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Emerging Arboviruses: Epidemiology, Vector Dynamics, and Pathogenesis

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Message from the Guest Editor

Dear Colleagues,

The continuous emergence and re-emergence of arboviruses, such as DENV, YFV, WNV, CHIKV, and ZIKV, pose a significant burden on global public health systems. Less common but important arboviruses, including JEV, MVEV, SPOV, SLEV, USUV, ONNV, PWV, and RVFV, also cause high mortality and morbidity rates in specific regions. Factors like anthropological influences, global transportation systems, urbanization, vector population density, and land perturbation contribute to their intensification and spread.

Over 70% of emerging infectious diseases in humans have a zoonotic origin, with one-third being vector-borne, resulting in over 700,000 deaths annually. Arboviruses can infect various arthropods and animals, with humans as incidental hosts. Unfortunately, there are limited antiviral therapies or vaccines available for many of these viruses.

This Special Issue aims to gather advances in research strategies for emerging and re-emerging arboviruses of human and animal public health concerns. The focus will be on epidemiology, vector dynamics, diagnostics, pathogenesis, vaccines, antivirals, and other mitigation methods to control and prevent the arboviral diseases.



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Special Issue



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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.

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