Special Issue

Recent Advances in Molecular and Cellular Approaches to Tuberculosis Pathogenesis, Treatment and Prevention

Message from the Guest Editor

Tuberculosis (TB), caused by Mycobacterium tuberculosis (Mtb), remains one of the most persistent and deadly infectious diseases globally, claiming over a million lives annually. Recent advances in molecular biology, immunology, and nanotechnology have opened new avenues for understanding TB pathogenesis and developing innovative tools for diagnosis, treatment, and prevention. Furthermore, advances in host-directed therapies (HDTs) aim to modulate the immune response to enhance bacterial clearance while minimizing tissue damage, offering a complementary strategy to conventional antibiotics. This proposal seeks to bring together experts in molecular biology, immunology, nanotechnology, pharmacology, and clinical medicine to explore and expand the frontiers of TB research.

We are pleased to invite you to submit articles on the molecular and cellular mechanisms of TB pathogenesis that leverage recent knowledge and insights to design novel diagnostic, therapeutic, and preventive strategies for TB.

Guest Editor

Dr. Selvakumar Subbian Rutgers New Jersey Medical School, Newark, NJ, USA

Deadline for manuscript submissions

30 January 2026



International Journal of Molecular Sciences

an Open Access Journal by MDPI

Impact Factor 4.9 CiteScore 9.0 Indexed in PubMed



mdpi.com/si/247799

International Journal of Molecular Sciences Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 ijms@mdpi.com

mdpi.com/journal/ ijms





International Journal of Molecular Sciences

an Open Access Journal by MDPI

Impact Factor 4.9 CiteScore 9.0 Indexed in PubMed





Message from the Editor-in-Chief

The International Journal of Molecular Sciences (*IJMS*, ISSN 1422-0067) is an open access journal, which was established in 2000. The journal aims to provide a forum for scholarly research on a range of topics, including biochemistry, molecular and cell biology, molecular biophysics, molecular medicine, and all aspects of molecular research in chemistry. *IJMS* publishes both original research and review articles, and regularly publishes special issues to highlight advances at the cutting edge of research. We invite you to read recent articles published in *IJMS* and consider publishing your next paper with us.

Editor-in-Chief

Prof. Dr. Maurizio Battino

Department of Odontostomatologic and Specialized Clinical Sciences, Sez-Biochimica, Faculty of Medicine, Università Politecnica delle Marche, Via Ranieri 65, 60100 Ancona, Italy

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, PMC, MEDLINE, Embase, CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q1 (Biochemistry and Molecular Biology) / CiteScore - Q1 (Organic Chemistry)

