

Special Issue

Host–Virus Co-Evolution in Aquatic Species: Insights into Disease Dynamics

Message from the Guest Editors

Aquatic species are frequently exposed to viral pathogens, leading to significant ecological and economic impacts. The ongoing co-evolution between host organisms and viruses plays a crucial role in shaping disease dynamics, influencing viral transmission, host resistance, and immune response mechanisms.

We invite contributions that explore the evolutionary “arms race” between aquatic hosts and viral pathogens. Additionally, the Issue will address the impact of environmental factors, such as climate change and habitat degradation, on host–virus co-evolution.

This Special Issue will shed light on the implications of co-evolutionary dynamics for disease management and prevention strategies in aquaculture and wild aquatic ecosystems. By understanding the complexities of host–virus interactions, we aim to enhance our ability to predict and mitigate viral outbreaks in aquatic species, contributing to more sustainable and resilient aquatic ecosystems.

Guest Editors

Dr. Myung-Hwa Jung

Department of Aqualife Medicine, Kongju National University, Yesan 32588, Republic of Korea

Prof. Dr. Min Sun Kim

Department of Biological Sciences, Kongju National University, Gongju 32588, Republic of Korea

Deadline for manuscript submissions

31 March 2026



Microorganisms

an Open Access Journal
by MDPI

Impact Factor 4.2
CiteScore 7.7
Indexed in PubMed



mdpi.com/si/235908

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

[mdpi.com/journal/
microorganisms](https://mdpi.com/journal/microorganisms)





Microorganisms

an Open Access Journal
by MDPI

Impact Factor 4.2
CiteScore 7.7
Indexed in PubMed



[mdpi.com/journal/
microorganisms](https://mdpi.com/journal/microorganisms)



About the Journal

Message from the Editor-in-Chief

"Microorganism" merges the idea of the very small with the idea of the evolving reproducing organism is a unifying principle for the discipline of microbiology. Our journal recognizes the broadly diverse yet connected nature of microorganisms and provides an advanced publishing forum for original articles from scientists involved in high-quality basic and applied research on any prokaryotic or eukaryotic microorganism, and for research on the ecology, genomics and evolution of microbial communities as well as that exploring cultured microorganisms in the laboratory.

Editor-in-Chief

Dr. Nico Jehmlich

Department of Molecular Toxicology, UFZ-Helmholtz Centre for
Environmental Research, 04318 Leipzig, Germany

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, PMC, PubAg, CAPlus / SciFinder, AGRIS, and other databases.

Journal Rank:

JCR - Q2 (Microbiology) / CiteScore - Q1 (Microbiology (medical))

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 15.2 days after submission; acceptance to publication is undertaken in 2.9 days (median values for papers published in this journal in the first half of 2025).