



Molecular Research on Osteogenesis

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Deadline for manuscript
submissions:

20 October 2025

Message from the Guest Editors

Bone tissue, a complex mineralized structure, plays a crucial role in various biological activities. Comprising both organic and inorganic components unique to the human body, its regenerative mechanisms involve intricate physiological activities, primarily centered on the interplay between osteogenic and angiogenic events. These interactions drive bone formation and tissue rejuvenation. Vascular Endothelial Growth Factor (VEGF), a key player in angiogenesis, stimulates endothelial cell migration and proliferation, indirectly influencing osteogenesis by regulating osteogenic growth factors and engaging in paracrine signaling. Despite extensive research over the past two decades exploring bone defect repair processes and the development of biomaterials to facilitate these activities, there remains a significant gap in our understanding. The purpose of this Special Issue is to spotlight recent or emerging research updates on the biological aspects of osteogenesis, bone repair, and bone tissue regeneration.





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Message from the Editor-in-Chief

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