Record Nr. UNINA9910458655803321 Principles of regenerative biology [[electronic resource] /] / Bruce M. **Titolo** Carlson Pubbl/distr/stampa Amsterdam; ; Burlington, Mass., : Elsevier/Academic Press, c2007 **ISBN** 1-281-05053-9 9786611050535 0-08-047796-8 Descrizione fisica 1 online resource (400 p.) Altri autori (Persone) CarlsonBruce M Disciplina 571.889 Soggetti Regeneration (Biology) Growth Electronic books. Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Front cover: Principles of Regenerative Biology: Copyright page: Table of contents; Preface; Acknowledgments; List of Abbreviations; CHAPTER 1: An Introduction to Regeneration; BRIEF HISTORY; WHAT IS REGENERATION?; HYPERTROPHY; MORPHALLAXIS; ASEXUAL REPRODUCTION; SUMMARY; CHAPTER 2: Origins of Cells in Regenerating Systems; WHERE DO REGENERATING CELLS COME FROM?; DEDIFFERENTIATION; PROLIFERATION OF PARENCHYMAL CELLS; PROLIFERATION OF RESIDENT PROGENITOR CELLS; INFLUX OF PROGENITOR (STEM) CELLS ORIGINATING OUTSIDE THE DAMAGED TISSUE; SUMMARY; CHAPTER 3: Epithelialization GENERAL FEATURES OF EPITHELIALIZATION MODEL SYSTEMS OF EPITHELIAL HEALING; ANALYSIS OF EVENTS IN THE EPITHELIALIZATION OF WOUNDS; ELECTRIC FIELDS AND EPITHELIALIZATION; EPITHELIAL PHAGOCYTOSIS AND HISTOLYSIS; REGENERATION OF EPIDERMAL

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Sommario/riassunto

With the explosion of knowledge from molecular biology and the burgeoning interest in generating or regenerating tissues or organs through various bioengineering or stem cell approaches, many scientists and students have shown a renewed interest in the phenomenon of regeneration. Because relatively few have had the luxury of being able to approach the phenomenon of regeneration from a broad biological perspective, Dr. Carlson has produced a book that outlines the fundamental principles of regeneration biology. Subject matters focus principally on regeneration in vertebrate systems, but also in