

**CONTENTS
VOLUME 75, 2003***CONTENTS*

VOLUME 75 NUMBER 1 2003

ARTICLES

- Lack of effect of 5HT₃ antagonist in mediating subjective and behavioral responses to cotinine.**
HATSUKAMI, D.K., J. JENSEN, L.H. BRAUER, M. MOONEY, S. SCHULTE, M. SOFUOGLU
and P.R. PENTEL 1
- Effects of dopamine antagonists on the timing of two intervals.**
DREW, M.R., S. FAIRHURST, C. MALAPANI, J.C. HORVITZ and P.D. BALSAM 9
- Differential vulnerability to motor deficits in second replicate HAS and LAS rats following neonatal alcohol exposure.**
THOMAS, J.D., B.D. LEANY and E.P. RILEY 17
- Blockade of histamine H₂ receptors of the periaqueductal gray and inferior colliculus induces fear-like behaviors.**
SANTOS, N.R., J.P. HUSTON and M.L. BRANDÃO 25
- Dose–response effects of chronic lithium regimens on spatial memory in the black molly fish.**
CRESON, T.K., M.L. WOODRUFF, K.E. FERSLEW, E.M. RASCH and P.J. MONACO 35
- The relationship between cocaine-induced increases in NAC1 and behavioral sensitization.**
WANG, P.J., M. STROMBERG, S. REPLENSKI, A. SNYDER-MACKLER and S.A. MACKLER 49
- Dopamine D₁ and D₂ antagonists reduce the acquisition and expression of flavor-preferences conditioned by fructose in rats.**
BAKER, R.M., M.J. SHAH, A. SCLAFANI and R.J. BODNAR 55
- Methylphenidate-induced motor activity in rats: Modulation by melatonin and vasopressin.**
APPENRODT, E. and H. SCHWARZBERG 67
- The effects of alprazolam on conditioned place preferences produced by intravenous heroin.**
WALKER, B.M. and A. ETTEMBERG 75
- Noradrenergic and serotonergic blockade inhibits BDNF mRNA activation following exercise and antidepressant.**
IVY, A.S., F.G. RODRIGUEZ, C. GARCIA, M.J. CHEN and A.A. RUSSO-NEUSTADT 81
- Moderate doses of ethanol partially reverse avoidance learning deficits in high-alcohol-drinking rats.**
RORICK, L.M., P.R. FINN and J.E. STEINMETZ 89
- Effects of preexposure to dexfenfluramine, phentermine, dexfenfluramine–phentermine, or fluoxetine on sibutramine-induced hypophagia in the adult rat.**
WELLMAN, P.J., S.L. JONES and D.K. MILLER 103
- Differential effects of intraplantar capsaizipine and ruthenium red on capsaicin-induced desensitization in mice.**
SAKURADA, T., T. MATSUMURA, T. MORIYAMA, C. SAKURADA and S. UENO
and S. SAKURADA 115
- Locomotion, stereotypy, and dopamine D₁ receptors after chronic “binge” cocaine in C57BL/6J and 129/J mice.**
SCHLUSSMAN, S.D., Y. ZHANG, S. KANE, C.L. STEWART, A. HO and M.J. KREEK 123
- Chronic treatment with antipsychotics in rats as a model for antipsychotic-induced weight gain in human.**
POUZET, B., T. MOW, M. KREILGAARD and S. VELSCHÖW 133
- Time-dependent effects of cycloheximide on long-term memory in the cuttlefish.**
AGIN, V., R. CHICHERY, E. MAUBERT and M.-P. CHICHERY 141
- Presynaptic regulation of neurotransmitter release in the cortex of aged rats with differential memory impairments.**
BIRTHELMER, A., A. LAZARIS, T. SCHWEIZER, R. JACKISCH and J.-C. CASSEL 147
- Amphetamine-modified acoustic startle responding and prepulse inhibition in adult and adolescent alcohol-preferring and -nonpreferring rats.**
BELL, R.L., Z.A. RODD, C.C. HSU, L. LUMENG, J.M. MURPHY and W.J. MCBRIDE 163
- Dimenhydrinate produces a conditioned place preference in rats.**
HALPERT, A.G., M.C. OLMSTEAD and R.J. BENINGER 173

Meal pattern changes associated with temporomandibular joint inflammation/pain in rats; Analgesic effects. KERINS, C.A., D.S. CARLSON, J.E. McINTOSH and L.L. BELLINGER	181
Heritable differences in the effects of amphetamine but not DOI on startle gating in albino and hooded outbred rat strains. SWERDLOW, N.R., J.M. SHOEMAKER, A. PLATTEN, L. PITCHER, J. GOINS and S. CRAIN	191
Facilitation of electrical brain self-stimulation behavior by abused solvents. BESPALOV, A., I. SUKHOTINA, I. MEDVEDEV, A. MALYSHKIN, I. BELOZERTSEVA, R. BALSTER and E. ZVARTAU	199
Norepinephrine regulates locomotor hyperactivity in the mouse mutant coloboma. JONES, M.D. and E.J. HESS	209
Effects of imidacloprid metabolites on habituation in honeybees suggest the existence of two subtypes of nicotinic receptors differentially expressed during adult development. GUEZ, D., L.P. BELZUNCES and R. MALESZKA	217
Flavor preferences conditioned by intragastric ethanol with limited access training. ACKROFF, K. and A. SCLAFANI	223
Agonist/antagonist properties of nalbuphine, butorphanol and (–)-pentazocine in male vs. female rats. CRAFT, R.M. and D.M. McNIEL	235

CONTENTS

VOLUME 75 NUMBER 2 2003

ARTICLES

Effects of selective serotonin reuptake inhibitors on immobility time in the tail suspension test in streptozotocin-induced diabetic mice. KAMEI, J., S. MIYATA, K. MORITA, A. SAITOH and H. TAKEDA	247
Induction of hyperglycemia in mice with atypical antipsychotic drugs that inhibit glucose uptake. DWYER, D.S. and D. DONOHOE	255
Antinociceptive and hypnotic effects of <i>Premna tomentosa</i> L. (Verbenaceae) in experimental animals. DEVI, K.P., M. SREEPRIYA, T. DEVAKI and K. BALAKRISHNA	261
Preventing L-NAME inhibitory effects on rat sexual behavior with hydralazine, isradipine or captopril co-treatment. FERRAZ, M.R., M.M.D. FERRAZ, R. SANTOS and R.S. DE MOURA	265
Quasi-asymptotic development of conditioned hyperactivity induced by intermittent injections of cocaine in C57BL/6J mice. BRABANT, C., S. TAMBOUR and E. TIRELLI	273
Effect of the 5-HT₆ receptor antagonists Ro 04-6790 and Ro 65-7199 on latent inhibition and prepulse inhibition in the rat: Comparison to clozapine. LENG, A., A. OUAGAZZAL, J. FELDON and G.A. HIGGINS	281
Suppression of morphine-induced conditioned place preference by <i>l</i>-12-chloroscoulerine, a novel dopamine receptor ligand. LIU, Z.-H., W.-Q. JIN, H.-P. ZHANG, X.-J. CHEN and G.-Z. JIN	289
Morphine conditioned place preference is attenuated by perinatal lead exposure. VALLES, R., A.L. CARDON, H.M. HEARD, G.R. BRATTON and J.R. NATION	295
Beta-funaltrexamine affects cocaine self-administration in rats responding on a progressive ratio schedule of reinforcement. WARD, S.J., T.J. MARTIN and D.C.S. ROBERTS	301
Postural syncope after marijuana: A transcranial Doppler study of the hemodynamics. MATHEW, R.J., W.H. WILSON and R. DAVIS	309
Interactions of tiagabine with some antiepileptics in the maximal electroshock in mice. ŁUSZCZKI, J., M. ŚWIĄDER, M. CZUCZWAR, J. KIŚ and S.J. CZUCZWAR	319
Prevention of picrotoxin convulsions-induced learning and memory impairment by nitric oxide increasing dose of L-arginine in rats. PAUL, V., L. REDDY and P. EKAMBARAM	329
Effect of repeated administration of phencyclidine on spatial performance in an eight-arm radial maze with delay in rats and mice. LI, Z., C.H. KIM, J. ICHIKAWA and H.Y. MELTZER	335
Thermal dehydration-induced thirst in lithium-treated rats. BARNEY, C.C., D.M. KURYLO and J.L. GROBE	341
Chronic opioid exposure produces increased heroin self-administration in rats. WALKER, J.R., S.A. CHEN, H. MOFFITT, C.E. INTURRISI and G.F. KOOB	349

Increased anxiety-like behavior in adult rats exposed to nicotine as adolescents. SLAWECKI, C.J., A. GILDER, J. ROTH and C.L. EHLERS	355
The modulatory actions of dopamine D2/3 agonists and antagonists on the locomotor-activating effects of morphine and caffeine in mice. COOK, C.D. and P.M. BEARDSLEY	363
Dopamine D3 receptor knockout mice and the motivational effects of ethanol. BOYCE-RUSTAY, J.M. and F.O. RISINGER	373
Serotonin, locomotion, exploration, and place recall in the rat. MOGENSEN, J., G. WÖRTWEIN, P. PLENGE and E.T. MELLERUP	381
Anti-conflict-like actions of intralateral septal infusions of allopregnanolone in Wistar rats. MOLINA-HERNÁNDEZ, M., N.P. TELLEZ-ALCÁNTARA, J.P. GARCÍA, J.I.O. LOPEZ and M.T. JARAMILLO	397
Nefazodone in the rat: Mimicry and antagonism of [-]-DOM-induced stimulus control. ECKLER, J.R., R.A. RABIN and J.C. WINTER	405
Anxiogenic effects during withdrawal from acute ethanol in adolescent and adult rats. DOREMUS, T.L., S.C. BRUNELL, E.I. VARLINSKAYA and L.P. SPEAR	411
Saiko-ka-ryukotsu-borei-to, a herbal medicine, ameliorates chronic stress-induced depressive state in rotarod performance. MIZOGUCHI, K., M. YUZURIHARA, A. ISHIGE, M. ABURADA and T. TABIRA	419
Potential serotonergic and noradrenergic involvement in the discriminative stimulus effects of the selective imidazoline I₂-site ligand 2-BFI. MACINNES, N. and S.L. HANDLEY	427
Selectivity in generalization to GABAergic drugs in midazolam-trained baboons. ATOR, N.A.	435
Possible antinociceptive mechanisms of opioid receptor antagonists in the mouse formalin test. CHOI, S.-S., K.-J. HAN, H.-K. LEE, E.-J. HAN and H.-W. SUH	447
Antinociception induced by stimulation of ventrolateral periaqueductal gray at the freezing threshold is regulated by opioid and 5-HT_{2A} receptors as assessed by the tail-flick and formalin tests. ZANOTO DE LUCA, M.C., M.L. BRANDÃO, V.A. MOTTA and J. LANDEIRA-FERNANDEZ	459
The effect of stress upon hydrolysis adenine nucleotides in blood serum of rats. BÖHMER, A.E., C.R. FÜRSTENAU, I.L.S. TORRES, L. CREMA, A.M.O. BATTASTINI, C. DALMAZ, M.B.C. FERREIRA and J.J.F. SARKIS	467
Orchidectomy sensitizes male rats to the action of diazepam on burying behavior latency: Role of testosterone. FERNÁNDEZ-GUASTI, A. and L. MARTÍNEZ-MOTA	473
Testosterone treatment induces behavioral disinhibition in adult male rats. SVENSSON, A.I., P. ÅKESSON, J.A. ENGEL and B. SÖDERPALM	481
The effects of central administration of physostigmine in two models of anxiety. SIENKIEWICZ-JAROSZ, H., P. MACIEJAK, P. KRZĄPŚCIK, A.I. CZŁONKOWSKA, J. SZYNDLER, A. BIDZIŃSKI, W. KOSTOWSKI and A. PŁAŻNIK	491

CONTENTS

VOLUME 75 NUMBER 3 2003

Special Issue:
Plants and the Central Nervous System

Guest Editors:
P.J. Houghton
P. Seth

EDITORIAL

Plants and the central nervous system. HOUGHTON, P.J. and P. SETH	497
Plants and the central nervous system. CARLINI, E.A.	501
Plants used in Chinese and Indian traditional medicine for improvement of memory and cognitive function. HOWES, M.-J.R. and P.J. HOUGHTON	513

<i>Clitoria ternatea</i> and the CNS.	
JAIN, N.N., C.C. OHAL, S.K. SHROFF, R.H. BHUTADA, R.S. SOMANI, V.S. KASTURE and S.B. KASTURE	529
6-Methylapigenin and hesperidin: New valeriana flavonoids with activity on the CNS.	
MARDER, M., H. VIOLA, C. WASOWSKI, S. FERNÁNDEZ, J.H. MEDINA and A.C. PALADINI	537
Adaptogenic activity of <i>Withania somnifera</i>: An experimental study using a rat model of chronic stress.	
BHATTACHARYA, S.K. and A.V. MURUGANANDAM	547
Long-term effects of an <i>Apocynum venetum</i> extract on brain monoamine levels and β-AR density in rats.	
BUTTERWECK, V., K. SIMBREY, S. SEO, T. SASAKI and S. NISHIBE	557
Perinatal exposure to Δ^9-tetrahydrocannabinol increases presynaptic dopamine D₂ receptor sensitivity: A behavioral study in rats.	
MORENO, M., J.M. TRIGO, L. ESCUREDO, F.R. DE FONSECA and M. NAVARRO	565
Effects of perinatal exposure to Δ^9-tetrahydrocannabinol on operant morphine-reinforced behavior.	
GONZÁLEZ, B., R. DE MIGUEL, S. MARTÍN, A. PÉREZ-ROSADO, J. ROMERO, C. GARCÍA-LECUMBERRI, J. FERNÁNDEZ-RUIZ, J.A. RAMOS and E. AMBROSIO	577
Effects of the synthetic cannabinoid nabilone on spatial learning and hippocampal neurotransmission.	
DIANA, G., M. MALLONI and M. PIERI	585
Plant derivatives in the treatment of alcohol dependency.	
REZVANI, A.H., D.H. OVERSTREET, M. PERFUMI and M. MASSI	593
Anti-addictive actions of an <i>iboga</i> alkaloid congener: A novel mechanism for a novel treatment.	
MAISONNEUVE, I.M. and S.D. GLICK	607
NPI-031G (puerarin) reduces anxiogenic effects of alcohol withdrawal or benzodiazepine inverse or 5-HT_{2C} agonists.	
OVERSTREET, D.H., J.E. KRALIC, A.L. MORROW, Z.Z. MA, Y.W. ZHANG and D.Y.W. LEE	619
Activities of extract and constituents of <i>Banisteriopsis caapi</i> relevant to parkinsonism.	
SCHWARZ, M.J., P.J. HOUGHTON, S. ROSE, P. JENNER and A.D. LEES	627
Pharmacological evidence for antidementia effect of Choto-san (Gouteng-san), a traditional Kampo medicine.	
WATANABE, H., Q. ZHAO, K. MATSUMOTO, M. TOHDA, Y. MURAKAMI, S.-H. ZHANG, T.-H. KANG, P. MAHAKUNAKORN, Y. MARUYAMA, I. SAKAKIBARA, N. AIMI and H. TAKAYAMA	635
<i>Ptychopetalum olacoides</i>, a traditional Amazonian “nerve tonic”, possesses anticholinesterase activity.	
SIQUEIRA, I.R., C. FÓCHESATTO, A.L. DA SILVA, D.S. NUNES, A.M. BATTASTINI, C.A. NETTO and E. ELISABETSKY	645
<i>Salvia</i> for dementia therapy: Review of pharmacological activity and pilot tolerability clinical trial.	
PERRY, N.S.L., C. BÖLLEN, E.K. PERRY and C. BALLARD	651
Synergistic and antagonistic interactions of anticholinesterase terpenoids in <i>Salvia lavandulaefolia</i> essential oil.	
SAVELEV, S., E. OKELLO, N.S.L. PERRY, R.M. WILKINS and E.K. PERRY	661
<i>Salvia lavandulaefolia</i> (Spanish Sage) enhances memory in healthy young volunteers.	
TILDESLEY, N.T.J., D.O. KENNEDY, E.K. PERRY, C.G. BALLARD, S. SAVELEV, K.A. WESNES and A.B. SCHOLEY	669
The psychopharmacology of huperzine A: An alkaloid with cognitive enhancing and neuroprotective properties of interest in the treatment of Alzheimer’s disease.	
ZANGARA, A.	675
Ginseng: Potential for the enhancement of cognitive performance and mood.	
KENNEDY, D.O. and SCHOLEY, A.B.	687
Electroencephalograph effects of single doses of <i>Ginkgo biloba</i> and <i>Panax ginseng</i> in healthy young volunteers.	
KENNEDY, D.O., A.B. SCHOLEY, L. DREWERY, V.R. MARSH, B. MOORE and H. ASHTON	701
Effects on cognition and mood in postmenopausal women of 1-week treatment with <i>Ginkgo biloba</i>.	
HARTLEY, D.E., L. HEINZE, S. ELSABAGH and S.E. FILE	711
Improved cognitive function in postmenopausal women after 12 weeks of consumption of a soya extract containing isoflavones.	
DUFFY, R., H. WISEMAN and S.E. FILE	721

CONTENTS

VOLUME 75 NUMBER 4 2003

Publishers Note	731
ARTICLES	
Effects of maternal exposure to picrotoxin during lactation on physical and reflex development, square crossing and sexual behavior of rat offspring. BASO, A.C.Z., F.C. GOULART, E. TEODOROV, L.F. FELÍCIO and M.M. BERNARDI	733
Putative anxiety-linked effects of the nitric oxide synthase inhibitor L-NAME in three murine exploratory behavior models. CZECH, D.A., E.B. JACOBSON, K.T. LeSUEUR-REED and M.R. KAZEL	741
The effect of calcineurin activator, extracted from Chinese herbal medicine, on memory and immunity in mice. LUÓ, J., J.-H. YIN and Q. WEI	749
Zuclopenthixol facilitates memory retrieval in rats: Possible involvement of noradrenergic and serotonergic mechanisms. KHALIFA, A.E.	755
Anxiety does not affect the antinociceptive effect of Δ^9-THC in mice: Participation of cannabinoid and opioid receptors. TAKAHASHI, R.N., G.A. RAMOS and F.L. ASSINI	763
5-HT_{1B} receptor mRNA levels in dorsal raphe nucleus: Inverse association with anxiety behavior in the elevated plus maze. KAIYALA, K.J., E.S. VINCOW, T.J. SEXTON and J.F. NEUMAIER	769
Behaviorally active doses of the CB₁ receptor antagonist SR 141716A increase brain serotonin and dopamine levels and turnover. DARMANI, N.A., J.J. JANOYAN, N. KUMAR and J.L. CRIM	777
Reduced binocular depth inversion in regular cannabis users. SEMPLE, D.M., F. RAMSDEN and A.M. McINTOSH	789
Long-term neurobehavioral and histological damage in brain of mice induced by L-cysteine. GAZIT, V., R. BEN-ABRAHAM, C.G. PICK, I. BEN-SHLOMO and Y. KATZ	795
Effects of naltrexone and isradipine, alone or in combination, on cocaine responses in humans. SOFUOGLU, M., A. SINGHA, T.R. KOSTEN, F. ELINORE McCANCE-KATZ, I. PETRAKIS and A. OLIVETO	801
The cannabinoid receptor antagonist SR-141716 does not readily antagonize open-field effects induced by the cannabinoid receptor agonist (R)-methanandamide in rats. JÁRBE, T.U.C., N.V. DIPATRIZIO, C. LI and A. MAKRIYANNIS	809
Adaptogenic effect of <i>Bacopa monniera</i> (Brahmi). RAI, D., G. BHATIA, G. PALIT, R. PAL, S. SINGH and H.K. SINGH	823
Long-term social isolation enhances picrotoxin seizure susceptibility in mice: Up-regulatory role of endogenous brain allopregnanolone in GABAergic systems. MATSUMOTO, K., H. NÓMURA, Y. MURAKAMI, K. TAKI, H. TAKAHATA and H. WATANABE	831
Effects of ethanol on cocaine discrimination in rats. GATCH, M.B., B.D. YOUNGBLOOD and M.J. FORSTER	837
Behavioral characterization of 2-O-desmethyl and 5-O-desmethyl metabolites of the phenylethylamine hallucinogen DOM. ECKLER, J.R., J. CHANG-FONG, R.A. RABIN, C. SMITH, M. TEITLER, R.A. GLENNON and J.C. WINTER	845
Protective effect of FK506 (Tacrolimus) in pentylenetetrazol-induced kindling in mice. SINGH, A., G. KUMAR, P.S. NAIDU and S.K. KULKARNI	853
A synthetic peptide ligand of NCAM affects exploratory behavior and memory in rodents. HARTZ, B.P., A. SØHOEL, V. BEREZIN, E. BOCK and J. SCHEEL-KRÜGER	861
Behavioral effects of neuropeptide Y in F344 rat substrains with a reduced dipeptidyl-peptidase IV activity. KARL, T., T. HOFFMANN, R. PABST and S. VON HÖRSTEN	869
Circadian variation of the acute and delayed response to alcohol: Investigation of core body temperature variations in humans. DEVANEY, M., D. GRAHAM and J. GREELEY	881
Finasteride inhibits the progesterone-induced spike-wave discharges in a genetic model of absence epilepsy. VAN LUIJTELAAR, G., B. BUDZISZEWSKA, M. TETICH and W. LASOŃ	889

A comparative study of the anticholinesterase activity of several antipsychotic agents. NASELLO, A.G., D. GIDALI and L.F. FELICIO	895
R-citalopram counteracts the effect of escitalopram in a rat conditioned fear stress model of anxiety. SÁNCHEZ, C., P. GRUCA, E. BIEN and M. PAPP	903
Chronic opioid antagonist treatment dose-dependently regulates μ-opioid receptors and trafficking proteins in vivo. RAJASHEKARA, V., C.N. PATEL, K. PATEL, V. PUROHIT and B.C. YOBURN	909
Cognitive and psychomotor function in hypoglycemia: Response error patterns and retest reliability. SCHÄCHINGER, H., D. COX, L. LINDER, S. BRODY and U. KELLER	915
The effects of habitual caffeine use on cognitive change: A longitudinal perspective. VAN BOXTEL, M.P.J., J.A.J. SCHMITT, H. BOSMA and J. JOLLES	921
Susceptibility to morphine place conditioning: Relationship with stress-induced locomotion and novelty-seeking behavior in juvenile and adult rats. XIGENG, Z., K. XUE, T. BEIPING, L. XIAOJING, X. WEI, Y. XIAOYAN and S. NAN	929
Contents of Volume 75	939
Author Index	945
Keyword Index	949