



Mossakowski Medical Research Centre of Polish Academy of Sciences in Warsaw, Poland

is seeking a postdoctoral researcher

for the project on the role of the proteasome machinery in cancer (with dr Dawid Walerych)

The project: The main objective is to understand the oncogenic contribution of the proteasome machinery to the reprogramming of proteome and transcriptome of human cancer cells and to use this knowledge to discover anti-cancer therapeutic approaches targeting the proteasome downstream effectors. **This project will be the first attempt to systematically understand the impact of the proteasome on proteome and transcriptome of several cancer types, as well as how this effect can be taken advantage of therapeutically.** The clinically approved therapies involving proteasome inhibitors – such as bortezomib and carfilzomib -successful in hematologic neoplasias, are facing a growing resistance problem, while their use is not effective in solid tumors for unknown reasons. The proposed research will enrich the knowledge of basic cellular mechanisms controlled by the proteasome and will uncover novel routes of extending or bypassing the proteasome inhibitor-based therapies and combating resistance to the approved proteasome inhibitors.

Location and duration: Participation in the project offers a possibility to take a key part in establishing a new, dynamic laboratory in the bio-medical institute with long traditions (<http://www.imdik.pan.pl/en/>), within the stimulating Ochota Biocenter campus environment. The location is the **Mossakowski Medical Research Centre Polish Academy of Sciences in Warsaw, 02-106 Poland, at Pawinskiego street 5.**

The project and employment is planned for 3 years, with the employment start planned for March 2018. The research pipeline and the laboratory does not exclude a possibility of further employment. 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 molecular biology, medical biology, genetics, biochemistry or related life sciences topic. The PhD degree has to be obtained not earlier than 2011 (for women - extended by 18 months for each child-birth).
- Excellent command of English and practice in scientific writing/presentation of data in English
- Knowledge of basic molecular biology techniques (DNA manipulation, qPCR, RNA handling, western blot etc.) and basic cell culture methods. Knowledge of organoid cultures will be an additional advantage
- Any knowledge of mass spectrometry (protein/metabolite identification) and/or basic bioinformatics will be an advantage
- Possibility to work full-time in Warsaw, Poland for the 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 motivation letter – if you want to justify your application (not required), do so briefly in the e-mail. **The application deadline is 10th of February 2018. Selected candidates will be invited for an interview in February 2017 – 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).

Eldridge, A.G. & O'Brien, T. Therapeutic strategies within the ubiquitin proteasome system. *Cell Death Differ* 17, 4-13 (2010).

Hoeller, D. & Dikic, I. Targeting the ubiquitin system in cancer therapy. *Nature* 458, 438-44 (2009).