

Experimental and Applied Psychological Sciences (EAPS) PhD Program

Outcome Data

In line with program objectives, EAPS students do well in their coursework, demonstrating mastery of knowledge objectives, engage in research activities including conference presentations, publications, and grant writing), and demonstrate overall competence by obtaining high quality post-doctoral positions.

EAPS students demonstrate knowledge in core areas

As reflected by an average GPA of 3.9 over the past several years, students in the EAPS program demonstrate knowledge of core content areas.

Post-doc Placements of EAPS Graduates

Within the past several years, EAPS students have received prestigious post-doctoral positions including:

Baumann Neves, Ana - Washington University in St. Louis

Jimenez-Gomez, Corina – University of Michigan

Podlesnik, Christopher – University of Michigan

Ward, Ryan – Columbia University

Research Engagement

Students demonstrate skills in planning and conducting research, including critically reviewing empirical literature and competence in dissemination of findings via engagement in publishing manuscripts and presenting at professional conferences.

Student Publications (2006-2008); n=22

Bailey, M. A., & Domenech Rodríguez, M. M. (2007). The role of faculty advisors in the success of Psi Chi chapters: Leadership characteristics and their relation with student organization success. *Eye on Psi Chi*, 11(2), 25-29.

Baumann, A. A. L., & Domenech Rodríguez, M. M. (2007). To pay or not to pay?: Legal and ethical issues in international students' participation in research. *International Section of Counseling Psychology*, 1, 11-12.

Jimenez-Gomez, C., & Shahan, T. A. (2007). Resistance to change of alcohol self-administration: Effects of alcohol-delivery rate on disruption by extinction and naltrexone. *Behavioural Pharmacology*, 18, 161-169.

Odum, A. L., & Baumann, A. A. L. (2007). Cigarette smokers show steeper discounting of both food and cigarettes than money. *Drug and Alcohol Dependence*, 91, 293-296.

- Odum, A. L., Baumann, A. A. L., & Rimington, D. D. (2006). Discounting of delayed hypothetical money and food: Effects of amount. *Behavioural Processes*, 73(3), 278-284.
- Odum, A. L., & Ward, R. D. (2007). Characterizing the effects of d-amphetamine on temporal discrimination. *Behavioural Processes*, 75(2), 56-66.
- Odum, A. L., Ward, R. D., Barnes, C. A., & Burke, K. A. (2006). Effects of delays to reinforcement on variability and repetition of response sequences. *Journal of the Experimental Analysis of Behavior*, 86, 159-179.
- Podlesnik, C. A., & Shahan, T. A. (2008). Response-reinforcer relations and resistance to change. *Behavioral Processes*, 77, 109-125.
- Podlesnik, C. A., Jimenez-Gomez, C., Ward, R. D., & Shahan, T. A. (2006). Resistance to change of responding maintained by unsignaled delays to reinforcement: A response-bout analysis. *Journal of the Experimental Analysis of Behavior*, 85, 329-347.
- Podlesnik, C. A., Jimenez-Gomez, C., & Shahan, T. A. (2006). Resurgence of alcohol seeking produced by discontinuing non-drug reinforcement as an animal model of drug relapse, *Behavioural Pharmacology*, 17, 369-374.
- Shahan, T. A., & Jimenez-Gomez, C. (2006). Effects of self-administered alcohol concentration on the frequency and persistence of rats' attending to alcohol cues. *Behavioural Pharmacology*, 17, 201-211.
- Shahan, T. A., & Jimenez-Gomez, C. (2006). Effects of self-administered alcohol concentration on the frequency and persistence of rats' attending to alcohol cues. *Behavioural Pharmacology*, 17, 201-211.
- Shahan, T. A., & Podlesnik, C. A. (2008). Conditioned reinforcement value and resistance to change. *Journal of the Experimental Analysis of Behavior*, 89, 263-298.
- Shahan, T. A., & Podlesnik, C. A. (2008). Quantitative analyses of observing and attending. *Behavioral Processes*, 78, 145-157.
- Shahan, T. A., & Podlesnik, C. A. (2007). Divided attention and the matching law: Sample duration affects sensitivity to reinforcement allocation. *Learning & Behavior*, 35, 141-148.
- Shahan, T. A., & Podlesnik, C. A. (2006). Divided attention performance and the matching law. *Learning & Behavior*, 34, 255-261.
- Shahan, T. A., Podlesnik, C. A., & Jimenez-Gomez, C. (2006). Matching and conditioned reinforcement rate. *Journal of the Experimental Analysis of Behavior*, 85, 167-180.
- Shahan, T. A., & Podlesnik, C. A. (2005). Rate of conditioned reinforcement affects observing rate but not resistance to change. *Journal of the Experimental Analysis of Behavior*, 84, 1-17.

- Sommers, M. S., Zink, T., Baker, R. B., Fargo, J. D., Porter, J., Weybright, D., et al. (2006). The effects of age and ethnicity on physical injury from rape. *Journal of Obstetric, Gynecologic, and Neonatal Nursing*, 35, 199-207.
- Ward, R. D., Kynaston, A. K., Bailey, E.M., & Odum, A. L. (2008). Discriminative control of variability: Effects of successive stimulus reversals. *Behavioral Processes*, 78, 17-24.
- Ward, R. D., & Odum, A. L. (2007). Disruption of temporal discrimination and the choose-short effect. *Learning & Behavior*, 35(1), 60-70.
- Ward, R. D., Bailey, E. M., & Odum, A. L. (2006). Effects of d-amphetamine and ethanol on variable and repetitive key-peck sequences in pigeons. *Journal of the Experimental Analysis of Behavior*, 86(3), 285-305.

Student Presentations (2006-2008); n=45)

- Sommers, M. S., Fargo, J. D., Lyons, M., & Bohn, C. M. (2008, June). *Problem drinking, cigarette smoking, and risky riving in an urban emergency department sample*. Paper presentation at the Annual Meeting of the Research Society on alcoholism, Washington, D.C.
- Baumann Neves, A. A. L., Thomas, W. P., Bates, S. C., Marquit, J. D., & Odum, A. L. (2008, May). *Discounting of delayed and probabilistic increases in temperature as a result of climate change*. Poster presented at the annual meeting of the Society for the Quantitative Analysis of Behavior, Chicago, IL.
- Baumann Neves, A. A. L., Thomas, W. P., & Odum, A. L. (2008, May). *Delay discounting of money, gift certificates for food and food*. Poster presented at the 34th annual meeting of the Association for Behavior Analysis, Chicago, IL.
- Crosby, J.M., Twohig, M.P., Shahan, T.A., & Allen, J.W. (2008, May). *Delay Discounting Research with Problematic Sexual Behavior in Human Subjects*. Poster presented at the 34th annual meeting of the Association for Behavior Analysis, Chicago, IL.
- Jimenez-Gomez, C., Podlesnik, C. A., & Shahan, T.A. (2008, May). *The effects of initial-link duration on preference and resistance to change*. Poster presented at the 31st Annual Society for the Quantitative Analyses of Behavior Conference, Chicago, IL.
- Kynaston, A. D., Thomas, W. P., & Odum, A. L. (2008, May). Contingencies affecting the development of tolerance and sensitization: Random-ratio vs. random-interval schedules. In M. Locey, Chair, *Factors contributing to the development of tolerance and sensitization to drugs of abuse*. Symposium presented at the 34th annual meeting of the Association for Behavior Analysis, Chicago, IL.
- Pyszczynski, A.D., & Shahan, T.A. (2008, May). *Multiple-schedule contrast and cross-context recovery of extinguished operant responding previously maintained by a qualitatively different reinforcer*. Poster presented at the 31st Annual Society for the Quantitative Analyses of Behavior Conference, Chicago, IL.

- Quick, S.L., & Shahan, T.A. (2008, May). *Context Valuation: The Effects of d-Amphetamine on the Persistence and Reinstatement of Responding Previously Maintained by Food*. Poster presented at the 34th annual meeting of the Association for Behavior Analysis, Chicago, IL.
- Thrailkill, E. A., Podlesnik, C. A., & Shahan, T.A. (2008, May). *Divided attention and the matching law: Compound sample performance is sensitive to variations in reinforcement experienced with the elements alone*. Poster presented at the 31st Annual Society for the Quantitative Analyses of Behavior Conference, Chicago, IL.
- Ward, R. D., & Odum, A. L. (2008, May). *Disruption of steady-state sensitivity to reinforcer frequency*. Poster presented at the annual meeting of the Society for the Quantitative Analysis of Behavior, Chicago, IL.
- DeBerard, M. S., LaCaille, R. A., Spielmans, G. I., Parlin, M. A., Gundy, J., & Grewe, J. (2008, March). *Patient satisfaction with the Utah workers' compensation system following lumbar discectomy: A validity study*. Poster presented at the Society of Behavioral Medicine 29th Annual Conference, San Diego, CA.
- DeBerard, M. S., Masters, K. S., Bates, S., & Grewe, J. (2008, March). *Detecting malingering in compensated back pain patients: An analog study*. Poster presented at the Society of Behavioral Medicine 29th Annual Conference, San Diego, CA.
- Roberts, R. N., & Davies, S. (2008, February). *Understanding the "space" of race/ethnicity in early intervention research/practice*. Presentation at the Conference on Research Innovations in Early Intervention, San Diego, CA.
- Osterman, R., Bohn, C. M., Fargo, J.D., & Sommers, M. S. (2007, October). *Association between hazardous/harmful drinking and depressive symptoms in an emergency room population*. Poster presentation at the annual conference of the International Nurses Society on Addictions, Arlington, VA.
- Ribak, J., Chapman, H., Fargo, J. D., & Sommers, M. S. (2007, October). *How short is too short? Comparing three forms of the AUDIT for use in the emergency department*. Poster presentation at the Annual Conference of the International Nurses Society on Addictions, Arlington, VA.
- Odum, A. L., Kynaston, A. D., & Newbold, C. L. (2007, August). *Sensitization develops to the effects of repeated d-amphetamine on responding of rats under random-ratio and random-interval schedules of food delivery*. In R. C. Pitts, Chair, *Behavioral pharmacology of stimulants - pharmacological and non-pharmacological factors*. Symposium presented at the 115th annual meeting of the American Psychological Association, San Francisco, CA.
- Marquit, J. D., Bates, S. C., & Redd, E. H. (2007, June). *Perception to action?: Findings from the Cache Valley Air Quality Perception Survey*. Poster presented at the 13th International Symposium on Society & Resource Management, Park City, UT.
- Ward, R. D., & Odum, A. L. (2007, May). Stimulus dimension and resistance to change of conditional discrimination. In J. A. Nevin (Chair), *Conditional discriminations: Conceptual*

issues and new findings. Symposium presented at the 33rd Annual Meeting of the Association for Behavior Analysis, San Diego, CA.

Baumann Neves, A. A. L., Kynaston, A. D., Alder, J. K., & Odum, A. L. (2007, May). To eat, not to eat, or to exchange: Discounting of food, gasoline, and money. In A. L. Odum (Chair), *Delay discounting*. Symposium presented at the 33rd Annual Meeting of the Association for Behavior Analysis, San Diego, CA.

Jimenez-Gomez, C. & Shahan, T.A. (2007, May). *Differential Resistance to Change of Alcohol Self-Administration of Rats Depends upon the Type of Disruptor*. Poster presented at the 33rd Annual Association of Behavior Analysis Convention, San Diego, CA.

Kynaston, A. D., Bailey, E., Ward, R. D., & Odum, A. L. (2007, May). *Discriminative control of variable behavior: Effects of successive stimulus reversals*. Poster presented at the 33rd Annual Meeting of the Association for Behavior Analysis, San Diego, CA.

Newbold, C. L., Kynaston, A. D., & Odum, A. L. (2007, May). *The effects of operant contingencies on drug sensitization and tolerance to chronic administration of amphetamine*. Poster presented at the 33rd annual meeting of the Association for Behavior Analysis, San Diego, CA.

Odum, A. L., Ward, R. D., Jiménez-Gómez, C., Shahan, T. A., & Nevin, J. A. (2007, May). Persistence of accuracy and response rate in delayed matching-to-sample with differential outcomes. In J. A. Nevin (Chair), *Conditional discriminations: Conceptual issues and new findings*. Symposium presented at the 33rd Annual Meeting of the Association for Behavior Analysis, San Diego, CA.

Ward, R. D., & Odum, A. L. (2007, May). *Stimulus dimension and resistance to change of conditional discrimination*. In J. A. Nevin, Chair, *Conditional discriminations: Conceptual issues and new findings*. Symposium presented at the 33rd annual meeting of the Association for Behavior Analysis, San Diego, CA.

Ward, R. D., & Odum, A. L. (2007, May). Disruption of temporal discrimination and the choose-short effect. In K. A. Saulsgiver (Chair), *Pharmacological and non-pharmacological disruptors of timing: Current results and theoretical implications*. Symposium presented at the 33rd Annual Meeting of the Association for Behavior Analysis, San Diego, CA.

Bohn, C. M., Findley, M., & Fargo, J. D. (2007, April). *Relationship between emotional and physical threats and fear of victimization in middle and high school students: Data from a national sample*. Poster presentation at the annual Utah State University Student Research Symposium, Logan, UT.

D'zatko, K., Collum, J. L., & Fargo, J. D. (2007, April). *Parenting typologies in mothers sexually abused as children*. Poster presentation at the annual Utah State University Student Research Symposium, Logan, UT. (Awarded 3rd place in graduate student competition.)

- Elison, J., Ferguson, T., Dansie, E., & Haycock, M. (2007, April). *Perils of partialing*. Paper presented at the annual meeting of the Rocky Mountain Psychological Association, Denver, CO.
- Bates, S. C., Gushin, V. I., Marquit, J. D., Bingham, G., & Sychev, V. V. (2007, March). *Plants as countermeasures in long-duration space missions: A review of the literature and research strategy*. Presented at the European Space Agency Workshop: Tools for Psychological Support, Noordwijk, The Netherlands.
- Bailey, M. A., & Domenech Rodríguez, M. M. (2007, February). *The role of faculty advisors in the success of Psi Chi chapters: Leadership characteristics and student organization success*. Poster presented at the annual conference of the Association of College Honor Societies, Tampa, FL.
- Domenech Rodríguez, M., & Baumann, A. A. (2006, November). Latino values: What we know and what we need to know. In E. Cardemil (Chair), *Future directions in Latino mental health research*. Symposium presented at the biannual conference of the National Latino/a Psychological Association, Milwaukee, WI.
- Bailey, E., & Odum, A. L. (2006, May). *Effects of a cannabinoid agonist on the reinforcing efficacy of self-administered ethanol in rats*. Poster presented at the 32nd annual meeting of the Association for Behavior Analysis, Atlanta, GA.
- Baumann Neves, A. A. & Odum, A. L. (2006, May). *Decision making: Base rate neglect and contextual factors*. Poster presented at the 32nd annual meeting of the Association for Behavior Analysis, Atlanta, GA.
- Jimenez-Gomez, C., & Shahan, T.A. (2006, May). Persistence of Rats' Attending to Alcohol Stimuli Associated with Different Concentrations of Alcohol. Poster presented at the 32st Annual Association of Behavior Analysis Convention, Atlanta, GA.
- Nevin, J. A., Shahan, T. A., & Odum, A. L. (2006, May). *Contrast effects on accuracy and response rate in delayed matching to sample*. In A. L. Odum, Chair, *Discriminating and attending*. Symposium presented at the 32nd annual meeting of the Association for Behavior Analysis, Atlanta, GA.
- Podlesnik, C.A., Jimenez-Gomez, C., & Shahan, T.A. (2006, May). *Resurgence as an Alternative Animal Model of Drug Relapse*. Poster presented at the 32st Annual Association of Behavior Analysis Convention, Atlanta, GA.
- Podlesnik, C.A., & Shahan, T.A. (2006, May). *Reinforcer Quality and Resistance to Change*. Poster session presented at the annual meeting of the Society for the Quantitative Analysis of Behavior, Atlanta, GA.
- Shahan, T. A., & Odum, A. L. (2006, May). *Utah State University: Behavior analysis training in the department of psychology*. Poster presented at the 32nd annual meeting of the Association for Behavior Analysis, Atlanta, GA.

- Shahan, T. A., & Podlesnik, C. A. (2006, May). Effects of added free-food presentations uncorrelated with S+ on observing rates and resistance to change. In A. Odum (Chair), *Discriminating and attending*. Symposium conducted at the 32nd Annual Meeting of the Association for Behavior Analysis, Atlanta, GA.
- Ward, R. D., & Odum, A. L. (2006, May). *Resistance to change of temporal discrimination*. In K. A. Lattal, Chair, *The temporal control of behavior*. Symposium presented at the 32nd annual meeting of the Association for Behavior Analysis, Atlanta, GA.
- Ward, R. D., & Odum, A. L. (2006, May). Effects of *d*-amphetamine on stimulus control and temporal discrimination in position and color-matching variants of the interval-bisection procedure. In E. McClure, Chair, *Topics in timing*. Symposium presented at the 32nd annual meeting of the Association for Behavior Analysis, Atlanta, GA.
- Cullum, J. L., Anderson, D. C., & Schroder, K. E. E. (2006, March). *Cognitive reactions to failure moderate the impact of temptation on diet quality, binging, and BMI*. Poster presented at the 27th Annual Meeting of the Society of Behavioral Medicine, San Francisco, CA.
- Doti, J. F., Cullum, J. L., & Schroder, K. E. E. (2006, March). *Development and validation of a Dieting Abstinence Violation Effect (DAVE) scale*. Poster presented at the 27th Annual Meeting of the Society of Behavioral Medicine, San Francisco, CA.
- Hatch, D. L., & Galliher, R. V. (2006, March). Testing romantic relationship factors as moderators of the association between adolescent intercourse experience and depressive symptoms. In S. Miller-Johnson (Chair), *Adolescent romantic relationships and risk taking behaviors*. Paper symposium presented at the Biennial Meeting of the Society for Research on Adolescence, San Francisco, CA.
- Shahan, T. A., & Podlesnik, C. A. (2006, February). *Divided attention and the matching law*. Invited address given at the annual meeting of the Winter Conference on Animal Learning and Behavior, Winter Park, CO.

Grants submitted

Students are expected to demonstrate competence in writing grants and contracts. Below are grants submitted by students in the EAPS program demonstrating that students are actively engaged in grant writing and submission.

2008

Baker, J. "The effect of video game playing on number estimation". Psi Chi SuperLab Research Grant

2007

Bauman, A. "A cross-cultural comparison of delay discounting: Are Latinos more impulsive than White Americans?" Submitted to Psi Chi – The National Honor Society in Psychology. (Funded at \$1500)

Bauman, A. “Are delay discounting, probability discounting and time perception related? A cross-cultural study among Latino and White American students?” Submitted to American Psychological Association Dissertation Research Award. (Funded at \$1000)

Jimenez-Gomez, C. “An animal model for quantifying the effects of behavioral and pharmacological treatments on the incentive properties of alcohol cues”. Submitted to Sigma Xi, The Scientific Research Society.

Podlesnik, C. A. “Resurgence as a Novel Model of Relapse to Alcohol Seeking”. Submitted to Sigma Xi, The Scientific Research Society. (Funded at \$400)

2006

Jimenez-Gomez, C. “The persistence of cocaine seeking: An animal model”. Submitted to Sigma Xi, The Scientific Research Society.

Ward, R. “Remembering, Sample-Stimulus Disparity, and Reinforcement”. Submitted to Psi Chi – The National Honor Society in Psychology. (Funded at \$1500)