Special Issue

The Antibiotic Resistance and Virulence Genes of Pathogens in Aquatic and Soil Environment

Message from the Guest Editor

Aquatic and soil environments are susceptible to the introduction of pathogenic bacteria, which can harbor genes conferring antibiotic resistance and virulence. The presence of such genes in water bodies and soil poses a risk to human health, as they can contribute to the emergence of antibiotic-resistant infections and potentially more severe disease outcomes. Moreover, these genes can spread among bacteria through horizontal gene transfer (HGT) mechanisms, and many kinds of pollutants can promote HGT to accelerate ARG dissemination. Therefore, monitoring and controlling the spread of these genes in aquatic and soil environments is critical for maintaining the effectiveness of antibiotics and safeguarding public health.

Guest Editor

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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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