

CALL No. 3/2025/T
FOR THE POSITION OF SPECIALIST/SENIOR SPECIALIST

INSTITUTION: Institute of Bioorganic Chemistry, PAS
CITY: Poznan
POSITION: Area expert
POSITIONS AVAILABLE: 1
SCIENTIFIC DISCIPLINE: biology
PUBLICATION DATE: 31.03.2025
APPLICATION DEADLINE: 14.04.2025
IBCH PAS WEBSITE: <http://www.ibch.poznan.pl/en>

KEYWORDS: *in vitro* cell cultures, iPSCs, organoids, cardiomyocytes, cell differentiation, electrophysiology

I Job description

This recruitment is for the implementation of the ECBG – European Centre for Bioinformatics and Genomics – MOSAIC 3D project (FENG.02.04-IP.04-0012/24), co-funded under the European Funds for Smart Economy 2021-2027 (FENG), Action 2.4 Smart Economy Research Infrastructure. The project's goal is to establish infrastructure for developing preclinical models of cardiovascular and oncological diseases. The project is led by Prof. Marek Figlerowicz.

As part of the project, we aim to create the biobank of induced pluripotent stem cells (iPSCs) and to use these cells to develop *in vitro* and *in silico* models of selected diseases. The project involves spatial transcriptomics analyses and single-cell sequencing to generate model datasets describing changes in the transcriptome and chromatin structure both during iPSC differentiation and in response to selected small-molecule compounds. The collected data will contribute to the development of digital twins – computational models that simulate cellular responses to genetic modifications and chemical compounds.

We are seeking a motivated individual to join the Department of Molecular and Systems Biology and the Cell and Tissue Culture Laboratory and contribute to the ECBG-MOSAIC 3D project team's work on iPSC differentiation into cardiomyocytes, generation of cardiac organoids, and their functional characterization. The tasks within this part of the project include optimizing and implementing cell differentiation protocols, cell tracking during differentiation using imaging techniques and molecular barcoding, characterizing the electrophysiological activity of cardiomyocytes using patch-clamp techniques and microelectrode arrays (MEA), conducting large-scale CRISPRi/a-based screening experiments.

We offer an opportunity to grow in a dynamic scientific environment and gain valuable experience working with cutting-edge technologies in cell biology, genomics, and single-cell analysis.

II Job responsibilities

1. Culturing and directed differentiation of induced pluripotent stem cells (iPSCs).
2. Design, cloning, and production of genetic vectors, including viral vectors.
3. Genetic modification of cells using CRISPR interference/activation (CRISPRi/a) technology.
4. Comprehensive molecular and functional characterization of cells, including gene expression profiling and electrophysiological analysis.
5. Data analysis, interpretation, and contribution to the preparation of scientific publications.

III Job requirements

1. PhD in biological sciences, chemistry, or a related field.
2. Proven experience in the derivation, culture, and differentiation of iPSCs.
3. Strong proficiency in fundamental molecular biology techniques, including vector design, molecular cloning, Western blotting, PCR/qPCR, and RNA/DNA isolation and purification.
4. Experience in the design and production of viral vectors (lentiviral and adenoviral) is an advantage.
5. Familiarity with patch-clamp or microelectrode array (MEA) techniques is an additional asset.
6. Proficiency in English sufficient for effective communication within an international research team, literature review, and preparation of scientific publications and reports.

IV Required documents

1. Application letter addressed to the Director of INCH PAS.
2. Scientific CV, including a list of publications, completed internships and research placements, participation in conferences, and any awards or distinctions received.
3. Motivation letter.
4. Copy of the diploma confirming the awarded academic degree.
5. Certificates or other documents confirming English language proficiency (if available).

V Application submission process

Applications should be submitted via the eRecruiter portal at

<https://system.erecruiter.pl/FormTemplates/RecruitmentForm.aspx?WebID=888ddca543114e3aa33b79505bce67b3>

VI Deadlines

1. The deadline for submitting the application is 14.04.2025.
2. The recruitment procedure shall be concluded no later than by 25.04.2025.

VII Employment conditions

1. Employment will be conducted in accordance with the provisions of the Labor Code.
2. Working hours: 1 full-time equivalent (FTE).
3. Salary ranging from 12,000 to 15,000 PLN (total employer cost), depending on the candidate's experience and skills.
4. Employment contract for a period of 1 year (with the possibility of extension).
5. Preferred start date: 28.04.2025.

VIII Selection criteria

1. Education, completed courses and training, and their relevance to the scope of work within the project.
2. Technical competencies, experience, and alignment of knowledge with the position and project requirements.
3. Communication skills and proficiency in English at a level necessary for effective project execution.

Recruitment is carried out in accordance with the principles of equal opportunity and non-discrimination. The process is standardized to ensure an objective evaluation of candidates and minimize the risk of bias.

For additional information, please contact:
dr Ireneusz Stolarek (istolarek@ibch.poznan.pl)

dr Natalia Koralewska (nataliak@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:

- 1. 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).*
- 2. 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.*
- 3. 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.*
- 4. 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.*
- 5. 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.*
- 6. The personal data of the candidates shall not be transferred to any third country.*
- 7. The person whose data shall be subjected to processing has the right to:*
 - a. request access to his/her personal data, and to amend it or delete it, pursuant to articles 15-17 of GDPR;*
 - b. limit data processing, in the events stipulated in article 18 of GDPR;*
 - c. data transferring, pursuant to article 20 of GDPR;*
 - d. withdraw consent at any moment, without influencing compliance with the law of the processing that was executed prior to consent withdrawal;*
 - e. 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

Protection for whistleblowers

In the case of reporting violations using a dedicated system for whistleblowers, the reporting person's data will be processed in accordance with applicable provisions on the protection of personal data, including the above-mentioned Regulation (EU 2016/679 of 27 April 2016). We ensure confidentiality and protection of the identity of reporting persons, and that their data will not be disclosed without their consent, unless the law provides otherwise.

Detailed rules regarding the protection of personal data and procedures for reporting violations of the law can be found in our Regulations on internal reporting at the Institute of Bioorganic Chemistry, Polish Academy of Sciences, available at the link: <https://portal.ichb.pl/wp-content/uploads/2024/10/INTERNALREPORTINGREGULATIONS.pdf>