Special Issue

Molecular Perspectives in Lung Diseases: Pathogenesis, Diagnosis, and Treatment

Message from the Guest Editor

This Special Issue focuses on the intricate molecular mechanisms underlying lung diseases, with a focus on pathogenesis, diagnosis, and treatment. We aim to explore cutting-edge research on lung cancer models, cancer stem cells, and the tumor microenvironment. Our interests span a wide array of molecular and cellular aspects, including the role of BMI1 in cancer stem cell regulation, the use of murine models to study disease progression and resistance to therapy, and the application of single-cell RNA sequencing (scRNAseq) and spatial transcriptomics to uncover novel targeting strategies. We also emphasize the importance of gene regulation, transcription factors, miRNAs, single-cell interaction networks, as well as KRAS and EGFR mutations, among others, in lung cancer biology. This Issue aims to provide a comprehensive overview of the current state of lung disease research and highlight the potential personalized medicine options. We invite contributions that offer new perspectives and innovative approaches to understanding and treating lung diseases.

Guest Editor

Dr. Elena Levantini Consiglio Nazionale delle Ricerche, Istituto di Tecnologie Biomediche, via Moruzzi 1, 56124 Pisa, Italy

Deadline for manuscript submissions

20 November 2025



International Journal of Molecular Sciences

an Open Access Journal by MDPI

Impact Factor 4.9 CiteScore 9.0 Indexed in PubMed



mdpi.com/si/220725

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





About the Journal

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)