Book Reviews

COLOR ATLAS OF NEUROSCIENCE: NEUROANATOMY AND NEUROPHYSIOLOGY

The title of this white coat pocket-sized book is somewhat misleading; although there are 193 whole-page color plates and diagrams, each facing page contains a fairly extensive text commentary. The authors' intent was to produce "a cohesive, fairly comprehensive undergraduate syllabus in Neuroscience." The distinguishing features of this book are the computer-drawn color illustrations and the depth of its coverage, which includes embryology, molecular neurobiology, central nervous system pharmacology, and even some molecular neuropathology, as well as neuroanatomy and neurophysiology. There is also a handy glossary of commonly used neuroscience terms before the index. The computer art is at its most successful in the molecular neurobiology ("cellular structures") section. This area is covered much more thoroughly than in most of its similarly priced competitors, a strength that no doubt reflects the senior author's employment in endocrinology research. The multicolored, rather blocky diagrams explain ion channel and receptor function well. On the other hand, this illustrative technique is considerably less successful in the neuroanatomical sections. Even those readers young enough to appreciate a tegmentum colored teal blue will find the level of detail and clarity in conventionally illustrated competitors superior. The computer-generated lines are also confusing when used to illustrate complicated pathways such as vestibulo-ocular connections or seventh nerve branches; once again conventional diagrams are superior.

Apart from the inferior neuroanatomical illustrations, this book has a number of drawbacks. There are some surprising omissions, with no illustrations of muscle structure and excitation-contraction coupling, or of cerebral arterial territories in relation to functional areas. Neuroimages, now integral to the teaching of neuroanatomy to medical students, are completely absent. Despite a reasonable section on "higher brain centers," there is no emphasis on functional brain imaging. Pathophysiology receives short shrift—for instance, there is no discussion of demyelination and conduction block, or the response of the motor unit to dropout of anterior horn cells or axons. Clinical correlations are attempted sporadically, but there is no systematic attempt to relate neuroanatomy and neurophysiology to topographical diagnosis, e.g., in the motor and somatosensory systems. These deficiencies would make this book difficult to recommend for medical students in modern courses attempting vertical integration with clin-
The major problem with this book, however, is the high frequency of errors: typographical (e.g., confusing adduction and abduction when discussing eye movements), diagrammatic (e.g., having the eyes converge in response to lateral head rotation; mislabeling the inferior sagittal sinus as the choroidal vein), and factual (e.g., stating that the spinal fibers of XI originate in the nucleus ambiguus, and that the floculonodular "node" is connected particularly with the dentate nucleus). There are also instances, particularly in the section dealing with molecular neuropathology, where the current consensus view does not emerge clearly. For example, the page on transmissible spongiform encephalopathies (TSE) gives equal weight to the viral and the protein-only hypotheses and fails to mention inherited (but still infectious) forms of TSE due to mutations in the PrP gene. Furthermore, the only mechanism advanced for Aβ neurotoxicity in Alzheimer's disease is formation of interaction with ion channels. With these problems in mind, I will not be recommending this book for my students. It does, however, show promise, and it is to be hoped that a revised second edition will soon appear.

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ETHICS, LAW, AND AGING REVIEW. VOLUME 6: FOCUS ON CONSUMER-DIRECTED CARE AND THE OLDER PERSON

Although this book is the sixth volume of a biannual series of the Journal of Ethics, Law, and Aging published by Springer, this particular tome is the first of a sequence that will focus on an "important ... topic at the intersection of ethics, law, and aging." The topic chosen for this analysis is the legal, ethical, policy, and political issues in the application of consumer-directed care to older persons. The topic occupies the first eight chapters of the book, and the final five chapters consist of separate ethical discussions, some related to aging but only one to the volume's title.

Because the main part of the book consists of discussions about the changes in long-term-care provision for older people with cognitive impairment in the United States, it will be of most interest to American readers. The principal changes described are from paternalistic state-provided models of care to those where the consumer chooses from an array of care providers, many privately funded. Although this change has been partly driven by a wish to provide more choice for those requiring care, it is also due to a desire to decrease the costs of long-term-care provision for the increasing aging population in the United States.

The various authors provide their views from the perspectives of ethics and the right of autonomy, the problems of accepting the choices of older impaired people, and the funding implications of these changes. Several exam-
ples of the programs set up to help individuals in choosing care are provided. The actual details of the programs are extremely confusing for a non-American reader (and may be confusing for a local reader!). The thrust of the arguments is that trials of programs enabling older people to choose their own care may provide benefits in terms of both care and cost. The discussions detailing the ethical issues for older people in choosing their own models of care are relevant to many clinicians who discuss long-term-care options with patients and families. The concern for legal redress that characterizes public life in the United States is shown in the discussion of the problems that carers and organizations have when contemplating the risks that may occur when older people are allowed to make their own decisions. In the opening chapter, which discusses the ability of older people with cognitive and other deficits to make decisions about their care provision, the editor advocates an individual analysis of the decision-making capabilities of older people searching for care. This is an interesting view that is not supported by the prevailing legal view of competence, which uses global capability.

The final chapters of the book are a collection of ethical writings dealing with issues as diverse as the response of physicians to maltreatment of older adults in institutions to the role of cognitive testing for older adults in the workplace. A negative chapter by Koch suggests that bioethics as a discipline has not advanced from its beginnings in 1880. This is balanced by a chapter suggesting that the four principles of bioethics may be helpful in designing an ethical typology of suicide and a code of ethical behavior for professionals who deal with suicidal persons, and a chapter suggesting that moral reasoning can be used to provide a framework for decision making in long-term-care policy.

The volume would be a useful addition to the libraries of medical and health sciences faculties and of large organizations providing long-term care. It will be of most value to American institutions.

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