

## **Under the Microscope** **with Professor Martyn French**

---

RPH and University of Western Australia research into the immune function of treated HIV patients has received \$480, 000 from the National Health and Medical Research Council.

Clinical Immunology's Professor Martyn French and A/Prof. Patricia Price are leading the study, which aims to determine why the immune system may malfunction in some treated HIV patients.

Prof French said that although antiretroviral treatment is effective in suppressing HIV it can sometimes result in an overactive immune system that causes inflammation and makes the patient very ill, which can result in death.

"In developing countries it is not understood that although this treatment is effective in suppressing HIV infection the recovering immune system can cause great damage," Prof French said.

It was in 1992 that RPH researchers were the first in the world to discover this abnormal immune response as a result of taking the antiretroviral drugs.

"At RPH we did skin testing on HIV patients and ~~we~~ noticed that some patients produced a vigorous immune response against infections associated with inflammation in the skin, lungs and other organs."

The recently funded study will examine another type of malfunction in the recovering immune system that results in patients having inadequate immune recovery even though the HIV is fully suppressed.

The study will look at two identified problems in the immune system of treated HIV patients – some patients are unable to produce new T cells whilst others are continuing to break down T cells much faster than normal.

The selected HIV patients with a low T cell count will have a chest scan and blood test and it is hoped there will be results in the next few years.

"If we can understand why the immune system is responding in this way then we can hopefully find a more effective treatment for HIV disease".

"HIV cannot be eradicated, only suppressed, so the ultimate aim is to find a way to eradicate the virus completely."