

Special Issue

Molecular Mechanisms of Periodontal Disease 2.0

Message from the Guest Editor

Periodontitis is a chronic inflammatory disease characterized by lymphocytic infiltration and alveolar bone destruction, along with tooth loss. Such destructive inflammation is elicited by host innate and adaptive immune response to periodontal biofilm-associated multiple microorganisms. In addition, several inflammatory cytokines produced from lymphocytes, leukocytes, fibroblasts, and gingival epithelial cells in the context of host immune responses have been identified as key molecules inducing periodontal tissue destruction. More specifically, proinflammatory cytokines, including IL-6 and IL-17, facilitate the RANKL expression level in fibroblasts or lymphocytes, which results in the induction of bone resorption. To that end, this Special Issue, which is a continuation of a previous successful issue on the molecular mechanisms of periodontal disease, focuses on novel immune reaction systems from the molecular level to the cellular level (Th1, Th2, Th17, Treg, and B cells activity, osteoclastogenesis, dendritic cells and monocytes immune response, the role of fibroblasts/epithelial cells in inflammation, etc.) in mouse periodontal disease models.

Guest Editor

Prof. Dr. Mikihiro Kajiya

Department of Periodontal Medicine, Applied Life Sciences, Institute of Biomedical & Health Sciences, Graduate School of Biomedical & Health Sciences, Hiroshima University, Minami-ku, Hiroshima, Japan

Deadline for manuscript submissions

closed (31 January 2022)



International Journal of Molecular Sciences

an Open Access Journal
by MDPI

Impact Factor 4.9
CiteScore 9.0
Indexed in PubMed



mdpi.com/si/68926

*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](https://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



[mdpi.com/journal/
ijms](https://mdpi.com/journal/ijms)



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)