

# Special Issue

## Evolution and Spread of Drug-Resistant Pathogens

### Message from the Guest Editors

The evolution of resistant pathogens has intensified alarmingly, driven by the excessive and inappropriate use of antimicrobials in human medicine, animal production, and agriculture. This scenario has favored the emergence of so-called “superbugs” – microorganisms capable of resisting multiple classes of antibiotics, including those considered last-resort treatments, such as carbapenems and colistin. These pathogens adapt rapidly through mechanisms like genetic mutations and horizontal gene transfer, enabling resistance traits to spread across species and environments. This Special Issue aims to present a collection of articles that provide an up-to-date and comprehensive overview of scientific advances related to antimicrobial resistance. Manuscripts covering all aspects of the evolution and dissemination of resistant pathogens are welcome, including molecular mechanisms of resistance, epidemiological surveillance, public health impacts, prevention and control strategies, and innovative approaches to diagnosis, treatment, and antimicrobial stewardship. Submissions focusing on One Health perspectives that integrate human, animal, and environmental health are especially encouraged.

### Guest Editors

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### Deadline for manuscript submissions

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## Microorganisms

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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.

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### Editor-in-Chief

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