CONTENTS


Gregory A. Weiland, Kenneth P. Minneman and Perry B. Molinoff. Thermodynamics of Agonist and Antagonist Interactions with Mammalian β-Adrenergic Receptors ........................................................................ 341


James N. Davis, Edward Olender, Wendy Maury and Robert McDaniel. α-Adrenergic Regulation of Cholinergic Responses in Rat Parotid Acinar Cells .................................................................................. 356


C. E. Spivak, B. Witkop and E. X. Albuquerque. Anatoxin-a: A Novel, Potent Agonist at the Nicotinic Receptor ................................................................................................................................. 384

Rüdiger Schultz, Michael Wüster, Heinz Kreuss, and Albert Herz. Lack of Cross-Tolerance on Multiple Opiate Receptors in the Mouse Vas Deferens ...................................................................................... 395

Ryung-soon (Song) Kim, Frank S. Labella, Hilda Zunza, Federika Zunza, and John F. Templeton. Progesterone Derivatives that Bind to the Digitalis Receptor: Structure-Activity Relationships ........................................................................ 402

Edward J. Pavlik and Benita S. Katzenellenbogen. The Stability of the Uterine Estrogen Receptor when Complexed with Estrogens or Antiestrogens ............................................................................. 406

Charles E. Spivak and Dermot B. Taylor. Ion Exchange between Agonists and Inorganic Ions at the Acetylcholine Receptor of Torpedo californica .................................................................................. 413

Anita Kober and Ingvar Sjöholm. The Binding Sites on Human Serum Albumin for Some Nonsteroidal Antiinflammatory Drugs .............................................................................................................. 421

Vincent E. Groppi, Jr. and Edward T. Browning. Norepinephrine-Dependent Protein Phosphorylation in Intact C-6 Glioma Cells. Analysis by Two-Dimensional Gel Electrophoresis ........................................................................ 427

Ilze Ducis and Victor DiStefano. Evidence for a Serotonin Uptake System in Isolated Bovine Pinealocyte Suspensions .................................................................................................................. 438

Ilze Ducis and Victor DiStefano. Characterization of Serotonin Uptake in Isolated Bovine Pinealocyte Suspensions ....................................................................................................................... 447

Sheryl Baldwin, Lemont B. Kier and Donald Shillady. Approximate Molecular Potentials of Mescaline Analogues in a Study of Similarities to 5-Hydroxytryptamine ......................................................... 455

(continued)
CONTENTS (cont’d)

ALESSANDRO AGRESTI, FRANCA BUFFONI, JOYCE J. KAUFMAN AND CARLO PETRONGOLO. Structure-Activity Relationships of Eseroline and Morphine: \textit{Ab Initio} Quantum-Chemical Study of the Electrostatic Potential and of the Interaction Energy with Water ........................................... 461

PER O. SEGLEN AND PAUL B. GORDON. Effects of Lysosomotropic Monoamines, Diamines, Amino Alcohols, and Other Amino Compounds on Protein Degradation and Protein Synthesis in Isolated Rat Hepatocytes ........................................... 468


ROBERT I. GLAZER AND KATHLEEN D. HARTMAN. Evidence that the Inhibitory Effect of Adenosine, but Not Cordycepin, on the Methylation of Nuclear RNA is Mediated by S-Adenosylhomocysteine Hydrolase ........................................... 483

JAN M. WOYNAROWSKI AND TERRY A. BEERMAN. Inhibition of DNA Replication in HeLa Cells by Macromomycin-I, an Antitumor Protein Antibiotic ........................................... 491

SHU-JING C. WEI, BEATRICE P. CHEN AND JERRY M. RICE. Comparative Effects of Methyl- and EthylNitrosourea on DNA Directing Cell-Free DNA-Dependent Synthesis of \textit{β}-Galactosidase ........................................... 494

RUSSELL T. KAWAHATA, CHARLES A. HOLMBERG, BENNIE I. OSBURN, LINDA F. CHUANG AND RONALD Y. CHUANG. Effect of 6-Mercaptopurine Ribonucleotides on DNA-Dependent RNA Polymerase Activity ........................................... 503


LELAND W. K. CHUNG AND HAIYEN CHAO. Neonatal Imprinting and Hepatic Cytochrome P-450. I. Comparison of Testosterone Hydroxylation in a Reconstituted System between Neonatally Imprinted and Nonimprinted Rats ........................................... 543

EDWARD BRESNICK, BRUCE HASSUK, PAUL LIBERATOR, WAYNE LEVIN AND PAUL E. THOMAS. Nucleolar Cytochrome P-450 ........................................... 550

C. ROLAND WOLF, WILLARD G. HARRELSON, JR., WOLFGANG M. NASTAINCZYK, RICHARD M. PHILPOT, B. KALYANARAMAN AND RONALD P. MASON. Metabolism of Carbon Tetrachloride in Hepatic Microsomes and Reconstituted Monoxygenase Systems and Its Relationship to Lipid Peroxidation ........................................... 553

HENG H. LIEM, URSULA MULLER-EBERHARD AND ERIC F. JOHNSON. Differential Induction by 2,3,7,8-Tetrachlorodibenzo-p-Dioxin of Multiple Forms of Rabbit Microsomal Cytochrome P-450: Evidence for Tissue Specificity ........................................... 565

ALAN POLAND, IVAN MAK, EDWARD GLOVER, RODNEY J. BOATMAN, FRANK H. EGETINO AND ANDREW S. KENDLE. 1,4-Bis[2-(3,5-Dichloropyridyloxy)]Benzene, a Potent Phenobarbital-like Inducer of Microsomal Monoxygenase Activity ........................................... 571

M. C. POIRIER, G. M. WILLIAMS AND S. H. YUSPA. Effect of Culture Conditions, Cell Type, and Species of Origin on the Distribution of Acetylated and Deacetylated Deoxyguanosine C-8 Adducts of N-Acetoxy-2-Acetylaminofluorene ........................................... 581

SUZANNE E. PATTON, GERALD M. ROSEN AND ELMER J. RAUCKMAN. Superoxide Production by Purified Hamster Hepatic Nuclei ........................................... 588

(continued)
CONTENTS (cont’d)

EDWARD PEREZ-REYES AND RONALD P. MASON. Electron Spin Resonance Study of the Autoxidation of 6-Aminodopamine ........................................ 594

DERMOT M. F. COOPER, CONSTANTINE LONDOS AND MARTIN RODBELL. Adenosine Receptor-Mediated Inhibition of Rat Cerebral Cortical Adenylate Cyclase by a GTP-Dependent Process ........................................ 598

PAUL R. ORTIZ DE MONTELLANO, KENT L. KUNZE AND BRUCE A. MICO. Destruction of Cytochrome P-450 by Olefins: N-Alkylation of Prosthetic Heme ................ 602

RONALD W. HOLZ. Correlation of the Effects of Bretylium, Guanethidine, and N,N-Diisopropyl-N'-Isoamyl-N'-Diethylaminoethylurea (P-286) on the H+ Electrochemical Gradient across the Chromaffin Granule Membrane and on Chromaffin Granule Function .................. 606

AUTHOR INDEX FOR VOLUME 18 .................................................. 611

CUMULATIVE SUBJECT INDEX FOR VOLUMES 17-18 ...................... 616