





an Open Access Journal by MDPI

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

Guest Editor:

Dr. Pengfei Ding

Howard Hughes Medical Institute, University of Maryland, Baltimore County, Baltimore, MD, USA

Deadline for manuscript submissions:

31 January 2025

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.













an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Felipe Fregni

1. Neuromodulation Center and Center for Clinical Research Learning, Spaulding Rehabilitation Hospital and Massachusetts General Hospital, Harvard Medical School, Boston, MA 02114, USA 2. Department of Epidemiology, Harvard T.H. Chan School of Public Health, Boston, MA 02115, USA

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.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility: indexed within Scopus, SCIE (Web of Science), PubMed, PMC, CAPlus / SciFinder, and other databases.

Journal Rank: JCR - Q1 (Pharmacology and Pharmacy) / CiteScore - Q2 (*Medicine (miscellaneous)*)

Contact Us