Special Issue

Antibiotic Resistance in Pathogenic Bacteria

Message from the Guest Editors

Antibiotic resistance is a global health threat impacting Gram-negative and Gram-positive bacteria. An increasing number of strains are now virtually resistant to all available antibiotics, making infectious diseases difficult or impossible to treat. The World Health Organization has identified species that urgently require new antimicrobials. At the same time, the Centers for Disease Control and Prevention has highlighted the species posing the most significant health threats due to antibiotic resistance. Understanding the mechanisms of antimicrobial resistance, their acquisition, and the events associated with the dissemination of resistance determinants is essential to developing strategies to overcome resistance. This Special Issue thus welcomes original research or review manuscripts focused on the molecular mechanisms of resistance and dissemination, bacterial strategies to evade antimicrobial action, specific resistant bacterial strains, antimicrobial stewardship, novel strategic therapeutics to fight resistant infections, and broader scientific concepts related to this critical global health challenge in the most impactful human pathogens.

Guest Editors

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"Microorganism" merges the idea of the very small with the idea of the evolving reproducing organism is a unifying principle for the discipline of microbiology. Our journal recognizes the broadly diverse yet connected nature of microorganisms and provides an advanced publishing forum for original articles from scientists involved in high-quality basic and applied research on any prokaryotic or eukaryotic microorganism, and for research on the ecology, genomics and evolution of microbial communities as well as that exploring cultured microorganisms in the laboratory.

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