



Media Release

Attention: News Editors

Date: 8 March 2006

New centre sheds light on fighting disease

A Monash University research team has shed light on how the immune system fights infection, after identifying a new role for a common class of immune molecules.

Professor Jamie Rossjohn and his team from the Department of Biochemistry and Molecular Biology, found that non-classical major histocompatibility complex (MHC) immune molecules played an important role in defending the body against pathogens such as those that caused tuberculosis, typhoid and Human Cytomegalovirus.

The findings have been published in the latest edition of *Nature Immunology* and mark today's official opening of the Australian Research Council (ARC) Centre of Excellence in Structural and Functional Microbial Genomics at Monash University.

It was previously thought that MHC molecules created a "stress" signal for viral infection within the body. However, the team's research shows the molecules can also produce an adaptive immunity - a defence mechanism against the diseases.

"Increasing this adaptive immune response may be a way of treating these devastating diseases," Professor Rossjohn said.

The study was a collaboration between the new ARC Centre of Excellence in Structural and Functional Microbial Genomics and Dr Lucy Sullivan and Dr Andrew Brooks from the University of Melbourne.

The ARC centre will also investigate how disease-causing organisms and their hosts interact in diseases affecting Australian livestock. Researchers are developing new veterinary vaccines for several diseases including fowl cholera, footrot in sheep, leptospirosis in livestock and swine dysentery.

Centre director Professor Ben Adler said its opening had great implications for future research into infectious diseases affecting people and livestock in Australia. "The centre will enable us to further both fundamental and applied research with commercialisation potential," he said.

The centre has been funded through Monash University, a donation by the Grollo Family, the Victorian Department of Innovation, Industry and Regional Development, and the ARC.

Centre launch

What: Opening of the ARC Centre of Excellence in Structural and Functional Microbial Genomics

Where: Ground floor, building 75, Monash University, Wellington Road, Clayton

When: 3.00pm Wednesday 8 March

Photo opportunities can be arranged earlier.

For information or to arrange interviews contact Ms Amanda Hamilton on 9902 0024 or Ms Diane Squires, Media Communications, on 9905 9315 or 0417 603 400.