



Antibiotic Resistance in Antibiotic Producers and Other Bacteria: Genes, Mechanisms, Evolution, and Surveillance

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Message from the Guest Editors

Dear Colleagues,

Competition between/within antibiotic producers and other bacteria is an inherent feature of environmental microbiomes, driving the co-evolution of antibiotic production and antimicrobial resistance (AMR) genes. Although this process is likely millions of years old, it first appeared in the scope of researchers after human pathogens started to evolve resistance to antibiotics used in clinics. All aspects of AMR in bacteria have become a subject of scrupulous research and debate, since it is a serious public health problem.

The current Special Issue seeks the submission of manuscripts that will allow us to deepen our current understanding of how bacteria—including antibiotic producers, environmental bacteria, and pathogens—resist antibiotics, using genetics, molecular biology, and different “-omics” approaches. We also welcome submissions on the surveillance of AMR genes in different environments. Manuscripts unraveling the evolution of AMR are especially encouraged. This Special Issue accepts original research articles, reviews, and case reports.





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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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