Special Issue

Infectious Diseases: Prevention, Diagnosis, and Treatment Under Antimicrobial Resistance Global Urgency

Message from the Guest Editor

The rise of antimicrobial resistance (AMR) presents an urgent global challenge in the fight against infectious diseases caused by bacteria, fungi, and viruses. Once-treatable infections are now becoming harder to manage as pathogens have evolved to resist common antimicrobial agents. This growing threat calls for a holistic approach for prevention, diagnosis, and treatment. Prevention is the frontline defense in slowing the spread of resistant infections. Vaccination programs, improved hygiene, and strict infection control measures are essential in reducing transmission, while public health campaigns encourage responsible antibiotic use. In both healthcare and agriculture, limiting unnecessary antibiotic exposure is critical to slowing resistance. Rapid, precise diagnostic tools are needed to accurately identify infections, distinguishing between bacterial, fungal, or viral origins. This allows for more targeted treatments, reducing the misuse of broad-spectrum antibiotics, which drive resistance. This Special Issue aims to focus on all these key points.

Guest Editor

Dr. Célia F. Rodrigues

1. UCIBIO—Applied Molecular Biosciences Unit, Translational Toxicology Research Laboratory, University Institute of Health Sciences (IH-TOXRUN, IUCS-CESPU), 4585-116 Gandra, PRD, Portugal
2. LEPABE, Department of Chemical Engineering, Faculty of Engineering, University of Porto, Rua Dr. Roberto Frias, s/n, 4200-465 Porto, Portugal

Deadline for manuscript submissions

31 January 2026

Biomedicines

an Open Access Journal by MDPI

Impact Factor 3.9
CiteScore 6.8
Indexed in PubMed

mdpi.com/si/220095

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

mdpi.com/journal/biomedicines

Biomedicines

an Open Access Journal by MDPI

Impact Factor 3.9
CiteScore 6.8
Indexed in PubMed

mdpi.com/journal/biomedicines

MDPI

About the Journal

Message from the Editor-in-Chief

Biomedicines (ISSN 2227-9059) is an open access journal devoted to all aspects of research on human health and disease, the discovery and characterization of new therapeutic targets, therapeutic strategies, and research of naturally driven biomedicines, pharmaceuticals, and biopharmaceutical products. Topics include pathogenesis mechanisms of diseases, translational medical research, biomaterial in biomedical research, natural bioactive molecules, biologics, vaccines, gene therapies, cell-based therapies, targeted specific antibodies, recombinant therapeutic proteins, nanobiotechnology driven products, targeted therapy, bioimaging, biosensors, biomarkers, and biosimilars. The journal is open for publication of studies conducted at the basic science and preclinical research levels. We invite you to consider submitting your work to Biomedicines, be it original research, review articles, or developing Special Issues of current key topics.

Editor-in-Chief

Prof. Dr. Felipe Fregni
1. Neuromodulation Center and Center for Clinical Research Learning, Spaulding Rehabilitation Hospital and Massachusetts General Hospital, Harvard Medical School, Boston, MA 02114, USA
2. Department of Epidemiology, Harvard T.H. Chan School of Public Health, Boston, MA 02115, USA

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, PMC, CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q1 (Pharmacology and Pharmacy) / CiteScore - Q1 (Medicine (miscellaneous))

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 17 days after submission; acceptance to publication is undertaken in 2.9 days (median values for papers published in this journal in the first half of 2025).