# **Special Issue**

## Molecular Advances in Dental Pulp Tissue Engineering, 2nd Edition

## Message from the Guest Editors

Protected by the surrounding mineralized barriers, such as enamel, dentin and cementum, dental pulp is a functionally versatile tissue that fulfils various tasks. Besides the perception of thermal and mechanical stimuli as a warning system as well as the deposition of dentin, the pulp exerts a variety of immunological functions, in terms of both recognition and of defense. In recent years, creative and multi-faceted attempts have been made to regenerate this valuable tissue using advanced molecular biology methods. Promising approaches based on tissue engineering and regenerative medicine (TERM) have been developed for this purpose. This Special Issue aims to present the scientific progress in this field of research. The goal is to collect innovative studies in the field of stem cell biology, scaffold material development or molecular signaling that contribute to the transfer of this knowledge from the bench to the dental clinic.

## Guest Editors

Prof. Dr. Matthias Widbiller

Department of Conservative Dentistry and Periodontology, University Hospital Regensburg, Franz-Josef-Strauß-Allee 11, D-93093 Regensburg, Germany

### Prof. Dr. Kerstin M. Galler

Department of Operative Dentistry and Periodontology, Friedrich-Alexander-University Erlangen-Nuernberg, D-91054 Erlangen, Germany

## Deadline for manuscript submissions

closed (20 February 2025)



# International Journal of Molecular Sciences

an Open Access Journal by MDPI

Impact Factor 4.9 CiteScore 8.1 Indexed in PubMed



mdpi.com/si/168537

International Journal of Molecular Sciences 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 8.1 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 (Inorganic Chemistry)