

Curriculum Vitae

Loren Martin, Ph.D.

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Citizenship: United States of America

Education:

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| 1994-1998 | Cum Laude, Class of 1998, B.S. Psychology with Minors in Biology and Chemistry, Olivet Nazarene University, Kankakee, IL |
| 1998-2003 | Ph.D. Neuroscience, Dec., 2003, The University of Tennessee Health Science Center, laboratory of Dr. Dan Goldowitz |
| 2003-2006 | Postdoctoral Fellow, Department of Psychiatry and Behavioral Sciences and The M.I.N.D. (Medical Investigation of Neurodevelopmental Disorders) Institute, University of California, Davis and the California National Primate Research Center, laboratory of Dr. David Amaral |
| 2005-2006 | Interdisciplinary Autism Training Program, UC Davis M.I.N.D. Institute, clinical mentor Dr. Sally Rogers |

Positions:

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| 2006-2008 | Assistant Professor, Department of Psychology, Azusa Pacific University |
| 2008-2010 | Research Director, Pediatric Neurodevelopment Institute, Azusa Pacific University |
| Spring, 2010 | Faculty Director in Residence, Azusa Oxford Semester, University of Oxford. Visiting Member of the Senior Commons Room, Regent's Park College, University of Oxford. |
| 2008-2011 | Associate Professor, Department of Psychology, Azusa Pacific University |

- 2011-2012 Associate Professor and Director of Research for the Doctoral Program, Department of Graduate Psychology, Azusa Pacific University
- 2012-Present Full Professor and Director of Research for the Doctoral Program, Department of Graduate Psychology, Azusa Pacific University

Honors, Awards, and Honorary Societies:

Undergraduate: Vice President of Senior Class, Secretary of Psychology Club, Olivet Scholar Award, Honor's Scholarship, Howard and Adda H. Farmer Scholarship, Dean's List, Psi Chi, Phi Delta Lambda.

Graduate: Invited Lecturer- (2002) Cure Autism Now (CAN) Annual Meeting, (2000, 2001) Neuroscience Predoctoral Fellowship Award from University of Tennessee Center for Neuroscience.

Postdoctorate: (December 2004) Accepted into the UC Davis M.I.N.D. Institute Interdisciplinary Training Program, (2005) Ruth L. Krichstein National Research Service Award for Postdoctoral Research from the National Institute for Mental Health (NIMH): grant support equal to \$154,461.

Professional: (2006-2007) Azusa Pacific University Creative Teaching Grant, (Spring 2007) Azusa Pacific University Emerging Scholar Award, (2007-2008, 2010-2011, 2011-2012 and 2012-2013) Azusa Pacific University Faculty Research Council Grants, (2010-2011, 2011-2012, 2012-2013, 2013-2014, 2014-2015, and 2015-2016), Azusa Pacific University Accomplished Scholar Award.

Membership in Professional Societies:

Society for Neuroscience, International Society for Autism Research, Society for Social Neuroscience.

Teaching Experience:

Over the past 10 years I have obtained extensive experience teaching both undergraduate and graduate students.

Courses Taught:

- Undergraduate- Physiological Psychology, Cognition, Research Methods, Advanced Statistics, Research Practicum, and General Psychology.

- Graduate-
Cognition, Psychobiology, and Quantitative Dissertation Development for the
doctoral program in clinical psychology.

Community Service and Invited Lectures:

Fall 2015-Present: Serving on the Office of the President's Valuing People Task
Force

2008-Present: Member- Azusa Pacific University Institutional Animal Care and Use
Committee.

Fall 2012-Present: Workload and Compensation Council (Chair Fall 2013 to
present).

Spring 2012-Spring 2015: Faculty Senator, Azusa Pacific University.

Fall 2013-Spring 2014: Academic Advancement Task Force

2015: Reviewer- Genes, Brain and Behavior, International Journal of Environmental
Research and Public Health

2014: Reviewer- Human Molecular Genetics; Genes, Brain, and Behavior

Fall 2013-Spring 2014: Member- Senate Steering Committee

2013: Reviewer- JAMA Psychiatry; Human Molecular Genetics

March 2012: Educational lecture, "The importance of empirical evidence," given to
the pediatric nurses at City of Hope's Helford Clinical Research Hospital.

January 2012: Invited lecture, "Towards a better understanding of autism through
studies on mouse, monkey, and man," given to the Levitt Lab, Zilkha Neurogenetic
Institute, Keck School of Medicine, University of Southern California.

May 2011: Invited lecture, "The potential role of maternal antibodies in the etiology
of autism: Support from a monkey model and the clinical population," given at the
National Institute of Environmental Health Sciences (NIEHS) in Research Triangle
Park, North Carolina.

March, 2011: Invited seminar, "Approaches towards modeling neurodevelopmental
disorders in animals models," given at the 1st Biennial Winter Institute in Banff,
Canada, sponsored by the Autism Research Training Program and NeuroDevNet.

March, 2011: Invited panelist on animal models of neurodevelopmental disorders at

the 1st Biennial Winter Institute in Banff, Canada.

2010: Reviewer- *Genes, Brain & Behavior*.

November, 2009: Invited lecture, "Of mice, monkeys, and men: Towards an understanding of autism," given at Fuller Graduate School of Psychology, Pasadena, CA.

May, 2009: Workshop on the neurobiology of autism given to the Orange County Association of School Psychologists, Yorba Linda, CA.

Peer-reviewed Publications:

1. Ballinger, S., Tisdale, T.C., Sellen, D.L., and Martin, L.A. (2016) Slowing down time: An exploration of personal life extension desirability as it relates to religiosity and specific religious beliefs. *Journal of Religion and Health*, DOI:10.1007/s10943-016-0218-7.
2. Martin, L. and Iceberg, E. (2015) Quantifying social motivation in mice using operant conditioning. *Journal of Visualized Experiments* 102: e53009, DOI:10.3791/53009.
3. Martin, L. and Lang, M.J. (2015) Quantitative autistic traits are transmitted intergenerationally and increase risk for autism spectrum disorders. *Evid Based Mental Health* 18(2): 49. DOI:10.1136/eb-2014-101983
4. Martin, L.A., Sample, H., Gregg, M., and Wood, C. (2014) Validation of operant social motivation paradigms using BTBR T+tf/J and C57BL/6J inbred mouse strains. *Brain and Behavior* 4(5): 754-764. DOI: 10.1002/brb3.273
5. Welsh, R. and Martin, L. (2013) Revisioning a systemic approach to neuroscience and psychotherapy. *Couple and Family Psychology: Research and Practice* 2(2): 116-123
6. Martin, L. A., and Horriat, N. (2012) The effects of birth order and birth interval on the phenotypic expression of autism spectrum disorder. *PLoS ONE* 7(11): e51049. doi:10.1371/journal.pone.0051049
7. Fatemi S. H., Aldinger K. A., Ashwood P., Bauman M. L., Blaha C. D., Blatt G. J., Chauhan A., Chauhan V., Dager S. R., Dickson P. E., Estes A. M., Goldowitz D., Heck D. H., Kemper T. L., King B. H., Martin L. A., Millen K. J., Mittleman G., Mosconi M. W., Persico A. M., Sweeney J. A., Webb S. J., Welsh J. P. (2012) Animal models of cerebellar neuropathology relevant to autism research. *Cerebellum*. 11(3): 777-807.
8. Dickson, P. E., Rogers, T. D., Del Mar, N., Martin, L. A., Heck, D., Blaha, C. D., Goldowitz, D., and Mittleman, G. (2010) Behavioral flexibility in a mouse model of developmental cerebellar Purkinje cell loss. *Neurobiology of Learning and Memory*, 94:

220-228.

9. Martin, L. A., Goldowitz, D., and Mittleman, G. (2010) Repetitive behavior and elevated activity in mice with Purkinje cell loss: A model for understanding the role of cerebellar pathology in autism. *European Journal of Neuroscience*. 31: 544-555.
10. Martin, L. A., Braunschweig, D., Cabanlit, M., Ashwood, P., Van de Water, J., and Amaral, D. G. (2008) Stereotypies and hyperactivity in rhesus monkeys exposed to IgG from mothers of children with autism. *Brain, Behavior, and Immunity*, 22 (6): 806-816.
11. Ziesmann, J., Gracey, S. R., Maarschalk, E. M., Martin, L. A., Patel, D. D., Somers, J., Sumpter, R. J., and Walls, A. S. (2007) BACE1 is necessary for normal olfactory behavior in mice. *Chemical Senses*, Summer.
12. Martin, L. A., Goldowitz, D., and Mittleman, G. (2006) Sustained Attention in the Mouse: A Study of the Relationship with the Cerebellum. *Behavioral Neuroscience*, 120(2): 477-481.
13. Goswami, J., Martin, L. A., Goldowitz, D., Beitz, A. J., and Feddersen, R. M. (2005) Enhanced Purkinje cell survival but compromised cerebellar function in targeted anti-apoptotic protein transgenic mice. *Molecular and Cellular Neuroscience*, 29(2): 202-221.
14. Martin, L. A., Escher, T., Goldowitz, D., and Mittleman, G. (2004) A relationship between cerebellar Purkinje cells and spatial working memory demonstrated in a lurcher/chimera mouse model system. *Genes, Brain and Behavior*, 3(3): 158-166.
15. Martin, L. A., Goldowitz, D., and Mittleman, G. (2003) The cerebellum and spatial ability: Dissection of motor and cognitive components with a mouse model system. *European Journal of Neuroscience* 18(7): 2002-2010.
16. Martin, L. A., Tan, S-S and Goldowitz, D. (2002) Cell lineage analysis and clonal architecture of the mouse hippocampus provide novel insights into hippocampal development. *Journal of Neuroscience* 22(9):3520-3530.

Presented Abstracts:

1. Martin, L. A., Iceberg, E. D, Rahman, M. N., Lum, B., Patterson, A., and Slama, M. (2015) The relationship between the GTF2i gene and social behavior: implications for Williams Beuren syndrome. International Behavioral Neuroscience Society Annual Meeting, Victoria, BC.
2. Roberts, N. M. and Martin, L. A. (2014) The effects of birth order and birth spacing on autism simplex families. International Meeting for Autism Research, Atlanta, GA.
3. McBratney, M., Gibson, C., Miranda, B., Lugo, J., and Martin, L. A. (2014) Reduced social behavior and heightened anxiety in 5HTT knockout Mice. International Behavioral

Neuroscience Society Annual Meeting, Las Vegas, NV.

4. Wood, C., Sample, H., Reyes, J., and Martin, L. A. (2013). Elucidating the role of the oxytocin system in specific social behaviors by using an oxytocin agonist and antagonist. Society for Neuroscience Abstracts, 39, and Society for Social Neuroscience Annual Meeting, San Diego, CA.
5. Lang, M. J., Morrison, D. Martin, L. A., and Shier, K. (2013) Sexual behavior in adolescents and young adults with autism. International Meeting for Autism Research, San Sebastian, Spain.
6. Martin, L. A., Wood, C., Sample, H., Gregg, M., Luttrull, J., Lopez, B., Johnson, J. and McBratney, M. (2013) Quantitative assessment of social motivation in mouse models relevant to autism. International Meeting for Autism Research, San Sebastian, Spain.
7. Martin, L.A., Sample, H. Gregg, M., Neal, H., Kaplan, J., Lopez, B., Luttrull, J. (2012) Exploration of the role of callosal and hippocampal commissural fibers in executive functions through studies on the BTBR inbred mouse strain. Society for Neuroscience Abstracts, 38.
8. Wood, C., Lopez, B., Luttrull, J., and Martin, L.A. (2012) The use of novel operant conditioning paradigms to assess social motivation in BTBR and C57BL/6J mice. Society for Social Neuroscience Annual Meeting, New Orleans, LA.
9. Gregg, M., Sample, H., Neal, H., Branson, N., Martin, L.A. (2012) Executive functions in agenesis of the corpus callosum: Working memory and sustained attention in BTBR mice. International Behavioral Neuroscience Society Annual Meeting, Kona, HI.
10. Wood, C., Sample, H., Neal, H., Gregg, M., Branson, N., and Martin, L.A. (2012) Quantitative assessment of social motivation in BTBR and C57BL/6J mice through novel operant conditioning paradigms. International Behavioral Neuroscience Society Annual Meeting, Kona, HI.
11. Martin, L. A., Sample, H., Neal, H., and Esquibel, S., Painton, C., Schoonover, A. (2011) Validation of a quantitative measure of social motivation in mice using an operant conditioning paradigm. Society for Social Neuroscience Annual Meeting, Washington, D.C.
12. Sample, H., Neal, H., Esquibel, S., Painton, C., Schoonover, A. and Martin, L. A. (2011) The comparison of BTBR and B6 mouse strains on a quantitative measure of social motivation: relevance for mouse models of autism. Faculty for Undergraduate Neuroscience Annual Meeting, Washington, D.C.
13. Martin, L. A., Sample, H., Neal, H., and Esquibel, S., Painton, C., Schoonover, A. (2011) The comparison of BTBR and B6 mouse strains on a quantitative measure of social motivation: relevance for mouse models of autism. Society for Neuroscience Abstracts, 37.

14. Dickson, P. E., Martin, L. A., Blaha, C. D., Goldowitz, D., and Mittleman, G. (2011) Systems analysis of cerebellar modulation of executive function. International Behavioral Neuroscience Society Annual Meeting, Steamboat Springs, CO.
15. Martin, L. A., Lane, L., Maupin, Z., and Berk, B. (2011) The development of operant tasks of social motivation for mouse models of social pathology. International Meeting for Autism Research, San Diego, CA.
16. Martin, L. A., (2011) Approaches towards modeling neurodevelopmental disorders in animals. 1st Biennial Winter Institute for the Study of Autism and Neurodevelopmental Disorders, Banff, Canada.
17. Martin, L. A., and Horriat, N. (2010) Birth order effects on autism symptom severity in multiplex families. Society for Neuroscience Abstracts, 36.
18. Shore, K., Lane, L. and Martin, L.A. (2010) Measuring social motivation in mice using a novel operant conditioning paradigm. Faculty for Undergraduate Neuroscience Annual Meeting, San Diego, CA.
19. Martin, L. A., Pike, T., Shier, K., Vaudrey, B., Benson, B., and Shelby, M. (2009) Birth order effects on the phenotypic expression of autism in multiplex families. International Meeting for Autism Research, Chicago, IL.
20. Martin, L. A. and Amaral, D. G. (2008) The development of a PKU monkey model to study the behavioral phenotype and neuropathology of autism in non-human primates. International Meeting for Autism Research, Montreal, Canada.
21. Dickson, P. E., Martin, L. A., Goldowitz, D., Heck, D. H., Blaha, C. D., and Mittleman, G. (2008) Executive function and the cerebellum: Defining the neural substrates of autistic behavior using a mouse model. Society for Neuroscience Abstracts, 34.
22. Ziesmann, J., Gracey, S. R., Maarschalk, E. M., Martin, L. A., Patel, D. D., Somers, J., Sumpter, R. J., and Walls, A. S. (2007) BACE1 is necessary for normal olfactory behavior in mice. Association for Chemoreception Sciences Annual Meeting.
23. Blaha, C. D., Boughter, J., Heck, D., Goldowitz, D., Martin, L. A., and Mittleman, G. (2006) Developmental cerebellar pathology: Influences on stereotyped behavior and frontal cortex dopamine release. Society for Neuroscience Abstracts, 32.
24. Martin, L. A., Ashwood, P., Van de Water, J., and Amaral, D. G. (2005) The development of monkey models for the study of autism. International Meeting for Autism Research.
25. Martin, L. A., Goldowitz, D., and Mittleman, G. (2002) Sustained attention and the cerebellum: defining the neural substrates of autistic behavior. Society for Neuroscience Abstracts 28:674.17.

26. Martin, L. A., Goldowitz, D., and Mittleman, G. (2002) The cerebellum and social behavior: is there a connection? International Meeting for Autism Research.
27. Martin, L. A., Goldowitz, D., and Mittleman, G. (2001) The role of Purkinje cells in behavior: part two in a series on a mouse model to study autism. Society for Neuroscience Abstracts 27:879.3.
28. Martin, L. A., Goldowitz, D., and Mittleman, G. (2001) The role of cerebellar neuropathology in autistic behaviors. International Meeting for Autism Research.
29. Martin, L. A., Mittleman, G., and Goldowitz, D. (2001) Cerebellar neuropathology and autistic behaviors: exploration of a mouse model system. National Institutes of Health Symposium on Autism Research.
30. Martin, L.A., Craggs, J.G., Goldowitz, D. and Mittleman, G. (2000) The role of Purkinje cells in behavior: A novel mouse model to study autism. Society for Neuroscience Abstracts 26:31.12.
31. Hamre, K.M., Boyd, J.D., Martin, L.A., and Goldowitz, D. (2000) The role of cerebellar Purkinje cells in ethanol-induced loss of righting reflex: Analysis of chimeric mice. Society for Neuroscience Abstracts 26:674.2.
32. Martin, L.A., Tan, S.S. and Goldowitz, D. (1999) Analysis of the role of cell lineage in establishing neural domains in the hippocampal formation using experimental mouse chimeras. Society for Neuroscience Abstracts 25:196.12.