Special Issue

Gram-Negative Infections in Humans and Companion Animals: A Global Threat

Message from the Guest Editor

Gram-negative infections have garnered global attention due to the alarming therapeutic failures caused by antimicrobial resistance. Comprehending the resistance mechanisms of these bacteria is essential for the creation of innovative antimicrobial drugs or alternative strategies to address these public health issues. The similarity of prescribed antimicrobials in human and veterinary medicines, coupled with the close interaction between companion animals and humans, heightens the risk of antibiotic-resistant transmission. This facilitates the potential for interspecies transmission of resistant microorganisms. This Special Issue solicits reviews, research articles, and brief communications that will enhance our current understanding of Gram-negative-derived infections in humans and companion animals, describing not only the antimicrobial resistance profiles using common techniques (both phenotypic or molecular), but also investigating the role of essential oils, metal nanoparticles, probiotics, antimicrobial peptides, bacteriocins, and bacteriophages as alternatives to antibiotic treatments.

Guest Editor

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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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