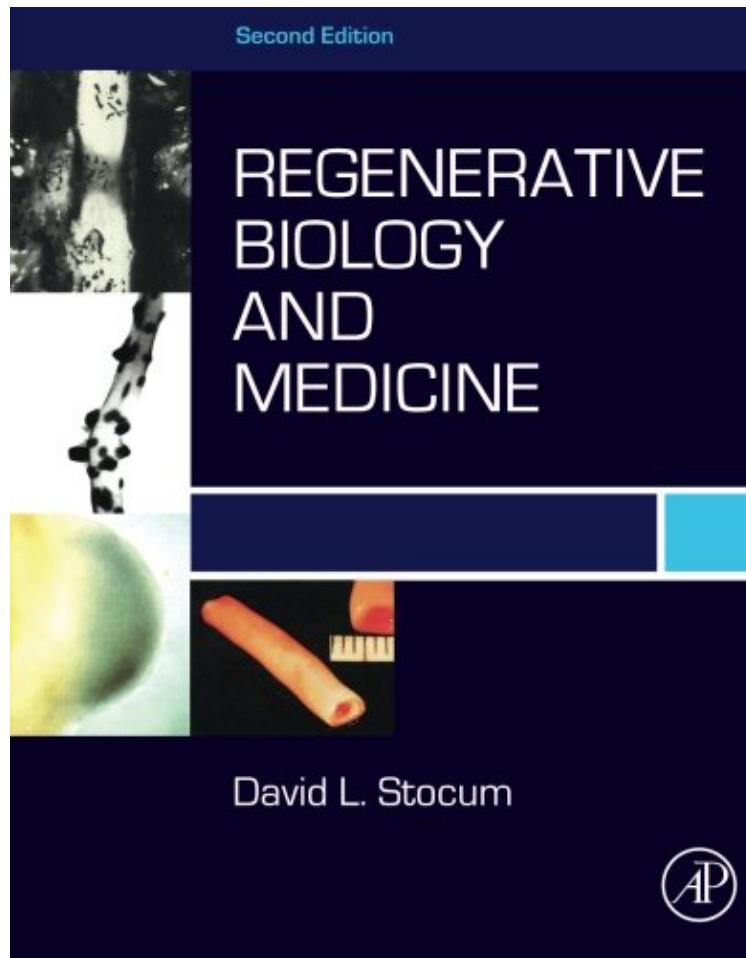


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Regenerative Biology and Medicine, Second Edition

David L. Stocum

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David L. Stocum : Regenerative Biology and Medicine, Second Edition before purchasing it in order to gage whether or not it would be worth my time, and all praised Regenerative Biology and Medicine, Second Edition:

0 of 0 people found the following review helpful. Five StarsBy Bookworm OneVery good overview of the field of regenerative biology and medicine.

Regenerative Biology and Medicine, Second Edition Winner of a 2013 Highly Commended BMA Medical Book Award for Medicine discusses the fundamentals of regenerative biology and medicine. It provides a comprehensive overview, which integrates old and new data into an ever-clearer global picture. The book is organized into three parts. Part I discusses the mechanisms and the basic biology of regeneration, while Part II deals with the strategies of regenerative medicine developed for restoring tissue, organ, and appendage structures. Part III reflects on the achievements of regenerative biology and medicine; future challenges; bioethical issues that need to be addressed; and

the most promising developments in regenerative medicine. The book is designed for multiple audiences: undergraduate students, graduate students, medical students and postdoctoral fellows, and research investigators interested in an overall synthesis of this field. It will also appeal to investigators from fields not directly related to regenerative biology and medicine, such as chemistry, informatics, computer science, mathematics, physics, and engineering. Highly Commended 2013 BMA Medical Book Award for Medicine Includes coverage of skin, hair, teeth, cornea, and central neural tissues Provides description of regenerative medicine in digestive, respiratory, urogenital, musculoskeletal, and cardiovascular systems Includes amphibians as powerful research models with discussion of appendage regeneration in amphibians and mammals

"...a terrific reference for anyone toying with the idea of moving into this field. The text offers an enormous breadth of coverage of different systems currently under investigation, and Stocum provides a central theme that pits regenerative ability against fibrosis as a way to conceptually untangle the limited regenerative capacity of humans...Stocum has erected an umbrella large enough for scientists of diverse backgrounds to initiate conceptual cross-talk between those actively involved in the biology of regeneration and those targeting its clinical application." - Ken Muneoka, Department of Cell and Molecular Biology, Tulane University, New Orleans, Louisiana of tremendous importance to researchers and clinicians working in the fields of regeneration and stem cell biology. - Jonathan Henry, University of Illinois at Urbana-Champaign This text integrates information from cell and developmental biology with regenerative biology, tissue engineering and clinical practice. The breadth and detail of this intellectual landscape are derived from the authors long commitment to the problems of regeneration, and help to make this volume a landmark publication for regenerative medicine. - Jeremy Brockes, University College London This book is a superb in-depth analysis of the existing potential of the tissues of the body to replace cells and tissues and how to promote this ability for the sake of repair. Every institute should have it as their background reading and mission statement. I can't recommend it highly enough, it has been long awaited. - Malcolm Maden, Kings College London wonderful and comprehensive, providing readers with the basis of regeneration biology and medicine. The author emphasizes the necessity of understanding the biology of regeneration for a true appreciation of its practice in clinical medicine. - Katsutoshi Yoshizato, University of Hiroshima From the Back Cover The progressive field of regenerative biology and medicine is occupied by a growing population of students, practitioners, administrators, and researchers who are embracing the science and looking towards the future. This fully-revised edition has been re-organized to highlight the different facets of regenerative biology and provide readers with an overview of the basics with a link to modern, clinically-oriented research and application. Coverage of a plethora of tissues and systems is complemented by information about the developmental plasticity of adult stem cells, the biology and use of embryonic stem cells and induced-pluripotent stem (iPS) cells, and the regeneration of appendages. The book goes beyond the lab to address the biological and bioethical issues and challenges in the field as well. Regenerative Biology and Medicine, Second Edition has been completely revised with a new organization which follows the natural progression of discovery within the science. The chapters of Part I provide a discussion of the mechanisms and the basic biology of regeneration while Part II examines the strategies of regenerative medicine being developed for each organ system. Part III provides a perspective on achievements so far and what will be the exciting areas of the future. This approach embraces the diverse and expanding scientific audience being introduced to this field.