Challenges in Overcoming the Global Burden of Dengue

Ooi Eng Eong, PhD
Associate Professor
Emerging Infectious Diseases Program, Duke-NUS Graduate Medical School

Abstract

The global emergence of epidemic dengue is fueled by an incomplete understanding of the determinants of both immunity and pathogenesis. Our laboratory aims to contribute to an improved understanding of dengue at the interface between clinical epidemiology, virology and immunology. Specifically, we are interested in elucidating (1) how antibodies either protect against or enhance dengue virus infection and (2) what viral factors determine the outcome of infection or transmissibility and hence explain its epidemiological phenotype. By elucidating these mechanisms, we hope to contribute to the development of effective vaccines or therapeutics.