

Special Issue

The Bidirectional Biological Interaction Between Periodontal Disease and Diabetes Mellitus

Message from the Guest Editors

There is growing evidence that diabetes mellitus (DM) has a significant impact on the pathogenesis of oral conditions, such as periodontal disease (PD) and apical periodontitis, increasing their risk and severity. PD is a chronic inflammatory condition associated with dysbiotic dental biofilm, which activates the host immune response and causes alveolar bone destruction and collagen degradation. The host immune response is modified by diabetes and might play a causative role in bacteria-induced tissue damage. On the other hand, persistent local infections, such as periodontitis, could induce or perpetuate low-grade chronic systemic inflammation, which may contribute to altered glycemic metabolism, eventually leading to a hyperglycemic state and diabetic complications. Altered glycemic metabolism can enhance the release of proinflammatory cytokines, increasing the risk of local and systemic complications. Understanding the influence of DM on inflammatory bone resorption and its impact on the quality of life of affected patients is crucial for successful management and treatment.

Guest Editors

Dr. Raquel M. Scarel-Caminaga

Department of Morphology, Genetics, Orthodontics and Pediatric Dentistry, School of Dentistry at Araraquara, São Paulo State University –UNESP, Araraquara 14801-903, SP, Brazil

Dr. Rafael Scaf De Molon

Department of Diagnostic and Surgery, School of Dentistry at Araraquara, University Estadual Paulista-UNESP, Araraquara 14801-903, SP, Brazil

Deadline for manuscript submissions

closed (20 October 2024)



International Journal of Molecular Sciences

an Open Access Journal
by MDPI

Impact Factor 4.9
CiteScore 9.0
Indexed in PubMed



mdpi.com/si/141860

*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)