Special Issue

New Approaches in Antimicrobial Drug Discovery and Design

Message from the Guest Editor

The rise of multi-drug-resistant human pathogenic bacteria found in many infectious diseases worldwide is a global problem recognized by the World Health Organization. To confront this global health threat, we must develop novel strategies for improved antibacterial drug development that are prompt, accurate, and consequently more efficient. Such approaches can be based on genome-wide bioinformatics analyses and systems biology for the in silico evaluation of new targets for antibacterial drug development. In addition, various synthetic biology tools can be employed to rationalize new antibacterial drug agents. Therefore, the main subject of this Special Issue includes novel approaches for antibacterial drug development based on novel drug targets, mechanisms of action, rational drug design, in silico drug target evaluation using bioinformatics and AI-based methods, etc.

Guest Editor

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Deadline for manuscript submissions

closed (31 October 2025)

Antibiotics

an Open Access Journal by MDPI

Impact Factor 4.6
CiteScore 8.7
Indexed in PubMed

mdpi.com/si/159554

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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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