Special Issue

Molecular Detection, Characterization, Antimicrobial Resistance and Genomic Epidemiology of Pathogenic Bacteria

Message from the Guest Editor

The infections caused by antibiotic-resistant bacteria have become a major challenge worldwide. The rapid detection of specific bacterial species causing infections and their antibiotic resistance determinants could provide the crucial tools for coping with this global problem. Currently, molecular detection tools and whole-genome sequencing have become the gold standard for the detection and characterization of various pathogens. The combination of molecular, genomic, and bioinformatics tools has already given rise to genomic epidemiology approaches, which are currently attracting increasing attention in different fields of pathogen investigation. For this Special Issue, we aim to describe the application of current molecular techniques to the detection, characterization, antimicrobial resistance determination, and epidemiological surveillance of various bacterial pathogens, including the ones causing co-infections in COVID-19 patients. Reports based on whole-genome sequencing and genomic epidemiology analysis are particularly welcome. Novel computational approaches for antimicrobial resistance determination and genomic characterization will also be considered.

Guest Editor

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Deadline for manuscript submissions

closed (31 October 2023)

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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.

Editor-in-Chief

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