



Working towards a cure for Multiple Sclerosis

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There is currently no cure for Multiple Sclerosis (MS) – however scientists at the Malaghan Institute of Medical Research believe that specialised cells found in the blood might hold the key to improving the quality of life of the thousands of New Zealanders affected by this disease.

In an ‘Outstanding Observation’ published recently in the international scientific journal *Immunology and Cell Biology*, Drs Jacquie Harper, Thomas Bäckström and Clare Slaney describe how blood cells called monocytes may play a part in the development of MS.

MS is an autoimmune disease of the central nervous system that affects one in every 1,500 New Zealanders and can render an individual unable to write, speak or walk.

The Malaghan research, which was funded by the Health Research Council of New Zealand, showed that the ability of the blood monocytes to suppress inflammation is impaired in an experimental model of MS.

“As such, these monocytes are no longer able to prevent inflammatory cells from destroying the central nervous system of MS sufferers,” said Dr Harper.

“If we can find a way to reactivate suppressor function in the monocytes of MS sufferers, we might be able to provide a new treatment for MS that could delay or even prevent the progression of this disease.”

Dr Thomas Bäckström was instrumental in laying the groundwork for the Malaghan study. He recently returned to Sweden to take up the position of Director of the T Cell Biology Department at Scandinavia’s biggest pharmaceutical company Novo Nordisk. Dr Bäckström says that we all have these monocyte suppressor cells in our blood. The new challenge is to find tools to help them do a better job at controlling inflammation to treat dreadful diseases like MS.

“Because MS hits adults in their prime, it dramatically reduces quality of life,” said coauthor and Malaghan MS Research Associate Dr Anne La Flamme. “Current treatments are not equally effective in all MS patients and often have side-effects associated with medium to long term use, so there is a desperate need for safer, more effective MS therapies.”

Next week Dr La Flamme will participate in stage six of the Great New Zealand Trek, as it journeys the length of the country on horseback, mountain bike or by walking, to raise funds to help the Malaghan continue its groundbreaking research and find a cure for MS.



The Malaghan Institute of Medical Research is New Zealand's premier vaccine and immunology research centre and is based at Victoria University's Kelburn campus, Wellington. The Institute operates independently and is a charitable trust. Researchers at the Malaghan Institute are focused on developing innovative ways to harness the strength and potency of the immune system, the body's own natural defence against disease, to treat cancer, asthma, arthritis, multiple sclerosis and infectious disease.

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This media release is also available for viewing on our website www.malaghan.org.nz with links to relevant individuals and research groups.