Special Issue

Bacterial Quorum Sensing (QS)

Message from the Guest Editor

The discovery of microbial communication through quorum sensing (QS) is considered one of the major advances in science. Microbial cells can communicate via quorum signals known as autoinducers or pheromones. Several mechanisms encountered in QS have been described. Quorum sensing machinery controls the secretion of an arsenal of enzymes, proteins, and polysaccharides. Moreover, QS is considered one of the major contributors to the expression of microbial virulence factors, biofilm assembly, host colonization, and evasion. In addition, cellular behavior in the presence of invaders is also controlled by QS circuits.Quorum sensing inhibition (QSI) is an attractive approach for the development of novel antipathogenic therapies as it disrupts bacterial pathogenic activities without killing the pathogen and facilitates microbial eradication via the immune system.This Special Issue will provide a collection of articles, review articles, and short communications that display new findings on how microorganisms communicate and how they interact through quorum sensing circuits, as well as how the QSI can influence microbial infection and dissemination.

Guest Editor

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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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