

**IBCH PAS RECRUITMENT PROCEDURE NO. 10/2024/SN
FOR THE POSITION OF A POSTDOCTORAL RESEARCH ASSISTANT**

INSTITUTION: Institute of Bioorganic Chemistry, Polish Academy of Sciences,
Department of Medical Biotechnology
CITY: Poznan
POSITION: assistant professor (post-doc)
POSITIONS AVAILABLE: 1
SCIENTIFIC DISCIPLINE: biology
PUBLICATION DATE: **April 29, 2024**
APPLICATION DEADLINE: **May 28, 2024**
WEBSITE: <https://portal.ibch.poznan.pl/homepage>

KEY WORDS: neurodegenerative diseases, oligonucleotides in therapy, microRNA, oxidative stress, neuronal cell cultures

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: microRNAs as non-invasive biomarkers of neurodegenerative diseases and identification of genes involved in the neurodegeneration

Project description:

The research will be carried out within the 2023/05/Y/NZ3/00160 international consortium project, entitled “**MyRIAD (Micro)RNA and informatics approaches for diagnosis, prognosis and treatment of Alzheimer’s disease and Dementia**”, received in the frame of JPND (*EU Joint Programme – Neurodegenerative Disease Research*).

The project aims to advance current knowledge of Alzheimer's disease (AD) and neurodegenerative diseases through the discovery and validation of new biomarkers and therapeutic targets.

A systems biology approach using existing and project-generated omics datasets from different stages of neurodegeneration in AD will enable the development of an *in silico* model of neurodegeneration that will be further validated in human neuronal progenitors. Using RNA-based approaches (miRNAs and ASOs), we will demonstrate the functional effect of modulating newly proposed candidate genes (including the V-ATPase gene) in neurodegeneration-related pathways.

The project coordinator is Dr. Katarzyna Goljanek-Whysall (University of Galway, Ireland), and the other partners are: Dr. Ali Cakmak (Istanbul Technical University, Turkey), Dr. Roberta Ghidoni (IRCCS Istituto Centro San Giovanni di Dio, Italy) and Dr. Leo Quinlan (University of Galway, Ireland).

As part of this project, ICHB PAS manages the implementation of WP4: Harnessing the potential of RNA approaches to validate novel players in neurodegeneration and provide proof of principle for RNA therapies to ameliorate neurodegeneration in AD and beyond.

Project tasks carried out at ICHB PAS:

1. Design of novel approaches based on oligonucleotides for selected therapeutic targets related to neurodegeneration.
2. Validation of the effectiveness of therapeutic approaches in advanced neuronal cell cultures.
3. Identification of desired and non-specific effects of tested oligonucleotides in neuronal cell lines derived from patients.

Description of the research unit:

ICHB PAS is among the leading research units in Poland and conducts scientific activities in the field of chemistry, bioinformatics, molecular biology and biomedicine. The Institute provides access to technologically advanced research equipment and has very well-organized administrative facilities.

I. Requirements for the candidate:

1. A PhD degree (or equivalent) in molecular biology, bioinformatics, biotechnology, biochemistry, medicine, or related sciences.*
2. The knowledge and experience in molecular and cellular biology techniques.
3. Well-documented research experience in the form of research papers published in recognizable research journals.
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 addressed to experienced researchers with at least a PhD degree, and concerns conducting basic research in the context of human diseases, with particular emphasis on molecular and cellular biology analyses. Experience with iPSC cell cultures and neuronal lines or bioinformatics experience in the analysis of RNA sequencing data is desirable for candidates.

*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. Planning and conducting experiments including: (I) development and cultivation of advanced cell lines, (II) design and testing of therapeutic oligonucleotides, (III) implementation and optimization of molecular and cell biology methods.
2. Analysis and description of research results.
3. Critical analysis of current literature on the subject of the project.
4. Presentation of results at seminars and other scientific meetings (including consortium meetings).
5. Preparing manuscripts for publications.

III. Required documents:

1. Letter of application to the Director of IBCH PAS.
2. CV with information on scientific achievements, including a list of publications, patents, grant projects (as investigator or PI), main research techniques used, awards and distinctions.
3. A cover letter containing a description of the candidate's scientific path so far, the most important scientific achievements, and motivation to participate in this project.
4. Details of 2 scientists who can issue letters of recommendation.
5. A copy of the diploma confirming obtaining a doctoral degree.

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

<https://system.erecruiter.pl/FormTemplates/RecruitmentForm.aspx?WebID=66d041f037024e85b0fc34d66040704b>

V. The submission deadline is May 28, 2024.

VI. Selection of candidates:

After initial verification based on the submitted documents, selected candidates may be invited to an interview. The main criteria that will be taken into account when selecting candidates will be (I) scientific achievements and experience, (II) compatibility of previous experience with the research tasks planned as part of the project, (III) motivation for scientific work and skills.

VII. The recruitment procedure shall be concluded no later than June 17, 2024.

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

IX. We offer:

1. Opportunity to work as a scientist in a leading unit in Poland, in a young team of several people, in which we value reliability, cooperation and take up ambitious scientific challenges.
2. Carrying out research as part of an international consortium with the possibility of short-term visits in consortium member labs and participation in conferences and training.
3. Position available from June-July 2024 for a period of 32 months (employment contract, first contract for a trial period). The salary is 11,666 PLN/month (total cost of the employer), approximately 9,500 PLN gross per month.

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.