Special Issue

Functional and Structural Features of Viral RNA Elements

Message from the Guest Editor

The outcome of viral infections including evasion from the immune system and pathogenicity can be regulated by multiple post-transcriptional mechanisms such as splicing, mRNA stability, mRNA export, translation initiation and mRNA modification or editing. The corresponding viral RNA sequences must therefore provide the structural and sequence determinants required for this process. Well-characterized examples are the internal ribosome entry site (IRES), for cap-independent protein translation first identified in Picornaviruses, or the RRE element required for the efficient export of HIV mRNAs. The current Special Issue addresses recent advances in unraveling the structural motifs contributing to the functionality of such viral cis-regulatory RNA sequences and the molecular mechanisms and host factors involved their mode of action. It further aims at a better understanding of the evolution of these regulatory elements for facilitating the prediction of sequences with similar functions in other viral genomes.

Guest Editor

Dr. Stefan Weger

Charité University Medicine Berlin, Campus Benjamin Franklin, Clinic for Neurology with Experimental Neurology, Gene Therapy Group, 12203 Berlin, Germany

Deadline for manuscript submissions

closed (31 May 2025)

Viruses

an Open Access Journal by MDPI

Impact Factor 3.5
CiteScore 7.7
Indexed in PubMed

mdpi.com/si/175327

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

mdpi.com/journal/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).