



## Antimicrobial and Antimicrobial Resistance in the Environment

Guest Editor:

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### Message from the Guest Editor

Global dissemination of multidrug-resistant bacterial species to last-resource antibiotics and associated human and animal infections is a major concern, and expected to rise in the future. However, the role of natural environments in antimicrobials accumulation and resistance development and dissemination has been overlooked until recently. In fact, antimicrobial compounds residues and resistant strains originating from agriculture, animal and human wastes, or even from wild animals, can disseminate through the environment, especially through groundwaters, entering habitats in which no antimicrobials are directly administered to animals or humans.

Characterizing environmental-resistant strains represents a potential aid for surveillance and management programs aiming to unveil AMR evolution mechanisms and dissemination routes in natural environments, as well as assessing possible consequences for human and animal health. This Special Issue aims to publish manuscripts that contribute to our understanding of the impact of antimicrobials and bacterial antimicrobial resistance in environmental health.





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## Editor-in-Chief

### Prof. Dr. Nicholas Dixon

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## 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 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.

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