Special Issue

Osteoblasts, Osteoclasts and Bone Diseases: Cellular Crosstalk and Therapeutic Opportunities

Message from the Guest Editor

Bone is a dynamic tissue that is continuously remodelled through the coordinated actions of osteoblasts, osteoclasts, and osteocytes. Disruption of this balance leads to various bone diseases, including osteoporosis, osteoarthritis, Paget's disease, and inflammatory bone loss.

Recent research has begun to explore the complex molecular and cellular networks that govern bone homeostasis and has identified key roles for signalling pathways such as RANK/RANKL/OPG, Wnt/□-catenin, mechanical factors and bone–tissue crosstalk.

This Special Issue invites contributions on the biology of bone cells, mechanisms of bone remodelling, and translational studies targeting skeletal pathologies. We welcome original research, reviews, and methodological advances focusing on cell signalling, transcriptional regulation, epigenetics, biomaterials, therapeutic interventions and bone crosstalk. By fostering a deeper understanding of the cellular mechanisms involved in bone health and disease, this Special Issue aims to support the development of innovative treatments and diagnostic tools for skeletal disorders.

Guest Editor

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About the Journal

Message from the Editorial Board

Cells has become a solid international scientific journal that is now indexed on SCIE and in other databases. We have successfully introduced a special issues format so that these issues serve as mini-forums in specific areas of cell science. *Cells* encourages researchers to suggest new special issues, serve as special issues editors, and volunteer to be reviewers. Our main focus will remain on cell anatomy and physiology, the structure and function of organelles, cell adhesion and motility, and the regulation of intracellular signaling, growth, differentiation, and aging. We are open to both original research papers and reviews.

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