

Special Issue

Molecular and Tissue Engineering Approaches in Musculoskeletal Regenerative Medicine

Message from the Guest Editors

Injuries affecting the various tissues of the musculoskeletal system (articular cartilage, bone, meniscus, and tendons/ligaments) do not fully heal by themselves due to a limited or unsatisfactory ability of these tissues for spontaneous repair. While a number of clinical options are available to address such problems, none are capable to reproduce the native tissue structures and original functions in patients, showing the vital need for novel alternatives that may improve the current therapies by stimulating the reparative processes in sites of injury. In this regard, a number of molecular options may be envisaged, alone or in combination, based on the application of regenerative (differentiated or progenitor) cells, candidate genes, and biomaterials adapted for each type of tissue and disease. The goal of this Special Issue is to offer an overview of the most advanced procedures that may be used as tools to improve the healing of musculoskeletal disorders in future translational approaches.

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Deadline for manuscript submissions

closed (10 October 2019)



International Journal of Molecular Sciences

an Open Access Journal
by MDPI

Impact Factor 4.9
CiteScore 8.1
Indexed in PubMed



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Molecular Sciences*
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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.

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