
The author has successfully reviewed recent biochemical, pharmacological, and physiological results in the field of peripheral neurochemical transmitters. Moreover, the first 300 pp. are devoted to a general treatment of the regulatory control of macromolecules and membrane structure and function. One of the main chapters deals with structure-activity relationships of analogs and antagonists of acetyl-choline and norepinephrine, and enters into the particulars of affinity, intrinsic activity, and of competitive and non-competitive inhibition. Other subjects of discussion are the alterations of membrane potential, involvement of cholinergic and adrenergic ligands with enzyme mediated processes, excitation-contracting coupling, and progress in receptor isolation.

The chapters are fully referenced. An author and subject index make the book a comprehensive reference volume for everyone interested in drug-receptor interactions.

R. Kullmann, Bonn


In the first section of the monograph, published as vol. 52 of Anaesthesiology and Resuscitation, some pathophysiological concepts of experimental haemorrhagic shock are discussed. Especially the excessive stimulation of adrenergic mechanisms and its effects on microcirculation and metabolic parameters are treated in detail.

The second part includes experimental investigations of the author with a haemorrhagic shock model dealing with the effects of adrenergic-stimulating and blocking drugs on the development of severe haemorrhagic shock. The results obtained in this arrangement may help to avoid incorrect clinical application of these drugs. On account of its mainly experimental character, however, the book applies especially to research workers. The reader will benefit from the clear structure and the detailed references.

R. Kullmann, Bonn


The recent developments in pharmacology and chemotherapy incited the editors to combine the ‘Advances’ in both fields in one serial publication. The present issue contains articles with the following topics: E. S. Vesell: Recent progress in pharmacogenetics; C. G. Hammar et al.: The combination of gas chromatography and mass spectrometry in the identification of drugs and metabolites; J. St. Kizer and R. Bressler: Drugs and the mechanism of insulin secretion; H.O. Collier: A pharmacological analysis of aspirin; J. L. Hartwell and B. J. Abbott: Antineoplastic principles in 208

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plants: recent developments in the field; St. G. Browne: The evaluation of present antileprosy compounds; E. Jawetz: Chemotherapy of chlamydial infections; H. R. Perkins: Composition of bacterial cell walls in relation to antibiotic action; J. A. McFadzean: Advances in the chemotherapy of viral diseases. The issue provides excellent information on the present state of the mentioned articles.

K. Mörsdorf, Bonn


The present volume of ‘Advances in pharmacology and chemotherapy’ contains interesting contributions in both fields, pharmacology and chemotherapy: R. I. Katz and T. N. Chase: Neurohumoral mechanisms in the brain slice; A. C. Aisenberg: An introduction to immunosuppressants; R. B. Livingston et al.: Glutamine antagonists in chemotherapy; W. H. G. Richards: The combined action of pyrimidines and sulfonamides or sulfoxides in the chemotherapy of malaria and other protozoal infections; B. A. Newton: Chemotherapeutic compounds affecting DNA structure and function; E. Marley and B. Blackwell: Interactions of monoamine oxidase inhibitors, amines, and foodstuffs. All topics are treated by expert authors and provide comprehensive information. The book can be recommended to everybody engaged in drug research.

K. Mörsdorf, Bonn


With the appearance of this volume the name of the former series ‘Antibiotica et Chemotherapia’ has been changed into ‘Antibiotics and Chemotherapy’ and the language of publication has been restricted to English. Connected with this formal modifications is a change in the style of the series: in the future, each volume will be limited to a specific subject. Thus the present volume is devoted to the mode of action of antibiotics. It contains 9 contributions by experienced authors on tetra-cyclines, streptomycin, the macrolide group of antibiotics (erythromycin, oleandomycin, carbomycin, spiramycin), actinomycin, cycloserine, azaserine, chemotherapeutics with tuberculostatic action, nalidixic acid, and on a number of smaller antibiotics. The individual contributions in this volume possess the character of review articles; they summarize in an instructive manner the present state of knowledge on the mode of action of the above-mentioned antibiotics.

K. Karzel, Bonn