



Bacteriophage-Host Cell Interactions: From Biology to the Control of Bacterial Infection

Guest Editor:

Dr. Carlos São-José

Research Institute for Medicines
(iMed.Ulisboa), Faculty of
Pharmacy, Universidade de
Lisboa, Av. Prof. Gama Pinto,
1649-003 Lisboa, Portugal

Deadline for manuscript
submissions:

closed (30 October 2023)

Message from the Guest Editor

Dear Colleagues,

Bacteriophages (phages) were first described more than a century ago, and it was immediately discovered that their bactericidal activity could be used to treat bacterial infections (phage therapy). Research on understanding how phages infect and interact with bacterial hosts in different environments has provided answers to fundamental questions in biology and this research is linked to the very foundations of molecular biology. Phage research maintained its relevance over the years, being at the forefront of fundamental discoveries and major technological revolutions, with the CRISPR-Cas systems being one of the most recent and famous examples.

Some focal areas include, but are not limited to, the following:

- Understanding phage interaction with the host cell envelope and how phages cope with the bacterial cell barriers;
- Use of phages and their derived proteins in the design of strategies to detect and/or fight bacteria in different contexts;
- Bacterial response and defense mechanisms to phage infection and phage countermeasures.

Keywords: bacteriophages; phage therapy; bacterial infections; bacteriophage–host interactions





an Open Access Journal by MDPI

Editor-in-Chief

Dr. Nico Jehmlich

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

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.

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), PubMed, PMC, PubAg, CAPlus / SciFinder, AGRIS, and other databases.

Journal Rank: JCR - Q2 (*Microbiology*) / CiteScore - Q2 (*Microbiology*)

Contact Us

Microorganisms Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

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

mdpi.com/journal/microorganisms
microorganisms@mdpi.com
X@Micro_MDPI