Special Issue

Infectious Disease Epidemiology and Modelling

Message from the Guest Editors

Characterizing the epidemiology of infectious diseases requires a proper understanding of the interplay between micro-organisms, such as viruses and bacteria, and the immune response. Given the limited available data on emerging infectious diseases, mathematical modelling remains a crucial tool used not only to gain insights into the epidemiology of infectious diseases but also to forecast the trajectory of pandemics. This Special Issue aims to bring together some of the latest advances in the field of infectious disease epidemiology and modelling. Research areas may include (but are not limited to) the following:

- Modelling the transmission of infectious disease;
- Characterizing the epidemiological characteristics of emerging infectious diseases;
- Within-host models of viral or bacterial kinetics and the immune response.

I look forward to receiving your contributions.

- COVID-19
- compartmental-based models
- agent-based models
- multiscale models
- viral kinetics
- immune response

Guest Editors

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About the Journal

Message from the Editor-in-Chief

"Microorganism" merges the idea of the very small with the idea of the evolving reproducing organism is a unifying principle for the discipline of microbiology. Our journal recognizes the broadly diverse yet connected nature of microorganisms and provides an advanced publishing forum for original articles from scientists involved in high-quality basic and applied research on any prokaryotic or eukaryotic microorganism, and for research on the ecology, genomics and evolution of microbial communities as well as that exploring cultured microorganisms in the laboratory.

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manuscripts are peer-reviewed and a first decision is provided to authors approximately 15.2 days after submission; acceptance to publication is undertaken in 2.9 days (median values for papers published in this journal in the first half of 2025).

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