

## Special Issue

# Duchenne Muscular Dystrophy: Mechanisms and Therapeutic Strategies

### Message from the Guest Editor

Duchenne muscular dystrophy (DMD) is one of the most prevalent forms of muscular dystrophy. DMD is an X-linked recessive disorder, epidemiologically reported to affect 1 in 3600–6000 male live births. DMD is caused by mutations in the dystrophin gene resulting in a loss of functional dystrophin protein in skeletal and cardiac muscles. This leads to the degeneration of muscle fibers, necrosis, inflammation, fibrosis, and fatty replacement resulting in muscle weakness, respiratory and cardiac failure, and premature death. Despite these findings and several clinical trials, there is no curative treatment for this disease. Although the loss of dystrophin is the primary cause, several cellular and molecular factors including calcium handling proteins, myogenic factors, proteases, signaling molecules, and altered expressions of genes have been identified as key players in muscle pathogenesis and the development of dystrophic cardiomyopathy. This Special Issue will provide a general overview of cellular and molecular mechanisms associated with muscle wasting and the development of dystrophic cardiomyopathy and therapeutic strategies in treating DMD.

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### Guest Editor

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### Deadline for manuscript submissions

closed (30 September 2021)



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