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Recruitment for the Poznań Doctoral School of the Institutes of the Polish Academy of Sciences at the Institute of Bioorganic Chemistry, PAS in Poznan Procedure no. 4/2023/ICHB/PSD

INSTITUTION: Institute of Bioorganic Chemistry, PAS

CITY: Poznan
POSITION: PhD student

POSITIONS AVAILABLE: 1

SCIENTIFIC DISCIPLINE: biological sciences
PUBLICATION DATE: February 1st 2023
APPLICATION DEADLINE: June 30th 2023

IBCH PAS WEBSITE: https://portal.ichb.pl/homepage/

PDS IPAS WEBSITE: https://psd-ipan.ichb.pl/index.php/en/home/

KEY WORDS: chronic kidney disease, atherosclerosis, lymphocytes, phosphoproteomics, mass spectrometry

Principal Investigator: Magdalena Łuczak, PhD, associate professor

Research topic: The role of phosphorylation mechanisms in the progression of atherosclerosis in chronic kidney disease

I. Project description

Chronic kidney disease (CKD) is characterized by a progressive and irreversible loss of kidney function. Surprisingly, the most common cause of death in this group of patients are cardiovascular events resulting from rapidly progressing atherosclerosis. Moreover, the level of this risk increases with the progression of the disease and is many times higher compared to "classic" cardiovascular disease not related to kidney dysfunction. The aim of the project is to explore the mechanisms of rapid acceleration of atherosclerosis in CKD and the involvement of lymphocytes and their interaction with endothelial cells in the progression of these disorders. The influence of uremic toxins on the protein profile and protein phosphorylation processes as well as signaling regulating cell adhesion and migration will be characterized. The research will include functional mechanistic analyzes on in vitro cells, comprehensive molecular studies in the field of proteomics and phosphoproteomics, visualizations using confocal microscopy and flow cytometry, and verification of the results using immunological methods.

Additional information:

- 1. Research and doctoral theses shall be carried out within the project 2021/43/B/NZ2/02796, entitled "Comprehensive phosphoproteomic analysis of NKT cells in the context of the role of phosphorylation mechanisms in progression of atherosclerosis in chronic kidney disease", funded by National Science Center.
- 2. PhD students shall receive a stipend in the gross amount of ca. 4300 PLN (3800 PLN net), for the period of 39 months with possible extension
- 3. PhD students shall be subject to social insurance, pursuant to article. 6 section 1 passage 7b of the act of October 13th, 1998 on the social insurance system (Journal of Laws of 2019, item 300, 303 and 730).

II. Requirements for the candidates:

- 1. Master's degree in one of the following: biology, biotechnology or related field
- 2. Experience in molecular biology experimental techniques (isolation of proteins, DNA, RNA, western blot), knowledge of basic techniques of cell culture *in vitro*.
- 3. Fluency in English (both in speech and in writing)
- 4. Ability to work in a team, good motivation and enthusiasm for scientific work







III. Duties in project:

- 1. Active participation in the experimental part of the project, e.g. isolation and fractionation of biological material using immunotechniques, isolation of proteins and phosphorylated proteins and their analysis, in vitro cell culture, mechanistic functional analyzes of cells, viability tests, proliferation tests, apoptosis assays, tests of adhesion and transmigration. Analyzes using mass spectrometry.
- 2. Analysis of results and participation in the preparation of scientific reports and publications.
- 3. Regular review of scientific literature
- 4. Presentation of obtained results during seminars and conferences
- 5. Care for students

IV. Required documents:

- Application for admission to PDS IPAS along with the consent for processing personal data upon the
 recruitment procedure and a statement on having acknowledged the regulations of recruitment for PDS IPAS,
 using form downloaded from
 https://portal.ichb.pl/wp-content/uploads/2021/10/ICHBApplication_for_admission_202110.docx
- 2. Certified copy of the diploma confirming graduation or a certificate confirming graduation (in the case of diplomas issued by foreign higher education schools, diploma stipulated in article 326, section 2, passage 2 or article 327, passage 2 of the act of July 20th, 2018 - Law on Higher Education and Science (Journal of Laws of 2018, item 1668, as amended), entitling to apply for conferment of a doctoral degree in the state in where such a certificate was issued by the relevant higher education school. In the event when the candidate is not in possession of the aforementioned documents, he/she is obliged to submit them prior to admission to PDS IPAS. information school Additional on foreign diplomas are available at: https://nawa.gov.pl/en/recognition/recognition-for-academic-purposes/applying-for-admission-to-doctoralstudies
- 3. Scientific CV encompassing track record of previous education and employment, information on involvement in scientific activities (participation in student research groups, attendance at scientific conferences, accomplished internships and training, awarded prizes and distinction) and list of publications.
- 4. Cover letter featuring a short description of research interests, achievements and justification for the intention to commence education at the doctoral school.
- 5. Certificates or other documents confirming the degree of proficiency in English, if the candidate is in possession of such materials.
- 6. Contact details of at least one, previous scientific supervisor or another researcher who is entitled to issue an opinion on the candidate.
- V. Applications should be submitted via the eRecruiter portal at

VI. Submission deadline is June 30th 2023

VII. Criteria for evaluation of candidates:

- 1. Candidate's research achievements, pursuant to the grades obtained in the course of studies, scientific publications, awarded scholarships and distinctions resulting from conducting scientific research or student activities or other achievements.
- Candidate's scientific and professional experience, pursuant to participation in conferences, workshops, training sessions and internships, implementation of research and commercial projects, involvement in scientific trusts and societies, international and professional mobility, experience in other sectors, including industry.







- 3. Candidate's knowledge on the following discipline: biological sciences.
- 4. Knowledge of the subject matter described in the recruitment advertisement.

VIII. The recruitment procedure shall be concluded no later than August 14th 2023.

IX. The description of the recruitment process is stipulated in the Regulations of Recruitment for PDS IPAS. Following the recruitment procedure, the unadmitted candidates shall be informed on the number of points obtained at both stages.

Incomplete applications will not be considered.

For additional information please contact the Principal Investigator:

Magdalena Łuczak

e-mail: magdalu@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:

- The Institute of Bioorganic Chemistry, Polish Academy of Sciences, seated in Noskowskiego St. 12/14, 61-704 Poznan; REGON 000849327, NIP 777-00-02-062 is the administrator of the collected personal data (further referred to as the Institute).
- 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 Poznan, or by sending an e-mail to: dpo@ibch.poznan.pl.
- 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.
- 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.
- 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.
- The personal data of the candidates shall not be transferred to any third country.
- The person whose data shall be subjected to processing has the right to:
 - o request access to his/her personal data, and to amend it or delete it, pursuant to articles 15-17 of GDPR;
 - o limit data processing, in the events stipulated in article 18 of GDPR;
 - o data transferring, pursuant to article 20 of GDPR;
 - withdraw consent at any moment, without influencing compliance with the law of the processing that was executed prior to consent withdrawal;
 - o 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.





