

they would appear to belong in the TIA column. Similarly, some of the appendices at the end of the book appear to be mislabelled.

Overall, the book follows a very useful and innovative concept of addressing in one volume a multitude of pain syndromes affecting the head, face, and neck. Traditionally, many of these syndromes are dealt with by different specialties and indeed different professions (i.e. medical and dental). It also presents information about a multidisciplinary approach for many of these pain syndromes. Therefore, this often detailed and well referenced up-to-date book provides a major service by bringing together experts from many disparate professions, specialties, and disciplines. Anyone who sees significant numbers of patients with head, face, and / or neck pain will certainly find it useful.

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ESSENTIALS OF APOPTOSIS. A GUIDE FOR BASIC AND CLINICAL RESEARCH. SECOND EDITION. 2009. Edited by Xiao-Ming Yin, Zheng Dong. Published by Humana Press. 728 pages. C\$150 approx.

Rated 

This collection provides a comprehensive overview of the history and current knowledge of the study of the genetic program of cell death known as apoptosis. The expressed intent of the book is to inform the basic researcher and the clinician interested in understanding how inappropriate apoptosis may underlie their area of scientific interest, and in this respect it succeeds. The 31 chapters are well-written, in some cases by eminent scholars, and provide an excellent overview that often includes a discussion of controversial areas requiring further work to achieve clarity. This second edition has an additional 15 chapters that provide a forum for highlighting translational possibilities stemming from the study of apoptosis. It is structured in five parts: molecular insights and signaling pathways, the use of model organisms (plants, yeast, fruit fly, nematode), mammalian systems and disease, alternative cell death pathways (e.g. autophagy, caspase-independent death), and a short section devoted to bench top protocols for quantitation of apoptosis. The section on the utility of the model organisms is particularly well constructed, providing a useful survey of the impact of these lines of investigation on the field.

The book would be a welcome addition for the collection of a newcomer to apoptosis: in the basic research lab, a graduate student or post-doc would benefit from the historical overviews, clear diagrams, tables in several chapters that catalog gene knockout phenotypes, as well as the excellent reference sections provided for each chapter. The clinician interested in understanding how the biochemical and molecular discoveries were made would also benefit, and from the chapters providing detailed overviews of the role of apoptosis in the immune system, the brain (acute neuronal injury or neurodegeneration), and in

cardiovascular, pulmonary, renal systems, to name a few. For the neuroscientist interested in Parkinson's, Alzheimer's, or Huntington's diseases, there is a well- documented chapter that provides a useful comparison of the areas of the brain affected in each condition and an overview of current therapeutic approaches targeting specific molecular targets implicated in each. Apoptosis represents a critical barrier to inappropriate cell survival and circumvention of this failsafe is a hallmark of tumour cells. As a result, significant effort has been placed on development of therapeutics targeting proteins with anti-apoptotic activity, and this is discussed in a dedicated, if brief, chapter and indeed throughout the book.

The central drawback of the collection is a reflection of the medium: books cannot accurately provide an up-to-the-minute snapshot of any given field. The colour figures section is quite valuable, yet serves to highlight the weakness of the black-and-white model images that suffer from a lack of clarity in some chapters. Some of the chapters end somewhat abruptly, which may be due to space constraints, and this will be noticeable to the expert reader. This is particularly noticeable in Part 5, the brief section devoted to protocols for the study and analysis of apoptosis (cell viability, morphological assessment, plasma membrane changes, biochemical events, DNA fragmentation, etc.). This section provides a useful guide for tried-and-true protocols, but does not offer significant troubleshooting guide that is often required for first-time users, and which is becoming more standard in dedicated methods periodicals.

In summary, for the newcomer to the field, an excellent overview of the process of apoptosis, its role in disease, and potential for targeted intervention for treatment.

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NEURO-OPHTHALMOLOGY ILLUSTRATED. 2009. By Valérie Biousse, Nancy J. Newman. Published by Thieme Medical Publishers, Inc. 614 pages. C\$95 approx.

Rated 

When I was first asked to review this newly released neuro-ophthalmology book, I was not sure I could accept the task, since I recently completed fellowship training with the authors, and I did not know if I could give an unbiased, critical review. After further consideration, I thought I might be an ideal person to review the book, since I had a unique insider's perspective on the book's contents and development.

I watched my mentors as they tirelessly and meticulously poured over every aspect of the book. Their determination, brainpower, and demand for perfection is reflected in every detail and on each page. The product derives from their combined 40 years of experience in neuro-ophthalmology, and imparts their shared insight in a way that simply makes this the most

comprehensive, high yield, pocket-sized neuro-ophthalmology handbook available.

This is indeed the authors' "opus" and I admit to feeling twinges of jealousy towards the readers of this book, since they will have clinical pearls in neuro-ophthalmology handed to them on a silver platter, compared to the past few years of struggle I engaged in to acquire the same understanding. Not that the book is equivalent to a "neuro-ophthalmology fellowship in your pocket", but rather it is aimed at the level of medical students, residents, ophthalmologists, neurologists and neurosurgeons who may be either participating in a neuro-ophthalmology clinic or rotation, or preparing for their qualifying examinations. This is also the ideal book for optometrists, general practitioners, and other clinicians who want to be able to better recognize neuro-ophthalmic problems, and have quick access to algorithms, differential diagnoses, management plans, and examination techniques for these complex patients.

Neurologists are good at thinking about clinical problems and relating them back to a framework that allows localization. Ophthalmologists are good at visual pattern recognition, and using tools that extend the physical examination. Neuro-ophthalmologists must be good at both, and this book goes a long way towards teaching how to think like a neuro-ophthalmologist, and how to use the tools of the trade. By including over 900 high-quality images and illustrations it also functions as a visual atlas which meets the need for the development of strong visual pattern recognition skills.

This is the first book I have seen which includes MRI images with superimposed line-drawn anatomic pathways of the visual system. Most photos and illustrations include arrows pointing out pathology or key findings. In fact, I value this book so highly that I bought a copy for each ophthalmology and neurology resident at the University of Saskatchewan for Christmas (no ulterior motives here). The residents tell me that they really appreciate how the concepts are succinctly explained and how the accompanying images and diagrams make neuro-ophthalmology much easier to understand.

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PHOTO ATLAS OF SKULL BASE DISSECTION. TECHNIQUES AND OPERATIVE APPROACHES. 2009. By Masahiko Wanibuchi, Allan H. Friedman, Takanori Fukushima. Published by Thieme Medical Publishers, Inc. 434 pages. C\$300 approx.

Rated **UNAVAILABLE**

The performance of most skull base surgery requires a clear understanding of complex anatomical relationships, often distorted by an underlying pathology such as tumor or vascular disease. Cadaveric anatomical dissections are frequently used to learn this anatomy, but in a context that is typically detached from a 'surgical

approach' state of mind. Wanibuchi, Friedman, and Fukushima have created a wonderful book that guides the reader through skull base anatomy organized according to surgical approaches. The book is illustrated with over 1100 high quality color photographs that provide a step-by-step guide to surgical anatomy as each surgical corridor is established and extended inward to reach its objective. Importantly, each approach begins with mapping out the skin incision, an essential part of surgical planning, and works through bone removal issues before advancing towards the intradural structures. The book is organized according to a logical surgical schema and it is very easy for the reader to open up to a section and begin to use as a teaching tool and surgical guide.

"Photo Atlas of Skull Base Dissection" is highly readable and will be a valuable resource and of interest to neurosurgeons and otolaryngologists, residents and fellows involved in skull base surgery. It will be used over and over again for surgical preparation. The one thing lacking in this otherwise wonderful book is a three-dimensional element. Surgery is always a 3-D activity and efforts to embrace this quantity should ultimately become an essential component of any text. An early effort to accomplish this was brought forward by Krause and Bailey in their 1994 book "Microsurgical Anatomy of the Brain. A Stereo Atlas". I recommend this book, also oriented towards surgical approaches, as an example of what is possible when 3-D is available and hope that future work exploits this potential advantage.

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REFERENCE

1. Microsurgical anatomy of the brain. A stereo atlas. Kraus GE, Bailey GJ. Baltimore, Maryland, USA: Williams and Wilkins; 1994.