



Climate Change and Antibiotic Resistance

Guest Editor:

Dr. Paola Di Carlo

Infectious Diseases Unit,
Department of Health Promotion
Sciences, Maternal and Infant
Care, Internal Medicine and
Medical Specialties “G.
D'Alessandro”, University of
Palermo, via del Vespro 129,
90127 Palermo, Italy

Deadline for manuscript
submissions:

30 November 2024

Message from the Guest Editor

Dear Colleagues,

There has been growing interest in the potential impacts of climate change and the antimicrobial resistance (AMR) of fungi and bacteria that are more sensitive to heat exposure due to changing climate variables, particularly the rising ambient temperature. These microorganisms can be found in natural and hospital environments and can cause opportunistic infections in at-risk groups such as the elderly, young, and immunocompromised individuals. Understanding their similarity in cell response to heat and antibiotics is crucial in preventing, detecting, and treating such infections.

Research is needed to understand how interactions between environmental microbes shape virulence and resistance on our warming planet. An increased understanding of the interrelatedness between climate change and microorganisms could help improve prevention, detection, and treatment efforts.

Because of unanswered questions, this Special Issue will bring together papers focusing on the impact of climate change on the interactions between environmental organisms and how this shapes virulence and resistance.





an Open Access Journal by MDPI

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 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.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility: indexed within Scopus, SCIE (Web of Science), PubMed, PMC, Embase, CAPlus / SciFinder, and other databases.

Journal Rank: JCR - Q1 (*Pharmacology & Pharmacy*) / CiteScore - Q1
(*General Pharmacology, Toxicology and Pharmaceutics*)

Contact Us

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

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/antibiotics
antibiotics@mdpi.com
[X@antibioticsmdpi](https://twitter.com/antibioticsmdpi)