

Special Issue

Molecular Strategies to Overcome Antibiotic Resistance in Carbapenem-Producing Bacteria

Message from the Guest Editors

The escalation of resistance mechanisms, including the emergence of carbapenemases, has severely limited treatment options, leading to increased morbidity and mortality rates worldwide. Understanding the intricate molecular pathways is essential for devising effective therapeutic interventions.

This Special Issue delves into innovative molecular strategies combating antibiotic resistance in carbapenem-producing bacteria. The focus is on unraveling genetic and biochemical mechanisms driving resistance to identify novel therapeutic targets. Encompassing mechanistic studies, drug discovery efforts, and clinical investigations, this collection aims to inform the development of urgently needed antimicrobial therapies. The issue showcases pioneering research utilizing diverse methodologies like genomic and proteomic analyses, structural elucidation of resistance determinants, drug screening approaches, and clinical trials of novel therapeutics. Emphasis lies on studies providing novel insights into resistance mechanisms and proposing transformative solutions reshaping clinical practice. Submissions of original research articles, reviews, and perspectives are welcome.

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Message from the Editor-in-Chief

The International Journal of Molecular Sciences (*IJMS*, ISSN 1422-0067) is an open access journal, which was established in 2000. The journal aims to provide a forum for scholarly research on a range of topics, including biochemistry, molecular and cell biology, molecular biophysics, molecular medicine, and all aspects of molecular research in chemistry. *IJMS* publishes both original research and review articles, and regularly publishes special issues to highlight advances at the cutting edge of research. We invite you to read recent articles published in *IJMS* and consider publishing your next paper with us.

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