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Altri autori (Persone)	BockGregory GoodeJamie
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Nota di contenuto	TISSUE ENGINEERING OF CARTILAGE AND BONE; Contents; Participants; Chair's introduction; Tissue engineering of cartilage: do we need it, can we do it, is it good and can we prove it?; Discussion; Embryonic development and the principles of tissue engineering; Discussion; The fundamentals of tissue engineering: scaffolds and bioreactors; Discussion; Tissue-engineered versus native cartilage: linkage between cellular mechano-transduction and biomechanical properties; Discussion; From the preclinical model to the patient; Discussion; Mesenchymal stem cell therapy in joint disease; Discussion Differentiated chondrocytes for cartilage tissue engineeringDiscussion; Mesenchymal stem cells and bioceramics: strategies to regenerate the

skeleton; Discussion; Bone marrow stromal cells and their use in regenerating bone; Discussion; Studying the effect of different macrostructures on in vitro cell behaviour and in vivo bone formation using a tissue engineering approach; General discussion I; Cartilage repair with chondrocytes: clinical and cellular aspects; Discussion; Qualitative and quantitative in vivo assessment of articular cartilage using magnetic resonance imaging; Discussion
Hyaluronan-based scaffolds (Hyalograft® C) in the treatment of knee cartilage defects: preliminary clinical findingsQuantitative analysis of repair tissue biopsies following chondrocyte implantation; Discussion; General discussion II Tissue engineering using recombinant human BMP2; Final discussion and summing-up; Index of contributors; Subject index

Sommario/riassunto

Tissue engineering takes advantages of the combined use of cultured living cells and three-dimensional scaffolds to reconstruct adult tissues that are absent or malfunctioning. This book brings together scientists and clinicians working on a variety of approaches for regenerating of damaged or lost cartilage and bone to assess the progress of this dynamic field.In its early days, tissue engineering was driven by material scientists who designed novel bio-resorbable scaffolds on which to seed cells and grow tissues. This ground-breaking work generated high expectations, but there have b