Special Issue

Gut Microbiota in Human Disease and Health: 2nd Edition

Message from the Guest Editors

The gut microbiota represents a key environmental modifier of human health, which can have an impact on the onset and/or progression of gastrointestinal and extraintestinal diseases, as well as on the therapeutic response. However, its drivers of variation, its interactions with the human host, and the underlying mechanisms remain incompletely understood. Likewise. there is a paucity of information on the impact of manipulating the gut microbiota for preventive and therapeutic purposes. This Special Issue aims to expand the current knowledge on the role of the gut microbiota in health and disease, including the potential of its modulation in disease prevention and treatment. The use of multi-omics approaches (metagenomics, metatranscriptomics, metabolomics and culturomics) is encouraged, as well as the search for and validation of mechanistic insights. Purely clinical studies are not suitable, but clinical submissions with biomolecular experiments are welcome.

- gut microbiota
- human disease
- human health
- omics
- microbiota-host interactions
- microbiota manipulation

Guest Editors

Dr. Silvia Turroni

Department of Pharmacy and Biotechnology, University of Bologna, Via Belmeloro, 6, 40126 Bologna, Italy

Dr. Federica D'Amico

Department of Pharmacy and Biotechnology, University of Bologna, 40126 Bologna, Italy

Deadline for manuscript submissions

31 December 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/248303

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)

