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Autore	Blottner Dieter
Titolo	The NeuroMuscular System: From Earth to Space Life Science : Neuromuscular Cell Signalling in Disuse and Exercise / / by Dieter Blottner, Michele Salanova
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Nota di bibliografia	Includes bibliographical references at the end of each chapters.
Nota di contenuto	General Introduction -- Skeletal Muscle -- Neuromuscular System -- Physical Countermeasure in Space: Efforts in Vain?
Sommario/riassunto	The book provides fundamental new insights in the structure and function of the healthy NeuroMuscular system. Recent findings suggest that the musculoskeletal system that supports movement control on Earth is controlled by unique principles of structural, biochemical and molecular characteristics. Mechanical loading by working against normal gravity helps to support principal structures in bone, muscle and associated subcellular scaffold components. Disuse or immobilization of the body in bed rest on Earth or in microgravity in Space result in considerable loss of bone, muscle and force with downregulation of neuromuscular activity resulting in impaired performance control. The goal is to develop exercise prescriptions to maintain postural control in normal life, aging and rehabilitation on

Earth as well as for an adequate human performance management in Space.