

## Special Issue

# Innovative Approaches in Bone and Cartilage Regeneration: From Stem Cells to Organoids

### Message from the Guest Editor

Bone and cartilage regeneration represent major challenges in both basic and translational research, due to the limited intrinsic repair capacity of these tissues and the growing need for effective therapeutic strategies. Recent scientific advances have opened new avenues in tissue regeneration, combining physiological insights with innovative technologies. This Special Issue aims to highlight cutting-edge research focused on the regeneration of bone and cartilage tissues, encompassing a wide spectrum of experimental approaches. Topics of interest include, but are not limited to, the following:

- The use of mesenchymal stem cells, induced pluripotent stem cells (iPSCs), and already differentiated cells;
- Organoids and 3D culture models mimicking physiological conditions;
- The role of natural compounds, nutraceuticals, and biomaterials in promoting tissue repair;
- Studies on the physiological mechanisms and molecular pathways underlying osteogenesis and chondrogenesis;
- The interaction between cells and their microenvironment, including inflammatory responses and extracellular matrix remodeling.

We look forward to receiving your contributions.

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### Guest Editor

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### Deadline for manuscript submissions

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## Current Issues in Molecular Biology

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## About the Journal

### Message from the Editor-in-Chief

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#### Editor-in-Chief

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