

Patrys, Walter and Eliza Hall awarded grant

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The Walter and Eliza Hall Institute is one of Australia's leading biomedical research institutes.



Singapore - Patrys Limited and the Walter and Eliza Hall Institute of Medical Research have recently been awarded a \$100,000 State Government Victorian Medical Research Acceleration Fund grant to support research within the PAT-DX1 program that aims to develop new treatments for cancer.

The Walter and Eliza Hall Institute is one of Australia's leading biomedical research institutes. The research will be undertaken by Dr Ruth Kluck, laboratory head in the Institute's Molecular Genetics of Cancer division and Associate Professor Edwin Hawkins, laboratory head in the Immunology division at the Institute.

Since 2002 Dr Kluck has been working towards new approaches to cancer treatment by investigating how cancer cells die. In particular, Dr Kluck is an expert on how cell-killing proteins called Bax and Bak help to eliminate cancer cells that grow out of control. This knowledge can assist in the development of new treatments that directly activate these important proteins to kill dangerous cells in the body. Dr Kluck has established an international profile in the cell death field and has been awarded prestigious fellowships from the Wellcome Trust and the Australian Government's Australian Research Council.

Associate Professor Hawkins is internationally renowned for his ground-breaking work in microscopy techniques. He has developed state-of-the-art imaging technology that investigates the action of drugs in real time and allows the monitoring of drug responses over extended periods. His laboratory is focused on investigating new treatments in blood cancers. Associate Professor Hawkins has received multiple competitive international research grants and fellowships and in 2017 was the runner up for the Centenary Institute Medical Innovation Award. He was also recently awarded a National Health and Medical Research Council of Australia career development fellowship to begin in 2019.

The Victorian Medical Research Acceleration Fund grant of \$100,000 will be used to support a collaboration between Patrys and the Walter and Eliza Hall Institute that aims to develop new reagents that target, penetrate and kill cancer cells.

The work will couple Patrys' PAT-DX1 with the Institute's 7D10 to generate a bi-specific antibody called 7D10-PAT-DX1. 7D10 protein interacts with the Bak protein inside cells to cause cell killing but is unable to pierce a cancer cell's outer

membrane and bind to its targets by itself. PAT-DX1 is a novel antibody that can enter and kill cancer cells harboring defective DNA repair mechanism. Combining these technologies by the generation of a bi-specific 7D10-PAT-DX1 antibody will result in a novel antibody that will be able to enter a cell, bind to its targets and act to help circumvent survival pathways typically employed by cancer. An intra-vital microscopy technique that Associate Professor Hawkins uses will allow following up of the cancer disease to see how the disease is affected when 7D10-PAT-DX1 therapy is introduced.

"Patrys has an established relationship with Dr Kluck and is looking forward to expanding that and building a new relationship with Associate Professor Hawkins. The collaboration should provide data regarding the potential effectiveness of 7D10-PAT-DX1 to kill cancer cells," said Dr James Campbell, Chief Executive Officer and Managing Director of Patrys. "The State Government's Victorian Medical Research Acceleration Fund scheme plays a critical role in establishing partnerships between Australian based companies and the research sector," he said.

Patrys expects to be able to report on the research findings in 2019.