

**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. 25/2020/ICHB/PSD**

INSTITUTION: Institute of Bioorganic Chemistry, PAS
CITY: Poznan
POSITION: PhD student
POSITIONS AVAILABLE: 1
SCIENTIFIC DISCIPLINE: biological sciences
PUBLICATION DATE: 05.11.2020 r.
APPLICATION DEADLINE: 04.12.2020 r
IBCH PAS WEBSITE: <http://www.ibch.poznan.pl>
PDS IPAS WEBSITE: <http://www.psd-ipan.ibch.poznan.pl/>

KEY WORDS: cellular methylation reactions, antibiotic resistance, biocrystallography

Research topic: Towards a new class of therapeutics targeting enzymes from human pathogenic microorganisms.

Principal Investigator: dr hab. Krzysztof Brzeziński

I. Project description

The project focuses on new mechanism of enzyme inhibition based on targeting the protein dynamics. We foresee that targeting enzyme dynamics will be a promising strategy for the development of new class of inhibitors that affect conformational changes of the enzyme during catalytic cycle. To develop new routes for enzyme inhibition through targeting the enzyme dynamics, a broad range of methods from the intersection of microbiology (including NGS), cell biology, biochemistry, crystallography and structural chemistry must be applied.

Additional information:

1. Research and doctoral theses shall be carried out within the SONATA BIS 8 nr 2018/30/E/NZ1/00729 grant entitled "Inhibition of *S*-adenosyl-L-homocysteine hydrolase from *Pseudomonas aeruginosa* by targeting the enzyme dynamics", funded by the Polish National Science Centre.
2. PhD students shall receive a stipend in the gross amount of ca 3700 PLN (2800 PLN net), for the period of 40 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. A M.Sc. in biology or chemistry (or related fields) or equivalent experience according to the criteria listed in article 186 of the act of July 20th, 2018 – Law on Higher Education and Science (Journal of Laws of 2018, item 1668, as amended)
2. Laboratory hands-on experience in molecular biology and/or biochemistry. Additional experience in microbiology and/or bioanalytical methods (including high-throughput experiments) would be a plus.
3. Excellent written and oral communication skills in English
4. Enthusiasm for experimental work.
5. Completion of an internship at research facility (e.g. university, research institute etc.) would be a plus.

III. Duties in project:

1. Planning and executing experiments within the research project, analyze and interpret the results, especially:
 - Evaluation of fragment and macrocycle libraries for *in vivo* and *in vitro* inhibition of *S*-adenosyl-L-homocysteine hydrolase from *P. aeruginosa* (PaSAHase).
 - Influence of discovered inhibitors on natural variants of PaSAHase.
 - Evaluation of antimicrobial activity and cytotoxicity against human cells
 - NGS of natural variants of *P. aeruginosa*
 - Structural study of enzyme-inhibitor complexes using methods of biocrystallography.
2. Prepare the research outcomes in the form of reports, seminars, posters and manuscripts of publication.
3. Presenting the results at national and international conferences.

IV. Required documents:

1. 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://www.ibch.poznan.pl/uploads/studium%20doktoranckie/2019/ICHB%20-%20Application%20for%20admission%20\(2019-09\).docx](https://www.ibch.poznan.pl/uploads/studium%20doktoranckie/2019/ICHB%20-%20Application%20for%20admission%20(2019-09).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. Additional information on foreign school diplomas are available at: <https://nawa.gov.pl/en/recognition/recognition-for-academic-purposes/applying-for-admission-to-doctoral-studies>
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

<https://system.erecruiter.pl/FormTemplates/RecruitmentForm.aspx?WebID=cc6852298f8042779fb97459d19196a8>

VI Submission deadline is **04.12.2020**.

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.
2. 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 **04.01.2021**.

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:

dr hab. Krzysztof Brzeziński

e-mail: kbrzezinski@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:*
 - *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.