



*symmetry*



an Open Access Journal by MDPI

## **Symmetry in the Molecular Evolution and Genetics of Viruses and Their Interactions with Vertebrate Hosts**

Guest Editor:

**Dr. Bob Friedman**

Retired from Department of  
Biological Sciences, University of  
South Carolina, Columbia, SC  
29208, USA

Deadline for manuscript  
submissions:

**closed (30 November 2022)**

### **Message from the Guest Editor**

Dear Colleagues,

The study of viruses that infect vertebrates is furthered by the collection of large amounts of genetic sequence data and the use of advanced machine learning methods. In essence, this interaction between virus and vertebrate host is a contest between the evolution of the virus and immune defense by the host. This is particularly applicable in jawed vertebrates with their system of adaptive immunity, which includes the mechanisms of somatic recombination for an increased diversity of cellular receptors with a role in foreign peptide detection. This adaptive process in the host can lead to learning the peptide fragments of a virus, but the adaptation is challenged by the ability of a virus to continually evolve and escape from host immunity...



[mdpi.com/si/125228](https://mdpi.com/si/125228)

**Special** Issue



an Open Access Journal by MDPI

## Editor-in-Chief

### Prof. Dr. Sergei D. Odintsov

1. Institució Catalana de Recerca  
i Estudis Avançats (ICREA),  
Passeig Luis Companys, 23,  
08010 Barcelona, Spain  
2. Institute of Space Sciences  
(ICE-CSIC), C. Can Magrans s/n,  
08193 Barcelona, Spain

## Message from the Editor-in-Chief

Symmetry is ultimately the most important concept in natural sciences. It is not surprising then that very basic and fundamental research achievements are related to symmetry. For instance, the Nobel Prize in Physics 1979 (Glashow, Salam, Weinberg) was received for a unified symmetry description of electromagnetic and weak interactions, while the Nobel Prize in Physics 2008 (Nambu, Kobayashi, Maskawa) was received for the discovery of the mechanism of spontaneous breaking of symmetry, including CP symmetry. Our journal is named *Symmetry* and it manifests its fundamental role in nature.

## 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), CAPlus / SciFinder, Inspec, Astrophysics Data System, and other databases.

**Journal Rank:** JCR - Q2 (*Multidisciplinary Sciences*) / CiteScore - Q1 (General Mathematics)

## Contact Us

---

*Symmetry* Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
www.mdpi.com

mdpi.com/journal/symmetry  
symmetry@mdpi.com  
X@Symmetry\_MDPI