

Mikel Maria Delgado

Maddie's Postdoctoral Fellow in Animal Behavior
Department of Medicine and Epidemiology
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EDUCATION

Doctorate of Philosophy, August 2017
Major: Psychology (Cognition)
University of California, Berkeley

Bachelor of Arts, Cum Laude June 2010
Major: Psychology, Minor: Statistics
California State University East Bay, Hayward CA

RESEARCH

Current research interests: Social and developmental behavior of the domestic cat, animal behavior/welfare, human-animal interactions

Doctoral Dissertation: Cache decisions, competition and cognition in the fox squirrel, *Sciurus niger*.

Qualifying Exam Topics: Animal cognition and decision-making; Personality in non-human animals; Evolution of emotions

PUBLICATIONS

Delgado, M., & Reeve, G. (accepted for publication). Development and psychometric evaluation of the Cat Care and Needs Scale (CCANS). *Anthrozoös*.

Delgado, M. & Jacobs, L. (2017). Caching for where and what: Evidence for a mnemonic strategy in a scatter-hoarder. *Royal Society Open Science*, 4(9), 170958. doi:10.1098/rsos.170958

Delgado, M., & Sulloway, F. (2017). Attributes of conscientiousness throughout the animal kingdom: An empirical and evolutionary overview. *Psychological Bulletin*, doi:10.1037/bul0000107

Dantas, L., Delgado, M., Johnson, I., & Buffington, C.A.T. (2016). Food puzzles for cats: Feeding for physical and emotional wellbeing. *Journal of Feline Medicine and Surgery*, 18, 723–732. doi:10.1177/1098612X16643753

Delgado, M., & Jacobs, L. (2016). Inaccessibility of reinforcement increases persistence and signaling behavior in the fox squirrel, *Sciurus niger*. *Journal of Comparative Psychology*, 130(2), 128-137.

Reeve, G. & Delgado, M. (2014). Are emotionally attached companion animal caregivers conscientious and neurotic? Factors that affect the human–companion animal relationship. *Journal of Applied Animal Welfare Science*, 18(3), 239-258. doi:10.1080/10888705.2014.988333

MacLean, E., Hare, B., Nunn, C., et al. (2014). The evolution of self-control. *Proceedings of the National Academy of Sciences*. doi:10.1073/pnas.1323533111

Delgado M.M., Nicholas M., Petrie D.J., Jacobs L.F. (2014). Fox squirrels match food assessment and cache effort to value and scarcity. *PLoS ONE*, 9(3), e92892. doi:10.1371/journal.pone.0092892

Delgado, M., Munera, J., & Reeve, G. (2012). Human perceptions of coat color as an indicator of domestic cat personality. *Anthrozoös*, 24(4), 427-440. DOI: doi:10.2752/175303712X13479798785779

Delgado, M.M. (2012). "Why Do Cats Purr?" in Matt Lamothe, Julia Rothman and Jenny Volvovski, Eds. *The Where, The Why and The How: 75 Artists Illustrate Wondrous Mysteries of the Universe*. Chronicle Books: San Francisco.

- Delgado, M.M. (2012). "Why Do Pigeons Bob Their Heads When They Walk?" in Matt Lamothe, Julia Rothman and Jenny Volvovski, Eds. *The Where, The Why and The How: 75 Artists Illustrate Wondrous Mysteries of the Universe*. Chronicle Books: San Francisco.
- Delgado, M.M. (2008). Beyond bossy: Feline status aggression. *Animal Behavior Consulting: Theory & Practice*, 4(2), 18-24.

FELLOWSHIPS, AWARDS AND RESEARCH GRANTS

- Maddie's Fund, 2017-2020, Maddie's Postdoctoral Fellow in Animal Behavior.
- Winn Foundation, 2017 (Co-investigator), "Foraging behavior under threat and enrichment in confined cats. \$24,780.
- Doctoral Dissertation Improvement Grant, National Science Foundation, 2015, The consequences of food assessment and cache placement on social competition and cache pilfering in a scatter-hoarding tree squirrel. \$20,390
- Animal Behavior Society Diversity Award, 2013
- National Science Foundation Graduate Research Fellowship, 2012-2016
- Animal Behavior Society Diversity Award, 2012
- Animal Behavior Society Diversity Award, 2011
- National Science Foundation Graduate Research Fellowship, Honorable Mention, 2011
- President's Award, International Association of Animal Behavior Consultants, April 2011
- Chancellor's Fellowship, University of California at Berkeley, 2010-2014
- UC Diversity Initiative for Graduate Study in the Social Sciences Faculty Mentorship Award, University of California at Berkeley, 2010
- Second Place, Student Poster Presentation Competition. "Human Attitudes about Personality of Domestic Cats." 10th North American Regional Meeting of the International Society for Applied Ethology (ISAE), May 2010
- First Place, Behavioral and Social Sciences Undergraduate Category. "Housing, Activity, and the Behavioral Welfare of the Laboratory Pigeon." California State University Student Research Competition, May 2010
- McNair Scholar, 2008 - 2010
- Sally Casanova Pre-Doctoral Scholar, 2009
- CSUEB Psychology Student of the Year, 2009
- Psi Chi member, 2009-present

INVITED TALKS

- Delgado, M. (2017, November). Peaceable Kingdom: *Using Feline Science to Increase the Success of Multi-Cat Households*. Presented at the 2017 Feline Science Symposium, San Francisco, CA.
- Delgado, M. (2017, June). *Tree Squirrels: the Original Nut Experts*. Presented at Pairings: Cultivating a Taste for Science Through Food, the Exploratorium Museum of Science, San Francisco, CA.
- Delgado, M. (2017, April). *Cat Behavior Consulting from Intake to Resolution in Case Studies*. Presented at the 2017 Conference of the International Association of Animal Behavior Consultants, Los Angeles, CA.
- Delgado, M. (2016, April). *Welfare Check: Are you doing all you can for cats in your care?* Presented at the 12th Annual Business of Saving Lives Conference, Animal Rescue Foundation, Walnut Creek, CA.
- Delgado, M. (2016, March). *Lessons from squirrels: What my research subjects have taught me about doing science*. Presented at the Let's Have an Awesome Time Doing Science Conference, Scientific Community Initiative at University of California at Berkeley.
- Invited Panelist*, "An Evolving Relationship with Cats?" Purina Better with Pets Summit, Brooklyn, NY, November 2015

- Delgado, M. (2015, April). *Cats and their Owners: Singing a Different Tune*. Presented at the Feline Behavior Conference, International Association of Animal Behavior Consultants, Atlanta, GA.
- Delgado, M. & Parry, D.G. (2011, March). *Nip it in the bud! Helping adopters prevent common cat behavior problems*. Presented at the 7th Annual Business of Saving Lives Conference, Animal Rescue Foundation, Walnut Creek, CA.
- Delgado, M. & Parry, D.G. (2010, March). *Troubled tabbies: Behavior modification for cats*. Presented at the 6th Annual Business of Saving Lives Conference, Animal Rescue Foundation, Walnut Creek, CA.
- Delgado, M. (2007, June). *Environmental enrichment for indoor cats*. Presented at Exploring the Animal Mind: Enriching Animals in Captivity, the Exploratorium Museum of Science, San Francisco, CA.
- Delgado, M. & Parry, D.G. (2003, July). *A hiss is just a hiss - or is it? Temperament testing and rehabilitation of shelter cats*. Presented at the Conference on Homeless Animal Management and Policy (CHAMP), St. Louis, MO.

ORAL PRESENTATIONS

- Delgado, M. & Reeve, G. (2017, June). *The neuroticism facet, anxiety, predicts human attachment to cats*. Meeting of the International Society of Anthrozoology, Davis, CA.
- Delgado, M & Jacobs, L. (2017, June) *Cache life: Factors related to how long caches stay where squirrels buried them*. Presented at the 54th Annual Meeting of the Animal Behavior Society, Toronto, Canada.
- Arbilly, M., Delgado, M., & Jacobs, L. (2016, August) *Pilfering may impose limits on food-cachers' long-term memory*. Presented at the International Society for Behavioral Ecology Meeting, Exeter, UK.
- Delgado, M., Jacobs, L., & Arbilly, M. (2016, April). *Pilfering may impose limits on food-cachers' memory*. Presented at the 23rd Annual International Conference on Comparative Cognition, Melbourne, FL.
- Delgado, M. & Reeve, G. (2015, July). *Development of a scale to measure cat care and understanding of cats' behavioral needs: The Cat Care and Needs Scale (CCANS)*. Meeting of the International Society of Anthrozoology, Saratoga Springs, NY.
- Delgado, M & Jacobs, L. (2014, May). *The consequences of cache investment and social interactions on cache retrieval in the fox squirrel*. Stanford-Berkeley Cognition talks, University of California at Berkeley.
- Delgado, M. (2015, April). *Anthrozoology: How humans interact with other animals*. Guest lecture, PSYCH 1: Introductory Psychology, University of California at Berkeley.
- Delgado, M. & Reeve, G. (2014, August). *Are emotionally attached pet owners conscientious and neurotic? Factors that affect the human-companion animal relationship*. Presented at the 51st Annual Meeting of the Animal Behavior Society, Princeton, NJ.
- Delgado, M. & Jacobs, L.F. (2014, August). *Where to bury a nut? Do fox squirrels have hierarchical rules for cache organization?* Presented at the Penn-Berkeley CABiR Symposia, Philadelphia, PA.
- Delgado, M. & Jacobs, L.F. (2014, August). *Where to bury a nut? Do fox squirrels have hierarchical rules for cache organization?* Presented at the International Society for Behavioral Ecology Meeting, New York City, NY.
- Delgado, M. & Jacobs, L.F. (2014, July). *Where to bury a nut? Do fox squirrels have hierarchical rules for cache organization?* Presented at the Berkeley-Bergen Peder Sather Working Group in Emergent Cognition Meeting, New York City, NY.
- Delgado, M. & Jacobs, L.F. (2013, July). *The systematic squirrel: Cache organization and implications for memory*. Presented at the 50th Annual Meeting of the Animal Behavior Society, Boulder, CO.
- Delgado, M. & Jacobs, L.F. (2013, June). *The systematic squirrel: Cache organization and implications for memory*. Presented at the Stanford-Berkeley Talks, Palo Alto, CA.

- Delgado, M. & Jacobs, L.F. (2013, March). *The systematic squirrel: Cache organization and implications for memory*. Presented at the 20th Annual International Conference on Comparative Cognition, Melbourne, FL.
- Delgado, M. & Jacobs, L.F. (2013, February). *The systematic squirrel: Cache organization and implications for memory*. Presented at the University of California at Davis Animal Behavior Conference, Davis, CA.
- Delgado, M. (2012, September). *Statistical analysis: A beginner's guide*. Guest Lecture, BROCA: Berkeley Review of CogSci Articles student group, University of California at Berkeley.
- Delgado, M., Curtis, L., Cerutti, D.T. & Wendel, L. (2010, May). *Housing, activity, and the behavioral welfare of the laboratory pigeon*. Presented at the California State University Student Research Competition, San Jose State University, San Jose, CA.
- Delgado, M. (2008, November). *Environmental enrichment for laboratory pigeons: What do they want?* Presented at the McNair Symposium, CSU East Bay, Hayward CA.

POSTER PRESENTATIONS

- Delgado, M. & Jacobs, L. (2017, April). *The longevity of a fox squirrel's cache is related to cache effort and conspicuousness*. Presented at the 24th Annual International Conference on Comparative Cognition, Melbourne, FL.
- Delgado, M. & Reevy, G. (2016, November). *Development and validation of a scale to measure cat care and understanding of cats' behavioral needs: The Cat Care and Needs Scale (CCANS)*. 2016 American Association of Feline Practitioners Conference, Washington, DC.
- Robin, A., Jinn, J., Delgado, M., & Jacobs, L. (2016, April). *To save or spend? The cache decision in wild fox squirrels*. Presented at the 23rd Annual International Conference on Comparative Cognition, Melbourne, FL.
- Delgado, M., & Jacobs, L. (2015, April). *Where to bury a nut? Tree squirrel principles for cache organization*. Presented at the 22nd Annual International Conference on Comparative Cognition, Melbourne, FL.
- Teixiera, A., Chung, E., Delgado, M., & Jacobs, L. (2015, April). *Social Status and signaling in tree squirrels*. Presented at the 22nd Annual International Conference on Comparative Cognition, Melbourne, FL.
- Reevy, G. & Delgado, M. (2014, August). *Personality traits as predictors of attachment to and affection for pets*. Presented at the American Psychological Association Annual Convention, Washington, DC.
- Delgado, M., & Reevy, G. (2014, April). *Are good pet owners conscientious and neurotic? Factors that affect the human-companion animal relationship*. Presented at the Provost's Award Ceremony & Faculty Research Poster Session, California State University East Bay, Hayward, CA.
- Sakai, N., Delgado, M., & Jacobs, L. (2013, May). *Vigilance behavior during feeding in the fox squirrel, *Sciurus niger**. Presented at the Berkeley Interdisciplinary Research Conference, Berkeley, CA.
- Delgado, M., Nicholas, M., Petrie, D. & Jacobs, L. (2012, June). *The hyper-rational squirrel: Investing in assessment and cache protection behaviors*. Presented at the 49th Annual Meeting of the Animal Behavior Society, Albuquerque, NM.
- Slattery, P., Delgado, M. & Jacobs, L. (2012, June). *Scatter-hoarding strategies in free ranging humans*. Presented at the 49th Annual Meeting of the Animal Behavior Society, Albuquerque, NM.
- Delgado, M. & Jacobs, L.F. (2011, July). *The behavioral correlates of frustration in the fox squirrel, *Sciurus niger**. Presented at the 48th Annual Meeting of the Animal Behavior Society, Bloomington, IN.
- Jacobs, L.F., Waisman, A., Nicholas, M. & Delgado, M. (2011, July). *How to encode the world: Integrating multiple frames of reference*. Presented at the 48th Annual Meeting of the Animal Behavior Society, Bloomington, IN.
- Russell, J., Lizotte, D., Curtis, L., Delgado, M. & Cerutti, D.T. (2011, February). *Behavioral effects of acute ethanol exposure in zebrafish (*Danio rerio*)*. Presented at the 29th Annual Regional Meeting of the California Association for Behavior Analysis, San Francisco, CA.

- Delgado, M., Munera, J., & Reeve, G. (2010, May). *Human attitudes about personality of domestic cats*. Presented at the 10th North American Regional Meeting of the International Society for Applied Ethology (ISAE), Pullman, WA.
- Delgado, M., Curtis, L., Cerutti, D.T., & Wendel, L. (2010, March). *Housing, activity, and the behavioral welfare of the laboratory pigeon*. Presented at the 17th Annual International Conference on Comparative Cognition, Melbourne, FL.
- Curtis, L., Lawrence, M., Delgado, M., & Cerutti, D. T. (2010, March). *The detailed time course of appetitive delayed pavlovian conditioning in the zebrafish*. Presented at the 17th Annual International Conference on Comparative Cognition, Melbourne, FL.
- Cerutti, D.T., Curtis, L., Lawrence, M., Delgado, M., & Wendell, L. (2010, March). *Testing the IQ of a tiny fish*. Presented at the Research, Scholarship & Creative Activity Poster Exhibit, California State University East Bay, Hayward, CA.
- Delgado, M.M., Wendel, L., & Cerutti, D.T. (2009, October). *Behind closed doors: The pastimes of pigeons in two different laboratory housing conditions*. Presented at the 18th Annual Conference of the International Society for Anthrozoology, Kansas City, MO.
- Delgado, M.M., Wendel, L., & Cerutti, D.T. (2009, April). *Behind closed doors: The pastimes of pigeons in two different laboratory housing conditions*. Presented at the 89th Annual Convention of the Western Psychological Association, Portland, OR.
- Wendel, L.V., Delgado, M., Montez, D., Dulay, J.P., & Cerutti, D.T. (2009, April). *Mating and habitat preference in the zebrafish, Danio rerio*. Presented at the 89th Annual Convention of the Western Psychological Association, Portland, OR.
- Delgado, M.M., Wendel, L., & Cerutti, D.T. (2009, March). *Behind closed doors: The pastimes of pigeons in two different laboratory housing conditions*. Presented at the 16th Annual International Conference on Comparative Cognition, Melbourne, FL.
- Cerutti, D., Delgado, M., Wendel, L., Jozefowicz, J., & Staddon, J. (2009, March). *Time and reinforcement in the temporal-bisection task: A test of behavioral versus cognitive hypotheses*. Presented at the 16th Annual International Conference on Comparative Cognition, Melbourne, FL.

TEACHING PREPARATION

Teaching Experience

- Graduate Student Instructor*, Biological Psychology, January 2017 – May 2017
University of California at Berkeley
Students taught: 75
- Graduate Student Instructor*, Research Methods and Data Analysis, August 2016 – December 2016
University of California at Berkeley
Students taught: 41
- Graduate Student Instructor*, Animal Cognition, January 2014 – May 2014
University of California at Berkeley
Students taught: 72
- Graduate Student Instructor*, Research Methods and Data Analysis, January 2012 – May 2012
University of California at Berkeley
Students taught: 38
- Graduate Student Instructor*, Research Methods and Data Analysis, August 2011 – December 2011
University of California at Berkeley
Students taught: 42

Teaching Enhancement Courses at UC Berkeley

Teaching Psychology (PSYC300)

Designing Courses and Course Syllabi to Enhance Student Motivation (PSYC290I)

Workshops from the GSI Teaching and Resource Center at UC Berkeley

How Students Learn

Designing Course Syllabi

Grading Student Writing

Fostering Student Participation

Professional Standards and Ethics for Graduate Student Instructors

Developing a Teaching Portfolio

Teaching Interests

Research Methods, Data Analysis, Animal Cognition, Animal Behavior, Biological Psychology, Critical Thinking, Introductory Psychology

MENTORING

The UC Berkeley Undergraduate Research Apprenticeship Program (URAP) program matches undergraduates to laboratories so they can work closely with a faculty member and graduate students to gain research skills. While a graduate student, I have mentored over 50 undergraduates, most of them URAP apprentices. I have involved mentees in all aspects of research, including design, data collection and analysis, and co-authored five posters with undergraduates in our lab.

OTHER PROFESSIONAL EXPERIENCE

Participant, Santa Fe Science Writing Workshop, Santa Fe, NM, May 2014

Teaching Assistant, Introduction to Psychology, June-July 2012, University of California, Berkeley

Teaching Assistant, Biological Psychology, July-August 2012, University of California, Berkeley

Research Assistant, Animal Adaptive Learning and Behavior Lab, June 2008 – August 2010, California State University East Bay, Hayward CA

Research Assistant, Rosenheim Lab, June 2009-August 2009
University of California, Davis

Tutor in Psychology and Statistics, Project IMPACT, January 2009 – June 2010
California State University East Bay, Hayward CA

Project Impact is a federally funded TRiO program that provides one-on-one assistance to students with disabilities.

Assistant to Lecturer Dr. Gretchen Reeve, January 2009 – May 2009
California State University East Bay, Hayward, CA

Cat Behavior Consultant, Business Founder and Owner, April 2008 - present
Feline Minds, Richmond, CA

Cat Behavior Specialist, June 2002 – April 2008

San Francisco Society for the Prevention of Cruelty to Animals, San Francisco, CA

Human Resources Coordinator, 1998-January 2005
Rainbow Grocery, San Francisco, CA

LEADERSHIP AND SERVICE

Ad hoc reviewer: Animal Behaviour, Animal Cognition, Pet Behaviour Science, Human-Animal Interaction Bulletin, Nature Scientific Reports, American Naturalist, Journal of Applied Animal Welfare Science, CAB Reviews, Journal of Comparative Psychology, Behavioural Processes, Animals, Royal Society Open Science

Co-Director, Beyond Academia. Beyond Academia is a yearly, student-organized conference held at UC Berkeley that exposes graduate students to career options outside of academia, 2014-2015.

Co-Chair, Cat Division, International Association of Animal Behavior Consultants, 2014-2015

Blogger/science writer, *Berkeley Science Review*, 2013-2015

Student Member, Lectureship Committee, Department of Psychology, 2013-2014

Volunteer and Disc Jockey, KALX, University of California at Berkeley, 2012-2017

Steering Committee Member, Halcyon Neighborhood Association, 2011-2017
Member, Psychology Department Diversity Student Alliance, 2010-2013
Student Member, Psychology Department Safety Committee, 2010-2014
Community Member, CSUEB Institutional Animal Care and Use Committee, 2010 – 2017
Board Member, International Association of Animal Behavior Consultants, 2007 – 2011
Student Member, CSUEB Institutional Animal Care and Use Committee, 2009 – 2010
Board Member, Women’s Action to Gain Economic Security, 1999 – 2002
Board Member, Rainbow Grocery Cooperative, 1996 – 1999

PROFESSIONAL MEMBERSHIPS

American Veterinary Society of Animal Behavior (AVSAB)
American Association of Feline Practitioners (AAFP)
Comparative Cognition Society
International Association of Animal Behavior Consultants (IAABC)
Animal Behavior Society

CERTIFICATIONS

Certified Cat Behavior Consultant (International Association of Animal Behavior Consultants), 2008 – present

SOFTWARE SKILLS

Proficient in:

R, SPSS, JMP, ArcGIS, Matlab, Access, Noldus Observer and Ethovision

Specialties:

Behavioral video coding, statistical analysis, spatial analysis, agent-based modeling