INSTITUTE
OF HUMAN GENETICS
POLISH ACADEMY OF SCIENCES

[12/2021/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, **Maciej Giefing, 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 Cancer Genetics IHG PAS
Number of vacancies: **1**

I. General information

1. Department in which candidate would work: **Department of Cancer Genetics**
2. Discipline: **Medical Science**
3. Planned remuneration: scholarship to the value of about **4200 PLN brutto (3700 PLN netto /per month)**
4. Period of involvement in research project: **33 months**
5. Deadline for submission of documents: **16.08.2021 r.**
6. Date of announcement: **16.07.2021 r.**

The proposed study will be carried out within the **OPUS-20** 2020/39/B/NZ2/01004
PI – Maciej Giefing, PhD
Project title: **'Functional analysis of novel oncomiR candidates in classical Hodgkin lymphoma'**

7. **Concise description of research:**

Classical Hodgkin lymphoma (cHL) is one of the most frequent lymphoma type especially in young adults. This disease is characterized by a yet not fully understood interplay of genetic and epigenetic deregulation. In our recent project we have identified a group of deregulated miRNAs, short RNAs of regulatory function and important members of the epigenetic cellular machinery, in cHL. Within this group we found a novel group of overexpressed miRNAs not reported in the literature in relation to cHL pathogenesis and expressed at significantly lower levels in any of the controls analyzed. Intrigued by this finding we hypothesize that these potential oncomiRs have an important, yet unknown function in the pathogenesis of cHL. Therefore, the aim of this proposal is to identify the biological function of these miRNAs in the pathogenesis of cHL.
To decipher the function of these miRNAs in the first part of the project we will silence the expression of these miRNA in selected cHL cell lines and perform downstream functional assays to observe changes in cell viability and survival. MiRNAs showing the strongest effect will be further analyzed in a procedure called AGO2-RIP-seq combined with global proteomic profiling (LC-MS/MS). The set of target mRNAs and the respective proteins regulated by the analyzed miRNA represents the targetome of the studied miRNA. By using bioinformatical analysis of the targetome we will decipher the biological function of the miRNAs of interest.
In the last step we will experimentally validate selected miRNA-mRNA interactions using reporter assay.

Keywords:

oncomiRs, cHL, classical Hodgkin lymphoma, epigenetic factors

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,
- supervision of students.

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.

II. Requirements for candidates

1. Master's degree in molecular biology, biotechnology, genetics, medicine or related field,
2. Knowledge of molecular biology, cancer genetics and epigenetics,
3. Knowledge of molecular biology techniques: PCR, RT-qPCR, preferably also Western blot and flow cytometry,
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 culturing, cell lines transfection,
6. Experience in work with DNA and RNA: extraction of nucleic acids,
7. Very good written and oral communication skills in English,
4. Motivation and enthusiasm about working in the field of science,
5. 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
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. 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/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:

by e-mail to the Secretary for Scientific Purposes: **phdstudies@igcz.poznan.pl**. Please, include the number of the announcement: [**12/2021/IGC/PSD**] in the title of your e-mail.

Additional information is available from:
Maciej Giefing: maciej.giefing@igcz.poznan.pl, tel. +48 61 6579-138,
and the Secretary for Scientific purposes: phdstudies@igcz.poznan.pl,
tel. +48 61 6579-142

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

DYREKTOR
Instytutu Genetyki Człowieka PAN

Prof. dr hab. med. Michał Witt