Special Issue

Linking Genomic Mutations to Antimicrobial Resistance and Virulence

Message from the Guest Editor

Linking genomic mutations to antimicrobial resistance (AMR) and virulence represents a vital area of research that addresses the escalating global threat of multidrug-resistant pathogens. Insights into genomic mutations, including single-nucleotide polymorphisms (SNPs) and structural variations, are key factors in developing resistance and modulating virulence factors, ultimately influencing pathogenicity. Understanding the genetic mechanisms behind antimicrobial resistance (AMR) and virulence not only aids in surveillance but also helps unravel the evolutionary dynamics of pathogenic microorganisms. For this Special Issue, we invite original research articles or reviews exploring the genetics and genomic mutations associated with antimicrobial resistance and virulence. We also welcome contributions that showcase the latest advancements and innovations in fundamental science and biomedical applications regarding infectious diseases and treatment strategies within the context of AMR.

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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