Special Issue

Molecular and Cellular Basis of Oral Immunology

Message from the Guest Editor

The oral cavity is the port of entry to the gastrointestinal and respiratory tracts, characterized by the juxtaposition of soft and hard tissues. Understanding how this complex immune system functions within the unique oral environment at the molecular and cellular level is essential for advancing our knowledge of oral health and disease. This Special Issue, titled "Molecular and Cellular Basis of Oral Immunology", aims to showcase cutting-edge research exploring the cellular players. molecular mechanisms, signaling pathways, and intricate interactions that govern immune responses in the oral cavity. We invite submissions covering topics such as innate and adaptive immunity in oral tissues (mucosa, periodontium, salivary glands); immune cell phenotypes and functions unique to the oral site; the molecular recognition of oral pathogens and commensals; the role of immune cells and molecules in oral inflammation and tissue homeostasis; immunomodulation strategies; and the molecular and cellular underpinnings of immune-mediated oral diseases, including infections, autoimmune conditions, and oral cancers.

Guest Editor

Dr. Kenichi Kumagai

Department of Oral and Maxillofacial Surgery, Dentistry and Orthodontics, The University of Tokyo Hospital, Tokyo 113-8655, Japan

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/243092

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)

