Medicine is an ever-changing science. As new research and clinical experience broaden our knowledge, changes in treatment and drug therapy are required. Clinical pharmacology encompasses all aspects of the relationship between drugs and humans.

This book represents almost 40 years of presenting the most up-to-date information available in the field. This edition reflects a major expansion of large-molecule drugs in the pharmacopeia, with numerous new monoclonal antibodies and other “biologics” discussed in several chapters.

The fifteenth edition continues the extensive use of full-color illustrations and expanded coverage of transporters, pharmacogenomics, and new drugs of all types. Case studies accompany most chapters. Basic & Clinical Pharmacology is designed to provide a comprehensive, authoritative, and readable pharmacology textbook for students in any of the health sciences.

This edition continues the sequence used in many pharmacology courses and in integrated curricula: basic principles of drug discovery, pharmacodynamics, pharmacokinetics, and pharmacogenomics; autonomic drugs; cardiovascular-renal drugs; drugs with important actions on smooth muscle; central nervous system drugs; drugs used to treat inflammation, gout, and diseases of the blood; endocrine drugs; chemotherapeutic drugs; toxicology; and special topics. This sequence builds new information on a foundation of information already assimilated. For example, early presentation of autonomic nervous system pharmacology allows students to integrate the physiology and neuroscience they have learned elsewhere with the pharmacology they are learning and prepares them to understand the autonomic effects of other drugs. This is especially important for the cardiovascular and central nervous system drug groups. Within each chapter, emphasis is placed on discussion of drug groups and prototypes rather than offering repetitive detail about individual drugs.

Significant revisions in this edition include:

- Addition of Dr. Todd W. Vanderah, PhD, as a title page editor and contributor.
- Major revisions of the chapters on immunopharmacology, antiseizure, antipsychotic, antidepressant, antidiabetic, anti-inflammatory, and...
antiviral drugs, prostaglandins, and central nervous system neurotransmitters. Cannabis pharmacology has become more relevant, and a new chapter in the special topics section is devoted to this important area.

- Continued expansion of the coverage of general concepts relating to newly discovered receptors, receptor mechanisms, and drug transporters.
- Descriptions of important new drugs, especially biologicals, released through December 2019.
- Revised illustrations in full color that provide significantly more information about drug mechanisms and effects and help to clarify important concepts.

Readers are encouraged to confirm the information contained herein with other sources. For example, and in particular, readers are advised to check the product information sheet included in the package of each drug they plan to administer to be certain that the information contained in this work is accurate and that changes have not been made in the recommended dose or in the contraindications for administration.

This recommendation is of particular importance in connection with new or infrequently used drugs. We have no doubt that at first, the textbook will look like a huge too detailed resource, which is hard to read till the end.

However, understanding at least Section - I of the book are important for advancing to the next step in clinical pharmacology. Enjoy the textbook!