Medicinal Chemistry: A Molecular And Biochemical Approach
Synopsis

Fully updated and rewritten by a basic scientist who is also a practicing physician, the third edition of this popular textbook remains comprehensive, authoritative and readable. Taking a receptor-based, target-centered approach, it presents the concepts central to the study of drug action in a logical, mechanistic way grounded on molecular and biochemical principles. Students of pharmacy, chemistry and pharmacology, as well as researchers interested in a better understanding of drug design, will find this book an invaluable resource. Starting with an overview of basic principles, Medicinal Chemistry examines the properties of drug molecules, the characteristics of drug receptors, and the nature of drug-receptor interactions. Then it systematically examines the various families of receptors involved in human disease and drug design. The first three classes of receptors are related to endogenous molecules: neurotransmitters, hormones and immunomodulators. Next, receptors associated with cellular organelles (mitochondria, cell nucleus), endogenous macromolecules (membrane proteins, cytoplasmic enzymes) and exogenous pathogens (viruses, bacteria) are examined. Through this evaluation of receptors, all the main types of human disease and all major categories of drugs are considered. There have been many changes in the third edition, including a new chapter on the immune system. Because of their increasingly prominent role in drug discovery, molecular modeling techniques, high throughput screening, neuropharmacology and genetics/genomics are given much more attention. The chapter on hormonal therapies has been thoroughly updated and re-organized. Emerging enzyme targets in drug design (e.g. kinases, caspases) are discussed, and recent information on voltage-gated and ligand-gated ion channels has been incorporated. The sections on antihypertensive, antiviral, antibacterial, anti-inflammatory, antiarrhythmic, and anticancer drugs, as well as treatments for hyperlipidemia and peptic ulcer, have been substantially expanded. One new feature will enhance the book’s appeal to all readers: clinical-molecular interface sections that facilitate understanding of the treatment of human disease at a molecular level.

Book Information

Paperback: 672 pages
Publisher: Oxford University Press; 3 edition (August 11, 2005)
Language: English
ISBN-10: 0195104560
Product Dimensions: 9.1 x 1.2 x 6.4 inches
I have taken two pharmacological type classes. One was pharmacology and the other was simply med chem. We used Goodman and Gilman in the pharmacology class and its just too dense. It has much information, but in my opinion, its not appropriate for a textbook. I thought that this book, by Nogrady is alot more managable. However, you need to have a background in biochemistry and organic chemistry to understand some of the topics in this book. It does a good job of explaining underlying mechanisms of pharmaceutical actions. Towards the end, it adopts a Goodman and Gilman approach and just starts listing drugs and their mechanism of action. However, Nogrady doesn't go on for 5 pages like Goodman and Gilman do. Its a bit more concise. Anyway, I don't mean to say that Goodman and Gilman is a bad book, quite the contrary, its an amazing book with more information than one could ever possibly want. Its just that if you want to understand pharmacology for a class, and are not browsing the pages for fun over a cup of tea, Nogrady may be the way to go.

Arrived promptly and just as described.