

COMPETITION ANNOUNCEMENT

The dean of the Faculty of Biology, with the consent of the Rector of the University of Warsaw, announces a competition for the position of Assistant Professor¹ in the project **Synaptic mitochondria as a key to understand autism-associated neurodevelopmental disorders: molecular mechanisms regulating their dynamics and function**.

About the programme/project/undertaking:

Title of programme/project/undertaking	<i>Synaptic mitochondria as a key to understand autism-associated neurodevelopmental disorders: molecular mechanisms regulating their dynamics and function.</i>	
Type of project	<i>OPUS 30</i>	
Funding institution	<i>National Science Centre</i>	
Duration of project	4 years	
Head of project	<i>Dr hab. Magdalena Dziembowska, prof. ucz.</i>	
Description project	Synapses have extremely high energetic demands, which makes them strongly dependent on specialized synaptic mitochondria for a constant supply of energy. Emerging evidence indicates that mitochondria differ profoundly depending on their location within a neuron, reflecting the distinct energetic and signaling requirements of individual neuronal compartments. Presynaptic terminals experience intense, rapid fluctuations in energy consumption and calcium load during neurotransmission, making local mitochondrial function critical for synaptic reliability and plasticity. This intense activity also renders synapses particularly vulnerable during metabolic stress or disease. Yet the molecular and functional diversity of mitochondria within a single neuron, and how it is altered in neurodevelopmental disorders associated with autism, remains poorly understood. This project will dissect the molecular mechanisms governing presynaptic mitochondrial function in two genetic mouse models of neurodevelopmental disorders: Fmr1 knockout (Fmr1 KO) mice, a well-established model of Fragile X syndrome and autism, and Trap1 mutant mice, carrying a mutation in a mitochondrial chaperone protein. By integrating biochemical, imaging, and electrophysiological approaches across two genetic models and both sexes, this project will provide a comprehensive, compartment-specific view of presynaptic mitochondrial dysfunction in autism-associated neurodevelopmental disorders and identify novel mitochondrial mechanisms that may represent targets for future therapeutic strategies.	

Position details:

Position title	Assistant Professor
Organisational unit	Faculty of Biology

¹ The nouns used in the announcement apply to people of all genders

Employment group	Research
Position profile ²	R2
Academic discipline ³	Biological sciences
Number of positions	1
Form of employment and length of working time (proportionally to full-time employment)	Full-time employment contract
Expected date of commencement of work and employment period	Employment starting from 01.10.2026 for 48 months
Remuneration	Basic remuneration PLN 11 000,00 gross/month plus the additional annual remuneration, allowance for years of service. More information: link
Other working conditions	– Workplace: <i>Department of Animal Physiology, Institute of Experimental Zoology</i> – Career opportunities: More information: link
Basic responsibilities and obligations	– Conducting scientific research in biological sciences and publishing findings in international scientific journals. – Securing research funding. – Fulfilling other academic teacher responsibilities as required by employment at the University of Warsaw. More information: Scope of responsibilities of the academic teacher
Conditions for entering the competition ⁴	– <i>Fulfill the requirements set out in Article 113 of the Law on Higher Education and Science (Journal of Laws of 2024, item 1571, consolidated text)</i> – Hold a Ph.D. degree in biological sciences or a related field obtained before the application deadline. – Have significant scientific achievements documented by well-cited publications in renowned international journals, invitations to deliver lectures or seminars, etc. – Have international experience, e.g.: participation in international conferences, engagement in international research projects, international collaborations documented by joint publications. – Submit a research plan outlining personal scientific development. – Research competencies in the field of: <i>a) establishing and maintaining primary neuronal cultures</i> <i>b) light and confocal microscopy</i> <i>c) sample preparation and imaging using electron microscopy</i> <i>d) analysis of electron microscopy images</i> <i>e) application of molecular biology and biochemistry methods (Western blot, sample preparation for mass spectrometry analysis)</i> <i>f) Authorization to work with laboratory animals, confirmed by an appropriate certificate (e.g., POLLASA)</i> <i>g) proficiency in English</i>
In addition, we expect ⁵	– Experience in individual work with students (e.g., supervising theses) and science popularization activities. – Research mobility, e.g., a fellowship at a prestigious foreign research institution. – Experience in securing research funding.

² Complete only in the case of competition for the position in the research employment group or the research and teaching employment group.

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⁴ Required by the Act, the Law on Higher Education and Science, the Statute of the University of Warsaw, as well as necessary for the position.

⁵ Additional conditions to be met; however, not meeting them will not lead to a negative formal assessment.

	– Experience in working with laboratory animals (mice, rats) – Basic knowledge of R programming – Experience implementing machine learning algorithms to analyze complex microscopic data. <i>If hired, we expect the University of Warsaw to be the primary workplace for the successful candidate.</i>
Criteria for the assessment of candidates in a competition	– Quality of the publication record and, if applicable, patent output. – Success in securing research funding. – Originality of research plans and the potential for developing research within the Faculty of Biology, including opportunities for collaboration with existing research teams.

Position ~~related~~/not related⁶ to activities covered by the protection of minors.

Competition rules:

Announcement reference number	WB-KG-10/2026
Keywords	synapses, mitochondria, autism spectrum disorder, neurodevelopmental disorders
Deadline for submitting applications ⁷	28 August 2026
Method of submitting an application	Send applications via email to m.dziembowska@uw.edu.pl and the Faculty Dean's Office: dziekanat.biol@uw.edu.pl. Candidates will receive an email confirmation of document submission. If no confirmation is received, please contact the project leader.
Required documents	– Personal questionnaire – available on the Faculty of Biology UW website. – Motivation letter including description of scientific interests and research activity plan. <i>Ensure the completeness of your application and submit it by the deadline. Failure to meet these requirements will result in rejection on formal grounds. Please, ensure that your application is complete and submitted by the deadline indicated!</i>

The competition is the first stage of the recruitment process, please read the Policy of Open, Transparent and Merit-Based Recruitment at the University of Warsaw [link](#)

Stages of competition	<i>The competition consists of the following stages:</i> – <i>Stage I - formal evaluation of documents,</i> – <i>Stage II - substantive evaluation on the basis of submitted documents,</i> – <i>Stage III - interview with selected candidates, during which the candidate will be required to give a short presentation on their previous achievements and career plans, followed by a Q&A session with members of the selection committee,</i> – <i>Stage IV - final evaluation of competence, experience and scientific achievements,</i> – <i>Stage V - adjudication of the competition and announcement of results.</i>
Anticipated date and method of notification of the competition outcomes	Interviews will take place 04.09.2026 Candidates will be individually notified about their interview schedule with the selection committee. Candidates will be informed of the results via email by 08.09.2026
Contact for any questions relating to the competition	Via email: m.dziembowska@uw.edu.pl (please include the announcement reference number). Accessibility needs should be indicated on the Candidate's Questionnaire, in: <i>Other relevant information from a candidate</i>

⁶ Delete as appropriate.

⁷ Not sooner than 30 days from the date of publication of the announcement.

Employing faculty/unit:

Research profile of faculty /unit	The Faculty conducts research across a broad range of biological sciences disciplines. More details are available on the Faculty website .
Teaching profile of faculty/ unit	The Faculty offers degree programs in <i>Biology</i> and <i>Biotechnology</i> and co-organizes programs in <i>Nature Conservation</i> and <i>Bioinformatics & Systems Biology</i> .
Other information	More details can be found on the Faculty website .

The University of Warsaw has implemented the procedure for whistleblowers reporting cases of law violation and for undertaking follow-up actions. For **more information** about this topic and the processing of candidates' personal data please follow the [link](#)

The University of Warsaw is a winner of the HR Excellence in Research award granted by the European Commission to institutions adhering to the European Charter for Researchers.

