

Special Issue

Advances in Mesenchymal Stem Cells

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 to maintain 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 last few decades. MSCs can be effective in the modulation of immune responses, anti-inflammatory affect, tissue repair and regeneration in many therapeutic applications *in vitro* and *in vivo*. This Special Issue will provide evidence based and recent advances in MSCs and Nanotechnology. This issue invites original research articles and reviews that will cover MSCs secretomes/exosomes or EVs and their impact, biomolecules and markers of MSCs, 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

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

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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.

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

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