



## Antimicrobial Resistance and Virulence Mechanisms

Guest Editor:

**Dr. Manuela Oliveira**

Centre for Interdisciplinary  
Research in Animal Health  
(CIISA), Faculty of Veterinary  
Medicine, Universidade de  
Lisboa, Lisbon, Portugal

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### Message from the Guest Editor

Bacterial resistance profiles, together with the expression of specific virulence markers, have a major influence on infectious disease outcomes. These bacterial traits are interconnected, since not only may the presence of antibiotics influence bacterial virulence gene expression and, consequently, infection pathogenesis, but some virulence factors may also contribute to an increased ability to resist bacteria, as observed in biofilm-producing strains. Surveillance of important resistant and virulent clones and associated mobile genetic elements is essential to decision-making in terms of mitigation measures to be applied for the prevention of such infections in both human and veterinary medicine. However, the role of natural environments as important components of the dissemination cycle of these strains has been disregarded until recently. This Special Issue aims to publish manuscripts that contribute to our understanding of the impact of bacterial antimicrobial resistance and virulence in the three areas of the One Health triad, i.e., animal, human, and environmental health.





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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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