

Special Issue

Collagen-Based Biomaterials in Tissue Engineering and Regenerative Medicine

Message from the Guest Editors

The current technological advances in biochemistry, molecular and cell biology, material sciences, and molecular medicine are significantly expanding the current opportunities in tissue engineering (TE) and regenerative medicine and lead to the development of new advanced biomaterials with the potential for more effective and faster treatment of tissue defects.

Many of these materials are based on collagen, the key molecule forming the human and animal bodies, the basic component of the extracellular matrix (ECM), and about 30% of all proteins in the body. Collagen is responsible for the proper functionality of various types of cells and tissues, plays an important role in wound healing, and belongs to one of the most attractive biopolymers used in TE due to its biocompatibility, biodegradability, low antigenicity, and toxicity.

This Special Issue of IJMS on “Collagen-Based Biomaterials in Tissue Engineering and Regenerative Medicine” aims to summarize all the mentioned aspects and share the current multidisciplinary knowledge on collagen and related molecules, their analyses and applications in TE.

Guest Editors

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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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