VOLUME 59(3)

MARCH 1977

British Journal of Pharmacology

- 385 JUAN, H. & LEMBECK, F. Prostaglandin F_{2a} reduces the algesic effect of bradykinin by antagonizing the pain enhancing action of endogenously released prostaglandin E
- 393 LAI, F.M. & SPECTOR, S. Brain and vascular monoamine oxidase activity in the deoxycorticosterone-salt hypertensive rat
- 397 GINSBURG, M., MACLUSKY, N.J., MORRIS, I.D. & THOMAS, P.J. The specificity of oestrogen receptor in brain, pituitary and uterus
- 403 DOGGRELL, S.A. & WOODRUFF, G.N. Effects of antidepressant drugs on noradrenaline accumulation and contractile responses in the rat anococcygeus muscle

- 411 LUDWIG, C. & NAWRATH, H. Effects of D-600 and its optical isomers on force of contraction in cat papillary muscles and guinea-pig auricles
- 419 PLETSCHER, A. Effect of neuroleptics and other drugs on monoamine uptake by membranes of adrenal chromaffin granules
- 425 CHANG, J., LEWIS, G.P. & PIPER, PRISCILLA J. Inhibition by glucocorticoids of prostaglandin release from adipose tissue *in vitro*
- 433 CHAUDHURY, R.R., CHOMPOOTAWEEP, S., DUSITSIN, N., FRIESEN, H. & TANKEYOON, M. The release of prolactin by medroxy-progesterone acetate in human subjects
- 435P PROCEEDINGS OF THE BRITISH PHARMACOLOGICAL SOCIETY, Mill Hill, 5th-7th January, 1977

PROCEEDINGS OF THE BRITISH PHARMACOLOGICAL SOCIETY

Mill Hill, 5th-7th January, 1977

- 435P GREINER, K.G., KEMPER, R., OSSWALD, H. & SCHMITZ, H.-J. (introduced by Wood, J.R.). Potentiation of angiotensin II-induced natriuresis by indomethacin in the rat
- 436P JONES, POYSER, N.L. & WILSON, N.H. Production of 6-oxo-prostaglandin $F_{1\alpha}$ by rat, guinea-pig and sheep uteri, in vitro
- 437P JEFFREY, R.R. & SMITH, G.W. (introduced by Ungar, A.). The potentiation of exogenous noradrenaline by prostaglandins $F_{2\alpha}$ C_2 and D_2 on the canine saphenous vein
- 438P BONTA, I.L., PARNHAM, M.J., van VLIET, L. & VINCENT, J.E. Mutual enhancement of the effects of prostaglandin E₁ and theophylline on the Freund adjuvant-induced arthritis syndrome of rats
- 439P ADOLFS, M.J.P., BONTA, I.L. & PARNHAM, M.J. Cyclic AMP production during adjuvantinduced arthritis in rats
- 440P BRAIN, SUSAN, LEWIS, G.P. & WHITTLE, B.J.R. Actions of phospholipase-A on mast-cell histamine release and paw oedema in the rat
- 441P BLACKWELL, G.J., FLOWER, R.J., NIJKAMP, F.P. & VANE, J.R. Phospholipase A₂ activity of guinea-pig perfused lungs: stimulation and inhibition by anti-inflammatory steroids
- 442P LEWIS, G.P., WESTWICK, J. & WILLIAMS, T.J. Microvascular responses produced by the prostaglandin endoperoxide PGG₂ in vivo
- 443P DUSTING, G.J., LATTIMER, N., MONCADA, S. & VANE, J.R. Prostaglandin X, the vascular metabolite of arachidonic acid responsible for relaxation of bovine coronary artery strips
- 444P ENGINEER, DINAZ M., PIPER, PRISCILLA J. & SIROIS, P. Release of prostaglandins and rabbit aorta contracting substance (RCS) from guinea-pig lung by slow reacting substance of anaphylaxis (SRS-A)
- 444P BOOT, J.R., BROCKWELL, A.D.J., DAWSON, W. & SWEATMAN, W.J.F. The relationship between prostaglandin-like substances and SRS-A released from immunologically challenged lungs

- 445P SCOTT, ELIZABETH, VAAGE, J. & WIBERG, T. (introduced by Ungar, A.). Hydrostatic pulmonary oedema is not a stimulus for prostaglandin synthesis in isolated, perfused lungs
- 446P COREY, E.J., GORDON, J.L., MacINTYRE, D.E. & SALZMAN, E.W. Effects of synthetic prostaglandin analogues on platelet aggregation and secretion
- 447P MILTON, A.S., SMITH, SUSAN & TOMKINS, K.B. Levels of prostaglandin F and E in cerebrospinal fluid of cats during pyrogen-induced fever
- 448P BENNETT, A., CHARLIER, ERIKA M, RAJA BHARTI & STAMFORD, I.F. Sex differences in guinea-pig brain prostaglandins and the effect of indomethacin
- 449P CLINGBINE, G. & HEADING, CHRISTINE E. Effect of colchicine and lumicolchicine on learning in goldfish
- 450P BEDARD, P. & PYCOCK, C. The 'wet dog shake' behaviour in the rat and 5-hydroxytryptamine
- 451P RIGTER, H. VAN RIEZEN, H. & WREN, A. (introduced by Schnieden, H.). Pharmacological validation of a new test for the detection of antidepressant activity of drugs
- 452P CLANCY, ANNETTE, NICHOLSON, A.N. & WRIGHT, CATHERINE M. Effect of metoprolol and oxprenolol on delayed differentiation behaviour in the monkey (Macaca mulatta)
- 453P D'MELLO, G. & STOLERMAN, I.P. Cocaine and amphetamine as discriminative stimuli in rats
- 454P HALLIWELL, J.V. & KUMAR, R. Influence of morphine dependence and withdrawal on circling behaviour in rats with unilateral nigral lesions
- 455P BAXTER, M.G., GOFF, D. MILLER, A.A. & SAUNDERS, I.A. Effect of a potent synthetic opioid pentapeptide in some anti-nociceptive and behavioural tests in mice and rats

- 456P PRESTON, E., RIGTER, H. & STRIJBOS, C. (introduced by Schönbaum, E.). Reversal of morphine-induced suppression of active avoidance behaviour by the tetracyclic antidepressant mianserin
- 457P BAMMER, GABRIELE & CHESHER, G.B. (introduced by Steinberg, Hannah). The effect of ethanol on a passive avoidance task in rats
- 458P GODFRAIND, JEAN-MARIE (introduced by Casteels, R.G.). Effect of iontophoretic and intravenously administered atropine on the acetylcholine-discharges of lateral geniculate neurones
- 459P EVANS, R.H. The effect of cholinomimetic drugs on the isolated hemisected immature rat spinal cord
- 460P JONES, R.S.G. & ROBERTS, M.H.T. Effects of viloxazine on cortical neurone responses to monoamines and acetylcholine
- 461P CROW, T.J. & DEAKIN, J.F.W. Role of tryptaminergic mechanisms in the elements of the behavioural syndrome evoked by tryptophan and a monoamine oxidase inhibitor
- 462P BOURA, A.L.A., BRAZENOR, R.M. & NOLAN, P.L. Precursors of 5-hydroxy-tryptamine reduce the pressor response to clonidine in the rat
- 463P RICHARDSON, P.D.I. & WITHRINGTON, P.G. Responses of the hepatic arterial vascular bed of the dog to intra-arterial injections of noradrenaline, adrenaline and phenylephrine: the role of β -adrenoceptors
- 464P JATON, A.L., LOEW, D.M. & VIGOURET, J.M. Turning behaviour elicited by apomorphine, (+)-amphetamine and three ergot derivatives in rats treated with a unilateral injection of ethanolamine-O-sulphate in the substantia nigra
- 465P WADDINGTON, J.L. (introduced by Crow, T.J.).

 Specificity of monoamine neurotoxins: rotational responses to dopaminergic agonists after unilateral 6-OHDA and 5,6-DHT lesions of the median forebrain bundle
- 466P CROW, T.J. & JOHNSTONE, EVE C. Stereochemical specificity in the antipsychotic effects of flupenthixol in man
- 467P DOLPHIN, A.C., JENNER, P., MARSDEN, C.D. & SAWAYA, M.C.B. Central dopaminergic and noradrenergic components of bromocryptine-induced locomotor activity in mice

- 467P COX, B. & LEE, T.F. Location of receptors mediating hypothermia after injection of dopamine agonists in rats
- 468P BEVAN, P., BRADSHAW, C.M. & SZABADI, E. Comparison of the effects of dopamine and noradrenaline on single cortical neurones
- 469P McCARTHY, P.S., WALKER, R.J. & WOODRUFF, G.N. On the depressant action of dopamine in rat caudate nucleus and nucleus accumbens
- 470P GREEN, A.R. & YOUDIM, M.B.H. The effect of iron deficiency on brain monoamine metabolism and the behavioural responses to increased brain 5-hydroxytryptamine and dopamine synthesis
- 471P BASSETT, J.R. & CAIRNCROSS, K.D. (introduced by Schnieden, H.). Ultrastructural changes in the coronary vascular system following prolonged emotional stress. An experimental model for the study of coronary vascular disease?
- 472P PALMER, R.M.J. & WEATHERALL, M. The effect of some anti-inflammatory and anti-malarial drugs on the migration of horse leucocytes in vitro
- 473P BACH, CATHERINE S. & JASANI, M.K. On the ineffectiveness of indomethacin against rheumatoid swelling
- 473P FOREMAN, J.C., HALLETT, M.B. & MONGAR, J.L. Site of action of the antiallergic drugs cromoglycate and doxantrazole
- 474P JOHANSEN, T. (introduced by Lewis, G.P.).

 Dependence of histamine release from rat mast cells induced by the ionophore A23187 on endogenous adenosine triphosphate
- 475P DUNLOP, LYN S. & SMITH, A.P. (introduced by Piper, Priscilla J.). The effect of histamine antagonists on antigen-induced contractions of sensitized human bronchus *in vitro*
- 476P BLACK, J.W. & WELCH, L.A. Are gastrin receptors located on parietal cells?
- 477P FINCH, L., HARVEY, C.A., HICKS, P.E. & OWEN, D.A.A. Interaction between histamine H₂-receptor antagonists and the hypotensive effects of clonidine in rats
- 478P KOSTERLITZ, H.W. & LESLIE, FRANCES M. Inhibition of [3H]-naloxone binding by opiate agonists

- 478P GODDEN, URMA, HOLZBAUER, MARGARETHE & SHARMAN, D.F. Dopamine utilization in the posterior pituitary gland of the rat
- 480P FELDBERG, W. & ROCHA E. SILVA, M. JR. Vasopressin release by antagonists of GABA and glycine
- 480P MINNEMAN, K.P. (introduced by IVERSEN, L.L.). Morphine selectively blocks dopamine-stimulated cyclic AMP formation in rat neostriatal slices
- 481P GOODLET, I., MIREYLESS, S.E. & SURGUE, M.F. In vitro studies on the inhibition of monoamine uptake by Org 6582
- 482P POOLE, S. & STEPHENSON, J.D. Effects of intrahypothalamic injections of noradrenaline and carbachol on core temperature of unrestrained rats
- 483P PETTY, MARGARET A. & REID, J.L. Noradrenaline concentration in hypothalamic and brain stem nuclei of renovascular hypertensive rats
- 484P MILSON, J.A. & MITCHELL, J.F. The action of amino acids on evoked responses in the frog optic tectum
- 485P DICK, FABIENNE & KELLY, J.S. Specific in vivo autoradiographic localization of [³H]-β-alanine uptake sites in macro- as opposed to microglial cells
- 485P GALVAN, M. (introduced by Brown, D.A.). Potentiation of γ -aminobutyric acid (GABA) action by inhibiting neuroglial uptake
- 486P JESSELL, T.M. (introduced by Iversen, L.L.).
 Inhibition of substance P release from the isolated rat substantia nigra by GABA
- 487P DESCHENES, M., FELTZ, P. & ROUZAIRE-DUBOIS, BEATRICE (introduced by Kelly, J.S.). Preliminary investigation of a process of desensitization on mammalian presynaptic γaminobuytric (GABA) receptors
- 488P ASSUMPÇÃO, J.A., BERNARDI, N., DACKE, C.G. & DAVIDSON, N. (introduced by Stone, T.W.). Efflux characteristics of isotopically labelled y-aminobutyric acid (GABA) and L-glutamate in the rat cuneate nucleus
- 489P DAVIES, J. & TONGROACH, P. Antagonism of synaptic inhibition in the rat substantia nigra by tetanus toxin

- 489P PARSONS, J.A., RAFFERTY, B., STEVENSON, R.W. & ZANELLI, JOAN M. Use of protease inhibitors to protect subcutaneously injected peptide hormones against local degradation
- 490P POWIS, G. Drug clearance in the rabbit twentyfour hours after an intoxicating doses of ethanol
- 491P LIVINGSTON, A. & WATERMAN, A.E. Influence of age and sex on the duration of action of ketamine in the rat
- 492P MEIER, J. & WAGNER, O. (introduced by Berde, B.). First-pass effect of the beta-adrenoceptor blocking agent pindolol in the dog
- 493P ARMITAGE, A.K., DOLLERY, C.T., HOUSEMAN, T.H., KOHNER, E.M., LEWIS, P.J. & TURNER, D.M. Absorption of nicotine by man during cigar smoking
- 494P ATA M.M. & SULLIVAN, F.M. Effect of prenatal phenytoin treatment on postnatal development
- 494P McELHATTON, PATRICIA R. & SULLIVAN, F.M. Comparative teratogenicity of six antiepileptic drugs in the mouse
- 495P SMITH, P.A. & WEIGHT, F.F. (introduced by Walker, R.J.). A comparison of the effects of ouabain and potassium-free Ringer on the electrogenic sodium pump and slow synaptic inhibition in bullfrog sympathetic ganglia
- 496P ALTMAN, J., GARAY, R., PAPADIMITRIOU, A. & WORCEL, M. Alterations in ²²Na fluxes of arterial smooth muscles of spontaneously hypertensive rats
- 497P HAMON, G. & WORCEL, M. Mechanism of action of angiotensin II on the membrane potential of rat myometrium
- 498P GHYSEL-BURTON, J. & GODFRAIND, T. High and low affinity ouabain binding sites in guinea-pig atria
- 499P PATERSON, S.J. & WILSON, W.S. Uptake of choline by rabbit corneal epithelium
- 499P HENDERSON, C.G. & UNGAR, A. Antagonist affinity constants for adrenomedullary muscarinic receptors
- 500P BROWN, D.A. & FATHERAZI, SAHBA.

 Muscarinic agonists and sympathetic ganglia

- 502P BEDDELL, C.R., CLARK, R.B., MILLER, R. & WILKINSON, S. A conformational study of enkephalin
- 503P BIRDSALL, N.J.M., BURGEN, A.S.V., HULME, E.C. & WELLS, J.W. Muscarinic receptors: ionic perturbation of the binding properties
- 503P HANLEY, M.R. & IVERSEN, L.L. Muscarinic acetylcholine receptors and cyclic GMP in rat brain
- 504P NORTH, R.A. Hyperpolarization of myenteric neurones by enkephalin
- 505P NORTH, R.A. & WALLIS, D.I. Intracellular recording of the effects of 5-hydroxytryptamine on rabbit superior cervical ganglion cells
- 506P RIDDALL D.R. (introduced by Langer, S.Z.). The uptake of ⁴⁵calcium into slices of rat cerebral cortex: effect of depolarizing stimuli
- 507P SCHOLFIELD, C.N. (introduced by Brown, D.A.). Prolongatin of post-synaptic inhibition by barbiturates
- 508P ARCHER, E.R., RICHARDS, C.D. & WHITE, ANN E. Non-additive anaesthetic effects of alphaxalone and methohexitone
- 509P PIPER, D.C. (introduced by James, G.W.L.).
 Stress-induced partial insomnia: a model for the evaluation of potential hypnotic compounds
- 510P MARSHALL, I., NASMYTH, P.A., NICHOLL, CLAIRE G. & SHEPPERSON, N.B. Pre-synaptic α -adrenoceptor regulation of the twitch response of the mouse vas deferens
- 511P MARSHALL, I., NASMYTH, P.A. & SHEPPERSON, N.B. Pre-synaptic α-adrenoceptors and the inhibition by uptake blocking agents of the twitch response of the mouse vas deferens
- 511P TAYO, F.M. (introduced by Osuide, G.). Further evidence for dopaminoceptors in the vas deferens
- 513P DREW, G.M. Pharmacological characterization of presynaptic α -adrenoceptors which regulate cholinergic activity in the guinea-pig ileum
- 514P AL-JEBOORY, A. & MARSHALL, R.J. The effects of dopamine and dobutamine on isolated coronary vascular smooth muscle of the pig

- 514P CAMBRIDGE, D., DAVEY, M.J. & MASSINGHAM, R. Prazosin, a selective antagonist of post-synaptic α-adrenoceptors
- 516P PYCOCK, C. The nature of central dopamine receptor supersensitivity
- 517P FRANKISH, N.H. & ZEITLIN, I.J. The assay of tissue kallikrein in rat intestine
- 518P LILJEQUIST, RAIJA, LINNOILA, M. & MATTILA, M.J. State-dependent effect of diazepam on learning
- 519P SABIKOWSKI, Z.T. (introduced by Lewis, G.P.). Transducer coupling to pen recorder
- 519P CRUTCHLEY, JOSE, P., SABIKOWSKI, Z.T. & SEALE, J.P. (introduced by Lewis, G.P.). Measurement of the area under a curve (Planimeter)
- 520P BIRDSALL, B., BURGEN, A.S.V., FEENEY, J. & ROBERTS, G.C.K. ³¹P and ¹H n.m.r. studies of coenzyme binding to dihydrofolate reductase
- 521P BIRDSALL, B., BURGEN, A.S.V., FEENEY, J., RODRIGUEZ de MIRANDA, J.F. & ROBERTS, G.C.K. Co-operativity in ligand binding to dihydrofolate reductase
- 521P BURGEN, A.S.V., FEENEY, J. & ROBERTS, G.C.K. Nuclear magnetic resonance studies of ligand binding to dihydrofolate reducatase
- 521P BATCHELOR, J.G. (introduced by Burgen, A.S.V.). Analysis of data by nonlinear regression analysis
- 522P DUNN, SUSAN M.J. & KING, R.W. (introduced by Burgen, A.S.V.). Kinetic studies of coenzyme binding to *L. casei* dihydrofolate reductase
- 522P BIRDSALL, N.J.M., BURGEN, A.S.V., FIELD, P.M., RAISMAN, G. & ROTTER, A. Axotomy causes loss of synaptic contacts and loss of muscarinic receptors in the hypoglossal nucleus
- 523P BAXTER, M.G., FOLLENFANT, R.L., MILLER, A.A. & SETHNA, D.M. Some morphine-like properties of a potent antinociceptive synthetic pentapeptide in relation to physical dependence in rodents
- 524P PARSONS, J.A., RAFFERTY, B., STEVENSON, R.W. & ZANELLI, JOAN M. Variable-rate intravenous infusions to mimic the blood levels of peptide hormones produced by physiological stimuli or subcutaneous injection

- 524P GARBUTT, P. & LEWIS, C.M. (introduced by Baker, J.B.E.). A low-cost electronic teaching aid
- 525P JOSEPH, M.H. The determination of kynurenine by gas-liquid chromatography; evidence for its presence in rat brain
- 526P RICHARDS, C.D. & TEGG, W.J.B. A superfusion chamber suitable for maintaining mammalian brain tissue slices for electrical recording
- 527P HORSFALL, G.B., OLDHAM, A.A. & ROUSE, W. A novel and inexpensive method for detecting and quantitating the occurrence of cardiac arrhythmias
- 527P CUELLO, A.C. & KELLY, J.S. Electron microscopic autoradiographic localization of [3H]-dopamine in the dendrites of the dopaminergic neurones of the rat substantia nigra in vivo
- 528P PEARSON, S. (introduced by Hill, R.G.). A variable programme controller for sequential drug administration
- 529P NAYLOR, I.L. (introduced by Leach, G.D.H.). A simple and inexpensive piece of apparatus for cascade superfusion procedures
- 530P FLYNN, SHEILA B., GRISTWOOD, R.W. & OWEN, D.A.A. An isolated guinea-pig working heart: preliminary studies with histamine and noradrenaline

- 531P LEE, A.J. & TABERNER, P.V. A non-invasive method for the preparation of split brain rats using ultrasonics
- 531P BAKER, JUDITH M., BOND, S.W. & HANDLEY, SHEILA L. Effects of long-term treatment with contraceptive steroids on plasma and brain tryptophan, brain 5-hydroxytryptamine, and locomotor activity in female mice
- 533P CAMPBELL, S., FRIEDMAN, L.A., LEWIS, P.J., TALBERT, D.G. & THOMS, A. Recording foetal breathing in man
- 534P CLANACHAN, A.S. & PATON, D.M. Inhibitory actions of adenine nucleotides and adenosine on transmission in rat vas deferens
- 535P MILSON, J.A. (introduced by Mitchell, J.F.). A unit for detecting, memorizing and recording peak voltages
- 535P FELDBERG, W. & GUERTZENSTEIN, P.G. How to apply drugs to the ventral surface of the brain stem in anaesthetized cats
- 535P CROW, T.J. & DEAKIN, J.F.W. Does activation of 5-HT neurones support self-stimulation?