



is seeking a bioinformatics postdoctoral researcher

for the project: **Multi-onco-map: a multi-omics map of the major oncogene function in cancer**
(with dr Dawid Walerych)

The project: The main objective is to build a systematic, proteomics- and transcriptomics-based map of downstream functional molecular programs of the main driver oncogenes mutant *TP53*, *KRAS* or *CMYC*, in cancer types causing most deaths in humans (multi-onco-map) and use this map to pinpoint novel therapeutic targets in human cancers, validated in organoid cultures of pancreatic and colon cancers. The molecular mapping and overlap of oncogene downstream programs will put in focus new drug targets and reveal already known targets for drug combinations and repositioning in specific cancer types. The project has started in 2018 and currently is collecting data from large-scale multi-omics experiments for computational biology analysis.

Location and duration: Participation in the project offers a possibility to take a key part in expanding a new, dynamic Laboratory of Human Disease Multi-omics (<http://www.imdik.pan.pl/en/research-groups/laboratories/1068-laboratory-of-human-disease-multiomics>), within the stimulating Ochota Biocenter campus environment. The location will be the **Mossakowski Medical Research Centre Polish Academy of Sciences in Warsaw, Poland, Pawinskiego and/or Smetany street.**

The project and employment is planned for minimum 33 months, with the employment starting in September 2019; salary min. 7000 PLN gross/month + top-ups. The laboratory does not exclude a possibility of further employment and will encourage applying for additional funding. The project is multidisciplinary, includes international and Polish collaborations and will allow to learn and develop skills of open and flexible scientific approach.

Requirements:

- Ph.D. in biology, bioinformatics, IT, biotechnology, biophysics, medicine or related topic – obtained formally until September 2019. The PhD degree has to be also obtained not earlier than September 2012 (extended by every maternity/paternity/disability leave period, and for women - extended by 18 months for each child-birth/adoption)
- Excellent command of English and practice in scientific writing/presentation of data in English
- Knowledge of omics-related computational biology and readiness to expand these skills – any of the following: large scale biological data maintenance and analysis (e.g. RNA-seq, exome-seq, proteomics, metabolomics), molecular pathway *in silico* analysis, systems biology, biostatistics
- Knowledge of R programming language will be an advantage
- Ability to develop web-based tools and/or webpages will be an advantage
- Practical knowledge of laboratory molecular biology techniques and cell culture methods will be an optional advantage - the project does not exclude laboratory activities compatible with bioinformatics, if wanted by the successful candidate
- Possibility to work full-time in Warsaw, Poland for the minimum 3 following years

How to apply: Please send your CV, including a publication list, a contact to your Ph.D. supervisor and (if applicable) later employers in science, by e-mail to dr Dawid Walerych: dwalerych@imdik.pan.pl. Do not write a separate motivation letter – if you want to justify your application (not required), do so briefly in the e-mail.

The application deadline is 2nd of June 2019. Selected candidates will be invited for an interview on 5th-15th June 2019 – the interview will be in English (possible via Skype).

Related reading:

Walerych, D. et al. Proteasome machinery is instrumental in a common gain-of-function program of the p53 missense mutants in cancer. *Nat Cell Biol* 18, 897-909 (2016).

Walerych, D., Lisek, K. & Del Sal, G. Multi-omics reveals global effects of mutant p53 gain-of-function. *Cell Cycle*, 1-2 (2016).