

**Developmental Pharmacology: Progress in Clinical and Biological Research. Volume 135.** EDITED BY STUART M. MACLEOD, ALLAN B. OKEY, AND STEPHEN P. SPEILBERG. New York, Alan R. Liss, Inc., 1982. Pages: 438. Price: \$78.00.

This volume represents a compilation of research papers presented at a symposium held in Toronto in 1982. Many of the chapters are rather specialized and would be of greater interest to a researcher in biochemical pharmacology than to a clinician in anesthesiology or pediatrics. A few chapters are of broader interest. Rajchgot and MacLeod's chapter on "Perinatal Pharmacology" gives an excellent summary of the relevant biology of the fetus and newborn and the factors influencing the responses of the fetus and newborn to drugs; this chapter would be of special interest to those specialists in pediatric or obstetric anesthesia. Three articles on pulmonary pharmacology would be of interest to those concerned with pediatric respiratory intensive care: Cassin's "Arachidonic Acid Metabolites and the Pulmonary Circulation of Fetus and Newborn," Isles' "Controversies in the Pharmacotherapy of Childhood Asthma," and Enhorning's "Surfactant in the Treatment of Respiratory Distress Syndrome." All three of these chapters include very current material and are well written. Leitman's "Antiviral Drugs: Where do we Stand in 1982?" and Hughes' "Anti-Infective Therapy in the Immunosuppressed Patient" are timely and concise and also would be of interest to specialists in intensive care.

Despite these good chapters and the high quality of many of the biochemically oriented chapters, most of this volume would have little relevance to the practicing anesthesiologist. It is to be recommended to those actively investigating teratology or the pharmacology of the fetus and newborn.

CHARLES BERDE, M.D., PH.D.  
*Resident in Anesthesia  
Massachusetts General Hospital  
Boston, Massachusetts*

**Monitoring Practice in Clinical Anesthesia.** BY J. S. GRAVENSTEIN AND DAVID A. PAULUS. Philadelphia, J.B. Lippincott, 1982. Pages: 386. Price: \$37.25.

This is a slim, eminently readable book that emphasizes the "dos" and "don'ts" of practical clinical monitoring in the operating room.

It is aimed both at beginning anesthetists and anesthesiologists, and at engineers and technicians. One might reasonably turn to this book to learn how to use a Siggard-Anderson Alignment Nomogram, how to measure the natural frequency and damping factor of a direct-pressure monitoring system, how best to monitor the ECG for ischemia if only three leads are available, or for a concise review of fetal heart rate monitoring and summary of typical patterns.

The book includes a section on anesthesia record keeping (with emphasis on adequacy of the record as a legal document) and a section on the importance of physical diagnosis (monitoring without instrumentation) in anesthesia. It then turns to a discussion of arterial pressure measurement that is comprehensive but concise and that covers numerous important issues: direct *versus* indirect measurements, frequency content of the pressure pulse, assessment of fidelity of monitoring systems, and cannulation technique. Generally excellent discussions of ECG, cardiac pressure and output, temperature, neuromuscular, ICP, fetal and blood and urine monitoring follow this. A section on ventilation suffers from inadequate coverage of pulse oximetry, capnography, cutaneous oxygen and carbon dioxide monitoring, and mass spectrometry. A section on acid-base and blood-gas measurements is adequate but is not as clear or as directly applicable to clinical practice, as are recent discussions of similar length by Rosenthal in the textbook on Anesthesia edited by Miller or the articles by Rose and by Hornbein in recent ASA Refresher Courses. A chapter that includes abbreviated operating instructions for 11 commonly used monitors will be helpful to individuals who use the specific devices mentioned. Two final chapters, one on trace gases in the operating room and one on electrical safety, do not specifically deal with monitoring but are helpful reprints of reviews of these subjects by the ASA (Ad Hoc Committee on Effects of Trace Anesthetic Agents . . .) and by the National Fire Protection Association.

In summary, this book provides a useful overview of practical aspects of current clinical monitoring techniques and should serve as a valuable resource, especially for individuals beginning their training in anesthesiology.

NATHANIEL M. SIMS, M.D.  
*Department of Anesthesia  
Massachusetts General Hospital  
Boston, Massachusetts 02114*