

Special Issue

Systems Involved in Antimicrobial Resistance and Virulence of Clinically Important Pathogens

Message from the Guest Editors

Plasmids play an important role in the epidemiology of antibiotic resistance, since acquisition of various resistance genes on a replicon can result in resistance to multiple antibiotics of the host bacterial cell. Additionally, plasmids harbor various genes encoding virulence or adhesion factors, which offer an advantage to the bacterium for successful invasion and survival within the infected host.

Many clones of bacterial strains possess a CRISPR/Cas system, which is an adaptive immune system that allows bacteria to limit the entry of genetic elements such as bacteriophages and plasmids. Interestingly, several recent studies have pointed at direct links of CRISPR/Cas systems to regulation of stress-related phenomena. Thus, exploring the role of those systems in bacterial infections is important for fighting MDR pathogens.

The scope of this Special Issue is to collect original contributions on the systems involved in antimicrobial resistance and virulence of clinically important pathogens. It is our pleasure to invite you to submit research articles, short communications, or review articles related to these topics.

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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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