

## Special Issue

# Antimicrobial Activity of Dental Biomaterials

### Message from the Guest Editors

Dentistry is a specialty directly connected to the biology and chemistry areas. Dental biomaterials have become a promising field of research and are now being developed to interact with complex biological systems in a range of applications, including bone grafts, guided tissue regeneration, pulp capping, sealing of perforations, apexification and root canal filling. In most cases, the success is dependent on adequate infection control prior to the use of the biomaterials. Considering the clinical conditions which involve direct contact between the biomaterials and the living tissues, reaching antimicrobial activity parallel to biocompatibility is a challenge. Different strategies to guarantee antimicrobial property without losing the biological characteristics are tested. The addition of antimicrobial components that are slowly delivered, ion release that alters the environment pH and the use of probiotics are some examples of strategies to provide antimicrobial activity. This Special Issue welcomes review and research papers discussing the antimicrobial activity of dental materials, and the strategies to amplify the antimicrobial action considering a biological perspective.

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### Guest Editors

Dr. Marina Angélica Marciano

Prof. Dr. Débora C. Coraça-Huber

Dr. Bruno Martini Guimarães

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### Deadline for manuscript submissions

closed (30 January 2024)



## Antibiotics

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## About the Journal

### 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 disciplines 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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### Editor-in-Chief

Prof. Dr. Nicholas Dixon  
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