Special Issue

Resistance Matters: Current Issues and Future Strategies to Combat Multidrug-Resistant Bugs

Message from the Guest Editors

The rise in the number of bacterial isolates that show antibiotic resistance (AR) to several, if not all, antibiotics represents the most frightening challenge of the 21st century. Currently, AR bugs cause infections associated with high morbidity and mortality, especially in healthcare settings. The main cause of this AR phenomenon is the overuse and misuse of antibiotics, involving both prescribers and users; therefore, strict measures of prevention and control should be taken. Together with combined therapies, phages, efflux pump and beta-lactamase/carbapenamase inhibitors, anti-quorum sensing, anti-biofilm, anti-virulence, anti-plasmid and plasmid curing are recent approaches to against AR pathogens, which are currently being researched. These strategies take into account bacterial behavior, selectively acting on those virulence determinants required for the establishment of the infections. Therefore, this Special Issue will focus on the various aspects of overcoming bacterial AR, including classical and innovative strategies to eradicate pathogens. This Special Issue also covers basic studies on potential and promising bacterial targets for the development of new molecules.

Guest Editors

Prof. Dr. Cecilia Ambrosi

Dr. Daniela Scribano

Dr. Meysam Sarshar

Dr. Payam Behzadi

Deadline for manuscript submissions

closed (31 August 2023)

Microorganisms

an Open Access Journal by MDPI

Impact Factor 4.2
CiteScore 7.7
Indexed in PubMed

mdpi.com/si/120159

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

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

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).

MDPI