



Ontario Institute for Cancer Research makes three equity investments

Toronto – April 26, 2010. Frank Stonebanks, Vice-President, Commercialization and Chief Commercial Officer of the Ontario Institute for Cancer Research (OICR) today announced that OICR has made equity investments in three promising Ontario technologies to accelerate their commercialization.

"These technologies hold exceptional promise in the advancement of personalized cancer medicine," said Mr. Stonebanks. "The investments will help close the gap between seed funding and clinical proof of concept, moving these programs closer to the commercial arena."

"The OICR has quickly established itself as a global leader in research commercialization," said John Milloy, Ontario Minister of Research and Innovation. "The Ontario government continues to support OICR as it invests in health technologies and strengthens Ontario as an innovation-based economy and society."

Dr. Li Zhang, Senior Scientist in the Division of Cellular and Molecular Biology at the University Health Network's Toronto General Research Institute, received the investment for her novel cellular immunotherapy for cancer.

OICR and the University Health Network created a new spin-off company to complete the pre-clinical requirements to test Dr. Zhang's novel cellular therapy in patients with acute myeloid leukemia (AML), a disease which has seen few improvements in therapy in the last 40 years. This proprietary UHN technology involves the growth of a specific minor population of the patient's own cancer-killing T cells in the laboratory with subsequent reinfusion into the patient to fight their disease. Dr. Zhang's group has performed extensive pre-clinical testing of these cancer-killing cells grown from AML patients and has shown that they kill human leukemia cells in an animal model. The next step is a phase I clinical trial in AML patients.

DVS Sciences Inc., a spin-off company from the University of Toronto, will use OICR's investment to support further engineering and product development of its revolutionary instrument for highly multiplexed biomarker analysis for scientific research, clinical trials and personalized medicine. The machine is similar to a flow cytometer but instead of fluorescent tags, which limit the multiplex capacity due to spectral overlap, the DVS system uses stable isotope tags to identify up to 100 biomarkers at a time with very high resolution and dynamic range. The system has been demonstrated analyzing 30 biomarkers simultaneously in single human leukemia cells at a rate of 1,000 cells per second with absolute signal quantification. Several prototypes have been sold to top laboratories in the U.S.A. and Canada. Also under development by DVS is a low-cost liquid bead array for gene analysis with multiplex capability in the hundreds of thousands – far beyond that of today's fluorescent-based bead arrays and approaching that of "gene chip" microarrays but at a fraction of the cost.

Dr. Shana Kelley, Director of the Division of Biomolecular Sciences in the Faculty of Pharmacy at the University of Toronto and Dr. Ted Sargent, Professor in the Edward S. Rogers Sr. Department of Electrical and Computer Engineering at the University of Toronto, and Canada Research Chair in Nanotechnology, received an investment for their validation of a microchip-based diagnostic system for clinically accepted leukemia biomarkers.

Plans are being made for the technology to be advanced by a start-up company with seed funding coming from OICR and other groups. OICR's investment will facilitate testing and refinement of the sensitive electronic chip and hand-held device for direct and rapid detection of clinically relevant biomolecules in patient samples. The chip-based system uses no enzymatic amplification steps and provides electronic detection of biomolecules (DNA, RNA or protein) in five minutes with high specificity and at concentrations as low as 100 molecules per sample. The single-use detector chips feature simple, inexpensive silicon-based integrated circuit technology, multiplex and multiple sample type capability, and integrated sample pre-processing.

OICR had previously invested in the three projects through its Intellectual Property Development and Commercialization Program, which provides seed funding for late stage academic projects that meet specific market-oriented criteria.

About OICR

OICR is a new, innovative cancer research & development institute dedicated to prevention, early detection, diagnosis and treatment of cancer. The Institute is an independent, not-for-profit corporation funded by the Government of Ontario through the Ministry of Research and Innovation. OICR supports 500 scientific staff and trainees (located at its headquarters and in research institutes and academia across the Province of Ontario) and an \$85 million annual operating budget. It has key research efforts underway in small molecules, biologics, cancer stem cells, imaging, genomics, informatics and bio-computing, from early stage research to Phase I clinical trials.

OICR is making Ontario more effective in knowledge transfer and commercialization, to maximize health and economic benefits of research findings for the people of Ontario. For more information, please visit the website at www.oicr.on.ca/commercialization.

- 30 -

Contact:
Rhea Cohen
Director of Communications
Email: rhea.cohen@oicr.on.ca
Telephone: 416-673-6642
Mobile: 416-671-2846