

Special Issue

Osteoarthritis and Cartilage Regeneration: From Pathophysiology to Novel Therapeutic Approaches

Message from the Guest Editors

OA is a degenerative disorder of the synovial joints viewed as a single organ, eventually culminating in the irreversible degradation of the articular cartilage. Despite the widespread awareness of the disease, the pathogenesis of OA is not completely understood and, to date, no disease-modifying osteoarthritis treatments have been developed successfully. Furthermore, articular cartilage has a poor intrinsic healing capacity and the regeneration of degenerated cartilage remains a clinical challenge. This Special Issue is intended to deepen our understanding of the pathophysiological mechanisms involved in OA and expect novel therapeutic strategies and research directions for treating OA and restoring degenerated cartilage. We encourage researchers that investigate the multifaceted pathophysiology of OA using cellular, molecular, genetic and functional approaches. Novel cell-based, extracellular vesicle, pharmacological, and gene therapy studies are recommended. We also welcome comprehensive reviews summarizing current knowledge of osteoarthritis and cartilage regeneration and fostering the link between achievements in basic science and clinical outcomes.

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As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal *Applied Sciences* has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

Editor-in-Chief

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