

**ICHB PAN RECRUITMENT NO. 8/2025/SN
FOR POST-DOC POSITION**

INSTITUTION: Institute of Bioorganic Chemistry, PAS
ADDRESS: 12/14 Noskowskiego Str., 61-704 Poznań
POSITION: post-doc
POSITIONS AVAILABLE: 1
SCIENTIFIC DISCIPLINE: biological sciences
PUBLICATION DATE: 30.05.2025
APPLICATION DEADLINE: 03.07.2025
IBCH PAS WEBSITE: <https://portal.ichb.pl/homepage/>

KEYWORDS: RNA structure, RNA-driven human diseases, p53 mRNA, carcinogenesis, RNA structure-function relationship, cryogenic electron microscopy, RNA mutations, therapies against RNA-driven disorders

Principal Investigator: dr Leszek Błaszczyk
Research topic: Global analysis of the structure and function of the mRNA molecule encoding the human tumor suppressor p53, in the context of human health and disease, and the development of new therapeutic approaches.

I. Project description

The aim of this project is comprehensive analysis of the known and uncharacterized RNA structures presented in mRNA molecule encoding one of the most important proteins, tumor suppressor p53. These structures are directly related to human health, disease pathogenesis, and development of new therapeutic approaches. This idea emerged from the observation that although the significance of the p53 tumor suppressor protein in maintaining cellular homeostasis and carcinogenesis is widely recognized, there is a huge gap in understanding how these mechanisms are regulated by the RNA structures located in the p53 mRNA. This limited knowledge hinders our ability to comprehend the crucial p53-dependent physiological processes at the RNA structure level and the development of new therapeutic strategies (e.g. personalized mRNA vaccines).

Research shall be carried out within the OPUS NCN project 2024/53/B/NZ5/01942 entitled “Comprehensive structural and functional analysis of p53 mRNA to identify secondary and tertiary RNA structures important in physiology, carcinogenesis, and development of therapies against human diseases”, funded by National Science Centre.

II. Requirements for the candidates:

The candidate should have:

1. Ph.D. (or equivalent) in biological sciences;
2. Basic knowledge and experience in laboratory work with RNA molecules and proteins (synthesis, purification, integrity and homogeneity analysis, etc.);

3. Experience in RNA secondary structure mapping (SHAPE-Map, DMS-Map, gel retardation, deep sequencing data analysis) and RNA-protein interaction analysis (EMSA, MST, etc.);
4. Ability to plan experiments and conduct analyses and visualize results;
5. Very good command of English to enable efficient communication, reading of professional literature, preparation of publications and presentation of results at national and international conferences;
6. High motivation for further development, self-reliance, good organization of work, communication skills and ability to work in a team;
7. Experience with electron cryomicroscopy and human cell cultures will be considered as an asset, but is not a prerequisite.

*According to NCN requirements, only individuals who obtained a doctoral degree no earlier than 7 years before the year of employment in the project may be admitted. This period may be extended by the time spent on long-term (over 90 days) documented sickness benefits or rehabilitation benefits due to incapacity for work. Additionally, the period may be extended by the number of months spent on leave for the care and upbringing of children, as specified under the Labor Code. For women, this period may also be increased by 18 months for each born or adopted child if this method of accounting for breaks in the scientific career is more advantageous.

Furthermore, according to NCN requirements, individuals who obtained a doctoral degree at an institution other than the Institute of Bioorganic Chemistry of the Polish Academy of Sciences, or those who earned the degree at ICHB PAN but completed a continuous, documented postdoctoral internship of at least 10 months at an institution other than the project-implementing entity and in a country different from where the doctoral degree was obtained, may be admitted.

III. Duties in the project:

1. Design, synthesis and purification of RNAs and proteins for structural and functional studies.
2. In vitro and in vivo RNA structure mapping experiments using SHAPE-Map, DMS-Map or equivalent method and analysis of results.
3. RNA preparation and RNA tertiary structure analysis by electron cryomicroscopy.
4. Active involvement in the implementation of the project, i.e. planning and conducting experiments and developing and interpreting results, preparing summaries/reports, scientific publications, supervising the work of students/doctoral students, presenting results at seminars, scientific meetings and conferences.

IV. Required documents:

1. Application to the Director of IBCH PAS, 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=b6a41f25f3414d379b36fffb48928879>

VI. Submission deadline is **July 3, 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 **July 18, 2025**.

IX. Additional Information:

The position is available immediately (depending on the competition results) and is offered for a period of 48 months, with the possibility of extension. The expected salary is approximately PLN 9000 gross. Employment will be in accordance with the provisions of the Labor Code.

For additional information please contact the Principal Investigator:

dr Leszek Błaszczyk

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LinkedIn: www.linkedin.com/in/leszek-blaszczyk-43505121b

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>