



Molecular Changes on Cartilage Development

Guest Editor:

Prof. Dr. Giuseppe Musumeci

Department of Biomedical and
Biotechnological Sciences,
Anatomy, Histology and
Movement Sciences Section,
School of Medicine, University of
Catania, 95123 Catania, Italy

Deadline for manuscript
submissions:

closed (30 June 2023)

Message from the Guest Editor

Dear Colleagues,

This Special Issue primarily focuses on how the macromolecular composition and architecture of articular cartilage and its unique biomechanical properties play a pivotal role in the ability of articular cartilage to withstand mechanical loads several magnitudes higher than the weight of the individual. Scientific contributions on effects of exercise on articular cartilage and the importance of appropriate exercises for normal and diseased or aberrated cartilage are welcomed.

Keywords:

- articular cartilage
- physical activity
- chondrons
- proteoglycans
- synoviocytes
- noncollagenous proteins
- glycoproteins
- cartilage matrix compartmentalization
- aging of articular cartilage
- joint arthropathy and effect of exercise
- nutrition effects on cartilage
- osteoarthritis

Prof. Dr. Giuseppe Musumeci

Guest Editor





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 (Organic 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