PAS RECRUITMENT PROCEDURE NO. 17/2022/SN
FOR THE POSITION OF A POSTDOCTORAL RESEARCH ASSISTANT**

INSTITUTION: Institute of Bioorganic Chemistry, Polish Academy of Sciences,
Department of Medical Biotechnology
CITY: Poznań
POSITION: assistant professor (post-doc)
POSITIONS AVAILABLE: 1
SCIENTIFIC DISCIPLINE: biology
PUBLICATION DATE: **July 1st, 2022**
APPLICATION DEADLINE: **August 31st, 2022**
WEBSITE: <https://portal.ibch.poznan.pl/homepage>

KEY WORDS: CAG repeat sequences, polyglutamine diseases, non-coding RNA, RNA-RNA interactions, protein-protein interactions

Principal Investigator: Agnieszka Fiszer, PhD, professor of IBCH PAS

Website of Department of Medical Biotechnology: <https://portal.ichb.pl/department-of-medical-biotechnology/>

Research topic: Biology of RNAs containing repeated tracts in the context of their functions and human neurodegenerative diseases

Research will be carried out within the 2021/41/B/NZ3/03803 OPUS 21 project, entitled “**Function and dysfunction of repeated tracts in non-coding and protein-coding transcripts**”, funded by National Science Centre.

Project description:

The aim of this project is to discover the functioning of a wide spectrum of RNA molecules containing multiple repeats of a three-base sequence, and to show how the length of a sequence of repeats affects the activity of a given RNA or encoded protein. We will focus on repeated CAG (cytosine-adenine-guanine) sequences in the context of the nervous system. For a better understanding of how our brain functions and how we can effectively treat neurodegenerative diseases, it is important to understand the network of molecules that interact there, including RNA and proteins.

Detailed scientific questions that we want to answer in this project are:

- What kind of functions, important for the nervous system, do RNA molecules containing CAG repeat sequences have?
- Is there a specific network of interacting RNAs containing tracts of trinucleotide repeats?
- What is the protein-protein interaction network mediated by the polyglutamine chain?
- Whether some CAG repeat-containing RNAs act as both non-coding and coding RNAs proteins/peptides?
- How the length of the CAG/glutamine repeats (within the normal range) affects functioning of specific RNA/protein?
- How dysfunctional are somatically expanded CAG/glutamine repeat tracts?

To answer these questions, we will use the optimal models, i.e. those appropriate for the planned methods, and also with the neural phenotype to find a clear relationship with functioning in the nervous system. This includes, but is not limited to, models derived from induced pluripotent stem cells (iPSCs). The methodological concept assumes the use of sets of cell lines with the same genetic background, which should allow highlighting the effects closely related to the length of the CAG and glutamine sequences. In addition, the observations will be verified in mouse brain tissue.

ICHB PAN is one of the leading research units in Poland and conducts research activities in the field of chemistry, molecular biology and biomedicine. The Institute provides access to technologically advanced research equipment.

I. Requirements for the candidate:

1. A PhD degree (or equivalent) in molecular biology, bioinformatics, biotechnology, biochemistry, medicine, or related sciences*.
2. Experience and knowledge of techniques in molecular biology of animals and/or human.
3. Well-documented research output in the form of research papers published in recognizable research journals listed in the Web of Science database.
4. Very good work organization and strong motivation for scientific work.
5. Ability to work independently and cooperate in a team.
6. Very good command of spoken and written English.

The offer is intended for experienced researchers, holding at least a PhD degree in biology. The position is dedicated especially to carry out research in the field of molecular biology in the context of human diseases, with particular emphasis on RNA, proteomic and microscopic analyzes, and cell lines generation (including in the Flp-In T-REx system).

*In accordance with the requirements of the National Science Centre, 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 Centre, the admitted person must additionally meet one of the following conditions: (I) obtained a doctoral degree in a subject other than the Institute of Bioorganic Chemistry of the Polish Academy of Sciences or (II) completed at least 10-month, continuous and documented postdoctoral fellowship in an entity other than ICHB PAN and in a country other than Poland..

II. Job Responsibilities:

1. Generation of genetic constructs and development of modified cell lines
2. Optimization and implementation of protocols for the analysis of RNA molecules and proteins
3. Regular presentation of the results at department seminars
4. Analysis of results and preparation of publication manuscripts.

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.
2. Scientific CV including list of publications, patents, previous positions and managed projects.
3. Cover letter featuring information on the candidate's scientific background, achievements and contact details to three referees.
4. Copy of PhD diploma.

IV. Applications should be submitted via the eRecruiter portal:

<https://system.erecruiter.pl/FormTemplates/RecruitmentForm.aspx?WebID=25a116d7e92a4887aeb6c1075c65cf>

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V. The submission deadline is August 31st, 2022.

VI. Selection of candidates:

Following preliminary verification, on the basis of the application documents, selected candidates will be invited for an interview, and based on the results of both stages of applicants evaluation, one candidate shall be appointed. The main criteria, taken into consideration during the selection of the candidates, will be: (i) research

output in a form of published papers, (ii) experience necessary for the tasks planned within the framework of the project, (iii) former foreign fellowships and /or post-doctoral positions held.

VII. The recruitment procedure shall be concluded no later than on September 30th, 2022.

VIII. Start and duration of the position.

Employment is available from October-November (depending on the result of the recruitment procedure). The position is available for the period of 28 months. The gross salary allocated: approximately 8 150 PLN/month.

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

For more details, please contact:

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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 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.