

## OPEN PhD Student POSITION

**[9/2025/IGC/PSD] Announcement concerning recruitment  
to the Poznan 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 Principal Investigator of the research project, **Marta Olszewska, 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 the Institutes PAS,  
in Independent Research Group of Sperm Genetics IHG PAS**  
Number of vacancies: **2**

### I. General information

1. Department in which candidate will work: **Independent Research Group of Sperm Genetics, Department of Reproductive Biology and Stem Cells**
2. Discipline: **Medical Sciences**
3. Planned scholarship: **4300 PLN gross/per month (3800 PLN net/per month)** before the mid-term evaluation; **5500 PLN gross/per month (4900 PLN net/per month)** after the mid-term evaluation
4. Period of involvement in research project: **48 months (from 1 October 2025)**
5. Deadline for submission of documents: **15.06.2025**
6. Date of announcement: **12.05.2025**

The proposed study will be carried out within **the project OPUS 2024/53/B/NZ5/02183**  
financed by the National Centre of Science in Poland

**Principal Investigator:** Marta Olszewska, PhD, professor IHG

**Project title:** *'Spatial visual transcriptomics approach of male and female gonad  
– validation of the role of candidate infertility genes in 'knockout' mice models'*

### 7. Description of research:

It is estimated that infertility concerns 10-18% of pairs in reproductive age. Both: male as well as female factor is responsible for 35-50% of all infertility cases. Among a variety of causative factors of infertility, the most important one seems to be genetics, especially in the context of gametogenesis – the process of production of proper gametes able to fertilize. The goal of the project is to validate the role of novel genes responsible for the development of gametogenesis in models of murine female and male knockouts, at the single cell level (incl. visium spatial transcriptomics), including three experimental levels: *in vivo*, *in vitro*, and *in silico*. The complex experimental approach would address the question concerning suspected possible co-(in)fertility of both sexes resulting from the same gene mutation. Interpretation of data obtained for both sexes would allow to determine the pathogenic role of these genes in gametogenesis and infertility.

**Keywords:** infertility, mouse *knockout* models, spatial visual transcriptomics, testis, ovary, causative genomic variants, gametogenesis

### **Predicted tasks in the project:**

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

### **Opportunities:**

- getting familiar with a molecular and cellular experimental techniques
- participation in national and international trainings, conferences and workshops
- working with a team engaged and enthusiastic about science

## **II. Requirements for candidates**

- master's degree in molecular biology, biotechnology, genetics or a related field
- basic experience in molecular biology techniques: PCR, RT-qPCR, preferably also: Western blot, immunohistochemistry or immunofluorescence, *in vitro* cell culture and handling
- experience in handling DNA and RNA, extraction and quality assessment of nucleic acids
- very good written and oral communication in English
- motivation and enthusiasm about working in science
- good collaborative and team work skills

## **III. Required documents**

1. CV, including research achievements, scientific activities, list of publications.
2. Cover letter featuring a short description of research interests, achievements and justification for the intention to commence education at the doctoral school.
3. Certified 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, giving the right to apply for a doctoral degree in the country of origin. More information about foreign diplomas is available at: <https://nawa.gov.pl/en/recognition/recognition-for-academic-purposes/applying-for-admission-to-doctoral-studies>.) If a document that raises doubts is submitted, the application will not be considered because the time required for its verification would make it impossible to complete the competition within the set deadline. We recommend a submission of the Individual Recognition Statement, obtained from the SYRENA system or another government institution, which can significantly speed up the recruitment process.

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.

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. 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 using form downloaded from: [https://psd-ipan.ichb.pl/wp-content/uploads/2024/10/IHG\\_Application\\_for\\_admission\\_01\\_10\\_24.docx](https://psd-ipan.ichb.pl/wp-content/uploads/2024/10/IHG_Application_for_admission_01_10_24.docx)  
Applications without the aforementioned content will not be considered.
6. 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 or commercial projects
  - involvement in scientific societies and associations
  - international and professional mobility
  - experience in other sectors, including industry
  - background knowledge in molecular biology.
2. 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.
3. Communication skills in English.

#### V. Announcement of results

Up to 45 days after the deadline of documents submission.

#### VI. Additional conditions

A condition of involvement in the project is participation in the Poznan Doctoral School of 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/>

followed by the fulfillment of requirements as set out in the Regulations for Granting Scholarships in Research Grants Financed by the National Research Center are available on website:

[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_2019-zal1_ang.pdf).

#### VII. Additional information

Address to which documents should be submitted by e-mail: [phdstudies@igcz.poznan.pl](mailto:phdstudies@igcz.poznan.pl)  
with the number of the announcement: 9/2025/IGC/PSD in the title of your message.

#### Additional information is available from:

- PI of the project – Marta Olszewska, PhD, professor IHG: [marta.olszewska@igcz.poznan.pl](mailto:marta.olszewska@igcz.poznan.pl)
- Secretary for Scientific purposes: [phdstudies@igcz.poznan.pl](mailto: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.

Principal Investigator

dr hab. n. med. i n. o zdr.  
Marta Olszewska



Director of the Institute

DIRECTOR  
Institute of Human Genetics  
Polish Academy of Sciences



Prof. Maciej Gierling, PhD