

BOOK REVIEWS

edited by H. PETSCHÉ and JOHN R. HUGHES

Handbook of drugs and chemical stimulation of the brain: Behavioral, pharmacological and physiological aspects. — R.D. Myers. (Van Nostrand Reinhold Company, New York, 1974, 759 p., \$37.50).

This is an excellent book that reviews some of the major research contributions of a well-known and prolific neuroscientist. Dr. Myers has given us a most remarkable summary of the current knowledge on the local application of drugs and chemicals to discrete areas of the brain. Behavioral, pharmacological and physiological aspects are covered. As a researcher who years ago came to the erroneous conclusion that the local instillation of chemicals into the brain was very limited because of the resulting brain lesions, I now find myself an enthusiastic supporter of this approach. We need all possible approaches to study brain function and chemical stimulation (which may result in increased as well as decreased neuronal discharge) is an important one. The author reviews so many aspects — including: theoretical, methodological, cardiovascular, respiratory, autonomic, hormonal, reproductive, temperature regulation, hunger and feeding, thirst and drinking, sleep and arousal, sensory and motor systems, emotional behavior, and learning and memory — that I, for one, marvel at his handbook. The references themselves cover 61 pages of fine print at the end of the book. I personally like the author's epilogue the best and especially its closing remarks that "the black box is gray". Indeed it is in part because Doctor Myers helped make it so. Experimental electroencephalographers and clinical neurophysiologists will find the sections on sleep and arousal as well as sensory and motor systems, particularly seizures and

epilepsy, of special interest. This handbook is recommended for neuroscientists as valuable reference material.

EDWARD F. DOMINO
Department of Pharmacology,
University of Michigan,
Ann Arbor, Mich. 48104 (U.S.A.)

Limbic and autonomic nervous systems research. — L.V. DiCara. (Plenum, New York, 1974, 428 p., \$24.50).

This is a most interesting collection of manuscripts, primarily representing DiCara's own area of interest, brain regulation of cardiovascular dynamics. The tome also has breadth in one or two dimensions but they are somewhat oblique to the main thrust of the text. The title is misleading, because the limbic system (if there really is such a unitary system) is hardly mentioned within the book and the brain processes discussed are, for the most part, antecedent to the actual motor outflow along the autonomic effectors. My advice to the followers of the boundaries of neuroscience, however, is that they become familiar with this particular book, because the collected papers convince me that brain regulation of the autonomic nervous system is an area of investigation that has a bright future and is certain to expand.

Each chapter is well written and the brilliance of each author is clearly manifested. DiCara seems to know where the action is and who is doing the best work. The theoretical underpinnings that could tie all of these papers together, however, are conspicuously absent, though there does seem to be some vague