

## Special Issue

# Dissemination, Evolution, Molecular Mechanism of Antibiotic Resistance and Novel Approaches to Combat Multidrug Resistant Isolates

### Message from the Guest Editor

In recent years, the number of antibiotic-resistant bacteria prevalent in clinical settings has dramatically risen worldwide, increasing the number of deaths caused by resistant bacteria. The CDC's 2019 Antibiotic Resistance Threats Report states that antibiotic-resistant bacteria and fungi cause more than 2.8 million infections and 35,000 deaths per year and result in annual healthcare costs exceeding \$281 million (2017) in the United States. Different mechanisms of antibiotic resistance and the way these mechanisms can spread are causing an increase in antibiotic resistance. In some cases, no available antibiotics are left to deal with some of these bacterial infections. This Special Issue seeks manuscript submissions that further our understanding of dissemination, evolution, the mechanism behind the antimicrobial resistance phenotype, and novel approaches to treating multidrug-resistant isolates.

**Keywords:** antibiotic resistance; beta-lactamases; mobile elements; horizontal gene transfer; novel therapies; extreme-drug resistance; pan-drug resistance; carbapenems; inhibitors; plasmids; clones

### Guest Editor

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### Deadline for manuscript submissions

closed (31 March 2021)



## Antibiotics

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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

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