Special Issue

Bioinformatics and Computational Approaches in Viral Genomics and Evolution 2025

Message from the Guest Editors

This Special Issue seeks to highlight innovative computational techniques, including genome-wide analysis, pipelines for NGS-generated genome assembly, phylogenetic modeling, and machine learning approaches, to study viral evolution. We welcome original research, reviews, and short communications on topics such as:

- Bioinformatics tools for viral genome analysis and surveillance;
- Computational methods for studying viral evolution and mutation;
- Integration of genomic data with clinical and epidemiological information;
- Computational models for understanding viral-host interactions and pathogenicity;
- Advances in computational epidemiology and viral surveillance networks.

Guest Editors

Dr. Camila Malta Romano

Prof. Dr. Mariana Severo Ramundo

Dr. Nilson Coimbra

Deadline for manuscript submissions

16 December 2025



Viruses

an Open Access Journal by MDPI

Impact Factor 3.5 CiteScore 7.7 Indexed in PubMed



mdpi.com/si/225824

Viruses Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 viruses@mdpi.com

mdpi.com/journal/

viruses





Viruses

an Open Access Journal by MDPI

Impact Factor 3.5 CiteScore 7.7 Indexed in PubMed



viruses



About the Journal

Message from the Editor-in-Chief

Viruses (ISSN 1999-4915) is an open access journal which provides an advanced forum for studies of viruses. It publishes reviews, regular research papers, communications, conference reports and short notes. Our aim is to encourage scientists to publish their experimental and theoretical results in as much detail as possible. There is no restriction on the length of the papers. The full experimental details must be provided so that the results can be reproduced. We also encourage the publication of timely reviews and commentaries on topics of interest to the virology community and feature highlights from the virology literature in the 'News and Views' section.

Electronic files or software regarding the full details of the calculation and experimental procedure, if unable to be published in a normal way, can be deposited as supplementary material.

Editor-in-Chief

Dr. Eric O. Freed HIV Dynamics and Replication Program, Center for Cancer Research, National Cancer Institute, Frederick, MD 21702-1201, USA

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, MEDLINE, PMC, Embase, PubAg, and other databases.

Journal Rank:

JCR - Q2 (Virology) / CiteScore - Q1 (Virology/Infectious Diseases)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 18.6 days after submission; acceptance to publication is undertaken in 2.5 days (median values for papers published in this journal in the first half of 2025).