

MARTHA ESCOBAR

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PROFESSIONAL PREPARATION

<i>Institution</i>	<i>Major</i>	<i>Degree, year</i>
University of Deusto, Bilbao, Spain	Psychology	B.A., 1997
SUNY-Binghamton, USA	Cognitive and Behavioral Science	M.A., 2001
SUNY-Binghamton, USA	Cognitive and Behavioral Science	Ph.D., 2002

APPOINTMENTS

2015-present	Associate Professor of Psychology, Oakland University, AL, USA
2007-2015	Associate Professor of Psychology, Auburn University, AL, USA
2002-2007	Assistant Professor of Psychology, Auburn University, AL, USA

TEACHING

COURSES TAUGHT

Undergraduate level

Animal Behavior (Auburn University, 2005, 2008, 2010, 2011, 2013; Oakland University, 2016)

Foundations of Contemporary Psychology (Oakland University, 2015-2016)

Human Odyssey I and II (Auburn University, 2009-2011)

Human Odyssey II, Honors (Auburn University, 2011)

Introduction to Psychology (Auburn University, 2002-2004, 2008-2009, 2011-2014; Oakland University 2016-17)

Learning Principles (Oakland University, 2018)

Orientation to the Psychology Major (Auburn University, 2013-2014)

Psychology of Learning (SUNY-Binghamton, 2000; Auburn University, 2002-2008, 2011-2014)

Special Topics Seminar: Animal Behavior (Auburn University, 2005, 2008, 2010, 2011, 2013)

Undergraduate seminar: The psychology laboratory and the experimental method in psychology (Universidad Autónoma de Bucaramanga, Colombia, 1996)

Undergraduate seminar: Use of the computer in psychology (Universidad de Deusto, Spain, 1996)

Undergraduate seminar: Learning processes (Oakland University, 2018)

Graduate level

Animal Behavior (Auburn University, 2005, 2008, 2010, 2011, 2013)

Learning and Conditioning (Auburn University, 2004-2007, 2011)
 Neuroanatomy, Brain Development, and Neural Plasticity (Oakland University, 2017)
 Special Topics Seminar: Associative Learning Theory (Auburn University, 2006, 2011)
 Special Topics Seminar: Advanced Learning and Conditioning (Auburn University, 2009)

Invited seminars/workshops

Juicios de causalidad: Perspectivas de modelos asociativos y causales (Causality judgments: Associative and causal model perspectives). Centro de Estudios e Investigaciones del Comportamiento (CEIC), Universidad de Guadalajara, Mexico, May 12-13, 2010 (12 h).

ADMINISTRATIVE POSITIONS RELATED TO TEACHING

2014-2015. Director, Auburn University Psychology Department Teaching Fellows Program

TEACHING HONORS AND AWARDS

2012 College of Liberal Arts Promotion of Excellence in Teaching and Learning Committee (PETL) Excellence in Teaching Award
 2008-2011 Auburn University Lanier Professorship in Psychology
 2006 College of Liberal Arts Programs for Excellence in Research and Creativity Awards for Tenure-Track Faculty (one semester teaching release, Fall 2006)
 2002-2003 Psi-Chi Excellence in Undergraduate Teaching Award (awarded by the Psi-Chi Auburn University Chapter)

PAPERS AND POSTERS RELATED TO TEACHING PRESENTED OR COAUTHORED AT PROFESSIONAL MEETINGS WITH A PUBLISHED ABSTRACT

*Note: * denotes graduate student coauthor; ** denotes undergraduate student coauthor.*

Knight, R. W., & Escobar, M. The Covert Curriculum of Two Cultures: The Trials and Tribulations of Team-Teaching with Someone Completely Different. Annual Georgia Conference on College and University Teaching, Kennesaw, GA, 2010.
 Mendonça, M.T., Barker, L. M., Escobar, M., & Knight, R. W. The Human Odyssey at Auburn University: An interdisciplinary curriculum in the sciences and humanities. Eighty-Seventh Annual Meeting of the Alabama Academy of Science, Normal, AL, 2010.

STUDENTS ADVISED (WORK COMPLETED)

Ph.D.

Subhrajit Bhattacharya, Co-advisor (2015, currently post-doctoral fellow at Emory University)
 Elizabeth P. Dunaway (2015, currently Assistant Professor at Dalton State College)
 Whitney K. Pugh (2013)
 William T. Suits (2009, currently Associate Professor at Seminole State College)

M.A.

Robert Alexander Sauer (2015)
 Elizabeth P. Dunaway (2013)

Justin S. Johnson (2009)

Seth Wilhelmsen (2007, currently Academic Advisor at Weber State University)

Honors Theses

Arnold Obungu (2015)

Kristen Haynes (2014)

Caroline Catchpole (2013)

Aaron R. Plitt (2010)

Daniel E. Bradford (2007)

Elizabeth J. Rahn (2004)

A. Brent Casteel (2003)

RESEARCH

EDITORIAL WORK

Associate Editor, *Learning and Motivation* (2017-2020). Editor-in-Chief: Phil Reed

REFEREE

Animal Behavior and Cognition

Animal Behaviour

Behaviour Research and Therapy

Behavioural Processes

Current Directions in Psychological Science

Frontiers in Behavioral Neuroscience

International Clinical Psychopharmacology

International Journal of Comparative Psychology

Journal of Behavior Therapy and Experimental Psychiatry

Journal of the Experimental Analysis of Behavior

Journal of Experimental Psychology: Animal Learning and Cognition (Journal of Experimental Psychology: Animal Behavior Processes)

Journal of Experimental Psychology: General

Journal of Experimental Psychology: Learning, Memory, and Cognition

Learning & Behavior (Animal Learning & Behavior)

Learning and Motivation

Memory

Neurotoxicology

PeerJ

Psichothema

Psychiatry Research

Psychological Record

Psychonomic Bulletin & Review

Psychiatry Research
 Quarterly Journal of Experimental Psychology
 Schizophrenia Bulletin

MEMBERSHIP IN PROFESSIONAL SOCIETIES

American Psychological Association
 American Psychological Society
 Comparative Cognition Society
 Eastern Psychological Association
 Spanish Comparative Psychology Society

AWARDS AND FELLOWSHIPS

Binghamton University Dissertation Year Award (9-01 to 5-02)
 NIH predoctoral fellowship (6-98 to 5-00)
 Auburn University Provost's Award for Faculty Excellence in Fostering Undergraduate Research and Creative Scholarship (2012)

GRANTS (FUNDED)

ONGOING

NSF INCLUDES (2017-2019). *The Alabama Alliance for Computer Science Preparation for Underrepresented Minorities in the Middle Schools of the Alabama Black Belt Region*. Role: Subawardee (Primary institution: Tuskegee University; PI: Shaik Jeelani).
 NSF HBCU-UP (2017-2022). *HBCU-UP Implementation Project: Preparing Interdisciplinary Minority Material Scientists and Engineers of the Future*. Amount awarded: \$904,082 (Oakland University portion: \$220,294). Role: PI (NSF Award #1719423).
 NSF ITEST (2017-2020). *Strategies: Building Unique Inventions to Launch Discoveries, Engagement and Reasoning in STEM (BUILDERS)*. Amount awarded: \$894,655 (Oakland University portion: \$190,120). Role: PI (NSF Award #1657123).
 NSF S-STEM (2016-2021) *Collaborative Research: Making to Advance Knowledge, Excellence, and Recognition in STEM (MAKERS)*. Amount awarded: \$4,999,714 across the Alliance (Oakland University portion: \$180,135). Role: PI. (NSF Award #1643953.)
 NSF AGEP-T (2014-2018) *Collaborative Research: The Tuskegee Alliance to Develop, Implement and Study a Virtual Graduate Education Model for Underrepresented Minorities in STEM*. Amount awarded: \$2,593,384 across the Alliance (Auburn University portion: \$821,702). Role: Co-PI (PI: Melody Russell). Role changed to consultant in August 2015. (NSF Award #1433004.)

COMPLETED

Oakland University Faculty Research Fellowship (Summer, 2016). *Learning and memory consequences of chemotherapy treatment*. Amount awarded: \$10,000. Role: PI.

- Auburn University Research Initiative in Cancer (AURIC) (2015-2017). *Elucidation of Molecular Mechanisms of Chemobrain: Identification of Targets and Therapies*. Amount awarded: \$100,000. Role: Co-PI (PI: Vishnu Suppiramaniam).
- Auburn University Intramural Grant Program, Level IV (2013-2014): *MEA: Evaluation of signaling in the brain, heart, muscle, and more*. Amount awarded: \$51,000.
- Auburn University Intramural Grant Program, Level I (2012-2013): *Interference and biological significance as determinants of fear attenuation*. Amount awarded: \$4,000.
- NIMH R15 (2008-2011): *Disruption and maintenance of extinction and other forms of interference in associative learning*. Amount awarded: \$219,000.
- Auburn University Competitive Research Grant (2007-2008). *Prediction, diagnosis, and classical conditioning processes in causality attribution*. Amount awarded: \$5,600.
- Auburn University Competitive Research Grant (2003-2004). *Temporal representations: Preliminary studies for an animal model of timing behavior*. Amount awarded: \$10,000.

GRANTS AWARDED TO STUDENTS UNDER MY SUPERVISION

Note: * denotes graduate student; ** denotes undergraduate student.

- *Elizabeth P. Dunaway. Auburn University Graduate School Research Award (2014-2015). Amount awarded: \$800.
- **Arnold Obungu. Auburn University Undergraduate Research Fellowship (CLA/COSAM) (2014-2015). Amount awarded: \$4,500.
- **Kristen Haynes. Opportunities in Undergraduate Research in CLA (OURCLA) (2013-2014). Stipend awarded: \$4,500; project funds: \$1,000.
- **Kyle Gennaro. Auburn University Undergraduate Research Fellowship (Summer 2012). Stipend awarded: \$1,000; project funds: \$700; travel funds: \$200.
- **Laura E. Coursen. Auburn University Undergraduate Research Fellowship (2009-2010). Stipend awarded: \$4,400; project funds: \$1,400; travel funds: \$200.
- **Aaron R. Plitt. Auburn University Undergraduate Research Fellowship (2009-2010). Stipend awarded: \$4,400; project funds: \$1,400; travel funds: \$200.
- **Daniel E. Bradford. American Psychological Association, Statistical Training in Psychology (ASTP) fellowship (Summer 2006). Tuition, room, and board costs awarded.
- **Daniel E. Bradford. Auburn University Undergraduate Research Fellowship (Fall 2006). Stipend awarded: \$1,000; project funds: \$700; travel funds: \$200.
- **Elizabeth J. Rahn. Auburn University Undergraduate Research Fellowship (2004-2005). Stipend awarded: \$4,400; project funds: \$1,400; travel funds: \$200.
- **Elizabeth J. Rahn. Psi Chi Undergraduate Research Grant (2004). *Inhibition of delay in Pavlovian appetitive conditioning*. Amount awarded: \$1,051.
- **A. Brent Casteel. Auburn University Undergraduate Research Fellowship (2003-2004). Stipend awarded: \$4,000; project funds: \$1,400; travel funds: \$200.

PUBLICATIONS

Note: * denotes graduate student coauthor; ** denotes undergraduate student coauthor.

Russell, M.L., **Escobar, M.**, Russell, J.A., *Thomas, M., *Laurencio, D., *Ellis, R., & *Dixon, C.

(conditional acceptance). Historically Black Colleges and Universities (HBCUs): Promoting pathways to STEM graduate programs and STEM careers. *The Negro Educational Review Journal*.

- Schachtman, T., Blaisdell, A.P., & **Escobar, M.** (in press). Ralph R. Miller. In J. Vonk and T.K. Shackelford (Eds.), *Encyclopedia of Animal Cognition and Behavior*.
- Escobar, M.**, Arcediano, F., & **Unobagha, C. (2017). Acquisition. In J. Vonk and T.K. Shackelford (Eds.), *Encyclopedia of Animal Cognition and Behavior*. 10.1007/978-3-319-47829-6_1058-1
- Escobar, M.**, *Irvan, D., & **Lechnar, A. (2017). Inhibition of delay. In J. Vonk and T.K. Shackelford (Eds.), *Encyclopedia of Animal Cognition and Behavior*. DOI 10.1007/978-3-319-47829-6_1071-1
- *Bhattacharya, S., *Kimble, W.L., *Buabeid, M., *Bhattacharya, D., *Bloemer, J., *Alhowail, A., Reed, M., Dhanasekaran, M., **Escobar, M.**, & Suppiramaniam, V. (2017). Altered AMPA receptor expression plays an important role in inducing bidirectional synaptic plasticity during contextual fear memory reconsolidation. *Neurobiology of Learning and Memory*, 139, 98-108. DOI: 10.1016/j.nlm.2016.12.013
- *Bhattacharya, D., *Dunaway, E.P., *Bhattacharya, S., *Bloemer, J., *Buabeid, M., **Escobar, M.**, Suppiramaniam, V., & Dhanasekaran, M. (2015). Impaired ILK function is associated with deficits in hippocampal based memory and synaptic plasticity in a FASD rat model. *PlosOne*, 10(8), e0135700. DOI: 10.1371/journal.pone.0135700
- Escobar, M.**, *Suits, W.T., **Rahn, E.J., & Arcediano, F. (2015). Do long delay conditioned stimuli develop inhibitory properties? *Frontiers in Psychology*, 6, 1606. DOI: 10.3389/fpsyg.2015.01606
- Escobar, M.**, *Dunaway, E.P. & **Gennaro, K. (2014). Conditioned avoidance responses survive contingency degradation in the garden slug, *Lehmannia valentiana*. *Learning & Behavior*, 42, 305-312. DOI 10.3758/s13420-014-0147-9
- *Powell, E. J., **Escobar, M.**, & *Kimble, W. (2013). Delaying interference training has equivalent effects in various Pavlovian interference paradigms. *Learning & Memory*, 20, 241-244.
- Escobar, M.**, & Miller, R. R. (2012). Associative accounts of causality judgments. In T. R. Zentall & E. A. Wasserman (Eds.), *Handbook on comparative cognition* (pp. 157-174). New York, NY: Oxford University Press.
- Parameshwaran, K., *Buabeid, M. A., *Karuppagounder, S. S., *Uthayathas, S., *Thiruchelvam, K., Shonesy, B., Dityatev, A., **Escobar, M.**, Dhanasekaran, M., & Suppiramaniam, V. (2012). Developmental nicotine exposure induced alterations in behavior and glutamate receptor function in hippocampus. *Cellular and Molecular Life Sciences*, 69, 829-841.
- Escobar, M.**, & Miller, R. R. (2010). Latent inhibition as a performance deficit. In R. E. Lubow & I. Weiner (Eds.), *Latent inhibition: Cognition, neuroscience, and applications to schizophrenia* (pp. 62-93). New York, NY: Cambridge University Press.
- *Johnson, J. S., **Escobar, M.**, & *Kimble, W. L. (2010). Long-term maintenance of immediate or delayed extinction is determined by the extinction-test interval. *Learning & Memory*, 17, 639-644.
- Escobar, M.** (2008). Classical conditioning. In S. F. Davis and W. Buskist (Eds.), *21st century psychology* (Vol. 1, pp. 300-309). Thousand Oaks, CA: Sage.

- Escobar, M.**, & Arcediano, F. (2007). *Aprendizaje temporal*. In O. Pineño, H. Matute, and M. A. Badillo (Eds.), *Psicología del Aprendizaje* (pp. 205-226). Madrid: Abecedario.
- Escobar, M.**, Arcediano, F., & Miller, R. R. (2005). Disruption of latent inhibition by interpolation of irrelevant stimulation between preexposure and conditioning. *Learning & Behavior, 33*, 371-385.
- Arcediano, F., Matute, H., **Escobar, M.**, & Miller, R. R. (2005). Competition between antecedent and between subsequent stimuli in causal judgments. *Journal of Experimental Psychology: Learning, Memory, and Cognition, 31*, 228-237.
- Arcediano, F., **Escobar, M.**, & Miller, R. R. (2005). Bidirectional associations in humans and rats. *Journal of Experimental Psychology: Animal Behavior Processes, 31*, 301-318.
- Arcediano, F., **Escobar, M.**, & Miller, R. R. (2004). Is stimulus competition an acquisition deficit or a performance deficit? *Psychonomic Bulletin & Review, 11*, 1105-1110.
- Escobar, M.**, Arcediano, F., *Platt, T., & Miller, R. R. (2004). Interference and time: A brief review and an integration. *Reviews in the Neurosciences, 15*, 415-438.
- Stout, S. C., **Escobar, M.**, & Miller, R. R. (2004). Trial number and temporal relationship as joint determinants of second-order conditioning and conditioned inhibition. *Learning & Behavior, 32*, 230-239.
- Escobar, M.**, & Miller, R. R. (2004). A review of the empirical laws of basic learning in Pavlovian conditioning. *International Journal of Comparative Psychology, 17*, 279-303.
- Stout, S. C., Arcediano, F., **Escobar, M.**, & Miller, R. R. (2003). Overshadowing as a function of trial number: Dynamics of first- and second-order comparator effects. *Learning & Behavior, 31*, 85-97.
- Escobar, M.**, & Miller, R. R. (2003). Timing in retroactive interference. *Learning & Behavior, 31*, 257-272.
- Escobar, M.**, Arcediano, F., & Miller, R. R. (2003). Latent inhibition in human adults without masking. *Journal of Experimental Psychology: Learning, Memory, and Cognition, 29*, 1028-1040.
- Arcediano, F., **Escobar, M.**, & Miller, R. R. (2003). Temporal integration and temporal backward associations in human and nonhuman subjects. *Learning & Behavior, 31*, 242-256.
- Amundson, J. C., **Escobar, M.**, & Miller, R. R. (2003). Proactive interference between cues trained with a common outcome in first-order Pavlovian conditioning. *Journal of Experimental Psychology: Animal Behavior Processes, 29*, 311-322.
- Miller, R. R., & **Escobar, M.** E. (2002). Learning: Laws and models of basic conditioning. In C. R. Gallistel (Ed.), *Stevens' handbook of experimental psychology. Vol.3: Learning, motivation, and emotion*. New York: John Wiley & Sons.
- Miller, R. R., & **Escobar, M.** (2002). Associative interference between cues and between outcomes presented together and presented apart: An integration. *Behavioural Processes, 57*, 163-185.
- Escobar, M.**, Pineño, O., & Matute, H. (2002). A comparison between elemental and compound training of cues in retrospective revaluation. *Animal Learning & Behavior, 30*, 228-238.
- Escobar, M.**, Miller, R. R., & Oberling, P. (2002). Associative deficit accounts of disrupted latent inhibition and blocking in schizophrenia. *Neuroscience and Biobehavioral Reviews, 26*, 203-216.

- Escobar, M.**, Arcediano, F., & Miller, R. R. (2002). Latent inhibition and contextual associations. *Journal of Experimental Psychology: Animal Behavior Processes*, *28*, 123-136.
- Miller, R. R., & **Escobar, M.** (2001). Contrasting acquisition-focused and performance-focused models of behavior change. *Current Directions in Psychological Science*, *10*, 141-145.
- Escobar, M.**, Matute, H., & Miller, R. R. (2001). Cues trained apart compete for behavioral control in rats: Convergence with the associative interference literature. *Journal of Experimental Psychology: General*, *130*, 97-115.
- Escobar, M.**, Arcediano, F., & Miller, R. R. (2001). Conditions favoring retroactive interference between antecedent events and between subsequent events. *Psychonomic Bulletin and Review*, *8*, 691-697.
- Arcediano, F., **Escobar, M.**, & Matute, H. (2001). Reversal from blocking in humans as a result of posttraining extinction of the blocking stimulus. *Animal Learning & Behavior*, *29*, 354-366.
- Friedman, B. X., Blaisdell, A. P., **Escobar, M.**, & Miller, R. R. (1998). Comparator mechanisms and conditioned inhibition: Conditioned stimulus preexposure disrupts Pavlovian conditioned inhibition but not explicitly unpaired conditioned inhibition. *Journal of Experimental Psychology: Animal Behavior Processes*, *24*, 453-466.

PAPERS IN PROGRESS

Note: * denotes graduate student coauthor; ** denotes undergraduate student coauthor.

- *Abdel-Rahman, A., *Buabeid, M, Tao, Y.-X., Dhanasekaran, M., **Escobar, M.**, Amin, R., & Suppiramaniam, V. (2017). Peroxisome Proliferator Activated Receptor-Delta Activation Ameliorates Diabetes-Induced Cognitive Dysfunction by Modulating Integrin Linked Kinase and AMPA Receptor Function. Under review at *Neurobiology of Learning and Memory*.
- *Sauer, R.A., **Escobar, M.**, & *Bell, Z.K. (in preparation). Relapse from appetitive-to-aversive and aversive-to-appetitive counterconditioning in a human predictive learning task.
- Escobar, M., & Qazi, M. (in preparation). *Proven practices to facilitate transition of underrepresented minorities to the professoriate: Lessons learned by 11 AGEP Alliances*. Manuscript in preparation.
- *Dunaway, E.P., & **Escobar, M.** (in preparation). *Immediate exposure increases the effectiveness of post-relapse booster exposure*.
- Escobar, M.**, *Johnson, J. S., Arcediano, F., & *Amegbletor, D. (in preparation). *Differential use of probability information in predictive and diagnostic learning*.
- Escobar, M.** (in preparation). *Testing increases recall of a taste aversion in the garden slug, Lehmannia Valentiana*.
- *Kimble, W.L., *Dunaway, E.P., & **Escobar, M.** (in preparation). *Preexposure as a Strategy to Improve Resiliency and Treatment of Conditioned Fear*.
- Russell, M.L., Russell, J.A., Qazi, M., Jeelani, S., Robertson, B.K., & **Escobar, M.** (conditional acceptance). The road less traveled: Pathways to the professoriate for traditionally underrepresented graduate students in STEM. *Journal of Faculty Development*.
- *Suits, W. T., **Escobar, M.**, & *Kimble, W. L. (in preparation). *Temporally specific extinction of Pavlovian conditioned inhibition*.

PAPERS AND POSTERS PRESENTED OR COAUTHORED AT PROFESSIONAL MEETINGS WITH A PUBLISHED ABSTRACT

Note: * denotes graduate student coauthor; ** denotes undergraduate student coauthor.

- *Amegbletor, D., & **Escobar, M.** Gaze behavior in causal reasoning. Eastern Psychological Association, Philadelphia, PA, 2018.
- Escobar, M.**, Dunaway, E.P., & *Sauer, R.A. The timing of Interference Effects and Long-Term Fear Attenuation. Annual Meeting of the Midwestern Psychological Association, Chicago, IL, 2018. (Invited address.)
- Jeelani, S, Collier, W., Curry, M., Hosur, M., Qazi, M., Rangari, V., Tcherbi-Narteh, A., Zainuddin, S., **Escobar, M.**, McDonald, M., & Huston, D. HBCU-UP Implementation Project: Preparing Interdisciplinary Minority Material Scientists and Engineers of the Future. 2018 HBCU-UP/CREST PI/PD Meeting, Washington, DC, February 2018.
- Escobar, M.**, Abdalla, M., Curry, A., Curry, M., Olson, M., Qazi, M., Shannon, D., & Zainuddin, S. Building unique inventions to launch discoveries, engagement and reasoning in STEM (BUILDERS). STELAR ITEST PI and Evaluator Summit, Arlington, VA, June 2017.
- Escobar, M.**, & Arcediano, F. Garden slugs show the testing effect. Annual Meeting of the Comparative Cognition Society, Melbourne, FL, April 2017.
- Russell, M.L., **Escobar, M.**, Russell, J.A., & Qazi, M. The Tuskegee Alliance to Forge Pathways to Academic Careers in STEM (T-PAC). AGEP National Forum, Council of Graduate Schools. Washington, DC, February 2017.
- Jeelani, S., Qazi, M.A., Russell, M., Russell, J., Robertson, B.K., Whaley, K., & **Escobar, M.** The Tuskegee Alliance to forge pathways to academic careers in STEM (T-PAC). 8th Conference on Understanding Interventions that Broaden Participation in Science Careers. Philadelphia, PA, 2016.
- *Bhattacharya, S., *Buabeid, M., *Bloemer, J., *Alhowail, A., Dhanasekaran, M., **Escobar, M.**, & Suppiramaniam, V. Altered synaptic glutamate receptor expression is required for contextual fear memory updating. Poster#: 445.09/CC24. 2015 Neuroscience Meeting Planner. Washington DC: Society for Neuroscience, 2015. Online.
- Escobar, M.**, *Bhattacharya, S., *Bhattacharya, D., & Suppiramaniam, V. Synaptic Plasticity changes After Retrieval of Contextual Fear Memories. Annual Meeting of the Pavlovian Society, Portland, OR, 2015. (Invited address.)
- *Sauer, R.A., & **Escobar, M.** Relapse phenomena from counterconditioning within a human predictive learning task. Eastern Psychological Association, Philadelphia, PA, 2015.
- *Bhattacharya, S., *Kimble, W.L., *Buabeid, M., *Bhattacharya, D., *Bloemer, J., *Katz, D., *Alhowail, A., *Aljedani, F., Dhanasekaran, M., Kodeeswaran, P., Escobar, M., & Suppiramaniam, V. Investigating the mechanism of memory reconsolidation in fear associated memories. Society for Neuroscience, Washington, DC, 2014.
- *Dunaway, E.P., & **Escobar, M.** Extending counterconditioning training increases the efficacy of immediate and delayed counterconditioning. Eastern Psychological Association, Boston, MA, 2014.
- **Haynes, K., & **Escobar, M.** Contingency degradation in the garden slug, *Lehmannia valentiana*. International Conference on Comparative Cognition, Melbourne, FL, 2014.
- Jeelani, S., Qazi, M.A., Russell, M., Russell, J., **Escobar, M.**, Vaughn, M., *Sauer, R.A., & Robertson, B.K. The Tuskegee Alliance to forge pathways to academic careers in STEM (T-

- PAC). 7th Conference on Understanding Interventions that Broaden Participation in Science Careers. San Diego, CA, 2015.
- *Sauer, R.A., & **Escobar, M.** Renewal of counterconditioning in a human predictive learning task. Eastern Psychological Association, Boston, MA, 2014.
- *Bhattacharya, S., *Kimble, W.L., *Buabeid, M., *Bhattacharya, D., *Bloemer, J., *Katz, D., *Alhowail, A., *ALjedani, F., Dhanasekaran, M., Kodeeswaran, P., Escobar, M., & Suppiramaniam, V. Investigating the mechanism of memory reconsolidation in fear associated memories. Society for Neuroscience, San Diego, CA, 2013.
- Escobar, M.**, *Powell, E. J., & **Gennaro, K. Aversive conditioning persists after contingency degradation: Spontaneous recovery of extinction and latent inhibition in the garden slug, *Lehmannia Valentiana*. Eastern Psychological Association, New York, NY, 2013.
- *Kimble, W. L., *Powell, E. J., **Escobar, M.**, & **Arnsdorff, G. B. Preexposure may enhance the effectiveness of extinction. Eastern Psychological Association, New York, NY, 2013.
- *Powell, E. J., **Escobar, M.**, & **Bennett, C. Reinstatement interacts with interpolation interval to determine the effectiveness of counterconditioning. Eastern Psychological Association, New York, NY, 2013.
- *Kimble, W. L., **Escobar, M.**, & **Plitt, A. R. Spontaneous recovery of latent inhibition is dependent on the preexposure-acquisition interval. Eastern Psychological Association, Pittsburgh, PA, 2012.
- *Powell, E. J., *Kimble, W. L., *Johnson, J. J., & **Escobar, M.** Target-interpolated training interval as a determinant of retroactive interference in latent inhibition and counterconditioning. Eastern Psychological Association, Pittsburgh, PA, 2012.
- Arcediano, F., *Johnson, J. S., & **Escobar, M.** Order of presentation influences causal, but not associative, recognition. Spanish Society of Comparative Psychology, Granada, Spain, 2011.
- *Johnson, J. S., Arcediano, F., & **Escobar, M.** Inflation of causal judgments dependent upon order of learning rather than testing. Eastern Psychological Association, Boston, MA, 2011.
- *Kimble, W. L., *Johnson, J. S., **Plitt, A. R., & **Escobar, M.** Spontaneous recovery following immediate or delayed extinction is determined by extinction-test intervals. Eastern Psychological Association, Brooklyn, Boston, MA 2011.
- **Coursen, L. E., & **Escobar, M.** Causal roles as determinants of blocking. International Conference on Comparative Cognition, Melbourne, FL, 2010.
- *Johnson, J. S., & **Escobar, M.** Acquisition-extinction interval determines the time course of spontaneous recovery of conditioned fear. International Conference on Comparative Cognition, Melbourne, FL, 2010.
- *Johnson, J. S., & **Escobar, M.** Biases in contingency-based causal judgments. Eastern Psychological Association, Brooklyn, NY, 2010.
- *Kimble, W. L., Suits, W. T., & **Escobar, M.** Extinction of conditioned inhibition is temporally specific: Retardation tests. Eastern Psychological Association, Brooklyn, NY, 2010.
- Escobar, M.**, *Johnson, J. J., & Arcediano, F. Estimación de contingencias en aprendizaje predictivo y diagnóstico [contingency estimation in predictive and diagnostic learning]. VI Encuentro de Ciencias del Comportamiento [VI Symposium on Behavioral Sciences]. National University of Colombia, Bogotá, Colombia, 2009 (Invited address).
- Escobar, M.**, Miller, R. R., & *Suits, W. T. Interferencia retroactiva: Una perspectiva

- comparativa [retroactive interference: a comparative perspective]. II Congreso Nacional De Psicología COLPSIC y I Congreso Internacional De Psicología COLPSIC-ASCOFAPSI [II National Psychology Conference COLPSIC and I International Psychology Congress COLPSIC-ASCOFAPSI]. Bogotá, Colombia, 2009 (Invited address).
- *Johnson, J. S., & **Escobar, M.** Directionality of learning and type of judgments modulate retroactive interference in causality judgments. Eastern Psychological Association, Pittsburgh, PA, 2009.
- *Johnson, J. S., Escobar, M., Arcediano, F., & **Bragan, S. Number of alternatives and situation plausibility as determinants of over- and under-prediction of causality judgments. International Conference on Comparative Cognition, Melbourne, FL, 2009.
- *Kimble, W. K., Suits, W. T., & **Escobar, M.** Temporally-specific recovery from conditioned inhibition. Annual Meeting of the Pavlovian Society, Burlington, VT, 2009.
- Arcediano, F., *Johnson, J. S., & **Escobar, M.** Diferencias fundamentales entre inferencias causales predictivas y diagnósticas (*fundamental differences in predictive and diagnostic causal inferences*). Spanish Society of Comparative Psychology, Bilbao, Spain, 2008.
- *Johnson, J. S., *Smith, D., *Suits, W. T., & **Escobar, M.** Retroactive interference in causality judgments. International Conference on Comparative Cognition, Melbourne, FL, 2008.
- **Bradford, D. E., & **Escobar, M.** Conditioned inhibition in latent inhibition. National Conferences on Undergraduate Research, San Rafael, CA, 2007.
- Escobar, M.**, *Suits, W. T., & **Rahn, E. J. Excitation and inhibition across the duration of a conditioned stimulus. Eastern Psychological Association, Philadelphia, PA, 2007.
- *Johnson, J. S., **Kimble, W. L., & **Escobar, M.** Directionality of training, directionality of testing, and contingency estimation. International Conference on Comparative Cognition, Melbourne, FL, 2007.
- *Suits, W. T., *Wilhelmsen, S. R., & **Escobar, M.** Preexposure and inhibition effects in long-delay conditioning. International Conference on Comparative Cognition, Melbourne, FL, 2007.
- **Rahn, E. J., *Platt, T., **Bradford, D. E., & **Escobar, M.** Inhibition of delay in appetitive conditioning: Retardation test. International Conference on Comparative Cognition, Melbourne, FL, 2006.
- *Wilhelmsen, S. R., **Bray, V. L., *Suits, W. T., & **Escobar, M.** Overestimation of contingencies following predictive but not diagnostic training. International Conference on Comparative Cognition, Melbourne, FL, 2006.
- Miller, R. R., & **Escobar, M.** The wide wide world of stimulus interaction. (Invited paper.) Eastern Psychological Association, Boston, MA, 2005.
- **Rahn, E. J., *Platt, T., & **Escobar, M.** Inhibition of delay in appetitive conditioning: Summation and retardation tests. International Conference on Comparative Cognition, Melbourne, FL, 2005.
- **Casteel, A. B., & **Escobar, M.** Acquisition and reversal of competition between effects. National Conferences on Undergraduate Research, Indianapolis, IN, 2004.
- *Platt, T., **Schuster, J., Arcediano, F., & **Escobar, M.** First- and second-order comparator effects in human causality judgments. International Conference on Comparative Cognition, Melbourne, FL, 2004.
- Arcediano, F., **Escobar, M.**, & Miller, R. R. Responding to a blocking stimulus is reduced by compound reinforced training. International Conference on Comparative Cognition,

Melbourne, FL, 2003.

- **Casteel, B., **Escobar, M.**, & Miller, R. R. The latent inhibition effect: Much more than the effects of preexposure. Annual Convention of the American Psychological Society, Atlanta, GA, 2003.
- Escobar, M.**, Arcediano, F., & Miller, R. R. Irrelevant stimulation interpolated between preexposure and conditioning disrupts latent inhibition in a conditioned fear preparation with rat subjects. International Conference on Comparative Cognition, Melbourne, FL, 2003.
- Escobar, M.**, & Miller, R. R. Temporal parameters in retroactive interference. Eastern Psychological Association, Baltimore, MD, 2003.
- Miller, R. R., & **Escobar, M.** Modeling associative interference beyond conventional cue competition. (Invited paper.) Midwestern Psychological Association, Chicago, IL, 2003.
- *Platt, T., **Escobar, M.**, & Miller, R. R. Dissociation of the effects of interpolating a retention interval versus instructions between preexposure and conditioning in a human unmasked latent inhibition paradigm. International Conference on Comparative Cognition, Melbourne, FL, 2003.
- Amundson, J. C., **Escobar, M.**, & Miller, R. R. Backward blocking with humans in a nonverbal task. International Conference on Comparative Cognition, Melbourne, FL, 2002.
- Amundson, J. C., **Escobar, M.**, & Miller, R. R. Proactive interference of Pavlovian associations. Eastern Psychological Association, Boston, MA, 2002.
- Arcediano, F., **Escobar, M.**, & Miller, R. R. Disruption of latent inhibition by context segmentation. Eastern Psychological Association, Boston, MA, 2002.
- Arcediano, F., **Escobar, M.**, & Miller, R. R. Is stimulus competition an acquisition deficit or a performance deficit? Sixth International Congress on Behaviorism and the Sciences of Behavior, Auburn, AL, 2002.
- Escobar, M.**, Amundson, J. C., Arcediano, F., & Miller, R. R. Associative Interference: An integrative approach. Sixth International Congress on Behaviorism and the Sciences of Behavior, Auburn, AL, 2002.
- Escobar, M.**, Arcediano, & Miller, R. R. Latent inhibition in human adults: Is masking necessary? Eastern Psychological Association, Boston, MA, 2002.
- Stout, S. C., **Escobar, M.**, & Miller, R. R. Trial number and temporal relationship as joint determinants of second-order conditioning and conditioned inhibition. Psychonomic Society, Kansas City, MO, 2002.
- Arcediano, F., **Escobar, M.**, & Miller, R. R. Backward associations and bidirectionality of associations in man and beast. International Conference on Comparative Cognition, Melbourne, FL, 2001.
- Escobar, M.**, & Miller, R. R. Latent inhibition in human adults without masking. Spanish Society of Comparative Psychology, San Sebastián, Spain, 2001.
- Escobar, M.**, Arcediano, F., & Miller, R. R. Latent inhibition in man and beast. International Conference on Comparative Cognition, Melbourne, FL, 2001.
- Miller, R. R., & **Escobar, M.** Interference between cues and between outcomes in rats. (Invited paper). Midwestern Psychological Association, Chicago, IL, 2001.
- Miller, R. R., & **Escobar, M.** Interference between cues and between outcomes presented together and presented apart. (Invited paper). Society for the Quantitative Analysis of Behavior, New Orleans, LA, 2001.

- Arcediano, F., Burger, D. C., **Escobar, M.**, & Miller, R. R. Backward associations in humans. International Conference on Comparative Cognition, Melbourne, FL, 2000.
- Arcediano, F., **Escobar, M.**, & Miller, R. R. Temporal coding and backward associations in humans. Eastern Psychological Association, Baltimore, MD, 2000.
- Arcediano, F., **Escobar, M.**, & Miller, R. R. Temporal coding, backward associations, and bidirectionality of associations in humans. Spanish Society of Comparative Psychology, Granada, Spain, 2000.
- Denniston, J. C., Burger, D. C., **Escobar, M.**, & Miller, R. R. Timing of US omission in Pavlovian conditioned inhibition. Psychonomic Society, New Orleans, LA, 2000.
- Escobar, M.**, Arcediano, F., & Miller, R. R. Context exposure modulates the CS-preexposure effect. International Conference on Comparative Cognition, Melbourne, FL, 2000.
- Escobar, M.**, Arcediano, F., & Miller, R. R. Latent inhibition and contextual associations. Eastern Psychological Association, Baltimore, MD, 2000.
- Escobar, M.**, & Miller, R. R. Contrasting retroactive interference between antecedent events and subsequent events in rats. Spanish Society of Comparative Psychology, Granada, Spain, 2000.
- Savastano, H., **Escobar, M.**, & Miller, R. R. The interaction between preexposure and overshadowing. Eastern Psychological Association, Baltimore, MD, 2000.
- Miller, R. R., Savastano, H. I., Escobar, M., & Matute, H. Interactions between antecedent events presented together and apart and between subsequent events presented together and apart. European Conference on Classic and Connectionist Approaches to Causal Inference and Social Judgment, Aix-en-Provence, France, 1999.
- Escobar, M.**, Hauer, L., Matute, H., & Miller, R. R. Competition between cues trained apart. Eastern Psychological Society, Providence, RI, 1999.
- Escobar, M.**, Blaisdell, A. P., & Miller, R. R. The extended comparator hypothesis and the dual treatment effect. III Associative Learning Symposium, Gregynog, Wales, UK, 1999.
- Blaisdell, A. P., Miller, R. R., & **Escobar, M.** Contrasting the Comparator Hypothesis with acquisition-focused models of retrospective revaluation: Relative validity. Psychonomic Society, Los Angeles, CA, 1999.
- Miller, R. R., **Escobar, M.**, Savastano, H. I., & Matute, H. Stimulus competition: Antecedent or subsequent events presented on the same or different trials. Psychonomic Society, Dallas, TX, 1998.
- Escobar, M.**, & Matute, H. Training with individual cues can produce stronger cue interaction than training with compound cues. Eastern Psychological Society, Boston, MA, 1998.
- Escobar, M.**, Gerolin, M., Arcediano, F., & Matute, H. Evidence of bidirectional associations. International Conference on Comparative Cognition, Melbourne, FL, 1998.
- Arcediano, F., Matute, H., & **Escobar, M.** Recovery from blocking achieved by post-training extinction of the blocking CS with humans. Eastern Psychological Society, Boston, MA, 1998.
- Escobar, M.**, Gerolin, M., & Matute, H. Interaction between individually-trained cues in a judgment task: The case of differential inhibition. Spanish Comparative Psychology Society, Salamanca, Spain, 1997.
- Arcediano, F., Matute, H., & **Escobar, M.** Blocking and recovery from blocking using a behavioral preparation with humans. Spanish Comparative Psychology Society, Salamanca, Spain, 1997.

Lopez, M., Paredes-Olay, M., & **Escobar, M.** Sensitivity of flavor aversions to shifts in motivational state. XXVI International Congress of Psychology, Montreal, Canada, 1995.

PAPERS PRESENTED OR COAUTHORED AT UNIVERSITY-WIDE EVENTS (UNPUBLISHED ABSTRACT)

Note: * denotes graduate student coauthor; ** denotes undergraduate student coauthor.

- Escobar, M.**, *Bhattacharya, S., *Buabeid, M.A., Dhanasekaran, M., Kimble, W.L., & Suppiramaniam, V. A synaptic plasticity model of memory destabilization, restabilization, and reconsolidation. Auburn University Research Week, 2014.
- *Bhattacharya, S., *Buabeid, M.A., Dhanasekaran, M., **Escobar, M.**, & Suppiramaniam, V. Investigating the mechanism of memory reconsolidation in fear associated memories. Auburn University Research Week, 2014.
- *Dunaway, E.P., & **Escobar, M.** Extending counterconditioning training increases the efficacy of immediate and delayed counterconditioning. Auburn University Research Week, 2014.
- *Sauer, R.A., & **Escobar, M.** Renewal of counterconditioning in a human predictive learning task. Auburn University Research Week, 2014.
- Escobar, M.**, *Johnson, J. S., & *Kimble, W. L. Immediately addressing fear may decrease or prevent future fear relapse: An animal model of generalized fear attenuation. Auburn University Research Week, 2013.
- *Powell, E. J., & **Escobar, M.** The effects of reinstatement on immediate and delayed counterconditioning. Auburn University Graduate Scholars Forum, 2013.
- Escobar, M.**, *Powell, E., & **Gennaro, K. Time-dependent memory phenomena in the common garden slug, *Lehmannia Valentiana*. Psychology Department 18th Annual Research and Teaching Festival, 2012.
- **Gennaro, K., *Powell, E. J., & **Escobar, M.** Associative learning in *Lehmannia Valentiana*. Auburn University Research Week, 2012.
- *Kimble, W. L., **Escobar, M.**, & **Plitt, A. Retroactive interference in latent inhibition is dependent on the preexposure-acquisition interval. Department of Psychology Research and Teaching Festival, 2012.
- *Powell, E. J., *Kimble, W.L., & **Escobar, M.** Manipulation of interpolation interval impacts retroactive interference in Pavlovian conditioning. Auburn University Graduate Scholars Forum, 2012.
- *Powell, E. J., *Kimble, W. L., *Johnson, J. J., & **Escobar, M.** (2012, April). Interpolation interval as a determinant of retroactive interference in extinction, latent inhibition, and counterconditioning. Department of Psychology Research and Teaching Festival, 2012.
- *Kimble, W. L., *Johnson, J. S., **Plitt, A., & **Escobar, M.** Spontaneous recovery following immediate or delayed extinction is determined by extinction-test intervals. Department of Psychology Research and Teaching Festival, 2011.
- **Coursen, L. W., *Kimble, W. K., & **Escobar, M.** Reversal of causal roles in blocking. Psychology Department 15th Annual Graduate Research Festival, Auburn University, 2009.
- *Johnson, J. S., **Bragan, S., **Escobar, M.**, & Arcediano, F. Situation plausibility as a determinant of over- and under-prediction of causality judgments in prediction and diagnosis. Psychology Department 15th Annual Graduate Research Festival, Auburn University, 2009.

- *Johnson, J. S., *Smith, D., *Suits, W. T., & **Escobar, M.** Interference in causality judgment: Global vs. trial-by-trial strategies. Psychology Department 13th Annual Graduate Research Festival, Auburn University, 2007.
- *Johnson, J. S., & **Escobar, M.** Contingency judgments in predictive and diagnostic learning. Psychology Department 12th Annual Graduate Research Festival, Auburn University, 2006.
- *Suits, W. T., *Wilhelmsen, S. R., **Bradford, D. E., *Smith, D. L., & **Escobar, M.** Temporally-specific excitation and inhibition. Psychology Department 12th Annual Graduate Research Festival, Auburn University, 2006.
- *Wilhelmsen, S. R., **Saunders, D. B., & **Escobar, M.** The effect of prior learning on the temporal location of responding to a compound stimulus. Psychology Department 12th Annual Graduate Research Festival, Auburn University, 2006.
- **Bray, V. L., **Bradford, D. E., **Sissons, H. T., & **Escobar, M.** Predictive vs. diagnostic learning in causality judgments. Psychology Department 11th Annual Graduate Research Festival, Auburn University, 2005.
- *Wilhelmsen, S. R., **Rahn, E. J., *Platt, T., & Martha Escobar. Inhibition of delay: Retardation test. Psychology Department 11th Annual Graduate Research Festival, Auburn University, 2005.
- **Rahn, E. J., & **Escobar, M.** Inhibition of delay in Pavlovian appetitive conditioning. Second Auburn University Undergraduate Research Forum, 2004.
- **Rahn, E. J., *Platt, T., *Wilhelmsen, S. R., & **Escobar, M.** Summation and retardation tests of inhibition of delay in an appetitive Pavlovian conditioning preparation. Psychology Department 10th Annual Graduate Research Festival, Auburn University, 2004.
- **Rahn, E. J., *Platt, T., *Wilhelmsen, S., & **Escobar, M.** Inhibition of delay in Pavlovian appetitive conditioning. Psychology Department 9th Annual Graduate Research Festival, Auburn University, 2003.
- **Schuster, J., **Casteel, A. B., & **Escobar, M.** First- and second-order comparator effects in human causality judgments. Psychology Department 9th Annual Graduate Research Festival, Auburn University, 2003.

OTHER PROFESSIONAL ACTIVITIES

INVITED ADDRESSES

- Graduate Education Workshop, *Stress and Time Management in Graduate School and Early Academic Careers*, Tuskegee University, Fall 2016.
- Seminar, *Time Management and Academic Success*, Women of Tomorrow Mentor & Scholarship Program, East English Village High School, Detroit, Winter 2017.