Special Issue

Molecular Studies of Muscle Contraction

Message from the Guest Editor

The main function of muscle is to shorten and generate force through the cyclic interaction between actin and myosin, fuelled by ATP hydrolysis. Many other proteins are involved in the regulation of the contraction and in preserving the architecture of the contractile machinery. These functions are brought about through proteinprotein interactions, in a complex interplay that can be investigated with both experimental and theoretical approaches. The aim of this Special Issue is to host original research papers and reviews on the proteins at work in muscle, both striated and smooth, and on their role in promoting, assisting and regulating the contractile function. Without intending to be exclusive. the papers collected in this issue could report studies on topics such as actomyosin interactions, thin and thick filament-based regulation, cytoskeletal anchoring proteins, and physiological or pharmacological modulation of muscle performance. Any of these investigations should be aimed at understanding the molecular mechanisms underlying either the normal muscle functioning or pathological condition.

Guest Editor

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Message from the Editor-in-Chief

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