Special Issue

Dynamics of Vector-Borne Infections

Message from the Guest Editor

Vector-borne diseases, such as malaria, have high morbidity and mortality rates. Dengue threatens the life of billions of people, and it has been demonstrated that there is a major risk of it being introduced to European and North American countries. Mathematical tools are extremely useful in describing the intensity of the transmission of infections and helping in the prediction of the future dynamics of these diseases. In addition, mathematical approaches have been applied in the design and assessment of the impacts of current and future vaccines. The recent SARS-CoV-2 pandemic took the world by surprise, and were it not for the help of mathematical models, it would have taken many months for the scientific and medical community to be able to act to contain it. This Special Issue will present the state of the art in modelling vector-borne infections, with articles by leading authors in this field.

Guest Editor

Prof. Dr. Eduardo Massad Fundacao Getulio Vargas, Rio de Janeiro, Brazil

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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

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