

**BOOKS RECEIVED**

**HANDBOOK OF DRUG-NUTRIENT INTERACTIONS. SECOND EDITION.** 2010. Edited by Joseph I. Boullata, Vincent T. Armenti. Published by Humana Press. 818 pages. C\$200 approx.

**DIABETES AND THE BRAIN.** 2009. Edited by Geert Jan Biessels, José A. Luchsinger. Published by Humana Press. 473 pages. C\$225 approx.

**ATLAS OF EEG IN CRITICAL CARE.** 2010. By Lawrence J. Hirsch, Richard P. Brenner. Published by John Wiley & Sons, Ltd. 334 pages. C\$170 approx.

**SYNAPTIC PLASTICITY IN PAIN.** 2009. Edited by Marzia Malcangio. Published by Springer. 504 pages. C\$190 approx.

**7.0 TESLA MRI BRAIN ATLAS. IN VIVO ATLAS WITH CRYOMACROTOME CORRELATION.** 2010. Edited by Zang-Hee Cho. Published by Springer. 560 pages. C\$305 approx.

**RADIOSURGERY. VOLUME 7.** 2010. Edited by Michael W. McDermott. Published by Karger. 422 pages. C\$300 approx.

**NEW STRATEGIES IN STROKE INTERVENTION IONIC TRANSPORTERS, PUMPS AND NEW CHANNELS.** 2009. Edited by Lucio Annunziato. Published by Humana Press. 254 pages. C\$195 approx.

**IMAGING THE BRAIN WITH OPTICAL METHODS.** 2010. Edited by Anna W. Roc. Published by Springer. 267 pages. C\$190 approx.

**BOOKS REVIEWED**

**HEAD, FACE AND NECK PAIN: SCIENCE, EVALUATION AND MANAGEMENT. AN INTERDISCIPLINARY APPROACH.** 2009. Edited by Noshir R. Mehta, George E. Maloney, Dharendra S. Bana, Steven J. Scrivani. Published by John Wiley & Sons, Inc. 722 pages. C\$185 approx.

Rated ★★★★★

This book is unusual but very appropriate in that it deals with pain through a regional approach. As its title suggests, it is concerned with pain in three contiguous areas, the head, face, and neck. It is a multi-author book, and has an introductory section on "Basic concepts of head, face, and neck pain", which is then followed by three further sections which deal in turn with each of the regions promised by the title.

As with many multi-authored texts, the major sections and the individual chapters are of uneven depth and quality. The chapters in the "Basic concepts" section tend to be short, and some have important omissions. For example, the chapter entitled "Structural and Functional Imaging of the Trigeminal System" addresses primarily functional imaging, and does not mention imaging studies which might be helpful in detecting compressive lesions of the trigeminal nerve root in patients with trigeminal neuralgia.

The headache section contains many excellent chapters including chapters on migraine, trigeminal autonomic cephalalgias, medication overuse headache, chronic daily headache, and others. There are at times what appear to be unnecessary duplications. For example, although there is a

specific chapter dedicated to a discussion of headache epidemiology, much of the material on migraine epidemiology is repeated in the migraine chapter. Similarly, there is much repetition of headache diagnostic criteria between the headache epidemiology chapter and the chapter on the classification of primary headache syndromes.

Many of the chapters provide excellent in-depth coverage of their topics, and are extremely well referenced. For example, the chapter on trigeminal neuralgia in the facial pain section is over 18 pages long, and lists 314 references. One of the book's greatest strengths is that it brings together in one source detailed discussions of headache syndromes, pain syndromes related to temporomandibular disorders, and pain syndromes related to cervical spine disorders. Its expert reviews in all these areas make it an unusually useful book for the neurologist who sees patients with headache, and indeed for any health professional that sees patients with pain in the head, face, or neck.

This is a first edition, and it is to be hoped that future editions will benefit from somewhat tighter editing. In addition to the duplications noted above, the book also suffers from some errors which seem to be the result of mechanical misplacement of text. The chapter on migraine displays a conceptually very useful table (10.1) which deals with the differential diagnosis of migraine aura, TIA, and focal seizures. However, some of the clinical features which are usually considered helpful in differentiating migraine aura from TIA seem to be misplaced, with characteristics such as sudden onset, no progression over time, and only negative symptoms being erroneously ascribed to the migraine aura when

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