CONTENTS

SHORT COMMUNICATION

ROY A. FYRE AND RONALD W. HOLZ. Phospholipase A₂ Inhibitors Block Catecholamine Secretion and Calcium Uptake in Cultured Bovine Adrenal Medullary Cells .......... 547


CHUN WEL LIN AND JOSÉ M. MUSACCHIO. The Determination of Dissociation Constants for Substance P and Substance P Analogues in the Guinea Pig Ileum by Pharmacological Procedures .................................. 558

CHI-MING LEE, JONATHAN A. JAVITCH, AND SOLOMON H. SNYDER. ³H-Substance P Binding to Salivary Gland Membranes: Regulation by Guanyl Nucleotides and Divalent Cations ......................................................... 563

PETER J. BARNES, BENGT-ERIC SKOOGH, JAY A. NADEL, AND JAMES M. ROBERTS. Postsynaptic Alpha₂-Adrenoceptors Predominate over Alpha₁-Adrenoceptors in Canine Tracheal Smooth Muscle and Mediate Neuronal and Hormonal Alpha-Adrenergic Contraction ........................................ 570

ALAIN ENJALBERT AND JOEL BOCKAERT. Pharmacological Characterization of the D₂ Dopamine Receptor Negatively Coupled with Adenylate Cyclase in Rat Anterior Pituitary .............................................. 576

DAVID R. SIBLEY AND IAN CREESE. Interactions of Ergot Alkaloids with Anterior Pituitary D-2 Dopamine Receptors ...................................................... 585

DAVID A. KENDALL, DUNCAN P. TAYLOR, AND S. J. ENNA. ³H-Tetrahydrozoladone Binding: Association with Serotonin; Binding Sites ........................................... 594

M. E. A. REITH, H. SERSHEN, D. L. ALLEN, AND A. LAJTHA. A Portion of ³H-Cocaine Binding in Brain Is Associated with Serotonergic Neurons .......................... 600

ANNE DUMBRILLE-ROSS AND SIU W. TANG. Binding of ³H-Ro 11-2465: Possible Identification of a Subclass of ³H-Imipramine Binding Sites ........................................ 607

KENNETH T. DOUGLAS, RAJIV K. SHARMA, JOANNE F. WALMSLEY, AND ROBERT C. HIDER. Ionization Processes of Some Harmala Alkaloids ........................................ 614

GALE L. CRAVISO AND JOSÉ M. MUSACCHIO. High-Affinity Dextromethorphan Binding Sites in Guinea Pig Brain. I. Initial Characterization .................................. 619

GALE L. CRAVISO AND JOSÉ M. MUSACCHIO. High-Affinity Dextromethorphan Binding Sites in Guinea Pig Brain. II. Competition Experiments .......................... 629

WENDELL L. COMBEST AND DIANE HADDOCK ALLEN. Alteration of Cyclic AMP-Dependent Protein Kinases and Polyamine Biosynthetic Enzymes during Hypertrophy and Hyperplasia of the Thyroid in the Rat ........................................ 641

GEORGE S. JOHNSON AND CYNTHIA J. JAWORSKI. Glucocorticoids Increase GTP-Dependent Adenylate Cyclase Activity in Cultured Fibroblasts .................................. 648

B. THEO MELLION, LOUIS J. IGNARRO, CARL B. MYERS, ERIE H. OHLSTEIN, BRYAN A. BALLOT, ALBERT L. HYMAN, AND PHILIP J. KADOWITZ. Inhibition of Human Platelet Aggregation by S-Nitrosothiols: Heme-Dependent Activation of Soluble Guanylate Cyclase and Stimulation of Cyclic GMP Accumulation ......................................................... 653

PAUL J. SILVER AND JAMES T. STULL. Effects of the Calmodulin Antagonist, Fluphenazine, on Phosphorylation of Myosin and Phosphorylase in Intact Smooth Muscle .............. 665

(continued)
CONTENTS (cont’d)

GULLIAN POCOCK. Ionic and Metabolic Requirements for Stimulation of Secretion by Ouabain in Bovine Adrenal Medullary Cells ........................................... 671

GILLIAN POCOCK. Ion Movements in Isolated Bovine Adrenal Medullary Cells Treated with Ouabain .......................................................... 681


MARY C. EDWARDS, A. M. E. NOURI, D. GORDON, AND F. J. EVANS. Tumor-Promoting and Nonpromoting Proinflammatory Esters Act as Human Lymphocyte Mitogens with Different Sensitivities to Inhibition by Cyclosporin A ........................................... 703

PAUL H. FISCHER, MARGARET A. WEDDELL, AND RAYMOND D. MOSSIE. Modulation of the Metabolism and Cytotoxicity of L-Deoxyglucose by 5'-Amino-5'-Deoxythymidine .......................................................... 709

JÖRG M. CHEMNITZ AND RONALD ZECH. Inhibition of Brain Carboxylesterases by Neurotoxic and Non-Neurotoxic Organophosphorus Compounds .................. 717

KURT A. BLACK AND T. R. TEPHLY. Effects of Nitrous Oxide and Methotrexate Administration on Hepatic Methionine Synthetase and Dihydrofolate Reductase Activities, Hepatic Folates, and Formate Oxidation in Rats ........................................... 724

HENRY CHANG, SANDRA M. EWERT, AND RONALD L. NAGEL. Identification of 2-Imidazolines as Anti-Sickling Agents ....................... 731

GABRIELA M. KELLER AND COLIN R. JEFFCOATE. Modulation of Microsomal Benz[a]pyrene Metabolism by DNA ........................................... 735

J. DAVID LAMBERT. 22-Ketocholesterol: A Potent Competitive Inhibitor of Cytochrome P-450epsilon-Dependent Side-Chain Cleavage of Cholesterol ....................... 743

E. H. JEFFERY AND G. J. MANNERING. Interaction of Constitutive and Phenobarbital-Induced Cytochrome P-450 Isozymes during the Sequential Oxidation of Benzo[a]pyrene: Explanation for the Difference in Benzphetamine-Induced Hydrogen Peroxide Production and 455-nm Complex Formation in Microsomes from Untreated and Phenobarbital-Treated Rats ........................................... 748

GREGORY L. KEDDERIS, LAWRENCE A. DWYER, DOUGLAS E. RICKERT, AND PAUL F. HOLLENBERG. Source of the Oxygen Atom in the Product of Cytochrome P-450-Catalyzed N-Demethylation Reactions ........................................... 758

JAMES STEVENS AND WILLIAM B. JAKOBY. Cysteine Conjugate /3-Lyase ....................... 761

P. DAVID JOSEPHY, THOMAS E. ELING, AND RONALD P. MASON. An Electron Spin Resonance Study of the Activation of Benzidine by Peroxidases ........................................... 766

GHEORGHE BENGA, MIHAI IONESCU, OCTAVIAN POPESCU, AND VICTOR I. POP. Effect of Chlorpromazine on Proteins in Human Erythrocyte Membranes as Inferred from Spin Labeling and Biochemical Analyses ........................................... 771

JAMES L. VANNICE, J. RUSSELL GROVE, AND GORDON M. RINGOLD. Analysis of Glucocorticoid-Inducible Genes in Wild-Type and Variant Rat Hepatoma Cells ........................................... 779

AUTHOR INDEX FOR VOLUME 23 ........................................... 787

The Subject Index for Volume 23 will appear in the November 1983 issue as part of a cumulative index for the year 1983.