

Special Issue

Next-Gen Sequencing Advances Pathogen Research in Health, Agriculture & Environment

Message from the Guest Editors

This *Pathogens* Special Issue emphasizes the crucial role of next-generation sequencing (NGS) and advanced molecular techniques in addressing the global health challenges posed by infectious pathogens. These pathogens not only threaten human and animal health but also cause significant economic losses and threaten biodiversity. By using high-throughput sequencing technologies among other molecular techniques, researchers can rapidly identify, characterize, and monitor pathogens, thereby enhancing our molecular and epidemiological understanding. This collection highlights how cutting-edge technology contributes to improvements in disease monitoring, control, and management strategies across public health, agriculture, livestock, and environmental sectors. This issue features case studies demonstrating how advancements in sequencing reveal insights into pathogen epidemiology, phylogeny, the emergence of new strains, and resistance development. Ultimately, this Special Issue underscores the importance of innovative molecular methods in advancing the state of the art in pathogen research and fostering more effective responses to infectious threats worldwide.

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About the Journal

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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