Special Issue

Mechanisms of Microbial Biofilm Resistance and New Methods for Biofilm Control

Message from the Guest Editor

Biofilm growth represents a key microbial strategy in terms of colonization, pathogenicity, and resistance, allowing microorganisms to persist both in the environment and within a host during infection. Within biofilms, microbial cells exhibit peculiar features that differ from planktonic ones, and special phenotypes are induced that can endure antimicrobial pressure. Indeed, bacterial cells growing in biofilms can be 10 to 1000 times more resistant to antibiotics, and this constitutes one of the main reasons for the lack of eradication of infections. Moreover, biofilms favor DNA exchange between cells, increasing the spread of antimicrobial resistance.

This Special Issue will focus on novel advances in the study of biofilm lifestyles, the features characterizing sessile cells, their resistance to antibiotics, and the identification of new compounds endowed with antibiofilm activity.

Guest Editor

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Message from the Editor-in-Chief

There are very few fields that attract as much attention as scientific endeavor related to antibiotic discovery. use and preservation. The public, patients, scientists, clinicians, policy-makers, NGOs, governments, and supra-governmental organizations are all focusing intensively on it: all are concerned that we use our existing agents more effectively, and develop and evaluate new interventions in time to face emerging challenges for the benefit of present and future generations. We need every discipline to contribute and collaborate: molecular, microbiological, clinical, epidemiological, geographic, economic, social scientific and policy disciples are all key. Antibiotics is a nimble, inclusive and rigorous indexed journal as an enabling platform for all who can contribute to solving the greatest broad concerns of the modern world.

Editor-in-Chief

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