

Special Issue

Adeno-Associated Virus Biology and AAV Vector- Mediated Gene Therapy

Message from the Guest Editors

Following their successful use as vectors in gene therapy clinical trials, adeno-associated viruses (AAV) have increased in popularity and have become emblematic viruses of the *Parvovirinae* subfamily. However, grey areas remain in the wild-type AAV life cycle. Whereas AAV was disclosed to the scientific community in 1964, novel coding sequences and proteins were only recently discovered, such as the MAAP (membrane-associated accessory protein) identified by Church's group. Additional knowledge on fundamental biology has a potential impact on AAV vector production, purification and efficiency. In this regard, the assembly-activating protein (AAP) described in 2010 shed new light on the capsid assembly mechanism, leading to a rethinking of Cap ORF molecular design for the generation of AAV variants. This Special Issue of *Microorganisms* invites submissions of manuscripts that address AAV biology and vectorology. Scientific findings must be relevant to recombinant AAV-mediated gene therapy. Original research articles and reviews are welcome. Research areas may include (but are not limited to) the following: genomics, epigenetics, vector design and quality control studies.

Guest Editors

Dr. Magalie Penaud-Budloo
Freelance Consultant, Nantes, France

Dr. Virginie Pichard
Translational Research in Gene Therapy, INSERM UMR 1089, CHU de Nantes, Nantes Université, F-44200 Nantes, France

Deadline for manuscript submissions

closed (30 September 2024)



Microorganisms

an Open Access Journal
by MDPI

Impact Factor 4.2
CiteScore 7.7
Indexed in PubMed



mdpi.com/si/161343

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).