

Renal Physiology (2nd Ed). Arthur J. Vander. McGraw-Hill Book Co., New York, 1980. 200 pp., illus., index, paperback, \$7.95.

This book is written primarily for those wishing to learn basic concepts in renal physiology. In the preface, the author states, "This book is my attempt to identify the essential core content of renal physiology appropriate for medical students and to present it in a way which permits the students to master the material independently, i.e., with not (or very few) accompanying lectures by the instructor." This goal of presenting an essential core of renal physiology so that it can be independently mastered is admirably achieved. The fundamental concepts of renal physiology are clearly presented in a didactic fashion. Controversies in specialized areas are addressed in footnotes. The clear presentation along with study questions for each chapter that focus on difficult concepts or areas of confusion provide for independent mastery. Basic concepts in renal anatomy, renal hemodynamics, glomerular filtration, tubular reabsorption and secretion, renal clearance, renal handling of organic compounds, renal handling of electrolytes, renal regulation of sodium and water balance, and renal regulation of acid-base status are presented. Throughout the book, especially in the chapter concerning acid-base regulation, clinical examples are used to illustrate concepts. This book is particularly suitable for medical students, but is also of value for students in beginning courses in physiology.

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Gastrointestinal Physiology — The Essentials. Thomas Sernka and Eugene Jacobson. Williams & Wilkins, Baltimore, 1979. 158 pp., illus., index, \$10.95.

This book is intended to serve as an introduction to gastrointestinal physiology for beginning medical and graduate students. The authors have placed a premium on essentials and brevity stressing physiological mechanisms and highlighting essential concepts by illustrations. Clinical examples have been added and the topics include gastrointestinal functions and secretions, and absorption with special emphasis on membrane transport and gastrointestinal circulation.

Although the intentions of the authors are laudable and there is probably a need for such a book, both for medical and graduate students and for review by residents and fellows being trained in gastroenterology, this book is not adequate. The general approach is superficial and the mixture of clinical and basic information does not provide the explanations necessary to understand this aspect of physiology. Despite the attempts of the authors, the illustrations are not clear and simple but in general are not good enough for teachers to use as teaching tools or for students to gain adequate knowledge by reviewing independently. The general writing is not clear and there are areas of poor grammar. The production of such monographs to cover succinctly but inclusive of contemporary important basic advances is competitive and there are other books already on the market which seem to fill the bill better than this one.

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Neurophysiology of Postural Mechanisms, second edition. T.D.M. Roberts. Butterworths, Boston 1978. 415+ xv pp., illus., hardbound, \$74.50.

The second edition of this text appears 10 years after the first. The thrust of the text concerns the influences of vestibular and cerebellar systems on the mechanisms of posture and locomotion. The author presents the ideas in a logical sequence beginning with cellular elements necessary to understand impulse generation, propagation, transmission and ultimately muscle fiber shortening. Part two deals with the regulatory mechanisms controlling tone and power and has an excellent exposition of bipedal and quadrupedal gait. Part three is concerned with the vestibular and other balance mechanisms and part four deals with other central nervous influences on posture and locomotion. The references are organized in an unusual fashion, being given in two appendices, one of which is organized by chapter and the other by complete citations to the literature.

As is usual with texts originating in the British Isles the writing is literate and easy to follow. The author has developed the information in each chapter beginning with simple concepts and deriving more complex ideas from these in a fashion that would be helpful to students at the intermediate level of physiologic expertise.

The text is designed for an intermediate level course in physiology and could well serve as a reference for additional reading for students interested in posture and locomotion. It will be particularly useful in physiology courses designed for physiatrists and physiotherapists. It is unfortunate the price is so high. The organization of references, while removing their "distraction" from the chapters, has the defect of failing to introduce the student to the concept of documentation in scientific exposition.

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