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# Molecular Strategies to Overcome Antibiotic Resistance in Carbapenem-Producing Bacteria

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### **Message from the Guest Editors**

Dear Colleagues,

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 carbapenemproducing 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

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