Special Issue

Mechanisms of Antimicrobial Resistance in Bacterial Pathogens

Message from the Guest Editor

Antibiotic resistance is a major crisis worldwide and is one of the most serious threats faced by humankind. Efflux pump inhibitors have been identified as potential therapeutic agents which can regain the activity of antibiotics that are no longer effective against pathogens. Thus, in this Special Issue, we would like to present up-to-date knowledge on the transcriptional regulatory mechanisms that control multidrug efflux pumps, and recent advances in the development of efflux pump inhibitors to tackle multidrug-resistant Gram-negative pathogens. This Special Issue could serve as a basis for the discovery of potential antimicrobial therapeutics based on inhibiting drug efflux pumps, to control highly resistant bacterial pathogens.

The topics that are covered in this Special Issue include but are not limited to multidrug efflux pumps; antibiotic resistance; transcriptional regulation of efflux pumps; drug transport; RND transporters; efflux pump inhibitors; antimicrobial therapeutics.

Guest Editor

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Message from the Editor-in-Chief

"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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