Special Issue

Research on Decreasing the Intestinal Carriage of Antibiotic Resistant Bacteria

Message from the Guest Editor

The intestinal microbiota is a major reservoir of multidrug-resistant bacteria (MDRB). Intestinal colonization by MDRB is promoted by intestinal dysbiosis and may evolve from an asymptomatic carriage to various infections including urinary, gastrointestinal and bloodstream infections. Furthermore, the intestinal carriage of MDRB can lead to environmental contamination and transmission to healthy or diseased subjects. Hence, treatments to decrease this carriage are crucial in order to limit the global spread of antimicrobial resistance. Various strategies have been assessed, but none has proved to be effective so far. The aim of this Issue is to explore new approaches able to fight such a carriage of MDRB, particularly carbapenem and ESBL-producing *Escherichia coli*, *Klebsiella pneumoniae*, and *Enterobacter cloacae*, but also vancomycin-resistant enterococci and other relevant species.

Keyword: prebiotic; probiotic; antibiotic-resistant bacteria; intestinal carriage; quorum-sensing inhibitor; bacteriophage; prodrug; E. coli; K. pneumoniae; enterococci

Guest Editor

Prof. Dr. Michel Dion

Microbiotes Hosts Antibiotics and bacterial Resistances (MiHAR), University of Nantes, Nantes, France

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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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"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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