

**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. 12/2023/ICHB/PSD**

INSTITUTION: Institute of Bioorganic Chemistry, PAS  
CITY: Poznań  
POSITION: PhD student  
POSITIONS AVAILABLE: 1  
SCIENTIFIC DISCIPLINE: biological sciences  
PUBLICATION DATE: **19.04.2023**  
APPLICATION DEADLINE: **22.05.2023**  
IBCH PAS WEBSITE: <http://www.ibch.poznan.pl>  
PDS IPAS WEBSITE: <http://www.psd-ipan.ibch.poznan.pl/>

**Key words: microbiome, NGS, bioinformatics**

**Research topic:** Urban air dust is a complex compound that can have harmful effects on human health and the environment. With the progress of urbanization and population growth in cities, the problem of air pollution is becoming more and more urgent. Air dust is also a reservoir of many different microorganisms that are a potential threat to human health. These microorganisms live in the air and move from one place to another, which can lead to the spread of infectious diseases.

The presence of microorganisms in urban air is inevitable and although they make up only a small percentage of air pollutants, their presence can have an impact on air quality and the health of urban residents. Therefore, research on the composition of urban air dust and its potential impact on human health and the environment is extremely important and up-to-date.

This project aims to study microorganisms living in urban air dust, to analyze the types and amounts of microorganisms present in dust and their potential impact on human health and the environment. We will use WGS methods to analyze the samples.

**Principal Investigator: Anna Philips, PhD**

### **I. Project description**

The main objective of the project is to determine the types and amounts of microorganisms present in urban air dust and their potential impact on human health and the environment. In order to carry out the tests, air dust samples will be collected from various places in the city, including at the infectious diseases hospital. An infectious diseases hospital is a place where there may be an increased risk of infection and the spread of diseases, so studying the composition of the microbiome in the vicinity of such a place can provide valuable clues about the types of microorganisms present in the air and their potential impact on human health. Another goal of the project is to analyze the correlation between the composition of the microbiome and the chemical composition of air dust. Many factors, such as the type and source of pollutants, can affect the composition of airborne dust and the microbiome. Analyzing the correlation between these two components can help us understand the complex relationship between microorganisms and chemical pollutants in urban air.

**Additional information:**

1. Research and doctoral theses shall be carried out within OPUS 21 (2021/41/B/NZ9/03765) research project entitled: *Airborne microbiome - characterization of microorganisms inhabiting particulate matter of urban areas and their impact on human health*. funded by National Science Center.
2. PhD students shall receive a stipend in the gross amount of ca. 4 300 PLN (3 800 PLN net), for the period of 30 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. Holds a Master's degree in biology, biotechnology, computational biology or related fields.
2. Basics of programming in R, Python or other programming language.
3. Basic knowledge of bioinformatics techniques.
4. Ability to work in a team and good organization of own work
5. Good command of spoken and written English.

**III. Duties**

- Analysis of NGS data using bioinformatics software
- Performing statistical analyzes of data and correlations
- Active involvement in the implementation of the project and cooperation with the research team
- Participation in the preparation of manuscripts.
- Presentation of results at seminars and scientific meetings.

**IV. Required documents**

1. Application for admission to Poznan PHD School of Institutes of Polish Academy of Sciences (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](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 does not have 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, and a potential list of publications.
4. A 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=e4fad5dac2ac4385a9d2a575add26334>

VI. Submission deadline is **May 22<sup>nd</sup>, 2023**.

**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 **June 23<sup>rd</sup>, 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:

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## **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](mailto: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.*