

SgN Immunology Seminar



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Immediate and Long-Lived Immunity Against CHIKV by Improved DNA Vaccination

Chikungunya virus (CHIKV) has re-emerged as a dangerous mosquito-borne alphavirus and has been responsible for several recent epidemics in tropical Africa and Asia. Recent evidence suggests that CHIKV, which is primarily transmitted to human by the *Aedes* species of mosquitoes, can also be transmitted by other mosquito carriers, raising concern for continued pathogen spread. Despite the recent resurgence of CHIKV, there are still no available vaccines or therapeutics for the disease. Considering the current potential for a global CHIKV pandemic, developing a CHIKV vaccine that elicits potent and broadly neutralizing antibodies is of paramount importance. A vaccine that can induce both induction of protective antibodies and T cells would be ideal in this regard. However, a platform that provides both immediate and long-term protection from CHIKV infection has yet to be developed and continues to be an elusive goal in CHIKV research.

In an effort to address this important need, we focused on developing an in vivo source for antibody production that generates immediate short-term protection while a novel DNA vaccine strategy can drive long-term protection. This talk addresses recent successes in the enhanced DNA platform with improved antibody responses for CHIKV virus. These results are the first of their kind and represent a transformation in the DNA vaccine field.

Host
Dr Lisa Ng
Singapore
Immunology
Network, A*Star

Date
Tuesday,
5 November 2013

Time
2 pm – 3pm

Venue
SgN Seminar Room
Immunos Building
Level 4
Biopolis