

CALL No. 8/2025/T
FOR THE POSITION OF SPECIALIST/SENIOR SPECIALIST

INSTITUTION: Institute of Bioorganic Chemistry, PAS
CITY: Poznań
POSITION: Area expert
POSITIONS AVAILABLE: 1
SCIENTIFIC DISCIPLINE: biology
PUBLICATION DATE: 20.08.2025
APPLICATION DEADLINE: 19.09.2025
IBCH PAS WEBSITE: <http://www.ibch.poznan.pl/en>

KEYWORDS: *in vitro* cell cultures, PBMC reprogramming, iPSCs, organoids, cardiomyocytes, cell differentiation, pluripotent stem cells, CRISPRi/a, genetic engineering, cell engineering, biobanking

I Job description

This recruitment is conducted as part of 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 goal of the project is to establish infrastructure for the development of preclinical models of cardiovascular and oncological diseases. The project is led by Prof. Marek Figlerowicz.

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

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 PBMC reprogramming into iPSC, iPSC differentiation into cardiomyocytes, generation of cardiac organoids, and their functional characterization. The tasks within this part of the project include establishing and cryopreserving iPSC lines from clinical material, optimizing and implementing differentiation protocols, performing molecular and functional assays to assess iPSC identity and cardiomyocyte activity, and maintaining detailed documentation of experimental procedures and results.

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. The position also includes the possibility for external training abroad, as the project provides a dedicated training component.

II Job responsibilities

1. Reprogramming of peripheral blood mononuclear cells (PBMCs) into induced pluripotent stem cells (iPSCs).
2. Quality control of iPSCs, including morphological assessment, pluripotency and differentiation assays, and preparation of cells for downstream applications.
3. Routine cell culture maintenance and cryopreservation of iPSCs and other cell types.
4. Design, cloning, and production of genetic vectors, including lentiviral and/or episomal vectors.
5. Genetic modification of cells using CRISPR interference/activation (CRISPRi/a) technology.

6. Sample registration, labeling, and tracking; maintenance of cryobank records.
7. Documentation of the complete sample lifecycle in accordance with established standard operating procedures (SOPs).
8. Development, review, and updating of SOPs related to cell culture, reprogramming, and differentiation.
9. Generating and collecting experimental data; supporting the preparation of scientific reports and peer-reviewed publications.

III Job requirements

1. MSc or PhD in biological sciences, chemistry, or a related field.
2. Documented experience in the generation, culture, and quality control of human iPSCs.
3. Proficiency in core molecular biology techniques, including vector design, molecular cloning, RNA/DNA isolation and purification, PCR/qPCR, and Western blotting.
4. Experience with the design, production, and titration of genetic vectors, including viral systems (Sendai, lentiviral, adenoviral) is an advantage.
5. Familiarity with CRISPRi/a, patch-clamp or microelectrode array (MEA) techniques is an additional asset.
6. Ability to maintain detailed and accurate documentation of work progress.
7. Fluency in English, both written and spoken, sufficient for effective communication in an international team, literature analysis, and preparation of reports and publications.
8. Ability to work independently, manage multiple tasks simultaneously, and contribute to collaborative projects.

IV Required documents

1. Application letter addressed to the Director of IBCH 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 proficiency in English (if available).

V Application submission process

Applications should be submitted via the eRecruiter portal at

<https://system.erecruiter.pl/FormTemplates/RecruitmentForm.aspx?WebID=269db2013b0e43c3839158583cb8fab1>

VI Deadlines

1. The deadline for submitting the application is 19.09.2025.
2. The recruitment procedure shall be concluded no later than by 26.09.2025.

VII Employment conditions

1. Employment will be conducted pursuant to the provisions of the Labor Code of Poland.
2. FTE: 1,0
3. Salary ranging from 9,000 to 13,000 PLN - total employment cost (gross remuneration 7,000 – 11,000 PLN, including seniority bonus), depending on the candidate's experience and skills.
4. Employment contract for a period of 1 year (with possible extension).
5. Preferred starting date: Oct 1st, 2025.



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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 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 Poznań; 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 Poznań, 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>

