

## REVIEWS

**Toxicology: The Basic Science of Poisons.** Edited by L. J. CASARETT and J. DOULL. Macmillan, New York, N.Y., 1975. xiv + 768 pp., 49 figures, 112 tables. Price \$23.95.

How often in an academic career do you receive a book for review about which you can honestly say you enjoyed getting it and reviewing it? Well, I have had the opportunity. For some 10 years, I have been teaching a graduate course in General Toxicology without a text, because none existed. Now arrives on the toxicology scene a most welcome text. I had the opportunity, during the summer Gordon Research Conference, to preview this book and the general opinion at that time was that we finally had a useful text for beginning courses in toxicology.

The book follows somewhat the same format as the classic text in pharmacology. I have pointed out to publishers over the past dozen years that what is needed in toxicology is an edited text along the same lines as the Goodman and Gilman text in pharmacology. Casarett and Doull have edited a 30-chapter text divided into four units. The initial unit deals with general principles of toxicology, covering quite well the scope of toxicology, absorption, distribution, excretion, metabolism of toxicants, and factors influencing toxicology. The only part of Unit I that is lacking is the chapter on toxicologic evaluation. It does not go into as much detail as is necessary to teach this aspect of toxicology. Hopefully, in future editions, this chapter will be written by a toxicologist whose expertise and daily job involve toxic evaluations (safety evaluations or assessment of hazards).

Unit II covers systemic toxicology in eight chapters. Essentially, a review of each system is included with discussion of the pathophysiology for specific chemicals. This section is lacking in a discussion of the largest organ of the body, the skin. It also lacks a chapter on the endocrine system.

Unit III deals with specific toxic agents under chapter headings as varied as Food Additives, Air Pollutants, Pesticides, Carcinogens, Social Poisons, Phytotoxicology, and Teratogens.

Unit IV is probably the most disappointing section of the text. This unit deals with the applications of toxicology, specifically Clinical Toxicology, Forensic Toxicology, Industrial Toxicology, Veterinary Toxicology, and Toxicology and the Law. Disappointing from the real point of view. The authors, in general, avoid putting into a chapter the real application of toxicology to their specific fields. It almost appears that they were writing to impress their colleagues rather than to inform a beginning student in toxicology. I am sure that these chapters will improve as Dr. Doull receives input from the users.

The text is very welcome and very useful for beginning courses in toxicology. It is not a perfect text, but neither was the first edition of Goodman and Gilman. Hopefully, future editions will contain chapters written by toxicologists with expertise in the area for which they were chosen to write.

This will be a classic text in toxicology. It will grow in size and wisdom as real toxicologists become involved in its preparation; many were involved in this first volume. I recommend its adoption for all beginning courses in General Toxicology, so that all future toxicologists would have a "standard of excellence" for a basic education in the basic science of Toxicology.

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**The Pharmacological Basis of Therapeutics, Fifth Edition.** Edited by LOUIS S. GOODMAN and ALFRED GILMAN. Macmillan, 866 Third Ave., New York, NY 10022, 1975. 1704 pp. 19 x 27 cm. Price \$30.00.

The fifth edition, published 34 years after the first, will undoubtedly continue to be one of the most useful pharmacology reference texts available.

The organization of the fifth edition is identical to the fourth edition, published in 1970. The 77 chapters reportedly underwent a thorough updating with respect to the mechanism of action and indication of use of older drugs and to the addition of important new drug entities. To prevent expansion of the fifth edition, less dynamic and outmoded sections were condensed or eliminated. As in the past, in areas where the number of therapeutic agents available is large, major discussion is focused on the well-established and effective prototypal drugs, while the numerous related compounds receive relatively brief descriptions. Therefore, the book is approximately 100 pages less than the fourth edition. There is also more discussion devoted to the pharmacokinetic principles of drugs. Other new entries include a discussion of the role of cyclic AMP as the "second messenger" and of the pharmacological effects of the prostaglandins.

"The Pharmacological Basis of Therapeutics" remains valuable as a complete and comprehensive text on pharmacology for all members of the health professions.

Staff Review

## NOTICES

*The Selectivity of Drugs.* By ADRIEN ALBERT. John Wiley and Sons, Inc., 605 Third Ave., New York, NY 10016, 1975. 64 pp. 17 x 21 cm.

*Current Developments in Psychopharmacology, Vol. 1.* Edited by WALTER B. ESSMAN and L. VALZELLI. Spectrum Publication, Inc., 86-19 Sancho St., Holliswood, NY 11423, 1975. 345 pp. 16 x 24 cm.

*Inhibitors of Nucleic Acid Synthesis.* By HELGA KERSTEN and WALTER KERSTEN. Springer-Verlag, 175 Fifth Ave., New York, NY 10010, 1974. 184 pp. 17 x 24.5 cm. Price \$27.90.

*Cell Patterning.* Ciba Foundation Symposium 29 (new series), Ciba-Geigy Corp., Summit, NJ 07901, 1975. 356 pp. 17 x 25 cm.

*Effects of Drugs on Clinical Laboratory Tests.* By D. S. YOUNG, L. C. PESTANER, and VAL GIBBERMAN. Clinical Pathology Dept., National Institutes of Health, Bethesda, MD 20014, 1975. 432 pp. 21 x 27.5 cm.

*Les Applications Industrielles de la Microbiologie.* By JACQUES RIVIERE. Masson et Cie, 120, Bd. Saint-Germain, Paris 6, France, 1975. 203 pp. 16 x 24 cm.

*Young Inner City Families: Development of Ego Strength Under Stress.* By MARGARET MORGAN LAWRENCE. Behavioral Publication, Inc., 72 Fifth Ave., New York, NY 10011, 1975. 139 pp. 14.5 x 21.5 cm. Price \$10.95.

*Size at Birth.* Ciba Foundation Symposium 27 (new series). Ciba-Geigy Corp., Summit, NJ 07901. 408 pp. 17 x 24.5 cm.

*Molds, Mushrooms, and Mycotoxins.* By CLYDE M. CHRISTENSEN. University of Minnesota Press, Minneapolis, MN 55455, 1975. 264 pp. 15 x 23 cm. Price \$11.50.

*Psychopharmacology Communications, Vol. 1.* Edited by EARL USDIN. Marcel Dekker, Inc., 270 Madison Ave., New York, NY 10016, 1975. 115 pp. 15 x 23 cm. Price \$7.50.

*Die Chemotherapeutischen und Pesticiden Wirkungen der Thiolo-reagenzien.* By TIBOR ZSOLNAI. Akademiai Kiado of the Hungarian Academy of Science, Budapest V. Alkotmany U. 21, 1975. 415 pp. 17 x 24.5 cm. Price \$26.00.

*Weighing Designs (Statistics: Textbooks and Monographs Series, Vol. 12).* By K. S. Banerjee. Marcel Dekker, Inc., 270 Madison Ave., New York, NY 10016, 1975. 141 pp. 16 x 24 cm. Price \$12.75.

*LSD—A Total Study.* By D. V. SIVASANKAR. PJD Publications Ltd., Westbury, NY 1590, 1975. 960 pp. 16 x 24 cm. Price \$29.75.

*Pharmacotherapy and Psychotherapy: Paradoxes Problems and Progress, Vol. IX.* Committee on Research. Group for the Advancement of Psychiatry, Inc., 419 Park Ave. S., New York, NY 10016, 1975. 176 pp. 16 x 20 cm. Price \$6.00.

- Manual of Psychiatric Therapeutics, Practical Psychiatry and Psychopharmacology.* Edited by RICHARD I. SHADER. Little, Brown and Co., 34 Beacon St., Boston, MA 02106, 1975. 362 pp. 15 × 22 cm.
- Central Cholinergic Systems and Behavior.* By F. V. DeFEUDIS. Academic Press, 24-28 Oval Rd., London NW1 7DX, England, 1975. 223 pp. 15.5 × 24 cm. Price \$15.75.
- The Future of Philanthropic Foundations.* Ciba Foundation Symposium 30 (new series). American Elsevier Publishing, 52 Vanderbilt Ave., New York, NY 10017, 1975. 240 pp. 17 × 25 cm.
- Outcome of Severe Damage to the Central Nervous System.* Ciba Foundation Symposium 34 (new series). Elsevier Scientific Publishing Co., Excerpta Medica, North Holland Publishing Co., P.O. Box 211, Amsterdam, The Netherlands, 1975. 354 pp. 17.5 × 24.5 cm.
- The Structure and Function of Chromatin.* Ciba Foundation Symposium 28 (new series). Associated Scientific Publishers, P.O. Box 211, Amsterdam, The Netherlands, 1975. 368 pp. 17 × 25 cm.
- Behavioral Pharmacology.* By SUSAN D. IVERSEN and LESLIE L. IVERSEN. Oxford University Press, 200 Madison Ave., New York, NY 10016, 1975. 310 pp. 14 × 21.5 cm. Price \$10.95 cloth; \$5.95 paper.
- Radiological Health Training Resources, 1975.* Division of Training and Medical Applications, USD/HEW, FDA, Bureau of Radiological Health, Rockville, MD 20852. 18 pp. 20 × 26.5 cm.
- Psychopharmacology, A Biological Approach.* By ROBERT A. LEVITT. John Wiley & Sons, Inc., 605 Third Ave., New York, NY 10016, 1975. 502 pp. 16 × 24 cm. Price \$17.50.
- Molecular Mechanisms of Gonadal Hormone Action: Advances in Sex Hormone Research, Vol. 1.* By JOHN A. THOMAS and RADHEY L. SINGHAL. University Park Press, Chamber of Commerce Bldg., Baltimore, MD 21202, 1975. 399 pp. 16 × 24 cm. Price \$32.50.
- Handbook of Organosilicon Compounds, Vol. 1.* By V. BAZANT MILAN HORAK, VACLAV CHVALOVSKY, and JAN SCHRAML. Marcel Dekker, Inc., 270 Madison Ave., New York, NY 10016, 1975. 761 pp. 16 × 25 cm. Price \$75.00.
- Nonproprietary Names for Pharmaceutical Substances.* World Health Organization Technical Report Series No. 581. World Health Organization, Geneva, Switzerland, 1975. 32 pp. 14 × 20 cm. Price Sw. fr. 6.-.
- Ophthalmica, Pharmazeutische Grundlagen ihrer Zubereitung, Band. 1.* Wissenschaftliche Verlagsgesellschaft mbH, 7000 Stuttgart 1, Postfach 40, Germany, 1975. 558 pp. 15 × 20.5 cm. Price 80 DM.
- Environmental Chemistry, Vol. 1.* By G. EGLINTON. The Chemical Society, Burlington House, London W1V 0BN, England, 1975. 199 pp. 14 × 21 cm. Price £7.00.
- Psychiatry in Broad Perspective.* By ROY R. GRINKER. Behavioral Publication, Inc., 72 Fifth Ave., New York, NY 10011, 1975. 262 pp. 14.5 × 22 cm. Price \$14.95; \$12.95 (students).
- The Organic Constituents of Higher Plants.* By TREVOR ROBINSON. Cordus Press, P.O. Box 587, North Amherst, MA 01059, 1975. 347 pp. 18 × 29 cm. Price \$10.00.
- Microcrystal Polymer Science.* By O. A. BATTISTA. McGraw-Hill Book Co., 1221 Avenue of the Americas, New York, NY 10020, 1975. 208 pp. 16 × 22.5 cm. Price \$18.50.