

FORM FOR EMPLOYERS

INSTITUTION: Łukasiewicz Research Network – PORT Polish Center for Technology Development

CITY: Wrocław

POSITION Postdoc in fUS in P4Health – Center of Excellence in Precise Phenotyping and BioDataBanking for Personalised Brain Health

POSTED **04.05.2026**

EXPIRES **24.05.2026**

WEBSITE: <https://port.lukasiewicz.gov.pl/kariera/oferty-pracy/>

Łukasiewicz Research Network – PORT Polish Center for Technology Development is a Research Institute within the Łukasiewicz Research Network. It focuses on development of new technologies, resulting from basic and applied research, which, in turn, serves as a basis for innovative solutions for the industry. With high-class specialists and state-of-the-art infrastructure, we provide capacity for the most advanced research. Our Institute consists of three research centers – Life Sciences & Biotechnology Center, Materials Science & Engineering Center and Center for Population Diagnostics, with access to specialized core laboratories – a combination, which allows to carry out both, scientific research and pilot studies for the industry in a comprehensive manner.

We currently seek applicants for Postdoc in fUS in P4Health – Center of Excellence in Precise Phenotyping and BioDataBanking for Personalised Brain Health

P4Health: Center of Excellence in Precise Phenotyping and BioDataBanking for Personalised Brain Health Project is carried out within the **MAB/IRA** programme of the Foundation for Polish Science.

Łukasiewicz PORT - Polish Center for Technology Development is a modern and dynamically developing Research Institute within the Łukasiewicz Research Network. It focuses on development of new technologies, resulting from basic and applied research which, in turn, serve as a basis for innovative solutions for the industry. The scientific branch of Łukasiewicz-PORT encompasses four Centers: Life Sciences and Biotechnology, Material Sciences, Population Diagnostics and the Independent Department P4Health, backed by specialized core facilities and excellent infrastructure that supports high quality research.

The P4Health Centre of Excellence is an interdisciplinary initiative focused on advancing Predictive, Preventive, Personalized, and Participatory (P4) approaches in health and medicine. Within the IRAP framework, the project's scientific goal is to discover and validate novel therapeutic concepts aimed at counteracting symptoms of brain disorders associated with

astrocyte pathology. The applied research programme is designed to deliver a detailed understanding of the mechanisms of astrocyte dysfunction and its impact on neuronal networks, building on the complementary expertise of a team with a strong publication record in reputable journals and proven experience in identifying nervous system pathomechanisms and developing prototype drug candidates. Project outcomes will be protected as intellectual property and will provide a foundation for translation through clinical studies and appropriate commercialisation pathways.

P4Health's key features:

- Interdisciplinary centre advancing P4 approaches in health and medicine
- Applied, mechanism-driven research focused on astrocyte dysfunction and its effects on neuronal networks
- Strong scientific track record demonstrated through high-quality publications and prior discoveries in nervous system pathomechanisms
- Translation-oriented strategy, from concept validation to clinical studies and commercialisation
- Systematic protection and management of intellectual property to support downstream implementation

Main research objectives/job description:

The P4Health CoE is seeking a highly motivated postdoctoral researcher to conduct functional ultrasound (fUS) research on rodent models within the field of precision psychiatry. This position offers a high degree of academic freedom and is ideal for candidates who wish to shape their own research direction, build independence and contribute to the development of a centre with a strong translational mission. **The position is intended for a person who has held a PhD for no longer than five years and who will participate in the project under the supervision of the Research Team Leader.** The five-year period is calculated from the year in which the PhD was awarded. The start of this period is marked by the year in which the degree was obtained, and the end by the year preceding the deadline for submitting applications in the competition. The 5-year period may be extended by any documented periods of interruption in research work occurring after the date of obtaining the doctoral degree, provided that such interruptions lasted for no less than 6 months.

Main research goals:

- Identify and characterise key mechanisms underlying astrocyte dysfunction in brain disorders.
- Define how astrocyte pathology reshapes neuronal networks and contributes to disease-relevant phenotypes.
- Discover and validate novel therapeutic concepts targeting astrocyte-related mechanisms to alleviate symptoms.

Major responsibilities:

- Designing, conducting, and analyzing functional ultrasound (fUS) experiments in rodent models.
- Developing and pursuing an independent research project aligned with the precision psychiatry mission of P4Health.
- Analyzing and interpreting large-scale imaging and behavioral datasets.
- Integrating imaging results with translational and disease-relevant readouts.
- Actively contributing to a collaborative, interdisciplinary research environment.
- Disseminating results through high-quality publications and international conferences.
- Contributing scientifically to competitive grant proposals and, where relevant, support the research development of junior colleagues.

Expectations:

- PhD in neuroscience, biomedical sciences, physics, engineering, or a related field
- Experience with brain imaging methods (e.g functional ultrasound (fUS), fMRI; optical imaging, electrophysiology)
- Proficiency in the analysis of large-scale and complex datasets
- Strong motivation to pursue independent research ideas in the field of psychiatric and translational neuroscience
- Interest in investigating brain circuit function in a translational framework, linking neural activity to behavior and disease-relevant phenotypes
- Demonstrated ability to work effectively in an international research environment.

We strongly encourage applications from candidates of all nationalities, genders, and backgrounds.

Required documents:

1. CV.
2. Cover letter .
3. Copy of PhD diploma (or thesis title and expected date of defense) .
4. Contact information, including e-mail address and phone number .
5. The candidates may include additional information or copies of documents/certificates in support of the application.

We offer:

- Full-time employment contract (1,0 FTE)
- Opportunity to collaborate with an experienced scientific team, with structured support for scientific and career development.

- Possibility to contribute to high-quality scientific publications and to engage in activities supporting the commercialisation of research outcomes.
- Co-financing of private medical care.
- Co-financing of a sports and wellness card.
- Option to enrol in group life insurance.
- Co-financing through the Social Benefits Fund (including holiday and Christmas benefits).
- Work in a modern, green science campus environment.
- Free on-site parking.

Remuneration : 13980 PLN gross

If you are interested, please apply via the link below:

<https://system.erecruiter.pl/FormTemplates/RecruitmentForm.aspx?WebID=c9a57b3b47b74a0aa0ef43f87f7d7cdd>

We kindly inform you that the controller of your personal data is Network Institute operating under the name of Łukasiewicz Research Network – PORT Polish Center for Technology Development, Stabłowicka 147, 54-066 Wrocław, Poland. The data contained in job application will be processed for the purposes of the current recruitment process, and – if the consent is given – for the purposes of future recruitment. We kindly inform you about your right to access your data and correct it, as well as your right to withdraw your consent to data processing at any time without the impact on the compliance with the law of the processing performed on the grounds of consent given before withdrawal thereof. Providing personal information is voluntary.

More information on the protection of personal data: <https://port.lukasiewicz.gov.pl/en/data-protection/>

Information about candidates applying for the above role is public information in the scope covered by the requirements specified in the recruitment announcement. Information on the result of the recruitment process, including the job position for which the recruitment was carried out, the name or names and surname of the selected candidate and his place of residence within the meaning of the provisions of the Act of 23 April 1964 – Civil Code as well as the justification of the candidate's selection or not employing any the candidate will be made public in accordance with the Act of February 21, 2019 on the Łukasiewicz Research Network.

We kindly inform you that we will contact only selected candidates.