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# Genomic Analysis of Antibiotics Resistance in Pathogens

Guest Editor:

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Deadline for manuscript submissions:
**closed (31 March 2022)**

## Message from the Guest Editor

Dear Colleagues,

The emergence of antibiotic-resistant pathogens currently poses a serious threat to public health and the economy. Pathogenic bacteria are the most frequently exposed to unnatural doses of antibiotics and their selective effect.

In bacteria, resistance to antibiotics can be encoded on chromosomes, plasmids, or other mobile genetic elements. It can also result from mutations that lead to changes in the antibiotics' affinity for their targets or in the antibiotics' ability to act on bacterial growth or death. The exposure of bacteria, bacterial populations, and microbial communities to antibiotics, at different concentrations, shapes their genomic dynamics. It is essential to understand the dynamics and mobilization of the genes that encode antibiotic resistance, in human, animal, plant, and environmental microbiomes, through genomic and metagenomic approaches and bioinformatics analyses.

This Special Issue seeks manuscript submissions on the horizontal transfer of antibiotic-resistance genes, their dissemination and epidemiology, association with bacterial virulence, between bacterial genotypes and their phenotypes.

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## Editor-in-Chief

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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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