Special Issue

Dengue Virus: Transmission, Pathogenesis, Diagnostics, and Vaccines

Message from the Guest Editors

The number of dengue virus infections has been increasing dramatically and is becoming a serious challenge to global public health. Estimated 390 million infections occur annually, with above 100 million symptomatic cases from more than 120 countries worldwide. Rising urbanization, global travel, climate change, global warming, and migration of people due to extensive trade and tourism have created ample opportunities for expansion of mosquito's vectors to diverse geo-climatic regions, thereby spreading dengue disease on a wider global scale. Dengue virus is tansmitted to humans through the bite of infected Aedes species mosquitoes, mainly A. aegypti and A. albopictus. Despite decades of research, there are currently no approved antiviral drugs or no safe and effective vaccines for the prevention and treatment of dengue infections. In this Special Issue, we aim to assemeble a collection of research papers and reviews that consider serological and molecular diagnostic approaches for dengue virus infections, virus-host interactions, and viral pathogenesis in animal models in order to promote the discovery of antiviral drugs and vaccines.

Guest Editors

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Message from the Editor-in-Chief

The worldwide impact of infectious disease is incalculable. The consequences for human health in terms of morbidity and mortality are obvious and vast but, when infections of animals and plants are also taken into account, it is hard to imagine any other disease that has such a significant impact on our lives—on healthcare systems, on agriculture and on world economics. *Pathogens* is proud to continue to serve the international community by publishing high quality studies that further our understanding of infection and have meaningful consequences for disease intervention.

Editor-in-Chief

Prof. Dr. Hinh Ly Department of Veterinary & Biomedical Sciences, University of Minnesota, Twin Cities, MN, USA

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