1. Record Nr. UNINA9910781102603321 Autore Brushart Thomas M Titolo Nerve repair [[electronic resource]]: the scientific basis // Thomas M. **Brushart** Pubbl/distr/stampa New York, : Oxford University Press, 2011 0-19-996516-1 **ISBN** 0-19-972160-2 Descrizione fisica 1 online resource (476 p.) Disciplina 617.4/81044 Soggetti Nervous system - Wounds and injuries Nervous system - Regeneration Nerves, Peripheral - Surgery Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Includes bibliographical references. Nota di bibliografia Nota di contenuto Peripheral nerve anatomy and function -- Touch -- Motion --Determining clinical outcomes -- Clinical nerve repair and grafting --Determining experimental outcome -- Outcomes of experimental nerve repair and grafting -- The nerve gap : beyond autograft -- Nerve regeneration -- Specificity in nerve regeneration -- Systems of organization after nerve repair or transfer -- Treatment strategies. Peripheral nerves are biologic wires that convey the desire for motion Sommario/riassunto from brain to muscle, and the experience of touch from skin to brain. When a nerve is cut, the individual fibers, or axons, must regenerate from the site of injury to reconnect with their skin and muscle targets. Nerve regeneration is a process of bewildering complexity that requires the coordinated action of multiple biologic systems. Gene expression within the neuron is altered to support axon growth, regenerating

axons must cross the complex environment of the nerve injury and

enter pathways that lead to functionally app