

tion. It has an editorial quality which calls for reform in both pharmacy education and pharmacy practice.

Chapter 25, "Principles of Experimental Design for Clinical Drug Studies," makes a unique contribution to *Perspectives*. It is written by a biostatistician who obviously is thoroughly familiar with his subject and lays out the concepts, requirements, design, and evaluation of clinical trials. For those who participate in clinical drug studies, this chapter is a valuable resource.

Perspectives, as with many first editions has both strengths and weaknesses. The chief weakness, in the reviewer's opinion, lies in the limited achievement of objective 1 for selection of subject matter. One might question the feasibility of attempting to include an "orientation to the health care system" in a textbook on clinical pharmacy because of the vast and complex nature of the subject. It is also obvious in some chapters that the authors are making a deliberate attempt to relate their subject matter to clinical pharmacy—a "bending" to accommodate a new concept. This appears to illustrate a statement under "Conclusions and Definitions," Chapter 2, which speaks of the loss of the medicine-making function (by pharmacists) to the pharmaceutical industry: "...the profession has sought to replace it with a 'new' thing—and today clinical pharmacy is the 'thing.'"

A new textbook that enjoys certain historical significance because of the time of its appearance and its subject matter often causes a critical reader to question the impact that the book will have on others, in this case the profession. A foreword for *Perspectives* was written by Professor Alex Berman who addressed himself to this question: "If the perspectives in clinical pharmacy revealed in this work become widely accepted in American pharmacy, can anyone doubt that this would have a profound impact on the profession and that it would grow enormously in social esteem? But such an acceptance will require a conscious change of direction and goals as well as a planned restructuring of economic and institutional aspects of pharmacy." The reviewer can only agree with Professor Berman's statement.

In summary, *Perspectives in Clinical Pharmacy*, has many features which will direct its use both as a textbook and a reference source. The reader will be left to ponder some of the philosophical matters that the book raises, particularly those that deal with the clinical pharmacy concept. In the final analysis, these matters are of lesser significance than those raised by the subject matter of the book. There are chapters in *Perspectives* that approach state-of-the-art presentations of certain areas of pharmacy practice and these will be the ultimate determinants of its usefulness to students and practitioners.

Reviewed by Donald C. Brodie
Chief, Pharmacy Related Programs Branch, National Center for
Health Services Research and Development, Health Services and
Mental Health Administration
Rockville, MD 20852 ■

Stereochemistry and Its Application in Biochemistry, The Relation between Substrate Symmetry and Biological Stereospecificity. By WILLIAM L. ALWORTH. Wiley-Interscience, 605 Third Ave., New York, NY 10016, 1972. 311 pp. 14.5 × 22.5 cm. Price \$16.95.

Appropriately, the opening chapter of the book starts with a discussion of the valuable contribution made by Ogston who pointed out that an asymmetric enzyme can distinguish between identical groups on a symmetrical enzyme. This point is further elaborated in a separate chapter on biochemical differentiation between chemically like, paired groups. The stereospecificity of fumarase, citrate

synthetase, aconitase, and alcohol dehydrogenase reactions is nicely condensed. For the nonchemistry majors, the introductory information on molecular asymmetry and biological stereospecificity, the standard configuration designations such as D, L system, and sequence rule are provided. Simple, selected examples for the determination of absolute configurations of the isomer are well presented. About 15 pages are devoted to the substrate stereospecificity of the well-studied enzyme, α -chymotrypsin. It emphasizes the value of stereoisomers in mapping the active site of the enzyme. The information will be useful to pharmacologists and other biologists who are interested in using D and L isomers as a tool to probe drug-sensitive pharmacological receptors.

The final chapter covers the additional examples of biological stereospecificity of the tricarboxylic acid cycle. The biological stereospecificities in the squalene biosynthetic pathways should be particularly useful to the medicinal chemist. A proper design of anti-cholesterol agents should come from the proper understanding of biochemistry and stereochemistry of the system. One related topic on *cis* and *trans* isomers of retinene is not discussed in the text.

Throughout the book, the important statements and words are presented in italics. The illustrations are simple, clear, and creative. In the preface, the author states that "all students will profit by considering their study of molecular symmetry and biologic stereospecificity as a vital part of an introduction to the field of biochemistry." The statement is very true. Due to his background in bioorganic chemistry, the author has kept a *proper* balance between biochemistry and stereochemistry.

For faculty, as well as graduate students, the book should serve as an excellent reference.

Reviewed by P. N. Patil
College of Pharmacy
Ohio State University
Columbus, OH 43210 ■

NOTICES

The Study of the Systemic, Coronary and Myocardial Effects of Nitrates. Edited by G. G. GENSINI, Charles C Thomas, 301-327 E. Lawrence Ave., Springfield, IL 62703, 1972. 399 pp. 16.5 × 25 cm. Price \$27.50.

Pathogenic Mycoplasmas, A Ciba Foundation Symposium. Associated Scientific Publishers, 52 Vanderbilt Ave., New York, NY 10017, 1972. 404 pp. 16 × 24 cm.

Autonomic Neuromuscular Transmission, Monographs of the Physiological Society, No. 30. By M. R. BENNETT. Cambridge University Press, American Branch, 32 E. 57th St., New York, NY 10022, 1973. 274 pp. 13 × 21.5 cm. Price \$25.00.

Actualites de Dermopharmacologie. Edited by H. THIERS and J. COTTE. Centre Europeen de Dermopharmacologie, 33 Cours Eugenie, 69003 Lyon, France. 199 pp. 15 × 23.5 cm. (French).

Subcellular Components, Preparation and Fractionation. Edited by G. D. BIRNIE. University Park Press, Chamber of Commerce Building, Baltimore, MD 21202, 1972. 320 pp. 13.5 × 21.5 cm. Price \$17.50.

Ontogeny of Acquired Immunity, A Ciba Foundation Symposium. Associated Scientific Publishers, 52 Vanderbilt Ave., New York, NY 10017, 1972. 283 pp. 16 × 24 cm.

Antibiotics in Clinical Practice. By HILLAS SMITH, Williams & Wilkins, Baltimore, MD 21202, 1972. 346 pp. 14 × 22.5 cm. Price \$17.00.