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. 2/2023/ICHB/PSD

INSTITUTION:	Institute of Bioorganic Chemistry, PAS
CITY:	Poznan
POSITION:	PhD student
POSITIONS AVAILABLE:	1
SCIENTIFIC DISCIPLINE:	Biological sciences
PUBLICATION DATE:	16.01.2023
APPLICATION DEADLINE:	16.02.2023
IBCH PAS WEBSITE:	https://portal.ichb.pl/homepage/
PDS IPAS WEBSITE:	https://psd-ipan.ichb.pl/index.php/en/home/

KEY WORDS: mass spectrometry, metabolomics, proteomics, molecular biology of plants, biotic and abiotic stresses of plants

Principal Investigator: Dr Anna Piasecka

Research topic: Multiomic analyzes in the field of metabolomics, proteomics and transcriptomics of plants under abiotic and biotic stresses

I. Project description

Cereals are of great agronomic importance. However, annual losses of their crops are associated with drought and fungal diseases. Fusarium shoot rot (FCR) caused by the mycotoxinogenic fungus Fusarium pseudograminearum is one of the most dangerous fungal diseases. The currently observed climate changes with frequent periods of drought are exacerbating the occurrence of FCR, leading to severe reductions in yields worldwide. Barley (Hordeum vulgare) cultivars with different drought tolerance will be used to search for molecular markers of cereal resistance to combined stresses. Studies on interactions of plant with environment are undoubtedly one of the most interdisciplinary projects of plant biology. Combining data from chemistry, plant physiology, mycology, metabolomics, transcriptomics, mathematics and statistics will allow us to explain and illustrate metabolic changes in plants during combined stress. To our knowledge, such detailed and comprehensive studies in this field have not yet been conducted. The plants - fungal pathogen relationships during drought are interesting also from the point of view of the creation an ideal model for the development and standardization of high throughput multiomic research. Comprehensive knowledge describing plant response to combined stress offer tremendous potential for modern plant breeding struggling with changes in environment. As final output of project will be essential data for the development of food crops better equipped for extreme environmental conditions.

Additional information:

1. Research and doctoral theses shall be carried out within the 2022/45/B/NZ9/03572 project, entitled "Description of the key mechanisms of coordination and prioritization of barley's response to simultaneous biotic and abiotic stresses - a multiomic approach", funded by National Science Center, Poland.
2. PhD students shall receive a stipend in the gross amount of ca 4300 PLN (3800 PLN net), for the period of 48 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:

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HR EXCELLENCE IN RESEARCH

KATEGORIA
A+

KNOW
Krajowy Naukowy
Ośrodek Wiodący
2014-2018
Leading National Research Centre

1. Master's degree in biology or related fields, or meeting the conditions indicated in Art. 186 sec. 2 of the Act of July 20, 2018. Law on Higher Education and Science (Journal of Laws of 2018, item 1668, as amended).
2. Experience in molecular biology techniques and/or research methods used in the biochemistry of plants and fungi.
3. Experience in processing and statistical analysis of scientific data.
4. Experience in working with mass spectrometry.
5. Scientific achievements (publications, conference presentations, scientific internships) will be an additional advantage.
6. Ability to independently solve research problems, communication skills, ability to work in a team
7. Good knowledge of English in speech and writing.

III. Duties in project:
1. Planning and conducting experiments within the project in the field of plant metabolomics, proteomics and genomics.
2. Analysis of results and involvement in the preparation of scientific publications.
3. Browsing and analyzing scientific articles on topics relevant to the project.
4. Presentation of results at seminars and 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://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. 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=0ef21c5916404d76a4c2d738733349bc

VI. Submission deadline is **16.02.2023**

VII. Criteria for evaluation of candidates:

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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 latter than **30.03.2023.**

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:
Dr Anna Piasecka
e-mail: apiasecka@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.