



ELSEVIER

Pharmacology, Biochemistry and Behavior 71 (2002) 869–874

www.elsevier.com/locate/pharmbiochembeh

**PHARMACOLOGY
BIOCHEMISTRY
AND
BEHAVIOR**

**CONTENTS
VOLUME 71, 2002**

CONTENTS

VOLUME 71 NUMBERS 1/2 2002

Articles

Tetrabenazine fails to antagonize a behavioral effect of cocaine in rhesus monkeys. KOETZNER, L., T.L. SUMPTER and J.H. WOODS	1
Seizure onset times for rats receiving systemic lithium and pilocarpine: Sources of variability. PERSINGER, M.A., L.S. STEWART, P.M. RICHARDS, T. HARRIGAN, R.P. O'CONNOR and Y.R.J. BUREAU	7
Antidotal effects of buprenorphine on the behavioral alterations accompanying cocaine and combined cocaine–ethanol toxicity. HAYASE, T., Y. YAMAMOTO and K. YAMAMOTO	19
Effects of amphetamine on locomotor activity in adult and juvenile alcohol-preferring and -nonpreferring rats. MCKINZIE, D.L., W.J. MCBRIDE, J.M. MURPHY, L. LUMENG and T.-K. LI	29
Evidence for the involvement of cyclooxygenase activity in the development of cocaine sensitization. REID, M.S., L.B. HO, K. HSU, L. FOX, B.K. TOLLIVER, J.U. ADAMS, A. FRANCO and S.P. BERGER	37
Sensory and physiologic effects of menthol and nonmenthol cigarettes with differing nicotine delivery. PICKWORTH, W.B., E.T. MOOLCHAN, I. BERLIN and R. MURTY	55
Influence of ACTH on the effects of imipramine, desipramine and lithium on duration of immobility of rats in the forced swim test. KITAMURA, Y., H. ARAKI and Y. GOMITA	63
Lack of effects of acute estradiol on mood in postmenopausal women. SCHLEIFER, L.A., A.J.H. JUSTICE and H. DE WIT	71
Chronic stress impairs rotarod performance in rats: Implications for depressive state. MIZOGUCHI, K., M. YUZURIHARA, A. ISHIGE, H. SASAKI and T. TABIRA	79
Butorphanol and nalbuphine in opioid-dependent humans under a naloxone discrimination procedure. OLIVETO, A., K. SEVARINO, E. MCCANCE-KATZ and A. FEINGOLD	85
The effects of callosal agenesis on the susceptibility to seizures elicited by pentylenetetrazol in BALB/cCF mice. MEDINA, A.E., A.C. MANHÃES and S.L. SCHMIDT	97
Bombesin decreases yawning in a high-yawning subline of Sprague–Dawley rats. DÍAZ-ROMERO, M., J.R. EGUÍBAR and A. MOYAHÓ	103
Ethanol-stimulated serotonin release in the ventral hippocampus: An absence of rapid tolerance for the alcohol-preferring P rat and insensitivity in the alcohol-nonpreferring NP rat. THIELEN, R.J., D.J. BARE, W.J. MCBRIDE, L. LUMENG and T.-K. LI	111
Involvement of microtubule integrity in memory impairment caused by colchicine. NAKAYAMA, T. and T. SAWADA	119
Angiotensin II-induced drinking and pressor responses to central or systemic irbesartan and losartan. GRIPPO, A.J., R.F. KIRBY, T.G. BELTZ and A.K. JOHNSON	139

Meal patterns of free feeding rats treated with clozapine, olanzapine, or haloperidol. LEE, M.D. and P.G. CLIFTON	147
Reversal of SR 141716A-induced head-twitch and ear-scratch responses in mice by Δ^9-THC and other cannabinoids. JANOYAN, J.J., J.L. CRIM and N.A. DARMANI	155
Evaluation of 1,1,1-trichloroethane and flurothyl locomotor effects following diazepam treatment in mice. WILEY, J.L., R.E. FAGALDÉ, K.G. BÜHLER, K.L. LAVECCHIA and R.L. BALSTER	163
Chronic exposure to the opioid growth factor, [Met⁵]-enkephalin, during pregnancy: Maternal and preweaning effects. MCLAUGHLIN, P.J., J.D. WYLIE, G. BLOOM, J.W. GRIFFITH and I.S. ZAGON	171
Evaluation of the anxiolytic-like effects of <i>Cecropia glazioui</i> Sneth in mice. ROCHA, F.F., A.J. LAPA and T.C.M. DE LIMA	183
Behavioural pharmacology of polygalasaponins indicates potential antipsychotic efficacy. CHUNG, I.-W., N.A. MOORE, W.-K. OH, M.F. O'NEILL, J.-S. AHN, J.-B. PARK, U.G. KANG and Y.S. KIM	191
Inhibition of cocaine self-administration by fluoxetine or D-fenfluramine combined with phentermine. GLATZ, A.C., M. EHRLICH, R.S. BAE, M.J. CLARKE, P.A. QUINLAN, E.C. BROWN, P. RADA and B.G. HOEBEL	197
The stimulus effect of 5,6,7,8-tetrahydro-1,3-dioxolo[4,5-g]isoquinoline is similar to that of cocaine but different from that of amphetamine. YOUNG, R. and R.A. GLENNON	205
Phenytoin ameliorates the memory deficit induced in the young chick by ethanol toxicity in association with thiamine deficiency. CROWE, S.F. and D. EL HADJ	215
Propranolol and metoprolol enhance the anticonvulsant action of valproate and diazepam against maximal electroshock. LUCHOWSKA, E., P. LUCHOWSKI, M. WIELOSZ, Z. KLEINROK, S.J. CZUCZWAR and E.M. URBAŃSKA	223
Chronic aspirin ingestion improves spatial learning in adult and aged rats. SMITH, J.W., O. AL-KHAMEES, B. COSTALL, R.J. NAYLOR and J.W. SMYTHE	233
Anxiogenic activity of <i>Myristica fragrans</i> seeds. SONAVANE, G.S., V.P. SARVEIYA, V.S. KASTURE and S.B. KASTURE	239
Protective effect of <i>trans</i>-resveratrol against kainic acid-induced seizures and oxidative stress in rats. GUPTA, Y.K., S. BRIYAL and G. CHAUDHARY	245
Effects of acute and chronic treatment with <i>Hypericum perforatum</i> L. (LI 160) on different anxiety-related responses in rats. FLAUSINO, O.A. JR., H. ZANGROSSI JR., J.V. SALGADO and M.B. VIANA	251
Effects of estradiol treatment on voluntary and forced alcohol consumption in male rats. JUÁREZ, J., E.B. DE TOMASI and M. VIRGEN	259
Tamoxifen and toremifene cause impairment of learning and memory function in mice. CHEN, D., C.F. WU, B. SHI and Y.M. XU	269
DMSO as a vehicle for central injections: Tests with feeding elicited by norepinephrine injected into the paraventricular nucleus. BLEVINS, J.E., B.G. STANLEY and R.D. REIDELBERGER	277

Delta opioid discrimination learning in the rat: Assessment with the selective delta agonist SNC80. STEVENSON, G.W., F. CAÑADAS, M. GOMEZ-SERRANO, T. ULLRICH, X. ZHANG, K.C. RICE and A.L. RILEY	283
Increased successive negative contrast in rats withdrawn from an escalating-dose schedule of D-amphetamine. BARR, A.M. and A.G. PHILLIPS	293
Reproductive changes in male rats treated perinatally with an aromatase inhibitor. GERARDIN, D.C.C. and O.C.M. PEREIRA	301
Effects of acute alcohol administration on object recognition learning in C57BL/6J mice. RYABININ, A.E., M.N. MILLER and S. DURRANT	307
Mouse light/dark box test reveals anxiogenic-like effects by activation of histamine H₁ receptors. MALMBERG-AIELLO, P., A. IPPONI, A. BARTOLINI and W. SCHUNACK	313
Pallidal administrations of gabazine and 5-AVA affect pressure-induced behavioral disorders in rats. DARBIN, O., J.J. RISSO, M. WEISS and J.C. ROSTAIN	319
Acute locomotor effects of fluoxetine, sertraline, and nomifensine in young versus aged Fischer 344 rats. STANFORD, J.A., T.D. CURRIER and G.A. GERHARDT	325
Reversal of Δ^9-THC hyperphagia by SR141716 and naloxone but not dexfenfluramine. WILLIAMS, C.M. and T.C. KIRKHAM	333
Prolonged effect of an anesthetic dose of ketamine on behavioral despair. YILMAZ, A., D. SCHULZ, A. AKSOY and R. CANBEYLI	341
Modulation of the locomotor properties of morphine and amphetamine by uncontrollable stress. WILL, M.J., A. DER-AVAKIAN, J.L. PEPIN, B.T. DURKAN, L.R. WATKINS and S.F. MAIER	345
Circling behavior induced by microinjection of serotonin reuptake inhibitors in the substantia nigra. BATA-GARCÍA, J.L., F.J. HEREDIA-LÓPEZ, F.J. ALVAREZ-CERVERA, G. ARANKOWSKY-SANDOVAL and J.L. GÓNGORA-ALFARO	353

CONTENTS

VOLUME 71 NUMBER 3 2002

SPECIAL ISSUE: FUNCTIONAL ROLE OF SPECIFIC SYSTEMS WITHIN THE EXTENDED
AMYGDALA AND HYPOTHALAMUS

Introduction SHEKHAR, A.	367
Articles	
Comparison of the distribution of calcium-binding proteins and intrinsic connectivity in the lateral nucleus of the rat, monkey, and human amygdala. PITKÄNEN, A. and S. KEMPPAINEN	369
The role of amygdala glutamate receptors in fear learning, fear-potentiated startle, and extinction. WALKER, D.L. and M. DAVIS	379
Expression of fear-conditioning is accompanied by increased paired-pulse depression within the amygdala. ZINEBI, F., M. MCKERNAN and P. SHINNICK-GALLAGHER	393

Amygdala priming results in conditioned place avoidance. THIELEN, S.K. and A. SHEKHAR	401
Behavioral reactivity to stress: Amplification of stress-induced noradrenergic activation elicits a galanin-mediated anxiolytic effect in central amygdala. KHOSHBOUEI, H., M. CECCHI, S. DOVE, M. JAVORS and D.A. MORILAK	407
Neuropeptide Y-Y₂ receptors mediate anxiety in the amygdala. SAJDYK, T.J., D.A. SCHOBBER, D.L. SMILEY and D.R. GEHLERT	419
Leptin suppression of hypothalamic NPY expression and feeding, but not amygdala NPY expression and experimental anxiety. THORSELL, A., L. CABERLOTTO, R. RIMONDINI and M. HEILIG	425
Glucose metabolism in the amygdala in depression: Relationship to diagnostic subtype and plasma cortisol levels. DREVETS, W.C., J.L. PRICE, M.E. BARDGETT, T. REICH, R.D. TODD and M.E. RAICHLE	431
The amygdala and related structures in the pathophysiology of autism. SWEETEN, T.L., D.J. POSEY, A. SHEKHAR and C.J. McDOUGLE	449
Local circuit regulation of paraventricular nucleus stress integration: Glutamate–GABA connections. HERMAN, J.P., J.G. TASKER, D.R. ZIEGLER and W.E. CULLINAN	457
The dorsomedial hypothalamus and the response to stress: Part renaissance, part revolution. DiMICCO, J.A., B.C. SAMUELS, M.V. ZARETSKAIA and D.V. ZARETSKY	469
The medial hypothalamic defensive system: Hodological organization and functional implications. CANTERAS, N.S.	481
Role of norepinephrine in the dorsomedial hypothalamic panic response: An in vivo microdialysis study. SHEKHAR, A., J.S. KATNER, T.J. SAJDYK and R.R. KOHL	493
Both the shell of the nucleus accumbens and the central nucleus of the amygdala support amphetamine self-administration in rats. CHEVRETTE, J., J.R. STELLAR, G.W. HESSE and A. MARKOU	501
Central nucleus of the amygdala and the effects of alcohol and alcohol-drinking behavior in rodents. McBRIDE, W.J.	509
Neural substrates of conditioned-cued relapse to drug-seeking behavior. SEE, R.E.	517

 CONTENTS

VOLUME 71 NUMBER 4 2002

SPECIAL ISSUE: SEROTONIN: PHARMACOLOGY, BIOCHEMISTRY AND BEHAVIOR

Editorial	531
------------------------	-----

LEAD ARTICLES

Molecular, pharmacological and functional diversity of 5-HT receptors. HOYER, D., J.P. HANNON and G.R. MARTIN	533
The medical benefit of 5-HT research. JONES, B.J. and T.P. BLACKBURN	555

SEROTONIN: RECEPTORS AND THERAPEUTICS

Subthalamic 5-HT_{1A} and 5-HT_{1B} receptor modulation of RU 24969-induced behavioral profile in rats. MARTINEZ-PRICE, D.L. and M.A. GEYER	569
Anxiogenic-like effect of serotonin_{1B} receptor stimulation in the rat elevated plus-maze. LIN, D. and L.H. PARSONS	581
Specific labelling of serotonin 5-HT_{1B} receptors in rat frontal cortex with the novel, phenylpiperazine derivative, [³H]GR125,743: A pharmacological characterization. MILLAN, M.J., A. NEWMAN-TANCREDI, S. LOCHON, M. TOUZARD, S. AUBRY and V. AUDINOT	589
Effect of SB-243213, a selective 5-HT_{2C} receptor antagonist, on the rat sleep profile: A comparison to paroxetine. SMITH, M.I., D.C. PIPER, M.S. DUXON and N. UPTON	599
Biochemical evidence that the atypical antipsychotic drugs clozapine and risperidone block 5-HT_{2C} receptors in vivo. DI MATTEO, V., M. CACCHIO, C. DI GIULIO, G. DI GIOVANNI and E. ESPOSITO	607
Influence of the 5-HT_{2C} receptor antagonist, SB-242084, in tests of anxiety. MARTIN, J.R., T.M. BALLARD and G.A. HIGGINS	615
Central 5-HT₄ receptors and dopamine-dependent motor behaviors: Searching for a functional role. DE DEURWAERDÈRE, P., L. CERVO, L. STINUS and U. SPAMPINATO	627
Effects of the 5-HT₆ receptor antagonist, SB-271046, in animal models for schizophrenia. POUZET, B., M. DIDRIKSEN and J. ARNT	635
Pharmacological profile of SB-357134: A potent, selective, brain penetrant, and orally active 5-HT₆ receptor antagonist. STEAN, T.O., W.D. HIRST, D.R. THOMAS, G.W. PRICE, D. ROGERS, G. RILEY, S.M. BROMIDGE, H.T. SERAFINOWSKA, D.R. SMITH, S. BARTLETT, N. DEEKS, M. DUXON and N. UPTON	645
Effects of the 5-HT₇ receptor antagonist SB-258741 in animal models for schizophrenia. POUZET, B., M. DIDRIKSEN and J. ARNT	655
Induction of hyperlocomotion in mice exposed to a novel environment by inhibition of serotonin reuptake: A pharmacological characterization of diverse classes of antidepressant agents. BROCCO, M., A. DEKEYNE, S. VEIGA, S. GIRARDON and M.J. MILLAN	667
SEROTONIN AND FEEDING	
Parabrachial infusion of D-fenfluramine reduces food intake: Blockade by the 5-HT_{1B} antagonist SB-216641. SIMANSKY, K.J. and D.M. NICKLOUS	681
Serotonin 2C receptor agonists and the behavioural satiety sequence in mice. HEWITT, K.N., M.D. LEE, C.T. DOURISH and P.G. CLIFTON	691
Estrous cycle and food availability affect feeding induced by amygdala 5-HT receptor blockade. PARKER, G.C., C. BISHOP and D.V. COSCINA	701
Hypothalamic paraventricular 5-hydroxytryptamine: Receptor-specific inhibition of NPY-stimulated eating and energy metabolism. CURRIE, P.J., C.D. COIRO, T. NIYOMCHAI, A. LIRA and F. FARAHMAND	709
SEROTONIN: MOTIVATED BEHAVIOR AND TIMING	
Activation of 5-HT_{1B} receptors in the nucleus accumbens reduces self-administration of amphetamine on a progressive ratio schedule. FLETCHER, P.J., A. AZAMPANAH and K.M. KORTH	717

Role of serotonin_{2C} receptors in the control of brain dopaminergic function.	
DI MATTEO, V., M. CACCHIO, C. DI GIULIO and E. ESPOSITO	727
An investigation of the role of 5-HT_{2C} receptors in modifying ethanol self-administration behaviour.	
TOMKINS, D.M., N. JOHARCHI, M. TAMPAKERAS, J.R. MARTIN, J. WICHMANN and G.A. HIGGINS	735
Serotonin 5-HT_{2C} receptors in nucleus accumbens regulate expression of the hyperlocomotive and discriminative stimulus effects of cocaine.	
FILIP, M. and K.A. CUNNINGHAM	745
Involvement of serotonin in nicotine dependence: Processes relevant to positive and negative regulation of drug intake.	
OLAUSSON, P., J.A. ENGEL and B. SÖDERPALM	757
5-Hydroxytryptamine and interval timing behaviour.	
HO, M.-Y., D.N. VELÁZQUEZ-MARTÍNEZ, C.M. BRADSHAW and E. SZABADI	773
Effect of 8-OH-DPAT on temporal discrimination following central 5-hydroxytryptamine depletion.	
BODY, S., T.-J. CHIANG, S. MOBINI, M.-Y. HO, C.M. BRADSHAW and E. SZABADI	787
SEROTONIN: INTERACTIONS WITH OTHER TRANSMITTER SYSTEMS	
Nicotinic-serotonergic interactions in brain and behaviour.	
SETH, P., S. CHEETA, S. TUCCI and S.E. FILE	795
Electrical stimulation of the dorsal and median raphe nuclei increases extracellular noradrenaline in rat hippocampus: Evidence for a 5-HT-independent mechanism.	
HAJÓS-KORCSOK, É. and T. SHARP	807
Alteration in 5-hydroxytryptamine agonist-induced behaviour following a corticosterone implant in adult rats.	
FONE, K.C.F. and I.A. TOPHAM	815
SEROTONIN: MEDICAL ISSUES	
Serotonin releasing agents: Neurochemical, therapeutic and adverse effects.	
ROTHMAN, R.B. and M.H. BAUMANN	825
Recreational Ecstasy/MDMA, the serotonin syndrome, and serotonergic neurotoxicity.	
PARROT, A.C.	837
How strong is the evidence that brain serotonin neurons are damaged in human users of ecstasy.	
KISH, S.J.	845
The role of serotonin in human mood and social interaction: Insight from altered tryptophan levels.	
YOUNG, S.N. and M. LEYTON	857
Index to Volume 71	869
Author Index	875
Keyword Index	877