

BOOKS RECEIVED

Biochemical Correlates of Brain Structure and Function. Edited by A. N. Davison, Academic Press Inc., 24-28 Oval Road, London, NW1 7DX. 245 pages, \$27.35.

Chemical Pharmacology of the Synapse. Authors D. J. Triggle and C. R. Triggle, Academic Press Inc., 24-28 Oval Road, London, NW1 7DX. 654 pages, \$43.75.

Dynamics of Brain Edema. Proceedings of the 3rd International Workshop on Dynamic Aspects of Cerebral Edema, Montreal, Canada, June 25-29, 1976. Editors: Pappius, H. M.; Feindel, W., Montreal, Canada. 83 figs., 81 tables. XIII, 404 pages. 1976. Soft cover DM 48,—; U.S. \$21.20.

Berlin-Heidelberg-New York: Springer-Verlag Kg., Postfach Heidelberg, Platz 3, D1000, Berlin 33.

BOOK REVIEW

Progress in Neuropathology. Volume III. Edited by H. M. Zimmerman. Published by Grune & Stratton, N.Y. Distributed by Longman Canada Ltd., 55 Barber Greene Road, Don Mills, Ontario, M3C 2A1. Price and number of pages not given.

Because it was not in his field of expertise this reviewer, a clinical neurosurgeon, was minded to decline this request and set the book aside. However, a glance at the illustrations was arresting. Their technical quality commanded attention. Those in the chapter on membrane characteristics of human brain tumors so resembled moonscapes that all thought of setting the book aside vanished. What was plasma membrane and what was this freeze-fracture technique? I became intrigued. A 20- to 30-second scan of the author's method gave the principle on which his preparations were made. I then found myself poring over each illustration seeing architectural details in cell structures that heretofore had only been names. I then found I could read the article and enjoy vicariously the intricacies of the cell structures of the tumors I had been removing for years. In the gross, brain tumors are horrible things. At the level of the electron microscope they are fascinating.

My appetite having thus been whetted I began at the beginning and went through the book, chapter by chapter. I found myself reliving my days under Dr. Courville in neuropathology — but with what expanded horizons! And with many an argument settled! No longer need we speculate about the origin of the macrophages of the brain. What an intriguing field the electron microscope had laid bare in the world of viruses, virions and nucleocapsids. Courville, now deceased, could no longer be ecstatic but one of his pupils tingled with excitement. On and on I went — through the lipid storage diseases (allergic encephalopathies, axonopathies in both central and peripheral nervous systems) amazed at the progress in basic understanding of the pathologic processes involved. The articles on hexachlorophene and lead intoxication were somewhat less illuminating but the illustrations of the lesions the authors produced or observed were of interest. The chapter on the development of the substantia nigra and related structures in relation to dopamine secretion is of unusual interest to those who study the disorders of the motor systems.

The chapter on the localization of neurosecretory pathways in the hypothalamus was largely beyond me but I recognized that this was a very competent review of a difficult and intricate subject by an authority in the field who refrained from putting forward his own pet ideas on the subject and indeed gave a masterly survey of the current work by virtually all of the giants who are investigating this region.

The final chapter was a very clear statement of the changes in the central nervous system in Huntington's Chorea. Again the illustrations were remarkable for the ease with which the changes described were so readily seen and correlated with the text. The review of this work, for which I had no initial enthusiasm, has been a very stimulating and rewarding experience. To those in the field the book will have some shortcomings for progress goes on and to document it is a somewhat elusive task which will always be less than complete. To those in allied fields who wish to be brought abreast of current research in the field, or who need a reference manual for current work in this area, this volume is authentic and contains a superb bibliography for extended study.

Charles W. Taylor, Calgary