

Bardo

Curriculum Vitae
June 2024
Michael Thomas Bardo

ADDRESS

Department of Psychology
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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
1994-06 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
2003-19 Director, Center for Drug Abuse Research Translation (CDART), University of

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	Kentucky, Lexington, KY
2005-11	Scientific Advisor, Yaupon Therapeutics Inc., Radnor PA
2006-pres	University Research Professor, Department of Psychology, University of Kentucky, Lexington, KY, Department of Psychology, University of Kentucky, Lexington, KY
2008-pres	Faculty Associate, Spinal Cord & Brain Injury Research Center, University of Kentucky, Lexington, KY
2010-12	Special Assistant to the Dean for Translational and Interdisciplinary Research
2011-12	Interim Associate Dean for Research, College of Arts & Sciences, University of Kentucky, Lexington, KY
2013	Invited Professor in Fundamental and Applied Sciences, University of Poitiers, Poitiers, France
2018-pres	Scientific Advisor, Pop Test Oncology/Palisades Therapeutics LLC, Cliffside Park, NJ.
2020	Visiting Academic, Queensland Brain Institute, University of Queensland, Brisbane, Australia
2021	Joint Professor, Department of Pharmacology and Nutritional Sciences, University of Kentucky, Lexington, KY
2022-pres	Director of Graduate Studies, Department of Psychology, 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, School of Life Sciences, 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: Core Faculty in the School of Social and Behavioral Sciences, Capella University, Minneapolis, MN.
- 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: Professor, Department of Psychiatry and Human Behavior, University of Mississippi Medical Center, Jackson, MS.
- 1994 Nancy A. Honeycutt, Ph.D.
Dissertation Title: "Lateralized function in patients with complex partial seizures of temporal origin."
Present Position: Independent Research Professional, Division of Psychiatric

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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: Instructor, Catawba College, Salisbury 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: 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: Special Education Coordinator, Autism Programs, Gwinnett County Public Schools, Suwanee, 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: 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: Medical Science Liaison, Otsuka America Pharmaceuticals, Rockville, MD.
- 2010 Thomas E. Wooters, Ph.D.
Dissertation Title: "The Effects of Oral Methylphenidate on Cocaine-induced Hyperactivity and Cocaine Self-administration."
Present Position: Senior Medical Writer, Jazz Pharmaceuticals, Palo Alto, CA.
- 2010 Cassandra D. Gipson, Ph.D.
Dissertation Title: "A Translational Model of Mood-Based Rash Action."
Present Position: Associate Professor, Department of Pharmacology and Nutritional Sciences, University of Kentucky, KY.

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- 2012 Andrew C, Meyer, Ph.D.
Dissertation Title: "Differential rearing environments affect response to novelty, amphetamine self-administration and neurochemical effect of amphetamine in Lewis and Fischer inbred rat strains: a gene X environment interaction."
Present position: Director, US Medical Affairs, Digital Therapeutics, Otsuka Pharmaceutical Development and Commercialization, Inc., Lexington, KY area
- 2014 Justin R Yates, Ph.D.
Dissertation Title: "Contribution of nucleus accumbens core to impulsive choice: role of dopamine and glutamate receptors."
Present position: Associate Professor, Department of Psychological Science, Northern Kentucky University, Highland Heights, KY.
- 2018 Virginia G. Weiss, Ph.D.
Dissertation Title: "Effects of social interaction on morphine conditioned place preference in adolescent male rats."
Present position: Senior Medical Writer, Merz Aesthetics, Monroeville, PA..
- 2019 Sarah E. Maggio, Ph.D.
Dissertation Title: "Development of a translational model of co-use of alcohol and nicotine for testing potential pharmacotherapies."
Present position: Program Officer, Medications Development Branch, Division of Treatment and Recovery, NIAAA, Bethesda MD
- 2023 Samantha G. Malone, Ph.D.
Dissertation Title: "Calcium imaging of central amygdala activity after fentanyl escalation."
Present position: Postdoctoral Scholar, Henry M. Jackson Foundation for the Advancement of Military Medicine, Uniformed Services University School of Medicine, Bethesda MD

POSTDOCTORAL SCHOLARS TRAINED

- 1993-96 Rick A. Bevins, Ph.D. from University of Massachusetts
Present Position: Professor and Associate Vice Chancellor for Research, Dept Psychology, Univ Nebraska, Lincoln NE
- 1999-02 Anthony S. Rauhut, Ph.D. from University of Massachusetts
Present Position: Professor, Department of Psychology, Dickinson College, Carlisle, PA.
- 1999-03 Steven B. Harrod, Ph.D. from Kent State University
Present Position: Professor, Department of Psychology, University of South Carolina, Columbia, SC.
- 2002-04 Mary E. Cain, Ph. D. from University of Vermont
Present Position: Professor, Department of Psychology, Kansas State University, Manhattan, KS.
- 2005-07 Shafiqur Rahman, Ph.D. from Memorial University of Newfoundland (CANADA)

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Present Position: Professor, College of Pharmacy, South Dakota State University, Brookings SD.

- 2006-07 Jennifer L. Perry, Ph.D. from University of Minnesota
Present Position: Visiting Assistant Professor, Kalamazoo College, Kalamazoo, MI.
- 2008-10 Julie A. Marusich, Ph.D. from University of Florida
Present Position: Research Pharmacologist, RTI International, Research Triangle Park, NC.
- 2010-13 Carrie E. Wilmouth, Ph.D. from Binghamton University
Present Position: Professor, Liberty University, Lynchburg, VA.
- 2008-14 Joshua S. Beckmann (Ph.D. from Southern Illinois University)
Present Position: Professor, Department of Psychology, University of Kentucky, Lexington, KY.
- 2014-16 Dolores B. Vazquez-Sanroman (Ph.D. from Universitat Jaume I, Spain)
Present Position: Associate Professor, Department of Anatomy and Cell Biology, Oklahoma State University Center for Health Sciences, Tulsa, OK.
- 2014-16 Arlington G. Wilson (Ph.D. from Indiana University)
Present Position: Data Scientist Contractor, Defense Health Agency, Washington, DC.
- 2012-17 Rebecca S. Hofford (Ph.D. from Texas A&M University)
Present Position: Research Assistant Professor, Department of Physiology and Pharmacology, Wake Forest University, Winston-Salem, NC.
- 2017-2020 Lindsey R. Hammerslag (Ph.D. from University of Illinois)
Present Position: Assistant Professor, Division of Biomedical Informatics, College of Medicine, University of Kentucky, Lexington, KY.
- 2018-2022 Cassie Chandler (Ph.D. from University of Mississippi Medical Center)
Present Position: Instructor, Department of Psychological Science, University of Arkansas, Fayetteville, AK

GRADUATE STUDENTS PRESENTLY IN TRAINING

- 2020- Jakob (Koby) D. Shaykin
2020- Bree A. Humburg
2024- Meagan Blanchard

INTERNATIONAL GRADUATE TRAINEE

- 2019- Michela Carbone, University of Cagliari in Sardinia ITALY

EXTRAMURAL GRANTS AND CONTRACTS AS PRINCIPAL INVESTIGATOR (Total Award)

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- 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. Dwoskin, 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.
- Targacept Inc., principal investigator, "Targacept contract #2," 2008, \$150,000
- US Worldmeds LLC, principal investigator "Effect of lofexidine on norepinephrine levels," 2008, \$9,700.
- NIH P50 DA05312, principal investigator and director for center grant, "CDART-Center for Drug Abuse Research Translation," 2007-2012, \$7,396,789.
- NIH R01 DA12964, principal investigator for individual research grant, "Novelty, dopamine and response to amphetamine," 2009-2016, \$1,846,885.
- NIH P50 DA05312, principal investigator and director for center grant, "CDART-Center for Drug Abuse Research Translation," 2012-2019, \$7,061,081.
- NIH R21 DA041755, principal investigator for individual research grant, "Social cues and drug relapse," 2017-2021, \$398,119.

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DoD CDMRP W81XWH-18-2-0044, principal investigator for PASA consortium grant, "Preclinical assessment of PT-150 for opioid use disorder and PTSD," 2019-2021, \$275,000.

NIH R01 DA053070, multiple principal investigator with J. Turner and P. Ortinski for individual research grant, "Functional and genomic signatures of escalated fentanyl use," 2021-2025, \$3,237,608.

EXTRAMURAL GRANTS AND CONTRACTS AS CO-INVESTIGATOR (Total Award)

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

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

Pharmacia Corporation, L. Dwoskin (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. Dwoskin (PI), "CNS pharmacology of tobacco alkaloids," 2000-2001, \$64,601.

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

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

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

NIH R21 DA033796, G. Gerhardt (PI), "Tonic and phasic glutamate release from psychomotor stimulants," 2012-15, \$371,250.

NIH U01 DA013519, L. Dwoskin (PI). "Development of novel therapies for methamphetamine abuse," 2012-2017, \$3,213,079.

FDA, Subcontract from Research Triangle Institute, L. Dwoskin (PI). "Assessment of the addictive potential of cotinine, anatabine and myosine in rodents," 2014-2015, \$357,005.

NIH, R01 AA025591, K. Nixon (PI). "Microglia and adolescent susceptibility to developing an alcohol use disorder," 2017-22, \$2,026,822

NIH, R44 AA05804, J. Littleton (PI). "Novel modulators of dopamine transporter for alcohol and nicotine use disorders," 2020-23, \$2,832,473

NIH, U01 DA051377, T. Prisinzano (PI). "Development of agents for synthetic opioid overdose," 2021-24, \$1,353,358

EXTRAMURAL GRANTS AS SPONSOR (Total Award)

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

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.

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.

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- NIH F31 DA023853, T. Wooters (Predoctoral Trainee), "Reinforcing and neurochemical effects of cocaine in a rodent model of ADHD," 2008-10, \$58,608.
- NIH F31 DA028018, C. Gipson (Predoctoral Trainee). "A translational model of mood-based drug abuse." 2010-12, \$74,484.
- NIH K99/R00 DA033373, J. Beckmann (Postdoctoral Trainee), Tonic and phasic glutamate release in incentive salience and cocaine reinforcement". 2012-14, \$262,626 (K99 phase).
- NIH F32 DA036291, R. Hofford (Postdoctoral Trainee), "Social isolation: effects of the stress axis and stimulant self-administration" 2014-15, \$60,410.
- NIH F31 DA057050, S. Malone (Predoctoral Trainee), "Calcium imaging of central amygdala after fentanyl escalation" 2022-24, \$46,752.
- NIH F31 DA055445, T. Anderson (Predoctoral Trainee, P. Ortinski as primary sponsor), "Clastrum serotonin and spike-timing plasticity associated with cognitive deficits after cocaine" \$72,462

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)

GRANT REVIEW EXPERIENCE

- 1987 NIDA Contract Review Meeting, ad hoc member
1987 NIDA Special Biomedical Research Review Committee II, ad hoc member
1988, 92, 02 NSF Proposal Review, ad hoc member
1994, 00 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, 04 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
2003-06 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
2008 NIH, Training in Neurosciences IRG (ZRG1 F02a), ad hoc member
2008-12 Lytmos Group, James and Esther King Biomedical Research Program, ad hoc grant reviewer
2009-10 CIHR (Canada), Team Grant and Catalyst Grant Review, ad hoc member
2009 NIH, NIDA Special Emphasis Panel on Interactions between Physical Activity and

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2009	Drug Abuse (ZDA1 GXM-A 05), ad hoc chair NIH, NIAAA Review of P30 and RC2 applications (ZAA1 DD 02), ad hoc member
2010	NIH, National Cooperative Drug Discovery and Development Group applications (ZMH1 ERB-C 03S), ad hoc member
2010	NIH, Drug Discovery Panel applications (ZRG1 MDCN-C 56), ad hoc member
2010	NIH, Program Project Special Review, Neurotoxicology and Alcohol (NAL) Study Section (ZRG1 IFCN-H40P), ad hoc chair
2011	NIH, Special Emphasis Panel on New Molecular Entities to Treat Substance Use Disorders (ZDA1 JXR-D 06), ad hoc member
2011	NIH, ZDA1 MXL-F 07 1, Exploring Drugs of Abuse and Transgenerational Phenotypes (R01), ad hoc chair
2012	NIH, NIDA Cutting Edge Basic Research Applications (CEBRA), ad hoc member
2012	NIH, National Cooperative Drug Discovery Group applications, ad hoc member
2012	NIH, NIDA Contract Review, Rodent Testing to Identify Pharmacotherapies for Substance Dependence, ad hoc member
2010-12	NIH, College of CSR Reviewers, regular member
2013	NIH, ZRG1 IFCN-C (02) M SEP: Drugs and Alcohol, ad hoc member
2013	NIH, ZRG1 BDCN-A (02) M SEP: Neurobiol Brain Disease, ad hoc chair
2013	NIH, NIMH SEP: National Cooperative Drug Discovery Groups, ad hoc member
2014	NIH, NIDA Core "Center of Excellence" P30 grant program (ZDA1 EXL-T 02), ad hoc member
2014-15	NIH, NIDA P01 Program Project Review (ZRG1 BDCN A(40)P), ad hoc member and chair
2014	NIH, SEP Behavioral Neuroscience Panel (ZRG1 F02A-J) for F31 and F32 applications, ad hoc member
2014	NIH, National Cooperative Drug Discovery/Development Groups (ZMH1 ERB-C01S), ad hoc member
2014	NIH, Cutting-Edge Basic Research Awards (CEBRA), 2015/01 ZDA JXR-G(09) S, ad hoc chair
2007-14	NIH, NIDA Research "Center of Excellence" P50 grant program (ZDA1 EXL-T 03 S), ad hoc member
2014	NIH, Pathophysiological Basis of Mental Disorders and Addictions (PMDA), ad hoc member
2015	NIH, Phase I AIDS NIDA Avenir Award Program for Research on Substance Abuse and HIV/AIDS, ad hoc member
2015	NIH, ZRG1 IFCN-C (02) M SEP: Neurotoxicology and Drugs, ad hoc member
2015	NIH, ZDA1 GXM-A(13)R: Tools and Services for Designing Methodologically Rigorous Animal Studies, ad hoc chair
2015	NIH, National Cooperative Drug Discovery/Development Groups ZMH1 ERB-C (01) S, ad hoc member
2016	NIH, ZRG1 IFCN-C (02) M SEP: Alcohol, Drugs and Neurotoxicology, ad hoc member
2015-17	NIH, Pathophysiological Basis of Mental Disorders and Addictions (PMDA), regular member
2017	NIH, ZRG1 IFCN-C (02) M SEP: Alcohol and Cocaine, ad hoc member
2018	NIH, CASEL in Tobacco Regulatory Science, U54, ad hoc member
2018-19	Kentucky Biomedical Research Infrastructure Network (KBRIN), funded by NIH grant 2P20GM103436, ad hoc member
2018	NIH, Pathophysiological Basis of Mental Disorders and Addictions (PMDA), ad hoc member
2018-19	NIH, ZRG1-BDCN: NIH Anonymization Study, ad hoc member

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- 2019 NIH, ZDA1 LXF-L (31) S, NIDA Loan Repayment, ad hoc member
2019 NIH, NIDA Research "Center of Excellence" P30 and P50 grant program (ZDA1 GXM-A (01 and 02), ad hoc member
2019 NIH, ZRG1 IFCN-C (02) M, SEP: Drugs, Heavy Metals and Motivated Behavior, ad hoc chair
2021 NIH, ZDA1 PXN-F (31) 2 NIDA Loan Repayment, ad hoc member
2021 NIH, ZRG1 IFCN-C (02) M SEP: Motivated Behavior, Alcohol and Heavy Metal, ad hoc member
2022 NIH, Neurobiology of Motivated Behavior (NMB), ad hoc member
2022 NIH, NIDA Contract Review, Using Rodent Behavioral Models to Identify Substance Abuse Pharmacotherapies, ad hoc chair
2023 NIH, ZRG1 MBBC-J(70) R, Director's Pioneer Program, ad hoc member.
2024 NIH, NIDA Contract Review, Medication Discovery Using Rat Models of Relapse, ad hoc member

REGIONAL, NATIONAL AND INTERNATIONAL SERVICE COMMITTEES

- 2003-06 Program Committee, Midwestern Psychological Association
2005 Program Integrating Committee, Society for Prevention Research
2007-10 Travel Awards & Mentoring Committee, College on Problems of Drug Dependence
2008-10 Nominations Committee, Society for Prevention Research
2010 International Scientific Programme Committee, Translational Research in Psychiatry Conference, Innsbruck Austria
2011-2015 Board of Directors, College on Problems of Drug Dependence
2011-2015 External Advisory Board, Integrative Predoctoral Training in Drug Abuse Research, Indiana University, Drs. George Rebec and Peter Finn, Co-Directors
2012-2014 Program Committee, College on Problems of Drug Dependence
2004-pres Scientific Advisory Board, Integrative Neuroscience Initiative on Alcoholism (INIA), Dr. Robert Messing, Consortium Director
2008-pres Midwestern Psychological Association, Local Representative
2017-2020 Finance Committee, College on Problems of Drug Dependence
2020-2023 Awards Committee, College on Problems of Drug Dependence

AWARDS

- 1988 Charter Fellow, American Psychological Society
2005 Distinguished University Scientist, Kentucky Academy of Science
2006 University Research Professorship, University of Kentucky
2009 Fellow, Midwestern Psychological Association
2011 William B. Sturgill Award for graduate mentoring, University of Kentucky
2014 Mentorship Award, College on Problems of Drug Dependence
2014 Fellow, College on Problems of Drug Dependence
2015 SEC Faculty Achievement Award
2018 Special Recognition for Teaching, Research and Mentoring in Drug Abuse, CCTS at the University of Kentucky
2021 Albert D. and Elizabeth H. Kirwan Memorial Prize for outstanding research and scholarship, University of Kentucky

EDITORIAL BOARDS

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2007-2015 *Drug Design, Development and Therapy*
2012-2015 *Journal of the Experimental Analysis of Behavior*
2021-pres *Drug and Alcohol Dependence Reports*

PATENTS

U.S. Patent Number 5,776,957, issued on July 7, 1998, for invention titled “Nornicotine Enantiomers for Use as a Treatment for Dopamine Related Conditions and Disease States.” Co-inventors, L. Dwoskin and P. Crooks.
U.S. Provisional Application Filed November 9, 2023, for invention titled “Potent Opioid Agonist with Reduced Respiratory Depression.” Co-inventors, T. Prisinzano and J. Turner.

JOURNAL 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.
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.
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.
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.
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.
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.
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.
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.
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.
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.
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.
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.
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.
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.
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.
 16. 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.
 17. 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.
 18. Bardo, M. T., Neisewander, J. L., and Miller, J. S. (1986). Repeated testing attenuates conditioned place preference with cocaine. Psychopharmacology, 89, 239-243.
 19. Bardo, M. T., and Neisewander, J. L. (1986). Single-trial conditioned place preference using intravenous morphine. Pharmacology, Biochemistry and Behavior, 25, 1101-1105.
 20. 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.
 21. 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.
 22. Neisewander, J. L., and Bardo, M. T. (1987). Expression of morphine-conditioned hyperactivity is attenuated by naloxone and pimozide. Psychopharmacology, 93, 314-319.
 23. 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.
 24. 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.
 25. 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.
 26. 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.
 27. 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.
 28. McDougall, S. A., Neisewander, J. L., Bardo, M. T., and Zolman, J. F. (1989). Ontogenetic changes in (³H)-spiroperidol binding sites in posthatch chick brain. Life Sciences, 44, 1515-1520.
 29. 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.
 30. 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.
 31. 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.
32. 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.
33. 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.
34. 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.
35. 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.
36. 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.
37. 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.
38. Bardo, M. T., and Hammer, R. P. (1991). Autoradiographic localization of dopamine D₁ and D₂ receptors in rat nucleus accumbens: resistance to differential rearing conditions. *Neuroscience*, 45, 281-290.
39. 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 D₂ dopamine receptor binding. *Neuroscience*, 45, 373-378.
40. 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.
41. Rowlett, J. K., Pedigo, N. W., and Bardo, M. T. (1991). Catalepsy produced by striatal microinjections of the D₁ dopamine receptor antagonist SCH23390 in neonatal rats. *Pharmacology, Biochemistry and Behavior*, 40, 829-834.
42. 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.
43. Randall, C. K., Kraemer, P. J., Dose, J. M., Carbary, T. J., and Bardo, M. T. (1992). The biphasic effect of morphine on odor conditioning in neonatal rats. *Developmental Psychobiology*, 25, 355-364.
44. 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 D₁ dopamine receptor stimulation. *Synapse*, 14, 160-168.
45. Bardo, M. T., Bowling, S. L., Robinet, P. M., Rowlett, J. K., Lacy, M., and Mattingly, B. A. (1993). Role of dopamine D₁ and D₂ receptors in novelty-maintained place preference. *Experimental and Clinical Psychopharmacology*, 1, 101-109.
46. 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.
47. Randall, C. K., Kraemer, P. J., Valone, J. M., and Bardo, M. T. (1993). Odor conditioning with morphine: conditioned preference, aversion and analgesia. *Psychobiology*, 21, 215-220.

48. Kolta, M. G., and Bardo, M. T. (1993). Opioid modulation of amphetamine-stimulated dopamine release and concentration in rat striatal slices. *Pharmacology, Biochemistry and Behavior*, *46*, 819-825.
49. Neisewander, J. L., Nonneman, A. J., Rowlett, J. K., and Bardo, M. T. (1994). Impaired supersensitivity to morphine following chronic naltrexone treatment in senescent rats. *Neurobiology of Aging*, *15*, 91-97.
50. Bardo, M. T., and Valone, J. M. (1994). Morphine-conditioned analgesia using a taste cue: Dissociation of taste aversion and analgesia. *Psychopharmacology*, *114*, 269-274.
51. Bowling, S. L., and Bardo, M. T. (1994). Locomotor and rewarding effects of amphetamine in enriched, social and isolate reared rats. *Pharmacology, Biochemistry and Behavior*, *48*, 459-464.
52. Crawford, C. A., Rowlett, J. K., McDougall, S. A., and Bardo, M. T. (1994). Age-dependent differences in the rate of recovery of striatal dopamine D₁ and D₂ receptors after inactivation with EEDQ. *European Journal of Pharmacology*, *252*, 225-231.
53. Crawford, C. A., McDougall, S. A., and Bardo, M. T. (1994). Ontogenetic effects of EEDQ on amphetamine-induced behaviors of rats: Role of presynaptic processes. *Psychopharmacology*, *116*, 152-160.
54. Rowlett, J. K., Gibson, T. R., and Bardo, M. T. (1994). Dissociation of buprenorphine-induced locomotor sensitization and conditioned place preference in rats. *Pharmacology, Biochemistry and Behavior*, *49*, 241-245.
55. Bardo, M. T., Rowlett, J. K., and Harris, M. J. (1995). Conditioned place preference using opiate and stimulant drugs: a meta-analysis. *Neuroscience and Biobehavioral Reviews*, *19*, 39-51.
56. Crawford, C. A., McDougall, S. A., and Bardo, M. T. (1995). Effects of EEDQ on the synthesis and metabolism of dopamine in pre-weanling and adult rats. *Neuropharmacology*, *33*, 1559-1565.
57. Bevins, R. A., Valone, J. M., Bradley, M. C., and Bardo, M. T. (1995). Morphine taste conditioning and analgesia: assessing conditioned and novelty-induced analgesia. *Experimental and Clinical Psychopharmacology*, *3*, 9-14.
58. Bardo, M. T., Bowling, S. L., Rowlett, J. K., Manderscheid, P., Buxton, S. T., and Dwoskin, L. P. (1995). Environmental enrichment attenuates locomotor sensitization, but not *in vitro* dopamine release, induced by amphetamine. *Pharmacology, Biochemistry and Behavior*, *51*, 397-405.
59. Clayton, R. R., Leukefeld, C., Donohew, R. L., Bardo, M. T. and Harrington, N. G. (1995). Risk and protective factors: a brief review. *Drugs and Society*, *8*, 7-14.
60. Rowlett, J. K., Mattingly, B. A., and Bardo, M. T. (1995). Repeated quinpirole treatment: Locomotor activity, dopamine synthesis and effects of selective dopamine antagonists. *Synapse*, *20*, 209-216.
61. Pierce, R. C., Rowlett, J. K., Rebec, G. V., and Bardo, M. T. (1995). Ascorbate potentiates amphetamine-induced conditioned place preference and forebrain dopamine release in rats. *Brain Research*, *688*, 21-26.
62. Bevins, R. A., Delzer, T. A., and Bardo, M. T. (1996). Characterization of the conditioned taste aversion produced by 7-OH-DPAT in rats. *Pharmacology, Biochemistry and Behavior*, *53*, 695-699.
63. Bevins, R. A., Delzer, T. A., and Bardo, M. T. (1996). Second-order conditioning detects unexpressed morphine-induced salt aversion. *Animal Learning and Behavior*, *24*, 221-229.
64. Bardo, M. T., Donohew, R. L., and Harrington, N. G. (1996). Psychobiology of novelty seeking and drug seeking behavior. *Behavioural Brain Research*, *77*, 23-43.
65. Mattingly, B. A., Fields, S. E., Langfels, M. S., Rowlett, J. K., Robinet, P. M., and Bardo, M. T. (1996). Repeated 7-OH-DPAT treatments: Behavioral sensitization, dopamine

- synthesis and subsequent sensitivity to apomorphine and cocaine.
Psychopharmacology, 125, 33-42.
66. Bardo, M. T., Robinet, P. M., and Hammer, R. P. (1997). Effect of differential rearing environments on morphine-induced behaviors, opioid receptors and dopamine neurotransmission. *Neuropharmacology*, 36, 251-259.
67. Rowlett, J. K., Mattingly, B. A., and Bardo, M. T. (1997). Locomotor activity and dopamine synthesis following 1 and 15 days of withdrawal from repeated apomorphine treatment. *Pharmacology, Biochemistry and Behavior*, 57, 13-18.
68. Rebec, G. V., Grabner, C. P., Johnson, M., Pierce, R. C., and Bardo, M. T. (1997). Transient increases in catecholaminergic activity in medial prefrontal cortex and nucleus accumbens shell during novelty. *Neuroscience*, 76, 707-714.
69. Bevins, R. A., Delzer, T. A., and Bardo, M. T. (1997). Unexpressed morphine conditioned salt aversion: procedural variants and hypertonicity of salt. *Behavioural Processes*, 40, 129-136.
70. Bevins, R. A., Klebaur, J. E., and Bardo, M. T. (1997). Individual differences in response to novelty and amphetamine drug discrimination in rats. *Behavioural Pharmacology*, 8, 113-123.
71. Bevins, R. A., Klebaur, J. E., and Bardo, M. T. (1997). 7-OH-DPAT has d-amphetamine-like discriminative stimulus properties. *Pharmacology, Biochemistry and Behavior*, 58, 485-490.
72. Bardo, M. T., Bevins, R. A., Klebaur, J. E., Crooks, P. A., and Dwoskin, L. P. (1997). (-)-Nornicotine partially substitutes for (+)-amphetamine in a drug discrimination paradigm in rats. *Pharmacology, Biochemistry and Behavior*, 58, 1083-1087.
73. Rebec, G. V., Christensen, J. R. C., Guerra, C., and Bardo, M. T. (1997). Regional and temporal differences in real-time dopamine efflux in the nucleus accumbens during free-choice novelty. *Brain Research*, 776, 61-67.
74. Bardo, M. T. (1998). Neuropharmacological mechanisms of drug abuse: beyond dopamine in the nucleus accumbens. *Critical Reviews in Neurobiology*, 12, 37-67.
75. Randall, C. K., Kraemer, P. J., and Bardo, M. T. (1998). Morphine-induced conditioned place preference in preweanling and adult rats. *Pharmacology, Biochemistry and Behavior*, 60, 217-222.
76. Valone, J. M., Randall, C. K., Kraemer, P. J., and Bardo, M. T. (1998). Olfactory cues and morphine-induced conditioned analgesia in rats. *Pharmacology, Biochemistry and Behavior*, 60, 115-118.
77. Bevins, R. A. and Bardo, M. T. (1998). Morphine-conditioned changes in locomotor activity: role of the conditioned stimulus. *Experimental and Clinical Psychopharmacology*, 6, 131-138.
78. Robinet, P. M., Rowlett, J. K., and Bardo, M. T. (1998). Individual differences in novelty-induced activity and the rewarding effects of novelty and amphetamine in rats. *Behavioural Processes*, 44, 1-9.
79. Segar, T. M., Klebaur, J. E., Bardo, M. T. and Barron, S. (1999). Acquisition of a fixed ratio schedule in adult male rats neonatally exposed to ethanol and/or cocaine. *Alcoholism: Clinical and Experimental Research*, 23, 7-11.
80. Bevins, R. A. and Bardo, M. T. (1999). Conditioned increase in place preference by access to novel objects: antagonism by MK-801. *Behavioural Brain Research*, 99, 53-60.
81. Bardo, M. T., Valone, J. M., and Bevins, R. A. (1999). Locomotion and conditioned place preference produced by acute intravenous amphetamine: role of dopamine receptors and individual differences in amphetamine self-administration. *Psychopharmacology*, 143, 39-46.
82. Bardo, M. T., Valone, J. M., Robinet, P. M., Shaw, W. B. and Dwoskin, L. P. (1999).

- Environmental enrichment enhances the stimulant effect of intravenous amphetamine: search for a cellular mechanism in the nucleus accumbens. *Psychobiology*, 27, 292-299.
83. Klebaur, J. E. and Bardo, M. T. (1999). The effects of anxiolytic drugs on novelty-induced place preference. *Behavioural Brain Research*, 101, 51-57.
84. Klebaur, J. E. and Bardo, M. T. (1999). Individual differences in novelty seeking on the playground maze predict amphetamine conditioned place preference. *Pharmacology, Biochemistry and Behavior*, 63, 131-136.
85. Dwoskin, L. P., Crooks, P. A., Teng, L., Green, T. A., and Bardo, M. T. (1999). Acute and chronic effects of nornicotine on locomotor activity in rats: altered response to nicotine. *Psychopharmacology*, 145, 442-451.
86. Bardo, M. T., Green, T. A., Crooks, P. A. and Dwoskin, L. P. (1999). Nornicotine is self-administered intravenously by rats. *Psychopharmacology*, 146, 290-296.
87. Brown, R. W., Bardo, M. T., Mace, D. D., Phillips, S. B., and Kraemer, P. J. (2000). D-amphetamine facilitation of Morris water task performance is blocked by eticlopride and correlated with increased dopamine synthesis in the prefrontal cortex. *Behavioural Brain Research*, 114, 135-143.
88. Green, T. A., Phillips, S. B., Crooks, P. A., Dwoskin, L. P. and Bardo, M. T. (2000). Nornicotine pretreatment decreases intravenous nicotine self-administration in rats. *Psychopharmacology*, 152, 289-294.
89. Bardo, M. T. and Bevins, R. A. (2000). Conditioned place preference: what does it add to our preclinical understanding of drug reward? *Psychopharmacology* 153, 31-43.
90. Levens, N., Green, T. A., Akins, C. K., and Bardo, M. T. (2000). Dopamine D₂ receptor binding in the brain of male Japanese quail (*Coturnix japonica*). *Neuroscience Letters*, 296, 77-80.
91. Bardo, M. T., Robinet, P. M., Mattingly, B. A. and Margulies, J. E. (2001). Effect of 6-hydroxydopamine or repeated amphetamine treatment on mesencephalic mRNA levels for AMPA glutamate receptor subunits in the rat. *Neuroscience Letters*, 302, 133-136.
92. Bardo, M. T., Klebaur, J. E., Valone, J. M. and Deaton, C. (2001). Environmental enrichment decreases intravenous self-administration of amphetamine in female and male rats. *Psychopharmacology*, 155, 278-284.
93. Harrod, S. B., Dwoskin, L. P., Crooks, P. A., Klebaur, J. E. and Bardo, M. T. (2001). Lobeline attenuates d-methamphetamine self-administration in rats. *Journal of Pharmacology and Experimental Therapeutics*, 298, 172-179.
94. Klebaur, J. E., Bevins, R. A., Segar, T. M., and Bardo, M. T. (2001). Individual differences in behavioral responses to novelty and amphetamine self-administration in female and male rats. *Behavioural Pharmacology*, 12, 267-275.
95. Robinet, P. M. and Bardo, M. T. (2001). Dopamine D3 receptors are involved in amphetamine-induced contralateral rotation in 6-OHDA lesioned rats. *Pharmacology, Biochemistry and Behavior*, 70, 43-54.
96. Green, T. A., Crooks, P. A., Bardo, M. T. and Dwoskin, L. P. (2001). A contributory role for nornicotine in nicotine neuropharmacology: Nornicotine evokes [³H]dopamine overflow from rat nucleus accumbens slices. *Biochemical Pharmacology*, 62, 1597-1603.
97. Miller, D. K., Wilkins, L. H., Bardo, M. T., Crooks, P. A. and Dwoskin, L. P. (2001). Once weekly administration of nicotine produces long-lasting locomotor sensitization in rats via a nicotinic receptor-mediated mechanism. *Psychopharmacology*, 156, 469-476.
98. Klebaur, J. E., Phillips, S. B., Kelly, T. H. and Bardo, M. T. (2001). Exposure to novel environmental stimuli decreases amphetamine self-administration in rats. *Experimental and Clinical Psychopharmacology*, 9, 372-379.
99. Rauhut, A. S., Gehrke, B. J., Phillips, S. B. and Bardo, M. T. (2002). Effects of opioid

- antagonists on unconditioned and conditioned hyperactivity to morphine. *Pharmacology, Biochemistry and Behavior*, 73, 611-622.
100. Rauhut, A. S., Mullins, S. N., Dwoskin, L. P. and Bardo, M. T. (2002). Reboxetine: attenuation of intravenous nicotine self-administration in rats. *Journal of Pharmacology and Experimental Therapeutics*, 303, 664-672.
101. Green, T. A., Gehrke, B. J. and Bardo, M. T. (2002). Environmental enrichment decreases intravenous amphetamine self-administration in rats: dose response functions for fixed- and progressive-ratio schedules. *Psychopharmacology*, 162, 373-378.
102. Green, T. A., Brown, R. W., Phillips, S. B., Dwoskin, L. P. and Bardo, M. T. (2002). Locomotor stimulant effects of nornicotine: role of dopamine. *Pharmacology, Biochemistry and Behavior*, 74, 87-94.
103. Miller, D. K., Harrod, S. B., Green, T. A., Wong, M. Y., Bardo M.T. and Dwoskin, L. P. (2002). Lobeline attenuates locomotor stimulation induced by repeated nicotine administration in rats. *Pharmacology, Biochemistry and Behavior*, 74, 279-286.
104. Bardo, M. T. (2002). On the nature of the conditioned stimulus: comment on Leri and Stewart (2002). *Experimental and Clinical Psychopharmacology*, 10, 353-355.
105. Prendergast, M. A., Rogers, D. T., Barron, S., Bardo, M. T. and Littleton, J. M. (2002). Ethanol and nicotine: a pharmacologic balancing act? *Alcoholism: Clinical and Experimental Research*, 26, 1917-1918.
106. Harrod, S. B., Dwoskin, L. P., Green, T. A., Gehrke, B. J. and Bardo, M. T. (2003). Lobeline does not serve as a reinforcer in rats. *Psychopharmacology*, 165, 397-404.
107. Gehrke, B. J., Harrod, S. B., Cass, W. A. and Bardo, M. T. (2003). The effect of neurotoxic doses of methamphetamine on methamphetamine-conditioned place preference in rats. *Psychopharmacology*, 166, 249-257.
108. Bardo, M. T., Gehrke, B. J., Shortridge, B. E. and Rauhut, A. S. (2003). Effect of β -funaltrexamine and naloxonazine on single-trial morphine conditioned place preference and locomotor activity. *Pharmacology, Biochemistry and Behavior*, 74, 617-622.
109. Rauhut, A. S., Neugebauer, N., Dwoskin, L. P. and Bardo, M. T. (2003). Effect of bupropion on nicotine self-administration in rats. *Psychopharmacology*, 169, 1-9.
110. Green, T. A., Cain, M., Thompson, M. and Bardo, M. T. (2003). Environmental enrichment decreases nicotine-induced hyperactivity in rats. *Psychopharmacology*, 170, 235-241.
111. Zhu, J., Green, T., Bardo, M. T. and Dwoskin, L. P. (2004). Environmental enrichment enhances sensitization to GBR 12935-induced activity and decreases dopamine transporter function. *Behavioural Brain Research*, 148, 107-117.
112. Bardo, M. T. (2004). On the nature of the intra-administration unconditioned stimulus: comment on McDonald and Siegel (2004). *Experimental and Clinical Psychopharmacology*, 12, 12-14.
113. Cain, M. E., Smith, C. M. and Bardo, M. T. (2004). The effect of novelty on amphetamine self-administration in rats classified as high and low responders. *Psychopharmacology*, 176, 129-138.
114. Melendez, R. I., Gregory, M. L., Bardo, M. T. and Kalivas, P. W. (2004). Impoverished rearing environment alters metabotropic glutamate receptor expression and function in the prefrontal cortex. *Neuropsychopharmacology*, 29, 1980-1987.
115. Harrod, S. B., Dwoskin, L. P. and Bardo, M. T. (2004). Lobeline produces conditioned taste avoidance in rats. *Pharmacology, Biochemistry and Behavior*, 78, 1-5.
116. Zhu, J., Apparsundaram, S., Bardo, M. T. and Dwoskin, L. P. (2005). Environmental enrichment decreases cell surface expression of the dopamine transporter in rat medial prefrontal cortex. *Journal of Neurochemistry*, 93, 1434-1443.
117. Rauhut, A. S., Dwoskin, L. P. and Bardo, M. T. (2005). Tolerance does not develop to the decrease in nicotine self-administration produced by repeated bupropion

- administration. *Nicotine and Tobacco Research*, 7, 901-907.
118. Cain, M. E., Saucier, D. A. and Bardo, M. T. (2005). Novelty seeking and drug use: contribution of an animal model. *Experimental and Clinical Psychopharmacology*, 13, 367-375.
119. Champtiaux, N., Kalivas, P. W. and Bardo, M. T. (2006). Contribution of dihydro-beta-erythroidine sensitive nicotinic acetylcholine receptors in the ventral tegmental area to cocaine-induced behavioral sensitization in rats. *Behavioural Brain Research*, 168, 120-126.
120. Neugebauer, N. M., Zhang, Z., Crooks, P. A., Dwoskin, L. P. and Bardo, M. T. (2006). Effect of a novel nicotinic receptor antagonist, N,N'-dodecane-1,12-diyl-bis-3-picolinium dibromide (bPiDDB), on nicotine self-administration and hyperactivity in rats. *Psychopharmacology*, 184, 426-434.
121. Pentz, M.A., Jasuja, G. K., Rohrbach, L.A., Sussman, S. and Bardo, M.T. (2006). Translation in tobacco and drug abuse prevention research. *Evaluation & the Health Professions*, 29, 246-271.
122. Cain, M. E., Dotson, W. F and Bardo, M. T. (2006). Individual differences in the effect of novel environmental stimuli prior to amphetamine self-administration in rats (*Rattus norvegicus*). *Experimental and Clinical Psychopharmacology*, 14, 389-401.
123. Dwoskin, L. P., Rauhut, A. S., King-Pospisil, K. A. and Bardo, M. T. (2006). Review of the pharmacology and clinical profile of bupropion, an antidepressant and tobacco use cessation agent. *CNS Drug Reviews*, 12, 178-207.
124. Gehrke, B. J., Cass, W. A. and Bardo, M. T. (2006). Monoamine-depleting doses of methamphetamine in enriched and isolated rats: consequences for subsequent methamphetamine-induced hyperactivity and reward. *Behavioural Pharmacology*, 17, 499-508.
125. Bardo, M. T., Cain, M. E. and Bylica, K. E. (2006). Effect of amphetamine on response inhibition in rats showing high or low response to novelty. *Pharmacology, Biochemistry and Behavior*, 85, 98-104.
126. Stairs, D. J., Klein, E. D. and Bardo, M. T. (2006). Effects of environmental enrichment on extinction and reinstatement of amphetamine self-administration and sucrose-maintained responding. *Behavioural Pharmacology*, 17, 597-604.
127. Cain, M. E., Green, T. A. and Bardo, M. T. (2006). Environmental enrichment decreases responding for visual novelty. *Behavioural Processes*, 73, 360-366.
128. Wooters, T. E., Dwoskin, L. P. and Bardo, M. T. (2006). Age and sex differences in the locomotor effect of repeated methylphenidate in rats classified as high or low novelty responders. *Psychopharmacology*, 188, 18-27.
129. Stairs, D. J., Neugebauer, N. M. Wei, X., Boustany, C., Hojahmat, M., Cassis, L. A., Crooks, P. A., Dwoskin, L. P. and Bardo, M. T. (2007). Effects of nornicotine enantiomers on intravenous S(-)-nicotine self-administration and cardiovascular function in rats. *Psychopharmacology*, 190, 145-155. [PMCID: PMC7440665].
130. Bardo, M. T., Williams, Y., Dwoskin, L. P., Moynahan, S. E., Perry, I. B. and Martin, C. A. (2007). The sensation seeking trait and substance use: research findings and clinical implications. *Current Psychiatry Reviews*, 3, 3-13.
131. Rahman, S., Neugebauer, N. M., Zhang, Z., Crooks, P. A., Dwoskin, L. P. and Bardo M. T. (2007). The effects of a novel nicotinic receptor antagonist N,N-dodecane-1,12-diyl-bis-3-picolinium dibromide (bPiDDB) on acute and repeated nicotine-induced increases in extracellular dopamine in rat nucleus accumbens. *Neuropharmacology*, 52, 755-763.
132. Klein, E. D., Gehrke, B. J., Green, T. A., Zentall, T. R. and Bardo, M. T. (2007). Repeated cocaine exposure facilitates sucrose-reinforced operant responding in enriched and isolated rats. *Learning and Motivation*, 38, 44-55. [PMCID: PMC3861055].

133. Neugebauer, N. M., Harrod, S. B., Stairs, D. J., Crooks, P. A., Dwoskin, L. P. and Bardo, M. T. (2007). Lobelane decreases methamphetamine self-administration in rats. *European Journal of Pharmacology*, **571**, 33-38.
134. Wooters, T. E. and Bardo, M. T. (2007). The monoamine oxidase inhibitor phenelzine enhances the discriminative stimulus effect of nicotine. *Behavioural Pharmacology*, **18**, 601-608.
135. Dwoskin, L. P., Joyce, B. M., Zheng, G., Neugebauer, N. M., Manda, V. K., Lockman, P., Papke, R. L., Bardo, M. T. and Crooks, P. A. (2007). Discovery of a novel nicotinic receptor antagonist for the treatment of nicotine addiction: 1-(3-Picolinium)-12-triethylammonium-dodecane dibromide (TMPD). *Biochemical Pharmacology*, **74**, 1271-1282.
136. Zhu, J., Bardo, M. T., Bruntz, R. C., Stairs, D. J. and Dwoskin, L. P. (2007). Individual differences in response to novelty predict prefrontal cortex dopamine transporter function and cell surface expression. *European Journal of Neuroscience*, **26**, 717-28.
137. Zhu, J., Bardo, M. T., Green, T. A., Wedlund, P. and Dwoskin, L. P. (2007). Nicotine increases dopamine clearance in medial prefrontal cortex in rats raised in an enriched environment. *Journal of Neurochemistry*, **103**, 2575-2588.
138. Wooters, T. E., Neugebauer, N. M., Rush, C. R. and Bardo, M. T. (2008). Methylphenidate enhances the abuse related behavioral effects of nicotine in rats: intravenous self-administration, drug discrimination and locomotor cross-sensitization. *Neuropsychopharmacology* **33**, 1137-1148. [PMCID: PMC2664110].
139. Rahman, S., Zhang, Z., Papke, R. L., Crooks, P. A., Dwoskin, L. P. and Bardo, M. T. (2008). Region-specific effects of *N,N'*-dodecane-1,12-diyl-*bis*-3-picolinium dibromide (bPiDDB) on in vivo nicotine-induced increase in extracellular dopamine. *British Journal of Pharmacology*, **153**, 792-804. [PMCID: PMC2259212].
140. Cain, M. E., Denehy, E. D. and Bardo, M. T. (2008). Individual differences in amphetamine self-administration: the role of the central nucleus of the amygdala. *Neuropsychopharmacology*, **33**, 1149-1161. [PMCID: PMC2742632].
141. Rahman, S. and Bardo, M. T. (2008). Environmental enrichment increases amphetamine-induced glutamate neurotransmission in the nucleus accumbens: a neurochemical study. *Brain Research*, **1197**, 40-46. [PMCID: PMC2293327].
142. Perry, J. L., Stairs, D. J. and Bardo, M. T. (2008). Impulsive choice and environmental enrichment: effects of d-amphetamine and methylphenidate. *Behavioural Brain Research*, **193**, 48-54. [PMCID: PMC2681296].
143. Rahman, S., Neugebauer, N. M., Zhang, Z., Crooks, P. A., Dwoskin, L. P. and Bardo, M. T. (2008). The novel nicotinic receptor antagonist *N,N'*-dodecane-1,12-diyl-*bis*-3-picolinium dibromide decreases nicotine-induced dopamine metabolism in rat nucleus accumbens. *European Journal of Pharmacology*, **601**, 103-105. [PMCID: PMC2646104].
144. 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. [PMCID: PMC3089982].
145. Dwoskin, L. P. and Bardo, M. T. (2009). Targeting nicotinic receptor antagonists as novel pharmacotherapies for tobacco dependence and relapse. *Neuropsychopharmacology*, **34**, 244-254. [PMCID: PMC3089967].
146. 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]

147. 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].
148. 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. [PMCID: PMC2754277].
149. 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. [PMCID: PMC4110684].
150. 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. [PMCID: PMC3148198].
151. Gipson, C. D. and Bardo, M. T. (2009). Extended access to amphetamine self-administration increases impulsive choice in a delay discounting task in rats. *Psychopharmacology*, *207*, 391-400. [PMCID: PMC3164508]
152. Wooters, T. E., Bevins, R. A. and Bardo, M. T. (2009). Neuropharmacology of the interoceptive stimulus properties of nicotine. *Current Drug Abuse Reviews*, *2*, 243-255. [PMCID: PMC3086090].
153. Neugebauer, N. M., Harrod, S. B. and Bardo, M. T. (2010). Nicotine elicits methamphetamine-seeking in rats previously administered nicotine. *Drug and Alcohol Dependence*, *106*, 72-78. [PMCID: PMC2815269].
154. 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. (2010). Environmental enrichment produces a behavioral phenotype mediated by low CREB activity in the nucleus accumbens. *Biological Psychiatry*, *67*, 28-35. [PMCID: PMC2860655].
155. Stairs, D. J., Neugebauer, N. M. and Bardo, M. T. (2010). Nicotine and cocaine self-administration using a multiple schedule of intravenous drug and sucrose reinforcement in rats. *Behavioural Pharmacology*, *21*, 182-193. [PMCID: PMC3072058].
156. Marusich, J. A., Beckmann, J. S., Gipson, C. D. and Bardo, M. T. (2010). Methylphenidate as a reinforcer for rats: contingent delivery and intake escalation. *Experimental and Clinical Psychopharmacology*, *18*, 257-266. [PMCID: PMC3164353].
157. Smith, A. S., Pivavarchyk, M., Wooters, T. E., Zhang, Z., Zheng, G., McIntosh, J. M., Crooks, P. A., Bardo, M. T. and Dwoskin, L. P. (2010). Repeated nicotine administration robustly increases bPiDDB inhibitory potency at $\alpha 6\beta 2$ -containing nicotinic receptors mediating nicotine-evoked dopamine release. *Biochemical Pharmacology*, *80*, 402-409.
158. Rauhut, A. S., Fenton, L. and Bardo, M. T. (2010). Renewal of sucrose-seeking behavior in rats: role of D2 dopamine receptors. *Pharmacology, Biochemistry and Behavior*, *96*, 354-362. [PMCID: PMC2908712].
159. Meyer, A. C., Rahman, S., Charnigo, R. J., Dwoskin, L. P., Crabbe, J. C. and Bardo, M. T. (2010). Genetics of novelty seeking, amphetamine self-administration and reinstatement using inbred rats. *Genes, Brain and Behavior*, *9*, 790-798. [PMCID: PMC2965303].
160. Beckmann, J. S., Siripurapu, K. B., Nickell, J. R., Horton, D. B., Denehy, E. D., Vartak, A., Crooks, P. A., Dwoskin, L. P. and Bardo, M. T. (2010). The novel pyrrolidine nor-lobelane analog UKCP-110 (cis-2,5-di-(2-phenethyl)-pyrrolidine hydrochloride) inhibits VMAT2 function, methamphetamine-evoked dopamine release, and methamphetamine self-administration in rats. *Journal of Pharmacology and Experimental Therapeutics*, *335*, 841-851. [PMCID: PMC2993560].
161. Beckmann, J. S., Marusich, J. A., Gipson, C. D. and Bardo, M. T. (2011). Novelty

- seeking, incentive salience and acquisition of cocaine self-administration in the rat. *Behavioural Brain Research*, **216**, 159-165. [PMCID: PMC2975769].
162. Perry, J. L., Joseph, J. E., Jiang, Y., Zimmerman, R. S., Kelly, T. H., Darna, M., Huettl, P., Dwoskin, L. P. and Bardo, M. T. (2011). Prefrontal cortex and drug abuse vulnerability: translation to prevention and treatment interventions. *Brain Research Reviews*, **65**, 124-149. [PMCID: PMC3005953].
 163. Wooters, T. E., Walton, M. T. and Bardo, M. T. (2011). Oral methylphenidate establishes a conditioned place preference in rats. *Neuroscience Letters*, **487**, 293-296. [PMCID: PMC3010495].
 164. Wooters, T. E., Bardo, M. T., Dwoskin, L. P., Mactutus, C. F., Booze, R. M. and Zhu, J. (2011). Environmental enrichment decreases the locomotor effects of repeated methylphenidate and protein kinase C-mediated dopamine transporter function in rat prefrontal cortex. *Behavioural Brain Research*, **219**, 98-107. [PMCID: PMC21219939].
 165. Gipson, C. D., Beckmann, J. S., El-Maraghi, S., Marusich, J. A. and Bardo, M. T. (2011). Effect of environmental enrichment on escalation of cocaine self-administration. *Psychopharmacology*, **214**, 557-566. [PMCID: PMC21057774].
 166. Fritz, M., El Rawas, R. E., Salti, A., Klement, S., Bardo, M. T., Kemmler, G., Dechant, G., Saria, A. and Zernig, G. (2011). Reversal of cocaine-conditioned place preference and mesocorticolimbic Zif68 expression by social interaction in rats. *Addiction Biology*, **16**, 273-284. [PMCID: PMC21309948].
 167. Wooters, T. E., Smith, A. M., Pivavarchyk, M., Siripurapu, K. B., McIntosh, J. M., Zhang, Z., Crooks, P. A., Bardo, M. T. and Dwoskin, L. P. (2011). bPiDI: a novel selective $\alpha 6\beta 2^*$ nicotinic receptor antagonist and preclinical candidate treatment for nicotine abuse. *British Journal of Pharmacology*, **163**, 346-357. [PMCID: PMC3087136].
 168. Wooters, T. E. and Bardo, M. T. (2011). Methylphenidate and fluphenazine, but not amphetamine, differentially affect impulsive choice in Spontaneously Hypertensive, Wistar-Kyoto and Sprague-Dawley rats. *Brain Research*, **1396**, 45-53. [PMCID: PMC3104114].
 169. Wooters, T. E., Dwoskin, L. P. and Bardo, M. T. (2011). Discriminative stimulus effects of NMDA, AMPA and mGluR5 glutamate receptor ligands in methamphetamine-trained rats. *Behavioural Pharmacology*, **22**, 516-52. [PMCID: PMC21836462].
 170. Marusich, J. A., Beckmann, J. S., Gipson, C. D. and Bardo, M. T. (2011). Cue effects on methylphenidate self-administration in rats. *Behavioural Pharmacology*, **22**, 714-717. [PMCID: PMC3381430].
 171. Stairs, D. J., Prendergast, M. A. and Bardo, M. T. (2011). Environmental-induced differences in corticosterone and glucocorticoid receptor blockade of amphetamine self-administration in rats. *Psychopharmacology*, **218**, 293-301. [PMCID: PMC3192300].
 172. Meyer, A. C., Horton, D. B., Neugebauer, N. M., Wooters, T. E., Nickell, J. R., Dwoskin, L. P. and Bardo, M. T. (2011). Tetrabenazine inhibition of monoamine uptake and methamphetamine behavioral effects: locomotor activity, drug discrimination and self-administration. *Neuropharmacology*, **61**, 849-856. [PMCID: PMC21669212].
 173. Charnigo, R., Kryscio, R., Bardo, M. T., Lynam, D. and Zimmerman, R. S. (2011). Joint modeling of longitudinal data in multiple behavior change. *Evaluation & the Health Professions*, **34**, 181-200. [PMCID: PMC21196429].
 174. Horton, D. B., Siripurapu, K. B., Norrholm, S. D., Culver, J. P., Hojahmat, M., Beckmann, J. S., Harrod, S. B., Deaciuc, A. G., Bardo, M. T., Crooks, P. A. and Dwoskin, L. P. (2011). Meso-Transdiene analogs inhibit vesicular monoamine transporter-2 function and methamphetamine-evoked dopamine release. *Journal of Pharmacology and Experimental Therapeutics*, **336**, 940-951. [PMCID: PMC3061531].
 175. Marusich, J. A., Darna, M., Charnigo, R. J., Dwoskin, L. P. and Bardo, M. T. (2011). A multivariate assessment of individual differences in sensation seeking and impulsivity as

- predictors of amphetamine self-administration and prefrontal dopamine function in rats. *Experimental and Clinical Psychopharmacology*, 19, 275-284. [PMCID: PMC3164505].
176. Gipson, C. D., Yates, J. R., Beckmann, J. S., Marusich, J. A., Zentall, T. R. and Bardo, M. T. (2011). Social facilitation of d-amphetamine self-administration in rats. *Experimental and Clinical Psychopharmacology*, 19, 409-419. [PMCID: PMC3224199].
177. Fritz, M., El Rawas, R., Klement, S., Kummer, K., Mayr, M. J., Eggart, V., Salti, A., Bardo, M. T., Saria, A. and Zernig, G. (2011). Differential effects of accumbens core vs. shell lesions in a rat concurrent conditioned place preference paradigm for cocaine vs. social interaction. *PLoS One*, 6, e26761 [PMCID: PMC3202564].
178. Marusich, J. A., McCuddy, T., Beckmann, J. S., Gipson, C. D. and Bardo, M. T. (2011). Strain differences in self-administration of methylphenidate and sucrose pellets in a rat model of ADHD. *Behavioural Pharmacology*, 22, 794-804. [PMCID: PMC21975194].
179. Yates, J. R., Marusich, J. A., Gipson, C. D., Beckmann, J. S. and Bardo, M. T. (2012). High impulsivity in rats predicts amphetamine conditioned place preference. *Pharmacology, Biochemistry and Behavior*, 100, 370-376. [PMCID: PMC3242916].
180. Gipson, C. D., Beckmann, J. S., Adams, Z. W., Marusich, J. A., Nesland, T. O., Yates, J. R., Kelly, T. H. and Bardo, M. T. (2012). A translational behavioral model of mood-based impulsivity: implications for substance abuse. *Drug and Alcohol Dependence*, 122, 93-99. [PMCID: PMC3270200].
181. Beckmann, J. S., Denehy, E. D., Zheng, G., Crooks, P. A., Dwoskin, L. P. and Bardo, M. T. (2012). The effect of a novel VMAT2 inhibitor, GZ-793A, on methamphetamine reward in rats. *Psychopharmacology*, 220, 395-403. [PMCID: PMC3390966].
182. Alvers, K.M., Beckmann, J., Guangrong, Z., Crooks, P., Dwoskin, L. and Bardo, M. (2012). The effect of VMAT2 inhibitor GZ-793A on the reinstatement of methamphetamine seeking in rats. *Psychopharmacology*, 224, 255-262. [PMCID: PMC3680349].
183. Yates, J. R., Darna, M., Gipson, C. D., Dwoskin, L. P. and Bardo, M. T. (2012). Isolation rearing as a preclinical model of attention/deficit-hyperactivity disorder. *Behavioural Brain Research*, 234, 292-298. [PMCID: PMC3676298].
184. Alvers, K., M., Marusich, J. A., Gipson, C. D., Beckmann, J. S. and Bardo, M. T. (2012). Environmental enrichment during development decreases intravenous self-administration of methylphenidate at low unit doses in rats. *Behavioural Pharmacology*, 23, 650-657. [PMCID: PMC3674782].
185. Berry, J. N., Neugebauer, N. and Bardo, M. T. (2012). Reinstatement of methamphetamine conditioned place preference in nicotine-sensitized rats. *Behavioural Brain Research*, 235, 158-165. [PMCID: PMC3445737].
186. Beckmann, J. S. and Bardo, M. T. (2012). Environmental enrichment reduces attribution of incentive salience to a food-associated stimulus. *Behavioural Brain Research*, 226, 331-334. [PMCID: PMC3687775].
187. Beckmann, J. S., Gipson, C. D., Marusich, J. A. and Bardo, M. T. (2012). Escalation of cocaine intake with extended access in rats: dysregulated addiction or regulated acquisition. *Psychopharmacology*, 222, 257-267. [PMCID: PMC3677022].
188. Narayanaswami, V., Thompson, A. C., Cassis, Bardo, M. T. and Dwoskin, L. P. (2012). Diet induced obesity: dopamine transporter, impulsivity and motivation. *International Journal of Obesity*, 37, 1095-1103. [PMCID: PMC3856583].
189. Bardo, M. T., Neisewander, J. L. and Kelly, T. H. (2013). Individual differences and social influences on the neurobehavioral pharmacology of abused drugs. *Pharmacological Reviews*, 65, 1-36. [PMCID: PMC3565917].
190. Molet, M., Billiet, G. and Bardo, M. T. (2013). Conditioned place preference and aversion for music in a virtual reality environment. *Behavioural Processes*, 92, 31-35. [PMCID: PMC3538929].

191. Yates, J. R., Beckmann, J. S., Meyer, A. C. and Bardo, M. T. (2013). Concurrent choice for social interaction and amphetamine using conditioned place preference in rats: Effects of age and housing condition. *Drug and Alcohol Dependence*, **129**, 240-246. [PMCID: PMC3628407].
192. Zhu, J., Bardo, M. T. and Dwoskin, L. P. (2013). Distinct effects of enriched environment on dopamine clearance in nucleus accumbens shell and core following systemic nicotine administration. *Synapse*, **67**, 57-67. [PMCID: PMC37866350].
193. Meyer, A. C., Neugebauer, N. M., Zheng, G., Crooks, P. A., Dwoskin, L. P. and Bardo, M. T. (2013). Effects of VMAT2 inhibitors lobeline and GZ-793A on methamphetamine-induced changes in dopamine release, metabolism and synthesis in vivo. *Journal of Neurochemistry*, **127**, 187-198. [PMCID: PMC3795981].
194. Wilmouth, C. E., Zheng, G., Crooks, P. A., Dwoskin, L. P. and Bardo, M. T. (2013). Oral administration of GZ-793A, a VMAT2 inhibitor, decreases methamphetamine self-administration in rats. *Pharmacology, Biochemistry and Behavior*, **112**, 29-33 [PMCID: PMC3842023].
195. Crooks, P. A., Bardo, M. T. and Dwoskin, L. P. (2014). Development of nicotinic receptor antagonists as agents for treating nicotine addiction. *Advances in Pharmacology*, **69**, 513-551. [PMCID: PMC4110698].
196. Hofford, R. S., Darna, M., Wilmouth, C. E., Dwoskin, L. P. and Bardo, M. T. (2014). Environmental enrichment reduces methamphetamine cue-induced reinstatement but does not alter methamphetamine reward or VMAT2 function. *Behavioural Brain Research*, **270**, 151-158. [PMCID: PMC4096828].
197. Yates, J. R., Perry, J. L., Meyer, A. C., Gipson, C. D., Charnigo, R. and Bardo, M. T. (2014). Role of medial prefrontal and orbitofrontal monoamine transporters and receptors in performance in an adjusting delay discounting procedure. *Brain Research*, **1574**, 26-36. [PMCID: PMC4151178].
198. De Biasi, M., McLaughlin, I., Perez, E. E., Crooks, P. A., Dwoskin, L. P., Bardo, M. T., Pentel, P. R. and Hatsukami, D. (2014). Scientific overview: 2013 BBC plenary symposium on tobacco addiction. *Drug and Alcohol Dependence*, **141**, 107-117. [PMCID: PMC4227301].
199. Yates, J. R., Batten, S., Bardo, M. T. and Beckmann, J. S. (2015). Role of ionotropic glutamate receptors in delay and probability discounting in the rat. *Psychopharmacology*, **232**, 1187-1196. [PMCID: PMC4361294].
200. Darna, M., Beckmann, J. S., Gipson, C. D., Bardo, M. T. and Dwoskin, L. P. (2015). Effect of environmental enrichment on dopamine and serotonin transporters and glutamate neurotransmission in medial prefrontal and orbitofrontal cortex. *Brain Research*, **1599**, 115-125. [PMCID: PMC4344853].
201. Hofford, R. S., Prendergast, M. A. and Bardo, M. T. (2015). Pharmacological manipulation of glucocorticoid receptors differentially affects cocaine self-administration in environmentally enriched and isolated rats. *Behavioural Brain Research*, **283**, 196-202. [PMCID: PMC4351170].
202. Griggs, R. B., Bardo, M. T. and Taylor, B. K. (2015). Gabapentin alleviates affective pain after traumatic nerve injury. *Neuroreport*, **26**, 522-527. [PMCID: PMC4479280].
203. Meyer, A. and Bardo, M. T. (2015). Amphetamine self-administration and dopamine function: assessment of gene x environment interactions in Lewis and Fischer 344 rats. *Psychopharmacology*, **232**, 2275-2285. [PMCID: PMC4465863].
204. Yates, J. R., Darna, M., Gipson, C. D., Dwoskin, L. P. and Bardo, M. T. (2015). Dissociable roles of dopamine and serotonin transporter function in a rat model of negative urgency. *Behavioural Brain Research*, **291**, 201-208. [PMCID: PMC4497831].
205. Weiss, V. G., Hofford, R. S., Yates, J. R., Jennings, F. C. and Bardo, M. T. (2015). Sex differences in monoamines following amphetamine and social reward in adolescent rats.

- Experimental and Clinical Psychopharmacology, 23, 197-205. [PMCID: PMC4523899].
206. Beckmann, J. S., Meyer, A. C., Pivavachyk, M., Horton, D. B., Zheng, G., Smith, A. M., Wooters, T. E., McIntosh, J. M., Crooks, P. A., Bardo, M. T. and Dwoskin, L. P. (2015). r-bPiDI, a $\alpha 6\beta 2^*$ nicotinic receptor antagonist, decreases nicotine-evoked dopamine release and nicotine reinforcement. Neurochemical Research, 40, 2121-2130. [PMCID: PMC4639919].
207. Bardo, M. T. and Compton, W. M. (2015). Does physical activity protect against drug abuse vulnerability? Drug and Alcohol Dependence, 153, 3-13.
<https://www.sciencedirect.com/science/article/pii/S0376871615002914?via%3Dhub>
208. Darna, M., Chow, J. J., Yates, J. R., Charnigo, R. J., Beckmann, J. S., Bardo, M. T. and Dwoskin, L. P. (2015). Role of serotonin transporter function in rat orbitofrontal cortex in impulsive choice. Behavioural Brain Research, 293, 134-142. [PMCID: PMC4808810].
209. Yates, J. R., Darna, M., Beckmann, J. S., Dwoskin, L. P. and Bardo, M. T. (2016). Individual differences in impulsive action and dopamine transporter function in rat orbitofrontal cortex. Neuroscience, 313, 122-129. [PMCID: PMC4695254].
210. Van Skike, C. E., Maggio, S. E., Reynolds, A. R., Casey, E. M., Bardo, M. T., Dwoskin, L. P., Prendergast, M. A. and Nixon, K. (2016). Critical needs in drug discovery for cessation of alcohol and nicotine polysubstance abuse. Progress in Neuro-Psychopharmacology & Biological Psychiatry, 65, 269-287. [PMCID: PMC4679525].
211. Somkuwar, S. S., Kantak, K. M., Bardo, M. T. and Dwoskin, L. P. (2016). Adolescent methylphenidate treatment differentially alters adult impulsivity and hyperactivity in the Spontaneously Hypertensive Rat model of ADHD. Pharmacology, Biochemistry and Behavior, 141, 66-77. [PMCID: PMC4764879].
212. Berry, J. N., Saunders, M. A., Sharrett-Field, L. J., Reynolds, A. R., Bardo, M. T., Pauly, J. R. and Prendergast, M. A. (2016). Corticosterone enhances N-methyl-D-aspartate receptor signaling to promote isolated ventral tegmental area activity in a reconstituted mesolimbic dopamine pathway. Brain Research Bulletin, 120, 159-165. [PMCID: PMC5217471].
213. Kelly, T. H. and Bardo, M. T. (2016). Emotion regulation and drug abuse: implications for prevention and treatment. Drug and Alcohol Dependence, 163, Supplement 1, S1-S2.
214. Hofford, R. S., Beckmann, J. S. and Bardo, M. T. (2016). Rearing environment differentially modulates cocaine self-administration after opioid pretreatment: A behavioral economic analysis. Drug and Alcohol Dependence, 167, 89-94. [PMCID: PMC5037017].
215. Vazquez-Sanroman, D. B., Monje, R. D. and Bardo, M. T. (2017). Nicotine self-administration remodels perineuronal nets in ventral tegmental area and orbitofrontal cortex in adult male rats. Addiction Biology, 22, 1743-1755. [PMCID: PMC5322253].
216. Lafragette, A., Bardo, M. T., Lardeux, V., Solinas, M. and Thiriet, N. (2017). Reduction of cocaine-induced locomotor effects by enriched environment is associated with cell-specific accumulation of Δ FosB in striatal and cortical subregions. International Journal of Neuropsychopharmacology, 20, 237-246. [PMCID: PMC5408985].
217. Yates, J. R. and Bardo, M. T. (2017). Effects of intra-accumbal administration of dopamine and ionotropic glutamate receptor drugs on delay discounting performance in rats. Behavioral Neuroscience, 131, 392-405. [PMCID: PMC5679283].
218. Hofford, R. S., Chow, J. J., Beckmann, J. S. and Bardo, M. T. (2017). Effects of environmental enrichment on self-administration of the short-acting opioid remifentanil. Psychopharmacology, 234, 3499-3506. [PMCID: PMC6541008].
219. Marusich, J. A., Darna, M., Wilson, A. G., Denehy, E. D., Ebben, A., Deaciuc, A.G., Dwoskin, L. P., Bardo, M. T., Lefever, T. W., Wiley, J. L., Reissig, C. J. and Jackson, K. J. (2017). Tobacco's minor alkaloids: effects on place conditioning and nucleus accumbens dopamine release in adult and adolescent rats. European Journal of

220. Pharmacology, 814, 196-206. [PMCID: PMC6563910].
Hofford, R. S., Prendergast, M. A. and Bardo, M. T. (2018). Modified single prolonged stress reduces cocaine self-administration during acquisition regardless of rearing environment. *Behavioural Brain Research*, 338, 143-152. [PMCID: PMC29061385].
221. Lee, N., Zheng, G., Crooks, P. A., Bardo, M. T. and Dwoskin, L. P. (2018). New scaffold for lead compounds to treat methamphetamine use disorders. *AAPS Journal*, 20, 29. [PMCID: PMC29427069].
222. Maggio, S. E., Saunders, M. A., Baxter, T. A., Nixon, K., Prendergast, M. A., Zheng, G., Crooks, P. A., Dwoskin, L. P., Slack, R. D., Newman, A. H., Bell, R. L. and Bardo, M. T. (2018). Effects of the nicotinic agonist varenicline, nicotinic antagonist r-bPiDI, and DAT inhibitor R-modafinil on co-use of ethanol and nicotine in female P rats. *Psychopharmacology* 235, 1439-1453. [PMCID: PMC29455292].
223. Maggio, S. E., Saunders, M. A., Nixon, K., Prendergast, M. A., Zheng, G., Crooks, P. A., Dwoskin, L. P., Bell, R. L. and Bardo, M. T. (2018). An improved model of ethanol and nicotine co-use in female P rats: effects of naltrexone, varenicline, and the selective nicotinic $\alpha 6\beta 2^*$ antagonist r-bPiDI. *Drug and Alcohol Dependence* 193: 154-161. [PMCID: PMC30384323].
224. Weiss, V. G., Yates, J. R., Beckmann, J. S., Hammerslag, L. R. and Bardo, M. T. (2018). Social reinstatement: a rat model of peer-induced relapse. *Psychopharmacology* 235, 3391-3400. [PMCID: PMC6252116].
225. Yates, J. R., Bardo, M. T. and Beckmann, J. S. (2019). Environmental enrichment and drug value: a behavioral economic analysis in male rats. *Addiction Biology* 24, 65-75. [PMCID: PMC6265118].
226. Bardo, M. T., Denehy, E. D., Hammerslag, L. R., Dwoskin, L. P., Blough, B. E., Landavazo, A., Bergman, J. and Kohut, S. J. (2019). Effects of methamphetamine isomers on d-methamphetamine self-administration and food-maintained responding in male rats. *Psychopharmacology* 236, 3557-3565. [PMCID: PMC6895396].
227. Lee, N. R., Zheng, G., Leggas, M., Janganati, V., Nickell, J. R., Crooks, P. A., Bardo, M. T. and Dwoskin, L. P. (2019). GZ-11608, a vesicular monoamine transporter-2 inhibitor, decreases the neurochemical and behavioral effects of methamphetamine. *Journal of Pharmacology and Experimental Therapeutics*, 371, 526-543. [PMCID: PMC6863457].
228. Weiss, V. G., Hammerslag, L. R. and Bardo, M. T. (2020). Effect of a social peer on risky decision-making in adolescent male Sprague Dawley rats. *Experimental and Clinical Psychopharmacology*, 28, 26-31. [PMCID: PMC6842026].
229. Strauss, M., O'Donovan, B., Ma, Y., Xiao, Z., Lin, S., Bardo, M. T., Ortinski, P. I., McLaughlin, J. P., and Zhu, J. (2020). [3 H]Dopamine uptake through both dopamine and norepinephrine transporters is decreased in the prefrontal cortex of HIV-1 Tat transgenic mice. *Journal of Pharmacology and Experimental Therapeutics*, 374, 241-251. [PMCID: PMC7366287].
230. Hammerslag, L. R., Hofford, R. S., Qiwen, K., Kryscio, R. J., Beckmann, J. S. and Bardo, M. T. (2020). Changes in fentanyl demand following naltrexone, morphine and buprenorphine in male rats. *Drug and Alcohol Dependence*, 206, 107804 [PMCID: PMC6981050].
231. Hofford, R. S., Bond, P. N., Chow, J. J. and Bardo, M. T. (2020). Presence of a social peer enhances acquisition of remifentanil self-administration in male rats. *Drug and Alcohol Dependence*, 213, 108125. [PMCID: PMC7371539].
232. Chandler, C. M., Maggio, S. E., Peng, H., Nixon, K. and Bardo, M. T. (2020). Effects of ethanol, naltrexone, nicotine and varenicline in an ethanol and nicotine co-use model in Sprague-Dawley rats. *Drug and Alcohol Dependence*, 212, 107988. [PMCID: PMC7293937].
233. Green, T. A. and Bardo, M. T. (2020). Opposite regulation of conditioned place

- preference and intravenous drug self-administration in rodent models: motivational and non-motivational examples. *Neuroscience and Biobehavioral Reviews*, 116, 89-98. [PMCID: PMC7423746].
234. Vazquez-Sanroman, D., Wilson, A.G. and Bardo, M. T. (2020). Effects of social isolation on perineuronal nets in the amygdala following a reward omission task in female rats. *Molecular Neurobiology*, 58, 348-361. [PMCID: PMC8276715].
235. Bardo, M. T., Hammerslag, L. R. and Malone, S. G. (2021). Effect of early life social adversity on drug abuse vulnerability: focus on corticotropin-releasing factor and oxytocin. *Neuropharmacology* 191, 108567 [PMCID: PMC8217369].
236. Melbourne, J. K., Chandler, C. M., Van Doorn, C. E., Bardo, M. T., Pauly, J. R. and Nixon, K. (2021). Primed for addiction: the role of microglia in the neurodevelopmental consequences of adolescent alcohol drinking. *Alcoholism: Clinical and Experimental Research*, 45, 1908-1926. [PMCID: PMC8793635].
237. Hammerslag, L. R., Denehy, E. D., Carper, B., Nolan, T. L., Prendergast, M. A. and Bardo, M. T. (2021). Effects of the glucocorticoid receptor antagonist PT150 on stress-induced fentanyl seeking in male and female rats. *Psychopharmacology*, 238, 2439-2447. [PMCID: PMC10323366].
238. Malone, S. G., Keller, P. S., Hammerslag, L. H. and Bardo, M. T. (2021). Escalation and reinstatement of fentanyl self-administration in male and female rats. *Psychopharmacology*, 238, 2261-2273. [PMCID: PMC10332850].
239. Nicolas, C., Hofford, R., Dugast, E., Lardeux, V., Belujon, P., Solinas, M., Bardo, M. T. and Thiriet, N. (2021). Prevention of relapse to methamphetamine self-administration by environmental enrichment: involvement of glucocorticoid receptors. *Psychopharmacology*, 239, 1009-1018. <https://pubmed.ncbi.nlm.nih.gov/33768375/>
240. Kelly, T. H., Klebaur, J. E., Perry, A. S., Martin, C. A., Lynam, D. R. and Bardo, M. T. (2021). Recreational activities and d-amphetamine effects in high and low sensation seekers. *Medical Research Archives*, 9 (8), 1-21. <https://www.researchgate.net/publication/354154700>
241. Chandler, C. M., Hamid, U., Maggio, S. E., Peng, H., Pauly, J. R., Beckmann, J. S., Nixon, K. and Bardo, M. T. (2022). Effects of adolescent alcohol exposure via oral gavage on adult alcohol drinking and co-use of alcohol and nicotine in Sprague Dawley rats. *Drug and Alcohol Dependence*, 232, 109298. [PMCID: PMC8885928].
242. Chandler, C. M., Shaykin, J. D., Peng, H., Pauly, J. R., Nixon, K. and Bardo, M. T. (2022). Effects of voluntary adolescent intermittent alcohol exposure and social isolation on adult alcohol intake in male rats. *Alcohol*, 104, 13-21. [PMCID: PMC10806401]
243. Hammerslag, L. R., Humburg, B. A., Malone, S. G., Beckmann, J. S., Saatman K. E., Grinevich, V. and Bardo, M. T. (2022). Peer-induced cocaine seeking in rats: comparison to nonsocial stimuli and role of paraventricular hypothalamic oxytocin neurons. *Addiction Biology*, 27, e13217. [PMCID: PMC9413367].
244. Malone, S. G., Shaykin, J. D., Stairs, D. J. and Bardo, M. T. (2022). Neurobehavioral effects of environmental enrichment and drug abuse vulnerability: an updated review. *Pharmacology, Biochemistry and Behavior*, 221, 173471. [PMCID: PMC10189610].
245. Custodio, L., Malone, S., Bardo, M.T. and Turner, J. R. (2022). Nicotine and opioid co-dependence: findings from bench research to clinical trials. *Neuroscience and Biobehavioral Reviews*. 134, 104507. [PMCID: PMC10986295]. <https://pubmed.ncbi.nlm.nih.gov/34968525/>
246. Bardo, M. T., Chandler, C., Denehy, E. D., Carper, B., Prendergast, M. A. and Nolen, T. R. (2023). Effect of the glucocorticoid receptor antagonist PT150 on acquisition and escalation of fentanyl self-administration following early life stress. *Experimental and Clinical Psychopharmacology*, 31, 362-369. [PMCID: PMC10084834].

247. Ahmed, N., Kassis, A., Malone, J., Yang, J., Zamzami, E., Lin, A., Gordon, S., Bardo, M., Dalmasso, C. and Loria, A. (2023). Prenatal morphine exposure increases cardiovascular disease risk factors and dysregulates endogenous opioid peptides in the adult offspring. *Hypertension*, 80, 1283-1296. [PMCID: PMC10274123].
248. Wooden, J.I., Peacock, L., Shaji, C.A., Melbourne, J.K., Chandler, C.M., Bardo, M.T. and Nixon, K. (2023). Adolescent intermittent ethanol drives modest neuroinflammation but does not escalate drinking in male rats. *Cells*, 12(21), 2572. [PMCID: PMC10649200].
<https://doi.org/10.3390/cells12212572>
249. Humburg, B. A. and Bardo, M. T. (2023). Renewal of cocaine seeking using social and nonsocial contextual stimuli. *Psychopharmacology*. [PMCID: PMC10806405].
<https://pubmed.ncbi.nlm.nih.gov/37391496/>
250. Radevski, M. E., Prendergast, M. A., Bardo, M. T. and Akins, C. K. (2023). PT150 blocks the rewarding properties of ethanol and attenuates ethanol-induced reduction of egg laying in Coturnix quail. *Psychopharmacology*, 240, 295-301. [PMCID in progress].
<https://pubmed.ncbi.nlm.nih.gov/36607385/>
251. Chandler, C. M., Nickell, J. R., Wilson, A. G., Culver, J. P., Crooks, P. A., Bardo, M. T. and Dwoskin, L. P. (2024). Vesicular Monoamine Transporter-2 inhibitor JPC-141 prevents methamphetamine-induced dopamine toxicity and blocks methamphetamine self-administration in rats. *Biochemical Pharmacology*. [PMCID in progress].
<https://www.sciencedirect.com/science/article/pii/S0006295224001722>
252. Vu, L., Luo, D., Johnson, K., Denehy, E., Songrad, J., Martin, J., Trivedi, R., Alsum, A., Shaykin, J., Chaudhary, C., Woloshin, E., Kornberger, L., Bhuiyan, N., Parkin, S., Jiang, Q., Che, T., Alilain, W., Turner, J., Bardo, M. and Prisinzano, T. (2024). Searching for synthetic opioid rescue agents: identification of a potent opioid agonist with reduced respiratory depression. *Journal of Medicinal Chemistry*. [PMCID in progress]
<https://pubs.acs.org/doi/10.1021/acs.jmedchem.4c00333>
253. Shaykin, J. D., Denehy, E. D., Martin, J. R., Chandler, C. M., Luo, D., Taylor, C. E., Sunshine, M. D., Turner, J. R., Alilain, W. J., Prisinzano, T. E. and Bardo, M. T. (accepted pending revision). Targeting α 1- and α 2-adrenergic receptors as a countermeasure for fentanyl-induced locomotor and respiratory depression. *Environmental Toxicology and Pharmacology*.

BOOK CHAPTERS

1. 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.
2. 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.
3. 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.
4. Donohew, L. and Bardo, M. T. (2000). Designing prevention programs for sensation seeking adolescents. In W. B. Hansen, S. M. Giles and M. D. Farnow-Kenney (Eds.), *Improving prevention effectiveness* (pp. 195-203). Greensboro NC: Tanglewood Research.
5. Bardo, M. T., Kelly, T., Lynam, D. R. and Milich, R. (2003). Basic science and drug abuse prevention: Neuroscience, learning and personality perspectives. In Z. Sloboda

- and W. J. Bukoski (Eds.), Handbook for drug abuse prevention: Theory, science, and practice (pp. 429-446). New York: Plenum.
6. Bardo, M. T. and Dwoskin, L. P. (2004). Biological connection between drug and novelty seeking motivational systems. In R. A. Bevins and M. T. Bardo (Eds.), Motivational factors in the etiology of drug abuse (pp. 127-158). University of Nebraska Press, Lincoln, NE.
 7. Bevins, R. A. and Bardo, M. T. (2004). Introduction: motivation, drug abuse, and 50 years of theoretical and empirical inquiry. In R. A. Bevins and M. T. Bardo (Eds.), Motivational factors in the etiology of drug abuse (pp. 9-15). University of Nebraska Press, Lincoln, NE.
 8. Bardo, M. T. (2004). High-risk behavior during adolescence: Comments on part 1. In R. E. Dahl and L. P. Spear (Eds.), Adolescent brain development: Vulnerabilities and opportunities, Volume 1021 of the Annals of the New York Academy of Sciences (pp 1-2). New York Academy of Sciences Press, New York, NY.
 9. Garrett, B. E., Dwoskin, L. P., Bardo, M. T. and Henningfield, J. E. (2004). Behavioral pharmacology of nicotine reinforcement. In P. Boyle, N. Gray, J. Henningfield, J. Seffrin and W. Zatonski (Eds.), Tobacco: science, policy, and public health (pp 149-165). Oxford University Press, New York, NY.
 10. Donohew, R. L., Bardo, M. T. and Zimmerman R. (2004). Personality and risky behavior: communication and prevention. In R. M. Stelmack (Ed.), On the psychobiology of personality: essays in honor of Marvin Zuckerman (pp 223-245). Elsevier, Oxford UK.
 11. Dwoskin, L. P., Pivavarchyk, M., Joyce, B. M., Neugebauer, N. M., Zheng, G., Zhang, Z., Bardo, M. T. and Crooks, P. A. (2009). Targeting reward-relevant nicotinic receptors in the discovery of novel pharmacotherapeutic agents to treat tobacco dependence. In R. A. Bevins and A. R. Caggiula (Eds.), The motivational impact of nicotine and its role in tobacco use (pp. 31-63). University of Nebraska Press, Lincoln, NE. [PMCID: PMC2664107].
 12. 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].
 13. Bardo, M. T. (2010). Novelty. In G. F. Koob, M. Le Moal and R. F. Thompson (Eds.), Encyclopedia of Behavioral Neuroscience (pp. 471-476). Elsevier, New York, NY [doi: 10.1016/B978-0-08-045396-5.00168-8].
 14. Dwoskin, L. P., Glaser, P. E. and Bardo M. T. (2011). Methamphetamine. In B. A. Johnson (Ed.), Addiction Medicine: Science and Practice (pp. 1049-1061). Springer, New York, NY. [doi: 10.1007/978-1-4419-0338-9].
 15. Bardo, M. T., Milich, R. and Fishbein, D. (2011). Future directions for research on inhibition and drug abuse. In: M. T. Bardo, D. Fishbein and R. Milich (Eds.), Inhibitory Control and Drug Abuse Prevention: From Research to Translation (pp. 317-329). Springer, New York, NY. [doi: 10.1007/978-1-4419-1268-8_17].
 16. Bardo, M. T. and Pentz, M. A. (2012). Translational research. In: H. Cooper (Ed.) APA Handbook of Research Methods in Psychology (pp. 553-568). American Psychological Association, Washington, DC [doi: 10.1037/13620-029].
 17. Bardo, M. T. (2013). The mesolimbic dopamine reward system and drug addiction. In: P. Miller (Ed.), Biological Research on Addiction: Volume 2, Chapter 22 (pp. 209-217). Elsevier, New York, NY [doi: 10.1016/B978-0-12-398335].
 18. Cain, M. E. and Bardo, M. T. (2015). Environmental enrichment and drug action. In: I. P. Stolerman and L. H. Price (Eds.) Encyclopedia of Psychopharmacology (pp. 615-620). Springer, Berlin [doi: 10.1007/978-3-642-36172-2].

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19. Bardo, M. T., Horton, D. B. and Yates, J. R. (2015). Conditioned place preference as a preclinical model for screening pharmacotherapies for drug abuse. In: C. Markgraf, T. Hudzik and D. Compton (Eds.). Nonclinical Assessment of Abuse Potential for New Pharmaceuticals (pp.151-196). Elsevier, Oxford UK. [doi: 10.1016/B978-0-12-420172-9.00007-2].
20. Bardo, M. T. and Pentz, M. A. (2016). Translational research. In: A. E. Kasdin (Ed.) Methodological Issues and Strategies in Clinical Research (4th ed, pp. 69-84). American Psychological Association, Washington, DC [doi: 10.1037/14805-000].
21. Dwoskin, L. P., Hankosky, E. R., Glaser, P. E. A. and Bardo M. T. (2017) Methamphetamine. In: B. A. Johnson (Ed.) Addiction Medicine: Science and Practice (2nd ed). Springer, New York, NY. [ISBN: 0323754406].
22. Bardo, M. T., Weiss, V. G. and Rebec, G. V. (2018). Using preclinical models to understand the neural basis of negative urgency. In: S. Sangha and D. Forti (Eds.) Neurobiology of Abnormal Emotion and Motivated Behaviors (pp.3-20). Elsevier, Oxford UK. [ISBN: 9780128136935].
23. Bardo, M. T., Cappelli, C. and Pentz, M. A. (**in press**). Translational research. In: H. Cooper and K. Sher (Eds.) APA Handbook of Research Methods in Psychology, Second Edition. American Psychological Association, Washington, DC

EDITED BOOKS AND SPECIAL JOURNAL ISSUES

- R. A. Bevins and M. T. Bardo (2004), Motivational factors in the etiology of drug abuse. University of Nebraska Press, Lincoln, NE.
- M. T. Bardo, D. Fishbein and R. Milich (2011), Inhibitory control and drug abuse prevention: from research to translation. Springer, New York, NY. [doi: 10.1007/978-1-4419-1268-8_17].
- T. H. Kelly and M. T. Bardo (2016), Emotion regulation and drug abuse: implications for prevention and treatment. Drug and Alcohol Dependence, 163, Supplement 1, S1-S70.

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
 2009 Wake Forest University, Department of Physiology and Pharmacology, Winston-Salem NC
 2010 University of Texas Medical Branch, Department of Pharmacology and Toxicology, Galveston TX
 2012 Texas A&M University, Institute for Neuroscience, College Station TX.
 2012 SUNY Buffalo, Research Institute on Addictions, Buffalo NY
 2013 Laboratoire de Neurosciences Expérimentales et Cliniques, University of Poitiers, Poitiers, France
 2013 Institut des Maladies Neurodégénératives, Université Bordeaux, Bordeaux, France
 2014 Program in Neuroscience, Florida State University, Tallahassee, FL.
 2018 Department of Neurobiology and Anatomical Sciences, University of Mississippi Medical Center, Jackson, MS.
 2018 Department of Psychological Science, Kansas State University, Manhattan, KS.
 2019 Department of Psychological Science, Purdue University, West Lafayette, IN
 2021 Integrative Physiology and Neuroscience, College of Veterinary Medicine, Washington State University, Pullman WA
 2022 Alcohol & Drug Abuse Center of Excellence, School of Medicine, LSU, New Orleans, LA.

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

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- and Novelty Seeking Motivational Systems." 50th 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.
- 2005 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. "Integrating 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." 55th 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.
- 2010 Invited roundtable speaker. "Using genetic and other neurobiological markers to identify children and adolescents at risk: forging new prevention science frontiers or walking on thin ice?" Society for Prevention Research, Denver, CO.
- 2010 Organizer and moderator. "Cells to society: filling the gap between neural and prevention sciences." Society for Prevention Research, Denver, CO.
- 2012 Invited symposium speaker. "Novelty seeking as a targeting variable for preventive interventions." College on Problems of Drug Dependence. Palm Springs, CA.
- 2013 Invited symposium speaker. "Prefrontal cortex and drug abuse vulnerability: translation

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- to prevention interventions" American Psychological Association. Honolulu, HI
- 2013 Invited symposium speaker. "Neurobehavioral mechanisms underlying the protective effect of environmental enrichment on drug abuse." European Behavioural Pharmacology Society, La Rochelle, France.
- 2014 Co-Organizer. "Emotional self-regulation and drug abuse vulnerability: connecting biology and prevention science." Society for Prevention Research, Washington, DC.
- 2015 Co-Organizer and discussant. "Environmental and social influences on drug-taking: the good, the bad and the ugly." College on Problems of Drug Dependence. Phoenix, AZ.
- 2017 Invited roundtable discussant. "How to enhance translation research for substance use prevention: reflections from NIDA centers on bench to clinic and community interventions." Society for Prevention Research, Washington, DC.
- 2020 Invited virtual talk. "Preclinical assessment of PT150 for opioid use disorder and PTSD." PASA Investigator Meeting, RTI International, Research Triangle Park, NC
- 2021 Invited Neal Miller lecturer. "Social influences on the neurobehavioral effects of abused drugs." American Psychological Association, San Diego, CA.
- 2022 Invited symposium speaker. "Peer-elicited drug seeking" European Behavioural Pharmacology Society, Rome, Italy.