feature, however you can always return to the index for the next topic, so it is easy to get around. You can "pause" the "videos".

The labeling of the detailed anatomy is sometimes intrusive and when "relationships" are shown, the number of structures, arrows and labeling can be intrusive and excessive. As well, some of the brainstem videos are very detailed and could be simplified, although I like the trick of coloring and highlighting the tract under discussion. Nevertheless, it is accurate and with time and patience, a lot can be learned quickly. I would advise scanning the contents at first and returning to selected parts of the CD for more intense review and study.

On balance, I would suspect that most training programs would be well served by having this program available as a resource, as would any other persons or groups with an interest in this area. Most medical students would find it interesting but too advanced. I suspect most practicing neurologists and neurosurgeons would not purchase this volume on first glance, but neurologists and neurosurgeons are sometimes a peculiar group, in that their love for "all things neurological" sometimes cannot be overcome, especially when the "neurology" is presented with such elegant learning technologies. I liked this product and learned a lot, all in "good taste" so to speak!

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CELL NEUROBIOLOGY TECHNIQUES. NEUROMETHODS, VOLUME 33 and IN VITRO NEUROCHEMICALTECHNIQUES: NEUROMETHODS, VOLUME 34. 1999. Edited by Alan A. Boulton, Glen B. Baker and Alan N. Bateson. Humana Press, Totowa, New Jersey. 391 pages, and 296 pages respectively. C$129.35 each – approx.

These contributions to the large series of "Neuromethods" volumes, focus on methods used widely in cellular neuroscience, describing both long-established approaches such as autoradiography and receptor binding assays, and newer methods such as differential display PCR. With distinguished Canadian editors, and a large number of Canadian contributors, these volumes attest to the strength of Canadian research in cellular neuroscience.

Volume 33 "Cell Neurobiology Techniques" describes a variety of approaches, such as cell culture techniques, the use of c-fos immunocytochemistry as a marker of neuronal activity, and the analysis of post-mortem brain tissue. Volume 34 "In vitro Neurochemical Techniques" covers ligand-binding techniques, electrophysiological approaches to receptors, and a number of contemporary molecular biological approaches, signal transduction, and protein phosphorylation methods.

In the highly specialized field of scientific publishing, "methods" books can be best sellers. Most laboratories where any kind of molecular biology is done have dog-eared volumes of "Maniatis" (Sambrook, J., E. F. Fritsch, and T. Maniatis. 1989. Molecular Cloning: A Laboratory Manual, Second Edition, Cold Spring Harbor Laboratory, Cold Spring Harbor, New York.) standing on a convenient shelf. The ideal methods book should have general information about the range of applications of a particular technique, preferably with some successful examples. This should be accompanied by a sufficiently detailed description of the underlying principles and theories to enable novice users to appreciate the pitfalls and limitations of the technique so that they can avoid over-interpretation of the results obtained, and do some trouble-shooting when things go wrong. Finally, of course, there has to be a detailed "cook book" description of the procedure, presented in sufficient detail for it to be followed, step by step, at the laboratory bench, without reference to any other source.

This ideal is achieved in some chapters, but overall the editors could have exerted a firmer hand on the contributors to ensure uniformity of content. Some chapters are heavy on theory, but light on detailed procedures. Others launch fairly quickly into the cook book section without adequate discussion of the applications or principles involved. The least helpful chapters, fortunately few, are those which are a review of the author's own research using the method supposed to be the topic of the chapter.

Together, the two volumes cover a remarkable range of techniques, but paradoxically this is likely to diminish their appeal. Methods books are usually purchased when an investigator wishes to introduce a new technique into the laboratory: a patch-clamper who wishes to do some *in situ* hybridization on the cell population of interest, for example. It's rather unlikely that they will also want to know about methods for studying signal transduction. For this reason, I recommend these helpful volumes as a purchase for an institutional library, where many individual investigators will be able to select those one or two chapters which will be useful to them.

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ADVANCES IN NEUROLOGY VOLUME 77: CONSCIOUSNESS: AT THE FRONTIERS OF NEUROSCIENCE 1998. Edited by Herbert H. Jasper, Laurent Descarries, Vincent F. Castellucci, Serge Rossignol. Published by Lippincott-Raven. 299 pages. C$217.21 approx.

As neurologists, we tend to think more about the presence of unconsciousness, rather than consciousness. As well, our thinking is very concrete: What is the patient's Glasgow Coma Scale score? Are brainstem reflexes present? In this book, philosophers, psychologists, physiologists and neuroscientists explore the meaning of consciousness. *Consciousness: at the Frontiers of Neuroscience* is the result of a symposium on consciousness held by the Université de Montréal. The list of 19 contributing authors reads like an international Who's Who of researchers in this field, including Herbert Jasper.

The book is organized into eighteen chapters, each written by a different author. The chapters are roughly grouped into six sections: historical perspectives, consciousness as a study object (philosophical discussions), consciousness as a function (neuroanatomy and neurophysiology), contents of consciousness (neuropathology and neuropsychology), models of conscious experience (electrophysiology) and a general discussion. At the end of each chapter is a discussion, in question-and-answer format, by the attendees at the symposium.

The book is a scholarly and scientific review which undertakes, through our knowledge of neuroanatomy,



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