FORM FOR EMPLOYERS

INSTITUTION: Institute of Human Genetics PAS

CITY: Poznań

POSITION: : Assistant

DISCIPLINE: Medical sciences

POSTED: March 26, 2025

EXPIRES: April 25, 2025

WEBSITE: http://bip.igcz.poznan.pl/konkurs/

KEY WORDS: personalized medicine, high-throughput sequencing, ELISA tests, quality management, biological material repository, bioinformatics analyses

DESCRIPTION (field, expectations, comments):

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 **assistant** at the Independent Research Group of the Regional Center for Digital Medicine (RCMC) 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 2020, item 1796, as amended) and the Regulations for conducting competitions for scientific positions at the Institute of Human Genetics, Polish Academy of Sciences in Poznan

Research Description:

a nominated research assistant would participate in research on the genetic basis of multifactorial diseases such as cardiovascular diseases, obesity, and conditions related to prematurity. The candidate will be involved in the introduction and development of new research techniques, such as nanopore sequencing and emulsion PCR, the development of a digital medicine platform that integrates high-quality clinical data with omics data, and the creation of a DNA sample repository working within a quality management system compliant with ISO 9001 standards. The conducted research is part of a broad area of personalized medicine studies. The main research tasks will include, among others, the analysis of the genome and microbiome of patients with morbid obesity, peripheral arterial disease, and pediatric populations using modern genomic and metagenomic sequencing methods. In the later stages, the research will focus on integrating the obtained data and analyzing them to identify factors influencing the treatment and progression of the studied diseases, ultimately leading to the development of new diagnostic and therapeutic strategies. The candidate will actively participate in the activities of IGC PAN, including promoting the institute's scientific work.

In relation to the activities of the research group, the candidate should demonstrate practical experience in analyzing data from multiomic experiments (genomics, metagenomics, microbiome analysis) and knowledge of high-throughput sequencing methods and their application in biomedical research. A documented scientific record, including publications related to the research topics, is also expected.

The scope of duties includes: a) Participation in the development and implementation of the ISO 9001 quality management system for the biological sample repository created within the SGB RCMC; b) Conducting experiments related to genotyping and sequencing (analyses based on PCR, qPCR, nucleic acid sequencing using NGS methods, dPCR, nanopore sequencing); c) Blood biomarker analysis using ELISA; d) Managing and maintaining the biological sample repository; e) Planning and carrying out reagent, material, and equipment purchases; f) Analyzing and interpreting results; g) Presenting results at conferences and writing scientific publications.

I.Requirements for candidates:

- 1. PhD degree in the field of medical sciences or related field.
- 2. Knowledge and skills in the genetics and pathology of diseases occurring in newborns, atherosclerosis, obesity, experience in working with biological material, including microbiological material, familiarity with quality management systems, and the ability to analyze and visualize data in R studio (or other equivalent).
- 3. Research track supported by publications in international scientific journals in the discipline of medical sciences.
- 4. Experience in writing grant or other types of applications for funding.
- 5. Fluent knowledge of English in speech and writing.
- 6. The ability to publicly present the results of scientific research in Polish and English
- 7. Independence, high motivation for work in science, problem solving.
- 8. Ability to teamwork.
- 9. Taking up work at the Institute of Human Genetics, Polish Academy of Sciences as the primary place of employment.
- 10. The candidate will be invited for an interview.

II.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 or 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: <u>http://bip.igcz.poznan.pl/wp-content/uploads/2018/10/Zgoda-rekrutacja-</u> 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: <u>http://bip.igcz.poznan.pl/wp-content/uploads/2018/10/Oswiadczenie_regulamin-</u> <u>Statement_Regulations.pdf</u>),

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: <u>http://bip.igcz.poznan.pl/wp-content/uploads/2018/10/Oswiadczenie_miejsce_pracy-</u> <u>Statement place of work.pdf</u>).

III.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.Experience in laboratory work,
- 7. Experience in high-throughput sequencing, data analysis in R,
- 8. Expertise in ISO 9001 quality management systems.
- 9.Good command of English,
- 10. Any breaks in the scientific work and indicated achievements of the candidate converted into effective years of scientific work.

IV.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.

V.Planned employment: 01.05.2025

VI.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.