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SIgN Immunology Seminar



Prof Terence Dermody

Division of Pediatric Infectious Diseases,
Department of Pathology, Microbiology and Immunology,
Vanderbilt University School of Medicine

New Insights into Chikungunya Virus Therapeutics

Host
Dr Lisa Ng
Singapore Immunology Network, A*Star

Date
Monday
3 August 2015

Time
11am – 12pm

Venue
SIgN Seminar Room
Immunos Building
Level 4
Biopolis

Chikungunya virus (CHIKV) is a reemerging alphavirus capable of causing massive epidemics of disease characterized by fever, rash, and polyarthralgia. Illness is acute and intense in most individuals, but chronic joint inflammation can persist for months to years in some. CHIKV is transmitted to humans by *Aedes* species of mosquitoes, which are prevalent throughout the world, including North America. Indeed, more than 1.4 million cases of CHIKV have been diagnosed in the Americas since its emergence in the Caribbean 18 months ago. There are no antiviral agents or vaccines licensed for use against CHIKV. We screened the NIH clinical collection for small molecules capable of inhibiting CHIKV infection and isolated new ultrapotent, CHIKV-specific neutralizing monoclonal antibodies from a human host. The findings point the way forward for development of CHIKV therapeutics and structure-based vaccines.