A Radioimmunoassay for the Unstable Pulmonary Metabolites of Prostaglandin E₁ and E₂: An Indirect Index of Their in Vivo Disposition and Pharmacokinetics. W. Bothwell, M. Verburg, M. Wynalda, E. G. Daniels and F. A. Fitzpatrick 229

Laxative-Like Effects of Nonsteroidal Anti-Inflammatory Drugs on Intestinal Fluid Movement and Membrane Integrity. Gary W. Gullikson, Mark Sender and Paul Bass 236

Protein Binding of N-2-Mercaptoethyl-1,3-Diaminopropane via Mixed Disulfide Formation after Oral Administration of WR 2721. Nina Felice Tabachnik, Peter Blackburn, Charles M. Peterson and Anthony Cerami 243

Irreversible Blockade of Beta Adrenoceptors and Their Recovery in the Rat Heart and Lung in Vivo. Stephen P. Baker and Josef Pitha 247


Human Cigarette Smoking: Manipulation of Number of Puffs per Bout, Intebout Interval and Nicotine Dose. Roland R. Griffiths, Jack E. Henningfield and George E. Bigelow 256

The Effects of Serotonin Antagonists on the Inhibition of Primate Spinothalamic Tract Cells Produced by Stimulation in Nucleus Raphe Magnus or Periaqueductal Gray. R. P. Yezierski, T. K. Wilcox and W. D. Willis 266

The Effect of Acute Opioid Administration on the Phosphorylation of Rat Striatal Synaptic Membrane Proteins. Norman Williams and Doris H. Clouet 278

Aminoglycoside Inhibition of a Renal Phosphatidylinositol Phospholipase C. James J. Lipsky and Paul S. Lietman 287

Pharmacological Modification of the Edema Produced by Combined Infusions of Prostaglandin E₁ and Bradykinin in Canine Forelimbs. C. M. Prasad, Stan W. Adamski, Erik Svensjö and George J. Grega 293

Quantitative Assessment of the Pre- and Postynaptic Alpha Adrenoceptor Antagonist Potency of Amitriptyline. H. J. Leighton 299

Effect of Inducers and Inhibitors of Glucuronidation on the Biliary Excretion and Choleretic Action of Valproic Acid in the Rat. John B. Watkins and Curtis D. Klaassen 305

Changes in Sensitivity to Intrathecal Norepinephrine and Serotonin after 6-Hydroxydopamine (6-OHDA), 5,6-Dihydroxytryptamine (5, 6-DHT) or Repeated Monoamine Administration. James R. Howe and Tony L. Yaksh 311

Effects of Phosphatidylcholine Administration to Rats on Choline in Blood and Choline and Acetylcholine in Brain. Richard S. Jope 322

Characterization of Vasopressin Analgesia. Barry A. Berkowitz and Sheldon Sherman 329

Interaction of Apomorphine and Stressors in the Production of Hyperthermia in the Rabbit. Anne E. Snow and Akira Horita 335

Developmental Changes in the Accumulation of Norepinephrine and the Chronotropic Effects of Catecholamines in Isolated Rat Atria as Influenced by Dietary Lipid. Leon C. Wince and Charles O. Rutledge 340

Evidence for a Prostaglandin Link in the Purinergic Activation of Rabbit Bladder Smooth Muscle. Gordon F. Anderson 347

A Quantitative Analysis of Histamine H₂-Receptor-Mediated Relaxation of Rabbit Trachea. Terry P. Kenakin and Deborah Beek 353

Diethylstilbestrol: Placental Transfer, Metabolism, Covalent Binding and Fetal Distribution in the Wistar Rat. Richard K. Miller, Mary E. Heckmann and Roger C. McKenzie 358

Effects of Bromocriptine on Single Nephron and Whole Kidney Function in Rats. Charles T. Stier, Jr., Elizabeth A. Cowden and Marjorie E. M. Allison 366

Contents Continued on iv
Inhibition of Acid Secretion in Isolated Canine Parietal Cells by Prostaglandins. Marcia L. Skoglund, Alan S. Nies and John G. Gerber

Regional Renal and Splanchnic Blood Flows during Nicotine Infusion: Effects of Alpha and of Combined Alpha and Beta Adrenergic Blockade. H. Fred Downey, George J. Crystal and Fouad A. Bashour

Specific Inhibition of Calcium Channels by Calcium Ions in Smooth Muscle. Leon Hurwitz, Linda J. McGuflfee, Peggy M. Smith and Sally A. Little

Apomorphine-Induced Aggression in Rats Chronically Treated with Oral Clonidine: Modulation by Central Serotonergic Mechanisms. Richard A. Hahn, Martin D. Hymes and Ray W. Fuller


Relationship of Tissue Nonprotein Sulphydryls to the Acute Toxic Effects of 1,2-Dibromo-3-Chloropropane. William M. Kluwe, Arnold Greenwell and Frank Harrington


Alteration in Sensitivity to Isoproterenol and Acetylcholine in the Rat Heart after Repeated Administration of Isoproterenol. Yasuyuki Nomura, Hiroko Kajiyama and Tomio Segawa

Disposition of Etodolac, Other Anti-Inflammatory Pyrazone-dole-1-Acetic Acids and Furobufen in Normal and Adjuvant Arthritic Rats. Eckhardt S. Ferdinandi, Mitchell N. Cayen and Cecil Pace-Asciak


The Renin-Angiotensin System in Aminoglycoside-Induced Acute Renal Failure. Friedrich C. Luft, George R. Aronoff, Victor Elharrar and Douglas F. Zipes

Effects of Encaaine and Metabolites (MJ14030 and MJ9444) on Canine Cardiac Purkinje and Ventricular Fibers. Victor Elharrar and Douglas F. Zipes

Erratum

AUTHOR INDEX

Adamski, S. W., 293
Allison, M. E. M., 366
Anderson, G. F., 347
Aronoff, G. R., 433
Baker, S. P., 247
Bashour, F. A., 375
Bass, P., 236
Beek, D., 353
Berkowitz, B. A., 329
Bhargava, H. N., 394
Bianchini, P., 406
Bigelow, G. E., 256
Blackburn, P., 243
Bothwell, W., 229
Cayen, M. N., 417
Cerami, A., 243
Cho, C., 427
Cloquet, D. H., 278
Connors, B. A., 433
Cowden, E. A., 366
Crystal, G. J., 375
Daniels, E. G., 292
Dietrich, C. P., 406
Downey, H. F., 375
Elharrar, V., 440
Ellingboe, J., 252
Evan, A. P., 433
Ferdinandi, E. S., 417
Fitzpatrick, F. A., 229
Fuller, R. W., 389
Gerber, J. G., 371
Greenwell, A., 399
Grega, G. J., 293
Griffiths, R. R., 256
Gullikson, G. W., 236
Hahn, R. A., 389
Harrington, F., 399
Heckmann, M. E., 358
Henningfield, J. E., 256
Horita, A., 335
Howe, J., 311
Hurwitz, L., 382
Hynes, M. D., 389
Jope, R. S., 222
Kajiama, H., 411
Kenakian, T. P., 353
Kim, H. S., 394
Klaassen, C. D., 305
Kleit, S. A., 433
Kluwe, W. M., 399
Kuehle, J., 252
Leighton, H. J., 299
Lietman, P. S., 287
Linscheer, W. G., 427
Lipsky, J. J., 287
Little, S. A., 382
Luft, F. C., 433
McGuffee, L. J., 382
McKenzie, R. C., 358
Mello, N. K., 252
Nies, A. S., 371
Nomura, Y., 411
Okuma, H., 406
Osima, B., 406
Parma, B., 406
Peterson, C. M., 243
Pitha, J., 247
Prasad, C. M., 293
Raheja, K. L., 427
Rutledge, C. G., 340
Segawa, T., 411
Sender, M., 236
Sherman, S., 329
Smith, P. M., 382
Snow, A. E., 335
Stier, C. T., Jr., 366
Sveno, E., 293
Tabachnik, N. F., 243
Verbog, M., 229
Watkins, J. B., 305
Weinberger, M. H., 433
Wilcox, T. K., 382
Wilcox, T. K., 266
Williams, N., 278
Willis, W. D., 266
Wince, L. C., 340
Wynalda, M., 229
Yaksh, T. L., 311
Yeziokako, R. P., 266
Zipes, D. P., 440