

## Special Issue

# Highlights in Pathophysiology and Treatment of Osteoarthritis

### Message from the Guest Editors

Osteoarthritis is a highly common and disabling condition worldwide. Growing evidence shows that osteoarthritis is a complex condition in which the whole joint is involved; the degradation of articular cartilage, subchondral sclerosis, and the hyperplasia of the synovial tissue are hallmarks of the disease. The pathological changes in the joint structure are mediated by a plethora of factors, such as proteases, proinflammatory cytokines and chemokines, adipokines, prostaglandins, nitric oxide, and reactive oxygen species. Current data suggest that aberrant epigenetic modifications, as well as the gut microbiome, play key roles in the pathophysiology of this disease. Our aim in launching this Special Issue is to provide an overview of emerging studies designed to identify the complex pathological mechanisms that characterize the disease and that test different pharmacological and non-pharmacological approaches to the treatment of osteoarthritis.

### Guest Editors

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## International Journal of Molecular Sciences

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