# Special Issue

# Polymyxin Resistance in Gram-Negative Bacteria

## Message from the Guest Editor

Infections due to multi-drug-resistant (MDR), extensively drug-resistant (XDR) and pan-drug-resistant (PDR) Gram-negative bacteria are one of the major challenges for clinicians. Available treatment options for these infections are minimal and include a few new antibacterials developed recently but also old antibacterials, such as polymyxins. Today, resistance to polymyxins has worldwide prevalence among Gram-negative pathogens, with rates constantly rising, and it poses a serious public health concern. The co-existence of polymyxin resistance with resistance to other classes of antibacterials further complicates the problem. The aim of this Special Issue is to update the knowledge on polymyxins resistance through highlightepidemiology, resistance mechanisms, and genomics of polymyxin-resistant Gram-negative bacteria, but also address treatment issues of polymyxin-resistant infections, combination therapy and polymyxins' PK/PD studies. Finally, manuscripts describing new microbiological tools for polymyxin resistance detection and manuscripts presenting One Health approaches to mitigate polymyxin resistance are also welcome.

## Guest Editor

Dr. Sophia Vourli

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## Deadline for manuscript submissions

closed (30 November 2024)

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# About the Journal

## 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

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