Special Issue

Bacterial and Antibiotic Resistance in the Environment (Second Edition)

Message from the Guest Editors

Antibiotic resistance (AR) is one of the most serious public health threats of our time. Modern life has introduced novel technologies, including widespread antibiotics, ventilation, and plastics, that pose new challenges to bacteria. The misuse of antibiotics has historically resulted in the rise of antimicrobial resistance, leading to the transmission of untreatable illnesses and, in some cases, death. Hotspots for antibiotic-resistant bacteria include wastewater systems, food and animal production sites, and clinical settings such as hospitals. However, the mechanisms by which microbes exposed to these environmental challenges acquire AR remain largely unknown.

The importance of this field justifies a Special Issue of Microorganisms devoted to the latest progress in the detection, assessment, and modeling of antibiotic resistance in the environment. Accordingly, as , we invite you to submit research articles focusing on environmental factors affecting the behavior and transmission of bacteria and potentially triggering antibiotic resistance.

Guest Editors

Dr. Maria King
Department of Biological and Agricultural Engineering, Texas A&M University, College Station, TX, USA

Dr. Xingmao Ma
Department of Civil and Environmental Engineering, Texas A&M University, College Station, TX 77843, USA

Deadline for manuscript submissions

closed (30 June 2025)

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Microorganisms
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
microorganisms@mdpi.com

mdpi.com/journal/microorganisms

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Message from the Editor-in-Chief

"Microorganism" merges the idea of the very small with the idea of the evolving reproducing organism is a unifying principle for the discipline of microbiology. Our journal recognizes the broadly diverse yet connected nature of microorganisms and provides an advanced publishing forum for original articles from scientists involved in high-quality basic and applied research on any prokaryotic or eukaryotic microorganism, and for research on the ecology, genomics and evolution of microbial communities as well as that exploring cultured microorganisms in the laboratory.

Editor-in-Chief

Dr. Nico Jehmlich
Department of Molecular Toxicology, UFZ-Helmholtz Centre for Environmental Research, 04318 Leipzig, Germany

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