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Short Communications

- C. DIANE HORNSBY, JANINE M. BARNES, 1865 Pharmacological comparison of the rat and guinea-pig
NICHOLAS M. BARNES, cortical high affinity 5-hydroxytryptamine uptake system
SHASHI CHAMPANERIA,
BRENDA COSTALL and
ROBERT J. NAYLOR
- CHRISTOPHER R. BARNETT, 1868 Cytochrome P450-dependent mixed-function oxidase
REBECCA A. ABBOTT, and glutathione *S*-transferase activities in spontaneous
CLIFFORD J. BAILEY, PETER R. FLATT obesity-diabetes
and COSTAS IOANNIDES
- YASUYUKI SADZUKA, TAKAHIRO SHOJI 1872 Effect of cisplatin on the activities of enzymes which
and YOSHIO TAKINO protect against lipid peroxidation
- SUSAN M. JONES, ALAN R. BOOBIS, 1876 Expression of CYP2E1 during human fetal development:
GUDRUN E. MOORE and methylation of the *CYP2E1* gene in human fetal and adult
PHILIP M. STANIER liver samples
- OYERONKE A. OSOWOLE, 1880 Isolation and partial characterization of pigeon pea
JOHN N. TONUKARI and protease inhibitor: its effect on the genotoxic action of
ANTONY O. UWAIFO aflatoxin B₁
- SASKIA DE RAAD and 1882 Stimulation of dopamine D₁ receptors by the D₂ agonist
MICHEL SCHORDERET CV 205-502 in bovine retina homogenates

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- LISE BINDERUP 1885 Immunological properties of vitamin D analogues and
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Research Papers

- NEIL J. SCHROEDER, FUAD QAW, 1893 Polar metabolites of dihydrotachysterol₃ in the rat.
MARTIN J. CALVERLEY, Comparison with *in vitro* metabolites of 1 α ,25-dihydroxy-
DAVID J. H. TRAFFORD, dihydrotachysterol₃
GLENNVILLE JONES and
HUGH L. J. MAKIN
- HIRONORI NAKURA, SUSUMU ITOH, 1907 Decrease in the content of cytochrome P450IIE by fasting
HISASHI KUSANO, HIROYUKI ISHIZONE, in liver microsomes of house musk shrew (*Suncus murinus*)
SUSUMU IMAOKA, YOSHIHIKO FUNAE,
TSUYOSHI YOKOI and
TETSUYA KAMATAKI
- YOSHINORI MATSUI, 1911 Debrisoquine 4-monooxygenase and bufuralol 1'-mono-
KAZUHIRO IWAHASHI and oxygenase activities in bovine and rabbit tissues
YOSHIYUKI ICHIKAWA
- KENJI HATTORI, MAYUMI IGARASHI, 1921 Specific induction by glucocorticoids of steroid esterase in
MISUZU ITOH, HIROKI TOMISAWA rat hepatic microsomes and its release into serum
and MITSURU TATEISHI
- KENJI HATTORI, MAYUMI IGARASHI, 1929 Purification and characterization of glucocorticoid-
MISUZU ITOH, HIROKI TOMISAWA inducible steroid esterase in rat hepatic microsomes
NAOKI OZAWA and MITSURU TATEISHI
- PAUL N. MOYNAGH and 1939 Stabilization of the peripheral-type benzodiazepine
D. CLIVE WILLIAMS acceptor by specific phospholipids
- C. M. HOLLIS, J. D. TURNER 1947 Binding of [³H]SCH23390 to a non-dopaminergic site in
and P. G. STRANGE bovine kidney
- KESARA NA BANGCHANG, 1957 Mefloquine metabolism by human liver microsomes.
JUNTRA KARBWANG and Effect of other antimalarial drugs
DAVID J. BACK

- SUMSULLAH KHAN, JAY J. RAMWANI and PETER J. O'BRIEN 1963 Hepatocyte toxicity of mechlorethamine and other alkylating anticancer drugs. Role of lipid peroxidation
- ZOUHAIR F. STEPHAN, EDNA C. YURACHEK, ROBIN SHARIF, JONG M. WASVARY, RONALD E. STEELE and COLIN HOWES 1969 Reduction of cardiovascular and thyroxine-suppressing activities of L-T₃ by liver targeting with cholic acid
- RAM P. GUPTA, DANIEL M. LAPADULA and MOHAMED B. ABOU-DONIA 1975 Ca²⁺/calmodulin-dependent protein kinase II from hen brain. Purification and characterization
- STEPHEN M. ROBERTS, LOIS ROTH, RAYMOND D. HARBISON and ROBERT C. JAMES 1989 Cocaethylene hepatotoxicity in mice
- THOMAYANT PRUEKSARITANONT, MASAHIRO KOIKE, BETTY-ANN HOENER and LESLIE Z. BENET 1997 Transport and metabolism of cyclosporine in isolated rat hepatocytes. The effects of lipids
- NANCY E. LEWIN, MARIE L. DELL'AQUILA, GEORGE R. PETTIT, PETER M. BLUMBERG and BARBOUR S. WARREN 2007 Binding of [³H]bryostatins 4 to protein kinase C
- DOUGLAS STICKLE and ROGER BARBER 2015 The encounter coupling model for β -adrenergic receptor/GTP-binding protein interaction in the S49 cell. Calculation of the encounter frequency
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- WALTER H. J. WARD, ROSEMARY KIMBELL and ANN L. JACKMAN 2029 Kinetic characteristics of ICI D1694: a quinazoline antifolate which inhibits thymidylate synthase
- MARGHERITA STROLIN BENEDETTI, ENRICO FRIGERIO, VITTORE TAMASSIA, GIORGIO NOSEDA and JOHN CALDWELL 2032 The dispositional enantioselectivity of indobufen in man
- ANDREA ROTHMAN, TERESA PROVERBIO, ELIZABETH FERNANDEZ and FULGENCIO PROVERBIO 2034 Effect of ethanol on the Na⁺- and the Na⁺, K⁺-ATPase activities of basolateral plasma membranes of kidney proximal tubular cells
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- RYSZARD T. SMOLENSKI, KRYSZYNA FABIANOWSKA-MAJEWSKA, CELIA MONTERO, JOHN A. DULEY, LYNETTE D. FAIRBANKS, MACIEJ MARLEWSKI and H. ANNE SIMMONDS 2053 A novel route of ATP synthesis
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