

NAME	POSITION TITLE
Miller, Lucy Jane	Executive Director, Foundation for Knowledge in Development (KID), Co-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. Positions and Honors

Positions and Employment

- 1979-Pres. Founder and Executive Director, Sensory Processing Disorder Foundation, a nonprofit 501(c)(3) public charity, dedicated to research, education, and advocacy, Denver, CO
- 1991-1993 Assistant Professor, Washington University, School of Medicine, St. Louis
- 1994-2000 Assistant Professor, Department of Pediatrics, University of Colorado Health Sciences Center, Denver, CO
- 1999-Pres. Founded and Directs the **Sensory Therapies And Research Center (STAR Center)**
- 2000-Pres. Associate Professor, Departments of Rehabilitation Medicine and Pediatrics, University of Colorado Health Sciences Center, Denver, CO
- 2005-Pres. Professor, Department of Pediatrics, Rocky Mountain University of Health Professions, UT

Other Experience and 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

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

B. Selected Peer-Reviewed Articles (in chronological order, selected from 66 publications)

1. **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.
2. **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.
3. **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.
4. 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.
5. 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.

6. 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.
7. 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.
8. 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.
9. 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.
10. 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.
11. **Miller**, L.J.(2006). Sensational Kids: Hope and help for children with sensory processing disorder. New York, Putnam.
12. **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.
13. **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.
14. **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.
15. 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.
16. 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
17. 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.
18. 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.
19. **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
20. 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
21. 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.
22. 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.

Nationally Standardized Norm Referenced Instruments (selected from seven scales)

1. **Miller**, L. J. (2006). The Miller Function and Participation Scale. San Antonio, TX: The Psychological Corporation.
2. Roid, G.H., & **Miller**, L.J. (1997). Leiter International Performance Scale-Revised. Wood Dale, IL: Stoelting Co.
3. Miller, L. J., & Roid, G. H., (1994). Toddler and Infant Motor Evaluation, San Antonio, TX: Psycho. Corp.
4. **Miller**, L.J. (1988; 1982). Miller Assessment for Preschoolers: Revised Manual. San Antonio, TX: Psycho. Corp.
5. **Miller**, L.J. (1993). FirstSTEP (Screening Test for Evaluating Preschoolers) Manual. San Antonio, TX: Psycho. Corp.

C. Research Support

Ongoing Research Support

Private Foundation Miller (PI) 01/01/2004 -05/01/2009

Wallace Research Foundation

For the study of the SP Scales and Multisensory Integration with children who have SPD

Role:PI

Private Foundation Miller (PI) 5/01/03–7/31/04

Cure Autism Now

Quantitative Psychophysiological 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

Private Foundation Support Miller (PI) 1/01/03-12/31/04

Wallace Research Foundation

Development of a Screening Procedure for Sensory Responsivity

The goal is to construct and conduct initial reliability and validity on a scale to assess sensory over-responsivity. The scale has two parts: a self-report checklist and an administered evaluation. The scale will be administered nation-wide by NIH-funded investigators who participated in the 2003 Sensory Research Planning Retreat and results will be reported at the Sensory Research Planning Retreat II in February 2004.

Role: PI

Private Foundation Funding Davies (PI) 11/01/01–12/31/04

Wallace Research Foundation

Brain Mechanisms Underlying Sensory Modulation Dysfunction

The goal is to use electroencephalogram (EEG) and event-related potentials (ERP) to study sensory gating mechanisms in children with sensory processing impairments compared to controls.

Role: PI (on subcontract with Colorado State University)

Completed Research Support

RI 201-000 Miller (PI) 2/01/01–2/28/04

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 Foundation Support Miller (PI) 1/01/03-4/30/04

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

Private Foundation Support Miller (PI) 1/01/03-12/31/03

Coleman Institute for Cognitive Disabilities

Development of a Screening Procedure for Sensory Responsivity

This grant provides a graduate research fellowship for the Sensory Responsivity Scale project.

Role: PI

Completed Research Support (Cont'd.)

R21 (HD/AR41614-01) Miller (PI)

9/01/01–8/31/03

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

5 MO1 RR00069 Miller (PI)

8/01/02–7/31/03

Pediatric General Clinical Research Center, University of Colorado Health Sciences Center, Denver, CO

Understanding Clinical Variability in Sensory Processing Impairments in Children, Pilot and Feasibility Grant

The goal was preparing extent data for analysis.

Role: PI

5 MO1 RR00069 Miller (PI)

8/01/02–7/31/03

Pediatric General Clinical Research Center, University of Colorado Health Sciences Center, Denver, CO

Defining the Phenotypes of Sensory Processing Impairments in Children

The goal is bioinformatics and statistical support to analyze existing data.

Role: PI

K01 (HD01183-01A1) Miller (PI)

3/1/99–2/28/02

NIH/NICHD/NCMRR Career Award

OT Outcomes: Children with Sensory Modulation Disorders

The goal was to train the PI in statistics, research design, and psychophysiological 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

Private Foundation Support Miller (PI)

1/01/02–12/31/02

Wallace Research Foundation and Coleman Institute for Cognitive Disabilities

Sensory Research Planning Retreat – I

The goal was to develop a consensus during a 3-day retreat with NIH funded researchers of research needed in sensory processing impairments to move the field forward. A consensus statement was developed (manuscript submitted). Five initiatives were developed and eight researchers were funded.

Role: PI