

Special Issue

Advances in Mesenchymal Stem Cells Volume II

Message from the Guest Editor

Mesenchymal stem cells (MSCs) are multipotent stem cells derived from mesenchyme, which develops from the mesoderm. MSCs are capable of self-renewal and differentiation into skeletal and connective tissues such as bone, fat, cartilage and muscle. The main roles of resident MSCs in adults are self-repair and the maintenance of cellular tissue homeostasis. MSCs are considered to be ideal candidates for tissue regeneration and tissue engineering, and interest in their biological roles and clinical potential has dramatically increased over the previous few decades. MSCs can be effective in the modulation of immune responses, anti-inflammatory affect, tissue repair and regeneration in many therapeutic applications, both in vitro and in vivo. This Special Issue will provide evidence-based analyses and overviews of recent advances in MSCs and nanotechnology. This Issue invites original research articles and reviews that cover MSCs secretomes/exosomes or EVs and their impact, biomolecules and markers of MSCs, the cultivation and differentiation of MSCs and nanotechnology or biomaterials, signalling pathways, and functional genomics.

Guest Editor

Dr. Huseyin Sumer

Department of Chemistry and Biotechnology, Faculty of Science, Engineering and Technology, Swinburne University of Technology, John St, Hawthorn, VIC 3122, Australia

Deadline for manuscript submissions

closed (31 October 2023)



Biomolecules

an Open Access Journal
by MDPI

Impact Factor 4.8
CiteScore 9.2
Indexed in PubMed



mdpi.com/si/170611

Biomolecules
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
biomolecules@mdpi.com

[mdpi.com/journal/
biomolecules](https://mdpi.com/journal/biomolecules)





Biomolecules

an Open Access Journal
by MDPI

Impact Factor 4.8
CiteScore 9.2
Indexed in PubMed



[mdpi.com/journal/
biomolecules](https://mdpi.com/journal/biomolecules)



About the Journal

Message from the Editorial Board

Biomolecules is a multidisciplinary open-access journal that reports on all aspects of research related to biogenic substances, from small molecules to complex polymers. We invite manuscripts of high scientific quality that pertain to the diverse aspects relevant to organic molecules, irrespective of the biological question or methodology. We aim for a competent, fair peer review and rapid publication. Please look at some of the exciting work that has been published in *Biomolecules* so far. We would be delighted to welcome you as one of our authors.

Editors-in-Chief

Prof. Dr. Peter E. Nielsen

Department of Cellular and Molecular Medicine, Faculty of Health and Medical Sciences, University of Copenhagen, Blegdamsvej 3C, DK-2200 Copenhagen, Denmark

Prof. Dr. Lukasz Kurgan

Department of Computer Science, Virginia Commonwealth University, Richmond, VA 23284, USA

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, MEDLINE, PMC, Embase, CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q1 (Biochemistry and Molecular Biology) / CiteScore - Q1 (Biochemistry)