

Job offer - postdoctoral researcher

at the International Centre for Cancer Vaccine Science, University of Gdańsk

Requirements:

- Doctoral degree obtained not earlier than 7 years before the year of employment in the project (excluding leaves related to the care and upbringing of children) in an entity other than that in which this position is to be filled, or has completed a continuous and documented postdoctoral training of at least 10 months at an institution other than the entity implementing the project, and in a country other than the country in which the doctoral degree was obtained.
- Understanding of protein dynamics and investigating targeted active / allosteric site pockets is an advantage.
- Knowledge of using and optimizing the thermal shift assay (TSA) to understand the activity of novel hit molecules compounds.
- Understanding of cross-linking mass spectrometry (CLMS) field, to investigate different cancer types treated with novel hit molecules.
- Basic knowledge of using fluorescence resonance energy transfer (FRET) assay to study protein-protein interactions.
- Knowledge of handling biochemical issues and experimental techniques.
- Good knowledge of the English language (written and spoken).

Responsibilities:

- Applying molecular modeling techniques to investigate the targeted NMD components.
- Conducting research within the project.
- Biological evaluation for the selected novel compounds and its derivatives against target; hUPF1 or other components form the NMD process.
- Designing *in vitro* experiments for the selected ligands (or derivatives) for the UPF1 protein using thermal shift assay or cellular thermal shift assay methods.
- Sample preparation for the CLMS analysis, to identify peptides and proteins.
- Participate in designing experiments for the FRET assay to study interactions between UPF1, UPF2, UPF3a, and UPF3b proteins from the NMD pathway.
- Visualization and presentation of the obtained results during internal meetings as well as scientific conferences.
- Publishing the obtained results in scientific journals.
- Other tasks related to scientific activity under the project defined by the project manager.

About the project:

The postdoctoral researcher will work within the project: *The impact of UPF1 ATP mimetics on the mutant immunopeptidome* led by prof. Theodore Hupp (grant agreement: UMO-2020/39/B/NZ7/02677). The project is a bilateral cooperation with the Gdańsk University of Technology, funded by NCN within the funding programme OPUS. The project will focus on understanding the mechanism and physiological functions of

the NMD pathway which can have the potential for treating certain genetic diseases and cancer. Co-authors are dr hab. inż. Umesh Kalathiya from the ICCVS, University of Gdańsk and prof. Sławomir Makowiec from the Gdańsk University of Technology. There will be an opportunity to access the Cyfronet Ares (37 824 computing cores and 147,7 TB of RAM) and CI TASK Tryton (~38, 000 cores) supercomputer clusters, which are consistently represented among the top 500 super computers in the world.

Work conditions:

- Employment contract for 11 months (including 3 months probation) with possibility of extension. The position is expected to start from 1 October 2024.
- Salary before tax & social insurance deductions incl. seniority bonus approx. 8.700 PLN.
- Additional yearly remuneration (so-called “13th salary”) if eligible and according to binding provisions at the University.
- Work in an interdisciplinary and dynamic team.
- Presentation of scientific results during scientific conferences.
- During receiving remuneration from this project, the candidate shall not receive other remuneration from funds granted as direct costs from research projects financed within NCN competitions; and shall not receive remuneration from another employer based on an employment contract, including an employer based outside Poland.

Please note, in case of questions you are encouraged to contact **dr hab. inż. Umesh Kalathiya** (umesh.kalathiya@ug.edu.pl) before submitting an application.

Additional information:

Please send the application in English to: iccv@ug.edu.pl quoting the reference “ATP mimetics” in the email’s title **until 31 August 2024**, 23:59.

Selected candidates will be invited to an (online) interview. The candidates will be selected by a competition committee appointed by the Rector of University of Gdańsk.

Application documents:

Application documents should be prepared as one single PDF document and include:

- A full CV with list of publications.
- Copy of the PhD diploma.
- A letter of motivation explaining your general interest for this position.
- Name, affiliation, email, and phone number of two referees who can be contacted, if necessary.
- Declaration of the applicant that his work is not financed by other projects of the National Science Center.
- Please include the signed statement on the GDPR information clause for this recruitment downloaded from: <https://iccv.ug.edu.pl/work-with-us/open-positions/>