Special Issue

Antibiotic Susceptibility Testing and Rapid Diagnostics of Antimicrobial Resistance

Message from the Guest Editors

Antimicrobial resistance (AMR) poses a critical threat to global health, leading to increased morbidity, mortality, and healthcare costs. The timely and accurate identification of resistant pathogens is essential for appropriate antimicrobial stewardship and improved clinical outcomes. This Special Issue focuses on recent advances and innovative strategies in antibiotic susceptibility testing (AST) and rapid diagnostics of AMR. We welcome original research articles, reviews, and technical reports that explore novel phenotypic and genotypic approaches to AST, molecular diagnostics, point-of-care testing, biosensors, and emerging technologies such as AI-assisted platforms. Studies addressing the clinical impact, implementation challenges, and real-world applications of rapid diagnostic tools across different healthcare settings are particularly encouraged. This Special Issue aims to bring together multidisciplinary contributions from microbiologists, clinicians, pharmacologists, and bioengineers working to combat AMR through faster and more precise diagnostics

Guest Editors

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About the Journal

Message from the Editor-in-Chief

There are very few fields that attract as much attention as scientific endeavor related to antibiotic discovery, use and preservation. The public, patients, scientists, clinicians, policy-makers, NGOs, governments, and supra-governmental organizations are all focusing intensively on it: all are concerned that we use our existing agents more effectively, and develop and evaluate new interventions in time to face emerging challenges for the benefit of present and future generations. We need every discipline to contribute and collaborate: molecular, microbiological, clinical, epidemiological, geographic, economic, social scientific and policy disciples are all key. *Antibiotics* is a nimble, inclusive and rigorous indexed journal as an enabling platform for all who can contribute to solving the greatest broad concerns of the modern world.

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