The last half of the book is slightly more clinically oriented. Aspects of substrate and hormonal regulation of glucose, lactate, and ketone body metabolism are covered during both normal and pathological states such as diabetic ketoacidosis, lactic acidosis, catecholamine stress, fasting, hypoxia, and congenital aciduria.

This book should be of considerable interest to clinicians who wish to extend their knowledge of the far-reaching effects of metabolic acidosis during normal and pathological states, especially if a quantitative understanding is appreciated. This work lacks unity in the sense that it is more a collection of papers than a monograph on metabolic acidosis. Continuity is based solely on the single subject theme of the symposium. The advantage is, of course, that each paper can be read independently of the others.

The final point to be made concerns the panel discussions at the end of each paper. These discussions are highly recommended and worthwhile reading, not simply for the additional information and references, but also as an indication of the state of the art of the research. The researchers' differences of opinion and the unanswered questions are in their own way just as informative and pertinent as the papers preceding them.

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RELA XIN. Edited by Ralph R. Anderson. New York, Plenum Publishing Corporation, 1982. 359 pp. $45.00.

The polypeptide hormone relaxin has in the past gained and lost in regard to its purported clinical importance, although its biological importance has been substantially recognized. It was discovered in 1926, and its major function seems to be its ability to relax pelvic ligaments. As stated in the introduction to Relaxin, significant work was not done until Dr. O.D. Sherwood was able to isolate the hormone, thus facilitating its investigation. This book comprises the Proceedings of the Fifteenth Midwest Conference in Endocrinology and Metabolism held in 1979. Each chapter represents an in-depth paper presented at this conference. Such biological aspects are discussed as its cellular localization, rates of production, and effects on receptors and messenger RNA. Excellent contributions with respect to its chemical structure and assay are included.

By dint of the reviewer's interests, the chapter entitled, "Need for Human Relaxin," by F.C. Greenwood and G.D. Greenwood, although short, was quite provocative. They conclude that once a radioimmunoassay for human relaxin is worked out, its effect in pregnancy and on placental metabolism will become more understandable and, hence, cause a renaissance in interest in the role of relaxin in the pregnant human patient. A fascinating study by Maclellan is cited in which when relaxin was applied to the pregnant cervix, it caused "ripening" of the cervix, facilitated establishment of labor with pitocin stimulation, and shortened labor.

This certainly represents a state-of-the-art book. It is interesting in regard to the chemistry and physiology of relaxin, but the work is most provocative with respect to the hormone's potential use in humans. It is a shame that more human studies were not included in this symposium, including the work of Gerson Weiss on the effect of relaxin on pelvic structures in the pregnant female, and research
demonstrating the interactions between the corpus luteum of pregnancy and relaxin. This volume represents, nevertheless, a fine addition to the literature.

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HANDBOOK OF BEHAVIORAL NEUROBIOLOGY. VOLUME 5. MOTOR COORDINATION. Edited by Arnold L. Towe and Erich S. Luschei. New York, Plenum Publishing Corporation, 1981. 640 pp. $45.00.

This volume of the Handbook of Behavioral Neurobiology contains a wealth of information on the neural control of movement. Overall, the approach of the authors is to stress basic experimental data. Therefore, the book will be an excellent reference source for basic scientists as well as clinicians.

The first chapters of the book examine the role of muscle in movement. These chapters discuss recent data on motor unit physiology and the role of proprioceptors in controlling their excitability. Later chapters discuss the anatomically defined neural systems which influence movement. These chapters are well organized and may be of particular interest to the neurologist in training. The chapter on the pyramidal tract by Wiesendanger is an excellent review of that system. The final chapters discuss more complex analyses of movement; these include behavioral approaches to the analysis of movement, systems analysis of posture, and gait analysis.

For the reader with a solid foundation in basic neuroanatomy and neurophysiology this book will provide interesting and provocative reading.

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VIROLOGY. By Heinz Fraenkel-Conrat and Paul C. Kimball. Englewood Cliffs, N.J., Prentice-Hall, Inc, 1982. 406 pp. $32.95.

Virology is a subject typically covered in the latter chapters of microbiology or biochemistry tests, and in original and review journal articles. These authors, however, chose innovatively to produce a single text wherein the topics related to virology are dealt with in a highly coherent manner. The twelve chapters carry us through subjects ranging from the basic definition of viruses and the methodologies for studying them to a chapter-by-chapter progression from the smallest RNA virus to the most complex DNA virus. Throughout the volume the individual chapters are well written, organized, and extremely comprehensible. An added feature is the liberal use of electron micrographs, schematic diagrams, charts, and tables, plus a glossary of technical terms to further explain the field of virology. If after reading a given chapter one feels unsure of his grasp of the topic or desires to pursue a subject in greater depth, the authors have made reference to both historical and current review papers at the conclusion of each chapter, in a section entitled “Further readings.” The text is thus well referenced.

The majority of the book deals with animal viruses; however, those interested in plant viruses and bacteriophages need look no further as attention is paid to these topics in several easily identifiable chapters. The emphasis throughout the text is