

Special Issue

Innovative Antimicrobial Strategies for Future Therapeutics

Message from the Guest Editors

Antimicrobial resistance (AMR) is no longer a looming threat—it is one of the most urgent crises facing modern medicine. The rapid rise in multidrug-resistant (MDR), extensively drug-resistant (XDR), and even pandrug-resistant (PDR) pathogens, coupled with a stagnant antibiotic pipeline, leaves us with a clear directive: we need innovative, alternative antimicrobial strategies, and we need them now.

Compounding this crisis are complex microbial behaviors such as biofilm formation on living tissues and medical devices, alongside fastidious or culture-negative infections that slip through standard diagnostic nets and evade traditional treatments.

Our goal is to highlight the discovery, development, and translational application of next-generation tools designed to shatter conventional resistance mechanisms. We welcome original research articles and reviews focused on next-generation antimicrobial strategies. Particular interest will be given to studies addressing difficult-to-treat infections such as periprosthetic joint infections (PJI), orthopedic and device-associated infections, biofilm-mediated diseases and broader infectious challenges viewed through a One Health lens.

Guest Editors

Dr. Md Ramim Tanver Rahman

Ottawa Hospital Research Institute, Ottawa, ON K1H 8L6, Canada

Dr. Marisa Azad

1. Division of Infectious Diseases, Department of Medicine, University of Ottawa at The Ottawa Hospital, Ottawa, ON K1H 8L6, Canada

2. Ottawa Hospital Research Institute, Ottawa, ON K1H 8L6, Canada

Deadline for manuscript submissions

10 June 2027



Pathogens

an Open Access Journal
by MDPI

Impact Factor 3.8
CiteScore 6.7
Indexed in PubMed



mdpi.com/si/286192

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

[mdpi.com/journal/
pathogens](https://mdpi.com/journal/pathogens)





Pathogens

an Open Access Journal
by MDPI

Impact Factor 3.8
CiteScore 6.7
Indexed in PubMed



[mdpi.com/journal/
pathogens](https://mdpi.com/journal/pathogens)



About the Journal

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

Prof. Dr. Moriya Tsuji

School of Engineering Medicine, Texas A&M University, 2121 West
Holcombe Blvd., Suite 1007, Houston, TX 77030, USA

Author Benefits

Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, MEDLINE, PMC, Embase, PubAg, CaPlus / SciFinder, AGRIS, and other databases.

Journal Rank:

JCR - Q2 (Microbiology) / CiteScore - Q1 (Infectious Diseases)