

Special Issue

Molecular Mechanisms Underlying an Aging Skeleton

Message from the Guest Editor

Bone is a dynamic organ that is under a balanced homeostasis during normal conditions. Aging, menopause in women, and several diseases tilt this balance, resulting in bone loss. Since bone is also an endocrine organ, changes in the bone environment may cause systemic changes. DNA damage, apoptosis, and cellular senescence together with a pro-inflammatory secretome drive age-related osteoporosis during normal physiological and pathological conditions. Molecular signatures that regulate these pathways in bone, and the autocrine, paracrine, or endocrine secretions that work locally and systemically are still being explored. This Special Issue will encompass studies that help us to understand these molecular signatures, focusing on cell fates to understand age- and disease-related bone loss. Several cellular events such as telomere shortening, epigenetic changes, proteostasis, mitochondrial dysfunction, and extracellular and intranuclear chromatin remodeling are all linked to cellular senescence. Research articles or reviews exploring the roles of these cellular mechanisms are solicited to understand the pathophysiology of an aging or diseased bone.

Guest Editor

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closed (31 August 2021)



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Message from the Editor-in-Chief

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.

Editor-in-Chief

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