

## Special Issue

# Present and Future of Antibiotic Treatment for Carbapenem-Resistant Enterobacteriaceae

### Message from the Guest Editor

Carbapenem-resistant Enterobacteriaceae (CRE) infections have emerged as a major public health concern over the past few decades. This Special Issue aims to shed light on the present and future of antibiotic treatment for CRE, focusing on the latest research advancements, clinical trials, and therapeutic interventions. By bringing together research from various disciplines, including microbiology, pharmacology, and clinical medicine, this collection of articles aims to provide a comprehensive overview of the current landscape and prospects in the fight against CRE. We invite researchers, clinicians, and industry professionals to contribute their insights and findings to this Special Issue. We will delve into the mechanisms underlying carbapenem resistance in Enterobacteriaceae, explore novel therapeutic targets and approaches, and discuss the challenges and opportunities in developing new antibiotics. In addition, Dr. Dalida Bivona from the Biomedical and Biotechnological Sciences Department, University of Catania, will be a co-worker to help care for this Special Issue.

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### Guest Editor

Dr. Dafne Bongiorno

Department of Biomedical and Biotechnological Sciences (BIOMETEC), Medical Molecular Microbiology and Antibiotic Resistance Laboratory (MMARLab), University of Catania, Catania, Italy

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### Deadline for manuscript submissions

closed (30 September 2025)



## Antibiotics

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*Antibiotics*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[antibiotics@mdpi.com](mailto:antibiotics@mdpi.com)

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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 disciplines 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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### Editor-in-Chief

Prof. Dr. Nicholas Dixon  
School of Chemistry and Molecular Bioscience, University of  
Wollongong, Wollongong, NSW 2522, Australia

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