

**ICHB PAN RECRUITMENT NO. 2/2025/SN
FOR THE POST-DOC POSITION**

INSTITUTION: Institute of Bioorganic Chemistry, PAS
ADDRESS: 12/14 Noskowskiego Str., 61-704 Poznan
POSITION: post-doc
POSITIONS AVAILABLE: 1
SCIENTIFIC DISCIPLINE: biological sciences
PUBLICATION DATE: **05.03.2025**
APPLICATION DEADLINE: **03.04.2025**
IBCH PAS WEBSITE: <https://portal.ichb.pl/homepage/>

KEY WORDS: colorectal cancer, metastasis, predictive biomarkers, targeted proteomics, validation, mass spectrometry, exosomes
Principal Investigator: Dr. Hab. Anna Wojakowska
Research topic: Proteomic predictors of metastasis in colorectal cancer – a validation study

The project cooperates with the National Cancer Institute - National Research Institute, Gliwice Branch (Dr. Hab. Marcin Zeman).

I. Project description

The main objective of the proposed project is to verify the hypothesis that the presence and levels of specific proteomic components in colon and rectal primary tumors and serum-derived small extracellular vesicles (sEVs) are specifically associated with disease invasiveness, progression, and metastasis risk in CRC. In the proposed study, we will use state-of-the-art targeted proteomic approaches based on mass spectrometry techniques and tissue matrix analysis based on immunohistochemistry, as well as flow cytometry methods, to evaluate proposed multiplex proteomic panels of metastases, including metachronous distant metastases of colon cancer and regional lymph node metastases in colon and rectal cancer. A special effort will be made to characterize and evaluate VCAN and related matrisome proteins as signatures of RLNM in rectal cancer in the primary tumor and proximal margin, as well as serum-derived sEVs. The project will be conducted in two arms, comprising a retrospective (FFPE and fresh frozen primary tumor tissues) and a prospective (serum-derived sEV) arm of the study. Linking VCAN protein levels and other potential proteomic signatures in sEV and primary tumor tissues to disease invasiveness, progression, and metastasis status will enable clinically useful prognostic and predictive signatures to be proposed.

Research shall be carried out within the 2024/53/B/NZ5/02780 NCN project entitled “Proteomic predictors of metastasis in colorectal cancer – a validation study”, funded by the National Science Centre.

II. Requirements for the candidates:

1. Doctoral degree (or equivalent) in biology, biochemistry, biotechnology, chemistry, bioinformatics, or medicine.
2. Experience in laboratory work in exosome biology (isolation and molecular characterization of small extracellular vesicles), knowledge of basic molecular biology, and immunodetection techniques.
3. Knowledge of proteomics, mass spectrometry, liquid chromatography techniques, and issues related to the project topics.
4. Experience in proteomic data analysis, knowledge of R/Python programming languages, and willingness to extend knowledge and skills in data analysis.

5. Knowledge of microscopy and flow cytometry techniques will be an advantage.
6. Very good knowledge of English to enable efficient communication, reading, and preparation of scientific papers.
7. Commitment to assigned tasks and ability to work independently and in a team, high motivation, and enthusiasm for scientific work.
8. Willingness to travel.

*In accordance with the requirements of the National Science Center, only those candidates who have been conferred a PhD degree in the year of employment in the project or within 7 years before 1 January of the year of employment in the project. This period may be extended by a time of long-term (in excess of 90 days) documented sick leaves or rehabilitation leaves granted on account of being unfit to work. In addition, the period may be extended by the number of months of a childcare leave granted pursuant to the Labor Code and in the case of women, by 18 months for every child born or adopted, whichever manner of accounting for career breaks is preferable.

Pursuant to the regulations of the National Science Center, only candidates who have been awarded a PhD degree by another institution than the one planned to employ them at this post or they have completed a continuous and evidenced post-doctoral fellowship of at least 10 months in another institution than the host institution for the project and in another country than the one in which they have been conferred a PhD degree.

III. Duties in the project:

1. Active involvement in the implementation of the project, including planning and conducting experiments, interpreting results, and preparing summaries/reports.
2. Performing experiments on exosomes with the use of molecular biology techniques and LC-MS-based proteomic approaches
3. Performing chemometric, bioinformatic, and functional analyses of the proteomic data.
4. Continuously expanding knowledge in areas relevant to the project.
5. Preparing scientific publications and participating in training courses, seminars, and scientific conferences.

IV. Required documents:

1. Application to the Director of IBCH PAN, containing contact details of previous scientific supervisors or other scientific employees who can give an opinion on the candidate.
2. A copy of the diploma confirming the achievement of the doctoral degree.
3. Scientific CV, containing, among others, information on scientific, didactic, and organizational achievements, including a list of scientific publications, information on management or participation in research projects

V. Applications should be submitted via the eRecruiter portal at

<https://system.erecruiter.pl/FormTemplates/RecruitmentForm.aspx?WebID=ab4608588d6f46629dedc0aff24717d6>

VI. Submission deadline is **03.04.2025**.

VII. After an initial verification based on the submitted documents, selected candidates will be invited to a job interview, during which the candidate recommended for employment will be chosen. The main criteria considered in the selection process will include: (i) scientific achievements (publications), (ii) relevance of previous experience to the research tasks planned within the project, and (iii) experience gained during research internships.

VIII. The recruitment procedure shall be concluded no later than **21.04.2025**

IX. Additional Information:

The position is available from June 2025 and is offered for a period of 12 months, with the possibility of an extension to 48 months. The expected salary is approximately PLN 9,000 gross. Employment will be under the provisions of the Labor Code.

For additional information please contact the Principal Investigator:

Dr. hab. Anna Wojakowska

e-mail: astasz@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:

1. *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).*
2. *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.*
3. *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.*
4. *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.*
5. *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.*
6. *The personal data of the candidates shall not be transferred to any third country.*
7. *The person whose data shall be subjected to processing has the right to:*
 - *request access to his/her personal data, and to amend it or delete it, pursuant to articles 15-17 of GDPR;*
 - *limit data processing, in the events stipulated in article 18 of GDPR;*
 - *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;*
 - *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.

Protection for whistleblowers: *In the case of reporting violations using a dedicated system for whistleblowers, the reporting person's data will be processed in accordance with applicable provisions on the protection of personal data, including the above-mentioned Regulation (EU 2016/679 of 27 April 2016). We ensure confidentiality and protection of the identity of reporting persons, and that their data will not be disclosed without their consent, unless the law provides otherwise.*

Detailed rules regarding the protection of personal data and procedures for reporting violations of the law can be found in our Regulations on internal reporting at the Institute of Bioorganic Chemistry, Polish Academy of Sciences, available at the link: <https://portal.ichb.pl/wp-content/uploads/2024/10/INTERNALREPORTINGREGULATIONS.pdf>