

**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. 9/2021/ICHB/PSD**

INSTITUTION: Department of Non-coding RNAs, IBCH, PAS  
CITY: Poznań  
POSITION: PhD student  
POSITIONS AVAILABLE: 1  
SCIENTIFIC DISCIPLINE: Biological sciences  
PUBLICATION DATE: 08.07.2021  
APPLICATION DEADLINE: 07.08.2021  
IBCH PAS WEBSITE: <http://www.ibch.poznan.pl>  
PDS IPAS WEBSITE: <http://www.psd-ipan.ibch.poznan.pl/>

KEY WORDS: non-coding RNAs, circRNAs, lncRNAs, single-cell RNA sequencing, pituitary gland.

**Research topic:** Non-coding RNAs at single cell resolution in the pituitary gland and their role in the regulation of gene expression.

**Principal Investigator:** dr Monika Piwecka.

## I. Project description

The main aim of the project is to investigate and provide insights on circRNA and lncRNA biology and their interactions with miRNAs and proteins in the pituitary gland. We will examine circRNA / lncRNA expression patterns in relation to individual types of secretory cells, their location and function in pituitary gland cells. Particularly, we want to study in-depth the RNA regulatory network composed of the circRNA Cdr1as, lncRNA Cyrano with microRNAs miR-7 and miR-671, which has been characterized in the mammalian brain as related to the proper functioning of neurons [Piwecka et al. 2017, *Science*]. As a research model we will use cell lines and tissues isolated from mice.

We are a young and dynamically developing research group interested in how non-coding RNAs affect the regulation of gene expression and molecular processes in neurons and glial cells in the brain and the neuroendocrine system. To this end, we combine the forces of molecular, cellular and systems biology along with neurobiology. We use new technologies such as single-cell RNA sequencing (scRNA-seq), single-molecule RNA imaging, and loss-of-function studies based on CRISPR-Cas13 technology. We develop new methods of studying RNA-protein interactions, as well as use traditional methods of molecular and cell biology, biochemistry, transcriptomics and proteomics.

Our website: <https://portal.ichb.pl/en/zaklad-niekodujacych-rna-en-2>

## Additional information:

1. The research and doctoral thesis will be carried out within OPUS-19 grant 2020/37/B/NZ3/03633, entitled “Non-coding RNAs at single cell resolution in the pituitary gland and their role in the regulation of gene expression”, funded by National Science Centre.
2. PhD students shall receive a stipend in the gross amount of ca. 4300 PLN (3800 PLN net), for the period of 41 months.
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. MSc degree in molecular biology or related sciences (biotechnology, biochemistry, bioinformatics, etc.), or fulfilling the conditions stipulated in article 186, section 2 of the act of July 20th, 2018 Law on Higher Education and Science (Journal of Laws of 2018, item 1668, as amended).
2. Experience in laboratory work, encompassing biology and/or biochemistry. Previous experience either in neuroscience or systems biology approaches would be of an additional value.
3. Enthusiasm for experimental work.
4. High working level of spoken and written English.

## III. Duties in the project:

1. Analysis of ncRNA expression patterns in tissues and cells of pituitary gland with molecular/cellular/systems biology methods.
2. Loss-of-function studies of selected ncRNAs in cell culture.
3. Data analysis and interpretation, presenting the results during internal seminars, national and international conferences.
4. Preparation of data for a publication.

## 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=46446bf7b598453f8148ca903733995e>

## VI. Submission deadline is **07/08/2021**.

## 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 **07/09/2021**.

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 Monika Piwecka

e-mail: [mpiwecka@ibch.poznan.pl](mailto:mpiwecka@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](mailto: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.*