Special Issue

Bacterial Biofilm Microenvironments: Their Interactions and Functions

Message from the Guest Editors

Mature bacterial biofilms contain a diversity of microorganisms dynamically working together to survive their environment. This diversity creates small, diversified environments, known as microenvironments, that have many different functions. Antimicrobial challenges to biofilms are hindered and even deactivated by these microenvironments, rendering them ineffective in treating the deeper parts of biofilm. Recent advancements in 3D bioprinting have allowed researchers to model these microenvironments, and advancements in nanotechnology have provided better drug delivery vessels to deliver antibiotics less affected by these microenvironments.

This Special Issue is focused on all aspects of bacterial biofilm microenvironments.This includes but is not limited to modeling via 3D bioprinting, microscopic analysis, nanotechnology, drug delivery systems, functionality, and influence on biofilm survival and/or maturity. In addition, this issue also deals with bacterial cell-to-cell signaling mechanisms and how they influence change in the microenvironment in the microbial community and in the development of biofilms, virulence factor production, pathogenicity, and antimicrobial resistance.

Guest Editors

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Deadline for manuscript submissions

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About the Journal

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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