However, these papers have been foreshortened. The scientific details, including methodology and theory, have been eliminated. Since this background material is absent, it is quite difficult to assess the validity of the scientific results and their significance for general clinical practice.

The concluding round-table discussion illustrates the inherent problems in stress research. This exchange of ideas is frank and stimulating. However, the discussion clearly illustrates that a precise measure of surgical stress is still wanting.

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The Respiratory Functions of Blood. BY L. GARBY, AND J. MELDON. New York, Plenum Publishing Corporation, 1977. Pages: 282. Price: $21.50.

Greats of physiology, Joseph Barcroft, Lawrence Henderson, J. B. Haldane, D. D. Van Slyke, celebrities of the Fatigue Laboratory at Harvard, and more recently, F. J. W. Roughton, all have had a hand at writing on the subject of this book. This is not easy company to keep. Yet, Dr. Lars Garby, a physiologist at the University of Odensee, Denmark, and Jerry Meldon, a chemical engineer in Boston, have combined their talents to assemble a review in which variety and conciseness are eminently evident. Most clinically oriented physicians will not find the book inviting; that is regrettable, since the information is deserving of attention. Personal preference has drawn my attention to the late chapters, where physiologist and engineer have joined efforts to clarify in graphic format the principles of O_2 and CO_2 transport. Modelling of physiologic systems is a favorite pastime for the mathematically-minded with a flair for computer conversation. Unfortunately, models of O_2 transport have gained rapidly in complexity and are nearly beyond test by experiment, an example where machine defeats its own purpose. Drs. Garby and Meldon have chosen a simplified approach and describe the adaptation in terms of blood flow and arterial blood O_2 content required to satisfy the needs of O_2 demand when affinity (P_{50}), arterial blood P_{O_2} or Hill's 'n' (the slope of the log saturation/low P_{O_2} relationship) varies. The model may bring little new to those "in the know." For the uninitiated, the potential for new insights is substantial. More than one reading is not merely desired, it is mandatory, and with each, the puzzle will appear less formidable. One can only regret that the steps between mathematical formulations and graphs were not presented in detail for the novice. An appropriate appendix would have been of help.

Acid–base balance and O_2 and CO_2 transport, as well as hemoglobin function, have evolved to a niveau of sophistication understandable only by a thermodynamicist or physical chemist. The evolution has been so rapid that any presentation of the subject is apt to appear confusing or too highly specialized. Perhaps the best way to approach the book is to choose sections appropriate to one's level of mathematical sophistication. Chapter 4, "Hemoglobin and its Interaction with Ligands," provides an excellent review of the subject. Although personal prejudices run contrary to the authors' interpretations of some published data, their presence caused only minor irritation. Chapters 7, "Some Physiological Control Systems," and 8, "Disturbances of Respiratory Functions of Blood," are highly recommended. Hidden near the end is an all-too-brief discussion of capillary density and capillary recruitment, a subject we will all hear more about in the future when a standard of measure other than the microscope will become available.

Definition of the structure of hemoglobin represents an achievement whose importance is appreciated by only a handful of scientists. This monograph helps to bridge the gap and introduces a modicum of sense into a mechanism that most of us discuss but few of us understand: O_2 transport.

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Central Nervous System Pharmacology: A Self-Instruction Text. Second edition. BY DONALD E. MCMILLAN. Boston, Little, Brown, and Company, 1979. Pages: 167. Price: $12.50.

This soft-covered self-instruction manual was written five years after the publication of the first edition. The text is divided into 18 chapters, and the information presented in a narrative style. Although the book is primarily designed for use as a supplemental text in general pharmacology courses for dental, pharmacy, and medical students, and as a review text for psychiatry residents, the author includes chapter on general principles of pharmacology and synaptic transmission in this edition to . . . "enable students not exposed to those areas in a formal course to obtain at least an introduction to some important concepts necessary to the study of CNS pharmacology. . . ."

In general, the author succeeds in his objective to present a simple, easy-to-read, brief review of CNS pharmacology. The book's organization is straightforward and efficient, and the indexing is adequate for a text of this type. While the manual will be of little value to experienced students of CNS pharmacology, it probably will be useful as a review book for anesthesiology and psychiatry residents and pharmacology students not wanting to take the time to consult a more comprehensive pharmacology book.

The text suffers, as do most manuals of this type, from a lack of depth. In addition, some chapters are strikingly out of date. This is most apparent in the chapters on general anesthetics (chapters 13 and 14), where most of the space is devoted to anesthetics that have long since disappeared from clinical practice. Little mention is made of enflurane, ketamine, and the neurolept compounds, and none of nitrous oxide–narcotic anesthesia, enflurane, or any of the newer intravenous anesthetics, e.g. propanidid, althesin, or etomidate. The chapter on sedatives and hypnotics barely mentions the barbiturates, and an important concept such as barbiturate protection of ischemic brain is not addressed at all. In contrast, the chapter on neurotransmitters (chapter 3) is quite complete and up-to-date.

The book probably belongs in a general medicine library for medical, dental, pharmacy, and clinical psychology students, and perhaps in anesthesiology and psychiatry departmental libraries.

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Management of the Injured Patient. EDITED BY J. NORMAN AND M. MOLES. London, Macmillan Press, 1978. Pages: 128. Price: £4.95.

Manual of Emergency and Outpatient Techniques. Washington University Department of Surgery. EDITED BY ALLEN T. KLIPPEL