



## Molecular Mechanisms of Craniofacial Birth Defects

Guest Editors:

**Dr. Akiko Suzuki**

**Dr. Junichi Iwata**

**Dr. Yoshihiro Komatsu**

Deadline for manuscript  
submissions:

**closed (15 September 2023)**

### Message from the Guest Editors

The craniofacial structure is composed of multiple tissues and organs, including bones, cartilage, muscles, neuronal/nervous systems, exocrine glands, and teeth, and their malformations including craniosynostosis, facial microsomia, cleft lip with/without cleft palate, tooth agenesis, and amelogenesis/dentinogenesis imperfecta are among the most common congenital birth defects. The etiology of these malformations is the contribution of either genetic factors (isolated or syndromic), environmental factors, or both. Recently, the modulation of gene regulatory networks by pharmacological approaches has interested basic and clinical researchers as a strategy for the prevention of craniofacial malformations.

This Special Issue focuses on the current understanding and new findings regarding the regulation of gene expression, signaling cascades, and patterning of cells during craniofacial development and in birth defects.





an Open Access Journal by MDPI

## 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

## 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.

## 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)

## Contact Us

---

*International Journal of Molecular  
Sciences* Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
www.mdpi.com

mdpi.com/journal/ijms  
ijms@mdpi.com  
X@IJMS\_MDPI