



Computational System Biology of Microbial Biofilms and Their Applications in Bioengineering

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Message from the Guest Editors

Dear Colleagues,

Biofilms grow practically on animate and inanimate surfaces exposed to aqueous environments, including but not limited to metals, polymers, living tissues, and medical implants. They are widely researched in biomedical, agricultural, and industrial settings and even reported and studied in spacecraft and international space station (ISS) environments. Biofilms can be incredibly beneficial or exceedingly harmful. For example, detached cells from pathogenic biofilms are known to transmit pathogens in food production facilities, water pipelines, and medical devices.

This Special Issue aims to leverage the data science toolkit to provide biofilm microbiologists with a systemic and integrative resource in metagenomics, meta-transcriptomics, meta-proteomics, meta-metabolomics, single-cell genomics, functional genomics, synthetic microbiology, bioinformatics, and computational bioscience.

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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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