

## Special Issue

# Pathogenic RNA Viruses: Mechanisms of Viral Replication, Viral-Host Interactions and Antiviral Development

### Message from the Guest Editor

Understanding the detailed molecular mechanisms behind RNA virus replication and the virus–host interactions is crucial for developing more effective antiviral strategies to prevent the devastating consequences of highly pathogenic RNA virus infections. In addition, RNA-virus-derived biologics could also have great potential in biotechnology and therapeutic development. This Special Issue focuses on recent advances in all aspects of RNA viruses and RNA virus infections. Authors are invited to submit their original research/review articles to *Biomedicines* on topics including, but not limited to, the following:

- Molecular mechanisms of viral replication;
- Viral particle assembly and viral RNA packaging;
- Structural and functional studies of non-coding RNAs in the viral RNA genome;
- Interplay between host cell and RNA virus, such as host antiviral responses and viral immune evasion;
- Vaccine and antiviral therapeutic developments;
- In vitro assembly of virus-like particles (VLP) and their applications.

### Guest Editor

Dr. Pengfei Ding

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### Deadline for manuscript submissions

closed (31 July 2025)



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## About the Journal

### Message from the Editor-in-Chief

*Biomedicines* (ISSN 2227-9059) is an open access journal devoted to all aspects of research on human health and disease, the discovery and characterization of new therapeutic targets, therapeutic strategies, and research of naturally driven biomedicines, pharmaceuticals, and biopharmaceutical products. Topics include pathogenesis mechanisms of diseases, translational medical research, biomaterial in biomedical research, natural bioactive molecules, biologics, vaccines, gene therapies, cell-based therapies, targeted specific antibodies, recombinant therapeutic proteins, nanobiotechnology driven products, targeted therapy, bioimaging, biosensors, biomarkers, and biosimilars. The journal is open for publication of studies conducted at the basic science and preclinical research levels. We invite you to consider submitting your work to *Biomedicines*, be it original research, review articles, or developing Special Issues of current key topics.

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### Editor-in-Chief

Prof. Dr. Felipe Fregni

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