Gene M. Heyman
Dept of Psychology & Neuroscience
Boston College
Chestnut, Hill, MA 02467

(617) 522-9287
heymang@bc.edu
http://www.geneheyman.com/

Education

Harvard University, Experimental Psychology, Ph.D., 1977

Professional Appointments

Senior Lecturer, Department of Psychology, Boston College, 2014-
Associate, Department of Psychology, Harvard University 2012 – 2019
Lecturer, Department of Psychology, Boston College, 2008- 2014
Lecturer, Department of Psychiatry, Harvard Medical School, 1998- 2012
Research Psychologist, McLean Hospital, 1998-2012
Adjunct Associate Professor, Heller School for Social Policy, Brandeis University, 2002-2008
Visiting Professor, University of Sao Paolo, Brazil, fall of 2001
Associate Professor, Department of Psychology, Harvard University, 1992-1998
Assistant Professor, Department of Psychology, Harvard University, 1989-1992
Senior Research Biologist, Lederle Laboratories, 1983-1989
Postdoctoral Fellow, Pharmacological and Physiological Sciences, Univ. of Chicago, 1981-1983
Lecturer on Psychology and Social Relations, Harvard University, 1979-1981
Research Fellow, Andrus Gerontology Center, University of Southern California, 1978-1979
Instructor, Simmons College, 1977
Instructor, Massachusetts Institute of Technology, 1975

Grants

Ignite Fund (2015): Attention allocation
NIDA (2002-2007): Individual differences in choice study predict drug use.
NIDA (1998-2001): Drug use and laboratory measures of rational choice.
Endowment for research in human biology (1997-1998): Daidzin inhibits alcohol consumption.
Russell Sage Foundation (1995-1998): Natural history of addiction.
National Science Foundation (1994-1997): An economic investigation of maximizing and matching
Milton Fund (1993-1994): Pharmacologically induced changes in preference for ethanol in rats
Clark Fund (1993-1994): Blood alcohol levels and preference for alcoholic drinks in rats
NIAAA & NIH, Shannon Director's Award (1994-1997): Determinants of ethanol reinforcement
NIAAA (1991-1993): Experimental analysis of ethanol reinforcing efficacy in rats
Clark Fund (1990-1991): Addictive drugs: a rat model of cocaine and ethanol consumption
Milton Fund (1989-1990): The reinforcement efficacy of abused drugs in rats
NIH Postdoctoral Fellowship (1981-1983): Pharmacological and Physiological Sciences Dept., University of Chicago
NIA Postdoctoral Fellowship (1978-1979): Andrus Gerontology Center, Univ. of S. California

Awards & Honors

Faculty Fellowship, Boston College (fall, 2016)
Certificate of Distinction in Teaching, Harvard University (2007)
Honorary Coach, Harvard Women's Varsity Basketball (2007)
Certificate of Distinction in Teaching, Harvard University (2006)
Hoopes Prize (2006): "For excellence in work with undergraduates," Harvard University
Hoopes Prize (1996): "For excellence in work with undergraduates," Harvard University
Sabbatical award for service to department (1995-1996), Harvard University
Hoopes Prize (1993): "For excellence in work with undergraduates," Harvard University

Professional Service

NIDA Challenge Grant Reviewer, 2009. NIDA Behavioral Processes Review Committee, 2004, 2005, 2007 ad hoc. NIAAA Biomedical Research Review Committee, 2001- 2003 and ad hoc 2005, 2006. Computational models in addiction, NIDA Workshop, 2000. New Animal Models of Drug Abuse, NIDA Workshop, 1998. Broadening Basic Behavioral Science Research in Drug Abuse, Special Review Committee, NIDA, 1996. Board of Editors, Journal of the Experimental Analysis of Behavior, 1979-1981, 1995-1998, 2005-2008. Invited reviews for various journals and granting institutions, including: Addiction Research & Theory, Alcohol & Alcoholism: Clinical and Experimental Research, Behavioural Pharmacology, Behavioral Analysis Letters, Behavioral and Brain Sciences, Journal of Mathematical Psychology, Journal of Clinical and Experimental Psychopharmacology, Learning & Motivation, Pharmacology, Biochemistry, & Behavior, Physiology & Behavior, Psychonomic Bulletin & Review, Psychological Review, Psychological Science, Perspectives on Psychological Science, Psychopharmacology, Science, N.S.F., N.I.M.H, European Science Consortium, Philosophical Psychology, Journal of Experimental Psychology: Animal Learning and Cognition, Paris Institute for Advanced Studies, Journal of Experimental Psychology: General, Nature, Journal of Studies on Alcohol and Drugs, American Journal on Addictions

Clinical Experience

Clinical Fellow: North Charles Institute of the Addictions, 1996-1999
Intern: Briggs Mental Health Center (Massachusetts Mental Health Department), 1969-1971

Publications

Heyman, G. M., Ryu, E., & Brownell, H. (2024). Evidence that intergenerational income mobility is the strongest predictor of drug overdose deaths in U.S. Midwest Counties. *International Journal of Drug Policy.*

Heyman, G. M. (2024). Disapproving of destructive drug use should not be confused with stigmatizing drug addicts. *Addiction Research & Theory, 32*(2), 95-96.

Heyman, G. M. (2023). Overconsumption as a function of how individuals make choices. *Journal of the Experimental Analysis of Behavior, 119*(1), 91-103.

Heyman, G. M. (2022). Political partisanship and cognitive proficiency predict U.S. state differences in Covid-19 vaccination rates. *Manuscript.*

Heyman, G. M. (2022). Social-economic factors predict state differences in opioid overdose rates. *Atlas of Science. May 2, 2022.*

Heyman, G. M. (2022). One cheer for the brain-disease interpretation of addiction. In *Evaluating the Brain Disease Model of Addiction.* Heather, N. et al. (Eds). Routledge, pp. 260-275.

Heyman G. M. (2021) Personality and its partisan political correlates predict U.S. state differences in Covid-19 policies and mask wearing percentages. *Frontiers in Psychology*. 12:729774.

Heyman, G. M. (2021). Aspiration fuels willpower: Evidence from the addiction literature. *Behavioral & Brain Sciences, 44,* e39.

Heyman, G. M., & Moncaleano, S. (2021). Behavioral psychology's matching law describes the allocation of covert attention: A choice rule for the mind. *Journal of Experimental Psychology: General,* 150*(2)*, 195–205.

Heyman, G. M. (2020). How individuals make choices explains addiction's distinctive features. *Behavioural Brain Research*, 397, pp x –xx.

Heyman, G. M., McVicar, N., & Brownell, H. (2019). Evidence that social-economic factors play an important role in drug overdoses. *International Journal of Drug Policy*, 74, 274-284.

Heyman, G. M. (2018). Deriving addiction: An analysis based on three elementary features of making choices. *Routledge Handbook of the Philosophy and Science of Addiction*, Pickard, H, & Ahmed, S. (Eds). Routledge, pp.23-33.

Heyman, G. M. (2018). Do addicts have free will? What research says about the nature of addiction. https://sciencetrends.com/do-addicts-have-free-will-what-research-says-about-the-nature-of-addiction/

Heyman, G. M., Lilienfeld, S. O., Morse, S. & Satel, S. (2017). May court send drug-using thief to jail for violating no-drugs probation condition. using-thief-to-jail-for-violating-no-drugs-probation- condition/?utm_term=.5b8f9d99424d (October 27, 2017)

Heyman, G. M., Lilienfeld, S. O., Morse, S. & Satel, S. (2017). Brief of Amici Curiae of 11 Addiction Experts in Support of Appellee (September 2017). *U of Penn Law School, Public Law Research Paper No. 17-44*. Available at SSRN: https://ssrn.com/abstract=3047859

Heyman, G. M., Montemayor, J., & Grisanzio, K. A. (2017). Dissociating attention and eye movements in a quantitative analysis of attention allocation. *Frontiers in Psychology*, 8

Heyman, Gene M. (2017). Do addicts have free will? An empirical approach to a vexing question. *Addictive Behaviors Reports* 5, 85-93.

Heyman, G. M. & Mims, V. (2016). What addicts can teach us about addiction: A natural history approach. In *Addiction and Choice*, Heather, N. & Segal, G. (Eds). Oxford University Press. pp. 385-408.

Heyman, G. M., Grisanzio, K., & Liang, V. (2016) Introducing a method for quantifying the allocation of attention in a cognitive "two-armed bandit" procedure: Probability matching gives way to maximizing. *Frontiers in Psychology*, 7.

Heyman, G.M., 2015. Opiate Use and Abuse, History of. In: James D. Wright (editor-in-chief), *International Encyclopedia of the Social & Behavioral Sciences*, 2nd edition, Vol 17. Oxford: Elsevier. pp. 236–242.

Heyman, G. M. (2014, Feb. 4). Drug addiction is a matter of difficult choices. *The New York Times.* http://www.nytimes.com/roomfordebate/2014/02/10/what-is-addiction/drug-addiction-is-a-matter-of-difficult-choices

Heyman, G. M., Dunn, B., & Mignone, J. (2014). Disentangling the correlates of drug use: A regression analysis of the associations between frequency of drug use, years-of-school, impulsivity, working memory, and psychiatric symptoms. *Frontiers in Psychiatry*, 5, 70.

Heyman, G. M. (2013). Addiction: An Emergent Consequence of Elementary Choice Principles. *Inquiry*, 56, 428-445.

Heyman, G. M. (2013). Addiction and choice: theory and new data. *Frontiers in Psychiatry*, 4.

Heyman, G. M. (2013). Quitting drugs: quantitative and qualitative features. *Annual Review of Clinical Psychology*, 9, 29-59.

Heyman, G. M. (2011). Received wisdom regarding the roles of craving and dopamine in addiction: A reply to Lewis. *Current Directions in Psychological Science*, 6, 156-160.

Heyman, G. M (2010). Addiction a latent property of choice. In *What is addiction?* Ross, D., et al. (Eds). Cambridge, MA, US: MIT Press, 2010. pp. 159-190

Heyman, G. M. (2009). Drug of Choice. Boston College Magazine, 69, 34-37.

Heyman, G. M. (2009) *Addiction: A disorder of choice*. Cambridge: Harvard University Press.

Hopper, J. Pitman, R.K., Su, Z., Heyman, G.M., Lasko, N., Macklin, M., Orr, S., Lukas, S. Elman, I. (2008). Probing reward function in posttraumatic stress disorder: expectancy and satisfaction with monetary gains and losses. *Journal of Psychiatric Research*, 42, 802-807.

Heyman, G.M. & Gibb, S. (2006). Delay discounting in college cigarette chippers. *Behavioural Pharmacology*, 17, 660-679.

Heyman, G. M. (2004). The sense of conscious will. *Behavioral and Brain Sciences*, 27, 663-664.

Heyman, G.M. (2003). Consumption dependent changes in reward value: A framework for understanding addiction. In Heather, N., & Vuchinich, R. (Eds.), *Choice, Behavioral Economics, and Addiction*. Elsevier Press, pp. 95-126.

Heyman, G.M. (2003). The remarkable agreement between people and pigeons concerning rewards delayed: Comments on Suzanne Mitchell's paper. In Heather, N., & Vuchinich, R. (Eds.), *Choice, Behavioral Economics, and Addiction*. Elsevier Press, pp. 358-362.

Heyman, G.M. (2002). A discussion of drug choice: What we know and what we need to know. In *NIDA Research Monograph, Problems of Drug Dependence 2002: Proceeding of the 64th Annual Scientific Meeting, College on Problems of Drug Dependence*, Inc., USDHHS, pp. 149-151.

Heyman, G.M. & Dunn, B. (2002). Decision biases and persistent illicit drug use: An experimental study of distributed choice in drug clinic patients. *Drug and Alcohol Dependence*, 67, 192-203.

Heyman, G.M. (2002). The Harvard Pigeon Lab, 1970-1998: Graduate students and matching law research. *Journal of the Experimental Analysis of Behavior*, 77, 380-383.

Heyman, G.M. (2001). Is addiction a chronic, relapsing disease? Relapse rates, estimates of duration, and a theory of addiction. In Heymann, P. & Brownsberger, W. (Eds.) *Drug Addiction and Drug Policy*. Harvard University Press, pp. 81-117.

Heyman, G.M. (2001). On drug use and abuse. In N. J. Smelser and Paul B. Baltes (Eds.), *International Encyclopedia of the Social and Behavioral Sciences*, pp. 3856-3861.Pergamon, Oxford.

Silva, T. & Heyman, G.M. (2001). Chronic morphine consumption decreases wheel running and wheel-running reinforced behavior in rats. *Pharmacology, Biochemistry, & Behavior*, 69, 51-57.

Heyman, G. M. (2000). Economic principles in animal models of alcohol consumption. *Alcohol Research and Health*, 24, 132-139.

Heyman, G.M. (2000). The reinforcing efficacy of alcohol in P and NP rats. *Pharmacology, Biochemistry, & Behavior*, 66, 455-463.

Heyman, G.M., Gendel, K., & Goodman, J. (1999). Inelastic demand for alcohol in rats. *Psychopharmacology*, 144, 213-219.

Heyman, G.M. (1998). On the science of substance abuse. *Science*, 289, 807-808.

Petry, N.M. & Heyman, G.M. (1997). Bi-directional modulation of sweet and bitter taste by benzodiazepines: Lack of effect with GABA drugs. *Physiology & Behavior*, 61, 119-126.

Petry, N.M., Heyman, G.M. (1997). Rat toys, reinforcers, and response strength: An examination of the Re parameter in Herrnstein's equation. *Behavioral Processes*, 39, 39-52.

Heyman, G.M. (1997). Preference for saccharin sweetened alcohol relative to isocaloric sucrose. *Psychopharmacology*, 129, 72-78.

Heyman, G.M. (1996). Elasticity of demand for alcohol in humans and rats. *Advances in Behavioral Economics*, vol. 3. Norwood, N.J., Ablex Publishing, 107-132.

Heyman, G.M., Keung, W.-.K, & Vallee, B. (1996). Daidzin differentially decreases alcohol consumption in rats. *Alcoholism: Clinical and Experimental Research,* 20, 1083-1087.

Heyman, G.M. (1996). Resolving the contradictions of addiction. *Behavioral and Brain Sciences*, 19, 561-574.

Heyman, G.M. (1996). Which behavioral consequences matter? The importance of frame of reference in explaining addiction. *Behavioral and Brain Sciences,* 19, 599-610.

Heyman, G.M., & L. E. Tanz (1995). How to teach a pigeon to maximize overall reinforcement rate. *Journal of the Experimental Analysis of Behavior*, 64, 277-297.

Heyman, G.M. (1995). Robust preferences for flavored alcohol relative to isocaloric food sources in rats [Abstract]. *Alcoholism: Clinical and Experimental Research*, 19, 12a.

Heyman, G.M. (1995). Alcohol consumption predicts blood alcohol levels in alcohol and food choice procedure [Abstract]. *Alcoholism: Clinical and Experimental Research*, 19, 12a.

Petry, N.M., & Heyman, G.M. (1995). Concurrent ethanol/sucrose and sucrose reinforcement in the rat: Effects of altering variable ratio requirements. *Journal of the Experimental Analysis of Behavior*, 64, 331-359.

Heyman, G. M. (1994, Nov 18). Misunderstood messengers. *Boston Globe* Retrieved from http://search.proquest.com/docview/403628233?accountid=9673

Heyman, G.M. & Monaghan, M.M. (1994). Reinforcer magnitude (sucrose concentration) and the matching law theory of response strength. *Journal of the Experimental Analysis of Behavior*, 61, 505-516.

Petry, N.M., & Heyman, G.M. (1994). Effects of qualitatively different reinforcers on the parameters of the response strength equation. *Journal of the Experimental Analysis of Behavior*, 61, 97-106.

Belke, T., & Heyman, G.M. (1994). Increasing and signaling background reinforcement. *Journal of the Experimental Analysis of Behavior*, 61, 65-81.

Belke, T., & Heyman, G.M. (1994). A matching law analysis of the reinforcing efficacy of wheel running in rats. *Animal Learning & Behavior*, 22, 267-274.

Heyman, G.M. (1993). Ethanol regulated preference in rats. *Psychopharmacology*, 112, 259-269.

Heyman, G.M. (1993). Response requirement increases fail to decrease preference for alcohol beverage in rats. [Abstract]. *Alcoholism: Clinical and Experimental Research*, 17, 480.

Heyman, G.M. & Oldfather, C. (1992). Elasticity of preference for ethanol in rats: An analysis of the reinforcing properties of ethanol. *Psychological Science*, 3, 122-130

Heyman, G.M. (1992). Methylphenidate increases reinforcement efficacy: Matching law and rate dependency analyses. *Psychopharmacology*, 109, 145-152.

Heyman, G.M. (1990). Contributions of the matching law to the analysis of the behavioral effects of drugs. P. Dews, & J. E. Barrett (Eds.), *Advances in Behavioral Pharmacology*, *Volume 7*. Hillsdale, N. J.: Lawrence Erlbaum Press, 39-77.

Heyman, G.M. (1989). The case of the "redundant" donor: Neither egoistic nor altruistic. *Behavioral and Brain Sciences*, 12, 708-709.

Heyman, G.M. (1988). Optimization theory: A too narrow path. *Behavioral and Brain Sciences*, 11, 136-137.

Heyman, G.M. (1988). How drugs affect cells and reinforcement affects behavior: Formal analogies. In M. Commons, R. Church, J. Stellar, & A. Wagner (Eds.), *Quantitative Analyses of Behavior, Vol. 7*: Biological Determinants of Reinforcement and Memory. Hillsdale, N.J.: Lawrence Erlbaum Press, 157-182.

Heyman, G.M., Monaghan, M. and Clody, D.E. (1987). Cis-flupentixol attenuates motor performance. *Psychopharmacology*, 93, 477-482.

Heyman, G.M. and Monaghan, M.M. (1987). The effect of changes in the response requirement and deprivation on the parameters of the matching law equation: New data and review. *Journal of Experimental Psychology: Animal Behavior Processes*, 13, 384-394.

Heyman, G.M. and Beer, B.B. (1987). A new approach for evaluating the behavioral effects of anti-psychotic drugs. *Trends in Pharmacology*, 8, 388-393.

Heyman, G.M., Kinzie, D.L. and Seiden, L.S. (1986). The effects of chlorpromazine and pimozide in reinforcement efficacy and motor performance: A matching law analysis. *Psychopharmacology*, 88, 346-353.

Heyman, G.M. and Herrnstein, R.J. (1986). More on concurrent interval ratio schedules. *Journal of the Experimental Analysis of Behavior*, 46, 331-351.

Heyman, G.M. and Seiden, L.S. (1985). A parametric description of amphetamine's effect on response rate: Changes in reinforcement efficacy and response topography. *Psychopharmacology*, 85, 154-161.

Heyman, G.M. (1983). Maximization theory: Close but no cigar. *Behavior Analysis Letters*, 3, 17-26.

Heyman, G.M. (1983). A cross-situational test of utility theory. *The Behavioral and Brain Sciences*, 6, 324.

Heyman, G.M. (1983). A parametric evaluation of the hedonic and motoric effects of drugs: Pimozide and amphetamine. *Journal of the Experimental Analysis of Behavior*, 40, 113-122.

Heyman, G.M. (1982). Is time allocation elicited behavior? In M. Commons, R. Herrnstein, & H. Rachlin (Eds.), *Quantitative Analyses of Behavior, Vol. 2: Matching and Maximizing Accounts*. Cambridge, Mass.: Ballinger Press, 459-490.

Heyman, G.M. and Bouzas, A. (1980). Context dependent changes in the reinforcement strength of schedule-induced drinking. *Journal of the Experimental Analysis of Behavior*, 33, 327-335.

Oscar-Berman, M. and Heyman, G.M. (1980). Human neuropsychology: Some differences between Korsakoff and normal operant performance. *Psychological Research*, 41, 235-247.

Heyman, G.M. and Luce, R.D. (1979). Operant matching is not a logical consequence of reinforcement rate maximization. *Animal Learning and Behavior*, 7, 133-140.

Heyman, G.M. and Luce, R.D. (1979). Reply to Rachlin's comment. *Animal Learning and Behavior*, 7, 269-270.

Herrnstein, R.J. and Heyman, G.M. (1979). Is matching compatible with reinforcement maximization on concurrent variable-interval, variable-ratio? *Journal of the Experimental Analysis of Behavior*, 31, 209-233.

Heyman, G.M. (1979). A Markov model description of changeover probabilities on concurrent schedules. *Journal of the Experimental Analysis of Behavior*, 31, 41-51.

Heyman, G.M. (1979). Matching and maximizing in concurrent schedules. *Psychological Review*, 86, 495-500.

Selected invited presentations, talks, and seminars

Choice principles help explain many of addiction's defining features. Society for the Quantitative Analyses of Behavior. Boston, May of 2022.

The kinds of choices those dependent on drugs (and everyone else) make. St. Anselm College. May of 2022.

What the matching law has taught us about addiction and choice. Eastern Psychological Association Meetings, Boston, 2020. (Presented on line).

Addiction, choice, and social economic correlates of drug overdose deaths. Heller School of Management, Brandeis University, 2019.

Addiction and choice: A synthesis. Heller School of Management, Brandeis University, 2018.

Addiction & Choice. Plenary Address. XXV Congreso Mexicano de Psicologia, Puerto Vallarta Mexico, 2017

Calculating attention, tracking eye movements. Psychonomic Science. Boston, 2016.

Addiction and choice. Heller School for Social Policy, Brandeis University, 2016.

A new method for quantifying attention: Results support optimizing theory. Psychonomic Science, Chicago, 2015

Calculating attention. Society for Quantitative Analyses of Behavior, San Antonio, Texas, 2015

Choice principles provide a framework for organizing empirical research on addiction. Heller School for Social Policy, Brandeis University, 2014.

What drug users have taught us about addiction---and why the lessons are often ignored. University of Vermont College of Medicine, Burlington. 2014

Addiction as a model system for discovering the rules of behavioral change. Changing Habits. Learning Innovations Laboratory, Harvard School of Education, Cambridge, 2014

Addiction: Why it is a disorder of choice and decision. Plenary Address. 6th German Congress on Addiction, University of Bonn, Germany, 2013

Why we disagree about the nature of addiction. 15th European Behavioural Pharmacology Society Meeting, La Rochelle, France, 2013

Plenary Address. Addiction's status today: empirical and definitional issues, University of Helsinki Collegium for Advanced Studies, Helsinki, 2012

Addiction, disease, & choice: Harvard Alumni Association, Ottawa, Canada, 2012

Addiction and what it teaches us about brain and behavior. Lafayette College, PA., 2012

Are dependent drug users compulsive drug users? Intramural Research Program of the National Institute on Drug Abuse, Baltimore, MD, 2011.

Drug addiction: an emergent disorder. Addiction and Agency Conference. Study for the Mind in Nature, Oslo, 2011.

Addiction and choice. Congreso National Las Addiciones y Sus Comorbilidades. La Psiquiatría y las Adicciones en México, Mexico City (read by the host), 2011.

Addiction and choice: Harvard Alumni Association, Los Angeles, 2011.

Cognition, disposition, years of school and drug use: Multivariate analyses. Concordia University, Montreal, 2011

Addiction: What it can teach us about voluntary behavior. Concordia University, Montreal, 2011

Addiction: Treating the Addictions, Harvard Medical School, Continuing Education Division, Boston, 2011.

Addiction and rationality: graduate seminar at MIT, spring semester 2011.

Plenary address: Is addiction really like other psychiatric diseases? Association for Medical Education and Research on Substance Abuse, Bethesda, 2010

New developments in addiction. Harvard Alumni Association, Cambridge, 2010

Addiction its implications for understanding of voluntary behavior. Provost's Interdisciplinary Seminar on Decision Making, University of Pennsylvania, 2009

Addiction and voluntary behavior. The Spencer Conference Series on Individual Differences and Economic Behavior: Cultivating Human Capital, University of Chicago, 2009

Years of school mediates the influence of cognition and impulsivity on drug use: A multivariate analysis. College on Problems of Drug Dependence, Quebec City, 2007

The natural dynamics of choice predict over-consumption, addiction, and their cognitive correlates. What is addiction? The third mind and world conference, University of Alabama at Birmingham. 2007.

The relationship between educational attainment, cognition, and drug use in clinic and nonclinic drug users. Department of Health Behavior, University of Alabama at Birmingham. 2007.

Working memory and education predict years of drug use: A multivariate analysis. College on Problems of Drug Dependence, Scottsdale, 2006.

Cognition, choice, & drug use. College on Problems of Drug Dependence, Orlando, 2005

Implications of preference dependent changes in reward value: matching, maximizing, excess, and addiction. Society for Quantitative Analyses of Behavior, Chicago, 2005.

Is addiction a chronic, relapsing disorder? College on Problems of Drug Dependence, Bal Harbor, 2003.

What do delay discounting procedures measure? Association for Behavior Analysis, San Francisco, 2003.

What do we mean by "addiction?" Sigma Chi Lecture, Wheaton College, 2003.

Compulsivity and ambivalence in drug use. Invited address for New Advances in the Understanding and Treatment of Addiction, European Behavioural Pharmacology Society and British Association for Psychopharmacology, Brighton, UK, 2002.

The contributions of choice theory (psychological and economic) to the understanding of animal drug self-administration studies. Invited discussant for Drug Choice: What We Know and What We Need to Know, College on Problems of Drug Dependence, Quebec City, Canada, 2002.

Frame of reference: behavioral economics and addiction. Invited address for NIDA sponsored conference: Behavioral Economics, Choice, and Addiction, Birmingham, Alabama, 2002.

Choice and addiction. Merging perspectives on drugs and crime, a cross agency approach. Kennedy School of Government, Harvard University, 2000.

Demand elasticity and preference for drugs. Joint meeting of the Behavioral Pharmacology Society and European Behavioral Pharmacology Society, Boston, 1999.

On the correlates of recovery from drug addiction. Merging perspectives on drugs and crime. Kennedy School of Government, Harvard University, 1999.

Corticosterone and drug consumption in rats. Psychology Department, Duke University, 1998.

Drugs of abuse, impulsivity, and risk taking. Invited discussant. College on Problems of Drug Dependence. Nashville, 1997.

Addiction and emotion. Invited discussant. Russell Sage Foundation. New York, 1997.

The matching law, economic rationality, and choice. Invited tutorial, Society for Quantitative Analyses of Behavior and Association for Behavior Analysis. Chicago, 1997.

Context and choice: Resolving the conflicting claims of economics and psychology. Invited tutorial. Department of Psychology, University of Indiana, Bloomington, Indiana, 1996.

The matching law: history and implications. Society for Quantitative Analyses of Behavior. Washington, D.C., 1995

Inelastic demand and addiction. Behavioral Pharmacology Society, Boston, 1994.

Choice methods for study of reinforcing efficacy of alcohol in rats. International Group for Investigation of Drugs as Reinforcers, College on Problems of Drug Dependence, Toronto, 1993.

Demand for alcohol in humans and rats. Society for Quantitative Analyses of Behavior & Association for Behavior Analysis, Chicago, 1993.

Dissociating ethanol and food consumption. Association for Behavior Analysis, San Francisco, 1992.

Regulated and excessive alcohol preference in rats. Behavioral Pharmacology Society, Jekyll Island, 1992.

Ethanol regulated preference. Eastern Psychological Association, Boston, 1992.

How drugs affect reinforcement efficacy and motor performance: An equilibrium theory approach. Seventh Harvard Symposium in the Quantitative Analysis of Behavior, Cambridge, 1984.

Pimozide and chlorpromazine reduce reinforcement efficacy and motor capacity in the rat. Society for Neuroscience, Los Angeles, 1983.

Amphetamine increases reinforcement efficacy in rats. Federation of American Societies for Experimental Biology, Chicago, 1983.

The effect of pimozide on reinforced responding. Eastern Psychological Association Meetings, Boston, 1981.

The exponential (Heyman-Luce) model of concurrent schedule performance. Second Harvard Symposium in the Quantitative Analysis of Behavior, Cambridge, 1979.

A quantitative account of polydipsia. American Psychological Association Meetings, San Francisco, 1977.

A molecular analysis of concurrent schedule performance. American Psychological Association Meetings, Washington, D.C., 1976.