







an Open Access Journal by MDPI

## **Hedgehog Signaling in Organogenesis and Tumor Microenvironment**

Guest Editor:

#### Prof. Dr. Tsuyoshi Shimo

Division of Reconstructive Surgery for Oral and Maxillofacial Region, Department of Human Biology and Pathophysiology, School of Dentistry, Health Sciences University of Hokkaido, 1757 Ishikari-Tobetsu, Hokkaido 061-0293, Japan

Deadline for manuscript submissions:

closed (31 October 2019)

## **Message from the Guest Editor**

Hedgehog signaling pathways govern complex developmental including stem-cell processes, maintenance, proliferation, differentiation, and patterning. However, hedgehog signaling is frequently activated in various human cancers. Several recent studies have shown that the aberrant activation of hedgehog signaling is associated with neoplastic transformation, cancer cell proliferation, metastasis, drug resistance of multiple cancers, and survival rate. This Special Issue focuses on several aspects of hedgehog signaling in organogenesis and tumor microenvironment, and we invite contributions of reviews and/or original papers reporting on the recent efforts in the field of hedgehog signaling.

# **Keywords**

- hedgehog
- stem cell
- target genes
- primary cilia
- organogenesis
- microenvironment
- immune surveillance
- hedgehog signaling pathway
- metastasis
- angiogenesis
- tumor-stroma interaction
- hedgehog signaling inhibitors
- targeted cancer therapy













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 & Molecular Biology*) / CiteScore - Q1 (*Inorganic Chemistry*)

### **Contact Us**