



Genetics and Antimicrobial Resistance in Pathogens of Hospital Importance

Guest Editor:

Prof. Dr. Maria de Lourdes R.S. Cunha

Department of Chemical and Biological Sciences, Institute of Biosciences, São Paulo State University (Unesp), Botucatu, SP, Brazil

Deadline for manuscript submissions:

30 September 2024

Message from the Guest Editor

The clonal spread of resistant microorganisms between geographically distant regions has driven the increase in antibiotic resistance in recent years. Healthcare-Associated Infections (HAIs) are directly associated with the emergence of MDROs, a fact resulting from the exposure of patients to pathogenic microorganisms, the indiscriminate use of broad-spectrum antibiotics, and submission to invasive procedures. The process of Antimicrobial resistance (AMR) emergence, dissemination, and persistence among bacteria has been accelerated due to the overuse or misuse of antimicrobials in the hospital settings. These resistance mechanisms have found a favorable environment in the modern hospital, a place with a high population of sensitive patients, intense pressure from the use of antibiotics that favors natural selection for resistance, and multiple opportunities for transmission. These organisms can spread through the care network, causing serious diseases and reducing therapeutic options. This Special Issue seeks manuscript submissions that further our understanding of basic and clinical research about genetics and antimicrobial resistance in the pathogens of hospital importance.





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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 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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Antibiotics Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

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