

The Nencki Institute of Experimental Biology PAS is seeking a candidate for the position
of: **Postdoctoral Researcher at the Laboratory of Neuro-Muscular Plasticity**

Number of available positions: **1**

Place of work: Laboratory of Neuro-Muscular Plasticity, Nencki Institute of Experimental Biology, PAS

Researcher career profiles (R1-R4): R2

Field of science: biology

Type of recruitment: NCN OPUS 28

Requirements:

A person applying for the position of Postdoctoral Researcher at the time of signing the employment contract should hold a PhD degree in biology, neurobiology, molecular biology, biotechnology or related sciences, awarded at an institution other than the institution where the position is intended to be held, or who has completed at least a 10-month, continuous and documented postdoctoral fellowship at an institution other than the institution implementing the project and in a country other than the country obtaining a doctoral degree; these are the NCN's formal requirements included in the Regulations for awarding funds for the implementation of tasks funded in the field of research projects for the OPUS 28 call: https://ncn.gov.pl/sites/default/files/pliki/uchwaly-rady/2024/uchwala84_2024-zal1.pdf

The candidate should:

- Know the physiology of the nervous system, molecular and cell biology, experience from work with rodents will be an additional advantage;
- Have experience in *in vitro* animal cell culture, experience in *ex vivo* organotypic culture will be an additional advantage;
- Have practical knowledge of basic laboratory methods/techniques used in biology, molecular biology, and related sciences (histological methods, microscopy, statistical analysis);
- Have experience in conducting gene expression analysis using traditional and large-scale methods will be an additional advantage;
- Can analyze and interpret the results obtained;
- Know English to the extent that allows communication, reading, and writing scientific texts, have a high motivation for scientific work, be accurate, creative, communicative, and be able to work independently and in a team;
- Significant motivation to conduct scientific research should be confirmed by publications, references of the doctoral thesis supervisor, and/or other scientific supervisors;
- It is expected that during the period of employment with the Institute, the Postdoctoral Researcher will not take up any other job;
- The candidate has been awarded a PhD degree in the year of employment in the project or within 12 years prior to 1 January of the year of employment in the project. This period may be extended pursuant to the terms laid down in the document *Types of costs* in research projects funded by the NCN.
- The candidate has been awarded a PhD degree by an institution other than Nencki Institute of Experimental Biology PAS; alternatively, they must have completed a continuous and documented research fellowship of at least 10 months, carried out during doctoral school, doctoral studies, or after obtaining the PhD degree, at an institution other than Nencki Institute of Experimental Biology PAS and in a country different from that in which the PhD degree was awarded.

Project description:

Our team has already demonstrated that transplantation of the fetal brainstem area containing 5-HT neurons into the spinal cord below the complete transection leads to the restoration of 5-HT innervation and contributes to the improvement of locomotor functions in paraplegic rats. The current project aims to generate a population of pre-differentiated neural progenitor cells (NPCs) and to test the hypothesis that modulation of *in vitro* culture conditions can result in the targeted differentiation of NPCs and the generation of specific neuron types. Next, our research will determine whether NPCs from different sources (exogenous – fetal brainstem or endogenous – ependymal from the spinal cord central canal), initially differentiated under the control of various trophic factors, will be able to differentiate into specific types of neurons after transplantation to the spinal cord (*ex vivo* organotypic cultures) and contribute to the improvement of lost locomotor functions (in vivo rat model). In the research, we will utilize cell and organotypic cultures, as well as animal models, complemented by modern neuroanatomical, neurophysiological, and electrophysiological methods, along with the analysis of large-scale data on gene expression (project description: <https://ncn.gov.pl/.../files/listy-rankingowe/637017-pl.pdf>).

Scope of tasks:

The employed person will participate in the implementation of the project. The duties of the employed person will include conducting and documenting laboratory experiments performed as part of the project, including:

- The implementation of research tasks, in particular the establishment and conduct of *in vitro* cell cultures, *ex vivo* organotypic spinal cord cultures, as well as participation in experiments in vivo on paraplegic rats;
- Preparation of histological dissections, analysis of microscopic images;
- Development and analysis of the results obtained;
- Participation in the preparation of reports, preparation of manuscripts of scientific publications, presentation of research results during seminars, congresses, and scientific national and international conferences;
- Participating in internships and training related to the work performed.

Employment conditions:

A Postdoctoral Researcher position may be held by a person who has obtained a doctoral degree and meets the NCN's formal requirements, described in the Regulations for awarding funds for the implementation of tasks funded in the field of research projects for the OPUS 28

call: https://ncn.gov.pl/sites/default/files/pliki/uchwaly-rady/2024/uchwala84_2024-za1.pdf

- An employment contract for 12 months with the possibility of extension for a 3-year duration of the grant (in total). Note: an employee may not terminate the contract before the expiry of 6 months from the date of signing the employment contract;
- Remuneration in accordance with the NCN guidelines for the Postdoctoral Researcher position (PLN 9,300 gross);
- Work in a dynamic, interdisciplinary research team;
- Opportunity to participate in modern research with high translational potential;
- Access to advanced research infrastructure;
- Opportunity for professional development, participation in scientific conferences, and publications;
- Additional benefits (medical package, sports card, social fund).

Application procedure and deadline:**Required documents:**

- CV with a description of professional experience and a list of publications;
- Letter of intent (max. 1 page) containing a description of previous scientific experience and interests;
- Address details of at least two people who can provide references;

- Copy of PhD diploma (or equivalent);
- Contact information, including e-mail address and phone number;
- Statement by the candidate that when the remuneration is paid, he/she will be receiving no other remuneration paid from the funds granted to research projects under NCN calls under the heading of direct costs,
- Declaration that when the remuneration is paid, the candidate will be receiving no remuneration from another employer pursuant to an employment contract, including an employer with registered office outside of Poland.

You can use the foreign equivalent of a Polish academic degree if it meets at least one of the following criteria:

- is covered by the provisions of an international agreement on the equivalence of education,
- was issued by an authorized institution operating in an EU, OECD or EFTA Member State,
- was issued in another country and recognized on the basis of the regulations on the recognition of academic degrees obtained abroad (learn more about the procedure for the recognition of academic degrees:

<https://nawa.gov.pl/en/recognition/recognition-for-professional-purposes/recognition-of-scientific-degrees-and-titles>

Applications (in PDF file format) should be sent to postdoc@nencki.edu.pl with note: **“Post-doc OPUS 28 US”** till **16 August 2026**.

For more information please contact: Prof. Urszula Sławińska u.slawinska@nencki.edu.pl

Link to website: <https://nencki.edu.pl/laboratories/laboratory-of-neuromuscular-plasticity/>

Additional information:

Please include the following clause in your CV:

I give consent for my personal data included in the recruitment form to be processed by Nencki Institute of Experimental Biology PAS with its registered seat in Warsaw at Pasteur Street No. 3 (data controller) for the purposes of recruitment for Postdoctoral Researcher position pursuant to 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 in compliance with a legal obligation to which the data controller is subject to (Art. 6 section 1 letter a) and the Act on personal data protection of 10 May 2018 (Journal of Laws of 2018, item 1000).

Information Clause:

The Controller of data is Nencki Institute of Experimental Biology PAS with its registered seat in Warsaw at Pasteur Street No. 3.

Contact Details of the Personal Data Protection Officer: iod@nencki.edu.pl

Personal data in the recruitment form is collected and will be processed only for the purposes of recruitment for Postdoctoral Researcher position conducted by Nencki Institute of Experimental Biology PAS.

Giving consent for processing of your personal data is voluntary; however, it is necessary in order to take part in recruitment. I hereby state that I was informed about the right to withdraw my consent at any time. The withdrawal of the consent does not influence the lawfulness of any processing performed before the consent withdrawal.

Personal data collected in order to perform the recruitment process shall be processed throughout the period of time necessary for the organisation and completion of the recruitment process, as well as for considering a possible complaint; however, not longer than for the period specified in the project regulations.

Personal data will not be transferred to a third party.

You have the right to request the data controller for access to your personal data, to edit or limit its processing, as well as to raise an objection or transfer your data. You are also entitled to file a complaint to the supervisory body (President of the Office for Personal Data Protection).