Record Nr. UNINA9910300060803321 **Titolo** Developing insights in cartilage repair / / Pieter J. Emans, Lars Peterson, editors Pubbl/distr/stampa London:,: Springer,, 2014 **ISBN** 1-4471-5385-5 Edizione [1st ed. 2014.] 1 online resource (xiv, 329 pages): illustrations (some color) Descrizione fisica Gale eBooks Collana Disciplina 617.472 Soggetti Cartilage - Wounds and injuries - Treatment Lingua di pubblicazione Inglese Formato Materiale a stampa Monografia Livello bibliografico Note generali Description based upon print version of record. Nota di bibliografia Includes bibliographical references and index. Nota di contenuto General Introduction -- Gene Therapy in articular cartilage repair --Targeting inflammatory processes for optimization of cartilage homeostasis and repair techniques -- Osteoarthritis: molecular mechanisms and treatments -- Bioreactor Tissue Engineering for Cartilage Repair -- Biomaterials for osteochondral reconstruction --Advanced magnetic resonance imaging of cartilage repair --Osteochondral Allograft Transplantation: The Rationale and Basic Science -- Osteochondral Allograft Transplantation: Surgical Technique and Results -- The Genesis of Autologous Chondrocyte Transplantation/Implantation: From a Hypothesis via an Animal Model to a Clinical Reality -- Characterized Chondrocyte Implantation challenges current paradigms for the treatment of symptomatic joint surface lesions -- Autologous Chondrocyte Implantation after Previous Treatment With Marrow Stimulation Techniques -- Arthroscopic approaches for cartilage repair in the knee joint -- Cartilage repair of the knee in athletes -- Meniscus Substitution: Scaffolds, allografts and prosthetic implants -- Cartilage Repair, Replacement, and Regenerative Strategies for Osteochondral Lesions of the Talus -- How to treat cartilage injuries in the ankle joint by BMDC's transplantation -- Pure cartilage-based repair modalities of focal cartilage lesions.

This book reviews the current basic and clinical research into the

mechanisms of cartilage injury and its management. It illustrates the considerable progress made in the search for solutions to cartilage related problems. Developing Insights in Cartilage Repair describes

Sommario/riassunto

fundamental research and the use of biomaterials, bioreactors, and imaging as part of existing cartilage repair strategies, while revealing the on-going trends for emerging techniques. The aim of the Editors and their team of authorities in cartilage medicine has been to provide a link between laboratory work and the daily treatment of patients in a clinical setting. This book reveals the highly multidisciplinary nature of the topic and it will thus not only be of considerable interest to a large proportion of the orthopaedic community, but also any discipline in which cartilaginous tissue is involved, including otorhinolaryngology and plastic surgery. • Provides an insight of cartilage and its repair to physicians and scientists with an active interest in cartilage repair and new transplantation techniques · Describes different strategies to repair cartilage defects as well as fundamental research concerning cartilage biology and imaging . Up-to-date research enables fast clinical implementation of novel findings to optimize cartilage repair.