

## REVIEWS

**Molecular Properties of Drug Receptors. A Ciba Foundation Symposium.** Edited by R. PORTER and M. O'CONNOR, J. and A. Churchill, London, England, 1970. ix + 298 pp., 15 × 23.5 cm.

This recent volume in the Ciba Symposia Series carries on in the tradition established by other volumes in this series: that is to say, it is excellently presented and makes extremely stimulating reading.

The book is divided into four major segments. The first, which has to do with pharmacological properties of receptors, contains chapters by W. D. M. Paton, S. Thesleff, S. E. Mayer, and P. G. Waser. All of these names are well known to people who have been involved in the area of autonomic receptors, and the papers presented are excellent summaries of recent work in that field. The next section deals primarily with the structure of active sites, and contains a review of crystallographic studies on the active site of lysozyme by Beddell, Moulton, and Phillips, a paper on the nuclear magnetic resonance spectrum of protein binding sites by Jardetzky, and a paper on fluorescent probes of biological macromolecules by Stryer. This is followed by a section involving conformational changes in proteins which includes a paper by J. Wyman on the interaction of the subunits of hemoglobin and a paper on conformational transitions in membrane excitation by a group led by J. P. Changeux. The final section deals primarily with attempts at receptor isolation and includes a paper by Singer on affinity labeling, a paper by a group led by A. Karlin on acetylcholine receptors in electroplax, and, finally, a paper by A. S. V. Burgen on the nature of complex formation. Each paper is followed by a short discussion and there is a general discussion after each section.

As is generally the case in Ciba Symposia volumes, the papers are of uniformly high quality and present an excellent overview of recent work being done in the laboratories of the scientists involved. Any given paper will contain much that is familiar to workers in that particular field. However, the major advantage to a symposium of this type is the bringing together of a number of scientists working in closely related fields, and the stimulation provided by the interchange of ideas which takes place. The Chairman of this meeting, Dr. F. H. C. Crick, has done a masterful job in bridging the disciplines involved, and as he states in his opening remarks, "... people here come from very different disciplines. I would, therefore, appeal to people on both the pharmacological side and the protein side not just to talk to the people who already know the field, but to the opposite side. My only usefulness as Chairman is that I have got to the stage where I hardly know about either side. Consequently, up to a point, I can ask the silly questions, but I hope that everyone else will do so, too, if a speaker is using jargon about his own subject."

The discussions form the high point of the book for me and provide real insight into the thinking of some of the leaders of research in the drug receptor field. To this end the book is valuable not only as a reference for scientists interested in this area, but as an example of the intellectual process involved in research. As Sir Francis states in his final summary, "I seem to have summed

up at intervals, so I won't make a grand summing up now. I have certainly been left with the impression that although there is a lot of hard work ahead, there are also very real grounds for optimism in many directions. There are many things which can be tried. I think many people will go on trying the things they were doing before, but perhaps they will do it in a wider context. One or two new ideas have come up which should help. Although before the meeting I knew to some extent the sort of problems involved, I can see them much more clearly now." This final sentence also expresses the opinion of this reviewer and I am sure will characterize the response of all readers of this volume. I recommend it highly.

Reviewed by Jules B. LaPidus  
College of Pharmacy  
Ohio State University  
Columbus, OH 43210 ■

## NOTICES

*A Documented Cross-Indexed Manual to Human Drug Interactions (Second Edition).* By N. J. SAWYER, C. M. KING, and B. A. HELLUMS. University of Alabama, Birmingham, AL 35233, 1971. 133 pp. 21.5 × 28 cm. Price \$5.00.

*Antimicrobial Agents and Chemotherapy—1970.* Edited by G. L. HOBBS. American Society for Microbiology, Bethesda, Md., 1971. xi + 545 pp. 18 × 26 cm. Price \$15.00.

*Flame Emission and Atomic Absorption Spectrometry.* (Volume 2, Components and Techniques). Edited by J. A. DEAN and T. C. RAINS. Marcel Dekker, New York, NY 10016, 1971. xiv + 362 pp. 16 × 23.5 cm. Price \$22.75.

*6-Hydroxydopamine and Catecholamine Neurons.* Edited by T. MALMFORS and H. THOENEN. American Elsevier, New York, NY 10017, 1971. 368 pp. 16 × 23.5 cm. Price \$22.50.

*Lidocaine in the Treatment of Ventricular Arrhythmias.* Edited by D. B. SCOTT and D. G. JULIAN. Williams & Wilkins, Baltimore, MD 21202, 1971. xiii + 241 pp. 14.5 × 22.5 cm. Price \$11.50.

*British Pharmaceutical Codex 1968—Supplement 1971.* Prepared in the Department of Pharmaceutical Sciences, Pharmaceutical Society of Great Britain. The Pharmaceutical Press, London, England, 1971. xxx + 144 pp. 14.5 × 23 cm. Price f 4-20.

*Index Nominum 1970/71.* Edited and published by La Societe Suisse de Pharmacie, Zurich, Switzerland, 1970. xxvi + 1159 pp. 15.5 × 22.5 cm.

*Antibiotic and Chemotherapy.* Third Edition. By L. P. GARROD and F. O'GRADY. Williams & Wilkins, Baltimore, MD 21202, 1971. ix + 499 pp. 14 × 22 cm. Price \$16.25.

*Pesticides in the Environment* (Volume 1, Part I). Edited by R. WHITE-STEVENS. Marcel Dekker, New York, NY 10016, 1971. xv + 270 pp. 15.5 × 23.5 cm. Price \$23.50.