



## Microstructure and Biomechanical Behavior of Living Tissues

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### Message from the Guest Editor

Living tissues' composition and organization at the micrometer scale provide them with exceptional biomechanical properties. In particular, connective tissues composed mainly of collagen fibers interact with elastin fibers, minerals, the extracellular matrix, etc., and possess mechanical properties that are very sensitive to changes in microstructure, which occur with aging or in connection with a pathology. Recent developments in vivo and in vitro bioimaging techniques now allow for a fine quantification of this microstructure. The mechanical properties of these tissues are now accessible for research at different space and time scales.

This Special Issue will highlight the most recent discoveries and advances in scientific areas related to living materials with applications in medicine and biology. This SI will particularly focus on the relationship between the microstructure and biomechanical response of connective tissues, such as bone, cartilage, ligament, skin, arteries, muscle, fibrous soft tissues, etc. Topics of interest include but are not limited to, microstructure characterization, biomechanical testing, bioimaging, effects of aging and pathological conditions.





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## Message from the Editor-in-Chief

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