

## **COBRE RESEARCH SEMINAR SERIES**

## Understanding Influenza and Hendra Virus Immunity

The creation of "designer" influenza viruses (family Orthomyxoviridae), made possible by reverse genetics systems, has accelerated both basic and applied research on host-pathogen interactions and the development of novel therapeutic strategies. Reverse genetics systems will be discussed in the context of pathogenicity, development of live-attenuated influenza virus vaccines and the generation of recombinant influenza virus vaccine vectors for the prevention and treatment of infectious diseases. Recent studies describing innate immunity following in vitro H5N1 infection will also be presented.

Since its identification in 1994 following an outbreak in horses and a trainer in the Brisbane suburb of Hendra, the frequency of Hendra virus (family Paramyxoviridae) infection has increased in Australia. Unlike seasonal and pandemic influenza viruses, our knowledge about the transmission, pathogenesis and immunity of Hendra virus infection is extremely limited. Results describing the analysis of a newly established encephalitic mouse model of Hendra virus infection will be presented.

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Wednesday, May 1, 2013 at 12:00 noon John A. Burns School of Medicine, Kaka'ako Medical Education Building Auditorium (Room 315) For further information, call 692-1654

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