CONTENTS

HARVEY J. MOTULSKY AND LAWRENCE C. MAHAN. The Kinetics of Competitive Radioligand Binding Predicted by the Law of Mass Action .................................................. +1
KEITH A. WREGGETT AND PHILIP SEEMAN. Agonist High- and Low-Affinity States of the D2-Dopamine Receptor in Calf Brain: Partial Conversion by Guanine Nucleotide .... 10
MARK E. GOLDMAN AND JOHN W. KEABIAN. Apomorphine Enantiomers: Interactions with D-1 and D-2 Dopamine Receptors .......................................................... 18
W. J. WOJCICK AND N. H. NEFF. γ-Aminobutyric Acid B Receptors Are Negatively Coupled to Adenylate Cyclase in Brain, and in the Cerebellum These Receptors May Be Associated with Granule Cells ......................................................... 24
STEPHEN L. NISHIMURA, LAWRENCE D. RECHT, AND GAVRIL W. PASTERNAK. Biochemical Characterization of High-Affinity 3H-Opioid Binding: Further Evidence for Mu Sites ........................................................................................................ 29
FREDERICK J. EHLERT AND DONALD J. JENDEN. Comparison of the Muscarinic Receptor Binding Activity of Some Tertiary Amines and Their Quaternary Ammonium Analogues ............................................................................................................. 46
P. MICHAEL CONN, DELORIS C. ROGERS, AND SALLIE G. SEAY. Biphemic Regulation of the Gonadotropin-Releasing Hormone Receptor by Microaggregation and Intracellular Ca2+ Levels ............................................................................................................ 51
KENNETH P. MINNEMAN AND PETER W. ABEL. “Spare” α1-Adrenergic Receptors and the Potency of Agonists in Rat Vas Deferens ........................................................................ 56
NINA MOHELL, MICHAEL WALLACE, AND JOHN N. FAIN. α2-Adrenergic Stimulation of Phosphatidylinositol Turnover and Respiration of Brown Fat Cells ......................... 64
ERIK DAHLBERG, ARNE THALÉN, RALPH BRATTSAND, JAN-ÅKE GUSTAFSSON, ULF JOHANSSON, KARIN ROEMPKE, AND TÖNUS SAARTOK. Correlation between Chemical Structure, Receptor Binding, and Biological Activity of Some Novel, Highly Active, 16a,17a-Acetal-Substituted Glucocorticoids ........................................................................... 70
WILLIAM S. MELLON. Dye-Ligand Interactions with 1,25-Dihydroxyvitamin D3-Receptor Complexes from Chicken Intestine ................................................................. 79
WILLIAM S. MELLON. Specificity of Dye-Ligand Interaction with the Polynucleotide Binding Domain of 1,25-Dihydroxyvitamin D3-Receptor Complexes of Chicken Intestinal Cytosol ................................................................................................. 86
GARY J. PASCUZZO, AKINORI AKAIKE, MOHAMMED A. MALEQUE, KAI-PING SHAW, ROBERT S. ARONSTAM, DANIEL L. RICKETT, AND EDSON X. ALBUQUERQUE. The Nature of the Interactions of Pyridostigmine with the Nicotinic Acetylcholine Receptor-Ionic Channel Complex. I. Agonist, Desensitizing, and Binding Properties ........................................................................................................ 92
AKINORE AKAIKE, STEPHEN R. IKEDA, NEVILLE BROOKES, GARY J. PASCUZZO, DANIEL L. RICKETT, AND EDSON X. ALBUQUERQUE. The Nature of the Interactions of Pyridostigmine with the Nicotinic Acetylcholine Receptor-Ionic Channel Complex. II. Patch Clamp Studies ........................................................................................................ 102
DANIEL SCHERMAN AND JEAN-PIERRE HENRY. Reserpine Binding to Bovine Chromaffin Granule Membranes: Characterization and Comparison with Dihydrotetrabenazine Binding ......................................................................................... 113
TAKAHIKO MORI, NORIOHI MATSUBAYASHI, AND ISSAKU UEDA. Membrane Expansion and Inhalation Anesthetics: Mean Excess Volume Hypothesis .......................... 123

Continued
CONTENTS (cont’d)

P. VIGNE, C. FRELIN, E. J. CRAGOÉ, JR., AND M. LAZDUNSKI. Structure-Activity Relationships of Amiloride and Certain of Its Analogues in Relation to the Blockade of the Na⁺/H⁺ Exchange System ................................................................. 131

BENT HONORÉ AND ROLF BRODERSEN. Albumin Binding of Anti-Inflammatory Drugs: Utility of a Site-Oriented versus a Stoichiometric Analysis ................................................................. 137

GERALD M. ROSEN, ELMER J. RAUCKMAN, SHARON P. ELLINGTON, DAVID C. DAHLIN, JAMES L. CHRISTIE, AND SIDNEY D. NELSON. Reduction and Glutathione Conjugation Reactions of N-Acetyl-p-Benzquinone Imine and Two Dimethylated Analogues .... 151

STEVEN A. BELINSKY, TAKAKATSU MATSUMURA, FREDERICK C. KAUFFMAN, AND RONALD G. THURMAN. Rates of Allyl Alcohol Metabolism in Periportal and Pericentral Regions of the Liver Lobule ................................................................. 158

TRENT D. BUCKMAN, MARY S. SUTPHIN, AND SAMUEL EIDUSON. Proteases as Probes of Mitochondrial Monoamine Oxidase Topography in Situ ................................................................. 165

WENDY L. WASHTIEN. Increased Levels of Thymidylate Synthetase in Cells Exposed to 5-Fluorouracil ................................................................. 171

J. WILLIAM LOWN, CHRISTOPHER C. HANSTOCK, ROGER D. BRADLEY, AND DOUGLAS G. SCRABA. Interactions of the Antitumor Agents Mitoxantrone and Bisantrene with Deoxyribonucleic Acids Studied by Electron Microscopy ................................................................. 178

JOYCE A. GOLDSINSTEIN AND PATRICIA LINKO. Differential Induction of Two 2,3,7,8-Tetrachlorodibenzo-p-dioxin-Inducible Forms of Cytochrome P-450 in Extrahepatic versus Hepatic Tissues ................................................................. 185

ERRATA .......................................................................................................................... 192

Copyright © 1984 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-1984 articles are the same as those shown for current articles.