

1. Record Nr.	UNINA9910144559403321
Titolo	Plasticity of the neuromuscular system [[electronic resource]]
Pubbl/distr/stampa	Chichester ; ; New York, : Wiley, 1988
ISBN	1-282-34756-X 9786612347566 0-470-51367-5 0-470-51368-3
Descrizione fisica	1 online resource (286 p.)
Collana	Ciba Foundation symposium ; ; 138
Altri autori (Persone)	EveredDavid WhelanJulie
Disciplina	591.1 591.1852 612.7
Soggetti	Muscles - Growth Neuroplasticity Neuromuscular transmission Electronic books.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	"Symposium on Plasticity of the neuromuscular system held at the Ciba Foundation, London, 19-21 January 1988"--P. v. Edited by David Evered and Julie Whelan. "A Wiley-Interscience publication."
Nota di bibliografia	Includes bibliographical references and indexes.
Nota di contenuto	PLASTICITY OF THE NEUROMUSCULAR SYSTEM; Participants; Introduction; Physiological factors influencing the growth of skeletal muscle; Molecular basis of the phenotypic characteristics of mammalian muscle fibres; Hormonal control of myosin heavy chain genes during development of skeletal muscles; Studies of acetylcholine receptor subunit gene expression: chromatin structural changes during myogenesis; General discussion I; Mechanism of interaction between motoneurons and muscles; Development of neuromuscular connections: guidance of motoneuron axons to muscles in the embryonic chick hindlimb In vitro analysis of specificity during new-muscle

synaptogenesis; Reorganization of synaptic inputs to developing skeletal muscle fibres; Neurotrophic interactions in the development of spinal cord motoneurons; The role of muscle in the development and differentiation of spinal motoneurons: in vitro studies; Distinct roles of neurofilament and tubulin gene expression in axonal growth; General discussion I I; Comparison of injury and development in the neuromuscular system

Model for the study of plasticity of the human nervous system: features of residual spinal cord motor activity resulting from established post-traumatic injury; Responses of diseased muscle to electrical and mechanical intervention; Final general discussion; Index of contributors; Subject index

---

Sommario/riassunto

Presents new information on the mutual interaction of skeletal muscle fibers and motoneurons at all levels, from the physiological to the molecular. Covers genetic, physiological, and hormonal factors affecting skeletal muscle development, control of acetylcholine receptor gene expression, selection and organization of motoneurons, and remodelling and refinement of synaptic inputs under the influence of muscle-derived growth factors. Also discusses the plasticity of the neuromuscular system during regeneration after injury, and in the modification of muscle properties and movement patterns in

---