







an Open Access Journal by MDPI

Towards Biofilm Eradication in the Context of Medical Applications: From Tailored Surface Engineering and Sustainable Biomaterials to Underlying Microbial Genetic

Guest Editors:

Prof. Dr. Debora Barros Barbosa

Prof. Dr. Nuno Pereira Mira

Dr. Sónia Silva

Deadline for manuscript submissions:

closed (29 February 2024)

Message from the Guest Editors

Dear Colleagues,

The microbial world is extremely complex and still not understood in many ways. The unique lifestyle of microbial cells in biofilms is part of that still poorly studied world, with many of the molecular mechanisms governing this intricate interaction involving cells and colonised surfaces remaining elusive. Due to their deleterious effects, the control and, when possible, eradication of biofilms are goals completed by not only approaches that prevent cells from triggering this phenotype but also approaches that engineer surfaces and sustainable materials to reduce (or even prevent) microbial colonisation.

This Special Issue is focused on these approaches, covering the development and design of "anti-biofilm" biomaterials/biosurfaces but also the underlying genetic/genomic mechanisms that underlie the formation and maturation of biofilms. We would like to emphasize strategies that may reduce, or even prevent, biofilm formation in the medical area.













an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Nicholas Dixon

School of Chemistry and Molecular Bioscience, University of Wollongong, Wollongong, NSW 2522, Australia

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 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.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility: indexed within Scopus, SCIE (Web of Science), PubMed, PMC, Embase, CAPlus / SciFinder, and other databases.

Journal Rank: JCR - Q1 (*Pharmacology & Pharmacy*) / CiteScore - Q1 (*General Pharmacology, Toxicology and Pharmaceutics*)

Contact Us