CONCEPTS


Fetal Anticonvulsant Syndrome in Rats: Dose- and Period-Response Relationships of Prenatal Diphenylhydantoin, Trimethadione and Phenobarbital Exposure on the Structural and Functional Development of the Offspring. Charles V. Vorhees 274

Potentiation of the Antithrombotic Effect of Prostacyclin by Simultaneous Administration of Aminophylline in a Canine Model of Coronary Artery Thrombosis. Joseph L. Rossm, Bruce G. Hook and Benedict R. Lucchesi 288

Effect of Experimental Renal Failure on the Disposition Kinetics of I-Propranolol in Rats. Norikazu Terao and Danny D. Shen 295


Ligand Selectivity of Dog Coronary Adenosine Receptor Resembles That of Adenylate Cyclase Stimulatory (Rₐ) Receptors. Shozo Kusachi, Robert D. Thompson and R. A. Olsson 316

Effect of Hydralazine on Tension and Membrane Potential in the Rat Caudal Artery. Kent Hermesmeyer, Angelo Tranpani, Peter W. Abel and Manuel Worcel 322

LY53857, a Selective and Potent Serotonergic (5-HT₃) Receptor Antagonist, Does Not Lower Blood Pressure in the Spontaneously Hypertensive Rat. Marlene L. Cohen, Ray W. Fuller and Ken D. Kurz 327

Role of Beta-1 Adrenergic Receptors in the Control of the Heterogeneity of O₂ Saturation in Small Myocardial Veins. Harvey R. Weiss 333

Heterogeneity of Acetylcholine Receptors: Different Forms of Receptor Distinguished by α-Bungarotoxin Kinetics and by Antibody Binding Properties. Tobias Massa and Thomas W. Mittag 340

Methanol Toxicity in the Monkey: Effects of Nitrous Oxide and Methionine. J. T. Eells, K. A. Black, C. E. Tedford and T. R. Tephly 349

Altered Behavioral Response to a D2 Agonist, LY141865, in Spontaneously Hypertensive Rats Exhibiting Biochemical and Endocrine Responses Similar to Those in Normotensive Rats. Ray W. Fuller, Susan K. Henrick-Luecke, David T. Wong, Donovan Pearson, Penny G. Threlkeld and Martin D. Hynes III 354

Stereoselective Increase in Propranolol Bioavailability during Chronic Dosing in the Dog. Stephen A. Bai, Michael J. Wilson, U. Kristina Walle and Thomas Walle 360

Release of Substance P from the Enteric Nervous System: Direct Quantitation and Characterization. Sheri A. Baron, Bernard M. Jaffe and Alan R. Gintzler 365

Alterations in Serum Protein Binding and Pharmacokinetics of I-Propranolol in the Rat Elicited by the Presence of an Indwelling Venous Catheter. Norikazu Terao and Danny D. Shen 369

Relationship of Dose to Morphine Tolerance in the Chick Embryo. M. B. Schmidt and Statia Norton 376

Dopaminergic and Serotonergic Mechanisms of Thermoregulation: Mediation of Thermal Effects of Apomorphine and Dopamine. Shigeto Yamawaki, Henry Lai and Akira Horita 383

Lipid Solubility is Correlated with Hypnotic and Hypothermic Responses of Long-Sleep (LS) and Short-Sleep (SS) Mice to Various Depressant Drugs. Thomas C. Howerton, Michael F. O’Connor and Allan C. Collins 389

Opioid Peptides with Differential Affinity for Mu and Delta Receptors Decrease Sensory Neuron Calcium-Dependent Action Potentials. Mary Ann Werz and Robert L. Macdonald 394
Contents Continued from iii


Nephrotoxicity of 1-(2-Chloroethyl)-3-(Trans-4-Methylcyclohexyl)-1-Nitrosourea (MeCCNU) in the Fischer F344 Rat. R. A. Kramer and M. R. Boyd .......................................................... 409

Impairment of Membrane Phosphoinositide Metabolism by Aminoglycoside Antibiotics: Streptomycin, Amikacin, Kanamycin, Dibekacin, Gentamicin and Neomycin. Pierre Marche, Sophie Koutouzov and Arlette Girard .............. 415


Temperature-Dependent 5-Hydroxytryptamine (5-HT)-Sensitive [3H]Spiperone Binding to Rat Cortical Membranes: Regulation by Guanine Nucleotide and Antidepressant Treatment. David A. Kendall and Stefan R. Nahorski 429


Placental Transfer and Renal Elimination of Cimetidine in Maternal and Fetal Sheep. George W. Mihaly, D. Brian Jones, Denis J. Morgan, Michael S. Ching, Lorraine K. Webster, Richard A. Smallwood and Ken J. Hardy ......................... 441


Inhibition of the Spontaneous Climbing Behavior Elicited in Mice by Opiates. Helene Marcia-Collado, Pierre Chaillot and Jean Costentin .......................................................... 466

Hypotensive and Diuretic Actions of Diltiazem in Spontaneously Hypertensive and Wistar Kyoto Rats. Hiroshi Narita, Taku Nagao, Hideo Yabana and Isao Yamaguchi .................................................. 472

Effects of the Sympathetic Nervous System on Bethanechol-Induced Elevation of Gastric Acid Secretion and Mucosal Blood Flow in Rats. Kunihiko Yokotani, Ikunobu Muramatsu and Motohatsu Fujiwara 478

Central and Peripheral Cardiovascular Effects of α-Methylepinephrine. Che-Se Tung, Michael R. Goldberg, Alan S. Hollister, John A. Oates and David Robertson ........................................................ 484

Estimation of the Styrene 7,8-Oxide Detoxifying Potential of Epoxide Hydrolase in Glutathione-Depleted, Perfused Rat Livers. Brian R. Smith, Jennifer Van Anda, James R. Fouts and John R. Bend .................................................. 491

β-Endorphin and Its Metabolites Stimulate Motility of the Dog Small Intestine. Thomas P. Davis, Alison J. Culling, Hans Schoemaker and James J. Galligan .......................................................... 499

Respiratory and Cardiovascular Depressant Effects of Nabilone, N-Methyllevonantradol and Δ-9-Tetrahydrocan-nabinol in Anesthetized Cats. Patricia A. Doherty, Lawrence E. McCarthy and Herbert L. Borison .................. 508

Effects of Histamine, H1- and H2-Receptor Antagonists on the Activity of Serotonergic Neurons in the Dorsal Raphe Nucleus. Joan M. Lakoski and George K. Aghajanian .................................................. 517

Amphetamine-Induced Hyperphagia and Obesity Caused by Intraventricular or Lateral Hypothalamic Injections in Rats. Luis Hernandez, Marco Parada and Bartley G. Hoebel .................................................. 524


Surfactants Selectively Ablate Enteric Neurons of the Rat Jejunum. Deborah A. Fox, Miles L. Epstein and Paul Bass ...... 538