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Titolo	Regenerative Medicine and Plastic Surgery : Elements, Research Concepts and Emerging Technologies / / edited by Dominik Duscher, Melvin A. Shiffman
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Descrizione fisica	1 online resource (x, 490 pages) : illustrations
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Soggetti	Regenerative medicine Tissue engineering Surgery, Plastic Regenerative Medicine/Tissue Engineering Plastic Surgery Medicina regenerativa Cirurgia plàstica Llibres electrònics
Lingua di pubblicazione	Inglese
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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Elements of regenerative medicine -- Research concepts -- Emerging technologies -- Translational aspects -- Regenerative plastic surgery.
Sommario/riassunto	This book discusses the current research concepts and the emerging technologies in the field of stem cells and tissue engineering. It is the first authoritative reference documenting all the ways that plastic surgical practice and regenerative medicine science overlap or provide a road map for the future of both specialties. The Editors have provided a valuable service by gathering in one place the leading voices in these two fields in clear and concise manner. Divided into five parts, the book opens with a description of the elements of regenerative medicine including definitions, basic principles of soft and bone tissue regeneration, biomaterials and scaffolds. Current research concepts are explored in the second part of this book, for example mechanotransduction and the utility of extracellular vesicles. In the

third part, the editors present the emerging technologies and highlight the novel perspectives on bionic reconstruction and biomimetics in surgery and regenerative medicine. Part four deals with translational aspects including practical information on moving scientific findings from bench to bedside. The final part then describes in detail applications in clinical plastic surgery. Written by leading experts this book is an invaluable resource for researchers, students, beginners and experienced clinicians in a range of specialties. "In your hands is a comprehensive encyclopedia of two rapidly converging fields. Drs Duscher and Schiffman have done an outstanding job of highlighting the interdependent relationship between plastic surgery and regenerative medicine. Ultimately, this is to the benefit of both fields." - Geoffrey C. Gurtner, MD, FACS Johnson and Johnson Distinguished Professor of Surgery Professor (by courtesy) of Bioengineering and Materials Science Inaugural Vice Chairman of Surgery for Innovation Stanford University School of Medicine.
