



**INSTITUTE
OF HUMAN GENETICS**
POLISH ACADEMY OF SCIENCES

“OPEN PHD POSITION”

(10/2024/IGC/PSD) Announcement concerning recruitment to the Poznań Doctoral School of the Institutes of the Polish Academy of Sciences (PDS IPAS) as part of a research project

The Director of the Institute of Human Genetics, Polish Academy of Sciences (IHG PAS), and leader of the current research project, **Agnieszka Dzikiewicz-Krawczyk, PhD**, professor IHG gives notice of an open competition to be held for the position of

**PhD student-scholarship holder at the Poznan Doctoral School of Institutes PAS,
Department of Molecular Pathology IHG PAS**

Number of vacancies: **1**

I. General information

1. Department in which candidate will work: **Department of Molecular Pathology**
2. Discipline: **Medical Science**
3. Planned remuneration: scholarship to the value of **4300 PLN gross/per month (3800 PLN net /per month)** before the mid-term evaluation
4. Period of involvement in research project: **48 months**
5. Deadline for submission of documents: **17/07/2024**
6. Date of announcement: **18/06/2024**

The proposed study will be carried out within the **SONATA BIS 2023/50/E/NZ1/00233**

PI – Agnieszka Dzikiewicz-Krawczyk, PhD, professor IHG

Project title: ***“Targeting IGH enhancer RNAs as a therapeutic approach in B-cell lymphoma”***

7. Description of research:

The characteristic feature of several B-cell lymphomas are translocations involving the immunoglobulin heavy chain (IGH) locus and oncogenes such as MYC, BCL2, BCL6, CCND1. As a result, the translocated oncogenes are placed under the control of IGH enhancers (E μ , 3'RR1 and 3'RR2) which drive their expression and lymphomagenesis. In our previous study we identified exact regions in IGH enhancers critical for lymphoma cell growth and confirmed transcription of enhancer RNAs (eRNA) from these regions in cell lines and patients.

The goal of this project is to develop a novel therapeutic approach for B-cell lymphoma based on targeting the IGH enhancer RNA. To this end, we will conduct a high-throughput screening for small molecules binding to the eRNA transcribed from the essential region in the IGH enhancers. Next, hit compounds will be validated for their effect on lymphoma cell growth and potential toxicity towards normal cells. Finally, selected compounds will be assessed in vivo in mouse xenograft models.

Results of our project will indicate novel therapeutic opportunities for treatment of B-cell lymphomas. Our strategy will universally target IGH translocations, regardless of the oncogene involved. This may be especially relevant for the group of so-called double hit B-cell lymphoma patients (with two oncogenes translocated to IGH), who in general respond poorly to current treatment regimens. Results of this pre-clinical proof of concept study will provide novel B-cell lymphoma therapeutics with a direct translation to clinical studies.

Keywords:

IGH, B-cell lymphoma, enhancer, eRNA, small molecule

Predicted tasks in the project:

- active participation in the realization of project goals and analysis of obtained results
- presenting at seminars and conferences, participation in writing scientific papers
- supervision of students

Opportunities:

- training in a challenging, competitive and advanced research using state-of-the-art technologies
- working with a team of engaged science enthusiasts
- participation in national and international trainings, conferences and workshops
- chance for a brilliant scientific career

II. Requirements for candidates

1. Master degree in molecular biology, biotechnology, genetics, medicine or related field.
2. Background in molecular biology.
3. Experience in RNA, cell culture and molecular biology techniques.
4. Very good written and oral communication skills in English.
5. Motivation and enthusiasm to work in science.
6. Good collaborative and team work skills.

III. Required documents

1. CV, including research achievements.
2. Cover letter.
3. A copy of the diploma confirming completion of a Master's Studies Programme, or a certificate of their completion (in the case of diplomas issued by foreign institutions, the diploma referred to in article 326 para.2 point 2 or article 327 para. 2 of the Act of 20 July 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 University of Higher Education issuing the diploma operates. If the candidate does not have the above-mentioned documents, s/he is obliged to provide them before being admitted to Poznań Doctoral School IPAS. More information about foreign diplomas is available at: <https://nawa.gov.pl/en/recognition/recognition-for-academic-purposes/applying-for-admission-to-doctoral-studies>.

4. Contact details of at least one current supervisor or other researcher who has previously agreed to issue an opinion about the candidate. The opinion should not be included in the application.
5. Consent for the processing of candidate's personal data for the purposes of the recruitment process:
[http://bip.igcz.poznan.pl/wp-content/uploads/2018/10/Zgoda-rekrutacja-Consent for the processing.pdf](http://bip.igcz.poznan.pl/wp-content/uploads/2018/10/Zgoda-rekrutacja-Consent%20for%20the%20processing.pdf)
6. Application for admission to the Poznań Doctoral School IPAS, together with a consent to the processing of personal data for the purposes of the recruitment procedure plus a statement on his/her familiarity with recruitment regulations for the Poznań Doctoral School (Application is available on: <http://igcz.poznan.pl/en/phd-studies/poznan-doctoral-school-of-institutes-of-pas/recruitment-regulations-for-psd-ipan/>)
7. Certificates or other documents indicating level of English language proficiency, if the candidate possesses any.

IV. Criteria for the evaluation of candidates

1. Candidate's scientific and professional experience based on his/her participation in conferences, workshops, training courses and internships; participation in research and commercial projects; involvement in scientific societies and associations; international and professional mobility; experience in other sectors, including industry.
2. Background in molecular biology.
3. Candidate's scientific achievements, based on study grades, scientific and popular science publications, scholarships; prizes and awards resulting from research carried out; student activity or other achievements.
4. Communication skills in English.

V. Announcement of results

Up to 30 days after the deadline of documents submission.

VI. Additional conditions

1. A condition of involvement in the project is participation in the Institutes of PAS (after passing the recruitment procedure). Details of the studies are available on [https://igcz.poznan.pl/en/phd-studies/poznan-doctoral-school-of-institutes-of-pas/Fulfillment of requirements as set out in the Regulations for Granting Scholarships in Research Grants Financed by the National Research Center](https://igcz.poznan.pl/en/phd-studies/poznan-doctoral-school-of-institutes-of-pas/Fulfillment%20of%20requirements%20as%20set%20out%20in%20the%20Regulations%20for%20Granting%20Scholarships%20in%20Research%20Grants%20Financed%20by%20the%20National%20Research%20Center) are available on ([https://www.ncn.gov.pl/sites/default/files/pliki/uchwaly-rady/2019/uchwala25 2019-zal1 ang.pdf](https://www.ncn.gov.pl/sites/default/files/pliki/uchwaly-rady/2019/uchwala25%202019-zal1_ang.pdf)).

VII. Additional information

Address to which documents should be submitted by e-mail to the Secretary for Scientific Purposes:
phdstudies@igcz.poznan.pl.

Please, include the number of the announcement: **(10/2024/IGC/PSD)** in the title of your e-mail.

Additional information is available from:

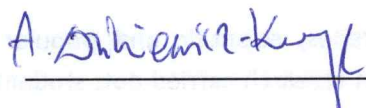
- Agnieszka Dzikiewicz-Krawczyk: agnieszka.dzikiewicz-krawczyk@igcz.poznan.pl,
- Secretary for Scientific purposes: phdstudies@igcz.poznan.pl

Application sent after the deadline will not be considered.

Once the recruitment process is finished, unsuccessful candidates will be informed about the scores they have obtained at each step of evaluation.

Refusal of admission to PDS IPAS takes place by way of an administrative decision. The candidate is entitled to submit a request for reconsideration of the decision to the director of the institute concerned.

Project Leader



Director of the Institute

DIRECTOR
Institute of Human Genetics
Polish Academy of Sciences
