REVIEWS

As a service to our readers, *Plastic and Reconstructive Surgery®* reviews books, DVDs, practice management software, and electronic media items of educational interest to reconstructive and aesthetic surgeons. All items are copyrighted and available commercially. The *Journal* actively solicits information in digital format (e.g., CD-ROM and Internet offerings) for review.

Reviewers are selected on the basis of relevant interest. Reviews are solely the opinion of the reviewer; they are usually published as submitted, with only copy editing. *Plastic and Reconstructive Surgery*® does not endorse or recommend any review so published. Send books, DVDs, and any other material for consideration to: Ronald P. Gruber, M.D., Review Editor, *Plastic and Reconstructive Surgery*, UT Southwestern Medical Center, 5323 Harry Hines Boulevard, HD1.544, Dallas, Texas 75390-8820.

> Ronald P. Gruber, M.D. Review Editor

Tissue Engineering (Academic Press Series in Biomedical Engineering)

Edited by Clemens van Blitterswijk. Pp. 739. Elsevier, London, United Kingdom. 2008. Price: \$115.

Tissue Engineering is an excellent and timely introductory review for any neophyte into the multifaceted arena of tissue engineering. Students require a fundamental knowledge base in this ever-growing and novel field, especially persons involved in any aspect of plastic surgery. The students who would benefit



include biomedical engineering students, medical students, scientists, residents, fellows, and physicians. With an increasing clinical application of autologous tissues in plastic surgery and the focus on the adipocyte-derived stem cells, this text approaches and covers relevant clinical applications for tissue-engineered constructs. Typically, to gain an understanding of the newest advance in any area of this field, one would review the latest articles in high-impact journals. However, it is not the purpose of high-impact journals to provide the fundamental conceptual building blocks to the reader. *Tissue Engineering* provides this starting point.

Copyright ©2010 by the American Society of Plastic Surgeons

A significant portion of the text reviews key issues to define stem cell biology: what cellular properties distinguish a stem cell from other cells, what matrices are natural, and which isolation, harvesting, and cell-culturing methods and procedures are currently practiced. With these concepts, the authors provide overarching rationales for scaffold designs and review potential drug-releasing capabilities for cell-scaffold constructs. The strength of Tissue Engineering is also its individual reviews of tissue engineering of the skin, cartilage, bone, nervous system, and other potential other organs. Each chapter provides the historical context from bench experiments and animal experiments. An opportunity is also provided to test this new knowledge with multiple-choice questions.

As a textbook, a wide spectrum of stem cells, potential scaffolding for stem cell tissue-engineering constructs, and potential uses in a number of clinical settings are presented. An additional strength of this book versus others is the coverage of topics that typically are not presented in detail, such as cell nutrition, cryobiology, and bioceramics as a scaffold. Equally important to readers, the authors provide a final chapter on the ethical issues in tissue engineering and the moral questions and concerns that not only the communities must address but plastic surgeons as well. The text is easy to read and presented with vivid illustrations and overviews that provide students with the state of the art and future directions. The contributing authors represent the international interest and breadth of tissue-engineering topics. This text is an excellent starting point for those students who require a broad foundation of tissue-engineering concepts.

DOI: 10.1097/PRS.0b013e3181f553c7

Spencer A. Brown, Ph.D.

Wound Care Practice, 2nd Edition

By Paul J. Sheffield, Ph.D., and Caroline E. Fife, M.D. Pp. 1210 (two volumes). Best Publishing Company, Flagstaff, Ariz. 2007. Price: \$159.99.

The practice of wound care, once relegated to an extremely small subset of health care providers, has taken on renewed interest, vigor, and enthusiasm. The multidisciplinary approach, frequently at specialized wound care centers, has combined with evidence-based medicine to provide improved outcomes and optimized patient care. Two of the recognized leaders in the field have teamed up again to co-edit the second

www.PRSJournal.com

Copyright © American Society of Plastic Surgeons. Unauthorized reproduction of this article is prohibited

edition of *Wound Care Practice*, a follow-up to their 2004 tome on wound care.

This 1210-page, two-volume hardback represents an expanded effort relative to the first edition (814 pages) and even adds another section, "Communication and Trust," to the original five sections ("The Problem Wound," "Principles of



Wound Assessment," "Principles of Wound Management," "Pain, Infection, and Adjunctive Therapies," and "Healthcare Delivery"). While many of the chapter topics have remained the same, there are notable additions to this comprehensive textbook, including discrete chapters on "Ischemia and Hypoxia," "Management of Wounds of the Scalp, Skull, and Brain," "Biofilm-Based Wound Care," and "Documentation." This is in addition to the topics in the new section, which includes chapters on "Comforting the Patient," "Ethics in Wound Care and Hyperbaric Medicine," and "Legal Aspects of Wound Care and Hyperbaric Medicine." The co-editors have continued their tradition of tapping well-respected authorities in their respective disciplines-medicine, surgery, nutrition, kinesiology, podiatry, radiation oncology, hyperbaric medicine, and others, including law. Many of these authors participate in the annual Wound Care Course, in San Antonio, Texas.

The book is very well-written and illustrated, with multicolor figures, tables, photographs, and images. These visual elements liberally peppered throughout the chapters add tremendous value to the reader, given the visual nature of the specialty, and help drive the points home. Interestingly, each chapter has a succinct overview as its frontmatter; this allows the reader to skim the chapter's contents quickly, as each subtopic references the page number on which it is mentioned, serving almost as an "individual chapter index," if you will. At the end of each chapter is a comprehensive bibliography that is thorough and complete. The review questions are a valuable addition at the end of each chapter, allowing readers to test their knowledge, if they should desire, on the chapter's contents. Answers to these multiple-choice questions are provided in a key, although critiques are not (along the lines of what one might find in an in-service examination key).

The book was designed so that each chapter could "stand alone"; therefore, they are independently thorough and comprehensive, at the expense of being redundant if the volumes are read in their entirety. There are also some minor discrepancies between chapters, due in part to individual authors' techniques and experience. Although the co-editors acknowledge this to be potentially confusing to the reader, it also represents a nice cross-section of expert perspectives in a single textbook. Evidence is married with technique to give complete descriptions and detailed overviews of each topic.

In all, the second edition of *Wound Care Practice* takes an already exceptional book and makes it even better. There are enough additions, updates, and modifications to warrant its purchase even if you own the first edition, at least in this reviewer's opinion. It remains a "bible of wound care" and earns its place on the shelves of any provider who devotes any significant time to the care of wounds.

DOI: 10.1097/01.prs.0000388219.50393.ba

Jeffrey E. Janis, M.D.