

## Special Issue

# Epidemiology, Virulence Factors and Antimicrobial Resistance in *Staphylococcus aureus*

### Message from the Guest Editor

Methicillin-resistant *Staphylococcus aureus* (MRSA) is a leading cause of healthcare-associated (HA-MRSA) infections, and its prevalence is also increasing in community-associated (CA-MRSA) infections. In addition to this, the increased use of antimicrobial agents during the COVID-19 pandemic, due to the need to implement mechanical ventilation and the use of invasive medical devices in some patients affected by SARS-COV-2, may intensify the selective pressure on microorganisms present in hospital environments, impacting the emergence of multi-resistant *S. aureus*. Successful treatment remains challenging and requires the evaluation of both novel antimicrobials and adjunctive aspects of care and source control. This Special Issue seeks manuscript submissions that further our understanding of basic and clinical *S. aureus* research about epidemiology, transmission, genetic diversity, evolution, virulence factors, surveillance and treatment. **Keywords:** MRSA; *Staphylococcus aureus*; antimicrobial resistance; epidemiology; virulence factors; genomics

### Guest Editor

Prof. Dr. Maria de Lourdes Ribeiro de Souza da Cunha  
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### Deadline for manuscript submissions

closed (30 June 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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