

Curriculum Vitae  
October, 2009  
**Michael Thomas Bardo**

**ADDRESS**

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**DEGREES**

- B.S. Eastern Illinois University, Charleston, IL 1974  
Major: Psychology  
M.A. Eastern Illinois University, Charleston, IL 1976  
Major: Psychology  
Ph.D. Iowa State University, Ames, IA 1980  
Major: Psychology  
Minor: Statistics

**POSITIONS HELD**

- 1975-76 Research Assistant, Department of Psychology, Eastern Illinois University, Charleston, IL  
1978-79 Instructor, Des Moines Area Community College, Boone, IA  
1979 Instructor, Department of Psychology, Drake University, Des Moines, IA  
1976-80 Research Assistant, Department of Psychology, Iowa State University, Ames, IA  
1980-82 Postdoctoral Research Fellow, Department of Pharmacology, University of Iowa, Iowa City, IA  
1982-88 Assistant Professor, Department of Psychology, University of Kentucky, Lexington, KY  
1989, 95-96 Visiting Scientist, Department of Anatomy and Neurobiology and Pacific Biomedical Research Center, Bekesy Laboratories, University of Hawaii, Honolulu, HI  
1988-94 Associate Professor, Department of Psychology, University of Kentucky, Lexington, KY, Department of Psychology, University of Kentucky, Lexington, KY  
1994- Professor, Department of Psychology, University of Kentucky, Lexington, KY, Department of Psychology, University of Kentucky, Lexington, KY  
1999-02 Director of Graduate Studies, Department of Psychology, University of Kentucky, Lexington, KY  
2001-03 Scientific Director, Center for Prevention Research, University of Kentucky, Lexington, KY  
2002-03 Visiting Scientist, Department of Physiology and Neuroscience, Medical University of South Carolina, Charleston, SC

- 2003- Director, Center for Drug Abuse Research Translation (CDART), University of Kentucky, Lexington, KY
- 2005- Scientific Advisor, Yaupon Therapeutics Inc., Radnor PA.
- 2008- Faculty Associate, Spinal Cord & Brain Injury Research Center, University of Kentucky, Lexington, KY

#### PHD GRADUATE STUDENTS TRAINED

- 1988 Janet L. Neisewander, Ph.D.  
Dissertation Title: "Behavioral and neurochemical effects of chronic opiate antagonist treatment in senescent rats."  
Present Position: Professor, Department of Psychology, Arizona State University, Tempe, AZ.
- 1992 Shana L. Pack (formerly Bowling), Ph.D.  
Dissertation Title: "The effects of environmental enrichment on responsiveness to amphetamine in rats: Neurochemistry and behavior."  
Present Position: Instructor, Department of Psychology, Western Kentucky University-Glasgow, Glasgow, KY.
- 1992 Cynthia A. Crawford, Ph.D.  
Dissertation Title: "Age-related behavioral and neurochemical differences in the effect of irreversible antagonism of dopamine receptors in the rat."  
Present Position: Professor, Department of Psychology, University of California, San Bernardino, CA.
- 1993 James K. Rowlett, Ph.D.  
Dissertation Title: "Locomotor and rewarding effects of the opioid mixed agonist-antagonist buprenorphine assessed with conditioned place preference."  
Present Position: Associate Professor of Psychiatry, Department of Psychiatry, Beth Israel Deaconess Medical Center, Harvard Medical School, New England Primate Research Center, Southborough, MA.
- 1994 Nancy A. Honeycutt, Ph.D.  
Dissertation Title: "Lateralized function in patients with complex partial seizures of temporal origin."  
Present Position: Assistant Professor, Department of Psychiatry, Division of Psychiatric Neuroimaging, Johns Hopkins School of Medicine, Baltimore, MD.
- 1998 Patricia M. Robinet, Ph.D.  
Dissertation Title: "The role of dopamine D3 receptors in rotational behavior following a 6-hydroxydopamine lesion of the medial forebrain bundle."  
Most Recent Position: Assistant Professor, Department of Psychology, Colby College, Waterville, ME.
- 1999 Jennifer E. Klebaur, Ph.D.  
Dissertation Title: "The role of novelty in disruption of amphetamine self-administration."  
Present Position: Adjunct Faculty, Central Piedmont Community College, Charlotte NC
- 2002 Thomas A. Green, Ph.D.

Dissertation Title: “Environmental enrichment and incentive salience factors affecting operant responding for drug and non-drug reinforcers.”

Present Position: Assistant Professor, Department of Pharmacology and Toxicology, University of Texas Medical Branch, Galveston, TX

2004 Brenda J. Gehrke, Ph.D.

Dissertation Title: “Effects of environmental enrichment on methamphetamine-induced neurotoxicity.”

Present Position: Pharmacologist, Division of Drug Oncology Products, Food and Drug Administration, Silver Spring, MD

2005 Emily D. Klein, Ph.D

Dissertation Title: “Cocaine and sucrose cross-sensitization.”

Present Position: Postdoctoral Scholar, The Language Research Center, Department of Psychology, Georgia State University, Atlanta, GA.

2007 Dustin J. Stairs, Ph.D.

Dissertation Title: “Enrichment-induced differences in corticosterone: differential response to amphetamine and glucocorticoid receptor blockade in low dose amphetamine self-administration.”

Present Position: Assistant Professor, Department of Psychology, Creighton University, Omaha, NE.

2008 Nichole M. Neugebauer, Ph.D.

Dissertation Title: “The Effects of Lobeline on Methamphetamine-induced Conditioned Place Preference and Dopaminergic Alterations in the Nucleus Accumbens Shell.”

Present Position: Postdoctoral Scholar, Department of Psychiatry, Yale University, New Haven, CT.

## **POSTDOCTORAL SCHOLARS TRAINED**

1993-96 Rick A. Bevins, Ph.D. from University of Massachusetts

Present Position: Professor, Department of Psychology, University of Nebraska, Lincoln, NE.

1999-02 Anthony S. Rauhut, Ph.D. from University of Massachusetts

Present Position: Associate Professor, Department of Psychology, Dickinson College, Carlisle, PA.

1999-03 Steven B. Harrod, Ph.D. from Kent State University

Present Position: Assistant Professor, Department of Psychology, University of South Carolina, Columbia, SC.

2002-04 Mary E. Cain, Ph. D. from University of Vermont

Present Position: Assistant Professor, Department of Psychology, Kansas State University, Manhattan, KS

2006-07 Jennifer L. Perry, Ph.D. from University of Minnesota

Present Position: Postdoctoral Scholar, Minneapolis Medical Research Foundation, Minneapolis, MN

**RESEARCH SCIENTIST TRAINED**

2005-07 Shafiqur Rahman, Ph.D. from Memorial University of Newfoundland (CANADA)  
Present Position: Associate Professor, College of Pharmacy, South Dakota  
 State University, Brookings SD

**GRADUATE STUDENTS PRESENTLY IN TRAINING**

2002- Thomas Wooters  
 2003- Andrew Meyer  
 2008- Cassandra Gipson  
 2009- Kristin Alvers  
 2009- Justin Yates

**POSTDOCTORAL SCHOLARS PRESENTLY IN TRAINING**

2008- Julie Marusich (Ph.D. from University of Florida)  
 2008- Joshua Beckmann (Ph.D. from Southern Illinois University)

**EXTRAMURAL GRANTS AND CONTRACTS AS PRINCIPAL INVESTIGATOR (Total Award)**

NIH F32 DA05195, postdoctoral trainee on individual national research service award, G. F. Gebhart (Sponsor), "Opiate receptor ontogeny and morphine-induced effects," 1981-1983, \$38,080.  
 NIH R03 DA03487, principal investigator for small research grant, "Classical conditioning of drug reward," 1984-1985, \$21,601.  
 Bristol-Myers Company, principal investigator for contract grant, "Reward and aversion with non-benzodiazepine anxiolytic drugs," 1985-1986, \$7,705.  
 NIH R01 DA03460, principal investigator for individual research grant, "Chronic naltrexone treatment and opiate action," 1985-1988, \$241,886.  
 NIH P50 DA05312, principal investigator for Project 1 in Center for Prevention Research (R. Clayton, PI), "Drug abuse prevention: A lifecourse perspective," 1987-1992, \$254,970.  
 NIH R01 DA06924, principal investigator for individual research grant, "Novelty, dopamine and drug reward," 1992-1995, \$356,811.  
 NIH R01 DA07746, principal investigator for individual research grant, "Taste cues in morphine conditioning," 1992-1995, \$260,726.  
 NIH P50 DA05312, principal investigator for Project 1 in center grant, Center for Prevention Research (R. Clayton, PI), "Drug abuse prevention: A lifecourse perspective II," 1992-1995, \$616,615.  
 NIH P50 DA05312, principal investigator for Project 1 in center grant, Center for Prevention Research (R. Clayton, PI), "Drug abuse prevention: A lifecourse perspective III," 1995-1998, \$660,750.  
 NIH R01 DA07746, principal investigator for individual research grant, "Taste cues in morphine conditioning," 1997-2000, \$257,036.  
 NIH R01 DA12964, principal investigator for individual research grant, "Novelty, dopamine and response to amphetamine," 2000-2003, \$623,246.  
 NIH P50 DA05312, principal investigator for Project 1 in center grant, Center for Prevention Research (M. Bardo, PI, effective 2003), "Drug abuse prevention: A lifecourse perspective IV," 2001-2007, \$969,271.  
 NIH R41 DA16521, principal investigator for small business research grant, "STTR: Nornicotine enantiomers and nicotine self-administration," 2003-04, \$59,682.

NIH U19 DA17548, principal investigator for Project 3 in cooperative agreement grant (L. Dvoskin, PI), "Development of Novel Treatments for Nicotine Addiction," 2003-08, \$1,029,562.

NIH R01 DA12964, principal investigator for individual research grant, "Novelty, dopamine and response to amphetamine," 2003-2008, \$1,472,400.

NIH R42 DA16521, principal investigator for small business research grant, "STTR: Nornicotine as a treatment for nicotine addiction," 2005-2008, \$914,898.

Targacept Inc., principal investigator, "Targacept contract," 2007-2008, \$150,000.

NIH P50 DA05312, principal investigator and director for center grant, "CDART-Center for Drug Abuse Research Translation," 2007-2012, \$7,396,789.

US Worldmeds LLC, principal investigator "Effect of lofexidine on norepinephrine levels," 2008, \$9,700.

Targacept Inc., principal investigator, "Targacept contract #2," 2008, \$150,000

NIH R01 DA12964, principal investigator for individual research grant, "Novelty, dopamine and response to amphetamine," 2009-2014, \$1,846,885.

### **EXTRAMURAL GRANTS AND CONTRACTS AS CO-INVESTIGATOR OR MENTOR (Total Award)**

NIH F32 DA05623, R. Bevins (Postdoctoral Trainee), "Morphine conditioning of activity using taste cues," 1995-1997, \$52,300.

NIH R01 DA08645, L. Dvoskin (PI), "Nornicotine contribution to the CNS effect of nicotine," 1996-2001, \$534,011.

Tobacco and Health Research Institute, State of Kentucky, L. Dvoskin (PI), "CNS pharmacology of tobacco alkaloids," 1999-2000, \$80,000.

Pharmacia Corporation, L. Dvoskin (PI), "Preclinical studies to determine the utility of reboxetine as a smoking cessation pharmacotherapy," 2000-2001, \$64,000.

Tobacco and Health Research Institute, State of Kentucky, L. Dvoskin (PI), "CNS pharmacology of tobacco alkaloids," 2000-2001, \$64,601.

NIH F32 DA06018, S. Harrod (Postdoctoral Trainee), "Lobeline analogs and amphetamine self-administration," 2000-2002, \$69,932.

NIH F31 DA06093, T. Green (Predoctoral Trainee), "Environmental enrichment and nicotine reinforcement," 2000-2002, \$52,717.

Tobacco and Health Research Institute, State of Kentucky, L. Dvoskin (PI), "CNS pharmacology of tobacco alkaloids," 2001-2002, \$50,000.

NIH R01 DA13519, L. Dvoskin (PI), "Development of novel therapies for methamphetamine abuse," 2000-2004, \$1,100,860.

NIH F32 DA16013, M. Cain (Postdoctoral Trainee), "The amygdala and amphetamine self-administration," 2002-2004, \$81,390.

NIH F31 DA15974, B. Gehrke (Predoctoral Trainee), "Enrichment and methamphetamine neurotoxicity," 2002-2004, \$58,754.

NIH F31 DA18476, E. Klein (Predoctoral Trainee), "Cocaine and sucrose cross-sensitization in rats," 2004-2006, \$47,044.

NIH R01 DA13519, L. Dvoskin (PI), "Development of novel therapies for methamphetamine abuse," 2005-2010, \$2,822,079.

NIH F31 DA023853, T. Wooters (Predoctoral Trainee), "Reinforcing and neurochemical effects of cocaine in a rodent model of ADHD," 2008-10, \$58,608.

### **PROFESSIONAL MEMBERSHIPS**

Society for Neuroscience

Association for Psychological Science (Fellow)  
 Midwestern Psychological Association  
 Society for Prevention Research  
 College on Problems of Drug Dependence  
 New York Academy of Sciences  
 APA Division 28 (affiliate member)

## PEER REVIEW EXPERIENCE

1987	NIDA Contract Review Meeting, ad hoc member
1987	NIDA Special Biomedical Research Review Committee II, ad hoc member
1988, 2000, 2002	NSF Proposal Review, ad hoc member
1994, 2000	The Wellcome Trust, England, ad hoc member
2000	NIH, NIDA Behavioral-Science Track Award for Research Transition (B/START), ad hoc member
2001	NIH, NIAAA Special Emphasis Panel for training grants, ad hoc member
2001,2004	NIH, NIDA Cutting-Edge Basic Research Award (ZDA1), ad hoc member
2001	NIH, NIDA Special Emphasis Panel (SSS-C 04), ad hoc member
2002	NIH, NIDA Imaging-Science Track Award for Research Transition (I/START), ad hoc member
2003-	Philip Morris External Research Program, ad hoc member
1999-03	NIH, Biobehavioral and Behavioral Processes 1 (BBBP-1), regular member
2004-06	NIH, Biobehavioral Regulation, Learning and Ethology (BRLE), regular chair
2006	NIH, NIDA Centers Review Committee (ZDA1-RXL-E 02), ad hoc member
2006	NIH, NIDA Special Emphasis Panel on Epigenetics of Addiction (ZDA1 RXL-E), ad hoc member
2007-08	NIH, NIDA Special Emphasis Panel on Extinction of Drug Seeking (ZDA1 RXL-E 23), ad hoc chair
2007-	NIH, NIDA Centers Review Committee (ZDA1 RXL-E 02), regular member
2008	NIH, Training in Neurosciences IRG (ZRG1 F02a), ad hoc member
2009	CIHR (Canada), Team Grant and Catalyst Grant Review, ad hoc member
2009	NIH, NIDA Special Emphasis Panel on Interactions between Physical Activity and Drug Abuse (ZDA1 GXM-A 05), ad hoc chair
2009	NIH, NIAAA Review of P30 and RC2 applications (ZAA1 DD 02), ad hoc member

Ad hoc reviewer for the following journals:

*Pharmacology, Biochemistry and Behavior*

*Psychobiology*

*Physiology and Behavior*

*Life Sciences*

*Brain Research Bulletin*

*Psychopharmacology*

*Learning and Motivation*

*Journal of Neuroscience Methods*

*Neuropsychopharmacology*

*Psychological Reports*

*Behavioural Brain Research*  
*European Journal of Pharmacology*  
*Journal of Personality and Social Psychology: Personality Processes and Individual Differences*  
*Journal of Pharmacology and Experimental Therapeutics*  
*Science*  
*Alcoholism: Clinical and Experimental Research*  
*Experimental and Clinical Psychopharmacology*  
*Behavioural Pharmacology*  
*Neuroscience Letters*  
*Journal of Abnormal Psychology*  
*Journal of Neuroscience*  
*Learning & Behavior*  
*Biological Psychiatry*  
*Drug and Alcohol Dependence*

### **NATIONAL SERVICE COMMITTEES**

2003-06 Program Committee, Midwestern Psychological Association  
 2004- Scientific Advisory Board, Integrative Neuroscience Initiative on Alcoholism (INIA), Dr. George Koob, Consortium Coordinator  
 2005 Program Integrating Committee, Society for Prevention Research  
 2007- Travel Awards & Mentoring Committee, College on Problems of Drug Dependence  
 2008- Nominations Committee, Society for Prevention Research

### **AWARDS**

1988 Charter Fellow, American Psychological Society  
 2005 Distinguished University Scientist, Kentucky Academy of Science  
 2006 University Research Professorship, University of Kentucky  
 2009- Charter Fellow, Midwestern Psychological Association

### **EDITORIAL BOARD**

2007- Drug Design, Development and Therapy

### **PATENT**

U.S. Patent Number 5,776,957, issued on July 7, 1998, for invention titled "Nor nicotine Enantiomers for Use as a Treatment for Dopamine Related Conditions and Disease States." Co-inventors, L. Dwoskin and P. Crooks.

### **PUBLICATIONS**

1. Bardo, M. T., and Hughes, R. A. (1978). Shock-elicited flight response in chickens as an index of morphine analgesia. *Pharmacology, Biochemistry, and Behavior*, 9, 147-149. [PMID: 704651].
2. Bardo, M. T., and Hughes, R. A. (1979). Exposure to a nonfunctional hot plate as a factor in the assessment of morphine analgesia and tolerance in rats. *Pharmacology, Biochemistry, and Behavior*, 10, 481-485. [PMID: 461477].
3. Bardo, M. T., Wellman, P. J., and Hughes, R. A. (1981). The role of hot plate and

- general environmental stimuli in morphine analgesic tolerance. Pharmacology, Biochemistry and Behavior, 14, 757-760. [PMID: 6113609].
4. Bardo, M. T., Bhatnagar, R. K., and Gebhart, G. F. (1981). Opiate receptor ontogeny and morphine-induced effects: influence of chronic footshock stress in preweanling rats. Developmental Brain Research, 1, 487-495. [PMID: 6266613].
  5. Bardo, M. T., and Hughes, R. A. (1981). Single-dose tolerance to morphine-induced analgesic and hypoactive effects in infant rats. Developmental Psychobiology, 14, 415-424. [PMID: 6268473].
  6. Hughes, R. A., and Bardo, M. T. (1981). Shuttlebox avoidance by rats using white noise intensities from 90-120 DB SPL as the UCS. Journal of Auditory Research, 21, 109-118. [PMID: 7052800].
  7. Bardo, M. T., and Gunion, M. W. (1982). Within- and between-subjects differences in the effect of morphine in mice. Psychological Reports, 50, 567-573. [PMID: 7201145].
  8. Bardo, M. T., Bhatnagar, R. K., Gebhart, G. F., and Hughes, R. A. (1982). Opiate receptor development in midbrain and forebrain of posthatch chicks. Developmental Brain Research, 3, 668-673. [PMID: 6280808].
  9. Bardo, M. T., Bhatnagar, R. K., and Gebhart, G. F. (1982). Differential effects of chronic morphine and naloxone on opiate receptors, monoamines, and morphine-induced behaviors in preweanling rats. Developmental Brain Research, 4, 139-147. [PMID: 6286051].
  10. Bardo, M. T., Bhatnagar, R. K., and Gebhart, G. F. (1982). An improved filtration procedure for measuring opiate receptors in small regions of rat brain. Journal of Neurochemistry, 39, 1751-1754. [PMID: 6292368].
  11. Bardo, M. T., Bhatnagar, R. K., and Gebhart, G. F. (1983). Age-related differences in the effect of chronic administration of naloxone on opiate binding in rat brain. Neuropharmacology, 22, 453-461. [PMID: 6304564].
  12. White, S. R., Bhatnagar, R. K., and Bardo, M. T. (1983). Norepinephrine depletion in the spinal cord gray matter of rats with experimental allergic encephalomyelitis. Journal of Neurochemistry, 44, 1771-1773. [PMID: 6602207].
  13. Bardo, M. T., Bhatnagar, R. K., and Gebhart, G. F. (1983). Chronic naltrexone increases opiate binding in brain and produces supersensitivity to morphine in the locus coeruleus of the rat. Brain Research, 289, 223-234. [PMID: 6318895].
  14. Bardo, M. T., Miller, J. S., and Neisewander, J. L. (1984). Conditioned place preference with morphine: the effect of extinction training on the reinforcing CR. Pharmacology, Biochemistry and Behavior, 21, 545-549. [PMID: 6504952].
  15. Bardo, M. T., Miller, J. S., and Risner, M. E. (1984). Opiate receptor supersensitivity produced by chronic naloxone treatment: dissociation of morphine-induced antinociception and conditioned taste aversion. Pharmacology, Biochemistry and Behavior, 21, 591-597. [PMID: 6095324].
  16. Bardo, M. T., and Risner, M. E. (1985). Biochemical substrates of drug abuse. In S. Maisto and M. Galizio (Eds.), Determinants of substance abuse: biological, psychological and environmental factors (pp. 65-99). New York: Plenum Press.
  17. Bardo, M. T., Schmidt, R. H., and Bhatnagar, R. K. (1985). Effects of morphine on sprouting of locus coeruleus fibers in the neonatal rat. Developmental Brain Research, 22, 161-168. [PMID: 3088643].
  18. Miller, J. S., McCoy, D. F., Kelly, K. S., and Bardo, M. T. (1986). A within-event analysis of taste-potentiated odor and contextual aversions. Animal Learning and Behavior, 14, 15-21.
  19. Bardo, M. T., Neisewander, J. L., and Miller, J. S. (1986). Repeated testing attenuates conditioned place preference with cocaine. Psychopharmacology, 89, 239-243.

- [PMID: 3088643].
20. Bardo, M. T., and Neisewander, J. L. (1986). Single-trial conditioned place preference using intravenous morphine. Pharmacology, Biochemistry and Behavior, *25*, 1101-1105. [PMID: 3786364].
  21. Miller, J. S., McCoy, D. F., Kelly, K. S., and Bardo, M. T. (1987). Within-compound associations between taste and contextual stimuli. Bulletin of the Psychonomic Society, *25*, 124-125.
  22. Bardo, M. T., and Neisewander, J. L. (1987). Chronic naltrexone supersensitizes the reinforcing and locomotor-activating effects of morphine. Pharmacology, Biochemistry and Behavior, *28*, 267-273. [PMID: 2825222].
  23. Neisewander, J. L., and Bardo, M. T. (1987). Expression of morphine-conditioned hyperactivity is attenuated by naloxone and pimozide. Psychopharmacology, *93*, 314-319. [PMID: 2829265].
  24. Bardo, M. T., Neisewander, J. L., and Ennis, R. B. (1988). Chronic treatment with naltrexone enhances morphine-stimulated dopamine neurotransmission: neurochemical and behavioral evidence. Neuropharmacology, *27*, 1103-1109. [PMID: 2849725].
  25. Isaac, W. L., Nonneman, A. J., Neisewander, J. L., Landers, T., and Bardo, M. T. (1989). Prefrontal cortex lesions differentially disrupt cocaine reinforced conditioned place preference, but not conditioned taste aversion. Behavioral Neuroscience, *103*, 345-355. [PMID: 2706078].
  26. Neisewander, J. L., Nonneman, A. J., McDougall, S. A., and Bardo, M. T. (1989). Up-regulation of opiate receptors following chronic naloxone treatment in aged rats. Neurobiology of Aging, *10*, 55-58. [PMID: 2547170].
  27. Bardo, M. T., Neisewander, J. L., and Pierce, R. C. (1989). Novelty-induced place preference behavior in rats: Effects of opiate and dopaminergic drugs. Pharmacology, Biochemistry and Behavior, *32*, 683-689. [PMID: 2544904].
  28. Neisewander, J. L., Rowlett, J. K., Nonneman, A. J., and Bardo, M. T. (1989). Up-regulation of opiate receptors following chronic naltrexone treatment in mature and aged male and female rats. Progress in Clinical and Biological Research, *292*, 471-476. [PMID: 2542985].
  29. McDougall, S. A., Neisewander, J. L., Bardo, M. T., and Zolman, J. F. (1989). Ontogenetic changes in (<sup>3</sup>H)-spiroperidol binding sites in posthatch chick brain. Life Sciences, *44*, 1515-1520. [PMID: 2725180].
  30. Neisewander, J. L., Rowlett, J. K., Nonneman, A. J., and Bardo, M. T. (1989). Up-regulation of opiate receptors following chronic naltrexone treatment in mature and aged male and female rats. In D. A. Butterfield (Ed.), Biological and synthetic membranes, (pp. 471-476). New York: Alan Liss.
  31. Houdi, A. A., Bardo, M. T., and Van Loon, G. R. (1989). Opioid mediation of cocaine-induced hyperactivity and reinforcement. Brain Research, *497*, 195-198. [PMID: 2790454].
  32. Neisewander, J. L., McDougall, S. A., Bowling, S. L., and Bardo, M. T. (1989). Conditioned taste aversion and place preference with buspirone and gepirone. Psychopharmacology, *100*, 485-490. [PMID: 2320709].
  33. Neisewander, J. L., Pierce, R. C., and Bardo, M. T. (1990). Naloxone enhances the expression of morphine-induced conditioned place preference. Psychopharmacology, *100*, 201-205. [PMID: 2305008].
  34. Pierce, R. C., Crawford, C. A., Nonneman, A. J., Mattingly, B. A. and Bardo, M. T. (1990). Effect of forebrain dopamine depletion on novelty-induced place preference behavior in rats. Pharmacology, Biochemistry and Behavior, *36*, 321-325. [PMID: 2113297].

35. Miller, J. S., Kelly, K. S., Neisewander, J. L., McCoy, D. F., and Bardo, M. T. (1990). Conditioning of morphine-induced taste aversion and analgesia. Psychopharmacology, *101*, 472-480. [PMID: 2167492].
36. Bardo, M. T., Bowling, S. L. and Pierce, R. C. (1990). Changes in locomotion and dopamine neurotransmission following amphetamine, haloperidol and exposure to novel environmental stimuli. Psychopharmacology, *101*, 338-343. [PMID: 2163539].
37. Bardo, M. T., Lacy, M., and Mattingly, B. A. (1990). Effects of apomorphine on novelty-induced place preference behavior in rats. Pharmacology, Biochemistry and Behavior, *37*, 89-93. [PMID: 2263670].
38. Rowlett, J. K., Mattingly, B. A., and Bardo, M. T. (1991). Neurochemical and behavioral effects of acute and chronic treatment with apomorphine in rats. Neuropharmacology, *30*, 191-197. [PMID: 1903190].
39. Bardo, M. T., and Mueller, C. W. (1991). Sensation seeking and drug abuse prevention from a biological perspective. In L. Donohew, H. Sypher, and W. Bukoski (Eds.), Persuasive communication and drug abuse prevention (pp. 195-207). Hillsdale, NJ: Lawrence Erlbaum Assoc.
40. McDougall, S. A., and Bardo, M. T. (1991). Ontogenetic changes in dopaminergic pre and postsynaptic elements in rat brain: effects of quinpirole and sulpiride. Neuropharmacology, *30*, 531-534. [PMID: 1678147].
41. Bardo, M. T., and Hammer, R. P. (1991). Autoradiographic localization of dopamine D<sub>1</sub> and D<sub>2</sub> receptors in rat nucleus accumbens: resistance to differential rearing conditions. Neuroscience, *45*, 281-290. [PMID: 1762680].
42. Pierce, R. C., Rowlett, J. K., Bardo, M. T., and Rebec, G. V. (1991). Chronic ascorbate potentiates the effects of chronic haloperidol on behavioral supersensitivity but not D<sub>2</sub> dopamine receptor binding. Neuroscience, *45*, 373-378. [PMID: 1762684].
43. Blanchard, D. C., Cholvanich, P., Blanchard, R. J., Clow, D. W., Hammer, R. P., Rowlett, J. K., and Bardo, M. T. (1991). Serotonin, but not dopamine, metabolites are increased in selected brain regions of subordinate male rats in a colony environment. Brain Research, *568*, 61-66. [PMID: 1726073].
44. Rowlett, J. K., Pedigo, N. W., and Bardo, M. T. (1991). Catalepsy produced by striatal microinjections of the D<sub>1</sub> dopamine receptor antagonist SCH23390 in neonatal rats. Pharmacology, Biochemistry and Behavior, *40*, 829-834. [PMID: 1840081].
45. Crawford, C. A., McDougall, S. A., Rowlett, J. K., and Bardo, M. T. (1992). Depletion of dopamine binding sites and changes in dopamine and dihydroxyphenylacetic acid levels in 17- and 90-day-old rat striatum after irreversible receptor antagonism. Neuroscience Letters, *137*, 265-269. [PMID: 1350079].
46. Randall, C. K., Kraemer, P. J., Dose, J. M., Carbarry, T. J., and Bardo, M. T. (1992). The biphasic effect of morphine on odor conditioning in neonatal rats. Developmental Psychobiology, *25*, 355-364. [PMID: 1526323].
47. Rowlett, J. K., Mattingly, B. A., and Bardo, M. T. (1993). Neurochemical correlates of behavioral sensitization following repeated apomorphine treatment: assessment of the role of D<sub>1</sub> dopamine receptor stimulation. Synapse, *14*, 160-168. [PMID: 8332946].
48. Bardo, M. T., Bowling, S. L., Robinet, P. M., Rowlett, J. K., Lacy, M., and Mattingly, B. A. (1993). Role of dopamine D<sub>1</sub> and D<sub>2</sub> receptors in novelty-maintained place preference. Experimental and Clinical Psychopharmacology, *1*, 101-109.
49. Bowling, S. L., Rowlett, J. K., and Bardo, M. T. (1993). The effect of environmental enrichment on amphetamine-stimulated locomotor activity, dopamine synthesis and dopamine release. Neuropharmacology, *32*, 885-893. [PMID: 8232791].
50. Randall, C. K., Kraemer, P. J., Valone, J. M., and Bardo, M. T. (1993). Odor conditioning with morphine: conditioned preference, aversion and analgesia.

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154. Dwoskin, L. P., Wooters, T. E., Sumithran, S. P., Siripurapu, K. B., Joyce, B. M., Lockman, P. R., Manda, V. K., Ayers, J. T., Zhang, Z., McIntosh, J. M., Crooks, P. A. and Bardo, M. T. (2008). *N,N'*-Alkane-diyl-*bis*-3-picoliniums as nicotinic receptor antagonists: inhibition of nicotine-induced dopamine release and hyperactivity. Journal of Pharmacology and Experimental Therapeutics, *326*, 563-576. [PMID: 18460644].

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156. Bardo, M. T. and Schnur, P. (2009). The motivational impact of nicotine and its role in tobacco use: final comments and priorities. In R. A. Bevins and A. R. Caggiula (Eds.), The motivational impact of nicotine and its role in tobacco use (pp. 199-205). University of Nebraska Press, Lincoln, NE. [PMCID: PMC2664107].
157. Dwoskin, L. P. and Bardo, M. T. (2009). Targeting nicotinic receptor antagonists as novel pharmacotherapies for tobacco dependence and relapse. Neuropsychopharmacology, *34*, 244-254. [PMID: 19079069].
158. Stairs, D. J. and Bardo, M. T. (2009). Neurobehavioral effects of environmental enrichment and drug abuse vulnerability. Pharmacology, Biochemistry and Behavior, *92*, 377-382. [PMCID: PMC2687322]
159. Wooters, T. E. and Bardo, M. T. (2009). Nicotinic receptors differentially modulate the induction and expression of behavioral sensitization to methylphenidate in rats. Psychopharmacology, *204*, 551-562. [PMCID: PMC2682633]
160. Bardo, M. T. (in press). Novelty. In G. Koob, R. F. Thompson and M. Le Moal (Eds.), Encyclopedia of Behavioral Neuroscience.
161. Cain, M. E. and Bardo, M. T. (in press). Environmental enrichment and drug action. In I. Stolerman (Ed.), Encyclopedia of Psychopharmacology.
162. Marusich, J. A. and Bardo, M. T. (2009). Differences in impulsivity on a delay discounting task predict self-administration of a low unit dose of methylphenidate in rats. Behavioural Pharmacology, *20*, 447-454. [PMC Journal – In Process]
163. Dwoskin, L. P., Smith, A. M., Wooters, T. E., Zhang, Z., Crooks, P. A. and Bardo, M. T. (2009). Nicotinic receptor-based therapeutics and candidates for smoking cessation. Biochemical Pharmacology, *78*, 732-743. [PMC Journal – In Process]
164. Kelly, T. H., Delzer, T. A., Martin, C. A., Harrington, N. G., Hays, L. R. and Bardo, M. T. (2009). Performance and subjective effects of d-amphetamine and diazepam in high and low sensation seekers. Behavioural Pharmacology, *20*, 505-517. [PMC Journal – In Process]
165. Green, T. A., Alibhai, I. N., Roybai, C. N., Winstanley, C. A., Theobald, D. E. H., Birnbaum, S. G., Graham, A. R., Unterberg, S., Graham, D. L., Vialou, V., Bass, C. E., Terwilliger, E. F., Bardo, M. T. and Nestler, E. J. (in press). Environmental enrichment produces a behavioral phenotype mediated by low CREB activity in the nucleus accumbens. Biological Psychiatry.
166. Wooters, T. E., Bevins, R. A. and Bardo, M. T. (in press). Neuropharmacology of the interoceptive stimulus properties of nicotine. Current Drug Abuse Reviews.
167. Neugebauer, N. M., Harrod, S. B. and Bardo, M. T. (in press). Nicotine elicits methamphetamine-seeking in rats previously administered nicotine. Drug and Alcohol Dependence. [PMC Journal – In Process]
168. Gipson, C. D. and Bardo, M. T. (in press). Effect of varied access to d-amphetamine self-administration on impulsive choice in a delay discounting task in rats. Psychopharmacology.
169. Dwoskin, L. P., Glaser, P. E. and Bardo, M. T. (in press). Methamphetamine. In B. A. Johnson (Ed.), Addiction Medicine: Science and Practice. Springer.

**EDITED BOOK**

R. A. Bevins and M. T. Bardo (2004), Motivational factors in the etiology of drug abuse.  
University of Nebraska Press, Lincoln, NE.

**INVITED SEMINARS**

- 1982 University of Iowa, Department of Pharmacology, Iowa City, IA.
- 1983 NIDA Addiction Research Center, Lexington, KY.
- 1989 University of Hawaii, Department of Anatomy and Reproductive Biology, Honolulu, HI.
- 1992 National Institute on Drug Abuse, Rockville, MD.
- 1993 Indiana University, Program in Neural Science, Bloomington, IN.
- 1999 University of Cincinnati, Department of Psychology, Cincinnati, OH.
- 2001 Indiana University Purdue University Indianapolis, Department of Psychology, Indianapolis, IN.
- 2004 University of Pennsylvania, Treatment Research Center, Department of Psychiatry, Philadelphia, PA.
- 2005 University of Minnesota, Tobacco Use Research Center, Minneapolis, MN.
- 2005 Duke University, Duke Transdisciplinary Prevention Research Center, Durham, NC
- 2005 Morehead State University, Department of Psychology, Morehead KY
- 2005 Rutgers, The State University of New Jersey, Center of Alcohol Studies, Piscataway NJ
- 2006 Medical College of Georgia, Department of Physiology, Augusta GA
- 2006 Centre College, Department of Psychology, Danville KY
- 2006 Concordia University, Center of Studies in Behavioral Neurobiology, Montreal Canada
- 2007 Pennsylvania State University, Department of Biobehavioral Health, State College PA
- 2008 Kansas University, Department of Pharmacology and Toxicology, Lawrence KS
- 2008 University of Cincinnati, Neuroscience Graduate Program, Cincinnati OH
- 2008 University of South Dakota, Sanford School of Medicine, Vermillion SD
- 2008 University of Illinois, Neuroscience Program, Champaign IL

**SYMPOSIA AND INVITED CONFERENCE PRESENTATIONS**

- 1987 Organizer and moderator. "Recent advances in psychopharmacology: Opioids and behavior." Midwestern Psychological Association, Chicago, IL.
- 1991 Organizer and moderator. "Psychobiological approaches to studying drug abuse." Midwestern Psychological Association, Chicago, IL.
- 1997 Organizer and moderator. "Applications of neuroscience to drug abuse prevention research." Society for Prevention Research, Baltimore, MD.
- 1997 Invited panel speaker. "Stimuli conditioned to drugs." Society for Stimulus Properties of Drugs, New Orleans, LA.
- 1998 Invited paper. "Psychobiology of novelty- and drug-seeking behaviors." Midwestern Psychological Association, Chicago, IL.
- 1998 Invited panel speaker. "Reducing drug-taking behavior with novel stimuli: evidence from laboratory animals and implications for prevention research." Society for Prevention Research, Park City, UT.
- 1999 Invited panel speaker. "Novel approaches to smoking cessation." Winter Conference on Brain Research, Snowmass, CO.
- 1999 Invited panel speaker. "Pre-clinical, clinical and preventive perspectives on protection and liability to substance abuse and mental disorders." Society for Prevention Research, New Orleans, LA.
- 1999 Invited symposium speaker. "Emerging biological targets for the treatment of nicotine

- dependence.” College on Problems of Drug Dependence, Acapulco, Mexico.
- 1999 Invited symposium speaker. “Environmental variables in the response to addictive drugs” Behavioral Pharmacology Society and European Behavioural Pharmacology Society, Boston, MA.
- 2000 Invited symposium speaker. “Non-traditional models of drug reinforcement: conditioned place preference.” The International Study Group Investigating Drugs as Reinforcers (ISGIDAR), San Juan, Puerto Rico.
- 2002 Invited symposium speaker and organizer. “Biological Connection Between Drug and Novelty Seeking Motivational Systems.” 50<sup>th</sup> annual Nebraska Symposium on Motivation, Lincoln, NE.
- 2003 Invited symposium respondent. “Risk-taking in Adolescence: What Changes and Why.” New York Academy of Sciences, New York, NY.
- 2003 Invited symposium speaker. “Sensation-seeking as a risk factor in drug abuse: from neuroscience to prevention science.” College on Problems of Drug Dependence, San Juan, Puerto Rico.
- 2005 Invited symposium speaker. “Developmental factors predicting drug abuse vulnerability: contribution of a rodent model.” Youth with Multiple Problem Behaviors: A Translational Perspective, Bethesda, MD.
- 2005 Organizer and moderator. “Translating basic research from neural, behavioral, and social sciences to prevention: challenges and opportunities.” Preconference satellite workshop at College on Problems of Drug Dependence, Orlando, FL.
- 2005 Invited symposium speaker. “Enriched environments and drug abuse vulnerability.” European Behavioural Pharmacology Society, Barcelona, Spain.
- 2006 Invited symposium discussant. “Psychopharmacology of nicotine.” Midwestern Psychological Association, Chicago, IL.
- 2006 Invited symposium discussant. “Intergrating neurobiological measures into prevention research.” Society for Prevention Research, San Antonio, TX.
- 2007 Invited symposium discussant. “The motivational impact of nicotine and its role in tobacco use.” 55<sup>th</sup> annual Nebraska Symposium on Motivation, Lincoln, NE.
- 2007 Invited symposium speaker. “Screening molecules in addiction-related neurobehavioral paradigms.” Preconference satellite workshop at College on Problems of Drug Dependence, Quebec City, CANADA.
- 2008 Invited symposium speaker. “Individual differences in novelty seeking and stimulant reward: environmental and genetic influences.” Preconference satellite workshop at International Behavioural and Neural Genetics Society, Portland, OR.
- 2008 Invited symposium speaker. “Novelty preference predicts amphetamine use in rats.” International Behavioural and Neural Genetics Society, Portland, OR.
- 2008 Invited symposium speaker. “The effect of environmental enrichment on drug seeking behavior.” Special NIDA meeting on Can Physical Activity and Exercise Prevent Drug Abuse?, Bethesda, MD.
- 2008 Invited symposium speaker. “Connections between neurobiology and drug abuse prevention.” Reducing Substance use Initiation among Adolescents: Bringing Science Down to Earth. Duke University Center for Child and Family Policy, Durham NC.
- 2008 Keynote Address. “Individual differences in neurobehavior and drug abuse prevention.” Indianapolis Chapter of the Society for Neuroscience, Indianapolis, IN.
- 2009 Invited symposium speaker. “Neural mechanisms involved in individual differences in drug abuse vulnerability: implications for prevention.” Ninth Annual Guze Symposium on Alcoholism. Washington University School of Medicine, St. Louis, MO.
- 2009 Organizer and moderator. “Neural and behavioral mechanisms of inhibitory control: implications for drug abuse prevention.” Society for Prevention Research, Washington, DC.

