



CONTENTS

VOLUME 78, 2004

CONTENTS

VOLUME 78 NUMBER 1 2004

ARTICLES

Lobeline produces conditioned taste avoidance in rats.

HARROD, S.B., L.P. DWOSKIN and M.T. BARDO 1

Antidepressant- and anxiolytic-like activity of magnesium in mice.

POLESZAK, E., B. SZEWCZYK, E. KĘDZIERSKA, P. WLAŹ, A. PILC and G. NOWAK 7

Sex differences in voluntary oral nicotine consumption by adolescent mice:

A dose-response experiment.

KLEIN, L.C., M.M. STINE, D.J. VANDENBERGH, C.A. WHETZEL and H.M. KAMENS 13

Antianxiety and antidepressant effects of riparin III from *Aniba riparia* (Nees)

Mez (Lauraceae) in mice.

SOUSA, F.C.F., C.T.V. MELO, A.P. MONTEIRO, V.T.M. LIMA, S.J.C. GUTIERREZ,
B.A. PEREIRA, J.M. BARBOSA-FILHO, S.M.M. VASCONCELOS, M.F. FONTELES
and G.S.B. VIANA 27

Spermidine/spermine N^1 -acetyltransferase overexpression in mice induces hypoactivity and spatial learning impairment.

KAASINEN, S.K., M. OKSMAN, L. ALHONEN, H. TANILA and J. JÄNNE 35

Effect of acute and chronic olanzapine treatment on phencyclidine-induced behavioral sensitization in rats with neonatal dopamine loss.

MOY, S.S., A. FERNANDES, Y. QIAN, D.J. ROTELLA, R.M. KOSTREWA
and G.R. BREESE 47

Assessing subjective and psychomotor effects of the herbal medication valerian in healthy volunteers.

GUTIERREZ, S., M.K. ANG-LEE, D.J. WALKER and J.P. ZACNY 57

Sedative and motor-impairing effects of neuropeptide Y and ethanol in selectively bred P and NP rats.

GILPIN, N.W., R.B. STEWART, R.L. ELDER, Y. KHO, J.M. MURPHY, T.-K. Li and
N.E. BADIA-ELDER 65

Susceptibility to audiogenic seizure and neurotransmitter amino acid levels in different brain areas of IL-6-deficient mice.

DE LUCA, G., R.M. DI GIORGIO, S. MACAIONE, P.R. CALPONA, S. COSTANTINO,
E.D. DI PAOLA, A. DE SARRO, G. CILIBERTO and G. DE SARRO 75

GABA_A receptors modulate cannabinoid-evoked hypothermia.

RAWLS, S.M., R.J. TALLARIDA, D.A. KON, E.B. GELLER and M.W. ADLER 83

Intranasal cocaine in humans: Acute tolerance, cardiovascular and subjective effects.

FOLTIN, R.W. and M. HANEY 93

Effect of felbamate and its combinations with conventional antiepileptics in amygdala-kindled rats.

BOROWICZ, K.K., N. RATNARAJ, P.N. PATSALOS and S.J. CZUCZWAR 103

Normal spatial and contextual learning for ketamine-treated rats in the pilocarpine epilepsy model.

McKAY, B.E. and M.A. PERSINGER 111

Chronic aspartame affects T-maze performance, brain cholinergic receptors and Na⁺,K⁺-ATPase in rats.

CHRISTIAN, B., K. McCONNAUGHEY, E. BETHEA, S. BRANTLEY, A. COFFEY,
L. HAMMOND, S. HARRELL, K. METCALF, D. MUEHLENBEIN, W. SPRUILL,
L. BRINSON and M. McCONNAUGHEY 121

Aphrodisiac properties of <i>Montanoa tomentosa</i> aqueous crude extract in male rats. CARRO-JUÁREZ, M., E. CERVANTES, M. CERVANTES-MÉNDEZ and G. RODRÍGUEZ-MANZO	129
The role of alpha-adrenoceptor mechanism(s) in morphine-induced conditioned place preference in female mice. SAHRAEI, H., H. GHAZZAGHI, M.-R. ZARRINDAST, H. GHOSHONI, H. SEPEHRI and A. HAERI-ROHAN	135
Biochemical, behavioral and immunohistochemical alterations in MPTP-treated mouse model of Parkinson's disease. KUROSAKI, R., Y. MURAMATSU, H. KATO and T. ARAKI	143
Delay fear conditioning modifies phospholipase C-β1a signaling in the hippocampus and frontal cortex. WEEBER, E.J. and K.K. CALDWELL	155
Antidepressant-like effects of the acute and chronic administration of nicotine in the rat forced swimming test and its interaction with flouxetine. VÁZQUEZ-PALACIOS, G., H. BONILLA-JAIME and J. VELÁZQUEZ-MOCTEZUMA	165
Morphine and endomorphin-1 differently influence pronociceptin/orphanin FQ system in neuropathic rats. MIKA, J., M.K.H. SCHÄFER, I. OBARA, E. WEIHE and B. PRZEWLOCKA	171
Early administration of nicotinamide prevents learning and memory impairment in mice induced by 1-methyl-4-phenyl-1, 2, 3, 6-tetrahydropyridine. YANG, J., L. HE, J. WANG and J.D. ADAMS JR.	179
Effects of oxazepam on methamphetamine-induced conditioned place preference. GOEDERS, J.E. and N.E. GOEDERS	185

CONTENTS

VOLUME 78 NUMBER 2 2004

EDITORIAL

Editorial

FILE, S.E.	189
-----------------	-----

ARTICLES

Protective effect of pregnanolone against lipoperoxidation and free radicals generation induced in hypothalamus of ovariectomized rats submitted to CO₂ exposure. PREDIGER, M.E., I.R. SIQUEIRA, G.D. GAMARO, M.S. SILVA, C.A. NETTO and C. DALMAZ	191
Sex differences in the escalation of intravenous cocaine intake following long- or short-access to cocaine self-administration. ROTH, M.E. and M.E. CARROLL	199
Differential contribution of cholecystokinin receptors to stress-induced modulation of seizure and nociception thresholds in mice. HOMAYOUN, H. and A.R. DEHPUR	209
Thermal analgesic effects from weak, complex magnetic fields and pharmacological interactions. MARTIN, L.J., S.A. KOREN and M.A. PERSINGER	217
Lesions of the laterodorsal tegmental nucleus disrupt prepulse inhibition of the acoustic startle reflex. JONES, C.K. and H.E. SHANNON	229
Naltrexone does not prevent acquisition or expression of flavor preferences conditioned by fructose in rats. BAKER, R.W., Y. LI, M.G. LEE, A. SCLAFANI and R.J. BODNAR	239
Role of the NO-cGMP pathway in the systemic antinociceptive effect of clonidine in rats and mice. DE MOURA, R.S., A.A.S. RIOS, E.J.A. SANTOS, A.B.A. NASCIMENTO, Â. DE CASTRO RESENDE, M.L. NETO, L.F. DE OLIVEIRA, A.C.M. RIBEIRO and T. TANO	247

Intracerebroventricular tryptophan increases heating and heat storage rate in exercising rats. SOARES, D.D., N.R.V. LIMA, C.C. COIMBRA and U. MARUBAYASHI	255
Modulation of the stimulus effects of (+)amphetamine by the 5-HT₆ antagonist MS-245. PULLAGURLA, M., T. BONDAREVA, R. YOUNG and R.A. GLENNON	263
Automated tests for measuring the effects of antidepressants in mice. CROWLEY, J.J., M.D. JONES, O.F. O'LEARY and I. LUCKI	269
Central H3R activation by thioperamide does not affect energy balance. SINDELAR, D.K., M.L. SHEPPERD, R.T. PICKARD, J. ALEXANDER-CHACKO, M.J. DILL, J.W. CRAMER, D.P. SMITH and R. GADSKI	275
Alterations in the distribution and orexigenic effects of dexamethasone in CAR-null mice. QATANANI, M., P. WEI and D.D. MOORE	285
The effects of continuous cocaine dose, treatment, and withdrawal duration on the induction of behavioral tolerance and dopamine autoreceptor function. KING, G.R., C. HILLBURN, G. PINTO and J. KONEN	293
Inhibitory effect of GABAergic drugs in cocaine-induced genital reflexes in paradoxical sleep-deprived male rats. ANDERSEN, M.L. and S. TUFIK	301
Effect of pretraining administration of NC-1900, a vasopressin fragment analog, on memory performance in non- or CO₂-amnesic mice. SATO, T., K.-I. TANAKA, T. TERAMOTO, Y. OHNISHI, K. HIRATE, M. IRIFUNE and T. NISHIKAWA	309
The antidepressant effect of ethanol extract of radix puerariae in mice exposed to cerebral ischemia reperfusion. YAN, B., D.-Y. WANG, D.-M. XING, Y. DING, R.-F. WANG, F. LEI and L.-J. DU	319
Pilocarpine-induced status epilepticus in rats: Lipid peroxidation level, nitrite formation, GABAergic and glutamatergic receptor alterations in the hippocampus, striatum and frontal cortex. FREITAS, R.M., F.C.F. SOUSA, S.M.M. VASCONCELOS, G.S.B. VIANA and M.M.F. FONTELES	327
Centrally administered oxytocin elicits exaggerated grooming in oxytocin null mice. AMICO, J.A., R.R. VOLLMER, J.R. KARAM, P.R. LEE, X. LI, J.I. KOENIG and M.M. MCCARTHY	333
Acute and chronic stress alter ecto-nucleotidase activities in synaptosomes from the rat hippocampus. FONTELLA, F.U., A.N. BRUNO, L.M. CREMA, A.M.O. BATTASTINI, J.J.F. SARKIS, C.A. NETTO and C. DALMAZ	341
Lack of effect of two oral sodium channel antagonists, lamotrigine and 4030W92, on intradermal capsaicin-induced hyperalgesia model. WALLACE, M.S., S. QUESSY and G. SCHULTEIS	349
Multibehavioral analysis of fear and anxiety before, during, and after experimentally induced predatory stress in <i>Callithrix penicillata</i>. BARROS, M., M.A. DE SOUZA SILVA, J.P. HUSTON and C. TOMAZ	357
Corticosterone increases spike-wave discharges in a dose- and time-dependent manner in WAG/Rij rats. SCHRIDDE, U. and G.V. LUIJTELAAR	369

CONTENTS

VOLUME 78 NUMBER 3 2004

Special Issue:
Sex and Drugs

Guest Editors:
Marlene A. Wilson
Sandra J. Kelly

EDITORIAL

Editorial WILSON, M.A. and S.J. KELLY	377
---	-----

REVIEW

Preclinical models of sexual desire: Conceptual and behavioral analyses.

- ÁGMO, A., A.L. TURI, E. ELLINGSEN and H. KASPERSEN 379

ARTICLES

Progestins' actions in the VTA to facilitate lordosis involve dopamine-like type 1 and 2 receptors.

- FRYE, C.A., A.A. WALF and K. SUMIDA 405

Sexual experience and conditioned place preference in male rats.

- CAMACHO, F., C. SANDOVAL and R.G. PAREDES 419

Behavioral analysis of male rat sexual motivation and performance following acute ethanol treatment.

- FERRARO III, F.M. and S.W. KIEFER 427

Interaction of chronic ethanol exposure and finasteride: Sex and strain differences.

- FINN, D.A., S.L. LONG, M.A. TANCHUCK and J.C. CRABBE 435

Anxiolytic effects of diazepam and ethanol in two behavioral models: Comparison of males and females.

- WILSON, M.A., P.R. BURGHARDT, K.A. FORD, M.B. WILKINSON and S.D. PRIMEAUX 445

Similar anxiety-like responses in male and female rats exposed to repeated withdrawals from ethanol.

- OVERSTREET, D.H., D.J. KNAPP and G.R. BREESE 459

Sexually dimorphic effects of postnatal allopregnanolone on the development of anxiety behavior after early deprivation.

- ZIMMERBERG, B. and E.W. KAJUNSKI 465

Testosterone's metabolism in the hippocampus may mediate its anti-anxiety effects in male rats.

- FRYE, C.A. and K.L. EDINGER 473

Androgens in the hippocampus can alter, and be altered by, ictal activity.

- RHODES, M.E. and C.A. FRYE 483

Sex differences in effects of mild chronic stress on seizure risk and GABA_A receptors in rats.

- CHADDA, R. and L.L. DEVAUD 495

3 α ,5 α -THP mediates progestins' effects to protect against adrenalectomy-induced cell death in the dentate gyrus of female and male rats.

- RHODES, M.E., C.M. MCCORMICK and C.A. FRYE 505

Sex dimorphisms in the neuroprotective effects of estrogen in an animal model of Parkinson's disease.

- GILLIES, G.E., H.E. MURRAY, D. DEXTER and S. McARTHUR 513

Antidepressant effects of ER β -selective estrogen receptor modulators in the forced swim test.

- WALF, A.A., M.E. RHODES and C.A. FRYE 523

Hippocampal 3 α ,5 α -THP may alter depressive behavior of pregnant and lactating rats.

- FRYE, C.A. and A.A. WALF 531

Chronic stress alters amphetamine effects on behavior and synaptophysin levels in female rats.

- BISAGNO, V., C.A. GRILLO, G.G. PIROLI, P. GIRALDO, B. McEWEN and V.N. LUINE 541

Estrogen has mnemonic-enhancing effects in the inhibitory avoidance task.

- RHODES, M.E. and C.A. FRYE 551

Mnemonic effects of testosterone and its 5 α -reduced metabolites in the conditioned fear and inhibitory avoidance tasks.

- EDINGER, K.L., B. LEE and C.A. FRYE 559

Acute stress impairs spatial memory in male but not female rats: Influence of estrous cycle.

- CONRAD, C.D., J.L. JACKSON, L. WIECZOREK, S.E. BARAN, J.S. HARMAN, R.L. WRIGHT and D.L. KOROL 569

Sex differences and repeated intravenous nicotine: Behavioral sensitization and dopamine receptors.

- HARROD, S.B., C.F. MACTUTUS, K. BENNETT, U. HASSELROT, G. WU, M. WELCH and R.M. BOOZE 581

Functional responses to the cannabinoid agonist WIN 55,212-2 in neonatal rats of both genders: Influence of weaning.	
BORCEL, E., L. PÉREZ-ALVAREZ, M.L. DE CEBALLOS, B.G. RAMIREZ, E.M. MARCO, B. FERNÁNDEZ, M. RUBIO, C. GUAZA and M.-P. VIVEROS	593
No difference in responsiveness to a low dose of alcohol between healthy women and men.	
NYBERG, S., G. WAHLSTRÖM, T. BÄCKSTRÖM and I.S. POROMAA	603
Binge drinking and sex: Effects on mood and cognitive function in healthy young volunteers.	
HARTLEY, D.E., S. ELSABAGH and S.E. FILE	611
Mood changes after cognitive testing in late middle-age: Impacts of sex and habitual alcohol consumption.	
ELSABAGH, S., D. HARTLEY, D. RANDALL, P. SETH and S.E. FILE	621
Does drinking have effects on mood and cognition in male and female students?	
RANDALL, D.C., S.M. ELSABAGH, D.E. HARTLEY and S.E. FILE	629
Effects of transdermally administered nicotine on aspects of attention, task load, and mood in women and men.	
TRIMMEL, M. and S. WITTBERGER	639
Cue reactivity in smokers: The effects of perceived cigarette availability and gender.	
FIELD, M. and T. DUKA	647

CONTENTS

VOLUME 78 NUMBER 4 2004

ARTICLES

The effects of a cold-water stimulus on butorphanol effects in males and females.	
ZACNY, J.P. and N.J. BECKMAN	653
Age differences in an animal model of obsessive–compulsive disorder: Participation of dopamine: Dopamine in an animal model of OCD.	
ULLOA, R.-E., H. NICOLINI and A. FERNÁNDEZ-GUASTI	661
Electroencephalographic effects induced by choline pivaloyl esters in scopolamine-treated or nucleus basalis magnocellularis lesioned rats.	
RISPOLI, V., D. ROTIROTI, V. CARELLI, F. LIBERATORE, L. SCIPIONE, R. MARRA, S. TORTORELLA and B. DI RIENZO	667
Gender-related response in open-field activity following developmental nicotine exposure in rats.	
ROMERO, R.D. and W.-J.A. CHEN	675
Chronic treatment with fluvoxamine desensitizes 5-HT_{2C} receptor-mediated hypolocomotion in rats.	
YAMAUCHI, M., T. TATEBAYASHI, K. NAGASE, M. KOJIMA and T. IMANISHI	683
Reciprocal cross-sensitization between amphetamine and salt appetite.	
CLARK, J.J., and I.L. BERNSTEIN	691
Effects of progesterone treatment on cocaine responses in male and female cocaine users.	
SOFUOGLU, M., E. MITCHELL and T.R. KOSTEN	699
Feeding responses to μ-, δ- and κ-opioid receptor agonists in the meat-type chick.	
BUNGO, T., K. KAWAMURA, T. IZUMI, K.-I. DODO and H. UEDA	707
Testosterone-dependent antidepressant-like effect of noradrenergic but not of serotonergic drugs.	
MARTÍNEZ-MOTA, L. and A. FERNÁNDEZ-GUASTI	711
Pentacyclic triterpenoids, α,β-amyriins, suppress the scratching behavior in a mouse model of pruritus.	
OLIVEIRA, F.A., R.C.P. LIMA-JUNIOR, W.M. CORDEIRO, G.M. VIEIRA-JÚNIOR, M.H. CHAVES, F.R.C. ALMEIDA, R.M. SILVA, F.A. SANTOS and V.S.N. RAO	719
Circadian-dependent effect of melatonin on dopaminergic D₂ antagonist-induced hypokinesia and agonist-induced stereotypies in rats.	
SUMAYA, I.C., D.M. BYERS, L.N. IRWIN, S. DEL VAL and D.E. MOSS	727
Modafinil facilitates performance on a delayed nonmatching to position swim task in rats.	
WARD, C.P., J.R. HARSH, K.M. YORK, K.L. STEWART and J.G. McCOY	735
The effect of baclofen alone and in combination with naltrexone on ethanol consumption in the rat.	
STROMBERG, M.F.	743

Haloperidol- and clozapine-induced oxidative stress in the rat brain.	
POLYDORO, M., N. SCHRÖDER, M.N.M. LIMA, F. CALDANA, D.C. LARANJA, E. BROMBERG, R. ROESLER, J. QUEVEDO, J.C.F. MOREIRA and F. DAL-PIZZOL	751
Pharmacological and neurochemical evidence for antidepressant-like effects of the herbal product Catuama.	
CAMPOS, M.M., E.S. FERNANDES, J. FERREIRA, L.B. BORTOLANZA, A.R.S. SANTOS and J.B. CALIXTO	757
Altered sleep latency and arousal regulation in mice lacking norepinephrine.	
HUNSLEY, M.S. and R.D. PALMITER	765
Evidence that muscarinic receptors are involved in nicotine-facilitated spatial memory.	
LIU, Y., Y. WANG, X. SUN and H. WANG	775
Pregnenolone sulfate potentiates the effects of NMDA on hippocampal alanine and dopamine.	
MACIEJAK, P., A.I. CZŁONKOWSKA, A. BIDZIŃSKI, J. WALKOWIAK, J. SZYNDLER, M. LEHNER, A. SKÓRZEWSKA, D. TURZYŃSKA, M. ZIENOWICZ, A. WISŁOWSKA, E. TARACHA, P. KRZAŚCIK and A. PŁAŻNIK	781
Improvement of scopolamine-induced memory impairment by Z-ajoene in the water maze in mice.	
YAMADA, N., A. HATTORI, T. HAYASHI, T. NISHIKAWA, H. FUKUDA and T. FUJINO	787
Electroacupuncture combined with indomethacin enhances antihyperalgesia in inflammatory rats.	
ZHANG, R.-X., L. LAO, X. WANG, K. REN and B.B. BERMAN	793
Effects of the traditional Japanese medicine Unkei-to on the corticotropin-releasing factor–induced increase in locomotor activity.	
TERAWAKI, K., K. KOIKE, M. YUZURIHARA, Y. KASE, S. TAKEDA, M. ABURADA, K. MURAKAMI, S. OHNO, N. SUZUKI and M. INOUE	799
The effects of dopamine D3 agonists and antagonists in a nonhuman primate model of tardive dyskinesia.	
MALIK, P., M.B. ANDERSEN and L. PEACOCK	805
Evaluation of the motor initiation hypothesis of APD-induced conditioned avoidance decreases.	
LI, M., J. PARKES, P.J. FLETCHER and S. KAPUR	811
Stimulus effects of three sulfur-containing psychoactive agents.	
KHORANA, N., M.R. PULLAGURLA, M. DUKAT, R. YOUNG and R.A. GLENNON	821
Cocaine, but not alcohol, reinstates cocaine-induced place preferences.	
BUSSE, G.D. and A.L. RILEY	827
Contents of Volume 78	837
Author Index	843
Keyword Index	847