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# Molecular Mechanisms of Biomineralization in Healthy and Pathological Bone Tissues

Guest Editors:

#### Dr. Emil Malucelli

Department of Pharmacy and Biotechnology, University of Bologna, 40127 Bologna, Italy

#### Prof. Dr. David Bendahan

CNRS Research Director Centre de Resonance Magnetique Biologique et Medicale

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## **Message from the Guest Editors**

Biomineralization refers to the process by which living systems generate organized mineral crystals. Bone mineralization depends upon the complex crosstalk between osteoclasts, osteoblasts, and osteocytes. The degree of bone mineralization, assessed by the bone mineral density, the microarchitecture, and the characteristics of the mineral deposits, is a major determinant of bone quality. This whole set of determinants has to be taken into account and assessed if one intends to better understand and characterize bone "quality". In that respect, further studies should be designed to characterize the molecular mechanisms involved in bone formation, repair, and remodeling. This Special Issue will be dedicated to "Molecular Mechanisms of Biomineralization in Healthy and Pathological Bone Tissues" with a focus on the mechanisms of bone formation and remodeling in both physiological and pathological conditions and the corresponding impact on bone quality. This Special Issue is intended to gather papers addressing various issues related to the assessment of bone quality in the fields of imaging, bioinformatics, cell differentiation, and regenerative medicine.













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## **Editor-in-Chief**

### Prof. Dr. Maurizio Battino

Department of Odontostomatologic and Specialized Clinical Sciences, Sez-Biochimica, Faculty of Medicine, Università Politecnica delle Marche, Via Ranieri 65, 60100 Ancona, Italy

## Message from the Editor-in-Chief

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