

[20/2025/IGCz/PSD] Announcement concerning recruitment to the Poznań Doctoral School of the Institutes of the Polish Academy of Sciences (PDS IPAS) as part of Implementation doctorate

The Director of the Institute of Human Genetics, Polish Academy of Sciences (IHG PAS), and leader of the current research project, Tomasz Kolanowski, PhD 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 would work: Department of Molecular pathology
- 2. Discipline: Medical Science
- 3. Period of involvement in research project: 48 months
- 4. Deadline for submission of documents: 04.09.2025 r.
- 5. Date of announcement: 06.08.2025 r.

The proposed study will be carried out within the

PI – Tomasz Kolanowski, PhD

Project title: "Development of a new generation of CAR adoptive therapy based on ATMP products" DWD/9/0366/2025

II. Concise description of research:

RESEARCH PROJECT OBJECTIVES / RESEARCH HYPOTHESES

The aim of the implementation doctorate is the development of advanced therapy medicinal product (ATMP) based on T lymphocytes containing the next generation chimeric CAR receptor (ngCAR). CAR-T therapies are currently used with high effectiveness in patients with hematologic malignancies, however, some of them experience problems with treatment effectiveness related to safety and disease relapses due to, among others, exhaustion of T lymphocytes. It is proposed to develop a product based on ngCAR, imitating the natural response of T lymphocytes in the presence of a specific antigen, to avoid excessive activation of cells and reducing the likelihood of occurrence of cytokine release syndrome and premature exhaustion of T cells. Additionally, the project assumes technological development that will allow for increasing production capabilities and optimizing the manufacturing process of the developed medicinal product.

Keywords:

ngCAR therapy, hematological malignancies, ATMP

Predicted tasks in the project:

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

Opportunities:

- work in an international research team, highly experienced in many molecular and cellular methodologies, and enthusiastic about conducting scientific research,
- participation in research training, international conferences and workshops.

III. Requirements for candidates

- 1. Master's degree in molecular biology, chemistry, biotechnology, genetics, medicine or related field,
- 2. Knowledge of molecular biology and genetic engineering as well as biology of stem cells and cancer,
- 3. Knowledge of molecular biology techniques: PCR, RT-qPCR, Western Blot, ELISA
- 4. Knowledge of genetic engineering techniques: designing of inserts for expression vectors and reporter assays,
- 5. Knowledge of the basics of working with cell lines: cell lines cultures, cell lines transfection,
- 6. Experience in work with DNA and RNA: extraction of nucleic acids,
- 7. Experience in work in cGMP standards (B class laboratory)
- 8. Very good written and oral communication skills in English,
- 8. Motivation and enthusiasm about working in the field of science,
- 9. Good collaborative and team work skills.

IV. 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
- 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.

V. Criteria for the evaluation of candidates

- 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
- 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. Selected candidates will be invited for interview.

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/

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: [20/2025/IGCz/PSD] in the title of your e-mail.

Additional information is available from:

- Leader of the project: prof. IGC PAN, Tomasz Kolanowski, PhD tomasz.kolanowski@igcz.poznan.pl
- the Secretary for Scientific purposes: phdstudies@igcz.poznan.pl
- Research and doctoral dissertation will be implemented in the frame of the Ministry of Education and Science programme – Implementation doctorate established on 08 April 2025 in the communication on establishing "Implementation doctorate IX edition" and call for application.
- A Phd student will receive a fellowship of about 3 935 zł till the month of mid-term assessment and about 5 997 zł – after the month when the mid-term assessment will be performed.
- A Phd student will have covered social security costs as referred to in art. 6 ust. 1 point 7b of the Act of 13 October 1998 on the social insurance system (Journal of Laws of 2021 item 423)

Applications 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

DYPEKTOR Institutu Genetyki Człowiąka PAN

srof, dr hafe. Machej Giding