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Microbial Biofilms, Antimicrobials, and Virulence Determinants

Guest Editor:

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Message from the Guest Editor

Dear Colleagues,

Biofilm formation is a successful survival strategy for microorganisms found in different environments. These structures formed by multiple microorganism species together with the secreted matrix could represent a challenge in case of human infections being a challenge in terms of diagnostic and treatment due to increased resistance to antimicrobial agents.

This issue will explore but is not restricted to the following topics:

- Antimicrobial resistance mechanisms in biofilms;
- Reports of confirmed biofilm-related infection cases;
- Identification of virulence factors related to biofilms;
- New methods to determine biofilms' susceptibility to antimicrobial drugs and disinfectants;
- Diagnostics of biofilm-related infections;
- Biofilm prevention;
- New anti-biofilm agents including drugs, disinfectants, modified surfaces;
- Quorum sensing inhibitors;
- Polymicrobial biofilms.

Keywords: biofilms; polymicrobial biofilms; antimicrobial resistance (AMR); extracellular polymeric matrix; quorum sensing; virulence factors; biofilm control; biofilm prevention; new methologies; antimicrobials



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Editor-in-Chief

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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 supragovernmental 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.

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