

Moyer's 1968 taxonomy of operational categories of aggressive behavior, as well as those of others who have long studied these behaviors, will be useful as a jumping off point for many readers. Much of the cited research has been done in animals, especially cats and rats, but the relationship to human aggression is explored to the extent possible, and where available, research in humans is discussed. Most of the book is attributed to Dr. Siegel alone, but two chapters, one on the endocrine system and the other on the immune system, were co-authored with Dr. Melissa K. Demetrikopoulos (at least the co-author is listed as "M. Demetrikopoulos" and she has collaborated previously in reviews and original research with Dr. Siegel).

Dr. Siegel devotes an entire chapter to each of the following areas of aggression and rage research: neuroanatomy, neurophysiology, the limbic components (these are actually reviewed in two chapters), neurochemistry, and genetics in addition to the two co-authored chapters mentioned previously. The discussion of neurochemistry devotes individual attention to each of the neurotransmitters from acetylcholine to substance P, and also explores the effects of substances of abuse on aggressive behavior. The chapter on hormonal state and aggression includes segments on each of the sex hormones, as well as products of the adrenal glands.

The text is imminently readable and reasonably easy to comprehend. In addition, there are numerous drawings, graphs, and tables scattered throughout the text that are extremely helpful in understanding the research results and anatomical pathways. The black and white photographs of aggressive behaviors in animals are not as clear or helpful. The final chapter concerns possible areas for future research as well as a discussion of how people might use the research findings to control aggressive impulses. There are references cited at the conclusion of each chapter and a thorough subject index.

The stated goal of the book is to provide an up-to-date discussion of all biological processes involved in the production and control of rage and aggression. Dr. Siegel has certainly done so. Any student of research into aggression will find this book of interest, particularly neurobiology graduate students and neuropsychologists. This book may provide more information than the clinician with a casual interest in anger and aggression will feel necessary, but the table of contents is so complete that the reader may easily pick and choose topics of greatest interest.

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This book seeks to provide a ready reference for the recent physiological Magnetic Resonance (MR) techniques such as diffusion, perfusion and spectroscopy as they apply to clinical practice. This book targets medical professionals as well as those who are interested in MR research. After an introductory section reviewing technical aspects of these techniques, seven clinical areas are addressed: (1) cerebral vascular disease, (2) neoplasia, (3) infection, inflammation and demyelination, (4) seizure disorders, (5) psychiatric and neurodegenerative disorders, (6) trauma, and finally (7) pediatrics.

The choice of topics and the organization of the book is elegant. By their admission, they have avoided functional Magnetic Resonance Imaging, a domain of neuroimaging too important to be given a minimal role in a volume such as this. The coverage of the clinical topics is comprehensive. The book is expensive but at around 50¢ per page of text, its sheer volume does make it a good deal. The size of the book also makes it more a reference volume than a handbook. The technical section provides the fundamentals, quantification issues and common artifacts. The artifact chapters are especially valuable, as a reference such as this will allow clinicians and researchers to avoid common pitfalls. The novice reader would have benefited from an account in this volume addressing the basic physics of MR imaging.

The book maintains a smooth style despite multiple authors (80 in all) and a plethora of technical details that are typical of books such as this. Case studies (36 in all) are a very strong feature, and serve as useful guideposts for the wealth of information provided in the chapters. Tables and graphics including the realistic clinical MR images/data images provide a good reference point for clinicians and researchers. Each chapter begins with a summary of key points, which is very useful for the reader interested in getting the take home points quickly.

A relatively small amount of attention is given in this book to psychiatric diseases. This is understandable as there are no clinically relevant MR procedures currently. Hence, this is not a good primary reference for those interested strictly in psychiatric MR research. There are other books that offer broad coverage of the field as relating to psychiatric illness. However, this book is clearly worth recommending strongly to neuroimaging professionals generally. The book is very timely and its emphasis on the fundamentals will help it stand the test of time better than many similar volumes.

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Clinical MR Neuroimaging. Diffusion, Perfusion and Spectroscopy. Edited by Jonathan Gillard, Adam Waldman and Peter Barker; Cambridge University Press, New York, New York; 2005; ISBN 0521 824 575; \$330 (hardcover); 827 pp.

Molecular Neurobiology for the Clinician. Edited by Dennis S. Charney; Review of Psychiatry, Volume 22, No. 3; American Psychiatric Publishing, Washington DC; 2003; ISBN 1-58562-113-7; \$34.95 (softcover), 250 pp.