Job Vacancy is announced by the Director of Mossakowski Medical Research Institute, Polish Academy of Sciences for the position of **assistant** in the Department of Stem Cell Bioengineering

City: Warsaw Position: assistant Scientific discipline: medical sciences Announcement date: August 24th, 2023 Application deadline: September 8th, 2023 Expected date of competition results announcement: the second half of September 2023 Date of taking the position: October 2023 Link to page: <u>http://www.imdik.pan.pl/en</u> Keywords: assistant, stem cells, neurobiology, 2D and 3D models of *in vitro* cultures, neural differentiation, CNS transplants, omics research.

The current research program of the Department of Stem Cell Bioengineering:

Research conducted at the Department of Stem Cell Bioengineering concerns the development and pathology of the CNS and the use of stem cells for modeling diseases and CNS therapy.

The area of the research in which the candidate would participate:

- participation in basic, preclinical and translational research in the field of regenerative medicine *in vitro*, *ex vivo* and *in vivo* studies on animal models; experimental therapy of CNS damage using human stem cells;
- study of molecular mechanisms of development and pathology of the central nervous system using animal models and human induced pluripotent stem cells;
- development of imaging methods for transplanted stem cells in the central nervous system.

Description of job position activities:

- planning and conducting research related to the use of stem cells (mesenchymal and induced pluripotent) in CNS regeneration;
- optimization of stem cell culture conditions (use of three-dimensional scaffolds, different oxygen concentrations) in order to obtain therapeutically competent cells;
- performing surgical procedures necessary in the global/focal cerebral ischemia model;
- collection of biological material for further processing and performance of biochemical tests;
- performing the necessary biochemical, molecular and electrophysiological tests, introducing new research technologies;
- using cellular models and molecular biology methods;
- active participation in the implementation of research projects, following the requirements of the financing institution;
- obtaining external funding for research projects: writing individual grant projects and in consortia;
- preparing reports on conducted research;
- preliminary elaboration of results and participation in the preparation of conference announcements and manuscripts, participation in seminars, courses, and training;
- active participation in the scientific and educational life (providing support for trainees) of the Department and the Institute;
- preparing conference announcements and active participation in Polish and foreign conferences;
- activity for the dissemination of science.

Requirements for the position of assistant:

- having a master's degree (or equivalent) in the field of medical, biological or other related sciences;
- experience and documented permission in working with laboratory animals (mouse, rat);
- experience (at least three years) in laboratory work in the field of stem cells culture (in 2D and 3D conditions) and primary cultures from human and animal tissues;

- experience in the field of molecular biology methods (DNA, RNA, RTqPCR, NGS isolation) and cell biology (ELISA);
- experience in immunohistochemical techniques and fluorescence microscopy imaging;
- experience (training) in vital imaging of cells transplanted to the CNS (magnetic resonance, bioluminescence);
- having at least 2 original scientific publications in scientific journals from the JCR list, including at least one in which the candidate is the first, equivalent first or corresponding author;
- documented active participation in conferences and scientific internships;
- independence and good organization of work;
- creativity, ability to work individually and in a team;
- fluency in English;
- indication Mossakowski Medical Research Institute Polish Academy of Sciences as a first place of employment.

Additional requirements (desirable):

- knowledge of working with animal models of cerebral ischemia;
- the ability to create research stations containing devices for stereotactic administration of cells to the CNS;
- knowledge of modern omics research techniques (ATAC-seq, ChIP-seq, scRNAseq) and genome editing methods;
- ability to analyze data and knowledge of statistical methods used in scientific research, ability to use software for statistical data analysis (e.g., GraphPad Prism, SPSS, R, Statistica);
- bioinformatics skills in working with raw and processed omics data, for example: raw readout analysis, statistics and data overlay from high-scale methods (e.g., RNA-seq, exome-seq, proteomics, metabolomics), in silico pathway analysis;
- ability to reprogram, culture of iPSC cell clones obtained after fibroblast transduction;
- experience in preparing applications to the Local Ethics Committee for animal experiments.

We offer:

- employment contract (full-time);
- scientific development;
- attendance in conferences and internships;
- additional financial support from the social fund;
- the possibility of taking advantage of preferential terms, e.g. group insurance, Multisport card;
- friendly work environment.

Required documents:

- cover letter with information about scientific interests;
- *curriculum vitae* containing information on education, scientific achievements, and previous jobs;
- list of publications;
- a copy of the diploma confirming the possession of the required professional title or academic degree;
- documents confirming the fulfillment of other requirements specified in the announcement of the competition (including documented activity in applying for research grants, valid permission to work with animals etc.).

How to apply:

The application should be addressed to the Director of Mossakowski Medical Research Institute, Polish Academy of Sciences. The required documents in electronic form (pdf format only) should be sent to the following e-mail address: <u>sekretariat@imdik.pan.pl</u> and must be received by the Institute by **September 8th, 2023.**

Please include the following job offer identification number in your application: **SDI.111.15.2023.**

The date of receipt of documents by IMDiK PAN is decisive - the applications received after the deadline will not be considered.

Anticipated result announcement date: the second half of September 2023.

Envisaged job starting date: October 2023.

The competition for the post of assistant is carried out following "*Regulations of the employment for the scientific positions in MMRI PAS*".

INFORMATION CLAUSE ON PERSONAL DATA PROCESSING

Under Article 13 of Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons concerning the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation), Mossakowski Medical Research Institute, Polish Academy of Sciences hereby informs:

- 1. The Controller of your data is the Mossakowski Medical Research Institute, Polish Academy of Sciences, A. Pawińskiego 5 St., 02-106 Warsaw, Poland ("MMRI PAS")
- 2. The Controller has designated the Data Protection Officer who can be contacted via the following e-mail address: <u>daneosobowe@imdik.pan.pl</u> or the postal address of the Controller.
- 3. Your data will be processed to carry out a recruitment process and select an employee and conclude a contract for employment at the MMRI PAS.
- 4. MMRI PAS processes Your data concerning a legal obligation (Article 6.1.c of the GDPR) according to Article 22¹ § 1 of the Act of 26 June 1974 Labour Code or Your consent understood by sending them to MMRI PAS (Article 6.1.a of the GDPR) for data not listed on Labour Code, and their application does not affect the possibility of participating in the recruitment/competition. If you do not want us to process additional data, please do not include it in the documents.
- 5. By submitting your candidacy, you consent to the fact that if you win the recruitment/competition, your name and surname together with information about the recommendation for employment will be posted on the MMRI PAS website.
- 6. Your application with personal data will be processed for the period necessary for the realization of purposes indicated in p. 3 for a maximum of one month and then your application with personal data will be deleted.
- 7. Concerning processing of Your data for purposes mentioned in p. 3, Your data might be shared with the following recipients or categories of recipients: entities supporting MMRI PAS in its business processes, in particular administrative and economic service and authorized entities.
- 8. Within the limits and on the terms set out in the GDPR, you have the right to request access to your data, rectification, deletion, or limitation of processing, as well as the right to submit a declaration of withdrawal of consent to the processing of personal data at any time. Withdrawal of consent does not affect the lawfulness of the processing which was carried out based on consent before its withdrawal, as well as the processing of data processed by the administrator based on other provisions.
- 9. You have the right to lodge a complaint to the President of the Office for the Protection of Personal Data (ul. Stawki 2, 00-193 Warszawa).