

DAVID N. KEARNS, PH.D.

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EDUCATION

2005 <i>Ph.D., Psychology</i>	American University	Washington, DC
2000 <i>M.A., Psychology</i>	American University	Washington, DC
1997 <i>B.A., Psychology/Philosophy</i>	Rutgers University	New Brunswick, NJ

POSITIONS HELD

August 2019	Professor	American University, Washington, DC
August 2011—2019	Associate Professor	American University, Washington, DC
August 2010-2013	Director, Ph.D. program in Behavior, Cognition, & Neuroscience	American University, Washington, DC
August 2005—2011	Research Assistant Professor	American University, Washington, DC

PUBLISHED JOURNAL ARTICLES

- Beasley, M. M., Gunawan, T., Tunstall, B. J., & **Kearns, D. N.** (2022). Intermittent access training produces greater motivation for a non-drug reinforcer than long access training. *Learning & Behavior*, 1-15.
- McConnell, S.A., Brandner, A.J., Blank, B.A., **Kearns, D.N.**, Koob, G.F., Vendruscolo, L.F., Tunstall, B.J. (2021). Demand for fentanyl becomes inelastic following extended access to fentanyl vapor self-administration. *Neuropharmacology*, 182, 108355.
- Gunawan, T., Hachiga, Y., Tripoli, C. S., Silberberg, A., **Kearns, D. N.** (2020). Heroin choice depends on income level and economy type. *Psychopharmacology*, 237, 1447-1457.
- Clasen, M. M., Sanon, T. V., Hempel, B. J., Nelson, K. H., **Kearns, D. N.**, Davidson, T. L., & Riley, A. L. (2020). Ad-libitum high fat diet consumption during adolescence and adulthood impacts the intravenous self-administration of cocaine in male Sprague-Dawley rats. *Experimental and Clinical Psychopharmacology*, 28, 32-43.

- Kearns, D. N., & Silberberg, A. (2020).** Opening the cocaine economy by providing within-session access to a cheaper source of cocaine makes demand for it more elastic. *Behavioural Pharmacology*, 31, 448-457.
- Clasen, M. M., Sanon, T. V., **Kearns, D. N.**, Davidson, T. L., & Riley, A. L. (2020). Ad libitum high fat diet consumption during adolescence and adulthood fails to impact the affective properties of cocaine in male Sprague-Dawley rats. *Experimental and Clinical Psychopharmacology*, 28, 438-448.
- Kearns, D. N. (2019).** The effect of economy type on reinforcer value. *Behavioural Processes*, 162, 20-28.
- Gunawan, T., Tripoli, C. S., Silberberg, A., & **Kearns, D. N. (2019).** The effect of economy type on heroin and saccharin essential value. *Experimental and Clinical Psychopharmacology*, 27, 598-608.
- Kim, J. S., & **Kearns, D. N. (2019).** Reduced ethanol self-administration in rats produced by the introduction of a high value non-drug alternative reinforcer. *Pharmacology Biochemistry and Behavior*, 184, 172744.
- Hachiga, Y., Schwartz, L. P., Tripoli, C., Michaels, S., **Kearns, D. N.**, Silberberg, A. (2019). Like chimpanzees (*Pan troglodytes*), pigeons (*Columba livia domestica*) match and Nash equilibrate where humans (*Homo sapiens*) do not. *Journal of Comparative Psychology*, 133, 197-206.
- Kim, J. S., Gunawan, T., Tripoli, C. S., Silberberg, A., **Kearns, D. N. (2018).** The effect of economy type on demand and preference for cocaine and saccharin in rats. *Drug and Alcohol Dependence*, 192, 150-157.
- Hachiga, Y., Schwartz, L. P., Silberberg, A., **Kearns, D. N.**, Gomez, M., Slotnick, B. (2018). Does a rat free a trapped rat due to empathy or for sociality? *Journal of the Experimental Analysis of Behavior*, 110, 267-274.
- Davidson, T. L., Hargrave, S., **Kearns, D. N.**, Clasen, M., Jones, S., Wakeford, A., Sample, C., Riley, A. L. (2018). Cocaine impairs serial-feature negative learning and blood-brain barrier integrity. *Pharmacology, Biochemistry & Behavior*, 170, 56-63.
- Stoops, W. W., & **Kearns, D. N. (2018).** Decision-making in addiction: Current knowledge, clinical implications and future directions. *Pharmacology, Biochemistry & Behavior*, 164, 1-3.
- Schwartz, L. P., **Kearns, D. N.**, & Silberberg, A. (2018). The effect of nicotine pre-exposure on demand for cocaine and sucrose in male rats. *Behavioural Pharmacology*, 29, 316-326.
- Clayman, C. L., Malloy, E. J., **Kearns, D. N.**, & Connaughton, V. P. (2017). Differential behavioral effects of ethanol pre-exposure in male and female zebrafish (*Danio rerio*). *Behavioural Brain Research*, 335, 174-184.
- Schwartz, L. P., Kim, J. S., Silberberg, A., & **Kearns, D. N. (2017).** Heroin and saccharin demand and preference in rats. *Drug and Alcohol Dependence*, 178, 87-93.

- Schwartz, L. P., Silberberg, A., Casey, A. H., **Kearns, D. N.**, & Slotnick, B. (2017). Does a rat release a soaked conspecific due to empathy? *Animal Cognition*, *20*, 299-308.
- Kearns, D. N.**, Kim, J. S., Tunstall, B. J., & Silberberg, A. (2017). Essential Values of Cocaine and Non-Drug Alternatives Predict the Choice Between Them. *Addiction Biology*, *22*, 1501-1504.
- Kearns, D. N.**, & Silberberg, A. (2016). Dose and elasticity of demand for self-administered cocaine in rats. *Behavioural Pharmacology*, *27*, 289-292.
- Weiss, S.J., & **Kearns, D. N.** (2016). Cocaine cues retain silent traces of an excitatory history after conversion into conditioned inhibitors: 'the ghost in the addict'. *Behavioural Pharmacology*, *27*, 293-300.
- Tunstall, B. J., & **Kearns, D. N.** (2015). Sign-tracking predicts increased choice of cocaine over food in rats. *Behavioural Brain Research*, *281*, 222-228.
- Connolly, N. P., Kim J. S., Tunstall B. J., **Kearns, D. N.** (2015). A test of stress, cues, and re-exposure to large wins as potential reinstaters of suboptimal decision making in rats. *Frontiers in Psychology*, *6*, 394.
- Tunstall, B. J., & **Kearns, D. N.** (2014). Cocaine can generate a stronger conditioned reinforcer than food despite being a weaker primary reinforcer. *Addiction Biology*, *21*, 282-293.
- Tunstall, B. J., Riley, A. L., & **Kearns, D. N.** (2014). Drug specificity in drug vs. food choice in male rats. *Experimental & Clinical Psychopharmacology*, *22*, 364-372.
- Silberberg, A., Allouch, C., Sandfort, S., **Kearns, D.**, Karpel, H., & Slotnick, B. (2014). Desire for social contact, not empathy, may explain "rescue" behavior in rats. *Animal Cognition*, *17*, 609-618.
- Tunstall, B. J., Verendeev, A., & **Kearns, D. N.** (2013). Outcome specificity in deepened extinction may limit treatment feasibility: Co-presentation of a food cue interferes with extinction of cue-elicited cocaine seeking. *Drug and Alcohol Dependence*, *133*, 832-837.
- Tunstall, B. J., & **Kearns, D. N.** (2013). Reinstatement in a cocaine vs. food choice situation: reversal of preference between drug and non-drug rewards. *Addiction Biology*, *19*, 838-848.
- Tunstall, B.J., Verendeev, A., & **Kearns, D. N.** (2012). A comparison of therapies for the treatment of drug cues: counterconditioning vs. extinction in male rats. *Experimental & Clinical Psychopharmacology*, *20*, 447-453.
- Kearns, D. N.**, Tunstall, B. J., & Weiss, S. J. (2012). Deepened extinction of cocaine cues. *Drug and Alcohol Dependence*, *124*, 283-287.
- Kearns, D. N.**, Tunstall, B. J., Marks, K. M., Weiss, S. J. (2012). Extinction of goal-tracking also eliminates the conditioned reinforcing effects of an appetitive conditioned stimulus. *Psychonomic Bulletin & Review*, *19*, 135-138.

- Kearns, D. N., & Weiss, S. J. (2012).** Extinguished cocaine cues increase drug seeking when presented simultaneously with a non-extinguished cocaine cue. *Drug and Alcohol Dependence, 121*, 140-147.
- Kearns, D. N., Gomez-Serrano, M. A., & Tunstall, B. J. (2011).** A review of preclinical research demonstrating that drug and non-drug reinforcers differentially affect behavior. *Current Drug Abuse Reviews, 4*, 261-269.
- Kearns, D. N., & Gomez-Serrano, M. A. (2011).** A rat model of gambling behavior and its extinction: effects of “win” probability on choice on a concurrent-chains procedure. *Analysis of Gambling Behavior, 5*, 5-18.
- Kearns, D. N., & Weiss, S. J. (2011).** A comparison of explicitly unpaired treatment and extinction: Recovery of sign-tracking within a context renewal design. *Behavioural Processes, 86*, 364-7.
- Marks, K. M., **Kearns, D. N.**, Christensen, C. J., Silberberg, A., & Weiss, S. J. (2010). Learning that a cocaine reward is smaller than expected: A test of Redish's computational model of addiction. *Behavioural Brain Research, 212*, 204-207.
- Weiss, S. J., **Kearns, D. N.**, Antoshina, M. (2009). Within-subject reversibility of the discriminative function in the composite-stimulus control of behavior. *Journal of the Experimental Analysis of Behavior, 92*, 367-377.
- Silberberg, A. M., & **Kearns, D. N.** (2009). Memory for the order of briefly presented numerals in humans as a function of practice. *Animal Cognition, 12*, 405-407.
- Freeman, K. B., **Kearns, D. N.**, Kohut, S. J., & Riley, A. L. (2009). Strain differences in patterns of drug intake during prolonged access to cocaine self-administration. *Behavioral Neuroscience, 123*, 156-164.
- Gomez-Serrano, M. A., **Kearns, D. N.**, & Riley, A. L. (2009). The effects of light cycle phase on morphine-induced conditioned taste aversions in the Lewis, Fischer and Sprague-Dawley rat strains. *Behavioural Brain Research, 196*, 116-122.
- Lombas, A. S., **Kearns, D. N.**, & Weiss, S. J. (2008). Differential effects of a food-based conditioned inhibitor on food- or cocaine seeking behavior. *Learning & Motivation, 39*, 323-333.
- Lombas, A. S., **Kearns, D. N.**, & Weiss, S. J. (2008). A comparison of the effects of discriminative and Pavlovian inhibitors and excitors on instrumental responding. *Behavioural Processes, 78*, 53-63.
- Kearns D. N.**, Weiss, S. J. (2007). Contextual renewal of cocaine seeking in rats and its attenuation by the conditioned effects of an alternative reinforcer. *Drug & Alcohol Dependence, 90*, 193-202.
- Kearns, D. N.**, & Weiss, S. J. (2007). Recovery of Pavlovian sign-tracking (autoshaping) following the discontinuation of explicitly unpaired food presentation in rats. *Behavioural Processes, 75*, 307-311.

- Weiss, S. J., **Kearns, D. N.**, Christensen, C. J., & Huntsberry, M. E., Schindler, C. W., & Panlilio, L. V. (2007). Reduction of cocaine seeking by a food-based inhibitor in rats. *Experimental and Clinical Psychopharmacology*, *15*, 359-367.
- Kearns, D. N.**, Gomez-Serrano, M. A., Weiss, S. J., & Riley, A. L. (2006). A comparison of Lewis and Fischer rat strains on autoshaping (sign-tracking), discrimination reversal learning, and negative automaintenance. *Behavioural Brain Research*, *169*, 193-200.
- Kearns, D. N.**, & Weiss, S. J. (2005). Reinstatement of a food-maintained operant produced by stimulus compounding. *Behavioural Processes*, *70*, 194-202.
- Kearns, D. N.**, Weiss, S. J., Schindler, C. W., & Panlilio, L. V. (2005). Conditioned inhibition of cocaine seeking in rats. *Journal of Experimental Psychology: Animal Behavior Processes*, *31*, 247-253.
- Weiss, S. J., **Kearns, D. N.**, Cohn, S. I., Schindler, C. W., & Panlilio, L. V. (2005). Cocaine and selective associations: investigations into a biological constraint on learning with drug self-administration and shock avoidance as reinforcers. *International Journal of Comparative Psychology*, *18*, 112-125.
- Weiss, S. J., Reilly, M. P., & **Kearns, D. N.** (2005). Associative mechanisms and drug-related behavior. *International Journal of Comparative Psychology*, *18*, v-vii.
- Kearns, D. N.**, & Weiss, S. J. (2004). Sign-tracking (autoshaping) in rats: a comparison of food and cocaine as unconditioned stimuli. *Learning & Behavior*, *32*, 463-476.
- Weiss, S. J., **Kearns, D. N.**, Cohn, S. I., Schindler, C. W., & Panlilio, L. V. (2003). Stimulus control of cocaine self-administration. *Journal of the Experimental Analysis of Behavior*, *79*, 111-135.
- Kearns, D. N.**, Weiss, S. J., & Panlilio, L. V. (2002). Conditioned suppression of behavior maintained by cocaine self-administration. *Drug and Alcohol Dependence*, *65*, 253-261.

BOOK CHAPTERS

- Tunstall, B. J., & **Kearns, D. N.** (2017). Cocaine-seeking behavior: comparisons to food-seeking and potential treatments. In V. R. Preedy (Ed.), *Neuroscience of Cocaine: Mechanisms and Treatment*. London, England: Elsevier Academic Press.
- Kearns, D. N.**, & Gomez-Serrano, M. A. (2010). Cognition: learning and memory: Pavlovian. In G. F. Koob, R. M. Thompson, & M. Le Moal (Eds.), *Encyclopedia of Behavioral Neuroscience*. London, England: Elsevier.

GRANTS

Principal Investigator – NIH R01 grant “Opioid and Psychostimulant Taking: Testing the Impact of Behavioral Economic Contexts” – received 14th percentile score, awaiting funding decision. Seeking \$1.7 million in total costs over five years.

Principal Investigator – NIH R01 grant “Addiction as Maladaptive Choice of Drugs over Non-Drug Rewards” – awarded \$1.58 million in total costs. February 2015 - November 2021.

Principal Investigator – NIH R01 grant “Incentive Properties of Abused Drugs” – awarded \$1.35 million in total costs. August 2010 - July 2016.

Principal Investigator – “An Animal Model of Relapse to Pathological Gambling” – awarded \$28,750 Seed Grant from National Center for Responsible Gaming. July 2013 - June 2014.

Co-Investigator (PI: Victoria Connaughton) – awarded \$25,000 American University Vice-Provost’s Research Support Award. This research investigates effects of adolescent ethanol exposure in a zebrafish model of alcoholism. May 2013 - April 2014

Principal Investigator – “Classical Conditioning and Compulsive Drug-Related Behavior”. F31 National Research Service Award from NIDA, awarded \$45,000. October 2001- September 2003.

INVITED TALKS

Kearns, D. N. (2022). Drug Choice and Behavioral Economics. Invited lecture given at National Institute on Drug Abuse, Intramural Research Program, Baltimore, MD.

Kearns, D. N. (2020). Behavioral Economic Variables Controlling Drug Self-administration: Income, Economy, and Substitutability. Invited talk given to Virginia Commonwealth University’s Department of Pharmacology and Toxicology.

Kearns, D. N. (2019). Heroin Self-administration in Open and Closed Economies. Invited lecture given at meeting of the Behavioral Pharmacology Society, Orlando, FL.

Kearns, D. N. (2018). Behavioral economics of drug self-administration. Invited lecture given at meeting of the Society for the Quantitative Analysis of Behavior, San Diego, CA.

Kearns, D. N. (2018). Cocaine Cues. Colloquium given for Center for Behavioral Neuroscience, American University, Washington, DC.

Kearns, D. N. (2016). Accounting for Taste: Using Essential Value to Predict Drug Choice. Invited lecture given at National Institute on Drug Abuse, Intramural Research Program, Baltimore, MD.

Kearns, D. N. (2015). What’s different about individuals who choose cocaine over non-drug alternatives? Some clues from rats. Seminars in Chemistry and Biochemistry, American University, Washington, DC.

Kearns, D. N. (2013). Applying to graduate school. Invited talk given at NIH’s Graduate and Professional School Fair, NIH, Bethesda, MD.

Kearns, D. N. (2007). The Context Renewal Model of Relapse and Behavioral Methods for Reducing Renewed Drug Seeking. Invited lecture given at National Institute on Drug Abuse, Behavioural Neuroscience Branch, Baltimore, MD.

TEACHING

Courses taught at American University

Behavior Principles (General Education undergraduate class)
Behavioral Neuroscience of Addiction (graduate and advanced undergraduate seminar)
Conditioning & Learning (graduate class)
Drugs & Behavior (AU Core undergraduate class)
Learning and Behavior (upper-level undergraduate class)
Research Methods in Psychology (upper-level undergraduate class)

Over the last two years, my mean teaching evaluation ratings for the items “Overall, instructor is” and “Overall, course is” have been 6.30 and 6.28, respectively, on a scale of 1 to 7, with 7 being “One of the best”.

STUDENT ADVISING

Ph.D. advisor for Madeline Beasley

Ph.D. advisor for Jung Kim, graduated 2018. Now a postdoctoral fellow at Scripps Research Institute.

Ph.D. advisor for Brendan Tunstall, graduated 2014 – Won University’s award for *Outstanding Scholarship at the Graduate Level*. Now a postdoctoral fellow in the laboratory of Dr. George Koob.

Doctoral Dissertation Committees (* = chair):

Katherine Nelson (2021), Christopher Tripoli (2021), Swanson (2020), Tommy Gunawan (2020), Briana Hempel (2019), Matthew Clasen (2018), Jung Kim* (2018), Carly Clayman (2017), Camille Sample (2016), Allison Wakeford (2015), Heather King (2015), Rebecca Pomfrey (2015), Christine Muench (2015), Bradley Wetzell (2015), Brendan Tunstall* (2014), Nina Connolly (2014), Nora Stinley (2014), Masha Reider (2014), Babita Das (2014), Kathryn Ross (2014), Andrey Verendeev (2013), Zach Hurwitz (2013), Jennifer Cobuzzi (2013), Mary Anne Hutchison (2012), Katherine Serafine (2012)

Masters Thesis Committees (* = chair):

Madeline Beasley* (2022), Eric Turnquist (2022), Samantha White (2022), Hayley Manke (2021), Christopher Tripoli (2019), Tommy Gunawan (2018), Katherine Nelson (2016), Carly Clayman (2016), Tim Regan (2016), Samantha Schiavon (2016), Briana Hempel (2016), Matthew Clasen (2016), Lindsay Schwartz (2015), Shaun Flax (2015), Jon Gore-Langton (2015), Anna Casey (2014), Heather Karpel (2014), Carissa Mehos* (2013), Brendan Tunstall* (2012), Heather King (2012), Nina Connolly (2012), Bradley Wetzell (2012), Kathryn Edwards (2012), Rebecca Wycoff Kim (2012), Caroline Seaback (2011), Babita Das (2011), Katherine Marks* (2010), Andrey Verendeev (2010)

CONFERENCE PRESENTATIONS

Kearns, D. N., Beasley, M., & Amantini, S. (2022). Behavioral economics of drugs: Cocaine and heroin interact differently with non-drug reinforcers. Paper presented at the meeting of the Eastern Psychological Association, New York, NY.

- Beasley, M., & **Kearns, D. N.** (2021). Intermittent vs. Long Access Training and Reinforcer Motivation. Paper presented at meeting of the Eastern Psychological Association, Virtual 2021.
- Kearns, D. N.** (2020) Operant Approaches to the Study of Addiction. Symposium organized at the meeting of the Eastern Psychological Association (virtual conference).
- Beasley, M., Jones, R., Gunawan, T., Tripoli, C.P., **Kearns, D.N.** (2020). Intermittent vs. long access: spiking drug levels or behavioral adaptation to constraint? Poster presented the meeting of Behavior, Biology, and Chemistry: Translational Research in Addiction, San Antonio, TX
- Kearns, D. N.**, Gunawan, T., Tripoli, C. S., & Silberberg, A. (2019). Cocaine, Heroin, and Saccharin Demand in Open vs. Closed Economies. Paper presented at meeting of the Eastern Psychological Association, New York, NY.
- Kearns, D. N.** (2018). Compounding Cues Associated with the Same, but not Different, Outcomes Deepens Extinction. Paper presented at meeting of the Eastern Psychological Association, Philadelphia, PA.
- Schwartz, L. P., **Kearns, D. N.**, Silberberg, A. (2018). The effect of nicotine pre-exposure on demand for cocaine in rats. Poster presented at the meeting of the Eastern Psychological Association, Philadelphia, PA.
- Kearns, D. N.** (2018). Stanley J. Weiss: In Memoriam. Memorial lecture given at the Winter Conference on Animal Learning and Behavior, Logan, Utah.
- Kearns, D. N.**, Kim, J. S., Gunawan, T., Tripoli, C., Silberberg, A. (2018). The Effect of Economy Type on Demand for Cocaine and Saccharin. Poster presented at meeting of the Eastern Psychological Association, Philadelphia, PA.
- Kearns, D. N.**, Schwartz, L. P., Kim, J. S., & Silberberg, A. (2017). Heroin and saccharin demand and preference in rats. Paper presented at meeting of the Eastern Psychological Association, Boston, MA.
- Kim, J. S., & **Kearns, D. N.** (2017). Ethanol and sucrose demand and preference in rats. Poster presented at the meeting of Behavior, Biology, and Chemistry: Translational Research in Addiction, San Antonio, TX.
- Kearns, D. N.**, Kim, J. S., Tunstall, B. J., Silberberg, A. (2016). Essential value of cocaine, but not food, predicts choice between cocaine and food. Paper presented at meeting of the Eastern Psychological Association, New York, NY.
- Kearns, D. N.**, & Tunstall, B. J. (2015). Cocaine Produces a Stronger Conditioned Reinforcer than Food Despite Being the Non-Preferred Primary Reinforcer. Paper presented at meeting of the Eastern Psychological Association, Philadelphia, PA.

- Kim, J. S., & **Kearns, D. N.** (2015). Exploring the relationship between elasticity of demand for cocaine and food and reinforcer choice: Preliminary results. Poster presented at the meeting of Behavior, Biology, and Chemistry: Translational Research in Addiction, San Antonio, TX.
- Kearns, D. N.**, Connolly, N. P., Kim, J. S., & Tunstall, B. J. (2014). A Test of Stress, Cues, and Priming as Potential Triggers for Relapse to Pathological Gambling. Poster presented at the meeting of the National Center for Responsible Gaming, Las Vegas, NV. (Honorable Mention for Best Poster).
- Kim, J. S., & **Kearns, D. N.** (2014). A preliminary investigation into the relationship between fixed-consecutive number (FCN) task performance and various measures of cocaine addiction-like behaviors. Poster presented at meeting of the American Psychological Association, Washington, DC.
- Tunstall, B. J., & **Kearns, D. N.** (2014). Cocaine Cues Become More Powerful Reinstaters of Reinforcer Seeking than Food Cues. Poster presented at meeting of the American Psychological Association, Washington, DC.
- Kearns, D.N.**, & Tunstall, B.J. (2014). Cocaine cues and deepened extinction. Paper presented at the meeting of Behavior, Biology, and Chemistry: Translational Research in Addiction, San Antonio, TX.
- Kim, J. S., & **Kearns, D. N.** (2014). Investigation into the relationship between performance on the fixed-consecutive number task and measures of cocaine addiction-like behaviors: Preliminary results. Poster presented at the meeting of Behavior, Biology, and Chemistry: Translational Research in Addiction, San Antonio, TX
- Kearns, D. N.**, Tunstall, B. J., & Verendeev, A. (2013). Counterconditioning Cocaine Cues. Paper presented at the meeting of the Eastern Psychological Association, New York, NY.
- Tunstall, B. J., & **Kearns, D. N.** (2013). Reinstatement in a Cocaine vs. Food Choice Situation: Reversal of Preference between Drug and Non-Drug Rewards. Paper presented at meeting of Behavior, Biology, and Chemistry conference, San Antonio, TX.
- Kearns, D.N.**, & Tunstall, B. J. (2013). Cocaine Cues vs. Food Cues: Strength as Reinstaters and Conditioned Reinforcers. Poster presented at meeting of Behavior, Biology, and Chemistry conference, San Antonio, TX.
- Tunstall, B. J., Verendeev, A., Riley, A. L., & **Kearns, D. N.** (2013). A Within-Subjects Comparison of Psychostimulant and Opiate Self-administration in a Model of Compulsive Drug Taking: Preliminary Data. Poster presented at meeting of Behavior, Biology, and Chemistry conference, San Antonio, TX.
- Weiss, S. J., **Kearns, D. N.**, & Schindler, C. W. (2013). Residual Silent Excitation after Extinction and Conditioned Inhibition: Food, Shock-Avoidance and Drug Self-Administration. Paper presented at the meeting of the Eastern Psychological Association, New York, NY.
- Verendeev, A., Tunstall, B.J., **Kearns, D.N.**, & Riley, A. L. (2012). Conditioned Taste Aversion Predicts Morphine, but not Cocaine, Self-Administration: A Role of Drug Aversion in Drug Taking. Poster presented at meeting of the Society for Neuroscience, New Orleans, LA.

- Weiss, S. J., & **Kearns, D. N.** (2012). Energizing Drug Seeking With an Extinction-Treated “Behaviorally Silent” Cue. Paper presented at the meeting of the Eastern Psychological Association, Pittsburg, PA.
- Kearns, D. N.**, Tunstall, B. J., & Weiss, S. J. (2012). Deepened extinction of cocaine cues. Poster presented at meeting of Behavior, Biology, and Chemistry conference, San Antonio, TX.
- Tunstall, B. J., & **Kearns, D. N.** (2012). Preference for cocaine vs. food during self-administration, extinction, and reinstatement testing: preliminary data. Poster presented at meeting of Behavior, Biology, and Chemistry conference, San Antonio, TX.
- Weiss, S. J., & **Kearns, D. N.** (2011). The effects of extinction generalize over the conditioned-response-eliciting and conditioned reinforcing effects of an appetitive CS. Poster presented at the meeting of the Eastern Psychological Association, Cambridge, MA.
- Kearns, D. N.**, & Weiss, S. J. (2010). Summation of Pavlovian resurgence and context renewal processes in relapse. Paper presented at the meeting of the Eastern Psychological Association. New York, NY.
- Weiss, S. J., **Kearns, D. N.**, & Christensen, C. J. (2009) Evidence of residual excitation after converting a cocaine excitator into a conditioned inhibitor. Poster presented at the meeting of the Society for the Quantitative Analysis of Behavior. Phoenix, AZ.
- Weiss, S. J., **Kearns, D. N.**, & Christensen, C. J. (2009). Conditioning History and Inhibitory Stimulus Control: The Ghost in the Addict Disrupts Treatment. Paper presented at the meeting of the Eastern Psychological Association. Pittsburg, PA.
- Kearns, D. N.**, & Weiss, S. J. (2009). Context, Explicitly Unpaired Treatment, and Resurgence. Paper presented at Winter Conference on Animal Learning and Behavior, Winter Park, CO.
- Weiss, S. J., & **Kearns, D. N.** (2008). Invited Address: Stimulus control and differential reinforcement: phenomena and processes. Conference on Odour Detection by Animals: Research and Practice. Sponsored by the Geneva International Centre for Humanitarian De-Mining. Os, Norway.
- Weiss, S. J., **Kearns, D. N.**, & Antoshina, M. (2008). Within-subject reversibility of composite stimulus control. Paper presented at the meeting of the Eastern Psychological Association. Boston, MA.
- Kearns, D. N.**, & Weiss, S. J. (2006). Renewal of Cocaine Seeking is Attenuated by Differential-Reinforcement-of-Other-Behavior Training. Paper presented at the meeting of the Eastern Psychological Association. Baltimore, MD.
- Kearns, D. N.**, & Weiss, S. J. (2006). Resurgence of Pavlovian Sign-tracking (Autoshaping) Following the Discontinuation of Inter-Trial Interval Food in Rats. Poster presented at the meeting of the Pavlovian Society, Philadelphia, PA.
- Kearns, D. N.**, Gomez-Serrano, M. A., Weiss, S. J., & Riley, A. L. (2006). Differences in Fischer and Lewis Rat Strains in Autoshaping (Sign-Tracking). Poster presented at the meeting of the College on Problems of Drug Dependence, Scottsdale, AZ.

- Christensen, C. J., **Kearns, D. N.**, & Weiss, S. J. (2006). Cocaine-Paired Stimuli That Serve as Conditioned Reinforcers Do Not Affect Rate of Operant Responding For Cocaine. Poster presented at the meeting of the Eastern Psychological Association, Baltimore, MD.
- Weiss, S. J., & **Kearns, D. N.** (2005). Reduction of cocaine seeking by a conditioned inhibitor for food. Paper presented at the meeting of the Eastern Psychological Association, Boston, MA.
- Lombas, A. S., Weiss, S. J., & **Kearns, D. N.** (2005). Response enhancement and suppression: adding the operant discriminative process to conditioned excitation and inhibition. Poster presented at the meeting of the Eastern Psychological Association, Boston, MA.
- Kearns, D. N.**, Weiss, S. J., Schindler, C. W., & Panlilio, L. V. (2004). Conditioned inhibition of cocaine self-administration. Paper presented at the meeting of the International Study Group Investigating Drugs as Reinforcers (ISGIDAR), San Juan, PR.
- Kearns, D. N.**, & Weiss, S. J. (2004). Reinstatement of a food-maintained operant response produced by compounding discriminative stimuli. Paper presented at the meeting of the Eastern Psychological Association, Washington, DC.
- Kearns, D. N.**, & Weiss, S. J. (2003). Sign-tracking (autoshaping) in rats: a comparison of food and cocaine as USs. Paper presented at the meeting of the Eastern Psychological Association, Baltimore, MD.
- Weiss, S. J., **Kearns, D. N.**, Weissman, R. D., Schindler, C. W., & Panlilio, L. V. (2003). Conditioned inhibition generated by food, shock-avoidance and cocaine self-administration contingencies. Paper presented at Winter Conference on Animal Learning and Behavior, Winter Park, CO.
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REVIEWER FOR PEER-REVIEWED JOURNALS

Addiction Biology, Addiction Neuroscience, Alcohol, Analysis of Gambling Behavior, Animal Behaviour, Behavior Analysis: Research and Practice, Behavioural Brain Research, Behavioural Pharmacology, Behavioural Processes, Brain Research, Brain Structure & Function, Cerebral Cortex, Drug and Alcohol Dependence, eNeuro, Experimental and Clinical Psychopharmacology, eNeuro, Frontiers in Behavioral Neuroscience, International Journal of Comparative Psychology, Journal of Clinical Toxicology, Journal of Experimental Psychology: Animal Behavior and Cognition, Journal of the Experimental Analysis of Behavior, Journal of Visualized Experiments, Learning & Behavior, Neuropharmacology, Neuropsychopharmacology, Neuroscience, Progress in Neuropsychopharmacology and Biological Psychiatry, Psychology Research and Behavior Management, Psychopharmacology, Scientific Reports, Translational Psychiatry

EDITORIAL SERVICE

Pharmacology, Biochemistry and Behavior, Guest Editor for Special Issue on *Decision Making in Substance Use Disorder*, published January 2018. The issue includes reviews by addiction researchers such as Warren Bickel, Serge Ahmed, Edyth London, Steven Negus, and more.

Editorial Board, *Experimental and Clinical Psychopharmacology*

CONFERENCE ORGANIZATION

Program chair for Learning area, Eastern Psychological Association, 2017-2020

Board of Directors, Eastern Psychological Association, 2020-2023

GRANT REVIEW PANELS

Reviewer for NIH R21 Special Emphasis Panel, November 2017

Reviewer for National Center on Responsible Gaming, October 2017, 2018

Reviewer for Behavior Biology and Chemistry Travel Awards, 2018-2022

PROFESSIONAL MEMBERSHIPS

Fellow, Eastern Psychological Association

Member, Pavlovian Society