Funding agreements for the INTERCEPT and ADEVASCO projects are signed

On Sept. 27, 2024, at the headquarters of the Ministry of Science and Higher Education, two Funding Agreements for research teams within the Virtual Research Institute were signed. The total amount for which the two projects amount to nearly PLN 119 million. The aim of these projects is to develop new solutions and technologies for oncology therapies. The coordinating units of the projects are the Institute of Bioorganic Chemistry of the Polish Academy of Sciences in Poznań and Jagiellonian University in Kraków.

As part of the third WIB call, announced in 2023, researchers from another seven scientific centers from different parts of Poland are joining the group of scientists whose work and research activities are funded by the Polish Science Fund. The funds received will ensure the stability of projects' funding for the next five years.

– The growing number of institutions and scientists funded under the WIB Programme increases the real impact of the state budget on the development of science and the economy in Poland. We are pleased that numerous scientists are joining projects aimed to develop commercializable technologies. For scientists, this is not only prestige, but also stable and long-term funding for their work. And for the economy and society, it is an opportunity for future access to innovative solutions at the global level," says Prof. Jaroslaw Bosy, Director of Łukasiewicz – PORT.

Towards cell-oriented interceptive medicine.

The first of the currently signed projects is titled: "Targeted single-cell technology for cancer diagnostics – towards cell-oriented interceptive medicine" [acronym: INTERCEPT]. The project has been planned for 5 years and its value is more than PLN 40 million. The project will be conducted by a research team from the Institute of Bioorganic Chemistry of the Polish Academy of Sciences in Poznań, led by Prof. Marek Figlerowicz, PhD. The main goal of the project is to revolutionize cancer diagnostics by developing a microfluidic system-independent and nucleic acid-based technology that enables single cell testing, which will then be used to create targeted diagnostic tests. It is intended that the tests will find application in the diagnosis of acute myeloid leukemia (AML) and chronic lymphocytic leukemia (CLL). The main idea of the project is to bring highly advanced single cell analysis technologies into clinical practice by reducing their technical complexity and cost and improving their overall clinical utility.

Towards modern vasculooncology.

The second project, entitled: "Personalized endothelial diagnostics in anticancer treatment; toward modern vasculo-oncology" [acronym: ADEVASCO], will be conducted by a consortium consisting of a team of researchers representing: Jagiellonian University, the Ludwik Hirszfeld Institute of Immunology and Experimental Therapy of the Polish Academy of Sciences (PAS) in Wrocław, the Institute of Animal Reproduction and Food Research of the Polish Academy of Sciences (PAN) in Olsztyn, the Medical University of Gdańsk, the Maria Skłodowska-Curie National Institute of Oncology – National Research Institute in Gliwice, and the Warsaw University of Technology. The amount of funds allocated to finance the project is more than PLN 78 million.

The leader of the research team is Prof. Stefan Chłopicki of Jagiellonian University. The aim of the research team's scientific activity is to develop unique preclinical and clinical studies that will allow

precise diagnostics of adverse effects of anticancer drugs on the vascular endothelium, and to develop a new technology of electrochemical aptasensor, using original methodological solutions and aptamers, polymer nanobricks, a dedicated POCT device with flow microcircuits. This completely new technology for detecting vascular endothelial dysfunction will provide a unique tool for endothelial companion diagnostics in the course of cancer therapies. It should become an important component of individualized risk stratification of cardiovascular complications of cancer therapies in patients.

Signing of Funding Agreements for the implementation of research tasks with the participation of: INTERCEPT from left Hubert Cichocki Ph.D. – President of the Łukasiewicz Research Network, Luiza Handschuh Ph.D. – Director of the Institute of Bioorganic Chemistry of the Polish Academy of Sciences, Maria Mrówczyńska, Ph.D. – Deputy Minister of Science and Higher Education, Prof. Jarosław Bosy, Ph.D., Director of Łukasiewicz – PORT; ADEVASCO from left Hubert Cichocki Ph.D. – President of the Łukasiewicz Research Network, Prof. Wojciech Macyk Ph.D. – Vice-Rector for Science, Jagiellonian University, Prof. Maria Mrówczyńska Ph.D. – Deputy Minister of Science and Higher Education, Prof. Jarosław Bosy Ph.D. – Director Łukasiewicz – PORT.

Photo: Ministry of Science and Higher Education

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