COLOR ATLAS OF EMERGENCY TRAUMA

Authors: Diku P. Mandavia, MD; Edward J. Newton, MD; Demetrios Demetriades, MD, PhD

Bibliographic Data: Cambridge University Press, 2003. ISBN: 0-521-78148-5, 295 pp, hard cover, $175.00.

Reviewer’s Expert Opinion:

Description: This is an atlas of injury patterns and common procedures for treatment of injury, prepared by the trauma program of the University of Southern California, one of the busiest trauma centers in the United States. Purpose: The collection of clinical images and drawings represent the experience of a large group of practitioners. Audience: Practitioners and students at all levels are an appropriate audience for this work. The authors represent trauma and emergency medicine leadership at the University of Southern California. Features: The material is presented by anatomic region of injury with photographs and line drawings to illustrate common problems and treatment strategies. The body is reviewed anatomically, much as it would be in trauma resuscitation. Head and neck injuries are discussed first, followed by injuries to the chest, abdomen, and musculoskeletal system. Specific chapters describe soft tissue injuries including burns and bites. Each of the eight chapters begins with a brief overview of the clinical problem followed by photographs and line drawings illustrating important patterns of presentation. In some cases, the commentary includes a review of common pitfalls in diagnosis and management of the condition. Photographs are black and white and color and reproduce well. Line drawings are also of excellent quality. No references are included, however. The table of contents provides excellent access to the detailed content of each chapter. The concluding index provides specific access not only to injuries, but also to tables and figures. Assessment: This atlas is an excellent addition to the teaching shelf. While treatment strategies may go out of date, the clinical images in the book will always be relevant. A similar publication is available for burn injury edited by Barret and Herndon, Color Atlas of Burn Care, W.B. Saunders, 2001.

Reviewer: David J. Dries, MD (University of Minnesota Medical School)

BACTERIAL EVASION OF HOST IMMUNE RESPONSES

Editors: Brian Henderson; Petra C.F. Oyston

Bibliographic Data: Cambridge University Press, 2003.

Assessment: This book contains a series of reviews on the mechanisms used by bacteria to evade immune responses in mammalian hosts. Humoral and cellular responses are considered, including those mediated by complement. Purpose: The intent is to provide current information regarding methods/strategies used by bacteria to abrogate or mitigate host immune response. Given the persistence of serious infectious disease, this is a worthwhile endeavor. Within limitations, these expectations are fulfilled. Audience: The target audience is the medical scientist (including basic investigators) concerned with molecular mechanisms of virulence and disease. The editors have assembled a highly qualified set of authors. Features: Most concerns regarding bacterial infection relate to identifying which antibiotic will be effective for therapeutic intervention. Generally, less attention is focused on the fact that the infection is well established before overt symptoms occur that can lead to such treatment, and that substantial interchange between the invading organism and the host immune system has already occurred. This book focuses on the latter aspect. The initial chapters review mechanisms of host recognition of bacteria and are followed by two main sections that deal with humoral and cell mediated responses. In each of these latter parts, several different aspects are reviewed. These include the role of the complement system, elicited proteins that bind immunoglobulins and what is termed phase variation. This latter is analogous to the strategy employed by trypanosomes wherein a set of coat protein genes is available to provide a constantly changing exterior landscape thus obviating immune responses. In the final section, cellular responses are discussed—thus, signaling networks, the role of superantigens and enterotoxins, and quorum sensing are all discussed in terms of their effects on the host cellular response. In general, the discussions are thorough with a strong molecular emphasis. The bibliographies are sufficiently detailed to provide adequate primary material. There are, however, some caveats. The overall topic is hardly restricted to bacterial infections. Thus, strategies employed by parasites, in particular, may have deserved mention. In the discussion of bacterial capsules, no distinction is made between that of hemolytic streptococci (non-immunogenic hyaluronic acid) and those where a strong immune response can be expected and where the capsular material itself can serve as a protective immunogen (Streptococcus pneumoniae, for example). Overall, this book is recommended for those investigators concerned with aspects of bacterial infectious disease. Assessment: This is a generally useful book. Investigators with a broad concern for infectious processes will find much of value but will miss comparable
discussions of parasites and viruses. The book is timely and not especially duplicative.

**Reviewer:** Eugene A. Davidson, PhD (Georgetown University School of Medicine)

**THE SKIN AND SYSTEMIC DISEASE: A COLOR ATLAS AND TEXT, 2ND EDITION**

**Author:** Mark G. Lebwohl, MD

**Bibliographic Data:** Elsevier Science Publishing Company, 2004. Imprint: Churchill Livingstone Inc. ISBN: 0-443-06539-X, NLM: WR 17, 260 pp, hard cover, $139.00.

**Reviewer’s Expert Opinion:**

*Description:* This is a superb collection of clinical photographs accompanied by outstanding descriptions of presentation and associated systemic diseases. It reminds me of the best of Du Vivier (*Atlas of Clinical Dermatology, 3rd Edition*, Elsevier Science, 2002) and clinical pearls from Fitzpatrick (*Color Atlas and Synopsis of Clinical Dermatology: Common and Serious Diseases*, 4th Edition, McGraw-Hill, 2001). High-quality glossy nonglare paper does justice to the excellently detailed color illustrations, which are grouped four on each page. This second edition updates the original, published in 1995. *Purpose:* The purpose is to illustrate the various skin findings associated with systemic illnesses. The chapters are organized according to organ system involvement. Excellent tables for work-up and interpretation of laboratory tests are provided. The author shares useful acronyms to aid one in remembering diagnostic possibilities and symptom complexes. *Audience:* The book will be extremely useful to all dermatologists and students of dermatology. *Features:* Each chapter begins with an interesting historical vignette and photograph. All the photographs are beautifully shot. There are no blurry slide reproductions here. The text is clinically oriented and full of valuable information regarding evaluation and diagnosis. This is a definite must have. *Assessment:* The color atlas rivals Du Vivier’s, Fitzpatrick’s, and Habif’s (*Clinical Dermatology: A Color Guide to Diagnosis and Therapy*, 4th Edition, Elsevier Science, 2004) color atlases. The author has taken great pains to provide not only outstanding clinical photographs but also equally brilliant text for the illustrations.

**Reviewer:** Patricia Wong, MD (Stanford University Medical Center)

**KINETIC ANALYSIS OF MACROMOLECULES**

**Editor:** Kenneth A. Johnson

**Bibliographic Data:** Oxford University Press, Inc., 2003. ISBN: 0-19-852493-5, Series Title: Practical Approach Series, v. 267, 256 pp, hard cover, $135.00.

**Reviewer’s Expert Opinion:**

*Description:* This is a collection of articles/protocols covering detailed kinetic analysis of macromolecular interactions. The main thrust is to provide technical directions for kinetic analysis of enzymatic reactions. *Purpose:* This book introduces the reader to kinetic analyses beyond the customary steady state measurements usually employed. In so doing, the opportunity to define mechanisms as well as rate determining steps is made clear. In terms of a more thorough analysis of enzyme reactions, this is worthwhile. Although each of the articles uses a specific reaction type for analysis, general principles can nonetheless be learned. In that sense, the goal of the book is achieved. *Audience:* It is intended for the enzyme mechanist or drug developer with a strong background in conventional kinetics. Graduate students working in this area, postdoctoral fellows and laboratory directors will find material of value.

The editor has assembled a qualified set of authors. *Features:* Since the introduction of Michaelis-Menten kinetics (and subsequent refinements) beginning about 90 years ago, most kinetic analysis of enzymatic reactions has been dominated by that approach. Few investigators go beyond determination of the classic constants, Km and kcat. More recently, those studying details of enzyme mechanisms have employed isotopes such as deuterium or oxygen-18 to identify rate-determining steps or the origin of a specific oxygen. This book extends such analyses to the realm of transient kinetics wherein analysis of early stages of reactions (usually in the millisecond range) can provide information about possible intermediates (or rule out some) and therefore valuable information about the reaction pathway. Approaching the problem from a kinetic perspective, the opening chapter provides a valuable overview of the reasons for this type of approach. The remaining chapters offer protocols for various types of enzymatic reactions. Included is a chapter on the use of a modified enzyme as an analytical sensor (for inorganic phosphate) and one on enzymes that have specific residues replaced. Although each of the associated protocols deals with the specific system under study (ribozyme cleavage, DNA-protein interactions etc.), general principles are clearly there. Application to aspects of drug development is clearly delineated in the section on quench methodology (focus is on reactions of phosphoenolpyruvate). The investigator wishing to identify possible intermediates in a reaction pathway will find much useful information. This book can also be recommended to students since it will introduce them to the next level of analysis—something of value for the next generation of enzymologists. Regrettably, the title is somewhat obscure and could be better edited to read “Kinetic Analysis of Macromolecular Interactions.” *Assessment:* In spite of a somewhat distracting title, this is a useful book. The technical requirements for the work described may, on occasion, be formidable, but the information gained cannot be easily acquired otherwise. A useful contribution.

**Reviewer:** Eugene A. Davidson, PhD (Georgetown University School of Medicine)