Special Issue

Antimicrobial Resistance Mechanisms in Bacteria

Message from the Guest Editors

Gram-negative bacteria are prevalent pathogens associated with hospital-acquired infections that are a major challenge for patient safety, especially in ICUs. The growing number of antimicrobial-resistant (AMR) pathogens places a significant burden on healthcare systems. Even multi-drug (MDR), extensive-drug (XDR), and pan-drug (PDR) resistant bacteria have developed because of horizontal transfer (HGT) of AMR genes. HGT through plasmids plays a major role. Typing of the plasmids and study of their spread and evolution in different bacterial hosts provide knowledge concerning the transmission of AMR. The aim of this Special Issue is to provide a collection of articles that highlight the current issues in the research of "Plasmids Carrying Antimicrobial Resistance Genes in Gram-Negative Bacteria". As the , I invite you to submit research articles, review articles, and short communications dedicated to the AMR genes and plasmids in Gram-negative bacteria, plasmid typing, HGT from the human microbiome or animal pathogens, etc.

Guest Editors

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Deadline for manuscript submissions

closed (15 January 2024)

Microorganisms

an Open Access Journal by MDPI

Impact Factor 4.2
CiteScore 7.7
Indexed in PubMed

mdpi.com/si/117190

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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

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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).

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