Book Reviews


This book comprises the proceedings of an international symposium held in Rottach-Egern; it is also available in English and French editions. Emphasis has been placed on the pathophysiology of pain perception and the problems involved in the measurement and evaluation of pain. Attention has also been given to the neurosurgical aspects of pain treatment and to the pharmacology of narcotic analgesics. A special section is devoted to contributions on the pharmacology of the benzomorphan derivative pentazocine.

The volume further contains review articles, summaries of discussions, an alphabetical bibliography and a general subject index, making it a valuable source of information for all interested in the pathophysiology and pharmacology of pain.

R. Kullmann, Bonn


Despite the considerable knowledge that has been gained on the various factors related to blood pressure control, the mechanisms responsible for the different forms of hypertension are still obscure. During the last decade the interest in this field has shifted from the sympathetic control of blood vessels to the renin-angiotensin system, denoting a new approach to problems as yet unresolved.

The papers presented at the Second International Symposium on Hypertension in Canada, published as ‘Hypertension – 1972’, deal with new methods for the purification and estimation of renin, radioimmunoassays for angiotensin, new findings on extrarenal renins, and the involvement of various tissues in the conversion of angiotensin. Another feature is the secretion and release of aldosterone and its role in essential hypertension. On the whole, this volume presents an excellent abstract on advances in the renin-angiotensin-sodium aspects of hypertension.

R. Kullmann, Bonn


This last issue of the well-known collection includes the following reviews by authoritative contributors on current important developments in pharmacological research: M. Israel, Données actuelles sur la localisation de l’acétylcholine des jonctions myoneurales et nerf-électroplaque; L. Julou, Etude expérimentale des neuroleptiques injectables à action prolongée; P. Karli, Rôle du système limbique dans le déterminisme physiologique de la réaction émotionnelle et sociale; E. Ellis, Récepteurs adrénergiques impliqués dans les réponses métaboliques aux catécholamines; G. Giurgea, Vers une pharmacologie de l’activité intégrative du cerveau: Tentative du concept nootrope en psychopharmacologie; H.G. Kroneberg, Des substances de synthèse à activité digitale; J. Cheymol, F. Bourillet et M. Roch-Arveiller, Venins et toxines de serpents: Effets
This volume of the series ‘Progress in Biochemical Pharmacology’ is the record of the lectures presented at the Symposium on the Synthesis and Use of Labelled Lipids, held in Milan 1968. Leading scientists in the field of chemistry and biology of lipids presented contributions in biosynthesis of sterols, fatty acids, phospholipids and prostaglandins. The contribution on the use of radioactive steroids for the study of transport and receptor proteins given by Baulieu and Raynaud is of general interest, in particular for a better understanding of hormone action mechanism. All papers will be a valuable reference to all investigators who work with labelled lipids.

K. Mörsdorf, Bonn


The booklet is the record of a series of lectures presented at a Symposium held in Vienna, Austria, in October 1970. The materia is presented in two parts. Part I deals with the pharmacology and toxicology of hexoprenalin. Hexoprenalin is a symmetrically arranged molecule composed of two molecules of noradrenaline linked together by an aliphatic hydrocarbon. The drug dilates bronchial muscles practically without considerable action on cardiac β-receptors. In the second part of the booklet the clinical effectiveness of hexoprenalin and its advantages compared to isoprenalin and other bronchodilators are discussed.

K. Mörsdorf, Bonn


The author gives in his booklet a comprehensive picture of the effectiveness as anti-inflammatory agents of the numerous different flavone derivatives. The first part of the book informs about the present position and recent trends of flavonoid research, and especially about the anti-inflammatory action of flavonoids. The second part of the booklet is essentially a summary of lectures held at a Bioflavonoid Symposium in Hungary, concerning the antiphlogistic action of 0-(3-hydroxyethyl)rutin and other flavonoids and the use of the rutin derivative, named above, in combination with phenylbutazone. Natural substances in therapy are always of common interest especially in view of the lower toxicity compared to the synthetic anti-inflammatory drugs. The book is of interest to pharmacologists, pathophysiologists, and pharmaceutical chemists.

K. Mörsdorf, Bonn


This book appearing as vol. 22 of the FEBS (Federation of European Biochemical Societies) series contains the proceedings of one of the symposia held during the seventh meeting of this society at Varna (Bulgaria) in 1971. The symposium was devoted to two fundamental topics in
the field of virology. About 10 of the 14 papers deal with virus-cell interactions, the remaining
papers with viral antimetabolites. In the first section, interactions between viruses and the
genome of host cells, antigenic changes or the induction of
antigens by viruses, influences of interferon and viruses on cellular protein synthesis, induction
of interferon and various other topics have been reported and discussed, while in the second
section the antiviral or potential antiviral actions of oxidized polyamines, of rifamycin and
aminopiperazine derivatives, of alkylated pyrimidine nucleosides and nucleotides have been
treated. The individual articles partly present new experimental findings and partly summarize
the present state of knowledge, thus providing a useful source of information and of reference
not only for biochemists and virologists but also for pharmacologists, cell biologists and
members of related disciplines. K. Karzel, Bonn

231 pp., 53 fig.; DM 48.-/ca. US $ 15.-.
This volume contains the proceedings of an international symposium which was held in October
1970 at Grosse Ledder (Germany) and in which 22 microbiologists and clinicians attended and
discussed changes of the causative agents in bacterial infections. The first section (5
contributions) was devoted to present trends in the changes of pathogenic bacteria with regard to
various infectious conditions or in relation to the use of antimicrobial agents. In the second
session (14 contributions) possible reasons for the changes of pathogenic bacteria were discussed
under various points of view. There were papers and discussions on the role of environmental
factors, on the role of the use of certain kinds of surgical protheses, on the behaviour of a pool of
bacteria present in a hospital, and on the role of chemotherapy (including antibiotics and
cytostatics). The test is completed by a general discussion and by name and subject indexes. The
volume provides interesting insight into theoretical and practical highly important and timely
problems in the field of bacterial infections. The book will be of interest to researchers in
microbiology and chemotherapy and to all clinicians confronted with the management of
bacterial infections.
K. Karzel, Bonn

D. Dettmer und R. Winter (eds.): Regulation von Lebensprozessen auf molekularer und
cellulärer Ebene. VEB Verlag Volk und Gesundheit, Berlin 1972. 436 pp., 198 fig. and tab.;
M47.-.
This volume appearing as No. 9 in the series Ergebnisse der experimentellen Medizin’ contains
the proceedings of a conference which was devoted to regulatory mechanisms in living
organisms at the cellular and molecular level and which was held in September 1970 at Leipzig.
15 contributions are grouped under the heading regulation at the molecular level and deal mainly
with metabolic and enzymatic processes and functions, but also with such topics as interactions
between ligands and receptors or structure-effect relationships. The part on regulation at the
cellular level contains 24 papers dealing with various aspects of membrane functions and
structures (membrane models, transport phenomena, bioelectrical processes), with mitochondrial
functions, with nucleic acid and protein synthesis and with carbohydrate metabolism. The
articles are printed in full length including figures and tables. They have partly the character of
review articles, report, however, also recent experimental findings. As the authors (with a few
exceptions) are research workers from Eastern Europe, mainly from Eastern Germany, the
volume is interesting particularly as a source of information on present research activities in this
region.
K. Karzel, Bonn
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MA. Mehlman and R.W. Hanson (eds.): Energy Metabolism and the Regulation of Metabolic
A group of scientists has been organizing during the last years symposia on metabolic regulation
which take place in yearly intervals and each of which is devoted to a specific topic in the
mentioned field. The aim of these symposia is to provide an opportunity for the exchange of
information and ideas on metabolic regulation with consideration of different views on a
particular subject. This book contains 16 communications which were presented at the 1971
symposium of this series at Omaha, Nebr. which was devoted to mitochondrial processes in
mitochondria. Most of the highly specialized material is based on recent experimental work with
various experimental models. The contributions deal with oxidative phosphorylation, electron
flow, with various aspects of the citric acid cycle, with gluco-neogenesis, lipogenesis and with a
number of further metabolic processes and functions of mitochondria. The articles contain the
experimental evidence for the reported matter in form of tables, diagrams, etc. The book will find
the interest not only of biochemists but also of pharmacologists, cell biologists and members of
related disciplines.
K. Karzel, Bonn
York 1972. XVI + 499 pp.; US $ 29.-.
This book is the sixth volume of an open-end treatise dealing with nervous tissue under
multidisciplinary aspects. The present volume is devoted to structure and physiology of nervous
tissue and contains 10 contributions by outstanding authors on the following topics: K.
Fleischhauer, Ependyma and subependymal layer; M.L. Shelanski and H. Feit, Filaments and
tubules in the nervous system; D.G. Jones, Ultrastructure of the synapse; Cammermeyer,
Nonspecific changes of the central nervous system; G.C.T. Kenny, The epiphysis cerebri; DA.
Rappoport and R.R. Fritz, Molecular biology of developing mammalian brain; F.C. Huneeus,
Excitation and macromolecules – the squid giant axon; Wata-nabe, Macromolecules and
excitation; O. Hornykiewicz, Dopamine and its physiological significance in brain function; G.
Franck, Brain slices. The individual chapters have the character of review articles summarizing
the present state of knowledge regarding the treated topic. They contain extensive lists of
references particularly of the most recent literature. The five contributions on morphological
topics are illustrated by many figures, mainly well-produced microscopic and submicroscopic
photographs. The volume – and if the other volumes have the same high standard one could say
the entire series – will be of great value as a source of reference and of information for research
workers, but also for students of all theoretical and clinical disciplines which have any relations
to nervous structures.
K. Karzel, Bonn
R.I. Shader (ed.): Psychiatric Complications of Medical Drugs. Raven Press, New York/North-
With the growing armamentarium of highly potent drugs employed in today’s therapeutics the
incidence of adverse drug effects has increased and a considerable part of these unwanted side
effects is of neuropsychiatric nature. The prevention and the treatment of such drug reactions has
become, therefore, an important therapeutical problem. The aim of this book is to provide an aid to the clinician and the practitioner in the management of such conditions. It is compiled by 17 authors, most of them members of psychiatric or psychopharmacological institutions, and it deals in 13 chapters with a number of drugs which are particularly prone to cause neuropsychiatric side effects. An introduction devoted to general aspects of the theme is followed by chapters on digitalis, cortisone, reserpine, anticholinergics, \textit{L}-dopa, amphetamine, antitubercular chemotherapeutics, on androgens and estrogens, on progesterone and oral contraceptives and on behavioral effects of hormones in general; in the last two chapters the role of vitamins in psychiatry and the emotional side effects of placebo are discussed. The individual chapters have the character of review articles and they are supplemented by ample references. They provide much information but show as well that there are still many unsolved questions. Despite this, the book will be a valuable help for clinicians and general practitioners prescribing the mentioned agents. K. Karzel, Bonn