

NAME	POSITION TITLE
Miller, Lucy Jane	Founder, Sensory Processing Disorder Foundation; Clinical Director, Sensory Therapies and Research (STAR) Center

EDUCATION/TRAINING (*Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.*)

INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
Lewis & Clark College, Oregon	B.S.	1972	Psychology
Boston University, Boston, MA	M.S., OTR	1974	Occupational Therapy
University of Denver, Denver, CO	Ph.D.	1986	Early Child. Spec. Ed (Educational Research)

A. Personal Statement: Dr. Miller is an occupational therapist and research scientists who studies the validity of Sensory Processing Disorder (SPD) and the effectiveness of OT in changing outcomes for children with SPD and other neurodevelopmental and behavioral conditions.

B. Positions and Titles

- 1979-2005: Founder and Executive Director of the KID Foundation (Foundation for Knowledge In Development) Littleton, CO
- 1994-2005: Associate Professor, Departments of Rehabilitation Medicine and Pediatrics, University of Colorado, Denver, CO
- 1994-2005: Director of STAR (Sensory Therapies And Research) Center, The Children's Hospital, Denver, CO
- 2005-Pres: Founder and Research Director, Sensory Processing Disorder (SPD) Foundation, Greenwood Village, CO
- 2005-Pres: Founder and Clinical Director, STAR (Sensory Therapies and Research) Center, Greenwood Village, CO
- 2005-Pres: Associate Clinical Professor, Departments of Rehabilitation Medicine and Pediatrics, University of Colorado Denver, CO
- 2006-Pres: Professor, Rocky Mountain University of Health Professions, Doctoral Programs in Pediatrics, Provo, UT

Other Professional Memberships

- 1987-1993 Governor's Appointment, Executive Committee, Interagency Coordinating Council for IDEA
- 1988-Pres. Charter Member, Academy of Research, American Occupational Therapy Foundation

C. Honors

- 1992 A. Jean Ayres Research Award: American Occupational Therapy Foundation
- 1994 Distinguished Technical Communication (First Place), Technical Publications Competition, Society for Technical Communications
- 1999 Occupational Therapy Outstanding Graduate Award: Boston University Sargent College of Health and Rehabilitation Sciences
- 2004 Award of Merit: American Occupational Therapy Association (highest award in the association)
- 2005 Martin King Luther Jr. Humanitarian Award: State of Colorado
- 2013 Outstanding Woman of the Year in Health Care; Denver Business Journal, Denver CO

D. Publications (in chronological order, selected from 80 publications)

1. Schoen, S. A., **Miller**, L. J., & Sullivan, J. C. (In Press). A Pilot Study of Integrated Listening Systems for Children with Sensory Processing Problems. *Journal of Occupational Therapy, Schools, & Early Intervention*.

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2. **Miller**, L.J., & Roid, G.H. (1993). Sequence comparison methodology for the analysis of movement patterns in infants and toddlers with and without motor delays. *American Journal of Occupational Therapy*, 47(4), 339-347.
 3. **Miller**, L.J., & Hanft, B.E. (1998). Building positive alliances: Partnerships with families as the cornerstone of developmental assessment. *Infants and Young Children*, 11(1), 49-60.
 4. **Miller**, L.J., McIntosh, D.N., McGrath, J., Shyu, V., Lampe, M., Taylor, A.K., Tassone, F., Neitzel, K., Stackhouse, T., & Hagerman, R. (1999). Electrodermal responses to sensory stimuli in individuals with fragile X syndrome: A preliminary report. *Journal of Medical Genetics*, 83(4), 268-279.
 5. McIntosh, D.N., **Miller**, L.J., Shyu, V., & Hagerman, R. (1999). Sensory modulation disruption, electrodermal responses, and functional behaviors. *Developmental Medicine and Child Neurology*, 41, 608-615.
 6. Cohn, E., **Miller**, L.J., & Tickle-Degnen, L. (2000). Parental hopes for therapy outcomes: Children with sensory modulation disorders. *American Journal of Occupational Therapy*, 54(1), 36-43.
 7. Mangeot, S.D., **Miller**, L.J., McIntosh, D.N., McGrath-Clarke, J., Simon, J., Hagerman, R.J., & Goldson, E. (2001). Sensory modulation dysfunction in children with attention deficit hyperactivity disorder. *Developmental Medicine and Child Neurology*, 43, 399-406.
 8. Hagerman, R.J., **Miller**, L.J., McGrath-Clarke, J., Riley, K., Goldson, E., Harris, S.W., Simon, J., Church, K., Bonnell, J., Ognibene, T.C., & McIntosh, D.N. (2002). Influence of stimulants on electrodermal studies in fragile X syndrome. *Microscopy Research and Technique*, 57, 168-173.
 9. Schaaf, R.C., **Miller**, L.J., Sewell, D., & O'Keefe, S. (2003). Children with disturbances in sensory processing: A pilot study examining the role of the parasympathetic nervous system. *American Journal of Occupational Therapy*, 57(4), 442-449.
 10. Ahn, R.R., **Miller**, L.J., Milberger, S., & McIntosh, D.N. (2004). Prevalence of parents' perceptions of sensory processing disorders among kindergarten children. *American Journal of Occupational Therapy*, 58(3), 287-302.
 11. Schaaf, R. C., & **Miller**, L. M. (2005). Occupational therapy using a sensory integrative approach for children with developmental disabilities. *Mental Retardation and Developmental Disabilities Research Reviews*, 11(2), 143-148.
 12. **Miller**, L.J. (2006). Sensational Kids: Hope and help for children with sensory processing disorder. New York, Putnam.
 13. **Miller**, L.J., Anzalone, S., Cermak, S.A., Lane, S.J., Osten, E.T. (2007). Concept evolution in sensory Integration: A proposed Nosology for Diagnosis. *The American Journal of Occupational Therapy*, 61 (2), 135-141.
 14. **Miller**, L.J., Schoen, S.A., James, K., Schaaf, R.C. (2007) Lessons Learned: A pilot study of occupational therapy effectiveness for children with sensory modulation disorder. *American Journal of Occupational Therapy*, 61 (2), 161-169.
 15. **Miller**, L.J., Coll, J.R., Schoen, S.A. (2007). Randomized control pilot study of the effectiveness of occupational therapy for children with sensory modulation disorder. *American Journal of Occupational Therapy*, 61 (2), 228-238.
 16. Schoen, S. A., **Miller**, L. J., Brett-Green, B. and Hepburn, S. L. (2008) Psychophysiology of Children with Autism Spectrum Disorder. *Research in Autism Spectrum Disorders*, 64 (2-3), 417-429.
 17. Gabriels, R. L., Agnew, J. A., **Miller**, L. J., Gralla, J., Pan, Z., Goldson, E., Ledbetter, J. ., Dinkins, J. P., Hooks, E. (2008) Is there a relationship between restricted, repetitive, stereotyped behaviors and interests and abnormal sensory response in children with autism spectrum disorders, *Research in autism Spectrum Disorders*. 2(4) 660-670
 18. Brett-Green, B. A., **Miller**, L. J., Gavin, W. J., Davies, P. I. (2008) Multisensory Integration in Children: A Preliminary ERP study, *Brain Research*. 1242, 283-290.
 19. Schoen, S. A., **Miller**, L. J., Green, K. (2008). Pilot Study of the Sensory Over-Responsivity Scales: Assessment and Inventory. *The Journal of Occupational Therapy*, 62 (7-8), 393-406.
 20. **Miller**, L.J., Nielson, D.M., Schoen, S.A., and Brett-Green, B.A. (2009) Perspectives on sensory processing disorder: a call for translational research. *Front. Integr. Neurosci.* 3 :22. Doi : 10.3389/neuro.07.022.2009
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21. Schoen, S. A., Miller, L.J., Brett-Green, B., Nielsen, D.M. (2009) Physiological and behavioral differences in sensory processing: a comparison of children with Autism Spectrum disorder and Sensory Modulation Disorder. *Front. Integr. Neurosci.* 3 :29. Doi : 10.3389/neuro.07.029.2009
22. Brett-Green, B., **Miller**, L.J., Schoen, S.A., Nielsen, D.M. (2010) An Exploratory Event Related Potential Study of Multisensory Integration in Sensory Over-Responsive Children. *Brain Research*. doi:10.1016/j.brainres.2010.01.043.
23. Schaaf, R.C., Benevides, T., Blanche, E.I., Brett-Green, B.A., Burke, J.P., Cohn, E.S., Koomar, J., Lane, S.J., **Miller**, L.J., May-Benson, T., Parham, D., Reynolds, S., Schoen, S.A. (2010). Parasympathetic functions in children with sensory processing disorder. *Front. Integr. Neurosci.* 4:4. Doi: 10.3389/fnint.2010.00004.
24. Bialer, D.S. and **Miller**, L.J. (2011). No Longer A SECRET: Unique Common Sense Strategies for Children with Sensory or Motor Challenges. Arlington, TX: Sensory World.
25. James, K., **Miller**, L.J., Schaaf, R.C., Nielsen, D.M., Schoen, S.A. (2011) Phenotypes within sensory modulation dysfunction. *Comprehensive Psychiatry.* 52, 715-724. Doi: 10.1016/i.comppsy. 2010.11.010.
26. **Miller**, L.J., Nielsen, D. M. and Schoen, S.A. (2012) Attention Deficit Hyperactivity Disorder and Sensory Modulation Disorder: A Comparison of Behavior and Physiology. *Research in Developmental Disabilities.* 33 (2012) 804-818.
27. **Miller**, L.J., Schoen, S.A, and Nielsen, D.M. (2012). Sensory Processing Disorder: Implications for Multisensory Function. *The New Handbook of Multisensory Processing*. Cambridge, MA: MIT Press (pp. 707-721).
28. **Miller**, L.J., Witten, M., and Ahn, R.R. (2012). Assessment of Sensory Processing Disorder: The Interplay With Affect in the Context of Relationship. *Handbook of Infant, Toddler, and Preschool Mental Health Assessment*. New York: Oxford University Press.
29. Tavassoli, T., **Miller**, L.J., Schoen, S.A., Brout, J., Nielsen, D.M., and Baron-Cohen, S. (2012). Similar or Different: Comparison of Children with Autism Spectrum Conditions and Sensory Processing Disorder. *Journal of the American Academy of Child & Adolescent Psychiatry*.
30. Hollenbeck, J. and **Miller**, L.J. (2013). Best Practices in Promoting Motor & Praxis Skills to Enhance Participation. *Best Practices in School Occupational Therapy*, 419-429.
31. Sullivan, J.C., **Miller**, L.J., Nielsen, D.M., and Schoen, S.A. (2013). The presence of migraines and its association with sensory hyperactivity and anxiety symptomatology in children with autism spectrum disorder. *Autism*. DOI: 10.1177/1362361313489377
32. Tavassoli, T., **Miller**, L.J., Schoen, S.A., Nielsen, D.M., and Baron-Cohen, S. (2013). Sensory over-responsivity in adults with autism spectrum conditions. *Autism*. DOI: 10.1177/1362361313477246
33. Schoen, S. A., **Miller**, L. J., & Hampton, S. (2014, September). Occupational therapy in natural settings: Using playgrounds. *Sensory Integration Special Interest Section Quarterly*, 37(3), 1-4.
34. Schoen, S.A., **Miller**, L.J., and Nielsen, D.M. (2014). Sensory Integrative Theory and Treatment: Occupational Therapy With a Sensory Integrative Approach. In C. Murray-Slutsky & B. Paris (Eds.), *Autism Interventions: Exploring the Spectrum of Autism*, 27-51
35. Schoen, S.A., **Miller**, L.J., Nielsen, D. M. (2014). Occupational Therapy with a Sensory Integration Approach. *Exploring the Spectrum of Autism and Pervasive Developmental Disorders – Intervention Strategies – 2nd edition*. Carolyn Murray-Slutsky and Betty Paris [Eds.]
36. Schoen, S. A., **Miller**, L. J., & Sullivan, J. C. (2014). Measurement in sensory modulation: The Sensory Processing Scale Assessment. *American Journal of Occupational Therapy*, 68, 522-530. <http://dx.doi.org/10.5014/ajot.2014.012377>
37. **Miller**, L.J. (In process). *Evolution of the STAR Treatment Model*. In A.C. Bundy, S.J. Lane, & E.A. Murray (Eds.), *Sensory Integration: Theory and Practice* (3rd ed.) Philadelphia, PA: F.A. Davis Company.

Nationally Standardized Norm Referenced Instruments

1. **Miller**, L.J. and Schoen, S.A. (In process) Nation-wide Standardization of the Sensory Processing Three Dimensions Scale (SP3D). Western Psychological Services: Torrance, CA
 2. **Miller**, L.J., Oakland, T.D., & Herzberg, D.S. (2013). *Goal-oriented Assessment of Life-Skills*. Los Angeles, CA: Western Psychological Services.
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3. Roid, G.H., & Miller, L.J. (2013). *Leiter International Performance Scale-3rd edition*. Wood Dale, IL: Stoelting Co.
4. Miller, L. J. (2006). *The Miller Function and Participation Scale*. San Antonio, TX: The Psychological Corporation.
5. Miller, L. J., & Roid, G. H., (1994). *Toddler and Infant Motor Evaluation*, San Antonio, TX: Psycho. Corp.
6. Miller, L.J. (1993). *FirstSTEP (Screening Test for Evaluating Preschoolers)* Manual. San Antonio, TX: Psych. Corp.
7. Miller, L.J. (1988; 1982). *Miller Assessment for Preschoolers: Revised Manual*. San Antonio, TX: Psycho. Corp.

C. Research Support

Private Foundation Miller (PI) 01/01/2003-12/31/2015 \$335,000
Wallace Research Foundation and other foundations
For the study of the SP Scales, Multisensory Integration and other psychophysiologic studies with children who have SPD
Role: PI

Private Foundation Miller (PI) 5/01/07-7/31/08 \$40,000
Cure Autism Now
Quantitative Psychophysiologic Evaluation of Sensory Processing in Children with Autism Spectrum Disorders
The goal is to examine the reliability and validity of an established physiologic assessment of sensory reactivity in 40 school-aged children carefully evaluated for the presence of Autistic Spectrum Disorders.
Role: PI

RI 201-000 Miller (PI) 2/01/01-2/28/04 \$100,000
Diana Boulter Research Scholar Award, The Children's Hospital Research Institute, Denver, CO
Effectiveness of OT for Children with Sensory Processing Difficulties: A Randomized Clinical Trial
The goal is completing a pilot study of the effectiveness of OT with children who have sensory processing impairments. Role: PI

Private Foundations Support Miller (PI) 1/01/03-4/30/04 \$224,000
Wallace Research Foundation and Coleman Institute for Cognitive Disabilities
Sensory Research Planning Retreat – II
The goal is to implement a follow-up retreat with NIH funded researchers and 10 additional NIH-funded researchers who might be interested in studying sensory processing impairments. NIH Project Officers will be invited to attend. Multiple pilot grants will be awarded to individuals with well-established research programs who will begin to incorporate research on sensory impairments into their research programs.
Role: PI Research Support

R21 (HD/AR41614-01) Miller (PI) 9/01/01-8/31/03 \$75,000
NIH/NICHD/NCMRR
Outcome of Sensory-Based Intervention after Birth Trauma: A Multi-Site Clinical Trial
The goal was to implement multi-site reliable psychophysiology laboratory procedures, to plan a multi-site randomized clinical trial with Boston University, Thomas Jefferson University, and the University of Southern California and to submit an R01 to NIH for same.
Role: PI

K01 (HD01183-01A1) Miller (PI) 3/1/99-2/28/02 \$252,720
NIH/NICHD/NCMRR Career Award
OT Outcomes: Children with Sensory Modulation Disorders

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The goal was to train the PI in statistics, research design, and psychophysiologic measures for measuring changes in children after interventions. We conducted a pilot study for a randomized clinical trial of Occupational Therapy compared to an alternative treatment and no treatment for children with sensory processing impairments.

Role: PI
