

[16/2020/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, Natalia Rozwadowska PhD
gives notice of an open competition to be held for the position of
PhD student-scholarship holder at the Poznań 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. Planned remuneration: scholarship to the value of about **3 800 PLN net/ per month (1-24 months); 4 500 PLN net (25-48 month)**
4. Deadline for submission of documents: **29.08.2020;**
5. Date of announcement: 29.07.2020;
6. The proposed study will be carried out within the **PRELUDIUM BIS 2019/35/O/NZ5/01900;**
PI – Natalia Rozwadowska, PhD
Project title: “The survey of genes regulated by RBM protein family member - a component of splicing machinery in human spermatogenesis”

Concise description of research:

Human spermatogenesis is a multistep, complex process and requires plenty of factors cooperating together. In modern world, male infertility is an increasing worldwide problem, which encourages researchers to study molecular background of spermatozoa formation.

One of the major obstacles to investigate spermatogenesis is a lack of well-established, easily accessible model. Nowadays, studies concerning gametogenesis are conducted based on stem cells models in specialized scientific institutions.

In proposed project we aim to perform enhanced survey of genes regulated by new, possibly related to spermatogenesis failure RBMXL proteins using in vitro seminoma model: Tcam-2 cell line as well as primordial germ cell-like cells (PGC-LCs) derived from human embryonic stem cells (hESC).

Our and other group results indicate the RBMXL proteins plays role in RNA metabolism, in particular, in splicing related processes such as Exon Junction Complex assembly on pre-mRNA molecule and Nonsense mediated decay. Hence, we would like to enhance the survey of RBMXL proteins using cutting edge RIPseq, eCLIP-seq (enhanced crosslinked and immunoprecipitation followed by sequencing; NGS), RNAseq technology and uncover genes regulated by this protein with emphasis on their differentially expressed splicing forms. Moreover, we have a unique opportunity to validate our results using stem cell-based model to study human germ cell development

Keywords: spermatogenesis, stem cell, RBM protein family, RNA metabolism

Predicted tasks in the project:

- active participation in the realization of project goals.
- supervision of Master's students.
- participation in writing scientific papers; presenting results at seminars and conferences.

Opportunities

- work in an international research team, highly experienced in many cutting edge molecular and cellular methodologies, and enthusiastic about conducting scientific research

- research training (courses);
- participation in international conferences and workshops
- NAWA scholarship for 6-month long scientific stay (additional 9000 PLN/month stipend)

II. Requirements for candidates

1. Master's degree in molecular biology, biotechnology, genetics, medicine or related field.
2. Background in molecular biology.
3. Experience in RNA, DNA, cell culture and molecular biology techniques.
4. The bioinformatic skills will be an advantage
5. Very good written and oral communication skills in English.
6. Motivation and enthusiasm about working in the field of science
7. 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/uznawalnosc/kontynuacja-nauki-w-polsce/studia-doktoranckie-i-otwieranie-przewodow-doktorskich>.
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-ipas/>)
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. Selected candidates will be invited for interview.

VI. Additional conditions

1. Period of involvement in research project: **1.10.2020-31.09.2023 (36 months)**
2. A condition of involvement in the project is participation in the International Doctoral School at IGC PAN (after passing the recruitment procedure). Details of the studies are available on <http://igcz.poznan.pl/en/scientific-activity/phd-studies>. Fulfillment of requirements as set out in the Regulations for Granting Scholarships in Research Grants Financed by the National Research Center are available on (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, in person or by registered mail: Institute of Human Genetics PAS, ul. Strzeszyńska 32, 60-479 Poznań with postscript [16/2020/IGC/PSD] or by e-mail to the Secretary for Scientific Purposes, phdstudies@igcz.poznan.pl. In the title please include the number of the announcement: [16/2020/IGC/PSD]

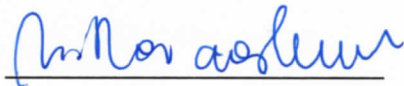
Additional information is available from: Natalia Rozwadowska: natalia.rozwadowska@igcz.poznan.pl The Secretary for Scientific purposes: phdstudies@igcz.poznan.pl, tel. 61 657 91 42

Incomplete applications 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

Prof. Michael Witt, MD PhD