

# [1/JB/2019] – Open competition for the position of a studentscholarship holder in the Department of Molecular Pathology.

Director of the Institute of Human Genetics, Polish Academy of Sciences (IHG PAS) and the leader of the research project announce an open competition for the position of a student- scholarship holder in the Department of Molecular Pathology.

#### I. General information

- 1. Institution announcing the competition: Institute of Human Genetics PAS
- 2. City: Poznań
- 3. Position: student scholarship holder
- 4. Discipline: medical biology
- 5. Number of vacancies: 1
- 6. Planned amount of the scholarship: 1 500 PLN per month
- 7. Deadline for documents submission: 20.10.2019
- 8. Period of the Scholarship agreement: 01.11.2019 r. 30.04.2021 r.

9. Address to which documents should be submitted: in person or via registered mail to Institute of Human Gentics PAS, ul. Strzeszyńska 32, 60-479 Poznań or by e-mail to:

agnieszka.dzikiewicz-krawczyk@igcz.poznan.pl, subject: ,,STUDENT - FIRST TEAM".

10. Link: http:/igcz.poznan.pl/en

11. Keywords: B-cell lymphoma, CRISPR/Cas9, enhancers

12. Department in which the candidate would work: Department of Molecular Pathology

13. In order to assess the predispositions, the candidate may be asked to complete a one-month internship at the Department of Molecular Pathology IHG PAS.

14. A concise description of the scientific research:

The project is carried out within the **First Team programme of the Foundation for Polish Science**, project leader is **dr Agnieszka Dzikiewicz-Krawczyk**.

#### Project title: "Functional dissection of IGH regulatory regions in B-cell non-Hodgkin lymphoma"

Characteristic feature of B-cell non-Hodgkin lymphoma are recurrent translocations juxtaposing an oncogene (e.g. MYC, BCL2) to the regulatory regions of immunoglobulin heavy chain (IGH) locus.

Survival and proliferation of many B-cell lymphomas depends on the expression of the translocated oncogene and on signaling from B-cell receptor expressed from the other functional IGH allele. IGH regulatory elements have been studied in normal B-cell development, but their role in human cancer cells has not been defined. The goal of this project is to identify and characterize the functional elements in IGH regulatory regions and enhancer RNAs (eRNA) essential for B-cell lymphoma cell growth. We will use state of the art techniques such as RISPR/Cas9 screens, GRO-seq, chromatin immunoprecipitation.

In the period of receiving the scholarship, the Candidate will be required to carry out research tasks resulting from the financed project and the concluded scholarship agreement, in agreement with the project leader and submit quarterly reports about the results.

The scope of tasks in the project:

- 1. Cell culture.
- 2. Modification of cell lines using CRISPR/Cas9.
- 3. Nucleic acid isolation.
- 4. PCR, qPCR.
- 5. Cloning.
- 6. Western blot.
- 7. Flow cytometry.

### II. Requirements for candidates

- 1. Student of the MSc studies in the field of biology, biotechnology or medicine.
- 2. Interest in the project.
- 3. Knowledge of basic laboratory techniques and experience in lab work (RNA, DNA, cell culture).
- 4. Ability to plan lab work and interpret results.
- 5. Good collaborative and team work skills.
- 6. Ability to read and write scientific texts in English.

### III. Required documents

- 1. A copy of the first-degree diploma or/and certificate of studies
- 2. CV including information on scientific achievements (e.g. participation in lectures, conferences, specialized courses, activity in students' scientific organizations, scientific publications, scholarships, awards and research experience: workshops/courses, participation in research projects etc.).
- 3. Cover letter
- 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 )

## IV. Criteria for the evaluation of candidates

- 1. The candidate's scientific achievements (scientific publications, participation in scientific conferences, activity in student associations, awards).
- 2. Experience in laboratory work.
- 3. Knowledge of molecular biology
- 4. Motivation to work in science.

5. Knowledge of English.

### V. Announcement of results

Up to 30 days after the deadline of documents submission. Selected candidates will be invited for an interview.

Leader of the research project

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Director of the Institute DIRECTOR Institute of Human Genetics Polish Academy of Sciences Prof. Michał Witt, MD PhD