

Offer no: 3/WC/2022

Appendix no 1
to the Regulations for conducting competitions for
scientific positions at the Institute of Human Genetics
PAS in Poznan.

“POST DOC POSITION”

ANNOUNCEMENT FOR A COMPETITION FOR A SCIENTIFIC POSITION

The Director of the Institute of Human Genetics, Polish Academy of Sciences in Poznan (IHG PAS) announces an open competition for the position of an **post-doc (adjunct)** at the Department of Cancer Genetics (DCG) of the IHG PAS

The competition is open to persons who meet the conditions set out in the Act of 30 April 2010 on the Polish Academy of Sciences (Journal of Laws of 2016, item 572, as amended) and the Regulations for conducting competitions for scientific positions at the Institute of Human Genetics, Polish Academy of Sciences in Poznan.

I. General information

1. Institution announcing the competition: **Institute of Human Genetics PAS.**
2. City: **Poznań**
3. Position: **post-doc (adjunct)**
4. Discipline: **medical sciences**
5. Number of vacancies: **1**
6. Planned remuneration: ca. **8 300 PLN** gross per month, ca. **6 000 PLN** net per month, full time employment contract starting at **1.06.2022.**
7. Deadline for submitting documents: **31.03.2022**
8. Address to which documents should be submitted: personally or by post (stating “post-doc DCG”) to the Institute of Human Genetics PAS, 32 Strzeszyńska street, PL-60-479 Poznań or electronically to the following address: maciej.giefing@igcz.poznan.pl putting “post-doc DCG” in the title.
9. Link: <http://bip.igcz.poznan.pl/konkurs/>.
10. Key words: classical Hodgkin lymphoma, Polycomb proteins, PRC1.1, BCOR, activation of the CXCL12 oncogenic pathway, tumor microenvironment.
11. Department / Team in which the candidate would work: Department of Cancer Genetics of the IHG PAS
12. A concise description of the scientific research in which the candidate would participate:

The project is carried out within the OPUS21 grant from the National Science Centre, Poland,
project leader **dr hab. n. med. Maciej Giefing**

Project title: **“BCOR alterations and the activation of CXCL12 oncogenic pathway in classical Hodgkin lymphoma”**

DESCRIPTION

In our previous study we reported recurrent alterations of BCOR, a transcriptional repressor and component of the Polycomb repressive complex PRC1.1, in classical Hodgkin lymphoma (cHL). Further analyzes performed prior to this application triggered the hypothesis that there is a mechanistic link between BCOR loss and the activation of the oncogenic CXCL12 chemokine in cHL. We think that loss of BCOR triggers an important CXCL12-based oncogenic and microenvironment modulating pathway in the pathogenesis of cHL.

Therefore the aim of this project is the functional validation whether BCOR loss-of-function alterations result in changes in chromatin accessibility and subsequent transcriptional activation of CXCL12. Moreover, we will focus on its effect on cell viability and the tumor microenvironment. We will use advanced molecular tools including CRISPR/Cas9 genome editing to establish BCOR knock-out cell lines and ATAC-seq to analyze if BCOR loss in the edited cell lines resulted in open chromatin of the CXCL12 promoter region. Moreover, we will use several functional assays like cell viability or chemotaxis assay to analyze for changed chemoattractive properties of the edited CXCL12 expressing cell

lines versus non-edited control cell lines. Last we will perform sequencing of microdissected Hodgkin and Reed-Sternberg cells to screen for potential BCOR inactivating mutations in primary cHL cases.

In conclusion, in this project we will decipher the mechanism of CXCL12 activation in cHL and show the contribution of this chemokine in the formation of the unique microenvironment in cHL, crucial element of HRS cell survival. The project will be realized in collaboration with German and US research groups.

The project 'BCOR alterations and the activation of CXCL12 oncogenic pathway in classical Hodgkin lymphoma' is carried out within OPUS21 grant from the National Science Centre Poland.

Key responsibilities:

- Small management of every-day lab work.
- Designing of sgRNAs and primers.
- Preparation of vectors.
- Cell line editing using CRISPR/Cas9.
- Cell culturing and designing and performing functional experiments.
- Data analysis.
- Western blot/Flow cytometry.
- Bioinformatic analysis in R.
- Manuscript preparation.

II. Requirements for candidates:

1. Doctor of medical sciences or related degree.
2. Knowledge of cancer genetics.
3. Practical knowledge of experimental techniques such as:
 - genome editing based on CRISPR / Cas9,
 - conducting cell cultures,
 - performing functional tests with the use of cell lines.
4. Possession of scientific achievements in the form of publications in the field of medical sciences.
5. Proficiency in using office.
6. Fluency in the use of the spoken and written English language.
7. Knowledge of the R package and flow cytometry is welcome.
8. Foreign internships / apprenticeships are welcome.
9. Independence, high motivation to work in science, problem-solving ability.
10. Ability to work in a team.
11. During the employment period, the Employee will not receive any other remuneration from the funds allocated as direct costs from research projects financed under NCN calls.
12. During the employment period, the Employee will not receive remuneration from another employer on the basis of an employment contract, including an employer based outside Poland.

III. A list of documents that the candidate should attach to the competition application:

1. Application for employment, along with the address for correspondence and contact details (e-mail address and telephone number).
2. Scan or photocopy of the university diploma.
3. Scan or photocopy of the award of the degree (if applicable).
4. Scan or photocopy of the diploma of obtaining a scientific title (if applicable).
5. CV.
6. A list of publications with the indication of a maximum of five most important works performed during the last 5 years of the candidate's scientific work (after deduction of breaks in scientific work), patent applications, patents, implementations, research projects (if applicable).
7. Information on the number of citations of publications without self-citations, the value of the Hirsch index and the

- number of years effectively worked in science (after deduction of breaks), (if applicable).
8. A list of research projects (including application and implementation projects) that the Candidate was leading or was the main contractor and 1-3 most important publications resulting from the implementation of this project, or other measurable results of the project (if applicable).
 9. At least one opinion of an independent researcher (R3), specialist in the scope indicated in the Competition Announcement.
 10. No more than 3,500 printed characters (one A4 page) - summary of scientific interests, previous achievements, potential participation in research projects and research projects.
 11. Consent to the processing of personal data of the Candidate for the purposes of the Competition, (available at: http://bip.igcz.poznan.pl/wp-content/uploads/2018/10/Zgoda-rekrutacja-Consent_for_the_processing.pdf),
 12. Candidate's statement about getting acquainted with the Regulations for conducting competitions for scientific positions at the Institute of Human Genetics, Polish Academy of Sciences in Poznań. (available at: http://bip.igcz.poznan.pl/wp-content/uploads/2018/10/Oswiadczenie_regulamin-Statement_Regulations.pdf),
 13. Candidate's statement that, in case of winning the competition, the Institute of Human Genetics, Polish Academy of Sciences in Poznań will be the main place of employment. (available at: http://bip.igcz.poznan.pl/wp-content/uploads/2018/10/Oswiadczenie_miejsce_pracy-Statement_place_of_work.pdf).

IV. Criteria for the evaluation of candidates

1. Creativity measured by the quality and number of scientific publications in which the candidate is the first author, corresponding author, or significant author, and patent applications / patents and / or implementations,
2. Mobility in scientific career (including academic internships, change of scientific profile, internships and work in industry),
3. Number of citations of the candidate's works, especially those in which the candidate is the first author, corresponding or significant author,
4. Creativity measured by the quality and number of research projects,
5. Opinion of an independent researcher (R3),
6. Any breaks in the scientific work and indicated achievements of the candidate converted into effective years of scientific work.

V. Announcement of results

Up to 30 days from the deadline for submitting documents.

Selected candidates will be invited for an interview. Each of the submitted candidates will receive individual information about the results of the competition in relation to their person. Information on the winner of the competition will be provided on the Institute's website.

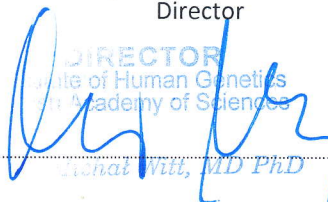
VI. Planned employment: starting from 01.06.2022.

VII. Additional information: dr hab. n. med. Maciej Giefing, maciej.giefing@igcz.poznan.pl

VIII. Information on the possibility of appeal of a candidate who has been negatively evaluated by the competition committee

Candidates who have been negatively evaluated by the Competition Commission have the right to appeal against the results of the assessment. The appeal is submitted to the Director of the Institute within 7 days from the date of receipt of negative feedback from the selection board. The decision of the Director of the Institute is final.

Director


DIRECTOR
Institute of Human Genetics
Polish Academy of Sciences
Maciej Giefing, MD PhD