CONTENTS

Kwen-Jen Chang, Eli Hazum, Anthony Killian, and Pedro Cuatrecasas. Interactions of Ligands with Morphine and Enkephalin Receptors Are Differentially Affected by Guanine Nucleotide ................................................. 1


Paul J. Marangos and Andrea M. Martino. Studies on the Relationship of γ-Aminobutyric Acid-Stimulated Diazepam Binding and the γ-Aminobutyric Acid Receptor ...................................................... 16

Michio Motohashi and Masao Nishikawa. Conformational Analysis of Beta2-Adrenoceptor-Stimulating Agents ................................................................. 22


Scott W. Landvatter and John A. Katzenellenbogen. Stereochemical Considerations in the Binding of Nonsteroidal Estrogens to the Estrogen Receptor .................................................. 43

James M. Roberts, Paul A. Insel, and Alan Goldfien. Regulation of Myometrial Adrenoceptors and Adrenergic Response by Sex Steroids .................................................. 52

Margaret A. Brostrom, Charles O. Brostrom, Su-Chen Huang, and Donald J. Wolff. Cholera Toxin-Stimulated Cyclic AMP Accumulation in Glial Tumor Cells: Modulation by Ca2+ ........................................... 59

James A. Nathanson and Edward J. Hunnicutt. N-Demethylchlordimeform: A Potent Partial Agonist of Octopamine-Sensitive Adenylate Cyclase ........................................... 68

Ewe Panten, Jürgen Biermann, and Werner Graen. Recognition of Insulin-Releasing Fuels by Pancreatic B-Cells: α-Ketoisocaproic Acid Is an Appropriate Model Compound to Study the Role of B-Cell Metabolism .................................................. 76

Bo Hellman. Tolbutamide Stimulation of 45Ca Fluxes in Microdissected Pancreatic Islets Rich in β-Cells ................................................................. 83

Alan G. Marshall and Junko M. Carruthers. Internal Flexibility of Inhibitors Bound to Electrophorus electricus Acetylcholinesterase: Proton Nuclear Magnetic Resonance Spectroscopy .................................................. 89

Brendan S. Wong. Quinidine Interactions with Myxicola Giant Axons ................................................................. 98


Joan Heller Brown. Calcium-Dependent Blockade of Cardiac Cyclic AMP Accumulation by Batrachotoxin and Veratridine ................................................................. 113

Gary Rudnick, Rosa Bencuya, Pamela J. Nelson, and Ruben A. Zito, Jr. Inhibition of Platelet Serotonin Transport by Propranolol .................................................. 118

Keisuke Kitamura, Hideki Kano, Keiji Yoneyama, and Keiichiro Hozumi. 1H Nuclear Magnetic Resonance Study on Transbilayer Permeation of Chlorpromazine in Lecithin Vesicles .................................................. 124

R. Adron Harris and Friedhelm Schroeder. Ethanol and the Physical Properties of Brain Membranes: Fluorescence Studies .................................................. 128

(continued)
CONTENTS (cont’d)

BADRI P. MALIWAL AND FRANK E. GUTHRIE. Interaction of Insecticides with Human Serum Albumin .................................................. 138

ANGELA GRONENBORN, BERRY BIRDSALL, EVA HYDE, GORDON ROBERTS, JAMES FEENEY, and ARNOLD BURGEN. 1H and 31P NMR Characterization of Two Conformations of the Trimethoprim-NADP*-Dihydrofolate Reductase Complex .................................................. 145

H. BERNHARD SCHLEGEL, MARTIN POE, and KARST HOOGSTEEN. Models for the Binding of Methotrexate to Escherichia coli Dihydrofolate Reductase: Direct Effect of Carboxylate of Aspartic Acid 27 upon Ultraviolet Spectrum of Methotrexate .................................................. 154

DEAN P. JONES, DAVID B. MEYER, BO ANDERSSON, and STEN ORRENIUS. Conversion of Catalase to the Secondary Catalase-Peroxide Complex (Compound II) by α-Methyldopa .................................................. 159

E. M. K. LUI and G. W. LUCIER. Hypophysial Regulation of Cadmium-Induced Depression of the Hepatic Monoxygenase System in the Rat .................................................. 165

ITSU KANO and DANIEL W. NEBERT. Ornithine Decarboxylase Induction in Liver- and Hepatoma-Derived Cell Cultures: No Detectable Differences between Control and 3-Methylcholanthrene-Treated Cells .................................................. 172

PHILLIP MUSHLIN, ROBERT C. BOERTH, and JACK N. WELLS. Selective Phosphodiesterase Inhibition and Alterations of Cardiac Function by Alkylated Xanthines .................................................. 179

PHILLIP MUSHLIN, ROBERT C. BOERTH, and JACK N. WELLS. Xanthine Derivatives That Selectively Inhibit Cyclic GMP Hydrolysis Potentiate Cardiac Contractile Effects of Isoproterenol but Not Those of Bethanecol .................................................. 190

SIDNEY D. NELSON, DAVID C. DAHLIN, ELMER J. RAUCKMAN, and GERALD M. ROSEN. Peroxidase-Mediated Formation of Reactive Metabolites of Acetaminophen .................................................. 195

BRUCE A. HARRIS, PRISCILLA P. SAUNDERS, and WILLIAM PLUNKETT. Metabolism of 9-β-D-Xylofuranosyladenine by the Chinese Hamster Ovary Cell .................................................. 200

GERALD S. MARKS, STEPHEN B. ZIMMER, STEPHEN E. DINIZO, BRUCE A. MICO, KENT L. KUNZE, and PAUL R. ORTIZ DE MONTELLANO. Studies of the Porphyrin-Inducing Activity of Ethynyl Compounds and Conformationally Restricted and Unrestricted Analogues of Allylisopropylacetamide in Chick Embryo Liver Cell Culture .................................................. 206

JEFFREY D. SAFFER and ROBERT I. GLAZER. Inhibition of Histone H1 Phosphorylation by Sangivamycin and Other Pyrrolopyrimidine Analogues .................................................. 211

L. W. SCHEIBEL and A. ADLER. Antimalarial Activity of Selected Aromatic Chelators. II. Substituted Quinolines and Quinoline-N-oxides .................................................. 218

SHORT COMMUNICATIONS

V. A. TKACHUK and M. WOLLEMAN. The Effect of Alprenolol on the Beta-Receptor and Adenylate Cyclase Activity in Rabbit Heart Membranes .................................................. 224

SABURO AYUKAWA, JOYCE M. FISHER, and MARCO RABINOVITZ. Proteolytic Susceptibility of Hemoglobin Synthesized in the Presence of Amino Acid Analogues .................................................. 227


SERRINE S. LAU and VINCENT G. ZANNONI. Bromobenzene Metabolism in the Rabbit: Specific Forms of Cytochrome P-450 Involved in 2,3- and 3,4-Epoxidation .................................................. 234

Copyright © 1981 by The American Society for Pharmacology and Experimental Therapeutics

All Rights Reserved

No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopy, recording, or any information storage and retrieval system, without permission in writing from the copyright owner.

The appearance of the code at the bottom of the first page of an article in this journal indicates the copyright owner’s consent that copies of this article may be made for personal or internal use, or for the personal or internal use of specific clients. This consent is given on the condition, however, that the copier pay the stated per copy fee through the Copyright Clearance Center, Inc., (21 Congress Street, Salem, Massachusetts 01970), for copying beyond that permitted by Sections 107 or 108 of the U.S. Copyright Law. This consent does not extend to other kinds of copying, such as copying for general distribution, for advertising or promotional purposes, for creating new collective works, or for resale. Copy fees for pre-1981 articles are the same as those shown for current articles.