Special Issue

Molecular Epidemiology, Genomics, and Antimicrobial Resistance of Pathogenic Bacteria

Message from the Guest Editor

Antimicrobial resistance (AMR) among pathogenic bacteria remains one of the global health challenges and is among the top ten priorities of all health agencies. Over the past decades, the advancements in molecular biology, next-generation sequencing, and public health facilities have led to a reshaping of the ability to track, predict, and mitigate the diverse resistance among bacterial pathogens. By combining clinical, environmental, and One Health perspectives, this Special Issue highlights both the complexity of AMR and the urgent need for coordinated scientific and policy responses. By utilizing insights from clinical microbiology, epidemiology, evolutionary biology, and genomics, this Special Issue aims to highlight the complexity of AMR and provide evidence for informed, effective surveillance, stewardship, and intervention strategies. The end goal is to advance knowledge that would contribute to safeguarding the future of antimicrobial agents for public health.

Guest Editor

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Deadline for manuscript submissions

15 March 2026



an Open Access Journal by MDPI

Impact Factor 3.3 CiteScore 6.8 Indexed in PubMed



mdpi.com/si/254028

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Message from the Editor-in-Chief

The worldwide impact of infectious disease is incalculable. The consequences for human health in terms of morbidity and mortality are obvious and vast but, when infections of animals and plants are also taken into account, it is hard to imagine any other disease that has such a significant impact on our lives—on healthcare systems, on agriculture and on world economics. *Pathogens* is proud to continue to serve the international community by publishing high quality studies that further our understanding of infection and have meaningful consequences for disease intervention.

Editor-in-Chief

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