

CURRICULUM VITAE

Mark E. Bouton
June, 2025

Address: Department of Psychological Science
University of Vermont
Burlington, Vermont 05405
E-mail: mark.bouton@uvm.edu

Education: University of Washington, Seattle, Washington
Ph.D., 1980, in Learning and Motivation (Psychology)
Minor: Physiological Psychology (Behavioral Neuroscience)
Dissertation Advisor: Robert C. Bolles

Williams College, Williamstown, Massachusetts
B.A. Magna cum laude with Honors in Psychology, 1975
Thesis Advisors: Hugh Criswell and Roger M. Tarpy

Positions Held:

2023-	University Distinguished Professor and Robert B. Lawson Green & Gold Professor of Psychology Emeritus, University of Vermont
2019-2023	University Distinguished Professor, University of Vermont
2011-2023	Robert B. Lawson Green & Gold Professor of Psychology, University of Vermont
1980-2010	Assistant Professor, Associate Professor, Professor, University of Vermont

Other Appointments:

2005-2020	Assistant Director, Neuroscience Graduate Program, University of Vermont
2017	Visiting Professorial Fellow, University of New South Wales, Sydney, Australia
2011-2014	Visiting Professor, Brain and Cognition Research Priority Program, University of Amsterdam
2004-2011	Director, General/Experimental Psychology Graduate Program, University of Vermont
2004	Visiting Fellow, Department of Experimental Psychology, Cardiff University, Cardiff, Wales (Cardiff Visiting Fellows Scheme)
1998-2003	Editor, <i>Journal of Experimental Psychology: Animal Behavior Processes</i> (Published by the American Psychological Association)
1997-1998	Fellow, Center for Advanced Study in the Behavioral Sciences, Stanford, California
1989-1990	Visiting Fellow, Department of Experimental Psychology, University of Cambridge, Cambridge, England

Honors and Awards:

University Distinguished Professor, career appointment held by a maximum of 10 University of Vermont faculty, 2019-2023 (Emeritus, 2023-)
Quad-L Award, University of New Mexico, "in recognition of outstanding research and contributions to the field of learning, memory, and cognition," 2013
W. Horsley Gantt Medal, Pavlovian Society, 2010
President, Division of Behavioral Neuroscience and Comparative Psychology (Division 6) of the American Psychological Association, 2009-2010
President, Pavlovian Society, 2008-2009

Fellow, Society of Experimental Psychologists, 2007-
President, Eastern Psychological Association, 2004-2005
Master Lecturer, American Psychological Association, 2004, 2008
Fellow, Center for Advanced Study in the Behavioral Sciences (Stanford, California), 1997-98
University Scholar, University of Vermont, 1995-96
Fellow, Association for Psychological Science (formerly American Psychological Society), 1992-
Fellow, American Psychological Association, 1991-
Fulbright Scholar, United Kingdom, 1989-90
James McKeen Cattell Fund Fellowship, 1989-90
Phi Beta Kappa, 1975
Sigma Xi, 1975

Editorial experience:

Editor:

Journal of Experimental Psychology: Animal Behavior Processes, 1998-2003

Consulting Editor:

Journal of Experimental Psychology: Animal Behavior Processes, 1991-1996; 2009-2025
Behavioral Neuroscience, 1995-present
Behavior Therapy and Experimental Psychiatry, 2006-present
Journal of the Experimental Analysis of Behavior, 2010- 2013, 2015-2018
Learning & Behavior, 2015-2022
Psychological Review, 2015-2021
Learning and Motivation, 2018-present
Animal Learning & Behavior, 1987-88, 1998-99

Special Issue Co-Editor:

Goal direction and habit in operant behavior, *Journal of the Experimental Analysis of Behavior*,
January 2024

Reviewer:

Acta Psychologica; Addiction Biology; American Journal of Psychology; American Psychologist; Animal Cognition; Animal Learning & Behavior; Appetite; Archives of General Psychiatry; Behavior Analysis: Research and Practice; Behavior Therapy; Behavioral Neuroscience; Behavioural and Cognitive Psychotherapy; Behavioural Brain Research; Behavioural Pharmacology; Behaviour Research and Therapy; Behavioural Processes; Biological Psychiatry; Biological Psychology; Brain and Mind: A Transdisciplinary Journal of Neuroscience and Neurophilosophy; Brain Research; Clinical Psychological Science; Clinical Psychology: Science and Practice; Cognition and Emotion; Comparative Cognition & Behavior Reviews; Current Biology; Current Directions in Psychological Science; Current Opinion in Behavioral Sciences; Developmental Psychobiology; European Journal of Neuroscience; Experimental & Clinical Psychopharmacology; Hippocampus; International Journal of Comparative Psychology; Journal of Abnormal Psychology; Journal of Applied Behavior Analysis; Journal of Cognitive Neuroscience; Journal of Comparative Psychology; Journal of the Experimental Analysis of Behavior; Journal of Experimental Child Psychology; Journal of Experimental Psychology: Animal Behavior Processes; Journal of Experimental Psychology: General; Journal of Experimental Psychology: Learning, Memory, & Cognition; Journal of Neuroscience; Journal of Neuroscience Methods; Learning & Behavior; Learning & Memory; Learning and Motivation; Life Sciences; Memory & Cognition; Molecular Psychiatry; Nature Reviews Neuroscience; Neurobiology of Learning and Memory; Neurobiology of Stress; Neuron; Neuropsychopharmacology; Neuroscience; NPJ Science of Learning; Personality and Social Psychology Review; Perspectives on Psychological Science; Pharmacology, Biochemistry, and Behavior; Physiology & Behavior; PLoS [Public Library of

Science; *Biology*; *PloS One*; *Proceedings of the National Academy of Sciences*; *Psychobiology*; *Progress in Neuro-Psychopharmacology & Biological Psychiatry*; *Psychophysiology*; *Psychological Bulletin*; *Psychological Review*; *Psychological Science*; *Psychology of Addictive Behaviors*; *Psychonomic Bulletin & Review*; *Quarterly Journal of Experimental Psychology*; *Science*; *Social Cognitive and Affective Neuroscience*; *Scientific Reports*; *Stress*; *Trends in Cognitive Sciences*; *Trends in Neurosciences*; *Advances in Infancy Research*; National Science Foundation; National Institutes of Health; Natural Sciences and Engineering Research Council of Canada; Biotechnology and Biological Sciences Research Council (U.K.); Medical Research Council (U.K.); Australian Research Council; North Atlantic Treaty Organization; Netherlands Organisation for Scientific Research (NWO); Eastern Psychological Association; Oxford University Press; United States-Israel Binational Science Foundation.

National or International Service:

International Benchmarking Review of United Kingdom Psychology
Panel Member and Biological Psychology Chair, London, October 2010. (Coordinated by the UK Economic and Social Research Council.)

Member, Biobehavioral Regulation, Learning and Ethology Study Section (National Institutes of Health), 2008-2012

Board of Directors, Eastern Psychological Association, 1996-1999, 2001-2006, 2015-2017

Member at Large of the Executive Committee, Division 3 of the American Psychological Association (Experimental Psychology), 2007-2010.

Member at Large of the Executive Committee, Division 6 of the American Psychological Association (Behavioral Neuroscience and Comparative Psychology), 2003-2006

National Institutes of Health Biobehavioral Regulation, Learning, and Ethology Study Section, 2005- (ad hoc).

Council of Editors, American Psychological Association, 1997-2003
Chair 2001-2002

Steering Committee, International Conference on Comparative Cognition, 1993-2000

Meeting Committee, Comparative Cognition Society, 2000

Fellows Committee, Division 6 of the American Psychological Association (Behavioral Neuroscience and Comparative Psychology) 2001-2004 (Chair 2002-2003)

Awards Committee, Div 6 of the American Psychological Association 1998-2000 (Chair, 1999), 2005- 2007. (Chair, 2006)

Selection Committee, American Psychological Association Early Career Contribution to Psychology Award (Behavioral Neuroscience/Animal Learning and Behavior), 1996

Ad Hoc Member, National Institute of Mental Health Psychobiology, Behavior, and Neuroscience Review Committee, 1995

Special Review Committees, National Institute of Mental Health: 1984, 1996, 2002, 2004, 2005, 2006, 2007; National Institute on Alcohol Abuse and Alcoholism, 2012.

Significant University of Vermont Service (since 2005):

COBRE pre-proposal review committee, Office of the Vice President for Research, 2016-2019.

Internal Advisor, Vermont Center on Behavior and Health, 2013-2023

Steering Committee, Neuroscience, Behavior, and Health Transdisciplinary Research Initiative, Vice Chair, 2010-2015; Director, 2016-

Search Committee, Chair of Neurological Sciences Department (College of Medicine), 2011-2012

Chair, Neuroscience Working Group, Transdisciplinary Research Initiative, 2009-2010

Graduate College Executive Committee, 2008-2012

Chair, Fifth-year review of Chemistry Department Chair Committee, 2008-2009

Steering Committee, Neuroscience Graduate Program, 2005-2023

Society Memberships:

American Psychological Association (active)
 Division of Experimental Psychology (Div. 3) [Fellow]
 Division of Behavioral Neuroscience and Comparative Psychology (Div. 6) [Fellow]
 Division of General Psychology (Div. 1) [Fellow]
 Association for Psychological Science [Fellow]
 Comparative Cognition Society
 Eastern Psychological Association [Fellow] (active)
 Pavlovian Society (active)
 Psychonomic Society
 Society of Experimental Psychologists [Fellow] (active)
 Society for Neuroscience (active)

Courses Taught:

Undergraduate: Learning; Animal Behavior; Memory; Psychological Methodology and Research; Learning, Cognition, and Behavior
 Graduate: Biobehavioral Proseminar; Seminar in Learning Theory; Animal Minds; Opponent-process Theory; Basic Research Relevant to Applied Topics; Learning and Behavior Therapy.

Research Interests:

Extinction, Behavioral Inhibition, and Relapse
 Habit and Goal-direction in Instrumental Behavior
 Context, Memory, and Emotional Processes in Associative Learning
 Models of Associative Learning (including Pavlovian and Instrumental Learning)
 Neurobiology of Learning, Memory, and Extinction
 Applications of Learning Theory to Issues in Cognitive Behavior Therapy

Extramural Research Grants:

• Continuous extramural funding, 1981 – 2023:

National Science Foundation, 1981 – 2001;
 National Institute of Mental Health, 2001 - 2012;
 National Institute on Drug Abuse, 2012 – 2023.

Bouton, M. E. The Context as a Determinant of Conditioned Fear, National Science Foundation Grant No. BNS 81-05401, June 1981 through June 1983. \$40,993.

Bouton, M. E. Contextual Fear and the US-Memory in Fear Conditioning, Alcohol, Drug Abuse, and Mental Health Administration Small Grants Program, 1981. \$39,000. (Declined by PI because of overlap with NSF grant.)

Bouton, M. E. The Contextual Control of Conditioned Fear, National Science Foundation Grant No. BNS 83-00803, June 1983 through August 1986. \$111,135.

Bouton, M. E. Contextual Control in Simple Associative Learning, National Science Foundation Grant No. BNS 86-07208, August 1986 through July 1989. \$145,140.

Bouton, M. E. Context and Memory Retrieval in Associative Learning, National Science Foundation Grant No. BNS 89-08535, August 1989 through August 1992. \$166,853.

- Bouton, M. E. Context and Memory in Associative Learning, National Science Foundation Grant No. IBN 92-09454, September 1992 through August 1998. \$350,000.
- Bouton, M. E. Context Dependence in Learning and Memory Processes, National Science Foundation Grant No. IBN 9727992, September 1998 through August 2001. \$210,000.
- Bouton, M. E. Temporal and Associative Aspects of Pavlovian Learning, National Institute of Mental Health Grant No. RO1 MH64847, December 2001 – November 2006. \$1,045,420.
- Bouton, M. E. Extinction and Recovery in Associative Learning, National Institute of Mental Health Grant No. 2 R01 MH064847, July 2007- June 2012. \$1,310,994.
- Epstein, L. Translating Habituation Research to Interventions for Pediatric Obesity, National Institute of Diabetes and Digestive and Kidney Diseases Grant No. 1U01 DK088380. Dec. 2009 – Dec. 2014. (M. E. Bouton, Site Principal Investigator). Site: \$108,193.
- Bouton, M. E. Extinction and Recovery in Associative Learning. National Institute on Drug Abuse Grant No. 9 R01 DA033123, May 2012 – April 2017. \$1,709,955.
- Bouton, M. E. Extinction and Recovery in Associative Learning. National Institute on Drug Abuse Grant No. 2 R01 DA033123, May 2017 – April 2022 (No-cost extension through April 2023). \$1,887,466.

Publications:

- Bolles, R. C., Collier, A. C., Bouton, M. E., & Marlin, N. A. (1978). Some tricks for ameliorating the trace-conditioning deficit. *Bulletin of the Psychonomic Society*, 11, 403-406.
- Bouton, M. E., & Bolles, R. C. (1979). Role of conditioned contextual stimuli in reinstatement of extinguished fear. *Journal of Experimental Psychology: Animal Behavior Processes*, 5, 368-378.
- Bouton, M. E., & Bolles, R. C. (1979). Contextual control of the extinction of conditioned fear. *Learning and Motivation*, 10, 445-466.
- Sigmundi, R. A., Bouton, M. E., & Bolles, R. C. (1980). Conditioned freezing in the rat as a function of shock intensity and CS modality. *Bulletin of the Psychonomic Society*, 15, 254-256.
- Bouton, M. E., & Bolles, R. C. (1980). Conditioned fear assessed by freezing and by the suppression of three different baselines. *Animal Learning & Behavior*, 8, 429-434.
- Bouton, M. E. (1982). Lack of reinstatement of an extinguished taste aversion. *Animal Learning & Behavior*, 10, 233-241.
- Bouton, M. E., & Whiting, M. R. (1982). Simultaneous odor-taste and taste-taste compounds in poison-avoidance learning. *Learning and Motivation*, 13, 472-494.
- Bernstein, I. L., Goehler, L. E., & Bouton, M. E. (1983). Relative potency of foods and drinks as targets in aversion conditioning. *Behavioral and Neural Biology*, 37, 134-148.
- Bouton, M. E., & King, D. A. (1983). Contextual control of the extinction of conditioned fear: Tests for the associative value of the context. *Journal of Experimental Psychology: Animal Behavior Processes*,

9, 248-265.

- Bouton, M. E. (1984). Differential control by context in the inflation and reinstatement paradigms. *Journal of Experimental Psychology: Animal Behavior Processes*, 10, 56-74.
- Bouton, M. E., & Bolles, R. C. (1985). Contexts, event-memories, and extinction. In P. D. Balsam & A. Tomie (Eds.), *Context and learning* (pp. 133-166). Hillsdale, NJ: Lawrence Erlbaum.
- Bouton, M. E., & King, D. A. (1986). Effect of context on performance to conditioned stimuli with mixed histories of reinforcement and nonreinforcement. *Journal of Experimental Psychology: Animal Behavior Processes*, 12, 4-15.
- Bouton, M. E. (1986). Slow reacquisition following the extinction of conditioned suppression. *Learning and Motivation*, 17, 1-15.
- Bouton, M. E., Jones, D. L., McPhillips, S. A., & Swartzentruber, D. (1986). Potentiation and overshadowing in odor-aversion learning: Role of method of odor presentation, the distal-proximal cue distinction, and the conditionability of odor. *Learning and Motivation*, 17, 115-138.
- Bouton, M. E., & Swartzentruber, D. (1986). Analysis of the associative and occasion-setting properties of contexts participating in a Pavlovian discrimination. *Journal of Experimental Psychology: Animal Behavior Processes*, 12, 333-350.
- Swartzentruber, D., & Bouton, M. E. (1986). Contextual control of negative transfer produced by prior CS-US pairings. *Learning and Motivation*, 17, 366-385.
- King, D. A., Bouton, M. E., & Musty, R. E. (1987). Associative control of tolerance to the sedative effects of a short-acting benzodiazepine. *Behavioral Neuroscience*, 101, 104-114.
- Bouton, M. E., Dunlap, C. M., & Swartzentruber, D. (1987). Potentiation of taste by another taste during compound aversion learning. *Animal Learning & Behavior*, 15, 433-438.
- Bouton, M. E. (1988). Context and ambiguity in the extinction of emotional learning: Implications for exposure therapy. *Behaviour Research and Therapy*, 26, 137-149.
- Swartzentruber, D., & Bouton, M. E. (1988). Transfer of positive contextual control across different conditioned stimuli. *Bulletin of the Psychonomic Society*, 26, 569-572.
- Bouton, M. E., & Swartzentruber, D. (1989). Slow reacquisition following extinction: Context, encoding, and retrieval mechanisms. *Journal of Experimental Psychology: Animal Behavior Processes*, 15, 43-53.
- Bouton, M. E., & Peck, C. A. (1989). Context effects on conditioning, extinction, and reinstatement in an appetitive conditioning preparation. *Animal Learning & Behavior*, 17, 188-198.
- Sobrero, A. P., & Bouton, M. E. (1989). Effects of stimuli present during oral morphine administration on withdrawal and subsequent consumption. *Psychobiology*, 17, 179-190.
- Peck, C. A., & Bouton, M. E. (1990). Context and performance in aversive-to-appetitive and appetitive-to-aversive transfer. *Learning and Motivation*, 21, 1-31.

- Bouton, M. E., Kenney, F. A., & Rosengard, C. (1990). State-dependent fear extinction with two benzodiazepine tranquilizers. *Behavioral Neuroscience*, 104, 44-55.
- Bouton, M. E. (1990). A mix of perspectives on a mix of problems. [Review of *Aversion, avoidance, and anxiety: Perspectives on aversively motivated behavior*]. *Contemporary Psychology*, 35, 715.
- Bouton, M. E. (1991). Context and retrieval in extinction and in other examples of interference in simple associative learning. In L. Dachowski & C. F. Flaherty (Eds.), *Current topics in animal learning: Brain, emotion, and cognition* (pp. 25-53). Hillsdale, NJ: Lawrence Erlbaum.
- Bouton, M. E. (1991). A contextual analysis of fear extinction. In P. R. Martin (Ed.), *Handbook of behavior therapy and psychological science: An integrative approach* (pp. 435-453). Elmsford, NY: Pergamon Press, Inc.
- Bouton, M. E., & Swartzentruber, D. (1991). Sources of relapse after extinction in Pavlovian and instrumental learning. *Clinical Psychology Review*, 11, 123-140.
- Baker, A. G., Steinwald, H., & Bouton, M. E. (1991). Contextual conditioning and reinstatement of extinguished instrumental responding. *The Quarterly Journal of Experimental Psychology*, 43B, 199-218.
- Swartzentruber, D., & Bouton, M. E. (1992). Context sensitivity of conditioned suppression following preexposure to the conditioned stimulus. *Animal Learning & Behavior*, 20, 97-103.
- Bouton, M. E., & Peck, C. A. (1992). Spontaneous recovery in cross-motivational transfer (counter-conditioning). *Animal Learning & Behavior*, 20, 313-321.
- Brooks, D. C., & Bouton, M. E. (1993). A retrieval cue for extinction attenuates spontaneous recovery. *Journal of Experimental Psychology: Animal Behavior Processes*, 19, 77-89.
- Bouton, M. E., Rosengard, C., Achenbach, G. G., Peck, C. A., & Brooks, D. C. (1993). Effects of contextual conditioning and unconditional stimulus presentation on performance in appetitive conditioning. *The Quarterly Journal of Experimental Psychology*, 46B, 63-95.
- Bouton, M. E., & Brooks, D. C. (1993). Time and context effects on performance in a Pavlovian discrimination reversal. *Journal of Experimental Psychology: Animal Behavior Processes*, 19, 165-179.
- Bouton, M. E. (1993). Context, time, and memory retrieval in the interference paradigms of Pavlovian learning. *Psychological Bulletin*, 114, 80-99.
- Bouton, M. E., & Nelson, J. B. (1994). Context-specificity of target versus feature inhibition in a feature-negative discrimination. *Journal of Experimental Psychology: Animal Behavior Processes*, 20, 51-65.
- Bouton, M. E. (1994). Context, ambiguity, and classical conditioning. *Current Directions in Psychological Science*, 3, 49-53.
- Bouton, M. E. (1994). Conditioning, remembering, and forgetting. *Journal of Experimental Psychology: Animal Behavior Processes*, 20, 219-231.

- Bouton, M. E., & Ricker, S. T. (1994). Renewal of extinguished responding in a second context. *Animal Learning & Behavior*, 22, 317-324.
- Brooks, D. C., & Bouton, M. E. (1994). A retrieval cue for extinction attenuates response recovery (renewal) caused by a return to the conditioning context. *Journal of Experimental Psychology: Animal Behavior Processes*, 20, 366-379.
- Wilson, A., Brooks, D. C., & Bouton, M. E. (1995). The role of the rat hippocampal system in several effects of context in extinction. *Behavioral Neuroscience*, 109, 828-836.
- Brooks, D. C., Hale, B., Nelson, J. B., & Bouton, M. E. (1995). Reinstatement after counterconditioning. *Animal Learning & Behavior*, 23, 383-390.
- O'Boyle, E. A., & Bouton, M. E. (1996). Conditioned inhibition in a multiple-category learning task. *The Quarterly Journal of Experimental Psychology*, 49B, 1-23.
- Bouton, M. E., & Fanselow, M. S. (1996). Robert C. Bolles [Obituary]. *American Psychologist*, 51, 733.
- Rosas, J. M., & Bouton, M. E. (1996). Spontaneous recovery after extinction of a conditioned taste aversion. *Animal Learning & Behavior*, 24, 341-348.
- Ricker, S. T., & Bouton, M. E. (1996). Reacquisition following extinction in appetitive conditioning. *Animal Learning & Behavior*, 24, 423-436.
- Nelson, J. B., & Bouton, M. E. (1997). The effects of a context switch following serial and simultaneous feature-negative discriminations. *Learning and Motivation*, 28, 56-84.
- Rosas, J. M., & Bouton, M. E. (1997). Renewal of a conditioned taste aversion upon return to the conditioning context after extinction in another one. *Learning and Motivation*, 28, 216-229.
- Rosas, J. M., & Bouton, M. E. (1997). Additivity of the effects of retention interval and context change on latent inhibition: Toward resolution of the context forgetting paradox. *Journal of Experimental Psychology: Animal Behavior Processes*, 23, 283-294.
- Bouton, M. E., & Fanselow, M. S. (Eds.) (1997). *Learning, motivation, and cognition: The functional behaviorism of Robert C. Bolles*. Washington, DC: American Psychological Association.
- Bouton, M. E. (1997). Signals for whether versus when an event will occur. In M. E. Bouton & M. S. Fanselow (Eds.), *Learning, motivation, and cognition: The functional behaviorism of Robert C. Bolles* (pp. 385-409). Washington, DC: American Psychological Association.
- Fanselow, M. S., & Bouton, M. E. (1997). The life and influence of Robert C. Bolles. In M. E. Bouton & M. S. Fanselow (Eds.), *Learning, motivation, and cognition: The functional behaviorism of Robert C. Bolles* (pp. 1-9). Washington, DC: American Psychological Association.
- Bouton, M. E., & Nelson, J. B. (1998). The role of context in classical conditioning: Some implications for cognitive behavior therapy. In W. O'Donohue (Ed.), *Learning and behavior therapy* (pp. 59-84). Needham Heights, MA: Allyn & Bacon.
- Bouton, M. E., & Nelson, J. B. (1998). Mechanisms of feature-positive and feature-negative discrimination learning in an appetitive conditioning paradigm. In N. Schmajuk & P. C. Holland (Eds.), *Occasion*

- setting: Associative learning and cognition in animals* (pp. 69-112). Washington, DC: American Psychological Association.
- Rosas, J. M., & Bouton, M. E. (1998). Context change and retention interval can have additive, rather than interactive, effects after taste aversion extinction. *Psychonomic Bulletin & Review*, 5, 79-83.
- Bouton, M. E., Nelson, J. B., & Rosas, J. M. (1999). Stimulus generalization, context change, and forgetting. *Psychological Bulletin*, 125, 171-186.
- Bouton, M. E., Nelson, J. B., & Rosas, J. M. (1999). Resolution now! Reply to Riccio, Richardson, and Ebner (1999). *Psychological Bulletin*, 125, 190-192.
- Holland, P. C., & Bouton, M. E. (1999). Hippocampus and context in classical conditioning. *Current Opinion in Neurobiology*, 9, 195-202.
- Bouton, M. E. (2000). A learning theory perspective on lapse, relapse, and the maintenance of behavior change. *Health Psychology*, 19(Suppl.), 57-63.
- Frohardt, R. J., Guarraci, F. A., & Bouton, M. E. (2000). The effects of neurotoxic hippocampal lesions on two effects of context after fear extinction. *Behavioral Neuroscience*, 114, 227-240.
- Bouton, M. E., Mineka, S., & Barlow, D. H. (2001). A modern learning theory perspective on the etiology of panic disorder. *Psychological Review*, 108, 4-32.
- Pearce, J. M., & Bouton, M. E. (2001). Theories of associative learning in animals. *Annual Review of Psychology*, 52, 111-139.
- Bouton, M. E., & Sunsay, C. (2001). Contextual control of appetitive conditioning: Influence of a contextual stimulus generated by a partial reinforcement procedure. *The Quarterly Journal of Experimental Psychology*, 54B, 109-125.
- Bouton, M. E. (2001). Classical conditioning and clinical psychology. In N. J. Smelser & P. B. Baltes (Eds.), *International Encyclopedia of the Social and Behavioral Sciences* (Vol. 3, pp. 1942-1945). Oxford: Elsevier Science.
- Nelson, J. B., & Bouton, M. E. (2002). Extinction, inhibition, and emotional intelligence. In L. Feldman Barrett & P. Salovey (Eds.), *The wisdom in feeling: Psychological processes in emotional intelligence* (pp. 60-85). New York: Guilford Publications.
- Bouton, M. E. (2002). The other learning process in substance abuse: Comment on Alessi, Roll, Reilly, and Johanson (2002). *Experimental and Clinical Psychopharmacology*, 10, 84-86.
- Bouton, M. E. (2002). Context, ambiguity, and unlearning: Sources of relapse after behavioral extinction. *Biological Psychiatry*, 52, 976-986.
- Bouton, M. E., & Sunsay, C. (2003). Importance of trials versus accumulating time across trials in partially-reinforced appetitive conditioning. *Journal of Experimental Psychology: Animal Behavior Processes*, 29, 62-77.
- Lovibond, P. F., Been, S.-L., Mitchell, C. J., Bouton, M. E., & Frohardt, R. (2003). Forward and backward blocking of causal judgment is enhanced by additivity of effect magnitude. *Memory and Cognition*,

31, 133-142.

- Bouton, M. E. (2004). A general role for early onset cues and intra-event learning: Comment on McDonald and Siegel (2004). *Experimental and Clinical Psychopharmacology*, 12, 18-19.
- Sunsay, C., Stetson, L., & Bouton, M. E. (2004). Memory priming and trial spacing effects in Pavlovian learning. *Learning & Behavior*, 32, 220-229.
- Bouton, M. E., Woods, A. M., & Pineño, O. (2004). Occasional reinforced trials during extinction can slow the rate of rapid reacquisition. *Learning and Motivation*, 35, 371-390.
- Bouton, M. E. (2004). Context and behavioral processes in extinction. *Learning & Memory*, 11, 485-494.
- Bouton, M. E., & Moody, E. W. (2004). Memory processes in classical conditioning. *Neuroscience and Biobehavioral Reviews*, 28, 663-674.
- Bouton, M. E. (2005). Behavior systems and the contextual control of anxiety, fear, and panic. In L. Feldman Barrett, P. Niedenthal, & P. Winkielman (Eds.), *Emotion: Conscious and unconscious* (pp. 205-227). New York: The Guilford Press.
- Bouton, M. E., & García-Gutiérrez, A. (2006). Intertrial interval as a contextual stimulus. *Behavioural Processes*, 71, 307-317.
- Moody, E. W., Sunsay, C., & Bouton, M. E. (2006). Priming and trial spacing in extinction: Effects on extinction performance, spontaneous recovery, and reinstatement in appetitive conditioning. *The Quarterly Journal of Experimental Psychology*, 59, 809-829.
- Waddell, J., Morris, R. W., & Bouton, M. E. (2006). Effect of bed nucleus of the stria terminalis lesions on conditioned anxiety: Aversive conditioning with long-duration conditional stimuli and reinstatement of extinguished fear. *Behavioral Neuroscience*, 120, 324-336.
- Bouton, M. E., García-Gutiérrez, A., Zilski, J., & Moody, E. W. (2006). Extinction in multiple contexts does not necessarily make extinction less vulnerable to relapse. *Behaviour Research and Therapy*, 44, 983-994.
- Bouton, M. E., Woods, A. M., Moody, E. W., Sunsay, C., & García-Gutiérrez, A. (2006). Counteracting the context-dependence of extinction: Relapse and tests of some relapse prevention methods. In M. G. Craske, D. Hermans, & D. Vansteenwegen (Eds.), *Fear and learning: Basic science to clinical application* (pp. 175-196). Washington, DC: American Psychological Association.
- Bouton, M. E., Westbrook, R. F., Corcoran, K. A., & Maren, S. (2006). Contextual and temporal modulation of extinction: Behavioral and brain mechanisms. *Biological Psychiatry*, 60, 352-360.
- Morris, R. W., & Bouton, M. E. (2006). Effect of unconditioned stimulus magnitude on the emergence of conditioned responding. *Journal of Experimental Psychology: Animal Behavior Processes*, 32, 371-385.
- Woods, A. M., & Bouton, M. E. (2006). D-cycloserine facilitates extinction but does not eliminate renewal of the conditioned emotional response. *Behavioral Neuroscience*, 120, 1159-1162.
- Bouton, M. E. (2007). *Learning and behavior: A contemporary synthesis*. Sunderland, MA: Sinauer

Associates, Inc.

- Bouton, M. E., & Waddell, J. (2007). Some biobehavioral insights into persistent effects of emotional trauma. In L. J. Kirmayer, R. Lemelson, & M. Barad (Eds.), *Understanding trauma: Integrating biological, clinical, and cultural perspectives* (pp. 41-59). Cambridge: Cambridge University Press.
- Woods, A. M., & Bouton, M. E. (2007). Occasional reinforced responses during extinction can slow the rate of reacquisition of an operant response. *Learning and Motivation*, 38, 56-74.
- Bouton, M. E. (2007). Context: The concept in the human and animal memory domains. In H. L. Roediger, Y. Dudai, & S. M. Fitzpatrick (Eds.), *Science of Memory: Concepts* (pp. 115-119). Oxford: Oxford University Press.
- Morris, R. W., & Bouton, M. E. (2007). The effect of yohimbine on the extinction of conditioned fear: A role for context. *Behavioral Neuroscience*, 121, 501-514.
- Acheson, D. T., Forsyth, J. P., Prenoveau, J. M., & Bouton, M. E. (2007). Interoceptive fear conditioning as a learning model of panic disorder: An experimental evaluation using 20% CO₂-enriched air in a non-clinical sample. *Behaviour Research & Therapy*, 45, 2280-2294.
- Bouton, M. E., Frohardt, R. J., Sunsay, C., Waddell, J., & Morris, R. W. (2008). Contextual control of inhibition with reinforcement: Adaptation and timing mechanisms. *Journal of Experimental Psychology: Animal Behavior Processes*, 34, 223-236.
- Bouton, M. E., & Woods, A. M. (2008). Extinction: Behavioral mechanisms and their implications. In J. H. Byrne, D. Sweatt, R. Menzel, H. Eichenbaum, & H. Roediger (Eds.), *Learning and memory: A comprehensive reference (Vol. 1, Learning Theory and Behaviour)*, pp. 151-171). Oxford: Elsevier.
- [Reprinted in J. H. Byrne (Ed.), *Concise learning and memory: The Editor's selection*, pp. 627-648. Oxford: Elsevier, 2008.]
- Sunsay, C., & Bouton, M. E. (2008). Analysis of a trial spacing effect with relatively long intertrial intervals. *Learning & Behavior*, 36, 104-115.
- Bouton, M. E., Vurbic, D., & Woods, A. M. (2008). D-cycloserine facilitates context-specific fear extinction learning. *Neurobiology of Learning and Memory*, 90, 504-510.
- Waddell, J., Bouton, M. E., & Falls, W. A. (2008). Central CRF receptor antagonist α -helical CRF9-41 blocks reinstatement of extinguished fear: The role of the bed nucleus of the stria terminalis. *Behavioral Neuroscience*, 122, 1061-1069.
- Woods, A. M., & Bouton, M. E. (2008). Immediate extinction causes a less durable loss of performance than delayed extinction following either fear or appetitive conditioning. *Learning & Memory*, 15, 909-920.
- Newcombe, N. S., & Bouton, M. E. (2009). Masked reviews are not fairer reviews. *Perspectives on Psychological Science*, 4, 62-64.
- Bouton, M. E. (2009). Behaviourism, thoughts, and actions. *British Journal of Psychology*, 100, 181-183.
- Epstein, L. H., Temple, J. L., Roemmich, J. N., & Bouton, M. E. (2009). Habituation as a determinant of

- human food intake. *Psychological Review*, 116, 384-407.
- Bouton, M. E. (2009). Learning theory. In B. J. Sadock, V. A. Sadock, & P. Ruiz (Eds.), *Kaplan & Sadock's Comprehensive textbook of psychiatry* (9th ed., Vol. 1, pp. 647-658). New York: Lippincott Williams & Wilkins.
- Bouton, M. E. (2010). The multiple forms of "context" in associative learning theory. In B. Mesquita, L. Feldman Barrett, & E. Smith (Eds.), *The mind in context* (pp. 233-258). New York: The Guilford Press.
- Archbold, G. E. B., Bouton, M. E., & Nader, K. (2010). Evidence for the persistence of contextual fear memories following immediate extinction. *European Journal of Neuroscience*, 31, 1303-1311.
- Todd, T. P., Winterbauer, N. E., & Bouton, M. E. (2010). Interstimulus interval as a discriminative stimulus: Evidence of the generality of a novel asymmetry in temporal discrimination learning. *Behavioural Processes*, 84, 412-420.
- Westbrook, R. F., & Bouton, M. E. (2010). Latent inhibition and extinction: Their signature phenomena and the role of prediction error. In R. E. Lubow & I. Weiner (Eds.), *Latent inhibition: Cognition, neuroscience, and applications to schizophrenia* (pp. 23-39). Cambridge: Cambridge University Press.
- Winterbauer, N. E., & Bouton, M. E. (2010). Mechanisms of resurgence of an extinguished instrumental behavior. *Journal of Experimental Psychology: Animal Behavior Processes*, 36, 343-353.
- Bouton, M. E., & Hendrix, M. C. (2011). Intertrial interval as a contextual stimulus: Further analysis of a novel asymmetry in temporal discrimination learning. *Journal of Experimental Psychology: Animal Behavior Processes*, 37, 79-93.
- Bouton, M. E., Todd, T. P., Vurbic, D., & Winterbauer, N. E. (2011). Renewal after the extinction of free operant behavior. *Learning & Behavior*, 39, 57-67.
- Bouton, M. E. (2011). Learning and the persistence of appetite: Extinction and the motivation to eat and overeat. *Physiology & Behavior*, 103, 51-58.
- Winterbauer, N. E., & Bouton, M. E. (2011). Mechanisms of resurgence II: Response-contingent reinforcers can reinstate a second extinguished behavior. *Learning and Motivation*, 42, 154-164.
- Epstein, L. H., Carr, K. A., Cavanaugh, M. D., Paluch, R. A., & Bouton, M. E. (2011). Long-term habituation to food in obese and nonobese women. *The American Journal of Clinical Nutrition*, 94, 371-376.
- Vurbic, D., Gold, B., & Bouton, M. E. (2011). Effects of D-cycloserine on the extinction of appetitive operant learning. *Behavioral Neuroscience*, 125, 551-559.
- Vurbic, D., & Bouton, M. E. (2011). Secondary extinction in Pavlovian fear conditioning. *Learning & Behavior*, 39, 202-211.
- Bouton, M. E., Winterbauer, N. E., & Vurbic, D. (2012). Context and extinction: Mechanisms of relapse in drug self-administration. In M. Haselgrove & L. Hogarth (Eds.), *Clinical applications of learning theory* (pp. 103-133). East Sussex, UK: Psychology Press.

- Todd, T. P., Winterbauer, N. E., & Bouton, M. E. (2012). Contextual control of appetite: Renewal of inhibited food-seeking behavior in sated rats after extinction. *Appetite*, 58, 484-489.
- Bouton, M. E., Winterbauer, N. E., & Todd, T. P. (2012). Relapse processes after the extinction of instrumental learning: Renewal, resurgence, and reacquisition. *Behavioural Processes*, 90, 130-141.
- Todd, T. P., Winterbauer, N. E., & Bouton, M. E. (2012). Effects of the amount of acquisition and contextual generalization on the renewal of instrumental behavior after extinction. *Learning & Behavior*, 40, 145-157.
- Todd, T. P., & Bouton, M. E. (2012). Trial spacing effect in associative learning. In N. M. Seel (Ed.), *Encyclopedia of the sciences of learning* (pp. 3345-3347). New York: Springer.
- Winterbauer, N. E., & Bouton, M. E. (2012). Effects of thinning the rate at which the alternative behavior is reinforced on resurgence of an extinguished instrumental response. *Journal of Experimental Psychology: Animal Behavior Processes*, 38, 279-291.
- Bouton, M. E., Doyle-Burr, C., & Vurbic, D. (2012). Asymmetrical generalization of conditioning and extinction from compound to element and element to compound. *Journal of Experimental Psychology: Animal Behavior Processes*, 38, 381-393.
- Winterbauer, N. E., Lucke, S., & Bouton, M. E. (2013). Some factors modulating the strength of resurgence after extinction of an instrumental behavior. *Learning and Motivation*, 44, 60-71.
- Epstein, L. H., Fletcher, K. D., O'Neill, J., Roemmich, J. N., & Bouton, M. E. (2013). Food characteristics, long-term habituation and energy intake: Laboratory and field studies. *Appetite*, 60, 40-50.
- Bouton, M. E., Todd, T. P., León, S. P., & Miles, O. W., & Epstein, L. H. (2013). Within- and between-session variety effects in a food-seeking habituation paradigm. *Appetite*, 66, 10-19.
- Rosas, J. M., Todd, T. P., & Bouton, M. E. (2013). Context change and associative learning. *Wiley Interdisciplinary Reviews: Cognitive Science*, 4, 237-244.
- Bouton, M. E. (2013). Conditioning and learning. In R. Biswas-Diener & E. Diener (Eds), *Noba textbook series: Psychology*. Champaign, IL: DEF Publishers. DOI: www.nobaproject.com.
- Bouton, M. E., Todd, T. P., & León, S. P. (2014). Contextual control of discriminated operant behavior. *Journal of Experimental Psychology: Animal Learning and Cognition*, 40, 92-105.
- Todd, T. P., Vurbic, D., & Bouton, M. E. (2014). Behavioral and neurobiological mechanisms of extinction in Pavlovian and instrumental learning. *Neurobiology of Learning and Memory*, 108, 52-64.
- Bouton, M. E., Woods, A. M., & Todd, T. P. (2014). Separation of time-based and trial-based accounts of the partial reinforcement extinction effect. *Behavioural Processes*, 101, 23-31.
- Bouton, M. E., & Todd, T. P. (2014). A fundamental role for context in instrumental learning and extinction. *Behavioural Processes*, 104, 13-19.
- Bouton, M. E., & Schepers, S. T. (2014). Resurgence of instrumental behavior after an abstinence contingency. *Learning & Behavior*, 42, 131-143.

- Vurbic, D., & Bouton, M. E. (2014). A contemporary behavioral perspective on extinction. In F. K. McSweeney & E. S. Murphy (Eds.), *The Wiley-Blackwell handbook of operant and classical conditioning* (pp. 53-76). Chichester, UK: John Wiley & Sons, Ltd.
- Bouton, M. E. (2014). Control contextual del aprendizaje y extinción instrumental. (Contextual control of instrumental learning and extinction.) In L. Sánchez-Carrasco & J. Nieto (Eds.), *Tendencias actuales en aprendizaje y memoria (Current directions in learning and memory)* (pp. 59-80). Mexico City: Universidad Nacional Autónoma de México.
- Todd, T. P., Vurbic, D., & Bouton, M. E. (2014). Mechanisms of renewal after the extinction of discriminated operant behavior. *Journal of Experimental Psychology: Animal Learning and Cognition*, 40, 355-368.
- Trask, S., & Bouton, M. E. (2014). Contextual control of operant behavior: Evidence for hierarchical associations in instrumental learning. *Learning & Behavior*, 42, 281-288.
- Van den Akker, K., Havermans, R. C., Bouton, M. E., & Jansen, A. (2014). How partial reinforcement of food cues affects the extinction and reacquisition of appetitive responses: A new model for dietary success? *Appetite*, 81, 242-252.
- Thrailkill, E. A., Epstein, L. H., & Bouton, M. E. (2014). Effects of inter-food interval on the variety effect in an instrumental food-seeking task: Clarifying the role of habituation. *Appetite*, 84, 43-53.
- Bouton, M. E. (2014). Why behavior change is difficult to sustain. *Preventive Medicine*, 68, 29-36.
- Thrailkill, E. A., & Bouton, M. E. (2015). Contextual control of instrumental actions and habits. *Journal of Experimental Psychology: Animal Learning and Cognition*, 41, 69-80.
- Bouton, M. E., & Schepers, S. T. (2015). Renewal after the punishment of free operant behavior. *Journal of Experimental Psychology: Animal Learning and Cognition* 41, 81-90.
- Boutelle, K. N., Liang, J., Knatz, S., Matheson, B., Risborough, V., Strong, D., Rhee, K., Craske, M. G., Zucker, N., & Bouton, M. E. (2015). Design and implementation of a study evaluating extinction processes to food cues in obese children: The Intervention for Regulations of Cues Trial (iROC). *Contemporary Clinical Trials*, 40, 95-104.
- Schepers, S. T., & Bouton, M. E. (2015). Effects of reinforcer distribution during response elimination on the resurgence of an extinguished instrumental behavior. *Journal of Experimental Psychology: Animal Learning and Cognition*, 41, 179-192.
- Astley, S. L., Aird, T., & Bouton, M. E. (2015). Asymmetries in time-based and feature-based discriminations in humans: Linking the long+ and feature-positive effects. *Journal of Experimental Psychology: Animal Learning and Cognition*, 41, 193-205.
- Thrailkill, E. A., & Bouton, M. E. (2015). Extinction of chained instrumental behaviors: Effects of procurement extinction on consumption responding. *Journal of Experimental Psychology: Animal Learning and Cognition*, 41, 232-246.
- Boutelle, K. N., & Bouton, M. E. (2015). Implications of learning theory to develop programs to decrease overeating. *Appetite*, 93, 62-74.

- Trask, S., Schepers, S. T., & Bouton, M. E. (2015). Context change explains resurgence after the extinction of operant behavior. *Mexican Journal of Behavior Analysis*, 41, 187-210.
- Hammack, S. E., Todd, T. P., Kocho-Schellenberg, M., & Bouton, M. E. (2015). The role of the bed nucleus of the stria terminalis in the acquisition of contextual fear at long or short context-shock intervals. *Behavioral Neuroscience*, 129, 673-678.
- Eddy, M. C., Todd, T. P., Bouton, M. E., & Green, J. T. (2016). Medial prefrontal cortex involvement in the expression of extinction and ABA renewal of instrumental behavior for a food reinforcer. *Neurobiology of Learning and Memory*, 128, 33-39.
- Thrailkill, E. A., & Bouton, M. E. (2016). Extinction of chained instrumental behaviors: Effects of consumption extinction on procurement responding. *Learning & Behavior*, 44, 85-96.
- Bouton, M. E. (2016). *Learning and behavior: A contemporary synthesis* (2nd ed). Sunderland, MA: Sinauer Associates.
- Bouton, M. E., & Trask, S. (2016). Role of the discriminative properties of the reinforcer in resurgence. *Learning & Behavior*, 44, 137-150.
- Trask, S., & Bouton, M. E. (2016). Discriminative properties of the reinforcer can be used to attenuate the renewal of an extinguished instrumental behavior. *Learning & Behavior*, 44, 151-161.
- Bouton, M. E., Trask, S., & Carranza-Jasso, R. (2016). Learning to inhibit the response during instrumental (operant) extinction. *Journal of Experimental Psychology: Animal Learning and Cognition*, 42, 246-258.
- Thrailkill, E. A., & Bouton, M. E. (2016). Extinction and the associative structure of heterogeneous instrumental chains. *Neurobiology of Learning and Memory*, 133, 61-68.
- Thrailkill, E. A., Kacelnik, A., Porritt, F., & Bouton, M. E. (2016). Increasing the persistence of a heterogeneous behavior chain: Studies of extinction in a rat model of search behavior in working dogs. *Behavioural Processes*, 129, 44-53.
- Thrailkill, E. A., Trott, J. M., Zerr, C. L., & Bouton, M. E. (2016). Contextual control of chained instrumental behaviors. *Journal of Experimental Psychology: Animal Learning and Cognition*, 42, 401-414.
- Thrailkill, E. A., & Bouton, M. E. (2017). Effects of outcome devaluation on instrumental behaviors in a discriminated heterogeneous chain. *Journal of Experimental Psychology: Animal Learning and Cognition*, 43, 88-95.
- Trask, S., Shipman, M. L., Green, J. T., & Bouton, M. E. (2017). Inactivation of the prelimbic cortex attenuates context-dependent operant responding. *Journal of Neuroscience*, 37, 2317-2324.
- Trask, S., Thrailkill, E. A., & Bouton, M. E. (2017). Occasion setting, inhibition, and the contextual control of extinction in Pavlovian and instrumental (operant) learning. *Behavioural Processes*, 137, 64-72.

- Bouton, M.E. (2017) Extinction: Behavioral mechanisms and their implications. In: Menzel, R. (ed.), *Learning Theory and Behavior, Vol. 1 of Learning and Memory: A Comprehensive Reference, 2nd edition*, Byrne, J.H. (ed.). pp. 61–83. Oxford: Academic Press.
- Mathew, R. S., Tatarakis, A., Rudenko, A., Johnson-Venkatesh, E. M., Yang, Y. J., Murphy, E. A., Todd, T. P., Schepers, S. T., Siuiti, N., Mortorell, A. J., Falls, W. A., Hammack, S. E., Walsh, C. A., Li-Huei, T., Umemori, H., Bouton, M. E., & Moazed, D. (2017). A microRNA negative feedback loop downregulates vesicle transport and inhibits fear memory. *eLIFE*, 5, e22467.
- Thrailkill, E. A., & Bouton, M. E. (2017). Factors that influence the persistence and relapse of discriminated behavior chains. *Behavioural Processes*, 141, 3-10.
- Bouton, M. E., Thrailkill, E. A., Bergeria, C., & Davis, D. (2017). Preventing relapse after incentivized choice treatment: A laboratory model. *Behavioural Processes*, 141, 11-18.
- Bouton, M. E. (2017). Learning theory. In B. J. Sadock, V. A. Sadock, & P. Ruiz (Eds), *Kaplan & Sadock's Comprehensive textbook of psychiatry*. (10th ed., Vol. 1, pp. 716-728). Philadelphia: Wolters Kluwer.
- Podlesnik, C. A., Kelley, M. E., Jimenez-Gomez, C., & Bouton, M. E. (2017). Renewed behavior caused by context change and its implications for treatment maintenance: A review. *Journal of Applied Behavior Analysis*, 50, 675-697.
- Schepers, S. T., & Bouton, M. E. (2017). Hunger as a context: Food-seeking that is inhibited during hunger can renew in the context of satiety. *Psychological Science*, 28, 1640-1648.
- Miles, O. W., Thrailkill, E. A., Linden, A. K., May, V., Bouton, M. E., & Hammack, S. E. (2018). Pituitary adenylate cyclase-activating peptide in the bed nucleus of the stria terminalis mediates stress-induced reinstatement of cocaine seeking in rats. *Neuropsychopharmacology*, 43, 978-986.
- Trask, S., & Bouton, M. E. (2018). Retrieval practice after multiple context changes, but not long retention intervals, reduces the impact of a final context change on instrumental behavior. *Learning & Behavior*, 46, 213-221.
- Trask, S., Keim, C. L., & Bouton, M. E. (2018). Factors that encourage generalization from extinction to test reduce resurgence of an extinguished operant response. *Journal of the Experimental Analysis of Behavior*, 110, 11-23.
- Shipman, M. L., Trask, S., Bouton, M. E., & Green, J. T. (2018). Inactivation of prelimbic and infralimbic cortex respectively affect expression of minimally-trained and extensively-trained goal-directed actions. *Neurobiology of Learning and Memory*, 155, 164-172.
- Thrailkill, E. A., Porritt, F., Kacelnik, A., & Bouton, M. E. (2018). Maintaining performance in searching dogs: Evidence from a rat model that practice detecting a second (irrelevant) stimulus can maintain search and detection responding. *Behavioural Processes*, 157, 161-170.
- Thrailkill, E. A., Trask, S., Vidal, P., Alcalá, J. A., & Bouton, M. E. (2018). Stimulus control of actions and habits: A role for reinforcer predictability and attention in the development of habitual behavior. *Journal of Experimental Psychology: Animal Learning and Cognition*, 44, 370-384.
- Schepers, S. T., & Bouton, M. E. (2019). Stress as a context: Stress causes relapse of inhibited food

- seeking when it has been associated with prior food seeking. *Appetite*, 132, 131-138.
- Bouton, M. E. (2019). Extinction of instrumental (operant) learning: Interference, varieties of context, and mechanisms of contextual control. *Psychopharmacology*, 236, 7-19.
- Bouton, M. E., & Balleine, B. W. (2019). Prediction and control of operant behavior: What you see is not all there is. *Behavior Analysis: Research and Practice*, 19, 202-212.
- Bouton, M. E., & Boakes, R. A. (2019). Learning. In R. J. Sternberg & W. A. Pickren (Eds.), *The Cambridge handbook of the intellectual history of psychology* (pp. 135-164). Cambridge: Cambridge University Press.
- Thrailkill, E. A., Ameden, W. P., & Bouton, M. E. (2019). Resurgence in humans: Reducing relapse by increasing generalization between treatment and testing. *Journal of Experimental Psychology: Animal Learning and Cognition*, 45, 338-349.
- Shipman, M. L., Johnson, G. C., Bouton, M. E., & Green, J. T. (2019). Chemogenetic silencing of prelimbic cortex to anterior dorsomedial striatum attenuates operant responding. *eNeuro* 2019, 10.1523/ENEURO.0125-19.2019.
- Bouton, M. E., & Hall, G. (2019). Learning theory. In D. S. Dunn (Ed.), *Oxford Bibliographies in Psychology*. New York: Oxford University Press. DOI: 10.1093/OBO/9780199828340-0252
- Steinfeld, M., Alcalá, J. A., Thrailkill, E. A., & Bouton, M. E. (2019). Renewal in a heterogeneous behavior chain: Extinction of the first response prevents renewal of a second response when it is separately extinguished and returned to the chain. *Learning and Motivation*, 68, 101587, 1-11.
- Rey, C. N., Thrailkill, E. A., Goldberg, K., & Bouton, M. E. (2020). Relapse of an operant behavior after response elimination with an extinction or an omission contingency. *Journal of the Experimental Analysis of Behavior*, 115, 124-140.
- Thrailkill, E. A., Todd, T. P., & Bouton, M. E. (2020). Effects of conditioned stimulus (CS) duration, intertrial interval, and I/T ratio on appetitive Pavlovian conditioning. *Journal of Experimental Psychology: Animal Learning and Cognition*, 46, 243-255.
- Harris, J. A., & Bouton, M. E. (2020). Pavlovian conditioning under partial reinforcement: The effects of non-reinforced trials versus cumulative conditioned stimulus duration. *Journal of Experimental Psychology: Animal Learning and Cognition*, 46, 256-272.
- Bouton, M. E., Thrailkill, E. A., Trask, S., & Alfaro, F. (2020). Correction of response error vs. stimulus error in the extinction of discriminated operant learning. *Journal of Experimental Psychology: Animal Learning and Cognition*, 46, 398-407.
- Steinfeld, M. R., & Bouton, M. E. (2020). Context and renewal of habits and goal-directed actions after extinction. *Journal of Experimental Psychology: Animal Learning and Cognition*, 46, 408-421.
- Bouton, M. E., Broomer, M. C., Rey, C. N., & Thrailkill, E. A. (2020). Unexpected food outcomes can return a habit to goal-directed action. *Neurobiology of Learning and Memory*, 169, 107163, 1-9.
- Trask, S., Shipman, M. L., Green, J. T., & Bouton, M. E. (2020). Some factors that restore goal-direction to a habitual behavior. *Neurobiology of Learning and Memory*, 169, 107161, 1-9.

- Thomas, C., Thraillkill, E. A., Bouton, M. E., & Green, J. T. (2020). Inactivation of the prelimbic cortex attenuates operant responding in both physical and behavioral contexts. *Neurobiology of Learning and Memory*, 171, 107189, 1-6.
- Bouton, M. E., Maren, S., & McNally, G. P. (2021). Behavioral and neurobiological mechanisms of Pavlovian and instrumental extinction learning. *Physiological Reviews*, 101, 611-681.
- Steinfeld, M. R., & Bouton, M. E. (2021). Renewal of goal direction with a context change after habit learning. *Behavioral Neuroscience*, 135, 79-87.
- Thraillkill, E. A., Michaud, N. L., & Bouton, M. E. (2021). Reinforcer predictability and stimulus salience promote discriminated habit learning. *Journal of Experimental Psychology: Animal Learning and Cognition*, 47, 183-199.
- Bouton, M. E., Allan, S. M., Tavakkoli, A., Steinfeld, M. R., & Thraillkill, E. A. (2021). Effect of context on the instrumental reinforcer devaluation effect produced by taste aversion learning. *Journal of Experimental Psychology: Animal Learning and Cognition*, 47, 476-489.
- Green, J. T., & Bouton, M. E. (2021). New functions of the rodent prelimbic and infralimbic cortex in instrumental behavior. *Neurobiology of Learning and Memory*, 185, 107533.
- Bouton, M. E. (2021). Context, attention, and the switch between habit and goal-direction in behavior. *Learning & Behavior*, 49, 349-362.
- Bouton, M. E., & Michaud, N. L. (2022). Partial reinforcement effects on acquisition and extinction of a conditioned taste aversion. *Learning & Behavior*, 50, 360-371.
- Steinfeld, M. R., & Bouton, M. E. (2022). Inhibition in instrumental learning: Tests of response-specificity after feature-negative and extinction learning. *Journal of Experimental Psychology: Animal Learning and Cognition*, 48, 413-434.
- Broomer, M. C., & Bouton, M. E. (2023). A comparison of renewal, spontaneous recovery, and reacquisition after instrumental punishment and extinction. *Learning & Behavior*, 51, 262-273.
- Bouton, M. E., & Broomer, M. C. (2023). Learning to stop responding. *Behavioural Processes*, 206, 104830.
- Thomas, C. M. P., Bouton, M. E., & Green, J. T. (2023). Prelimbic cortex inactivation prevents ABA renewal based on satiety state. *Neurobiology of Learning and Memory*, 202, 107759.
- Broomer, M. C., & Bouton, M. E. (2023). Response-specific effects of punishment of a discriminated operant response. *Learning and Motivation*, 83, 101907.
- Kloc, M. L., Shultes, M. G., Pressman, R. D., Liebman, S. A., Schneur, C. A., Broomer, M. C., Barry, J. M., Bouton, M. E., & Holmes, G. L. (2023). The flurothyl model for early life seizures alters habit behavior formation and fronto-striatal circuit dynamics. *Epilepsy & Behavior*, 145, 109320.
- Thomas, C. M. P., Bouton, M. E., & Green, J. T. (2023). Prelimbic cortex inactivation prevents ABA renewal based on stress state. *Behavioral Neuroscience*, 137, 373-379.

- Watson, P., Thraillkill, E. A., Corbit, L. H., & Bouton, M. E. (2024). Introduction to the special issue: Goal direction and habit in operant behavior. *Journal of the Experimental Analysis of Behavior*, 121, 3-7.
- Bouton, M. E. (2024). Habit and persistence. *Journal of the Experimental Analysis of Behavior*, 121, 88-96.
- Thomas, C. M. P., Bouton, M. E., & Green, J. T. (2024). Chemogenetic inhibition of the ventral hippocampus but not its direct projection to the prelimbic cortex attenuates context-specific operant responding. *Frontiers in Behavioral Neuroscience*, 18, 1310478.
- Bouton, M. E. (2024). Situating habit and goal direction in a general view of instrumental behavior. In Y. Vandaele (Ed.), *Habits: Their definition, neurobiology, and role in addiction* (pp. 45-68). Cham, Switzerland: Springer Nature Switzerland.
- Broomer, M. C., & Bouton, M. E. (2024). Infralimbic cortex plays a similar role in the punishment and extinction of instrumental behavior. *Neurobiology of Learning and Memory*, 211, 107926.
- Michaud, N. L., & Bouton, M. E. (2024). An analysis of reinstatement after extinction of a conditioned taste aversion. *Journal of Experimental Psychology: Animal Learning and Cognition*, 50, 144-160.
- Bouton, M. E., Broomer, M. C., Frazee, F., & Steinfeld, M. R. (2024). Response-specificity or response-generalizability of inhibition in an operant feature-negative discrimination: Influence of the amount of inhibition training and attention to the response. *Learning and Motivation*, 88, 102042.
- Thraillkill, E. A., Elste, N., Thorpe, C. R., & Bouton, M. E. (2025). Goal-direction and habit in human and nonhuman instrumental behavioral sequences (behavior chains). *Journal of Experimental Psychology: Animal Learning and Cognition*, 51, 73-91.
- Bouton, M. E. (2025). Reinstatement and reacquisition of extinguished behavior: Evidence from the laboratory. In M. Kranak (Ed.), *Behavioral treatments for individuals with autism: Promoting longevity and durability*. Springer, in press.
- Harlan, E., Thraillkill, E. A., Green, J. T., & Bouton, M. E. (2025). Intertrial interval as a discriminative stimulus in discriminated operant learning. *Journal of Experimental Psychology: Animal Learning and Cognition*, in press.
- Bouton, M. E., & Thraillkill, E. A. Habit and goal direction in operant behavior. Invited for G. J. Madden and F. D. DiGennaro (Eds.), *APA Handbook of behavior analysis (2nd edition)*. American Psychological Association, under review.
- Webb, R., Fong, J., Mazar, A., Levine, J., Wellsjo, A. S., Natan, O., Zhao, C., Lally, P., de Wit, S., O'Doherty, J., Ching, A., Thomadsen, R., Osborne, M., Landry, P., Bouton, M., Wood, W., & Camerer, C. Integrating neuro-psychological habit research into consumer choice models. Submitted for publication.

Doctoral Dissertation:

Role of conditioned contextual stimuli in two effects of retaining the unconditioned stimulus during extinction.

Papers and Invited Presentations:

- Bouton, M. E., & Bolles, R. C. *Contextual determinants of conditioned suppression*. Psychonomic Society, Washington, DC, 1977.
- Bolles, R. C., & Bouton, M. E. *Freezing as an index of fear conditioning*. Psychonomic Society, San Antonio, 1978.
- Bouton, M. E., & Bolles, R. C. *Reinstatement of conditioned fear following extinction depends upon conditioning of contextual stimuli*. Eastern Psychological Association, Philadelphia, 1979.
- Bouton, M. E. *Role of contextual stimuli in the effect of US inflation following fear conditioning*. Eastern Psychological Association, Hartford, 1980.
- Bouton, M. E. *US memories and contexts in fear conditioning*. Conference on Animal Learning, McGill University, 1981.
- Bouton, M. E. *Extinction of fear in a dangerous context*. Eastern Psychological Association, New York City, 1981.
- Bouton, M. E., & Whiting, M. R. *A comparison of odor-taste and taste-taste compounds in toxiphobia conditioning*. Eastern Psychological Association, Baltimore, 1982.
- Bouton, M. E. *Conditioned fear and the associative value of the context*. Psychonomic Society, Minneapolis, 1982.
- Bouton, M. E. *Differential influence of context following fear conditioning and extinction*. Conference on Animal Learning, McGill University, 1983.
- Bouton, M. E. *Contexts, event-memories, and extinction*. Psychology Department Colloquium Series, Dartmouth College, 1983.
- Bouton, M. E. *Opponent-process theory, drug tolerance, and drug addiction*. Vermont State Substance Abuse Conference, Fairlee, VT, 1984.
- Bouton, M. E., & King, D. A. *Conditioning history of the CS affects CS-context interactions*. Psychonomic Society, San Antonio, 1984.
- Bouton, M. E., Jones, D. A., & McPhillips, S. *Potentiation and overshadowing of odor-aversion learning by taste: Role of method of odor administration*. Eastern Psychological Association, Boston, 1985.
- King, D. A., Bouton, M. E., & Musty, R. E. *Benzodiazepine tolerance acquisition: Evidence for a compensatory response*. Eastern Psychological Association, Boston, 1985.
- Bouton, M. E. *The contextual control of Pavlovian behavior*. Psychology Department Colloquium Series, Dalhousie University, Halifax, Nova Scotia, 1985.
- Bouton, M. E., & Swartzentruber, D. *Properties of contexts participating in a simple Pavlovian*

- discrimination*. Psychonomic Society, Boston, 1985.
- Bouton, M. E. *Contexts, occasion setting, and the role of the discriminative stimulus concept in modern behavior theory*. Winter Conference on Animal Learning, Winter Park, Colorado, 1986.
- Bouton, M. E. *Drug tolerance, drug dependence, and learning: New implications for substance abuse*. Vermont Psychological Association, Warren, VT, 1986.
- Bouton, M. E. *Function vs. fiction in learning theory: The non-peculiar roles of odor and taste in toxin avoidance learning*. Northeast Regional Meeting of the Animal Behavior Society, Burlington, VT, 1986.
- Bouton, M. E. *Context and the resolution of ambiguity in simple associative learning*. Psychology Department Colloquium Series:
 -University of Massachusetts, Amherst, 1986.
 -State University of New York at Binghamton, 1987.
 -McGill University, Montreal, 1987.
- Swartzentruber, D., & Bouton, M. E. *Contextual control of Hall-Pearce negative transfer*. Eastern Psychological Association, Arlington, VA, 1987.
- Bouton, M. E. *Context and interference in simple associative learning*. New England Psychological Association, Amherst, MA, 1987.
- Bouton, M. E., & Swartzentruber, D. *Mechanisms of slow reacquisition following the extinction of conditioned suppression*. Psychonomic Society, Seattle, 1987.
- Bouton, M. E. *Contextual control in simple associative learning: Context and retrieval processes in extinction*. Flowerree Symposium on Animal Learning and Conditioning, Tulane University, New Orleans, 1988.
- Sobrero, A. P., & Bouton, M. E. *Oral administration of morphine and the effects of environment-drug associations on consumption and withdrawal*. Eastern Psychological Association, Buffalo, 1988.
- Bouton, M. E. *Memory retrieval in animal learning*. Pennsylvania Lecture Series in Psychology, Susquehanna University / Bucknell University, Selinsgrove, PA, 1988.
- Swartzentruber, D., & Bouton, M. E. *Blocking between occasion setters and contextual stimuli*. Eastern Psychological Association, Boston, 1989.
- Bouton, M. E. *Context and memory retrieval in associative learning*. Psychobiology colloquium, Yale University, 1989.
- Bouton, M. E. *Context, memory retrieval, and interference in associative learning*. Psychology colloquium, University of York, England, 1989.
- Bouton, M. E. *Context and memory retrieval in associative learning*. Experimental Psychology colloquium, University of Cambridge, 1990.
- Bouton, M. E. *Toward a retrieval model of interference in Pavlovian learning*. Conference of The Experimental Analysis of Behaviour Group, York, England, 1990.

- Baker, A. G., Geczy, I., & Bouton, M. E. *Reinstatement of operant conditioning following the presence and the absence of the reinforcer*. Eastern Psychological Association, Philadelphia, 1990.
- Bouton, M. E. *A contextual analysis of fear extinction*. Psychology colloquium, Institute of Psychiatry, London, 1990.
- Bouton, M. E. *Context and retrieval processes in simple associative learning*. Experimental Psychology Society, Oxford, England, 1990.
- Bouton, M. E. *Availability and accessibility in associative learning: Another look at the learning-performance distinction*. Winter Conference on Animal Learning, Winter Park, Colorado, 1991.
- Bouton, M. E. *Context and memory retrieval in animal learning*. Psychobiology of animal cognition colloquium, Columbia University, 1991.
- Bouton, M. E. *Context, retrieval, and relapse after the extinction and counterconditioning of fear*. American Psychological Association, San Francisco, 1991.
- Bouton, M. E. *Context, retrieval, and relapse in extinction and other learning paradigms*. Psychology colloquium, Concordia University, Montreal, 1991.
- Bouton, M. E., Peck, C. A., & Brooks, D. C. *Contextual conditioning and performance in appetitive conditioning*. Psychonomic Society, San Francisco, 1991.
- Bouton, M. E., & Brooks, D. C. *Time and physical context effects in a Pavlovian discrimination reversal*. Eastern Psychological Association, Boston, 1992.
- Brooks, D. C., & Bouton, M. E. *Retrieval cues for extinction may attenuate spontaneous recovery*. Eastern Psychological Association, Boston, 1992.
- Bouton, M. E., & Nelson, J. B. *Context-specificity of target vs. feature inhibition in a feature-negative discrimination*. Psychonomic Society, St. Louis, 1992.
- Bouton, M. E. *Behavioral evidence that extinction is not unlearning*. Winter Conference on the Neurobiology of Learning and Memory, Park City, Utah, 1993.
- O'Boyle, E. A., Lamoureux, J., & Bouton, M. E. *Conditioned inhibition in a multiple-category learning task*. Eastern Psychological Association, Arlington, VA, 1993.
- Bouton, M. E., Nelson, J. B., & Ricker, S. T. *Context and memory retrieval: Some new relationships between extinction and conditioned inhibition*. Canadian Brain, Behavior, and Cognition Society, Toronto, 1993.
- Bouton, M. E. *Extinction is not forever: Sources of relapse after behavior change*. Science Weekend Symposium ("Does behavior change permanently?"), American Psychological Association, Toronto, 1993.
- Bouton, M. E. *Context, ambiguity, and classical conditioning*. Invited Address, American Psychological Association, Toronto, 1993.

- Brooks, D. C., & Bouton, M. E. *Retrieval of extinction attenuates spontaneous recovery and the renewal effect*. Psychonomic Society, Washington, D.C., 1993.
- Nelson, J. B., & Bouton, M. E. *Effect of context on inhibition arising from serial and simultaneous feature-negative discriminations*. Conference on Comparative Cognition, Melbourne, FL, 1994.
- Brooks, D. C., Hale, B., Nelson, J. B., & Bouton, M. E. *Reinstatement after counterconditioning*. Eastern Psychological Association, Providence, RI, 1994.
- Bouton, M. E. *Context, ambiguity, and classical conditioning*. Rutgers University Psychology Department Colloquium, 1994.
- Bouton, M. E. *Signals for whether versus when an event will occur*. Memorial Tribute to Robert C. Bolles, University of Washington, Seattle, 1994.
- Bouton, M. E. *Sources of relapse after behavior change: Remembering and forgetting in conditioning*. Hebb Lecture, McGill University, 1994.
- Bouton, M. E. *Signaling whether versus when an event will occur*. Robert C. Bolles Memorial, Psychonomic Society, St. Louis, 1994.
- Wilson, A., Brooks, D. C., & Bouton, M. E. *The role of the hippocampal system on two context effects after extinction*. Society for Neuroscience, Miami Beach, 1994.
- Bouton, M. E. *Context, ambiguity, and memory retrieval in simple associative learning*. Binghamton University Psychology Department Colloquium, 1995.
- Bouton, M. E. *The animal cognition in animal conditioning*. Conference on Comparative Cognition, Melbourne, FL, 1995.
- Brooks, D. C., & Bouton, M. E. *Mechanisms by which retrieval cues for extinction attenuate spontaneous recovery*. Eastern Psychological Association, Boston, 1995.
- Nelson, J. B., & Bouton, M. E. *The effects of context on inhibition following serial and simultaneous feature-negative discrimination training*. Eastern Psychological Association, Boston, 1995.
- Ricker, S. T., & Bouton, M. E. *Reacquisition following extinction in appetitive conditioning*. Eastern Psychological Association, Boston, 1995.
- Bouton, M. E., & Nelson, J. B. *Context, extinction, and inhibition*. First Annual Meeting of the Australian Learning Group, Townsville, Queensland, Australia, 1995.
- Bouton, M. E. *Memory and relapse effects in classical conditioning*. Science Weekend Symposium ("Basic conditioning processes and their place in contemporary psychology"), American Psychological Association, New York, 1995.
- Rosas, J. M., & Bouton, M. E. *Recuperacion espontanea de la conducta extinguida en aversion condicionada al sabor*. VII Congreso de la Sociedad Espanola de Psicologia comparada (SEPC), Bilbao, Spain, 1995.
- Bouton, M. E. *Context, memory retrieval, and behavior change*. Psychology Department Colloquium,

- Purdue University, 1995.
- Rosas, J. M., & Bouton, M. E. *Spontaneous recovery following extinction of a conditioned taste aversion*. Psychonomic Society, Los Angeles, 1995.
- Bouton, M. E. *Context, interference, and inhibition in simple associative learning*. Department of Experimental Psychology Colloquium, Duke University, 1995.
- Bouton, M. E. *Why the name Pavlov still rings a bell*. University Scholar Lecture, University of Vermont, 1996.
- Bouton, M. E., & Rosas, J. M. *Interactions between context switch and retention interval effects*. Conference on Comparative Cognition, Melbourne, FL, 1996.
- Bouton, M. E. *Context, memory retrieval, and behavioral inhibition*. Clarence H. Graham Memorial Lecture (Invited Address), Eastern Psychological Association, Philadelphia, 1996.
- Bouton, M. E. *Context and the modulation of learned performances*. Yale University Psychobiology / Learning Colloquium, 1996.
- Rosas, J. M., & Bouton, M. E. *Context switch and retention interval effects after conditioning and extinction of a taste aversion*. XXVI International Congress of Psychology, Montreal, 1996.
- Bouton, M. E. *Context, memory, and simple associative learning*. Neurobiology of Learning and Memory Colloquium, Universite Paris Sud, Paris, France, 1996.
- Bouton, M. E. *The several roles of context in learning and memory processes*. (2 lectures). University of Strasbourg, Strasbourg, France, 1996.
- Bouton, M. E. *Context and memory processes in associative learning*. European Neuroscience Association / European Brain and Behaviour Society, Strasbourg, France, 1996.
- Bouton, M. E. *Context, conditioning, and memory*. Psychology Department Colloquium, University of Toronto, February 1997.
- Bouton, M. E., & Nelson, J. B. *Are feature-negative and feature-positive discriminations psychological opposites?* Duke University Conference on Occasion-Setting, March 1997.
- Bouton, M. E., Nelson, J. B., & Rosas, J. M. *Paradox lost: Generalization gradients that flatten over time and their implications for a context-change account of forgetting*. International Conference on Comparative Cognition, Melbourne, FL, March 1997.
- Bouton, M. E. *The content of unlearning: Extinction, inhibition, and occasion setting*. Eastern Psychological Association, Washington, DC, April 1997.
- Nelson, J. B., & Bouton, M. E. *Context specificity and the sequential order of memories*. Eastern Psychological Association, Washington, DC, April 1997.
- Bouton, M. E. *Context, conditioning, and memory*. Psychology Department Colloquium ("Distinguished Psychologists Series"), University of California Los Angeles, February 1998.

- Bouton, M. E. *Theoretical and practical implications of a memory model of extinction*. Eastern Psychological Association, Boston, February 1998.
- Nelson, J. B., & Bouton, M. E. *A role for a context-dependent second association in feature-positive discriminations*. Eastern Psychological Association, Boston, February 1998.
- Bouton, M. E. *Why the name Pavlov still rings a bell: Learning, unlearning, and relapse*. Psychology Department Colloquium, California State University at Fresno, March 1998.
- Bouton, M. E. *Context, conditioning, and memory*. Psychology Department Colloquium, University of California, Berkeley, April 1998.
- Bouton, M. E. *Behavior maintenance after behavior change: Relapse in the learning laboratory*. Symposium on Maintenance of Behavior Change in Cardiovascular Risk Reduction, National Heart Lung and Blood Institute, Bethesda, July 1998.
- Bouton, M. E. *Context and inhibitory processes in behavior and memory*. Psychology Department Colloquium, Rutgers University, September 1998.
- Bouton, M. E. *Context and inhibitory processes in behavior and memory*. Psychology Department Colloquium, Brown University, October 1998.
- Bouton, M. E. *The complexities of contemporary research on conditioning as relevant to understanding panic disorder*. Society for Research in Psychopathology, Boston, November 1998.
- Bouton, M. E. *Practical and theoretical implications of a memory model of extinction*. Invited Address, Western Psychological Association, Irvine, CA April, 1999.
- Bouton, M. E. *Context and inhibitory mechanisms in animal memory*. President's Symposium, Western Psychological Association, Irvine, CA April, 1999.
- Bouton, M. E. *What makes learning context-specific?* American Psychological Association, Boston, August, 1999.
- Bouton, M. E. *Multiple roles of context in classical conditioning: An analysis of two effects of context after extinction*. Behavioral Pharmacology Society / European Behavioural Pharmacology Society, Boston, September, 1999.
- Bouton, M. E. *Context and memory processes in conditioning and associative learning*. Invited Address, XI Congress of the Spanish Society of Comparative Psychology, Baeza, Spain, September, 1999.
- Bouton, M. E., & Frohardt, R. J. *Behavioral and brain dissociations of two effects of context following extinction*. European Brain and Behaviour Society, Rome, October 1999.
- Frohardt, R. J., Guarraci, F. A., & Bouton, M. E. *The role of the hippocampus in reinstatement and renewal*. Society for Neuroscience, November 1999.
- Bouton, M. E., & Sunsay, C. *Surprise, frustration, and the contextual control of appetitive conditioning*. International Conference on Comparative Cognition, Melbourne, FL, March 2000.
- Bouton, M. E. *Context and memory processes in conditioning and associative learning*. Psychology

Department Colloquium, Dartmouth College, May 2000.

Frohardt, R. J., & Bouton, M. E. *Context freezing after lesions of the hippocampus or two of its efferent targets*. Society for Neuroscience, New Orleans, November 2000.

Bouton, M. E., & Sunsay, C. *Trials versus accumulating time in trials in a partial reinforcement procedure*. International Conference on Comparative Cognition, Melbourne, FL March 2001.

Bouton, M. E. *Are trials the basis of Pavlovian learning?* Guest Lecture, Gregynog conference on associative learning, Gregynog, Wales, April 2001.

Bouton, M. E., & Sunsay, C. *Effects of trial time, cycle time, and US probability on acquisition under partial reinforcement conditions*. Eastern Psychological Association, Washington, DC, April 2001.

Sunsay, C., Waddell, J., Gingras, A., Minton, A., & Bouton, M. E. *The relationship between inhibition of delay and nonmonotonic learning curves: Evidence from aversive and appetitive conditioning*. Eastern Psychological Association, Washington, DC, April 2001.

Bouton, M. E. *Context and memory processes in conditioning and associative learning*. Psychology Department Colloquium, University of New South Wales, Sydney, Australia, July 2001.

Bouton, M. E., & Sunsay, C. *Time versus trials as the basis of Pavlovian learning*. Meeting of the Australian Learning Group, Townsville, Queensland, Australia, July 2001.

Bouton, M. E. *Associative learning, behavior systems, and panic disorder*. American Psychological Association, San Francisco, August 2001.

Pineño, O., & Bouton, M. E. *Reacquisition when either extinction or partial reinforcement has followed an initial conditioning phase*. XIII Congress of the Spanish Society of Comparative Psychology, San Sebastian, Spain, September 2001.

Falls, W. A., & Bouton, M. E. *Behavioral and physiological studies of extinction: Extinction is not unlearning*. Pavlovian Society, New Brunswick, NJ, October 2001.

Bouton, M. E. *Why the name Pavlov still rings a bell: Modern implications of the world's most famous learning process*. J. R. Kantor Memorial Lecture, Denison University, Ohio, February 2002.

Bouton, M. E. *Context and memory processes in conditioning and associative learning*. Psychology Department Colloquium, Denison University, Ohio, February 2002.

Sunsay, C., Stetson, L., Melamed, T., & Bouton, M. E. *Priming effects in appetitive conditioning*. Eastern Psychological Association, Boston, March 2002.

Bouton, M. E. *Sources of relapse after extinction and counterconditioning: Context, ambiguity, and "unlearning."* Satellite Research Symposium, Anxiety Disorders Association of America, Austin, Texas, March 2002.

Bouton, M. E. *Context, memory, and learning: Synergistic relationships between conditioning theory, memory theory, and brain*. Kalamazoo College Symposium on Interdisciplinary Approaches to Neuroscience: The Hippocampus, Kalamazoo, MI, April 2002.

- Bouton, M. E. *Trials, rate, and conditioning: Separating trial-based and time-accumulation models of Pavlovian learning*. Yale University Psychobiology / Learning Colloquium, September 2002.
- Bouton, M. E. *Extinction is not forever: What modern learning research can tell us about lapse and relapse after behavior change*. Invited Address, Association for the Advancement of Behavior Therapy, Reno, November 2002.
- Bouton, M. E. *Context, ambiguity, and unlearning: Sources of relapse after behavioral extinction*. Conference on Posttraumatic Stress Disorder: Biological, Clinical, and Cultural Approaches to Trauma's Effects, Los Angeles, December 2002.
- Bouton, M. E. *Extinction is not forever*. Colloquium at the National Center for PTSD / Boston VAMC / Department of Psychiatry, Boston University, January 2003.
- Bouton, M. E. *Context, ambiguity, and relapse after behavioral extinction*. Keynote Address, Winter Conference on Animal Learning and Behavior, Winter Park, CO, February 2003.
- Bouton, M. E. *Behavior systems and the associative control of anxiety, fear, and panic*. Special Interest Meeting on Learning and Fear, Le Lignely, Belgium (University of Leuven), May 2003.
- Bouton, M. E. *Behavioral lapse and relapse mechanisms after extinction and counterconditioning*. National Institute of Mental Health Workshop, "Mechanisms of Extinction Learning: Basic, Clinical, and Translational Research," Rockville, MD, June 2003.
- Bouton, M. E. *Importance of context, new learning, and memory retrieval in understanding extinction*. Symposium on extinction, American Psychological Association, Toronto, August 2003.
- Bouton, M. E. *Behavior systems and the contextual control of anxiety, fear, and panic*. Conference on Emotion: Conscious and Unconscious, Clermont-Ferrand, France, September 2003.
- Bouton, M. E., Sunsay, C., Woods, A., & Zilski, J. *Effects of partial reinforcement on classical conditioning and extinction: Trial-based and time-based accounts*. XV Congress of the Spanish Society of Comparative Psychology, Barcelona, Spain, September, 2003.
- Bouton, M. E. *Context and memory processes in conditioning, extinction, and associative learning*. Psychology Department Colloquium, University of Maryland, October 2003.
- Bouton, M. E. *Behavior systems and the contextual control of anxiety, fear and panic*. Clinical colloquium, Indiana University, November 2003.
- Bouton, M. E. *Context and memory processes in conditioning, extinction, and associative learning*. Psychology Department Colloquium, Indiana University, November 2003.
- Bouton, M. E. *Context and memory processes in conditioning, extinction, and associative learning*. Psychology Department Colloquium, Cardiff University (Wales), February 2004.
- Bouton, M. E., Sunsay, C., Moody, E. W., & Woods, A. M. *Effects of time and time expectancy in extinction*. Gregynog conference on associative learning, Gregynog, Wales, April 2004.
- Bouton, M. E., & Woods, A. M. *Separating time-based and trial-based accounts of the partial*

- reinforcement extinction effect*. Eastern Psychological Association, Washington, DC, April 2004.
- Moody, E. W., & Bouton, M. E. *Effects of trial distribution on extinction and spontaneous recovery*. Eastern Psychological Association, Washington, DC, April 2004.
- Woods, A. M., & Bouton, M. E. *Reacquisition following extinction and following partial reinforcement in appetitive conditioning*. Eastern Psychological Association, Washington, DC, April 2004.
- Sunsay, C., & Bouton, M. E. *Theoretical explanations of the trial spacing effect in appetitive Pavlovian conditioning*. Eastern Psychological Association, Washington, DC, April 2004.
- Bouton, M. E. *Context and memory processes in extinction, relapse, and conditioning*. Psychology Department Colloquium, University of Minnesota, April 2004.
- Bouton, M. E. *Learning, extinction, and emotion in the context of time*. Master Lecture, American Psychological Association, Honolulu, HI, July 2004.
- Bouton, M. E. *Extinction generates new learning, not unlearning: Implications for relapse*. Workshop on Cognitive & Affective Neuroscience and Behavioral Treatment Development: New Directions for Translational Research, National Institute on Drug Abuse, September 2004.
- Waddell, J., & Bouton, M. E. *Effect of bed nucleus of the stria terminalis lesions on aversive conditioning with long-duration conditional stimuli*. Pavlovian Society, Baltimore, MD.
- Bouton, M. E. *Context and memory processes in extinction, relapse, and conditioning*. Symposium on Learning, Memory, and Brain Plasticity: Implications for Psychopathology, Freudenstadt, Germany, September 2004.
- Bouton, M. E. *Context and behavioral processes in conditioning, extinction, and relapse*. 10th Annual Duke Nicotine Research Conference, Duke University, October 2004.
- Bouton, M. E. *Context, memory, and relapse processes in extinction and associative learning*. Psychology Department Colloquium, Kent State University, November 2004.
- Bouton, M. E. *Multiple effects of time on conditioning and learning*. Psychology Department Colloquium, McGill University, January 2005.
- Bouton, M. E., & Woods, A. M. *What the effects of partial reinforcement procedures can tell us about extinction*. Conference on Extinction: The Neural Mechanisms of Behavior Change, Ponce, Puerto Rico, February 2005.
- Bouton, M. E. *Are lapse and relapse inevitable? Context and behavioral processes in extinction*. Presidential Address, Eastern Psychological Association, Boston, March 2005.
- Garcia-Gutierrez, A., Zilski, J., Moody, E. W., & Bouton, M. E. *Extinction in multiple contexts does not necessarily prevent the renewal effect*. Eastern Psychological Association, Boston, March 2005.
- Woods, A. M., & Bouton, M. E. *Occasional reinforced responses during extinction slow down rapid reacquisition in operant conditioning*. Eastern Psychological Association, Boston, March 2005.
- Bouton, M. E. *Learning and extinction: The place of basic behavioral science in a translational research*

- agenda*. National Institutes of Health Behavioral and Social Science Research Lecture, Rockville, MD, May 2005.
- Bouton, M. E. *Context*. Science of Memory: Concepts (Conference organized by the James S McDonnell Foundation). IBM Palisades, Palisades, NY, September 2005.
- Bouton, M. E. *Time between trials as a contextual stimulus*. Associative Learning Today: Conference in Honour of Shepard Siegel, McMaster University, Ontario, November 2005.
- Morris, R., Waddell, J., & Bouton, M. E. *Effect of bed nucleus of the stria terminalis lesions on aversive conditioning with long duration conditional stimuli and reinstatement of extinguished fear*. Society for Neuroscience, Washington, DC, November 2005.
- Bouton, M. E. *Multiple effects of time on learning, conditioning, and extinction*. Psychology Department Colloquium, Johns Hopkins University, Baltimore, MD March 2006.
- Bouton, M. E., & Garcia-Gutierrez, A. *Intertrial interval as a contextual stimulus: An unexpected asymmetry in interval timing*. Eastern Psychological Association, Baltimore, March 2006.
- Morris, R., & Bouton, M. E. *Effect of US magnitude on the decision to respond in appetitive and aversive conditioning*. Eastern Psychological Association, Baltimore, March 2006.
- Woods, A. M., & Bouton, M. E. *The effects of d-cycloserine on fear extinction and renewal*. Eastern Psychological Association, Baltimore, March 2006.
- Bouton, M. E., Sunsay, C., Garcia-Gutierrez, A., & Hendrix, M. C. *Understanding intertrial interval effects*. International Conference on Comparative Cognition, Melbourne, FL, March 2006.
- Bouton, M. E. *Are lapse and relapse inevitable? Context and behavioral processes in extinction*. Psychology Department Colloquium, College of Charleston, Charleston, SC, April 2006.
- Bouton, M. E., Garcia-Gutierrez, A., & Hendrix, M. C. *Time between trials as a contextual stimulus*. Gregynog conference on associative learning, Gregynog, Wales, April 2006.
- Bouton, M. E. *Contrasting trial-based and time-accumulation accounts of Pavlovian learning*. Meeting of the Pavlovian Society, Philadelphia September 2006.
- Bouton, M. E. *Behavior systems, extinction, and the contextual control of anxiety, fear, and panic*. Symposium on Learning, Memory, and Brain Plasticity: Implications for psychopathology. Schwetzingen, Germany, October 2006.
- Bouton, M. E. *Context, fear learning, and fear extinction*. Symposium on Pain and Learning, Gatsby Computational Neuroscience Unit, University College London, London, November 2006.
- Woods, A. M., & Bouton, M. E. *Effects of immediate versus delayed fear extinction*. Eastern Psychological Association, Philadelphia, March 2007.
- Bouton, M. E., & Hendrix, M. *Intertrial interval as a contextual stimulus: Further analysis of a new asymmetry in temporal discrimination learning*. Eastern Psychological Association, Philadelphia, March 2007.

- Bouton, M. E. *Behavior systems and the contextual control of anxiety, fear, and panic*. Gregory A. Kimble Lecture, Duke University Department of Psychology and Neuroscience, April 2007.
- Bouton, M. E., & Woods, A. M. *Optimizing extinction learning*. Special Interest Meeting on Learning and Fear, Le Lignely, Belgium (University of Leuven), May 2007.
- Woods, A. M., & Bouton, M. E. *A comparison of immediate versus delayed extinction after aversive and appetitive conditioning*. Special Interest Meeting on Learning and Fear, Le Lignely, Belgium (University of Leuven), May 2007.
- Bouton, M. E. *Context and memory processes in extinction: Some implications for understanding relapse*. Psychology Department Colloquium, University of Pittsburgh, September 2007.
- Bouton, M. E. *Context, extinction, and relapse: Insights from animal associative learning*. Department of Psychology, Universität Würzburg, Germany, October 2007.
- Woods, A. M., & Bouton, M. E. *Immediate extinction is less durable than delayed extinction in a fear-conditioning and an appetitive-conditioning paradigm*. Society for Neuroscience, San Diego, November 2007.
- Archbold, G., Bouton, M. E., & Nader, K. *Evidence for the persistence of contextual fear memories that have undergone immediate extinction*. Society for Neuroscience, San Diego, November 2007.
- Bouton, M. E. *Context and memory processes in extinction: Some implications for understanding relapse*. Ernest Gallo Clinic and Research Center, University of California San Francisco, November 2007.
- Unrod, M., Drobes, D. J., Stasiewicz, P. R., Ditre, J. W., Armstrong, G., Bouton, M. E., Miller, R. R., Niaura, R. S., & Brandon, T. H. *Key decision-points in conducting cue-exposure therapy for smoking cessation*. Society for Research on Nicotine and Tobacco, Portland, OR, February 2008.
- Bouton, M. E. *Optimizing extinction learning*. Winter Conference on Neural Plasticity, St. Lucia, February 2008.
- Bouton, M. E. *Context and memory processes in extinction: Some implications for understanding relapse*. Psychology Department Colloquium, University of Guelph, Ontario, March 2008.
- Bouton, M. E., Vurbic, D., & Woods, A. M. *Clarifying the effects of D-cycloserine on fear extinction learning*. Eastern Psychological Association, Boston, March 2008.
- Bouton, M. E., Woods, A. M., & Vurbic, D. *Effects of D-cycloserine and immediate extinction on extinction learning*. Symposium on Associative Learning, Gregynog, Wales, March 2008.
- Bouton, M. E. *Context and memory processes in extinction: Some implications for understanding relapse*. Alcohol and Drug Abuse Research Program Colloquium, Washington State University, Pullman, WA, April 2008.
- Bouton, M. E. *Context and memory processes in extinction: Some implications for understanding relapse*. Roger Brown Loucks Lecture in the Neurophysiological Basis of Learning and Memory, University of Washington, Seattle, April 2008.

- Bouton, M. E. *Learning and conditioning in the context of time*. Psychology Department Colloquium, University of Washington, Seattle, April 2008.
- Bouton, M. E. *Context, extinction, and relapse*. Psychology Department Colloquium, Binghamton University, May 2008.
- Bouton, M. E. *Optimizing extinction learning*. Plenary Lecture, Dutch Endo-Neuro-Psycho Society Meeting, Doorwerth, Netherlands, June 2008.
- Bouton, M. E. *Contextual and temporal modulation of emotional learning*. Symposium on Context in Learning and Memory, Dutch Endo-Neuro-Psycho Society Meeting, Doorwerth, Netherlands, June 2008.
- Bouton, M. E. *Parallel asymmetries in discrimination learning with temporal and explicit predictors of food*. Experimental Psychology Society, Symposium on Associative Learning, Liverpool, July 2008.
- Bouton, M. E. *Optimizing extinction learning*. Master Lecture, American Psychological Association, Boston, August 2008.
- Bouton, M. E. *Context, extinction, and relapse*. Psychology Department Colloquium, Rutgers University, October 2008.
- Bouton, M. E. *Context, extinction, and relapse*. Psychology Department and Neuroscience Program Colloquium, Middlebury College, November 2008.
- Bouton, M. E. *Context, extinction, and relapse*. Cognitive Science Colloquium, State University of New York at Buffalo, December 2008.
- Winterbauer, N. E., & Bouton, M. E. *Mechanisms behind resurgence of an extinguished operant behavior*. Eastern Psychological Association, Pittsburgh, March 2009.
- Vurbic, D., & Bouton, M. E. *Pavlovian secondary extinction in fear conditioning*. Eastern Psychological Association, Pittsburgh, March 2009.
- Bouton, M. E. *Context, extinction, and relapse*. Psychology Department Colloquium, University of Delaware, April 2009.
- Bouton, M. E. *Toward an associative analysis of temporal learning*. Society for the Quantitative Analyses of Behavior, Phoenix, May 2009.
- Bouton, M. E. *Toward an associative analysis of temporal learning: Novel asymmetries in the generalization of extinction*. Psychology Department Colloquium, Philipps-Universitat Marburg, Marburg, Germany, June 2009.
- Bouton, M. E. *The role of context in relapse after extinction of Pavlovian and instrumental learning*. European Behavioural Pharmacology Society, Rome, Italy, September 2009.
- Vurbic, D., & Bouton, M. E. *Secondary extinction of Pavlovian conditioned fear requires intermixed conditioning trials*. Pavlovian Society, Burlington, VT, October 2009.

- Winterbauer, N. E., & Bouton, M. E. *Different mechanisms in two kinds of resurgence following the extinction of an operant response*. Pavlovian Society, Burlington, VT, October 2009.
- Winterbauer, N. E., Todd, T. P., & Bouton, M. E. *Predictability of the temporal relationship between CS and US affects the distribution of conditioned responding*. Pavlovian Society, Burlington, VT, October 2009.
- Todd, T. P., Winterbauer, N. E., & Bouton, M. E. *Contrasting asymmetries in within trial temporal discrimination learning*. Pavlovian Society, Burlington, VT, October 2009.
- Winterbauer, N. E., & Bouton, M. E. *Resurgence of instrumental behavior II: Role of reinstatement*. Eastern Psychological Association, Brooklyn, March 2010.
- Vurbic, D., Winterbauer, N. E., & Bouton, M. E. *Secondary extinction of appetitive and aversive Pavlovian conditioning requires intermixed conditioning trials*. Eastern Psychological Association, Brooklyn, March 2010.
- Bouton, M. E. *Context and the extinction of free-operant behavior*. Eastern Psychological Association, Brooklyn, March 2010.
- Todd, T. P., Vurbic, D., Winterbauer, N. E., & Bouton, M. E. *ABA, AAB, and ABC renewal of extinguished instrumental responding*. Eastern Psychological Association, Brooklyn, March 2010.
- Bouton, M. E., Winterbauer, N. E., Vurbic, D., & Todd, T. P. *Renewal and resurgence after the extinction of free-operant behavior*. Symposium on Associative Learning, Gregynog, Wales, March 2010.
- Bouton, M. E. *Learning and unlearning appetitive behavior*. Festschrift for Stephen C. Woods, University of Cincinnati, April 2010.
- Bouton, M. E. *Context, lapse, and relapse after extinction of instrumental (operant) behavior*. National Institute on Drug Abuse Intramural Research Program Seminar, Baltimore, June 2010.
- Bouton, M. E. *Timing and associative learning: Does one explain the other?* Presidential Address, Division 6 (Division of Behavioral Neuroscience and Comparative Psychology), American Psychological Association, San Diego, August 2010.
- Todd, T. P., Winterbauer, N. E., & Bouton, M. E. *Effects of self-generated priming of the conditioned stimulus on the acquisition of conditioned responding*. Pavlovian Society, Baltimore, October 2010.
- Vurbic, D., Gold, B., & Bouton, M. E. *Effects of d-cycloserine on operant extinction learning*. Pavlovian Society, Baltimore, October 2010.
- Bouton, M. E. *Timing and associative learning: Does one explain the other?* Pavlovian Society, Baltimore, October 2010.
- Bouton, M. E. *Context, extinction, and relapse*. Keynote Address, Indianapolis Chapter of the Society for Neuroscience and Psychiatry Department Grand Rounds, Indiana University - Purdue University Indianapolis, Indianapolis, IN, October 2010.

- Bouton, M. E. *Context, lapse, and relapse after extinction of instrumental (operant) behavior*. Psychology Department Colloquium, Concordia University, Montreal, November 2010.
- Bouton, M. E. *Context, extinction, and memory: Implications for understanding relapse*. CSCA Lecture Series, Cognitive Science Center of the University of Amsterdam, November 2010.
- Unrod, M., Drobles, D. J., Stasiewicz, P. R., Ditre, J. W., Bouton, M. E., Miller, R. R., Niaura, R. S., & Brandon, T. H. *Extinction of cue-provoked craving during cue-exposure therapy for smoking cessation*. Society for Research on Nicotine and Tobacco, Toronto, February 2011.
- Bouton, M. E. *Finding trends in psychology*. Eastern Psychological Association (“EPA Past Presidents Panel”), Cambridge, MA, March 2011.
- Bouton, M. E., Todd, T. P., Vurbic, D., & Winterbauer, N. E. *Contextual control of operant extinction learning*. Society for the Quantitative Analyses of Behavior, Denver, May 2011.
- Bouton, M. E. *Relapse processes in instrumental (operant) learning: Implications for addiction*. Addiction Seminar, Medical University of South Carolina, Charleston, November 2011.
- Bouton, M. E. *Context, extinction, and relapse*. Grand Rounds, Department of Psychiatry and Behavioral Sciences, Medical University of South Carolina, Charleston, November 2011.
- Bouton, M. E. *Context, extinction, and memory: Implications for a biobehavioral understanding of relapse*. Psychology and Neuroscience Colloquium, St. Mary’s College of Maryland, November 2011.
- Todd, T. P., Winterbauer, N. E., & Bouton, M. E. *Contextual control of appetite: Renewal of inhibited food-seeking behavior in sated rats after extinction*. Eastern Psychological Association, Pittsburgh, March 2012.
- Bouton, M. E., & Winterbauer, N. E. *Getting rid of resurgence*. Eastern Psychological Association, Pittsburgh, March 2012.
- Bouton, M. E., Todd, T. P., Lucke, S., Vurbic, D., & Winterbauer, N. E. *Contextual control of instrumental extinction: Renewal and resurgence*. Symposium on Associative Learning, Gregynog, Wales, April 2012.
- Bouton, M. E. *Context, extinction, and memory: Implications for a biobehavioral understanding of relapse*. Psychology Department Colloquium, Tufts University, April 2012.
- Vurbic, D., & Bouton, M. E. *Effects of d-cycloserine on operant extinction learning*. American Psychological Association, Orlando, August 2012.
- Bouton, M. E. *Context, extinction, and memory: Implications for a biobehavioral understanding of relapse*. Psychology Department Colloquium, University of the Basque Country, San Sebastian, Spain, September 2012.
- Bouton, M. E. *Contextual control of operant extinction learning*. Inaugural Lecture, Joint Meeting of the International Congress of the Spanish Society for Comparative Psychology and the International Society of Comparative Psychology, Jaén, Spain, September 2012.
- Astley, S., & Bouton, M. E. *The long+ effect as demonstrated by humans playing a video game*. Joint

- Meeting of the International Congress of the Spanish Society for Comparative Psychology and the International Society of Comparative Psychology, Jaén, Spain, September 2012.
- León, S. P., Vurbic, D., Todd, T. P., & Bouton, M. E. *ABA and AAB renewal in discriminant operant procedure with rats*. Joint Meeting of the International Congress of the Spanish Society for Comparative Psychology and the International Society of Comparative Psychology, Jaén, Spain, September 2012.
- Bouton, M. E. *Contextual control of operant extinction learning*. DFG Research Group 1581 Symposium, Extinction Learning: Behavioral, Neural and Clinical Implications. Herne, Germany, September 2012.
- Bouton, M. E. *Contextual control of operant extinction learning*. Conferencia Magistral (Keynote Address), XXII Congreso de la Sociedad Mexicana de Análisis de la Conducta (Reunión Satélite de Aprendizaje y Memoria), Guanajuato, Mexico, November 2012.
- Bouton, M. E. *Contextual control of operant extinction learning*. Department of Clinical Psychology, University of Amsterdam, November 2012.
- Bouton, M. E. *Contextual control of operant extinction learning*. Department of Clinical Psychology, Maastricht University (Netherlands), December 2012.
- Schepers, S. T., Trask, S., & Bouton, M. E. *Effects of a negative contingency in phase 2 reinforcement in a resurgence paradigm*. Eastern Psychological Association, New York City, March 2013.
- Bouton, M. E. (2013). *The surprising importance of the context-response relation in instrumental learning and extinction*. Australian Learning Group, Sydney, Australia, April 2013.
- Bouton, M. E. (2013). *Relapse and contextual control of inhibited (extinguished) operant behavior*. School of Psychology Colloquium, University of Sydney. Sydney, Australia, April 2013.
- Bouton, M. E. (2013). *Relapse and contextual control of inhibited (extinguished) operant behavior*. School of Psychology Colloquium, University of New South Wales, Sydney, Australia, April 2013.
- Bouton, M. E. (2013). "Relapse" after punishment and negative contingency. "Bouton Bonanza" (Symposium), Brain & Mind Research Institute, University of Sydney, Sydney, Australia, May 2013.
- Bouton, M. E., Todd, T. P., & León, S. P. (2013). *Contextual control of free and discriminated operant behavior*. Society for the Quantitative Analysis of Behavior, Minneapolis, May 2013.
- Bouton, M. E. *Context, operant behavior, and extinction*. B. F. Skinner Lecture, Association for Behavior Analysis International, Minneapolis, May 2013.
- Bouton, M. E. *Impediments to behavior change: Relapse processes after extinction and behavioral inhibition*. Conference on Behavior Change, Health, and Health Disparities, Burlington, VT, September 2013.
- Todd, T. P., Vurbic, D., & Bouton, M. E. *Renewal after the extinction of discriminated operant behavior: Role of context-specific response inhibition*. Pavlovian Society, Austin, September 2013.

- Bouton, M. E. *Contextual control of the inhibition of instrumental behavior: Some implications for understanding relapse and impediments to behavior change*. Quad-L Award Lecture, Department of Psychology, University of New Mexico, November 2013.
- Bouton, M. E. *Contextual control of instrumental actions and habits*. Winter Conference on Neural Plasticity, Vieques, Puerto Rico, February 2014.
- Bouton, M. E. *Contextual control of instrumental behavior and its inhibition*. Keynote address, Eastern Psychological Association, Boston, March 2014.
- Thrailkill, E. A., & Bouton, M. E. *Effects of extinction of procurement responding in a heterogeneous procurement-consumption instrumental chain*. Eastern Psychological Association, Boston, March 2014.
- Schepers, S. T., & Bouton, M. E. *Renewal after the punishment of free operant behavior*. Eastern Psychological Association, Boston, March 2014.
- Trask, S. M., & Bouton, M. E. *Hierarchical association between the context, response, and reinforcer in operant learning*. Eastern Psychological Association, Boston, March 2014.
- Thrailkill, E. A., & Bouton, M. E. *A context switch weakens instrumental responding regardless of amount of training with ratio or interval schedules*. Eastern Psychological Association, Boston, March 2014.
- Thrailkill, E. A., Todd, T. P., & Bouton, M. E. *Effects of CS duration, intertrial interval, and the I/T ratio on appetitive conditioning*. Eastern Psychological Association, Boston, March 2014.
- Todd, T. P., Vurbic, D., & Bouton, M. E. *Mechanisms of renewal after the extinction of discriminated operant behavior*. Eastern Psychological Association, Boston, March 2014.
- Bouton, M. E., Trask, S. M., & Thrailkill, E. A. *Contextual control of instrumental actions and habits*. Associative Learning Symposium, Gregynog, Wales, April 2014.
- Bouton, M. E. *Contextual control of instrumental behavior and its inhibition*. Pavlovian Society, Seattle, September 2014.
- Trask, S., & Bouton, M. E. *Discriminative role of the reinforcer in the inhibition of operant behavior*. Pavlovian Society, Seattle, September 2014.
- Schepers, S. T., & Bouton, M. E. *Reducing the resurgence of an instrumental behavior after extinction by altering the temporal distribution of reinforcers during the response elimination phase*. Pavlovian Society, Seattle, September 2014.
- Thrailkill, E. A., Todd, T. P., & Bouton, M. E. *Effects of CS duration, intertrial interval, and the I/T ratio on appetitive conditioning*. Pavlovian Society, Seattle, September 2014.
- Eddy, M. C., Todd, T. P., Bouton, M. E., & Green, J. T. *Exercise in adolescent rats reduces renewal of extinguished instrumental behavior*. Pavlovian Society, Seattle, September 2014.
- Bouton, M. E. *Context and memory as revealed in operant tasks*. Memorial symposium in honor of Carolyn Rovee-Collier, Eastern Psychological Association, Philadelphia, March 2015.

- Bouton, M. E. *Interference at performance output in instrumental learning*. Symposium celebrating the career of Ralph R. Miller, Eastern Psychological Association, Philadelphia, March 2015.
- Trask, S., & Bouton, M. E. *Reinforcers associated with extinction can attenuate free-operant renewal*. Eastern Psychological Association, Philadelphia, March 2015.
- Schepers, S. T., & Bouton, M. E. *Effects of reinforcer distribution during response elimination on resurgence of an instrumental behavior*. Eastern Psychological Association, Philadelphia, March 2015.
- Thrailkill, E. A., & Bouton, M. E. *An associative analysis of instrumental chains*. Eastern Psychological Association, Philadelphia, March 2015.
- Carranza-Jasso, R., Trask, S., & Bouton, M. E. *Response inhibition during extinction of discriminated operant conditioning*. Eastern Psychological Association, Philadelphia, March 2015.
- Thrailkill, E. A., & Bouton, M. E. *Extinction reveals the associative structure of instrumental chains*. Associative Learning Symposium, Gregynog, Wales, April 2015.
- Bouton, M. E. *Extinction and recovery of emotional and instrumental memory*. Katholieke Universiteit Leuven, Leuven, Belgium, September 2015.
- Bouton, M. E., Trask, S., & Carranza-Jasso, R. *Learning not to make the response during operant extinction*. Pavlovian Society, Portland, OR, September 2015.
- Shipman, M. L., Trask, S., Green, J. T., & Bouton, M. E. *Inactivation of the prelimbic cortex attenuates context-dependent excitatory operant responding*. Pavlovian Society, Portland, OR, September 2015.
- Miles, O. W., Thrailkill, E. A., May, V., Bouton, M. E., & Hammack, S. E. *Intra-bed nucleus of the stria terminalis (BNST) pituitary adenylate cyclase activating peptide (PACAP) infusion reinstates cocaine seeking in rats*. Society for Neuroscience, Chicago, October 2015.
- Bouton, M. E. *Response inhibition and response recovery in the extinction of instrumental learning*. Symposium on Extinction Learning: Neural mechanisms, behavioural manifestations, and clinical implications. Ruhr-University Bochum, Germany, November 2015.
- Bouton, M. E. *Contextual control of operant behavior and its inhibition*. Scott Center for Autism Treatment Colloquium, Florida Institute of Technology, Melbourne, FL, February 2016.
- Trott, J. M., Thrailkill, E. A., & Bouton, M. E., *Renewal of an extinguished behavior in the context of a preceding response*. Eastern Psychological Association, New York City, March 2016.
- Thrailkill, E. A., Bergeria, C., Davis, D., & Bouton, M. E. *Relapse following the removal of incentives for desired behavior*. Eastern Psychological Association, New York City, March 2016.
- Schepers, S., T., & Bouton, M. E. *Instrumental food-seeking inhibited while hungry can renew in the context of satiation*. Eastern Psychological Association, New York City, March 2016.
- Trask, S., Shipman, M. L., Green, J. T., & Bouton, M. E. *Inactivation of the prelimbic cortex attenuates*

- context-dependent excitatory operant responding*. Eastern Psychological Association, New York City, March 2016.
- Trask, S., & Bouton, M. E. *Transfer of operant responding to a new context after training in multiple contexts*. Eastern Psychological Association, New York City, March 2016.
- Bouton, M. E. *Contextual control of instrumental behavior and its inhibition*. Psychology Department Colloquium, University of Chile, Santiago, Chile March 2016.
- Bouton, M. E. *Mechanisms of relapse after behavior change*. Chilean Society of Scientific Psychology, Pucón, Chile, March 2016.
- Bouton, M. E., Trask, S., & Carranza-Jasso, R. *Learning to inhibit the response during operant extinction*. Associative Learning Symposium, Gregynog, Wales, April 2016.
- Bouton, M. E. *Contextual control of instrumental behavior and its inhibition*. Symposium on Addictions in Theory, University College London (Gatsby Neurocomputation Unit), May 2016.
- Bouton, M. E. *Resurgence and relapse after incentivized choice treatment*. Society for the Quantitative Analysis of Behavior, Chicago, May 2016.
- Thrailkill, E. A., & Bouton, M. E. *Persistence and relapse in heterogeneous behavior chains*. Society for the Quantitative Analysis of Behavior, Chicago, May 2016.
- Bouton, M. E. *Current research on persistence and relapse in humans and nonhuman animals* [Symposium Discussant]. Association for Behavior Analysis International, Chicago, May 2016.
- Bouton, M. E. *Contextual control of extinction in emotional and instrumental learning*. Emotional Memory Course, Neuroscience School of Advanced Studies, Bressanone, Italy, August 2016.
- Schepers, S. T., & Bouton, M. E. *Renewal in the context of stress: A potential mechanism for stress-induced reinstatement*. Pavlovian Society, Jersey City, NJ, September 2016.
- Shipman, M. L., Trask, S., Bouton, M. E., & Green, J. T. *Prelimbic cortex inactivation attenuates responding of undertrained but not overtrained actions*. Pavlovian Society, Jersey City, NJ, September 2016.
- Thrailkill, E. A., Rojas, G., & Bouton, M. E. *How to break a habit*. Pavlovian Society, Jersey City, NJ, September 2016.
- Trask, S., & Bouton, M. E. *Reducing the negative impact of context change on an operant response*. Pavlovian Society, Jersey City, NJ, September 2016.
- Bouton, M. E. *Contextual control of instrumental behavior and its inhibition*. Leaton Lecture, Department of Psychological and Brain Sciences Colloquium Series, Dartmouth College, Hanover, NH, October 2016.
- Miles, O. W., Thrailkill, E. A., Linden, A. K., May, V., Bouton, M. E., & Hammack, S. E. *Cocaine self-administration alters endogenous pituitary adenylate cyclase activating peptide (PACAP) levels in the bed nucleus of the stria terminalis (BNST)*. Society for Neuroscience, San Diego, November 2016.

- Trask, S., & Bouton, M. E. *Retrieval cues associated with alternative reinforcement can attenuate resurgence of an extinguished operant response*. Eastern Psychological Association, Boston, March 2017.
- Thraillkill, E. A., & Bouton, M. E. *What is the goal of the procurement response in a behavior chain?* Eastern Psychological Association, Boston, March 2017.
- Schepers, S. T., & Bouton, M. E. *Renewal in the context of stress: A potential mechanism for stress-induced reinstatement*. Eastern Psychological Association, Boston, March 2017.
- Bouton, M. E. *Contextual control of instrumental behavior and its inhibition*. School of Psychology Colloquium, University of Sydney, Sydney, Australia, May 2017.
- Bouton, M. E. *Contextual control of instrumental behavior and its inhibition: Clinical implications of the understanding of animal behavior*. Department of Psychology Colloquium, University of Jaén, Jaén, Spain, July 2017.
- Bouton, M. E. *Contextual control of instrumental behavior and its inhibition*. Katholieke Universiteit Leuven, Leuven, Belgium, September 2017.
- Bouton, M. E. *Contextual control of retroactive inhibition in instrumental learning*. Pavlovian Society, Philadelphia, October 2017.
- Shipman, M. L., Trask, S., Bouton, M. E., & Green, J. T. *Inactivation of prelimbic and infralimbic cortex respectively affect expression of minimally-trained and extensively-trained goal-directed actions*. Pavlovian Society, Philadelphia, October 2017.
- Trask, S., Keim, C. L., & Bouton, M. E. *Factors that encourage generalization from extinction to test reduce resurgence of an extinguished operant response*. Pavlovian Society, Philadelphia, October 2017.
- Thraillkill, E. A., Trask, S., & Bouton, M. E. *Can discriminated operants become habits?* Pavlovian Society, Philadelphia, October 2017.
- Steinfeld, M., Thraillkill, E. A., & Bouton, M. E. *Extinction of procurement prevents renewal of consumption when an extinguished consumption response is returned to a heterogeneous chain*. Pavlovian Society, Philadelphia, October 2017.
- Bouton, M. E. *Contextual control of operant behavior and its inhibition*. Conferencia Magistral (Opening Keynote Address), XXVII Congreso de la Sociedad Mexicana de Análisis de la Conducta, Aguascalientes, Mexico, October 2017.
- Bouton, M. E. *Mechanisms of relapse after behavior change 1: Pavlovian (respondent) learning and Mechanisms of relapse after behavior change 2: Instrumental (operant) learning*. 3-hour Seminar and 4-hour Workshop (respectively), XXVII Congreso de la Sociedad Mexicana de Análisis de la Conducta, Aguascalientes, Mexico, October 2017.
- Bouton, M. E. *Contextual control of instrumental behavior and its inhibition*. Colloquium and Symposium Keynote, Neuroscience and Cognition Program, Utrecht University, Netherlands, March 2018.

- Bouton, M. E., Alcala, J., Vidal, P., Trask, S., & Thraillkill, E. A. *Can discriminated operants become habits?* Associative Learning Symposium, Gregynog, Wales, March 2018.
- Thraillkill, E., Ameden, W., & Bouton, M. E. *Factors that influence resurgence of an extinguished instrumental response in humans.* Eastern Psychological Association, Philadelphia, March 2018.
- Steinfeld, M., Thraillkill, E., & Bouton, M. E. *Extinction of procurement prevents renewal of extinguished consumption when it is returned to the heterogeneous chain.* Eastern Psychological Association, Philadelphia, March 2018.
- Trask, S., Keim, C., & Bouton, M. E. *Factors encouraging generalization from extinction reduce resurgence of an extinguished operant response.* Eastern Psychological Association, Philadelphia, March 2018.
- Bouton, M. E. *Context effects on voluntary behavior and its inhibition.* Research Society on Alcoholism, San Diego, June 2018.
- Shipman, M., Bouton, M. E., & Green, J. T. *Chemogenetic inhibition of prelimbic cortex projections to dorsomedial striatum attenuates operant responding.* Pavlovian Society, Iowa City, Iowa, October 2018.
- Allan, S., Steinfeld, M., Thraillkill, E., & Bouton, M. *Devaluation context influences how aversion conditioning identifies goal-directed and habitual behavior.* Eastern Psychological Association, New York, March 2019.
- Bouton, M. Thraillkill, E., Trask, S., & Alfaro, F. *Role of response error versus expectation error in instrumental extinction.* Eastern Psychological Association, New York, March 2019.
- Steinfeld, M., Balea, P., & Bouton, M. *Extinction of a discriminated operant response without the response.* Eastern Psychological Association, New York, March 2019.
- Thraillkill, E., & Bouton, M. *Discriminative properties of the alternative reinforcer can reduce resurgence in humans.* Eastern Psychological Association, New York, March 2019.
- Bouton, M. E. *Contextual control of instrumental behavior and its inhibition.* Colloquium, Center for Behavioral Neuroscience, American University, Washington, DC, April 2019.
- Bouton, M. E. *Critical events in the extinction of discriminated operant behavior.* Associative Learning Symposium, Gregynog, Wales, April 2019.
- Bouton, M. E., Allan, S., Tavakkoli, A., Steinfeld, M., & Thraillkill, E. A. *Separating goal-directed action from habit: Role of the context in which taste aversion learning occurs in creating the reinforcer devaluation effect.* Society for Neuroscience, Chicago, October 2019.
- Bouton, M. E. *Contextual control of behavior change.* Invited address, Southeastern Association for Behavior Analysis, Richmond, VA, October 2019.
- Steinfeld, M., & Bouton, M. E. *Renewal of goal-directed actions and habits after extinction [virtual].* Eastern Psychological Association, May 2020.
- Michaud, N. L., Thraillkill, E. A., & Bouton, M. E. *Stimulus salience and reinforcer predictability in the*

- formation of habits* [virtual].. Eastern Psychological Association, May 2020.
- Broomer, M., & Bouton, M. E. *Returning habit back to goal-directed action with surprising reinforcers* [virtual]. Eastern Psychological Association, May 2020.
- Thrailkill, E. A., Thorpe, K., & Bouton, M. E. *Goal-directed and habitual behavior chains in rats and humans* [virtual]. Eastern Psychological Association, May 2020.
- Broomer, M. C., & Bouton, M. E. *Infralimbic cortical control of current versus previous behavioral state*. Society for Neuroscience [virtual], January 2021
- Broomer, M. C., & Bouton, M. E. *The role of infralimbic cortex in toggling instrumental habits and actions*. Eastern Psychological Association [virtual], March 2021.
- Michaud, N. L., & Bouton, M. E. *Associative structures underlying discriminated three-response behavior chains*. Eastern Psychological Association [virtual], March 2021.
- Steinfeld, M. R., & Bouton, M. E. *Testing the specificity of response control in discriminated operant learning*. Eastern Psychological Association [virtual], March 2021.
- Bouton, M. E. *Learning to stop responding*. B. F. Skinner lecture, Association for Behavior Analysis International [virtual], May 2021.
- Steinfeld, M., & Bouton, M. E. *Investigating operant response inhibition with a feature-negative paradigm*. Pavlovian Society, Ann Arbor, MI, October 2021.
- Bouton, M. E. *Understanding and preventing resurgence*. Panel discussant, Southeastern Association for Behavior Analysis [virtual], October 2021.
- Bouton, M. E. *Context, behavior change, and habit learning*. Vermont Center on Behavior and Health, Burlington, VT [virtual], December 2021.
- Bouton, M. E. *Context, behavior change, and habit learning*. University of California Los Angeles Department of Psychology Behavioral Neuroscience Area Journal Club, January 2022.
- Michaud, N., & Bouton, M. E. *Partial reinforcement effects on acquisition and extinction of a conditioned taste aversion*. Eastern Psychological Association, New York City, March 2022.
- Steinfeld, M., & Bouton, M. E. *Inhibition in instrumental learning feature-negative paradigms and extinction*. Eastern Psychological Association, New York City, March 2022.
- Steinfeld, M. R., & Bouton, M. E. (presented by MEB). *Inhibition of instrumental responses after extinction and after feature-negative discrimination learning*. Associative Learning Symposium, Gregynog, Wales, April 2022.
- Bouton, M. E. *Context, behavior change, and habit learning*. Department of Cognitive and Behavioral Sciences, National Autonomous University of Mexico, Mexico City [virtual], May 2022.
- Bouton, M. E. *Context, behavior change, and habit learning*. Society for the Quantitative Analysis of Behavior, Boston, May 2022.

- Bouton, M. E. *Context, behavior change, and habit learning*. Department of Psychology, Universidad de Jaén, Jaén, Spain, June 2022.
- Bouton, M. E. *Response inhibition and habit in instrumental learning*. Symposium, University of the Basque Country, San Sebastian, Spain, June 2022.
- Bouton, M. E. *Habits, actions, and behavior change: One intersection of neuroscience, behavior, and health*. Keynote Address, Neuroscience, Behavior, and Health Forum, Burlington, VT, February 2023.
- Michaud, N. L., & Bouton, M. E. *New failures to find reinstatement after extinction of a conditioned taste aversion*. Eastern Psychological Association, Boston, February 2023.
- Broomer, M. C., & Bouton, M. E. *The role of infralimbic cortex in punishment as well as extinction*. Eastern Psychological Association, Boston, February 2023.
- Bouton, M. E. *Habit, goal direction, and behavior change*. Habit: Neuroscience, Behavior, and Field Data, California Institute of Technology, Pasadena, CA, March 2023.
- Bouton, M. E. *Habit, goal direction, and behavior change*. INSEAD 12th Invitational Choice Meeting, Habit Group, Fontainebleau, France, August 2023.
- Bouton, M. E. *Habit, goal direction, and behavior change*. Pavlovian Society, Austin, September 2023.
- Bouton, M. E. *Habit, goal direction, and persistence*. Associative Learning Symposium, Gregynog, Wales, March 2024.
- Harlan, E. W., Thrailkill, E.A., Green, J. T., & Bouton, M. E. *Intertrial interval as a contextual stimulus in discriminated operant conditioning*. Pavlovian Society, Indianapolis, September 2024.
- Bouton, M. E. *Habits, actions, and behavior change: A research story at the intersection of behavior, brain, and health science*. Church Neuroscience Lecture, St. Lawrence University, Canton, New York, October 2024.
- Bouton, M. E. *Paying attention to behavior*. Festschrift for Michael S. Fanselow, University of California Los Angeles, November 2024.
- Bouton, M. E. *Paying attention (or not) to what you are doing: Goal direction, inhibition, and habit in operant learning*. Invited Address, Association for Behavior Analysis International, Washington, DC, May 2025.
- Bouton, M. E. *Paying attention (or not) to what you are doing: Habit, goal direction, and inhibition in instrumental learning*. Psychology of Associative Learning and Memory (PALM) online lecture series, based at the University of Lille, June 2025.