

**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. 15/2022/ICHB/PSD**

INSTITUTION: Institute of Bioorganic Chemistry, PAS  
CITY: Poznan  
POSITION: PhD student  
POSITIONS AVAILABLE: 1  
SCIENTIFIC DISCIPLINE: biological sciences  
PUBLICATION DATE: May 17, 2022  
APPLICATION DEADLINE: July 24, 2022  
IBCH PAS WEBSITE: <https://portal.ibch.poznan.pl/homepage/>  
PDS IPAS WEBSITE: [http://www.psd-ipan.ibch.poznan.pl/?page\\_id=355&lang=en](http://www.psd-ipan.ibch.poznan.pl/?page_id=355&lang=en)

**KEY WORDS:** human neurological-neuromuscular diseases; myotonic dystrophy type 2 (DM2); alternative splicing; recursive splicing; RNA sequencing; intron retention; lariat; circular RNA

Principal Investigator: Marzena Wojciechowska, PhD

Research topic: pathogenesis of human neuromuscular disorders

### **I. Project description**

DM2 is one of the most common forms of muscle dystrophy associated with expansional instability of CCTG tetranucleotide repeats located in a large 12k nt intron 1 (i1) of CNBP. Conventional model of splicing suggests that nearly all introns are removed as single units via one cycle of spliceosome assembly and splicing. However, examples of large introns excision via multiple recursive splicing (RS) events have recently been reported in human genes. In this project we will test the hypothesis that i1 of CNBP is spliced via non-canonical multiple RS events using unannotated splice sites. The recognition of RS sites by the spliceosome apparatus is perturbed in DM2 due to functional depletion of splicing factors reported in patients and attributed to the global aberrant alternative splicing. This in turn causes the i1 retention and its aberrant turnover detected in DM2 cells and tissues as nuclear RNA foci. The outcome of this project will have multidimensional and far-reaching impact since it will deliver a novel view of splicing regulation in humans and will increase our understanding of the causes and fundamental mechanisms of DM2 pathogenesis.

### **Additional information:**

1. Research and doctoral theses shall be carried out within the **Preludium Bis 3** project (UMO-2021/43/O/NZ1/01590) entitled “*Non-canonical pre-mRNA splicing participates in the editing of CNBP mutant allele in myotonic dystrophy type 2 (DM2)*”, funded by National Science Center.
2. PhD students shall receive a stipend in the amount of:
  - ca 3 600 PLN net (4 200 PLN gross), by month of the mid-term evaluation of PhD student in PDS,
  - ca 4 300 PL net (5 000 PLN gross), after the month of the mid-term evaluation of PhD student in PDS.
3. The employment will start October 1<sup>st</sup>, 2022
4. 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, bioinformatics, biotechnology or related fields.
2. Knowledge of molecular biology techniques, i.e.: RT-PCR, primer design, cell culture, isolation and purification of RNA and proteins.
3. Interest in broadening knowledge; ability to work both independently and in a team.
4. Good command of spoken and written English.

### III. Duties in project:

1. Active involvement in the implementation of the project.
2. Participation in manuscripts preparations.
3. Presentation of the results in seminars and scientific meetings.
4. Applying to the National Agency for Academic Exchange (NAWA) for financing a foreign internship<sup>4</sup>, lasting 3-6 months, and after obtaining its financing, implementation of the internship during the Preludium Bis project.

### 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 [http://www.psd-ipan.ibch.poznan.pl/wp-content/uploads/2021/10/ICHBApplication\\_for\\_admission\\_202110.docx](http://www.psd-ipan.ibch.poznan.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=a4723edb84774ffe86479b76fbb1721b>

VI. Submission deadline is **July 24<sup>th</sup>, 2022**.

### 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 **August 23<sup>rd</sup>, 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:

**Marzena Wojciechowska, PhD**

**Department of Rare Diseases, IBCH PAS**

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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:*

- *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.*