

## Special Issue

# Modeling the Unholy Trinity of Pandemics: Viral Infection, Immunity, and Virus Transmission 2025

### Message from the Guest Editor

COVID-19 demonstrated the significant impact that viral infections can have on our society. While infected-cases forecasting was of major interest during the pandemic, epidemic models neglected to incorporate three major components: host–pathogen dynamics, the respective immunity, and the potential to be transmitted to other hosts. This Special Issue aims to advance our holistic understanding of these three lines; while it is mainly focused on innovative mathematical modeling ideas and in vivo experiments of SARS-CoV-2, papers covering any other viruses that enable us to advance our holistic knowledge of these three components are very welcome.

### Guest Editor

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### Deadline for manuscript submissions

closed (30 April 2025)



## Viruses

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### Message from the Editor-in-Chief

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### Editor-in-Chief

Dr. Eric O. Freed

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