

**Recruitment for the Poznań Doctoral School of the Institutes of the Polish Academy of Sciences at the
Institute of Bioorganic Chemistry, PAS in Poznań
Procedure no. 26/2022/ICHB/PSD**

INSTITUTION: Institute of Bioorganic Chemistry, PAS
CITY: Poznań
POSITION: PhD Student
POSITIONS AVAILABLE: 1
SCIENTIFIC DISCIPLINE: biological sciences
PUBLICATION DATE: 5/07/2022
APPLICATION DEADLINE: 10/08/2022
IBCH PAS WEBSITE: <https://portal.ibch.poznan.pl/homepage/>
PDS IPAS WEBSITE: <https://psd-ipan.ichb.pl/index.php/en/home/>

KEY WORDS: structural variation, deletions, insertions, duplications, symbiotic nitrogen fixation, transposable elements, DNA methylation

Research topics: Investigating the influence of epigenetic factors and structural variation of the plant genome on the formation of symbiotic root nodules.

Principal Investigator: Dr. Agnieszka Żmieńko, Department of Plant Genomics, IBCh PAS

I. Project and job description:

The offered PhD student position is closely related to the implementation of the research project entitled "The role of transposable elements and epigenetic regulation of gene expression in *Medicago truncatula* root nodules development", financed by the National Science Center. The first goal of this project is to describe the intraspecific structural variation of the legume *Medicago truncatula* genome, by identifying copy number, indel and transposable element variants that differentiate natural ecotypes. The second aim of the project is to investigate how epigenome changes are related to changes in gene expression during the development of symbiotic root nodules, and whether differences in the location of transposons affect these processes. The PhD student will be involved primarily in bioinformatic analyses (processing of the Illumina sequencing and nanopore sequencing data, identification of structural variants, differential analysis of gene expression) and to a lesser extent in experimental work (plant cultivation, analysis with molecular tools, preparation of sequencing libraries). In addition, he/she will be responsible for result analysis, preparation of scientific publications and conference reports as well as keeping to date with the scientific literature related to the topic. We offer support scientific career development and the opportunity to work in modern research laboratories, within a small, dynamic team formed by biologists and bioinformaticians, working closely together.

Additional information:

- The position will be created under the PRELUDIUM BIS-3 project No. 2021/43/O/NZ2/01626, funded by the National Science Center.
- The PhD student will receive a PRELUDIUM BIS doctoral scholarship for a period of 48 months, subject to positive evaluation.
- The doctoral scholarship will be paid in the amount of:
by approx. PLN 3,600 net (PLN 4,200 gross) by month of the mid-term evaluation of PhD student in PDS,
by approx. PLN 4,300 net (PLN 5,000 gross) after the month of the mid-term evaluation of PhD student in PDS.

- Employment shall start on October 1, 2022.
- PhD student 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).
- In accordance with the project requirements, the PhD student will undertake to:
 - carry out the education program at the doctoral school, which shall be completed with the doctoral student obtaining the doctoral degree no later than 12 months after the completion of the project.
 - implement an individual research plan, consistent with the research project being carried out,
 - apply for a call conducted by the National Agency for Academic Exchange (NAWA) under the conditions specified in Annex 7 to the Cooperation Agreement between NAWA and the NCN of September 12, 2019, to cover 4-month internship at the Institute of Bioinformatics, the University of Münster in Germany, in a competition, and after obtaining the funding, completing this internship during the project.

II. Requirements for the candidates:

1. Does not hold a doctoral degree and is currently not a participant in a doctoral school.
2. Has a master's degree in bioinformatics, biology or related fields, or meets the conditions specified in Art. 186 paragraph 2 of the Act of July 20, 2018, Law on Higher Education and Science (Journal of Laws of 2018, item 1668, as amended).
3. Has knowledge about the organization of eukaryotic genomes
4. Has theoretical knowledge of the basic bioinformatics and of high-throughput analysis of DNA or RNA sequencing data.
5. Is familiar with Linux environment and Python or R / Bioconductor programming language.
6. Is responsible and well-organized, knows how to plan his/her own work and to document the research.
7. Is willing to acquire new knowledge and skills.
8. Knows English sufficiently to allow reading specialist literature on molecular biology, genetics and bioinformatics.
9. Is cooperative.

III. Duties in project:

1. Planning and carrying out experimental work
2. Planning and conducting bioinformatics analyzes
3. Collecting, processing and archiving the results.
4. Participation in the preparation of manuscripts.
5. Presentation of the results at seminars and scientific meetings.
6. Mastering the experimental methods and tools necessary for the implementation of research tasks in the project
7. Applying to the National Agency for Academic Exchange (NAWA) for financing a foreign internship specified in the project, and after obtaining its financing, completing the internship during the Preludium BIS project

IV. Required documents:

1. An application for admission to PSD IPAN with consent to the processing of personal data for the purposes of recruitment and a declaration of reading the rules of recruitment to PSD IPAN, made on the form available at: http://www.psd-ipan.ibch.poznan.pl/wp-content/uploads/2021/10/ICHBApplication_for_admission_202110.docx
2. A copy of the diploma confirming graduation or a certificate of graduation (in the case of diplomas issued by foreign universities, the diploma referred to in Article 326 (2) (2) or Article 327 (2) of the Act of July 20, 2018.
 - Law on higher education and science (Journal of Laws of 2018, item 1668, as amended), giving the right to

apply for a doctoral degree in the country in which the higher education system is operated by the university that issued it. If the candidate does not have the above-mentioned documents, he / she is required to submit them before being admitted to the PSD IPAN Additional information about foreign diplomas is available on the website.

<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. Optionally - 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=8ccb6a65bbb54233b80cfa59336eff8>

VI. The deadline for submitting the application is 10/08/2022.

VII. Following the initial verification on the basis of the submitted documents, the selected candidates may be invited for an interview. The evaluation criteria will include competences to carry out the project research tasks and the track of the candidate's scientific achievements

VIII. The recruitment procedure shall be concluded no later than 09/09/2022.

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. Agnieszka Żmieńko

Department of Plant Genomics IBCh PAS

ECBiG, Poznan University of Technology

ul. Piotrowo 2, Poznań

e-mail: akisiel@ibch.poznan.pl

tel. +48 616653100

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.