

AUTHOR INDEX FOR VOLUME 49

A

- Agnew, R. *see* Roberts-Thomson, S. J., 105
 Agrawal, A. K., and Shapiro, B. H. Phenobarbital Induction of Hepatic *CYP2B1* and *CYP2B2*: Pretranscriptional and Post-transcriptional Effects of Gender, Adult Age, and Phenobarbital Dose, 523
 Ahern, S. *see* Prézeau, L., 422
 Alam, M. *see* Jarolimek, W., 165
 Al-ani, B. *see* Hollenberg, M. D., 229
 Albuquerque, E. X. *see* Schrattenholz, A., 1
 Ali-Osman, F., Antoun, G., Wang, H., Rajagopal, S., and Gagucas, E. Buthionine Sulfoximine Induction of γ -L-Glutamyl-L-cysteine Synthetase Gene Expression, Kinetics of Glutathione Depletion and Resynthesis, and Modulation of Carmustine-Induced DNA-DNA Cross-linking and Cytotoxicity in Human Glioma Cells, 1012
 Allal, C. *see* Clark, R. B., 182
 Anastasiadis, P. Z., States, J. C., Imerman, B. A., Louie, M. C., Kuhn, D. M., and Levine, R. A. Mitogenic Effects of Tetrahydrobiop-
 terin in PC12 Cells, 149
 Anderson, L. M. *see* Nerurkar, P. V., 874
 Antoun, G. *see* Ali-Osman, F., 1012
 Anyanwutaku, I. O., Guo, X., Chen, H.-X., Ji, Z., Lee, K.-H., and Cheng, Y.-C. Activities of Novel Nonglycosidic Epipodophyllo-
 toxins in Etoposide-Sensitive and -Resistant Variants of Human KB Cells, P-388 Cells, and *In Vivo* Multidrug-Resistant Murine Leukemia Cells, 721
 Arai, A. *see* Kessler, M., 123
 Arinami, T. *see* Itokawa, M., 560
 Arredondo, N. F. *see* Ford, A. P. D. W., 209
 Arrighi, V. *see* Pizzi, M., 586
 Ashford, M. L. J. *see* Lee, K., 715

B

- Bahouth, S. W., Gokmen-Polar, Y., Coronel, E. C., and Fain, J. N. Enhanced Desensitization and Phosphorylation of the β_1 -Adren-
 ergic Receptor in Rat Adipocytes by Peroxovanadate, 1049
 Bailly, C. *see* René, B., 343
 Bain, C. *see* Hadingham, K. L., 253
 Ballyk, B. *see* Bleakman, D., 581
 Balzarini, J., Pelemans, H., Pérez-Pérez, M.-J., San-Félix, A., Cama-
 rasa, M.-J., De Clercq, E., and Karlsson, A. Marked Inhibitory Activity of Non-nucleoside Reverse Transcriptase Inhibitors against Human Immunodeficiency Virus Type 1 When Com-
 bined with (-)-2',3'-Dideoxy-3'-thiacytidine, 882
 Banerjee, D. *see* Ercikan-Abali, E. A., 430
 Barber, R. *see* Clark, R. B., 182
 Barnes, P. J. *see* Haddad, E.-B., 781
 Barnes, P. J. *see* Rousell, J., 629
 Barret, J.-M., Calsou, P., Laurent, G., and Salles, B. DNA Repair Activity in Protein Extracts of Fresh Human Malignant Lym-
 phoid Cells, 766
 Barrie, A., Chierigatti, E., Miloso, M., Benfenati, F., and Valtorta, F. Epidermal Growth Factor-Mediated Inhibition of Neurotrans-
 mitter Glutamate Release from Rat Forebrain Synaptosomes, 399
 Basolo, F. *see* Danesi, R., 972
 Baur, R. *see* Buhr, A., 1080

- Bausch, S. *see* Befort, K., 216
 Beavers, L. S. *see* Gehlert, D. R., 224
 Beck, W. T. *see* Schuetz, E. G., 311
 Beere, H. M., Chresta, C. M., and Hickman, J. A. Selective Inhibition of Topoisomerase II by ICRF-193 Does Not Support a Role for Topoisomerase II Activity in the Fragmentation of Chromatin during Apoptosis of Human Leukemia Cells, 842
 Befort, K., Tabbara, L., Bausch, S., Chavkin, C., Evans, C., and Kieffer, B. The Conserved Aspartate Residue in the Third Pu-
 tative Transmembrane Domain of the δ -Opioid Receptor Is not the Anionic Counterpart for Cationic Opiate Binding but Is a Constituent of the Receptor Binding Site, 216
 Beindl, W. *see* Freissmuth, M., 602
 Benfenati, F. *see* Barrie, A., 399
 Bernatowicz, M. S. *see* Seiler, S. M., 190
 Bertino, J. R. *see* Ercikan-Abali, E. A., 430
 Bhama, J. K. *see* Ding, X., 1113
 Billings, R. E. *see* Carlson, T. J., 796
 Bindokas, V. P. *see* Prehn, J. H. M., 319
 Birrer, M. J. *see* Freemerman, A. J., 788
 Blackmore, P. F., Fisher, J. F., Spilman, C. H., and Bleasdale, J. E. Unusual Steroid Specificity of the Cell Surface Progesterone Receptor on Human Sperm, 727
 Blakely, R. D. *see* Freneau, R. T., Jr., 1033
 Bleakman, D., Schoepp, D. D., Ballyk, B., Bufton, H., Sharpe, E. F., Thomas, K., Ornstein, P. L., and Kamboj, R. K. Pharmacological Discrimination of GluR 5 and GluR 6 Kainate Receptor Subtypes by (3S,4aR,6R,8aR)-6-[2-(2H-tetrazole-5-yl)-ethyl]decahydroiso-
 quinoline-3-carboxylic acid, 581
 Bleasdale, J. E. *see* Blackmore, P. F., 727
 Blue, D. R., Jr. *see* Ford, A. P. D. W., 209
 Bockaert, J. *see* Prézeau, L., 422
 Boehm, S. *see* Freissmuth, M., 602
 Boeve, C. M. A., Vanden Wyngaerd, A., and Ley, M. D. Inhibition of Human Interferon- γ Biosynthesis by an Antisense RNA-Ex-
 pressing Vector, 58
 Boise, L. H. *see* Prehn, J. H. M., 319
 Bonhaus, D. W. *see* Ford, A. P. D. W., 209
 Bonner, T. I. *see* Song, Z.-H., 891
 Boulanger, Y. *see* Forget, M.-A., 1071
 Bouvier, M. *see* Rousseau, G., 752
 Boyd, N. D. *see* Macdonald, D., 808
 Bresnick, E. *see* Sterling, K., 329
 Brown, A. M. *see* Jarolimek, W., 165
 Brown, F. *see* Perez, D. M., 112
 Buell, G. *see* Werner, P., 656
 Bufton, H. *see* Bleakman, D., 581
 Buhr, A., Baur, R., Malherbe, P., and Sigel, E. Point Mutations of the $\alpha 1\beta 2\gamma 2$ γ -Aminobutyric Acid_A Receptor Affecting Modulation of the Channel by Ligands of the Benzodiazepine Binding Site, 1080
 Bulseco, D. A., and Schimerlik, M. I. Single Amino Acid Substitu-
 tions in the pm2 Muscarinic Receptor Alter Receptor/G Protein Coupling Without Changing Physiological Responses, 132
 Bunnett, N. W. *see* Garland, A. M., 438

C

- Cai, J. J., and Lee, H.-C. Protein Kinase C Isozyme-Specific Modulation of Cyclic AMP-Dependent Phosphodiesterase in Hypertrophic Cardiomyopathic Hamster Hearts, 81
- Calmels, T. P. G. *see* Rusnak, J. M., 244
- Calsou, P. *see* Barret, J.-M., 766
- Camarasa, M.-J. *see* Balzarini, J., 882
- Carlson, T. J., and Billings, R. E. Role of Nitric Oxide in the Cytochrome-Mediated Regulation of Cytochrome P-450, 796
- Carpenter, S. P., Lasker, J. M., and Raucy, J. L. Expression, Induction, and Catalytic Activity of the Ethanol-Inducible Cytochrome P450 (CYP2E1) in Human Fetal Liver and Hepatocytes, 260
- Carruba, M. O. *see* Nisoli, E., 7
- Caruncho, H. *see* Impagnatiello, F., 822
- Castanon, N. *see* Yu, X.-J., 761
- Cederbaum, A. I. *see* Rao, D. N. R., 814
- Cederbaum, A. I. *see* Wu, D., 802
- Chang, S. Y. *see* Makielski, J. C., 30
- Chao, J. *see* Kashiwagi, K., 1131
- Chaudhary, A. *see* Snyders, D. J., 949
- Chaveau, J. *see* Yu, X.-J., 761
- Chavkin, C. *see* Befort, K., 216
- Chen, H.-X. *see* Anyanwutaku, I. O., 721
- Chen, J. *see* Javitch, J. A., 692
- Chen, J.-S. *see* Hawkinson, J. E., 897
- Cheng, Y.-C. *see* Anyanwutaku, I. O., 721
- Chesselet, M.-F. *see* Ghasemzadeh, M. B., 852
- Chiba, P., Ecker, G., Schmid, D., Drach, J., Tell, B., Goldenberg, S., and Gekeler, V. Structural Requirements for Activity of Propafenone-type Modulators in P-Glycoprotein-Mediated Multidrug Resistance, 1122
- Chieriegatti, E. *see* Barrie, A., 399
- Chik, C. L. *see* Ho, A. K., 1104
- Chresta, C. M. *see* Beere, H. M., 842
- Clark, R. B., Allal, C., Friedman, J., Johnson, M., and Barber, R. Stable Activation and Desensitization of β_2 -Adrenergic Receptor Stimulation of Adenylyl Cyclase by Salmeterol: Evidence for Quasi-irreversible Binding to an Exosite, 182
- Clarke, D. E. *see* Ford, A. P. D. W., 209
- Cobb, R. R., Felts, K. A., Parry, G. C. N., and Mackman, N. D609, a Phosphatidylcholine-Specific Phospholipase C Inhibitor, Blocks Interleukin-1 β -Induced Vascular Cell Adhesion Molecule 1 Gene Expression in Human Endothelial Cells, 998
- Cohen, S. M. *see* Freneau, R. T., Jr., 1033
- Colby, H. D. *see* Jiang, Q., 458
- Cole, S. P. C. *see* Stride, B. D., 962
- Consolandi, O. *see* Pizzi, M., 586
- Contesse, V., Hamel, C., Lefebvre, H., Dumuis, A., Vaudry, H., and Delarue, C. Activation of 5-Hydroxytryptamine₄ Receptors Causes Calcium Influx in Adrenocortical Cells: Involvement of Calcium in 5-Hydroxytryptamine-Induced Steroid Secretion, 481
- Cook, V. A. *see* Leeder, J. S., 234
- Coon, M. J. *see* Ding, X., 1113
- Coon, M. J. *see* Raner, G. M., 515
- Coronel, E. C. *see* Bahouth, S. W., 1049
- Costa, E. *see* Impagnatiello, F., 822
- Coutsogeorgopoulos, C. *see* Kallia-Raftopoulos, S., 1085
- Coyle, A. J. *see* Dowd, L. A., 465
- Daniel, D. S. *see* Hoffenberg, S., 156
- Davis, C. D. *see* Nerurkar, P. V., 874
- De Angelis, I. *see* Rossi, L., 547
- DeBolt, B. K. *see* Jiang, Q., 458
- De Clercq, E. *see* Balzarini, J., 882
- Deeley, R. G. *see* Stride, B. D., 962
- Delarue, C. *see* Contesse, V., 481
- Del Tacca, M. *see* Danesi, R., 972
- Dicker, A. P. *see* Ercikan-Abali, E. A., 430
- Dickey, B. F. *see* Hoffenberg, S., 156
- Ding, X., Spink, D. C., Bhama, J. K., Sheng, J. J., Vaz, A. D. N., and Coon, M. J. Metabolic Activation of 2,6-Dichlorobenzonitrile, an Olfactory-Specific Toxicant, by Rat, Rabbit, and Human Cytochromes P450, 1113
- Domin, B. *see* Freneau, R. T., Jr., 1033
- Dopico, A. M., Lemos, J. R., and Treistman, S. N. Ethanol Increases the Activity of Large Conductance, Ca²⁺-Activated K⁺ Channels in Isolated Neurohypophyseal Terminals, 40
- Dowd, L. A., Coyle, A. J., Rothstein, J. D., Pritchett, D. B., and Robinson, M. B. Comparison of Na⁺-Dependent Glutamate Transport Activity in Synaptosomes, C6 Glioma, and *Xenopus* Oocytes Expressing Excitatory Amino Acid Carrier 1 (EAAC1), 465
- Drach, J. *see* Chiba, P., 1122
- Drewe, J. A. *see* Hawkinson, J. E., 897
- Drozda, S. E. *see* Macdonald, D., 808
- Dubru, F. *see* Mankhetkorn, S., 532
- Dukat, M. *see* Glennon, R. A., 198
- Duke, C. C. *see* Roberts-Thomson, S. J., 105
- Dumuis, A. *see* Contesse, V., 481

E

- Eberwine, J. H. *see* Ghasemzadeh, M. B., 852
- Ecker, G. *see* Chiba, P., 1122
- Edwardson, J. M. *see* Koenig, J. A., 351
- Eidne, K. A. *see* Svoboda, P., 646
- Eling, T. E. *see* Glasgow, W. C., 1042
- El-Naggar, A. K. *see* Ling, Y.-H., 832
- Ercikan-Abali, E. A., Waltham, M. C., Dicker, A. P., Schweitzer, B. I., Gritsman, H., Banerjee, D., and Bertino, J. R. Variants of Human Dihydrofolate Reductase with Substitutions at Leucine-22: Effect on Catalytic and Inhibitor Binding Properties, 430
- Ernsberger, P. *see* Separovic, D., 668
- Escher, E. *see* Laporte, S. A., 89
- Euchenhofer, C. *see* Kleinert, H., 15
- Evans, C. *see* Befort, K., 216

F

- Fain, J. N. *see* Bahouth, S. W., 1049
- Fan, Z. *see* Makielski, J. C., 30
- Felder, R. A. *see* Yamaguchi, I., 373
- Feldman, R. I., Fried, S., Mann, E., Wu, J. M., and Liang, M. Gastrin-Releasing Peptide Receptor Signaling Resulting in Growth Inhibition, 505
- Felts, K. A. *see* Cobb, R. R., 998
- Fernandez-Salguero, P. *see* Lee, I. J., 980
- Fiallo, M. *see* Mankhetkorn, S., 532
- Fiedler, B. *see* Redondo, J., 49
- Fisher, J. F. *see* Blackmore, P. F., 727
- Fishman, J. B. *see* Hoffenberg, S., 156
- Fletcher, G. H., and Steinbach, J. H. Ability of Nondepolarizing Neuromuscular Blocking Drugs to Act as Partial Agonists at Fetal and Adult Mouse Muscle Nicotinic Receptors, 938
- Ford, A. P. D. W., Arredondo, N. F., Blue, D. R., Jr., Bonhaus, D. W., Jasper, J., Kava, M. S., Lesnick, J., Pfister, J. R., Shieh, I. A., Vimont, R. L., Williams, T. J., McNeal, J. E., Stamey, T. A., and

D

- Dahlman-Wright, K. *see* Makino, Y., 612
- Danesi, R., Nardini, D., Basolo, F., Del Tacca, M., Samid, D., and Myers, C. E. Phenylacetate Inhibits Protein Isoprenylation and Growth of the Androgen-Independent LNCaP Prostate Cancer Cells Transfected with the T24 Ha-ras Oncogene, 972

- Clarke, D. E. RS-17053 (*N*-[2-(2-Cyclopropylmethoxyphenoxy)-ethyl]-5-chloro- α , α -dimethyl-1*H*-indole-3-ethanamine hydrochloride), a Selective α_{1A} -Adrenoceptor Antagonist, Displays Low Affinity for Functional α_1 -Adrenoceptors in Human Prostate: Implications for Adrenoceptor Classification, 209
- Forget, M.-A., Lebel, N., Sirois, P., Boulanger, Y., and Fournier, A. Biological and Molecular Analyses of Structurally Reduced Analogues of Endothelin-1, 1071
- Fornwald, L. W. *see* Nerurkar, P. V., 874
- Förstermann, U. *see* Kleinert, H., 15
- Fossé, P. *see* René, B., 343
- Fournier, A. *see* Forget, M.-A., 1071
- Freemerman, A. J., Turner, A. J., Birrer, M. J., Szabo, E., Valerie, K., and Grant, S. Role of *c-jun* in Human Myeloid Leukemia Cell Apoptosis Induced by Pharmacological Inhibitors of Protein Kinase C, 788
- Freissmuth, M. *see* Hohenegger, M., 73
- Freissmuth, M., Boehm, S., Beindl, W., Nickel, P., Ijzerman, A. P., Hohenegger, M., and Nanoff, C. Suramin Analogues as Subtype-Selective G Protein Inhibitors, 602
- Freneau, R. T., Jr., Velaz-Faircloth, M., Miller, J. W., Henzi, V. A., Cohen, S. M., Nadler, J. V., Shafqat, S., Blakely, R. D., and Domin, B. A Novel Nonopiod Action of Enkephalins: Competitive Inhibition of the Mammalian Brain High Affinity L-Proline Transporter, 1033
- Fried, S. *see* Feldman, R. I., 505
- Friedman, J. *see* Clark, R. B., 182
- Fritschy, J. M. *see* Impagnatiello, F., 822
- Frucht, M. M. *see* Garland, A. M., 438
- Fu, D. *see* Javitch, J. A., 692
- Fukuchi, J.-I. *see* Kashiwagi, K., 1131
- Fukui, T. *see* Kai, H., 96
- Fumagalli, F. *see* Riva, M. A., 699
- Funae, Y. *see* Jiang, Q., 458
- G**
- Gackenhimer, S. L. *see* Gehlert, D. R., 224
- Gadski, R. A. *see* Gehlert, D. R., 224
- Gaedigk, A. *see* Leeder, J. S., 234
- Gagucas, E. *see* Ali-Osman, F., 1012
- Gaivin, R. *see* Perez, D. M., 112
- Galindo, M. F. *see* Prehn, J. H. M., 319
- Galli, P. *see* Pizzi, M., 586
- Galvez, T. *see* Prézeau, L., 422
- Garland, A. M., Grady, E. F., Lovett, M., Vigna, S. R., Frucht, M. M., Krause, J. E., and Bunnett, N. W. Mechanisms of Desensitization and Resensitization of G Protein-Coupled Neurokinin₁ and Neurokinin₂ Receptors, 438
- Garnier-Suillerot, A. *see* Mankhetkorn, S., 532
- Garrett, E. M. *see* Hadingham, K. L., 253
- Gee, K. W. *see* Hawkinson, J. E., 897
- Gehlert, D. R., Beavers, L. S., Johnson, D., Gackenhimer, S. L., Schober, D. A., and Gadski, R. A. Expression Cloning of a Human Brain Neuropeptide Y Y2 Receptor, 224
- Gekeler, V. *see* Chiba, P., 1122
- Geoghegan, T. E. *see* Webb, S. J., 276
- Gerlach, J. H. *see* Stride, B. D., 962
- Gershengorn, M. C. *see* Laakkonen, L., 1092
- Ghade, G. D. *see* Prehn, J. H. M., 319
- Ghasemzadeh, M. B., Sharma, S., Surmeier, D. J., Eberwine, J. H., and Chesselet, M.-F. Multiplicity of Glutamate Receptor Subunits in Single Striatal Neurons: An RNA Amplification Study, 852
- Giembycz, M. A. *see* Rousell, J., 629
- Girvin, M. E. *see* Hockerman, G. H., 1021
- Glasgow, W. C., Hill, E. M., McGown, S. R., Tomer, K. B., and Eling, T. E. Regulation of 13(S)-Hydroxyoctadecadienoic Acid Biosynthesis in Syrian Hamster Embryo Fibroblasts by the Epidermal Growth Factor Receptor Tyrosine Kinase, 1042
- Glashofer, M. *see* Kim, J., 683
- Glennon, R. A., Dukat, M., Westkaemper, R. B., Ismaiel, A. M., Izzarelli, D. G., and Parker, E. M. The Binding of Propranolol at 5-Hydroxytryptamine_{1D β} T355N Mutant Receptors May Involve Formation of Two Hydrogen Bonds to Asparagine, 198
- Gobbi, M., Parotti, L., and Mennini, T. Are 5-Hydroxytryptamine₁ Receptors Involved in [³H]5-Hydroxytryptamine Binding to 5-Hydroxytryptamine_{1nonA-nonB} Receptors in Rat Hypothalamus?, 556
- Gokmen-Polar, Y. *see* Bahouth, S. W., 1049
- Goldenberg, S. *see* Chiba, P., 1122
- Gomez, J. *see* Prézeau, L., 422
- Gonzalez, F. J. *see* Lee, I. J., 980
- Gosselin, G. *see* Mazumder, A., 621
- Goto, M., Yamada, K., Katayama, K.-I., and Tanaka, I. Inhibitory Effect of E3330, a Novel Quinone Derivative Able to Suppress Tumor Necrosis Factor- α Generation, on Activation of Nuclear Factor- κ B, 860
- Grady, E. F. *see* Garland, A. M., 438
- Graham, R. M. *see* Perez, D. M., 112
- Grant, S. *see* Freemerman, A. J., 788
- Grassie, M. A. *see* Svoboda, P., 646
- Griendling, K. K. *see* Kai, H., 96
- Gritsman, H. *see* Ercikan-Abali, E. A., 430
- Guarnieri, F. *see* Laakkonen, L., 1092
- Guerra, L. *see* Lorenzen, A., 915
- Guidotti, A. *see* Impagnatiello, F., 822
- Guillemette, G. *see* Laporte, S. A., 89
- Guo, X. *see* Anyanwutaku, I. O., 721
- Guzelian, P. S. *see* Schuetz, J. D., 63
- H**
- Haddad, E.-B. *see* Rousell, J., 629
- Haddad, E.-B., Rousell, J., Mak, J. C. W., and Barnes, P. J. Transforming Growth Factor- β 1 Induces Transcriptional Down-regulation of m2 Muscarinic Receptor Gene Expression, 781
- Hadingham, K. L., Garrett, E. M., Wafford, K. A., Bain, C., Heavens, R. P., Sirinathsinghi, D. J. S., and Whiting, P. J. Cloning of cDNAs Encoding the Human γ -Aminobutyric acid Type A Receptor α 6 Subunit and Characterization of the Pharmacology of α 6-Containing receptors, 253
- Haga, T. *see* Itokawa, M., 560
- Hales, C. N. *see* Lee, K., 715
- Hall, A. C. *see* Lee, K., 715
- Hamaguchi, H. *see* Itokawa, M., 560
- Hamel, C. *see* Contesse, V., 481
- Hanley, M. R. *see* Kim, H. Y., 360
- Hawkinson, J. E., Drewe, J. A., Kimbrough, C. L., Chen, J.-S., Hogenkamp, D. J., Lan, N. C., Gee, K. W., Shen, K.-Z., Whitmore, E. R., and Woodward, R. M. 3 α -Hydroxy-3 β -trifluoromethyl-5 α -pregnan-20-one (Co 2-1970): A Partial Agonist at the Neuroactive Steroid Site of the γ -Aminobutyric acid_A Receptor, 897
- Heavens, R. P. *see* Hadingham, K. L., 253
- Hefti, F. *see* Venero, J. L., 303
- Hen, R. *see* Yu, X.-J., 761
- Henzi, V. A. *see* Freneau, R. T., Jr., 1033
- Hermans, E., Octave, J.-N., and Maloteaux, J.-M. Interaction of the COOH-Terminal Domain of the Neurotensin Receptor with a G Protein Does Not Control the Phospholipase C Activation but Is Involved in the Agonist-Induced Internalization, 365
- Hesschenbrouck, J. *see* Mankhetkorn, S., 532
- Hickman, J. A. *see* Beere, H. M., 842
- Hill, E. M. *see* Glasgow, W. C., 1042
- Hill, S. J. *see* McCrea, K. E., 927

- Ho, A. K., Ogiwara, T., and Chik, C. L. Thapsigargin Modulates Agonist-Stimulated Cyclic AMP Responses through Cytosolic Calcium-Dependent and -Independent Mechanisms in Rat Pinealocytes, 1104
- Hockerman, G. H., Girvin, M. E., Malbon, C. C., and Ruoho, A. E. Antagonist Conformations within the β_2 -Adrenergic Receptor Ligand Binding Pocket, 1021
- Hoffenberg, S., Shannon, T. M., Noonan, T. P., Liu, S., Daniel, D. S., Fishman, J. B., Rubins, J. B., Misra, H. K., Wright, G. E., and Dickey, B. F. Specific and Effective Interaction of a Guanine Nucleotide Analogue with Small G Proteins, 156
- Hoffman, B. B. *see* Thomas, J. M., 907
- Hogenkamp, D. J. *see* Hawkinson, J. E., 897
- Hohenegger, M. *see* Freissmuth, M., 602
- Hohenegger, M., Mitterauer, T., Voss, T., Nanoff, C., and Freissmuth, M. Thiophosphorylation of the G Protein β Subunit in Human Platelet Membranes: Evidence against a Direct Phosphate Transfer Reaction with G_{α} Subunits, 73
- Holder, G. M. *see* Roberts-Thomson, S. J., 105
- Hollenberg, M. D., Saifeddine, M., and Al-ani, B. Proteinase-Activated Receptor-2 in Rat Aorta: Structural Requirements for Agonist Activity of Receptor-Activating Peptides, 229
- Holy, A. *see* Kramata, P., 1005
- Holz, R. W. *see* Wick, P. F., 295
- Houghton, P. J. *see* Shu, L. L., 595
- Hoyt, D. G. *see* Rusnak, J. M., 244
- Huang, Y. *see* Jiang, Q., 458
- Huettner, J. E. *see* Wilding, T. J., 540
- Humbert, Y. *see* Rimland, J. M., 387
- Hussy, N. *see* Werner, P., 656
- Hwa, J. *see* Perez, D. M., 112
- I**
- Igarashi, K. *see* Kashiwagi, K., 1131
- Ihrig-Biedert, I. *see* Kleinert, H., 15
- Ijzerman, A. P. *see* Freissmuth, M., 602
- Ikeda, S. R. *see* Pan, X., 707
- Imbach, J.-L. *see* Mazumder, A., 621
- Imerman, B. A. *see* Anastasiadis, P. Z., 149
- Impagnatiello, F., Pesold, C., Longone, P., Caruncho, H., Fritschy, J. M., Costa, E., and Guidotti, A. Modifications of γ -Aminobutyric Acid_A Receptor Subunit Expression in Rat Neocortex during Tolerance to Diazepam, 822
- Irons, R. D. *see* Pyatt, D. W., 1097
- Ismail, A. M. *see* Glennon, R. A., 198
- Ito, K. *see* Itokawa, M., 560
- Itokawa, M., Toru, M., Ito, K., Tsuga, H., Kameyama, K., Haga, T., Arinami, T., and Hamaguchi, H. Sequestration of the Short and Long Isoforms of Dopamine D₂ Receptors Expressed in Chinese Hamster Ovary Cells, 560
- Izzarelli, D. G. *see* Glennon, R. A., 198
- J**
- Jacobson, K. A. *see* Kim, J., 683
- Jacquemin-Sablon, A. *see* René, B., 343
- Jakobs, K. H. *see* Van Koppen, C. J., 956
- Jarolimek, W., Soman, K. V., Alam, M., and Brown, A. M. Structure-Activity Relationship of Quaternary Ammonium Ions at the External Tetraethylammonium Binding Site of Cloned Potassium Channels, 165
- Jasper, J. *see* Ford, A. P. D. W., 209
- Javitch, J. A., Fu, D., and Chen, J. Differentiating Dopamine D₂ Ligands by Their Sensitivities to Modification of the Cysteine Exposed in the Binding-Site Crevice, 692
- Jeong, K. S. *see* Lee, I. J., 980
- Ji, Z. *see* Anyanwutaku, I. O., 721
- Jiang, Q. *see* Kim, J., 683
- Jiang, Q., Huang, Y., Voigt, J. M., DeBolt, B. K., Kominami, S., Takemori, S., Funae, Y., and Colby, H. D. Expression and Zonal Distribution of *CYP2D16* in the Guinea Pig Adrenal Cortex: Relationship to Xenobiotic Metabolism, 458
- Johnson, D. *see* Gehlert, D. R., 224
- Johnson, M. *see* Clark, R. B., 182
- Jones, K. A. *see* Werner, P., 656
- Jones, S. V. P. Modulation of the Inwardly Rectifying Potassium Channel IRK1 by the m1 Muscarinic Receptor, 662
- Jordán, J. *see* Prehn, J. H. M., 319
- Jose, P. A. *see* Yamaguchi, I., 373
- K**
- Kai, H., Fukui, T., Lassègue, B., Shah, A., Minieri, C. A., and Griendling, K. K. Prolonged Exposure to Agonist Results in a Reduction in the Levels of the G_q/G_{11} α Subunits in Cultured Vascular Smooth Muscle Cells, 96
- Kallarakal, A. T. *see* Lee, I. J., 980
- Kallia-Raftopoulos, S., Synetos, D., Ottenheijm, H. C. J., Van Den Broek, L. A. G. M., and Coutsoygeorgopoulos, C. Sparsomycin and Its Analogues: A New Approach for Evaluating Their Potency as Inhibitors of Peptide Bond Formation, 1085
- Kamboj, R. K. *see* Bleakman, D., 581
- Kameyama, K. *see* Itokawa, M., 560
- Karlsson, A. *see* Balzarini, J., 882
- Kashiwagi, K., Fukuchi, J.-I., Chao, J., Igarashi, K., and Williams, K. An Aspartate Residue in the Extracellular Loop of the *N*-Methyl-D-aspartate Receptor Controls Sensitivity to Spermine and Protons, 1131
- Katayama, K.-I. *see* Goto, M., 860
- Katsura, Y. *see* Sugawara, F., 447
- Kava, M. S. *see* Ford, A. P. D. W., 209
- Kessler, M., Arai, A., Quan, A., and Lynch, G. Effect of Cyclothiazide on Binding Properties of AMPA-Type Glutamate Receptors: Lack of Competition between Cyclothiazide and GYKI 52466, 123
- Kester, M. *see* Separovic, D., 668
- Khan, R. N. *see* Lee, K., 715
- Khélifa, T. *see* René, B., 343
- Kieffer, B. *see* Befort, K., 216
- Kim, G.-D. *see* Svoboda, P., 646
- Kim, H. Y., Thomas, D., and Hanley, M. R. Stimulation of Ca²⁺-Dependent Membrane Currents in *Xenopus* Oocytes by Microinjection of Pyrimidine Nucleotide-Glucose Conjugates, 360
- Kim, J., Jiang, Q., Glashofer, M., Yehle, S., Wess, J., and Jacobson, K. A. Glutamate Residues in the Second Extracellular Loop of the Human A_{2A} Adenosine Receptor Are Required for Ligand Recognition, 683
- Kim, P. M., and Wells, P. G. Phenytoin-Initiated Hydroxyl Radical Formation: Characterization by Enhanced Salicylate Hydroxylation, 172
- Kimbrough, C. L. *see* Hawkinson, J. E., 897
- Kimmitt, S. M., Whitney, R. A., and Marks, G. S. Isolation of *N*-Vinylprotoporphyrin IX after Hepatic Cytochrome P450 Inactivation by 3-[(Aryltio)ethyl]sydnone in Chick Embryos Pretreated with Phenobarbital, Glutethimide, Dexamethasone, and β -Naphthoflavone: Differential Inhibition of Ferrochelatase by *N*-Vinylprotoporphyrin Regioisomers, 676
- Kleinert, H., Euchenhofer, C., Ihrig-Biedert, I., and Förstermann, U. Glucocorticoids Inhibit the Induction of Nitric Oxide Synthase II by Down-regulating Cytokine-Induced Activity of Transcription Factor Nuclear Factor- κ B, 15
- Klimas, C. *see* Seiler, S. M., 190
- Knusel, B. *see* Venero, J. L., 303

- Koenig, J. A., and Edwardson, J. M. Intracellular Trafficking of the Muscarinic Acetylcholine Receptor: Importance of Subtype and Cell Type, 351
- Kominami, S. *see* Jiang, Q., 458
- Kondo, Y. *see* Rusnak, J. M., 244
- Konopa, J. *see* Skladanowski, 772
- Krajewski, S. *see* Prehn, J. H. M., 319
- Kramata, P., Votruba, I., Otová, B., and Holý, A. Different Inhibitory Potencies of Acyclic Phosphonomethoxyalkyl Nucleotide Analogs toward DNA Polymerases α , δ , and ϵ , 1005
- Krause, J. E. *see* Garland, A. M., 438
- Krishek, B. J., Moss, S. J., and Smart, T. G. Homomeric β_1 γ -Aminobutyric acid_A Receptor-Ion Channels: Evaluation of Pharmacological and Physiological Properties, 494
- Kuhn, D. M. *see* Anastasiadis, P. Z., 149
- Kuppusamy, P. *see* Li, Y., 404, 412
- Kyle, J. W. *see* Makielski, J. C., 30

L

- Laakkonen, L., Li, W., Perlman, J. H., Guarnieri, F., Osman, R., Moeller, K. D., and Gershengorn, M. C. Restricted Analogues Provide Evidence of a Biologically Active Conformation of Thyrotropin-Releasing Hormone, 1092
- Lan, N. C. *see* Hawkinson, J. E., 897
- Landi, M. *see* Nisoli, E., 7
- Laporte, S. A., Servant, G., Richard, D. E., Escher, E., Guillemette, G., and Leduc, R. The Tyrosine within the NPX_nY Motif of the Human Angiotensin II Type 1 Receptor Is Involved in Mediating Signal Transduction but Is Not Essential for Internalization, 89
- Larsen, A. K. *see* Skladanowski, 772
- Laser, K. T. *see* Van Koppen, C. J., 956
- Lasker, J. M. *see* Carpenter, S. P., 260
- Lasker, J. M. *see* Rao, D. N. R., 814
- Lassègue, B. *see* Kai, H., 96
- Laurent, G. *see* Barret, J.-M., 766
- Lazo, J. S. *see* Rusnak, J. M., 244
- Lebel, N. *see* Forget, M.-A., 1071
- Leduc, R. *see* Laporte, S. A., 89
- Lee, H.-C. *see* Cai, J. J., 81
- Lee, I. J., Jeong, K. S., Roberts, B. J., Kallarakal, A. T., Fernandez-Salguero, P., Gonzalez, F. J., and Song, B. J. Transcriptional Induction of the Cytochrome P4501A1 Gene by a Thiazolium Compound, YH439, 980
- Lee, K., Khan, R. N., Rowe, I. C. M., Ozanne, S. E., Hall, A. C., Papadakis, E., Hales, C. N., and Ashford, M. L. J. Citalizindol Inhibits ATP-Sensitive K⁺ Channels and Stimulates Insulin Secretion in CRI-G1 Insulin-Secreting Cells, 715
- Lee, K.-H. *see* Anyanwutaku, I. O., 721
- Leeder, J. S., Gaedigk, A., Lu, X., and Cook, V. A. Epitope Mapping Studies with Human Anti-Cytochrome P450 3A Antibodies, 234
- Leeman, S. E. *see* Macdonald, D., 808
- Lefebvre, H. *see* Contesse, V., 481
- Lemon, S. C. *see* Walsh, K. B., 379
- Lemos, J. R. *see* Dopico, A. M., 40
- Lesnick, J. *see* Ford, A. P. D. W., 209
- Levine, R. A. *see* Anastasiadis, P. Z., 149
- Levy, G. N. *see* Nerurkar, P. V., 874
- Lewis, D. L. *see* Pan, X., 707
- Ley, M. D. *see* Boeve, C. M. A., 58
- Li, W. *see* Laakkonen, L., 1092
- Li, Y., Kuppusamy, P., Zweier, J. L., and Trush, M. A. Role of Cu/Zn-Superoxide Dismutase in Xenobiotic Activation. I. Chemical Reactions Involved in the Cu/Zn-Superoxide Dismutase-Accelerated Oxidation of the Benzene Metabolite 1,4-Hydroquinone, 404
- Li, Y., Kuppusamy, P., Zweier, J. L., and Trush, M. A. Role of Cu/Zn-Superoxide Dismutase in Xenobiotic Activation. II. Bio-

- logical Effects Resulting from the Cu/Zn-Superoxide Dismutase-Accelerated Oxidation of the Benzene Metabolite 1,4-Hydroquinone, 412
- Liang, M. *see* Feldman, R. I., 505
- Limberis, J. T. *see* Makielski, J. C., 30
- Ling, Y.-H., El-Naggar, A. K., Priebe, W., and Perez-Soler, R. Cell Cycle-Dependent Cytotoxicity, G2/M Phase Arrest, and Disruption of p34^{cdc2}/Cyclin B₁ Activity Induced by Doxorubicin in Synchronized P388 Cells, 832
- Liu, P. C. C., Phillips, M. A., and Matsumura, F. Alteration by 2,3,7,8-Tetrachlorodibenzo-p-dioxin of CCAAT/Enhancer Binding Protein Correlates with Suppression of Adipocyte Differentiation in 3T3-L1 Cells, 989
- Liu, S. *see* Hoffenberg, S., 156
- Long, K. J. *see* Walsh, K. B., 379
- Longone, P. *see* Impagnatiello, F., 822
- Lorenzen, A., Guerra, L., Vogt, H., and Schwabe, U. Interaction of Full and Partial Agonists of the A₁ Adenosine Receptor with Receptor/G Protein Complexes in Rat Brain Membranes, 915
- Louie, M. C. *see* Anastasiadis, P. Z., 149
- Lovati, E. *see* Riva, M. A., 699
- Lovett, M. *see* Garland, A. M., 438
- Lowe, J. A., III *see* Macdonald, D., 808
- Lu, X. *see* Leeder, J. S., 234
- Lynch, G. *see* Kessler, M., 123

M

- Macdonald, D., Silberman, S. C., Lowe, J. A., III, Drozda, S. E., Leeman, S. E., and Boyd, N. D. Photoaffinity Labeling of the Human Substance P (Neurokinin-1) Receptor with [³H]Azido-CP-96,345, a Photoreactive Derivative of a Nonpeptide Antagonist, 808
- Macdonald, R. L. *see* Saxena, N. C., 567
- Mackman, N. *see* Cobb, R. R., 998
- Macor, J. E. *see* Yu, X.-J., 761
- Maelicke, A. *see* Schrattenholz, A., 1
- Mak, J. C. W. *see* Haddad, E.-B., 781
- Mak, J. C. W. *see* Rousell, J., 629
- Makielski, J. C., Limberis, J. T., Chang, S. Y., Fan, Z., and Kyle, J. W. Coexpression of β_1 with Cardiac Sodium Channel α Subunits in Oocytes Decreases Lidocaine Block, 30
- Makino, I. *see* Makino, Y., 612
- Makino, Y., Tanaka, H., Dahlman-Wright, K., and Makino, I. Modulation of Glucocorticoid-Inducible Gene Expression by Metal Ions, 612
- Malbon, C. C. *see* Hockerman, G. H., 1021
- Malherbe, P. *see* Buhr, A., 1080
- Maloteaux, J.-M. *see* Hermans, E., 365
- Mankhetkorn, S., Dubru, F., Hesschenbrouck, J., Fiallo, M., and Garnier-Suillerot, A. Relation among the Resistance Factor, Kinetics of Uptake, and Kinetics of the P-Glycoprotein-Mediated Efflux of Doxorubicin, Daunorubicin, 8-(S)-Fluoridarubicin, and Idarubicin in Multidrug-Resistant K562 Cells, 532
- Mann, E. *see* Feldman, R. I., 505
- Marchese, E. *see* Rossi, L., 547
- Marks, G. S. *see* Kimmitt, S. M., 676
- Mary, S. *see* Prézeau, L., 422
- Masaki, T. *see* Sugawara, F., 447
- Mathur, M. *see* Perez, D. M., 112
- Matsueda, G. R. *see* Seiler, S. M., 190
- Matsumura, F. *see* Liu, P. C. C., 989
- Mayer, M. L. *see* Partin, K. M., 142
- Mazda, O. *see* Sugawara, F., 447
- Mazumder, A., Neamati, N., Sommadossi, J.-P., Gosselin, G., Schinazi, R. F., Imbach, J.-L., and Pommier, Y. Effects of Nucleotide Analogues on Human Immunodeficiency Virus Type 1 Integrase, 621

- McCrea, K. E., and Hill, S. J. Comparison of Duration of Agonist Action at β_1 - and β_2 -Adrenoceptors in C6 Glioma Cells: Evidence that the Long Duration of Action of Salmeterol Is Specific to the β_2 -Adrenoceptor, 927
- McGown, S. R. *see* Glasgow, W. C., 1042
- McManus, M. E. *see* Roberts-Thomson, S. J., 105
- McNeal, J. E. *see* Ford, A. P. D. W., 209
- Memo, M. *see* Pizzi, M., 586
- Mennini, T. *see* Gobbi, M., 556
- Methfessel, C. *see* Schrattenholz, A., 1
- Meyer Zu Heringdorf, D. *see* Van Koppen, C. J., 956
- Miller, J. W. *see* Freneau, R. T., Jr., 1033
- Miller, R. J. *see* Prehn, J. H. M., 319
- Milligan, G. *see* Svoboda, P., 646
- Miloso, M. *see* Barrie, A., 399
- Minieri, C. A. *see* Kai, H., 96
- Miras-Portugal, M. T. *see* Rodriguez-Pascual, F., 1058
- Misra, H. K. *see* Hoffenberg, S., 156
- Mitterauer, T. *see* Hohenegger, M., 73
- Miwa, S. *see* Sugawara, F., 447
- Moeller, K. D. *see* Laakkonen, L., 1092
- Molteni, R. *see* Riva, M. A., 699
- Moskowitz, M. A. *see* Yu, X.-J., 761
- Moss, S. J. *see* Krishek, B. J., 494
- Myers, C. E. *see* Danesi, R., 972

N

- Nadler, J. V. *see* Freneau, R. T., Jr., 1033
- Nanoff, C. *see* Freissmuth, M., 602
- Nanoff, C. *see* Hohenegger, M., 73
- Nantel, F. *see* Rousseau, G., 752
- Nardini, D. *see* Danesi, R., 972
- Neamati, N. *see* Mazumder, A., 621
- Nerurkar, P. V., Schut, H. A. J., Anderson, L. M., Riggs, C. W., Fornwald, L. W., Davis, C. D., Snyderwine, E. G., Thorgeirsson, S. S., Weber, W. W., Rice, J. M., and Levy, G. N. *Ahr* Locus Phenotype in Congenic Mice Influences Hepatic and Pulmonary DNA Adduct Levels of 2-Amino-3-methylimidazo[4,5-f]quinoline in the Absence of Cytochrome P450 Induction, 874
- Nestler, E. J. *see* Nye, H. E., 636
- Nickel, P. *see* Freissmuth, M., 602
- Ninomiya, H. *see* Sugawara, F., 447
- Nisoli, E., Tonello, C., Landi, M., and Carruba, M. O. Functional Studies of the First Selective β_3 -Adrenergic Receptor Antagonist SR 59230A in Rat Brown Adipocytes, 7
- Noonan, T. P. *see* Hoffenberg, S., 156
- North, R. A. *see* Rimland, J. M., 387
- North, R. A. *see* Werner, P., 656
- Nye, H. E., and Nestler, E. J. Induction of Chronic Fos-Related Antigens in Rat Brain by Chronic Morphine Administration, 636

O

- Octave, J.-N. *see* Hermans, E., 365
- Ogiwara, T. *see* Ho, A. K., 1104
- Okamoto, Y. *see* Sugawara, F., 447
- Olianas, M. C., and Onali, P. Characterization of the G Protein Involved in the Muscarinic Stimulation of Adenylyl Cyclase of Rat Olfactory Bulb, 22
- Onali, P. *see* Olianas, M. C., 22
- Ornstein, P. L. *see* Bleakman, D., 581
- Osman, R. *see* Laakkonen, L., 1092
- Otová, B. *see* Kramata, P., 1005
- Ottenheijm, H. C. J. *see* Kallia-Raftopoulos, S., 1085
- Ozanne, S. E. *see* Lee, K., 715

P

- Pan, X., Ikeda, S. R., and Lewis, D. L. Rat Brain Cannabinoid Receptor Modulates N-Type Ca^{2+} Channels in a Neuronal Expression System, 707
- Papadakis, E. *see* Lee, K., 715
- Parker, E. M. *see* Glennon, R. A., 198
- Parotti, L. *see* Gobbi, M., 556
- Parry, G. C. N. *see* Cobb, R. R., 998
- Partin, K. M., and Mayer, M. L. Negative Allosteric Modulation of Wild-Type and Mutant AMPA Receptors by GYKI 53655, 142
- Pedersen, J. Z. *see* Rossi, L., 547
- Pelemans, H. *see* Balzarini, J., 882
- Peluso, M. *see* Seiler, S. M., 190
- Pereira, E. F. R. *see* Schrattenholz, A., 1
- Perez, D. M., Hwa, J., Gaivin, R., Mathur, M., Brown, F., and Graham, R. M. Constitutive Activation of a Single Effector Pathway: Evidence for Multiple Activation States of a G Protein-Coupled Receptor, 112
- Pérez-Pérez, M.-J. *see* Balzarini, J., 882
- Perez-Soler, R. *see* Ling, Y.-H., 832
- Perlman, J. H. *see* Laakkonen, L., 1092
- Pesold, C. *see* Impagnatiello, F., 822
- Pessah, I. N. *see* Wong, P. W., 740
- Pfister, J. R. *see* Ford, A. P. D. W., 209
- Phillips, M. A. *see* Liu, P. C. C., 989
- Pin, J.-P. *see* Prézeau, L., 422
- Pizzi, M., Galli, P., Consolandi, O., Arrighi, V., Memo, M., and Spano, P. F. Metabotropic and Ionotropic Transducers of Glutamate Signal Inversely Control Cytoplasmic Ca^{2+} Concentration and Excitotoxicity in Cultured Cerebellar Granule Cells: Pivotal Role of Protein Kinase C, 586
- Plisov, S. Y. *see* Skladanowski, 772
- Pollenz, R. S. The Aryl-Hydrocarbon Receptor, but not the Aryl-Hydrocarbon Receptor Nuclear Translocator Protein, Is Rapidly Depleted in Hepatic and Nonhepatic Culture Cells Exposed to 2,3,7,8-Tetrachlorodibenzo-p-dioxin, 391
- Pommier, Y. *see* Mazumder, A., 621
- Prehn, J. H. M., Bindokas, V. P., Jordán, J., Galindo, M. F., Ghadge, G. D., Roos, R. P., Boisse, L. H., Thompson, C. B., Krajewski, S., Reed, J. C., and Miller, R. J. Protective Effect of Transforming Growth Factor- $\beta 1$ on β -Amyloid Neurotoxicity in Rat Hippocampal Neurons, 319
- Prézeau, L., Gomez, J., Ahern, S., Mary, S., Galvez, T., Bockaert, J., and Pin, J.-P. Changes in the Carboxyl-Terminal Domain of Metabotropic Glutamate Receptor 1 by Alternative Splicing Generate Receptors with Differing Agonist-Independent Activity, 422
- Priebe, W. *see* Ling, Y.-H., 832
- Pritchett, D. B. *see* Dowd, L. A., 465
- Prough, R. A. *see* Webb, S. J., 276
- Pryor, K. *see* Seiler, S. M., 190
- Pyatt, D. W., Stillman, W. S., and Irons, R. D. Reactive Oxygen Species Mediate Stem Cell Factor Synergy with Granulocyte/Macrophage Colony-Stimulating Factor in a Subpopulation of Primitive Murine Hematopoietic Progenitor Cells, 1097

Q

- Quan, A. *see* Kessler, M., 123

R

- Racagni, G. *see* Riva, M. A., 699
- Rajagopal, S. *see* Ali-Osman, F., 1012
- Raner, G. M., Vaz, A. D. N., and Coon, M. J. Metabolism of All-*trans*, 9-*cis*, and 13-*cis* Isomers of Retinal by Purified Isozymes of

S

- Microsomal Cytochrome P450 and Mechanism-based Inhibition of Retinoid Oxidation by Citral, 515
- Rao, D. N. R., Yang, M.-X., Lasker, J. M., and Cederbaum, A. I. 1-Hydroxyethyl Radical Formation during NADPH- and NADH-Dependent Oxidation of Ethanol by Human Liver Microsomes, 814
- Ratti, E. *see* Rimland, J. M., 387
- Raucy, J. L. *see* Carpenter, S. P., 260
- Rayport, S. *see* Sulzer, D., 338
- Redondo, J., Fiedler, B., and Scheiner-Bobis, G. Palytoxin-Induced Na⁺ Influx into Yeast Cells Expressing the Mammalian Sodium Pump Is Due to the Formation of a Channel within the Enzyme, 49
- Reed, J. C. *see* Prehn, J. H. M., 319
- René, B., Fossé, P., Khélifa, T., Jacquemin-Sablon, A., and Bailly, C. The 1'-Substituent on the Anilino Ring of the Antitumor Drug Amsacrine Is a Critical Element for Topoisomerase II Inhibition and Cytotoxicity, 343
- Rice, J. M. *see* Nerurkar, P. V., 874
- Richard, D. E. *see* Laporte, S. A., 89
- Riggs, C. W. *see* Nerurkar, P. V., 874
- Rimland, J. M., Seward, E. P., Humbert, Y., Ratti, E., Trist, D. G., and North, R. A. Coexpression with Potassium Channel Subunits Used to Clone the Y₂ Receptor for Neuropeptide Y, 387
- Riva, M. A., Molteni, R., Lovati, E., Fumagalli, F., Rusnati, M., and Racagni, G. Cyclic AMP-Dependent Regulation of Fibroblast Growth Factor-2 Messenger RNA Levels in Rat Cortical Astrocytes: Comparison with Fibroblast Growth Factor-1 and Ciliary Neurotrophic Factor, 699
- Roberts, B. J. *see* Lee, I. J., 980
- Roberts-Thomson, S. J., McManus, M. E., Duke, C. C., Agnew, R., and Holder, G. M. Stereoselective and Regioselective Hydration of 7-Methylbenz[c]acridine-5,6-oxide Enantiomers by Rodent and Human Microsomal Epoxide Hydrolases, 105
- Robinson, M. B. *see* Dowd, L. A., 465
- Rodriguez-Pascual, F., Miras-Portugal, M. T., and Torres, M. Effect of Cyclic GMP-Increasing Agents Nitric Oxide and C-Type Natriuretic Peptide on Bovine Chromaffin Cell Function: Inhibitory Role Mediated by Cyclic GMP-Dependent Protein Kinase, 1058
- Roos, R. P. *see* Prehn, J. H. M., 319
- Rossi, L., De Angelis, I., Pedersen, J. Z., Marchese, E., Stamatii, A., Rotilio, G., and Zucco, F. N-[5-Nitro-2-furfurylidene]-3-amino-2-oxazolidinone Activation by the Human Intestinal Cell Line Caco-2 Monitored through Noninvasive Electron Spin Resonance Spectroscopy, 547
- Roth, U. *see* Schrattenholz, A., 1
- Rothstein, J. D. *see* Dowd, L. A., 465
- Rotilio, G. *see* Rossi, L., 547
- Rousell, J. *see* Haddad, E.-B., 781
- Rousell, J., Haddad, E.-B., Mak, J. C. W., Webb, B. L. J., Gienbycz, M. A., and Barnes, P. J. β -Adrenoceptor-Mediated Down-regulation of M₂ Muscarinic Receptors: Role of Cyclic Adenosine 5'-monophosphate-Dependent Protein Kinase and Protein Kinase C, 629
- Rousseau, G., Nantel, F., and Bouvier, M. Distinct Receptor Domains Determine Subtype-Specific Coupling and Desensitization Phenotypes for Human β_1 - and β_2 -Adrenergic Receptors, 752
- Rowe, I. C. M. *see* Lee, K., 715
- Rubins, J. B. *see* Hoffenberg, S., 156
- Ruoho, A. E. *see* Hockerman, G. H., 1021
- Rusnak, J. M., Calmels, T. P. G., Hoyt, D. G., Kondo, Y., Yalowich, J. C., and Lazo, J. S. Genesis of Discrete Higher Order DNA Fragments in Apoptotic Human Prostatic Carcinoma Cells, 244
- Rusnati, M. *see* Riva, M. A., 699
- Saifeddine, M. *see* Hollenberg, M. D., 229
- Salles, B. *see* Barret, J.-M., 766
- Samid, D. *see* Danesi, R., 972
- Sanders-Bush, E. *see* Westphal, R. S., 474
- San-Félix, A. *see* Balzarini, J., 882
- Saxena, N. C., and Macdonald, R. L. Properties of Putative Cerebellar γ -Aminobutyric acid_A Receptor Isoforms, 567
- Searce, K. *see* Yu, X.-J., 761
- Scheiner-Bobis, G. *see* Redondo, J., 49
- Schimerlik, M. I. *see* Bulseco, D. A., 132
- Schinazi, R. F. *see* Mazumder, A., 621
- Schmid, D. *see* Chiba, P., 1122
- Schober, D. A. *see* Gehlert, D. R., 224
- Schoepp, D. D. *see* Bleakman, D., 581
- Schrattenholz, A., Pereira, E. F. R., Methfessel, C., Roth, U., Weber, K.-H., Albuquerque, E. X., and Maelicke, A. Agonist Responses of Neuronal Nicotinic Acetylcholine Receptors Are Potentiated by a Novel Class of Allosterically Acting Ligands, 1
- Schuetz, E. G. *see* Schuetz, J. D., 63
- Schuetz, E. G., Beck, W. T., and Schuetz, J. D. Modulators and Substrates of P-glycoprotein and Cytochrome P4503A Coordinately Up-regulate these Proteins in Human Colon Carcinoma Cells, 311
- Schuetz, J. D. *see* Schuetz, E. G., 311
- Schuetz, J. D., Schuetz, E. G., Thottassery, J. V., Guzelian, P. S., Strom, S., and Sun, D. Identification of a Novel Dexamethasone Responsive Enhancer in the Human CYP3A5 Gene and Its Activation in Human and Rat Liver Cells, 63
- Schut, H. A. J. *see* Nerurkar, P. V., 874
- Schwabe, U. *see* Lorenzen, A., 915
- Schweitzer, B. I. *see* Ercikan-Abali, E. A., 430
- Seiler, S. M., Peluso, M., Tuttle, J. G., Pryor, K., Klimas, C., Matsueda, G. R., and Bernatowicz, M. S. Thrombin Receptor Activation by Thrombin and Receptor-Derived Peptides in Platelet and CHRF-288 Cell Membranes: Receptor-Stimulated GTPase and Evaluation of Agonists and Partial Agonists, 190
- Separovic, D., Kester, M., and Ernberger, P. Coupling of I₁-Imidazoline Receptors to Diacylglyceride Accumulation in PC12 Rat Pheochromocytoma Cells, 668
- Servant, G. *see* Laporte, S. A., 89
- Seward, E. P. *see* Rimland, J. M., 387
- Shafqat, S. *see* Freneau, R. T., Jr., 1033
- Shah, A. *see* Kai, H., 96
- Shannon, T. M. *see* Hoffenberg, S., 156
- Shapiro, B. H. *see* Agrawal, A. K., 523
- Sharma, S. *see* Ghasemzadeh, M. B., 852
- Sharpe, E. F. *see* Bleakman, D., 581
- Shen, K.-Z. *see* Hawkinson, J. E., 897
- Sheng, J. J. *see* Ding, X., 1113
- Shieh, I. A. *see* Ford, A. P. D. W., 209
- Shu, L. L., and Houghton, P. J. Separation of Resistance to Antitumor Diarylsulfonylurea Agents from Collateral Sensitivity to Mitochondrial Toxins, 595
- Sigel, E. *see* Buhr, A., 1080
- Silberman, S. C. *see* Macdonald, D., 808
- Sinha, B. K. *see* Wang, Z., 269
- Sirinathsinghji, D. J. S. *see* Hadingham, K. L., 253
- Sirois, P. *see* Forget, M.-A., 1071
- Skladanowski, Plisov, S. Y., Konopa, J., and Larsen, A. K. Inhibition of DNA Topoisomerase II by Imidazoacridinones, New Antineoplastic Agents with Strong Activity Against Solid Tumors, 772
- Smart, T. G. *see* Krishek, B. J., 494
- Smith, C. D. *see* Zhang, X., 288
- Snyders, D. J., and Chaudhary, A. High Affinity Open Channel Block by Dofetilide of *HERG* Expressed in a Human Cell Line, 949
- Snyderwine, E. G. *see* Nerurkar, P. V., 874

- Soman, K. V. *see* Jarolimek, W., 165
 Sommadossi, J.-P. *see* Mazumder, A., 621
 Song, B. J. *see* Lee, I. J., 980
 Song, Z.-H., and Bonner, T. I. A Lysine Residue of the Cannabinoid Receptor Is Critical for Receptor Recognition by Several Agonists but not WIN55212-2, 891
 Spano, P. F. *see* Pizzi, M., 586
 Spilman, C. H. *see* Blackmore, P. F., 727
 Spink, D. C. *see* Ding, X., 1113
 Stamey, T. A. *see* Ford, A. P. D. W., 209
 Stamatii, A. *see* Rossi, L., 547
 States, J. C. *see* Anastasiadis, P. Z., 149
 Steinbach, J. H. *see* Fletcher, G. H., 938
 Sterling, K., and Bresnick, E. Oct-1 Transcription Factor Is a Negative Regulator of Rat *CYP1A1* Expression via an Octamer Sequence in Its Negative Regulatory Element, 329
 Stillman, W. S. *see* Pyatt, D. W., 1097
 St. Remy, C. *see* Sulzer, D., 338
 Stride, B. D., Valdimarsson, G., Gerlach, J. H., Wilson, G. M., Cole, S. P. C., and Deeley, R. G. Structure and Expression of the Messenger RNA Encoding the Murine Multidrug Resistance Protein, an ATP-binding Cassette Transporter, 962
 Strom, S. *see* Schuetz, J. D., 63
 Sugawara, F., Ninomiya, H., Okamoto, Y., Miwa, S., Mazda, O., Katsura, Y., and Masaki, T. Endothelin-1-Induced Mitogenic Responses of Chinese Hamster Ovary Cells Expressing Human Endothelin_A: The Role of a Wortmannin-Sensitive Signaling Pathway, 447
 Sulzer, D., St. Remy, C., and Rayport, S. Reserpine Inhibits Amphetamine Action in Ventral Midbrain Culture, 338
 Sun, D. *see* Schuetz, J. D., 63
 Surmeier, D. J. *see* Ghasemzadeh, M. B., 852
 Svoboda, P., Kim, G.-D., Grassie, M. A., Eidne, K. A., and Milligan, G. Thyrotropin-Releasing Hormone-Induced Subcellular Redistribution and Down-regulation of G_{11α}: Analysis of Agonist Regulation of Coexpressed G_{11α} Species Variants, 646
 Synetos, D. *see* Kallia-Raftopoulos, S., 1085
 Szabo, E. *see* Freerman, A. J., 788

T

- Tabbara, L. *see* Befort, K., 216
 Takemori, S. *see* Jiang, Q., 458
 Tanaka, H. *see* Makino, Y., 612
 Tanaka, I. *see* Goto, M., 860
 Tell, B. *see* Chiba, P., 1122
 Thomas, D. *see* Kim, H. Y., 360
 Thomas, J. M., and Hoffman, B. B. Isoform-Specific Sensitization of Adenylyl Cyclase Activity by Prior Activation of Inhibitory Receptors: Role of $\beta\gamma$ Subunits in Transducing Enhanced Activity of the Type VI Isoform, 907
 Thomas, K. *see* Bleakman, D., 581
 Thompson, C. B. *see* Prehn, J. H. M., 319
 Thorgeirsson, S. S. *see* Nerurkar, P. V., 874
 Thottassery, J. V. *see* Schuetz, J. D., 63
 Tomer, K. B. *see* Glasgow, W. C., 1042
 Tonello, C. *see* Nisoli, E., 7
 Torres, M. *see* Rodriguez-Pascual, F., 1058
 Toru, M. *see* Itokawa, M., 560
 Treistman, S. N. *see* Dopico, A. M., 40
 Trist, D. G. *see* Rimland, J. M., 387
 Trush, M. A. *see* Li, Y., 404, 412
 Tsuga, H. *see* Itokawa, M., 560
 Turner, A. J. *see* Freerman, A. J., 788
 Tuttle, J. G. *see* Seiler, S. M., 190

V

- Valdimarsson, G. *see* Stride, B. D., 962
 Valerie, K. *see* Freerman, A. J., 788
 Valtorta, F. *see* Barrie, A., 399
 Van Den Broek, L. A. G. M. *see* Kallia-Raftopoulos, S., 1085
 Vanden Wyngaerd, A. *see* Boeve, C. M. A., 58
 Van Koppen, C. J., Meyer Zu Heringdorf, D., Zhang, C., Laser, K. T., and Jakobs, K. H. A Distinct G_i Protein-Coupled Receptor for Sphingosylphosphorylcholine in Human Leukemia HL-60 Cells and Human Neutrophils, 956
 Vaudry, H. *see* Contesse, V., 481
 Vaz, A. D. N. *see* Ding, X., 1113
 Vaz, A. D. N. *see* Raner, G. M., 515
 Velaz-Faircloth, M. *see* Freneau, R. T., Jr., 1033
 Venero, J. L., Hefti, F., and Knusel, B. Trophic Effect of Exogenous Nerve Growth Factor on Rat Striatal Cholinergic Neurons: Comparison between Intraparenchymal and Intraventricular Administration, 303
 Vigna, S. R. *see* Garland, A. M., 438
 Vimont, R. L. *see* Ford, A. P. D. W., 209
 Vogt, H. *see* Lorenzen, A., 915
 Voigt, J. M. *see* Jiang, Q., 458
 Voss, T. *see* Hohenegger, M., 73
 Votruba, I. *see* Kramata, P., 1005

W

- Waeber, C. *see* Yu, X.-J., 761
 Wafford, K. A. *see* Hadingham, K. L., 253
 Walk, S. F. *see* Yamaguchi, I., 373
 Walsh, K. B., Wilson, S. P., Long, K. J., and Lemon, S. C. Stimulatory Regulation of the Large-Conductance, Calcium-Activated Potassium Channel by G Proteins in Bovine Adrenal Chromaffin Cells, 379
 Waltham, M. C. *see* Ercikan-Abali, E. A., 430
 Wang, H. *see* Ali-Osman, F., 1012
 Wang, Z., and Sinha, B. K. Interleukin-1 α -Induced Modulation of Topoisomerase I Activity and DNA Damage: Implications in the Mechanisms of Synergy with Camptothecins *In Vitro* and *In Vivo*, 269
 Webb, B. L. J. *see* Rousell, J., 629
 Webb, S. J., Xiao, G.-H., Geoghegan, T. E., and Prough, R. A. Regulation of *CYP4A* Expression in Rat by Dehydroepiandrosterone and Thyroid Hormone, 276
 Weber, K.-H. *see* Schrattenholz, A., 1
 Weber, W. W. *see* Nerurkar, P. V., 874
 Wells, P. G. *see* Kim, P. M., 172
 Werner, P., Hussy, N., Buell, G., Jones, K. A., and North, R. A. D₂, D₃, and D₄ Dopamine Receptors Couple to G Protein-Regulated Potassium Channels in *Xenopus* Oocytes, 656
 Wess, J. *see* Kim, J., 683
 Westenbroek, R. E. *see* Wick, P. F., 295
 Westkaemper, R. B. *see* Glennon, R. A., 198
 Westphal, R. S., and Sanders-Bush, E. Differences in Agonist-Independent and -Dependent 5-Hydroxytryptamine_{2C} Receptor-Mediated Cell Division, 474
 Whiting, P. J. *see* Hadingham, K. L., 253
 Whitney, R. A. *see* Kimmett, S. M., 676
 Whittemore, E. R. *see* Hawkinson, J. E., 897
 Wick, P. F., Westenbroek, R. E., and Holz, R. W. Effects of Expression of a Mouse Brain L-Type Calcium Channel $\alpha 1$ Subunit on Secretion from Bovine Adrenal Chromaffin Cells, 295
 Wilding, T. J., and Huettner, J. E. Antagonist Pharmacology of Kainate- and α -Amino-3-hydroxy-5-methyl-4-isoxazolepropionic Acid-Preferring Receptors, 540
 Williams, K. *see* Kashiwagi, K., 1131
 Williams, T. J. *see* Ford, A. P. D. W., 209

- Wilson, G. M. *see* Stride, B. D., 962
 Wilson, S. P. *see* Walsh, K. B., 379
 Wong, P. W., and Pessah, I. N. *Ortho*-Substituted Polychlorinated Biphenyls Alter Calcium Regulation by a Ryanodine Receptor-Mediated Mechanism: Structural Specificity toward Skeletal- and Cardiac-Type Microsomal Calcium Release Channels, 740
 Woodward, R. M. *see* Hawkinson, J. E., 897
 Wright, G. E. *see* Hoffenberg, S., 156
 Wu, D., and Cederbaum, A. I. Expression of Cytochrome P4502E1 in Rat Fetal Hepatocyte Culture, 802
 Wu, J. M. *see* Feldman, R. I., 505

X

- Xiao, G.-H. *see* Webb, S. J., 276

Y

- Yalowich, J. C. *see* Rusnak, J. M., 244
 Yamada, K. *see* Goto, M., 860
 Yamaguchi, I., Walk, S. F., Jose, P. A., and Felder, R. A. Dopamine D_{2L} Receptors Stimulate Na⁺/K⁺-ATPase Activity in Murine LTK⁻ Cells, 373

- Yang, M.-X. *see* Rao, D. N. R., 814
 Yehle, S. *see* Kim, J., 683
 Yu, X.-J., Waeber, C., Castanon, N., Searce, K., Hen, R., Macor, J. E., Chaveau, J., and Moskowitz, M. A. 5-Carboxamido-tryptamine, CP-122,288, and Dihydroergotamine but not Sumatriptan, CP-93,129, and Serotonin-5-*O*-carboxymethyl-glycyl-tyrosinamide Block Dural Plasma Protein Extravasation in Knockout Mice that Lack 5-Hydroxytryptamine_{1B} Receptors, 761

Z

- Zhang, C. *see* Van Koppen, C. J., 956
 Zhang, X., and Smith, C. D. Microtubule Effects of Welwistatin, a Cyanobacterial Indolinone that Circumvents Multiple Drug Resistance, 288
 Zucco, F. *see* Rossi, L., 547
 Zweier, J. L. *see* Li, Y., 404, 412

SUBJECT INDEX FOR VOLUME 49

A

- Acetylcholine receptor, *see* Muscarinic acetylcholine receptor; Nicotinic acetylcholine receptor
- Adenosine monophosphate, cyclic, *see* Cyclic adenosine monophosphate
- Adenosine receptor
full and partial agonists of, interaction of, with receptor/G protein complexes, in brain (rat), 915
ligand recognition in (human), 683
- Adenosine triphosphate, potassium channel sensitive to, ciclazindol inhibition of (CRI-G1 cell), 715
- Adenylyl cyclase activity, isoform-specific sensitization of (human), 907
- Adipocyte
 β_1 -adrenergic receptor phosphorylation in, peroxovanadate and (rat), 1049
 β_3 -adrenergic receptor antagonist in (rat), 7
differentiation of, TCDD alteration of (3T3-L1 cells), 989
- Adrenal chromaffin cell
bovine, secretion from, calcium channel $\alpha 1$ expression and (mouse), 295
calcium-activated potassium channel in, G protein and (bovine), 379
- Adrenal cortex
calcium influx into, 5-hydroxytryptamine receptor and (frog), 481
CYP2D16 expression and distribution in, xenobiotic metabolism and (guinea pig), 458
- β -Adrenergic receptor, m2 muscarinic receptor cross-talk with (HEL 299 cells), 629
- β_1 -Adrenergic receptor
coupling and desensitization of (human), 752
phosphorylation of, in adipocyte, peroxovanadate and (rat), 1049
salmeterol action at, duration of, in glioma cell (C6 cells), 927
- β_2 -Adrenergic receptor
antagonist conformations within (hamster), 1021
coupling and desensitization of (human), 752
salmeterol action at, duration of, in glioma cell (C6 cells), 927
salmeterol-induced desensitization of (hamster), 182
- β_3 -Adrenergic receptor antagonist, functional studies of (rat), 7
- Allosteric potentiation, of nicotinic acetylcholine receptor responses (rat), 1
- γ -Aminobutyric acid receptor
 $\alpha 6$ subunit in, 253
cerebellar (rat), 567
Co 2-1970 at neuroactive steroid site of (human), 897
diazepam tolerance and (rat), 822
ion channels of (mouse), 494
mutations of, benzodiazepine binding site and (rat), 1080
- α -Amino-3-hydroxy-5-methyl-4-isoxazolepropionic acid receptor
antagonist pharmacology of (rat), 540
benzodiazepine modulation of (rat), 142
binding properties of, cyclothiazide and (rat), 123
- AMPA receptor, *see* α -Amino-3-hydroxy-5-methyl-4-isoxazolepropionic acid receptor
- Amphetamine, reserpine inhibition of, 338
- Amsacrine, 1'-substituent on, topoisomerase II inhibition and cytotoxicity and (human), 343
- Androgen-independent prostate cancer cell, growth of, phenylacetate inhibition of (human), 972

- Angiotensin II receptor, NPX_nY motif of, site-directed mutagenesis of (human), 89
- Aorta, proteinase-activated receptor-2 in (rat), 229
- Apoptosis
DNA topoisomerase II in (human), 842
of leukemic cells, *c-jun* in (human), 788
of prostatic cancer cells, DNA fragmentation in (human), 244
- Aryl-hydrocarbon receptor, depletion of, in culture cells exposed to TCDD (rat), 391
- Aspartate 128, in δ -opioid receptor (mouse), 216
- Astrocyte, isoproterenol regulation of FGF in (rat), 699
- Azido-CP-96,345, photoaffinity labeling of substance P receptor by (human), 808

B

- Benzodiazepine, AMPA receptor modulation by (rat), 142
- Benzodiazepine binding site, γ -aminobutyric acid_A receptor mutations and (rat), 1080
- Brain
cannabinoid receptor in, calcium channel modulation by (rat), 707
proline transporter in, enkephalin inhibition of (human and rat), 1033
- Buthionine sulfoximine, cytotoxicity of, GSH depletion and resynthesis and, in glioma cells (human), 1012

C

- Calcium
influx of, into adrenocortical cell, 5-hydroxytryptamine receptor and (frog), 481
intracellular, glutamate signal and, in granule cells (rat), 586
mobilization of, pyrimidine nucleotide-glucose conjugate induction of (*Xenopus*), 360
- Calcium channel
 $\alpha 1$ subunit of, expression of, bovine adrenal chromaffin cell secretion and (mouse), 295
brain cannabinoid receptor modulation of (rat), 707
ryanodine receptor regulation of (rat), 740
- Calcium-activated potassium channel
in adrenal chromaffin cell, G protein and (bovine), 379
in neurohypophyseal terminal, ethanol activation of (rat), 40
- Cannabinoid receptor
in brain, calcium channel modulation by (rat), 707
lysine residue of, ligand binding and (human), 891
- Carboxamido-tryptamine, blockage of protein extravasation by, in absence of 5-hydroxytryptamine_{1B} receptor (mouse), 761
- Cardiomyopathy, *see also* Heart
hypertrophic, PKC isozyme modulation of cAMP-dependent phosphodiesterase in (hamster), 81
- Carmustine, DNA cross-linking induced by, GSH depletion and buthionine sulfoximine cytotoxicity and, in glioma cell (human), 1012
- CCAAT/enhancer-binding protein, TCDD alteration of (3T3-L1 cells), 989
- Cell division, 5-hydroxytryptamine receptor-mediated (NIH-3T3 cell), 474
- Cerebellum, GABA receptor in (rat), 567
- Chromaffin cell, cGMP-increasing agents in (bovine), 1058

- Ciclazindol, inhibition of ATP-sensitive K⁺ channels (CRI-G1 cells), 715
- Citral, retinal inhibition by (rabbit), 505
- c-jun*, in leukemic cell apoptosis (human), 788
- Co 2-1970, at neuroactive steroid site of GABA receptor (human), 897
- Colon carcinoma cell, coexpression of P-glycoprotein and cytochrome P4503A in (human), 311
- Copper/zinc superoxide dismutase, xenobiotic activation mediated by (bovine), 404, 412
- CP-122,228, blockage of protein extravasation by, in absence of 5-hydroxytryptamine_{1B} receptor (mouse), 761
- C-type natriuretic peptide, chromaffin cell function and (bovine), 1058
- Cyclic adenosine monophosphate
 muscarinic stimulation of, G protein in (rat), 22
 pineal, thapsigargin and (rat), 1104
- Cyclic guanosine monophosphate, agents increasing, chromaffin cell function and (bovine), 1058
- Cyclotiazide, glutamate receptor binding properties and (rat), 123
- Cysteine, dopamine ligand sensitivity to (human), 692
- Cytochrome P450
 cytokine-mediated regulation of, nitric oxide in (rat), 796
 dichlorobenzonitrile activation by (human, rabbit, rat), 1113
 retinal metabolism by (rabbit), 505
- Cytochrome P4501A1
 negative regulation of, by Oct-1 transcription factor (rat), 329
 transcriptional induction of, by YH439 (rat), 980
- Cytochrome P4502B1 and 2B2, hepatic, phenobarbital induction of (rat), 523
- Cytochrome P4502D16, adrenal cortical expression and distribution of, xenobiotic metabolism and (guinea pig), 458
- Cytochrome P4502E1
 in fetal hepatocytes (rat), 802
 in fetal liver and hepatocytes (human), 260
- Cytochrome P4503A
 antibodies to, epitope mapping studies with (human), 234
 in colon carcinoma cell (human), 311
- Cytochrome P4503A5, dexamethasone-responsive enhancer in (human and rat), 63
- Cytochrome P4504A, regulation of, by DHEA and thyroid hormone (rat), 276
- Cytokine(s), cytochrome P450 regulation by, nitric oxide in (rat), 796
- Cytotoxicity
 amsacrine 1'-substituent and (human), 343
 cell cycle-dependent, doxorubicin and (mouse), 832
- D**
- D609, IL-1 β -induced VCAM expression blocked by (human), 998
- Daunorubicin, K562 cell resistance to, 532
- Dehydroepiandrosterone, *CYP4A* regulation by (rat), 276
- Deoxyribonucleic acid
 damage to, IL-1 α modulation of (human), 269
 fragmentation of, in prostatic cancer cells (human), 244
 repair of, in malignant lymphoid cells (human), 766
- Deoxyribonucleic acid polymerase, acyclic nucleotide inhibition of (rat), 1005
- Deoxyribonucleic acid topoisomerase II
 in apoptosis (human), 842
 imidazoacridinone inhibition of (*Crithidia fusciculata*), 772
- Dexamethasone, enhancer responsive to, in *CYP3A5* gene and liver cell (human and rat), 63
- DHEA, *see* Dehydroepiandrosterone
- Diacylglyceride, imidazoline receptor coupling to, in pheochromocytoma cell (rat), 668
- Diarylsulfonylurea, resistance to (human), 595
- Diazepam, tolerance to, GABA receptor in (rat), 822
- Dichlorobenzonitrile, cytochrome P450 activation of (human, rabbit, rat), 1113
- Dideoxythiacytidine, with non-nucleoside reverse transcriptase inhibitors, anti-HIV activity of (CEM cells), 882
- Dihydroergotamine, blockage of protein extravasation by, in absence of 5-hydroxytryptamine_{1B} receptor (mouse), 761
- Dihydrofolate reductase, residue 22 mutations of (human), 430
- Dofetilide, open channel block of *HERG* by (human), 949
- Dopamine, sensitivity of, to cysteine modulation (human), 692
- Dopamine receptor
 G protein-regulated potassium channel coupling to (*Xenopus*), 656
 Na⁺/K⁺-ATPase activity and (mouse), 373
 short and long isoforms of (hamster), 560
- Doxorubicin
 cytotoxicity, G₂/M phase arrest, and p34^{cdc2}/cyclin activity and (mouse), 832
 K562 cell resistance to, 532
- E**
- E3330, NF- κ B inhibition by (human), 860
- EAAC1, *see* Excitatory amino acid carrier 1
- EGF, *see* Epidermal growth factor
- Endothelial cell, IL-1 β -induced VCAM expression in, D609 blockage of (human), 998
- Endothelin-1, mitogenic signaling of, wortmannin-sensitive pathway in (hamster), 447
- Endothelin-1 analogues, biological and molecular analysis of (guinea pig), 1071
- Enkephalin, brain proline transporter inhibition by (human and rat), 1033
- Epidermal growth factor, neurotransmitter glutamate receptor release and, from forebrain synaptosomes (rat), 399
- Epidermal growth factor receptor, linoleate metabolism regulation by (hamster), 1042
- Epipodophyllotoxin, in multidrug-resistant tumor models (mouse), 721
- Epitope mapping studies, with antibodies to cytochrome P450 3A (human), 234
- Ethanol
 activation of neurohypophysial terminal Ca²⁺-activated K⁺ channel by (rat), 40
 hepatic microsome oxidation of (human, mouse, rat), 814
- Excitatory amino acid carrier 1, expression of, Na⁺-dependent glutamate transport and (*Xenopus*), 465
- F**
- Ferrochelatase, vinylprotoporphyrin IX inhibition by (chick), 676
- Fetus
 hepatocytes of, cytochrome P4502E1 in (rat), 802
 liver and hepatocytes of, *CYP2E1* in (human), 260
- FGF, *see* Fibroblast growth factor
- Fibroblast growth factor, isoproterenol regulation of, in astrocyte (rat), 699
- Fluoridarubicin, K562 cell resistance to, 532
- Forebrain, neurotransmitter release from, EGF and (rat), 399
- Fos-related antigen(s), chronic, morphine regulation of (rat), 636
- Furazolidone, Caco-2 cell activation of (human), 547
- G**
- G₂/M phase arrest, doxorubicin and (mouse), 832
- G protein
 α -subunit of, agonist regulation of, in vascular smooth muscle cells (rat), 96
 adenosine receptor agonist interaction with, in brain (rat), 915
 β -subunit of, thiophosphorylation of (human), 73

coupling domain of, in pm2 muscarinic receptor (hamster), 132
 guanine nucleotide analogue interaction with (bovine), 156
 and muscarinic stimulation of cAMP (rat), 22
 neurokinin receptor coupled to, desensitization and resensitization of (hamster), 438
 neurotensin receptor interaction with, agonist-induced internalization and (hamster), 365
 suramin analogue inhibition of (human), 602
 TRH-induced distribution of (human), 646
 G protein-coupled receptor, multiple activation states of (COS-1 cell), 112
 G protein-regulated potassium channel, dopamine receptor coupling to (*Xenopus*), 656
 GABA receptor, *see* γ -Aminobutyric acid receptor
 Gastrin-releasing peptide receptor, growth inhibition and (human), 505
 G₁-coupled sphingosylphosphorylcholine receptor, in leukemia cells and neutrophils (human), 956
 Glioma cell
 β -adrenergic receptor salmeterol action duration in (C6 cells), 927
 GSH depletion and resynthesis and buthionine sulfoximine cytotoxicity in (human), 1012
 Glucocorticoid(s)
 gene expression inducible by, metal ions and (hamster), 612
 inhibition of nitric oxide synthase II induction by (human), 15
 GluR5 antagonism, by LY293558 (rat), 581
 Glutamate, Na⁺-dependent transport of, EAAC1 expression and (rat and *Xenopus*), 465
 Glutamate receptor
 binding properties of, cyclothiazide and (rat), 123
 subunit colocalization of, in striatum (rat), 852
 Glutamate signal, intracellular calcium and, in granule cells (rat), 586
 Glutathione, depletion and resynthesis of, buthionine sulfoximine cytotoxicity and, in glioma cell (human), 1012
 GM-CSF, *see* Granulocyte/macrophage colony-stimulating factor
 Granule cell, glutamate signal and intracellular calcium in (rat), 586
 Granulocyte/macrophage colony-stimulating factor, stem cell synergy with, reactive oxygen species mediation of (mouse), 1097
 Growth, inhibition of, gastrin-releasing peptide receptor and (human), 505
 Guanine nucleotide analogue, G protein interaction with (bovine), 156
 Guanosine monophosphate, cyclic, *see* Cyclic guanosine monophosphate
 Guanosine triphosphatase, in membrane, thrombin receptor activation of (human), 190

H

Heart, *see also* Cardiomyopathy
 Na channel in, lidocaine block of (rat and *Xenopus*), 30
 Hepatocyte, fetal, cytochrome P450E1 in
 in human, 260
 in rat, 802
 HERG, open channel block of, by dofetilide (human), 949
 Hippocampus, neurotoxicity in, TGF- β 1 protection against (rat), 319
 HIV, *see* Human immunodeficiency virus
 Human immunodeficiency virus, inhibition of, by 3TC with non-nucleoside reverse transcriptase inhibitors (CEM cells), 882
 Human immunodeficiency virus-1 integrase, nucleotide analogues and (human), 621
 Hydroquinone, Cu/Zn-superoxide dismutase-accelerated oxidation of (bovine), 404, 412
 Hydroxyethyl radical, hepatic microsome production of (human, mouse, rat), 814
 Hydroxyoctadecadienoic acid, biosynthesis of, tyrosine kinase regulation of (hamster), 1042

5-Hydroxytryptamine, hypothalamic binding sites for (rat), 556
 5-Hydroxytryptamine receptor
 absence of, protein extravasation in (mouse), 761
 adrenocortical calcium influx and (frog), 481
 mitogenic properties of (NIH-3T3 cell), 474
 propranolol binding at (human), 198
 Hypothalamus, 5-hydroxytryptamine binding sites in (rat), 556

I

Idarubicin, K562 cell resistance to, 532
 IFN, *see* Interferon
 IL, *see* Interleukin
 Imidazoacridinone, DNA topoisomerase II inhibition by (*Crithidia fusciculata*), 772
 Imidazole receptor, diacylglyceride coupling to, in pheochromocytoma (rat), 668
 Interferon- γ , biosynthesis of, antisense RNA inhibition of (human), 58
 Interleukin-1 α , modulation of topoisomerase I activity and DNA damage by (human), 269
 Interleukin-1 β , VCAM expression induced by, D609 blockage of (human), 998
 Inwardly rectifying G protein, m1 muscarinic receptor modulation of (*Xenopus*), 662
 Ion channel, *see also* Calcium channel; Potassium channel; Sodium channel
 of GABA receptor (mouse), 494
 IQ/DNA adducts, hepatic and pulmonary (mouse), 874
 Isoproterenol, FGF regulation by, in astrocyte (rat), 699

K

Kainate receptor, antagonist pharmacology of (rat), 540

L

Leukemia cell
 apoptosis of
 c-*jun* in (human), 788
 DNA topoisomerase II in (human), 842
 G₁-coupled sphingosylphosphorylcholine receptor in (human), 956
 Lidocaine, cardiac Na channel block by (rat and *Xenopus*), 30
 Linoleate metabolism, tyrosine kinase regulation of (hamster), 1042
 Liver
 dexamethasone-responsive enhancer in (human and rat), 63
 fetal, CYP2E1 in (human), 260
 IQ/DNA adducts in (mouse), 874
 microsomes of, hydroxyethyl radical production by (human, mouse, rat), 814
 phenobarbital induction of CYP2B1 and CYP2B2 in (rat), 523
 LNcap prostate cancer cell, growth of, phenylacetate inhibition of (human), 972
 Long QT syndrome, dofetilide block of HERG open channel and (human), 949
 Lung, IQ/DNA adducts in (mouse), 874
 LY293558, GluR5 antagonism by (rat), 581
 Lymphoid cell, malignant, DNA repair in (human), 766

M

Malignant lymphoid cell, DNA repair in (human), 766
 Metabotropic glutamate receptor-1, constitutive activity of (rat), 422
 Metal ion, glucocorticoid-inducible gene expression and (hamster), 612
 7-Methylbenz[c]acridine-5,6-oxide enantiomer, microsomal epoxide hydrolase hydration of (human, rabbit, and rat), 105
 Microsome

- epoxide hydrolase in, hydration of enantiomers by (human, rabbit, and rat), 105
- hepatic, hydroxyethyl radical production by (human, mouse, rat), 814
- Mitogenic signaling, of endothelin-1, wortmannin-sensitive pathway in (hamster), 447
- Morphine, chronic Fos-related antigen regulation by (rat), 636
- Multidrug resistance
- in K562 cells, 532
 - P-glycoprotein-mediated, propafenone analogs as modulators of (mouse), 1122
 - in tumor, epipodophyllotoxins in (mouse), 721
 - welwistatin circumvention of (human), 288
- Multidrug resistance protein, homolog of (mouse), 962
- Muscarinic acetylcholine receptor
- intracellular trafficking of (hamster), 351
 - m2
 - β -adrenoceptor cross-talk with (HEL 299 cells), 629
 - TGF- β 1 regulation of (human), 781
 - m1, inwardly rectifying G protein modulation by (*Xenopus*), 662
 - pm2, G protein coupling domain of (hamster), 132
- Muscarinic stimulation, of cAMP, G protein in (rat), 22

N

- Na⁺/K⁺-ATPase activity, dopamine receptor and (mouse), 373
- Natriuretic peptide, C-type, chromaffin cell function and (bovine), 1058
- Neocortex, GABA receptor in, diazepam tolerance and (rat), 822
- Nerve growth factor, striatal cholinergic neuron effects of (rat), 303
- Neurohypophyseal terminal, Ca²⁺-activated K⁺ channels in, ethanol activation of (rat), 40
- Neurokinin receptor, G protein-coupled, desensitization and resensitization of (hamster), 438
- Neuromuscular blocking drugs, nondepolarizing, fetal and adult nicotinic receptor effects of (mouse), 938
- Neuropeptide Y, expression cloning with K⁺ channels for (human), 387
- Neuropeptide Y receptor, expression cloning of (human), 224
- Neurotensin receptor, agonist-induced internalization of, G protein interaction and (hamster), 365
- Neurotransmitter, release of, from forebrain synaptosomes, EGF and (rat), 399
- Neutrophil, G_i-coupled sphingosylphosphorylcholine receptor in (human), 956
- NF- κ B, *see* Nuclear factor- κ B
- NGF, *see* Nerve growth factor
- Nicotinic acetylcholine receptor
- fetal and adult, nondepolarizing neuromuscular blocking drug effects on (mouse), 938
 - responses of, allosteric potentiation of (rat), 1
- Nitric oxide
- chromaffin cell function and (bovine), 1058
 - in cytokine-mediated cytochrome P-450 regulation (rat), 796
- Nitric oxide synthase II, induction of, glucocorticoid inhibition of (human), 15
- NMDA receptor, *see* N-Methyl-D-aspartate receptor
- N-Methyl-D-aspartate receptor, mutant, spermine and pH at, 1131
- Non-nucleoside reverse transcriptase inhibitors, 3TC with, anti-HIV activity of (CEM cells), 882
- Nuclear factor- κ B
- cytokine-induced activity of, glucocorticoid inhibition of (human), 15
 - E3330 inhibition of (human), 860
- Nucleotide, acyclic, DNA polymerase inhibition by (rat), 1005
- Nucleotide analogues, HIV-1 integrase and (human), 621

O

- Oct-1 transcription factor, negative regulation of *CYP1A1* by (rat), 329
- Olfactory bulb, cAMP of, muscarinic stimulation of, G protein in (rat), 22
- β -Opioid receptor, aspartate 128 in (mouse), 216
- Oxygen, reactive, stem cell synergy with GM-CSF mediated by (mouse), 1097

P

- p34^{cdc2}/cyclin activity, doxorubicin and (mouse), 832
- Palytoxin, Na⁺ influx into yeast cells induced by (*Saccharomyces cerevisiae*), 40
- Peptidyltransferase, inhibition of, by sparsomycin and its analogues (*Escherichia coli*), 1085
- Peroxovanadate, adipocyte β_1 -adrenergic receptor phosphorylation and (rat), 1049
- P-glycoprotein
- in colon carcinoma cell (human), 311
 - multidrug resistance mediated by, propafenone analogs as modulators of (mouse), 1122
- pH, at mutant NMDA receptor, 1131
- Phenobarbital, induction of hepatic *CYP2B1* and *CYP2B2* by (rat), 523
- Phenylacetate, inhibition of protein isoprenylation and prostate cancer cell growth by (human), 972
- Phenytol, salicylate hydroxylation initiated by (mouse), 172
- Pheochromocytoma cell, diacylglyceride coupling to imidazole receptor in (rat), 668
- Phosphodiesterase, cAMP-dependent, PKC modulation of, in hypertrophic cardiomyopathy (hamster), 81
- Phosphonmethoxyalkyl nucleotide analogs, acyclic, DNA polymerase inhibition by (rat), 1005
- Pinealocyte, cAMP in, thapsigargin and (rat), 1104
- PKC, *see* Protein kinase C
- pm2 muscarinic receptor, G protein coupling domain of (hamster), 132
- Polychlorinated biphenyl, *ortho*-substituted, ryanodine receptor activation by (rat), 740
- Potassium channel
- ATP-sensitive, ciclazindol inhibition of (CRI-G1 cell), 715
 - Ca²⁺-activated
 - in adrenal chromaffin cells, G protein and (bovine), 379
 - in neurohypophyseal terminal, ethanol activation of (rat), 40
 - expression cloning with, for neuropeptide Y (human), 387
 - G protein-regulated, dopamine receptor coupling to (*Xenopus*), 656
 - inwardly rectifying, M1 muscarinic receptor modulation of (*Xenopus*), 662
- Progesterone receptor, on sperm, steroid specificity of (human), 727
- Proline transporter, in brain, enkephalin inhibition of (human and rat), 1033
- Propafenone analogs, as modulators of P-glycoprotein-mediated multidrug resistance (mouse), 1122
- Propranolol, binding of, at 5-hydroxytryptamine mutant receptor (human), 198
- Prostate, α_1 -adrenoceptor in, pharmacology of (human), 209
- Prostate cancer cell
- androgen-independent, growth of, phenylacetate inhibition of (human), 972
 - apoptotic, DNA fragmentation in (human), 244
- Protein, isoprenylation of, phenylacetate inhibition of (human), 972
- Protein extravasation, in absence of 5-hydroxytryptamine_{1B} receptor (mouse), 761
- Protein kinase C
- in m2 muscarinic receptor and β -adrenoceptor cross-talk (HEL 299 cells), 629

modulation of cAMP-dependent phosphodiesterase by, in hypertrophic cardiomyopathy (hamster), 81
 Proteinase-activated receptor-2, in aorta (rat), 229
 Pyrimidine nucleotide-glucose conjugate, calcium mobilization by (*Xenopus*), 360

R

Reactive oxygen species, stem cell synergy with GM-CSF mediated by (mouse), 1097
 Reserpine, amphetamine inhibition by, 338
 Retinal, cytochrome P450 metabolism of and citral inhibition of (rabbit), 505
 Reverse transcriptase inhibitors, non-nucleoside, 3TC with, anti-HIV activity of (CEM cells), 882
 Ribonucleic acid, antisense, IFN- γ biosynthesis inhibition by (human), 58
 RNA, *see* Ribonucleic acid
 Ryanodine receptor, *ortho*-substituted polychlorinated biphenyl activation of (rat), 740

S

Salicylate, phenytoin-initiated hydroxylation of (mouse), 172
 Salmeterol
 action duration of, at β_1 - and β -adrenergic receptors, in glioma cell (C6 cells), 927
 β_2 -adrenergic receptor desensitization induced by (hamster), 182
 Smooth muscle cell, vascular, agonist regulation of G protein α -subunit in (rat), 96
 Sodium
 glutamate transport dependent on, EAAC1 expression and (rat and *Xenopus*), 465
 palytoxin-induced influx of, into yeast cell (*Saccharomyces cerevisiae*), 40
 Sodium channel, cardiac, lidocaine block of (rat and *Xenopus*), 30
 Sparsomycin, and analogues of, peptidyltransferase inhibition by (*Escherichia coli*), 1085
 Sperm, progesterone receptor on, steroid specificity of (human), 727
 Spermine, at mutant NMDA receptor, 1131
 Sphingosylphosphorylcholine receptor, G_1 -coupled, in leukemia cells and neutrophils (human), 956
 SR 59230A, in adipocyte, functional studies of (rat), 7
 Stem cell, GM-CSF synergy with, reactive oxygen species mediation of (mouse), 1097
 Steroid specificity, of progesterone receptor on sperm (human), 727
 Striatum
 glutamate receptor subunit colocalization in (rat), 852
 NGF effects on (rat), 303
 Substance P receptor, antagonist photoaffinity labeling of (human), 808
 Suramin analogue, G protein inhibition by (human), 602

T

3TC, *see* Dideoxythiacytidine
 TCDD, *see* Tetrachlorodibenzo-*p*-dioxin

Tetrachlorodibenzo-*p*-dioxin
 adipogenic factor alteration by (3T3-L1 cells), 989
 depletion of aryl-hydrocarbon receptor in cells exposed to (rat), 391
 Tetraethylammonium derivatives, structure-activity relationships of (*Xenopus*), 165
 Tetrahydrobiopterin, mitogenic effects of (PC12 cell), 149
 TGF- $\beta 1$, *see* Transforming growth factor- $\beta 1$
 Thapsigargin, pineal cAMP and (rat), 1104
 Thiophosphorylation, of G protein β -subunit (human), 73
 Thrombin receptor, membrane GTPase activation by (human), 190
 Thyroid hormone, CYP4A regulation by (rat), 276
 Thyrotropin-releasing hormone
 biologically active conformation of (mouse), 1092
 G protein distribution induced by (human), 646
 Topoisomerase I, IL-1 α modulation of (human), 269
 Topoisomerase II
 in apoptosis (human), 842
 imidazoacridinone inhibition of (*Crithidia fusciculata*), 772
 inhibition of, amsacrine 1'-substituent and (human), 343
 Transforming growth factor- $\beta 1$
 muscarinic receptor gene regulation by (human), 781
 neurotoxicity protection by, in hippocampus (rat), 319
 TRH, *see* Thyrotropin-releasing hormone
 Tyrosine kinase, linoleate metabolism regulation by (hamster), 1042

V

Vascular intercellular adhesion molecule, IL-1 β -induced expression of, D609 blockage of (human), 998
 Vascular smooth muscle cell, agonist regulation of G protein α -subunit in (rat), 96
 VCAM, *see* Vascular intercellular adhesion molecule
 Vinylprotoporphyrin IX, ferrochelatase inhibition of (chick), 676

W

Welwistatin, microtubule effects of (human), 288
 Wortmannin, signaling pathway sensitive to, in endothelin-1 mitogenic signaling (hamster), 447

X

Xenobiotic activation, Cu/Zn-superoxide dismutase mediation of (bovine), 404, 412
 Xenobiotic metabolism, adrenal cortical CYP2D16 expression and distribution and (guinea pig), 458

Y

Yeast cell, palytoxin-induced Na⁺ influx into (*Saccharomyces cerevisiae*), 40
 YH439, transcriptional induction of cytochrome P4501A1 by (rat), 980

**Copyright © 1996 by the American Society for
Pharmacology and Experimental Therapeutics**

Previous Editors

- 1965** Avram Goldstein, *Editor*. Stanford University.
- 1968** Paul Talalay, *Editor*; Donald S. Coffey, *Associate Editor*. Johns Hopkins University.
- 1971** Steven E. Mayer, *Editor*; Palmer W. Taylor, *Associate Editor*. University of California at San Diego.
- 1975** George I. Drummond, *Editor*; H. Joseph Goren, *Associate Editor*. University of Calgary.
- 1978** Norman Kirschner, *Editor*; Theodore A. Slotkin, *Associate Editor*. Duke University.
- 1983** Joel G. Hardman, *Editor*; Lee Limbird, F. Peter Guengerich, *Associate Editors*. Vanderbilt University.
- 1986** William A. Catterall, *Editor*; Joseph A. Beavo, Mont R. Juchau, Neil M. Nathanson, Daniel R. Storm, Frank F. Vincenzi, *Associate Editors*. University of Washington, Seattle.
- 1990** T. Kendall Harden, *Editor*; Raymond J. Dingleline, R. L. Juliano, James W. Putney, Jr., Kenneth D. Tew, Ronald G. Thurman, *Associate Editors*. University of North Carolina at Chapel Hill.

Minding our P's & Q's is a high priority at Williams & Wilkins.

People and Quality are the *P's and Q's* Williams & Wilkins represents. We put the two together because we believe the people who are important to us—our valued, longstanding subscribers—deserve the best quality products and services we can provide.

- ☐ **CHANGE OF ADDRESS.** Please notify us eight weeks in advance. Send us your mailing label or your account number, along with your new address, and the date the change of address is to take effect.
- ☐ **RENEWALS.** To ensure uninterrupted service, please renew your subscription two months prior to the expiration date of your current subscription. Current rates are available for up to three years.
- ☐ **GIFT SUBSCRIPTIONS.** Do you have a friend or colleague who shares your professional interests? Perhaps a colleague from another country where access to the latest scientific literature is limited? Give him or her a gift subscription to your journal. For assistance with your order, contact Customer Service, using our toll-free number (1-800-638-6423).
- ☐ **CLAIMS OR CANCELLATIONS.** Claims for missing or damaged issues are honored for three months after the mailing date of the issue. If, for any reason, you are not satisfied with your subscription, you may cancel and receive a full refund on all unmailed issues.

INFORMATION FOR SUBSCRIBERS

To order back issues, bound volumes, reprints of journal articles, microfilm or microfiche, call or write Williams & Wilkins, 351 West Camden Street, Baltimore, MD 21201-2436. Toll-free number: 1-800-638-6423.



Williams & Wilkins
A WAVERLY COMPANY

SUB 56246

**For customer service, call TOLL FREE:
1-800-638-6423**

(from anywhere in the U.S., Canada, or Mexico)

Or write:

Subscription Fulfillment Department
Williams & Wilkins
351 W. Camden Street
Baltimore, MD 21201-2436

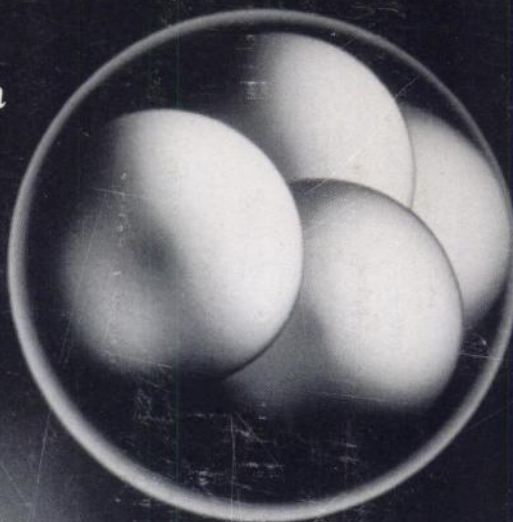
Fax international orders to: (410) 361-8048

An important resource for everyone
involved in research on the metabolism
of drugs and chemicals

DRUG METABOLISM AND DISPOSITION

The Biological Fate of Chemicals

Editor: Raymond F. Novak, Ph.D.,
Wayne State University, Detroit, Michigan



DRUG METABOLISM AND DISPOSITION publishes experimental results from *in vitro* and *in vivo* systems that bring readers significant and original information on the metabolism and disposition of endogenous and exogenous compounds, including the metabolism of therapeutic agents and environmental chemicals. The journal also invites timely reviews, short communications and letters to the Editor. All submissions are refereed to ensure a high standard of publication. The areas covered are:

- metabolism, metabolite identification and mechanisms of metabolite formation
- expression of drug metabolizing enzymes
- regulation of drug metabolizing enzyme gene expression
- toxicological consequences of xenobiotic metabolism
- pharmacokinetics
- pharmacodynamics

This journal should be a standard reference in all pharmacology and toxicology departments. It is also a valuable resource for all medicinal chemists involved in drug design and all biochemists with interest in drug metabolism, expression or drug metabolizing enzymes and regulation of drug metabolizing enzyme gene expression. *Monthly*

To order by credit card, call TOLL-FREE
1-800-638-6423 in North America. Outside
North America, fax: 1-410-361-8048 or call one
of our international offices: Tokyo (03) 5689-5400,
London 0171-385-2357, Hong Kong 852-2610-2339.

☐ **Yes!** Please start my subscription.

Avoid future rate increases and ensure uninterrupted service—enter your multiyear subscription today!

Drug Metabolism and Disposition (monthly)

- ☐ Individual \$90/year
☐ Institutional \$150/year

(Add \$25 a year for postage outside the U.S.;
in Canada, also add 7 % GST)

- ☐ New Subscription ☐ Renewal
☐ 3 years ☐ 2 years ☐ 1 year

PAYMENT OPTIONS:

- ☐ Check enclosed (payable to Williams & Wilkins)
☐ Bill me ☐ Am Ex ☐ MasterCard ☐ VISA

Card # _____ Exp. date _____

Signature/P.O.# _____

Name _____

Address _____

City/State/Zip _____

MD, ME, and IL subscribers must add state sales tax. Subscriptions outside the U.S. must be prepaid in U.S. dollars only. In Japan, contact Igaku-Shoin MYW, Ltd. (03) 5689-5400. Rates valid through October 31, 1996.

Discounts available to members on all ASPET publications. SAVE 10% when ordering two. SAVE 15% when ordering three. SAVE 20% when ordering all four.

Return coupon to: Williams & Wilkins, A Waverly Company,
P.O. Box 23291, Baltimore, MD 21203-9990.

DMD 56603 Printed in USA S6J008Z



Williams & Wilkins
A WAVERLY COMPANY