



Sandra L. Willett, PT, Ph.D.
Board Certified Clinical Specialist in Pediatric Physical Therapy
Associate Professor, Doctor of Physical Therapy Program
Department of Kinesiology
Colorado Mesa University
swillett@coloradomesa.edu

Education:

University of Nebraska Medical Center, Omaha, NE 68198
Clinical Translation Research Mentored Scholars Program/Medical Sciences Interdepartmental Area,
Graduate Studies: attended August 2013 – June 2019
Ph.D. Awarded June 2019
Dissertation: Maternal Cognitions and Early Sensorimotor Play in Infant Born Pre-term
Advisors: Barbara Jackson, Ph.D. and Lani Zimmerman, Ph.D.

Department of Cell Biology and Anatomy, Graduate Studies
Attended 8/88-12/93
Awarded Master of Science in Cell Biology and Anatomy
Thesis: Comparison of Trunk Muscle Activation Patterns in Infant Kicking and Stepping Behaviors
Thesis Advisor: Wayne A. Stuber, Ph.D., P.T., P.C.S.

University of Nebraska Medical Center, Omaha, NE 68198
Division of Physical Therapy Education
Attended 6/84-5/86
Awarded Bachelor of Science in Physical Therapy

University of Nebraska-Omaha, Omaha, NE 68182
Attended 8/82-5/84

Academic appointments:

Colorado Mesa University, Department of Kinesiology, Physical Therapy Program, Grand Junction, CO.
Associate Professor, 2023 – present.

University of Nebraska Medical Center, Munroe Meyer Institute, Omaha, NE 68198-5450
Assistant Professor, 2009 – 2021; Associate Professor, 2021 – 2023; Adjunct Associate Professor,
2023 - present.

University of Nebraska Medical Center, School of Allied Health Professions Division of Physical Therapy
Education, Omaha, NE 68198-4420
Instructor, 2/94-2003; Assistant Professor, 2003-2009.

University of Nebraska Graduate College, Medical Sciences Interdisciplinary Area, University of Nebraska
Medical Center, Omaha NE, Graduate Faculty, 2019 - .

Certifications and licenses:

Nebraska License #733, 7/86-present
CPR Certification by the American Heart Association (7/84 - present)



Board Certified Clinical Specialist, Pediatric Physical Therapy by the American Board of Physical Therapy
Specialties (ABPTS), 5/00-present
NeuroDevelopmental Treatment (NDT) Certification by the NeuroDevelopmental Treatment Association
(NDTA), 8/90
Tscharnuter Akademie for Movement Organization (TAMO) Certification by the
Tscharnuter Akademie for Movement Organization (TAMO), 5/96

Grants (Funded or Under Review):

Title: Powered Mobility in Children with Disabilities: User Needs and its Impact on Global Development.
Funding Agency: Child Health and Research Institute
Total Dollars Requested: \$11,926
Principle Investigator(s): Andrea Cunha and Jamie Gehringer, Co-Investigator: **Sandy Willett**
Funded: 1/2023

Title: Hand Arm Bimanual Intensive Training-Virtual Reality (HABIT-VR). Funding Agency: IdeA-CTR
Technology Transfer Pilot Grant
Total Dollars Requested: \$76,151
Principle Investigator: Jamie Gehringer, Co-Investigator: **Sandy Willett**

Title: Development of a Research Consortium and Planning Proposal to Evaluate the Efficacy of STEPS_H2 –
Supporting Transitions by Enhancing Parent Support from Hospital to Home.
Funding Agency: Academy of Pediatric Physical Therapy, Planning Grant 12/2020
Total Dollars Requested: \$25,000
Principle Investigator: Stacey Dusing (USC) Co-Investigators: Barbara Sargent (USC); **Sandy Willett** (UNMC),
Andrea Duncan (CHOP), Lisa Chiarello (Drexell University),
Dana McCarty (UNC), Beth McManus (CU), Audrey Kane (VCU) and Jill Heathcock (OSU)
Funded: 1/2021

Title: Evaluation of the Efficacy of a Physical Therapy Intervention Targeting Sitting and Reaching for Young
Children with Cerebral Palsy
Funding Agency: RFA/PA: HD20-005: Pediatric Rehabilitation (R01)
Start and End Dates: 5/2020 – 5/2025
Total Dollars Requested: 3,114,277
Principal Investigator: Stacey Dusing, PhD, PT (University of Southern California)
UNMC Site Co-Principal Investigator: **Sandy Willett** (2020- 2023) Site Co-Investigator: (2023 – 2025)

Title: Efficacy of the START-Play Program for Infants with Neuromotor Disorders
Funding Agency: National Center for Special Education Research, U.S. Department of Education
Start and End Dates: 3/2018 – 6/2019
Total Dollars: \$18,552.00
Principal Investigator: Reggie Harbourne, PT, PhD (Duquesne University)
UNMC Site Co-Principal Investigator: **Sandy Willett**

Title: GoBabyGo! BIG
Funding Agency: Munroe-Meyer Guild



Start and End Dates: 3/2018 – 3/2019

Total Dollars: \$8,750.00

Principal Investigator: **Sandy Willett**

Title: Maternal Cognitions and Sensorimotor-based Play in Premature Infants at Near Term Adjusted Age: A Mixed Methods Approach

Funding Agency: UNMC Clinical Translational Research Mentored Scholar's Program

Start and End Dates: 7/2017 – 7/2018

Total Dollars: \$25,000

Principal Investigator: **Sandy Willett**

Title: Development and Psychometric Testing of the Maternal Perception of Pre-term Infant Well-being Scale.

Funding Agency: Academy of Pediatric Physical Therapy, American Physical Therapy Association, Mentored Research

Start and End Dates: 7/2017 – 7/2018

Total Dollars: \$9,900.00

Principal Investigator: **Sandy Willett**, Mentors: Stacey Dusing, Bunny Pozehl

Title: Somatosensory Cortical Activity in Pre-term Infants

Funding Agency: UNMC Department of Pediatrics

Start and End Dates: 6/2017 – 6/2018

Total Dollars: \$50,000

Principal Investigators: Ann Anderson Berry, Co-PI; Max Kurz, Co-PI; **Sandy Willett**, co-investigator

Title: **GO Baby GO! Nebraska!** A Community Partnership to Optimize Early Mobility

Funding Agency: Munroe Meyer Institute Guild

Start and End Dates: 4/1/16 – 10/1/17

Total Dollars: \$14,500

Funding Agency: Olsson Associates Foundation

Start and End Dates: 5/1/16 – 5/1/17

Total Dollars: \$2,000

Funding Agency: Private Donation

Start and End Dates: 12/30/2016 –

Total Dollars: \$4,000

Principal Investigators: **Sandy Willett**, PI; Sara Garcia, Co-PI(Children's Hospital and Medical Center); Betsy Becker, Co-PI (Division of PT Education, UNMC CAHP)

Title: Intervention to Advance Postural Transitions in Young Children with Neuromotor Disabilities and Resulting Effects on Play.

Funding Agency: Section of Pediatrics, American Physical Therapy Association

Start and End Dates: 1/1/12- 12/31/12

Total Dollars: \$30,000.



Principal Investigators: Regina Harbourne, PI, **Sandra Willett**, Co-PI, Max Kurz, Co-PI. Support Personnel: Lynne Capoun

Title: Investigation of Interventions for Sitting Postural Control in Young Children with Moderate to Severe Cerebral Palsy.

Funding Agency: U.S. Department of Education, Field Initiated Program (H133G080023).

Start and End Dates: 10/01/08-9/30/11.

Total Dollars: \$600,000.

Principal Investigators: Nicholas Stergiou, PI, Regina Harbourne, Co-PI. Support Personnel: **Sandy Willett**, Amy Beyersdorf.

Title: Investigation of the Dynamics of Sitting Posture Control in Infants with Cerebral Palsy.

Funding Agency: U.S. Department of Education, Field Initiated Program 84.133G-1.

Start and End Dates: 12/01/04 - 12/01/07

Total Dollars: \$450,000

Principal Investigators: Nicholas Stergiou, PI, Regina Harbourne, Co-PI, Wayne Stuberger, Co-PI. Support Personnel: **Sandy Willett**, Stacey Dejong.

Title: A Test for Diagnosis of Motor Delay in Infants

Funding Agency: National Institute of Child Health and Human Development
(1 R01 HD38867-01A1)

Start and End dates: 9/01/01 - 8/31/03

Total Dollars: \$50,460.00

Principal Investigator: Suzann Campbell, University of Illinois Chicago

Subcontractor (UNMC Site): **Sandy Willett**, Principal Investigator (.15); Janice Flegle, OTR/L (.12), Denise Lynes, MSN, and Joanne Frankenfield, NNP (.10 combined) - secondary investigators.

Applications (Under Review)

Title: SIT-PT and Biopsychosocial Adherence of Parents: Notice of Special Interest Administrative Supplement

Funding Agency: National Institute of Child Health and Human Development

Submitted April, 2023

Total Dollars: \$250,000

Principle Investigator: Stacey Dusing (USC) and Reggie Harbourne (Duquesne University); Co-Investigators: **Sandy Willett** (CMU), Natalie Koziol (UNL) and Kari Kretch (USC).

Scholarship Related to Discipline

Chapters in Books:

Willett S. (2018) Developmental Care in the Nursery. In H. Needelman & B.J. Jackson (Eds.), *Follow-up for NICU Graduates: Promoting Positive Developmental and Behavioral Outcomes for At-Risk Infants* (15 – 58), Gewerbestrasse, Cham, Switzerland: Springer International. ISBN 978-3-319-73274-9.

Journal Articles

Harbourne R, **Willett SL.** A Comparison of Interventions for Children with Cerebral Palsy to Improve Sitting Postural Control: A Clinical Trial. *Phys Ther.* 2010; 90(12):1881.

Willett SL, Harbourne R. Commentary on Impact of Enhanced Sensory Input on Treadmill Step Frequency: Infants Born with Myelomeningocele. *Pediatric Phy Ther*, 2011; 23(1): 53.

Jackson B, Needleman H, Roberts H, **Willett SL**, McMorris C. Bayley Scales of Infant Development Screening Test-Gross Motor Subtest: Efficacy in Determining Need for Services. *Pediatric Phy Ther*. Spring 2012; 24(1): 58-62.

Kyvedlidou A, Harbourne R, **Willett SL**, Stergiou N. Sitting Postural Control in Infants with Typical Development, Motor Delay or Cerebral Palsy. *Pediatric Phy Ther*. Spring 2013; 25(1): 46-51.

Willett SL, Harbourne R. Commentary on Genu Valgum and Flat Feet in Children with Healthy and Excessive Body Weight. *Pediatric Phy Ther*. 2016; 28: 206.

Surkar SM, Hoffman RM, **Willett SL**, Flegle J, Harbourne R, Kurz MJ. Hand-Arm Bimanual Intensive Therapy Improves Prefrontal Cortex Activation in Children with Hemiplegic Cerebral Palsy. *Pediatric Phys Ther*. 2018, 30 (2): 93 – 100.

Kurz, M. J. and **Willett, S.** (2018), Clinical biomarkers for assessing neurodevelopmental outcome of infants born preterm. *Dev Med Child Neurol*, 60: 1193-1194. doi:[10.1111/dmcn.13968](https://doi.org/10.1111/dmcn.13968)

Willett, SL and Reelfs, H. Commentary on “Early Intervention Therapy Services for Infants with or at Risk for Cerebral Palsy.” *Pediatric Phy Ther*. 2019;31(3): 250.

Willett SL, Pleasant M, Jackson BJ, Needleman H, Roberts H, McMorris C. Sitting Matters! Differences Between Sitters and Non-sitters at 6 months’ adjusted age in infants at-risk and Born preterm. *Pediatric Phy Ther*. 2019;31(3):257-262.

Harbourne RT, Dusing SC, Lobo MA, Westcott-McCoy S, Bovaird J, Sheridan S, Hsu LY, Koziol N, Marcinowski EC, Babik I, **Willett SL**. START-Play Physical Therapy Intervention Impacts Motor and Cognitive Outcomes in Infants with Neuromotor Disorders: A Multi-Site Randomized Clinical Trial. *Phys Ther*, 2021; 101(2):pzaa232, <https://doi.org/10.1093/ptj/pzaa232>

Jensen-Willett S, Miller K, Jackson B, Harbourne R. The Influence of Maternal Cognitions Upon Motor Development in Infants Born Preterm: A Scoping Review. *Pediatr Phys Ther*. 2021;33(3):137-147. doi:10.1097/PEP.0000000000000806

Willett SL, Drew E, Dibbern J. Commentary on “Intensive Bimanual Intervention for Children who have Undergone Hemispherectomy: A Pilot Study”. *Pediatr Phys Ther*. 2021;33(3):128.

Cunha AB, Babik I, Dongho C, Koziol N, Harbourne RT, Dusing SC, McCoy SW, **Willett SL**, Bovaird J, Lobo MA. The Impact of Severity of Motor Delay, Timing of Task Mastery, and START-Play Intervention on the Development of Means-End Problem Solving in Young Children. *Brazilian J of Phys Ther*. (Under Review)

Kretch KS, **Willett SL**, Hsu LY, Sargent BA, Harbourne RT, Dusing SC. "Learn the Signs. Act Early.": Updates and Implications for Physical Therapists. *Pediatr Phys Ther*. 2022 Jul 25. doi: 10.1097/PEP.0000000000000937. Epub

ahead of print. PMID: 35876833.

Koziol NA, Butera CD, Kretch KS, Harbourne RT, Lobo MA, McCoy SW, Hsu LY, **Willett SL**, Kane AE, Bovaird JA, Dusing SC. Effect of the START-Play Physical Therapy Intervention on Cognitive Skills Depends on Caregiver-Provided Learning Opportunities. *Phys Occup Ther Pediatr*. 2022;42(5):510-525. doi: 10.1080/01942638.2022.2054301. Epub 2022 Mar 29. PMID: 35350970.

Jensen-Willett S, Cunha A, Lobo MA, Harbourne R, Dusing SC, McCoy SW, Koziol NA, Hsu LY, Marcinowski EC, Babik I, An M, Bovaird JA. The Effect of Early-Life Seizures on Cognitive and Motor Development: A Case Series. *Pediatr Phys Ther*. 2022 Jul 1;34(3):425-431. doi: 10.1097/PEP.0000000000000918. Epub 2022 Jun 8. PMID: 35703307.

Dusing SC, Harbourne RT, Hsu LY, Koziol NA, Kretch K, Sargent B, **Jensen-Willett S**, McCoy SW, Vanderbilt DL. The SIT-PT Trial Protocol: A Dose-Matched Randomized Clinical Trial Comparing 2 Physical Therapist Interventions for Infants and Toddlers With Cerebral Palsy. *Phys Ther*. 2022 Jul 4;102(7):pzac039. doi: 10.1093/ptj/pzac039. PMID: 35421222; PMCID: PMC9291380.

An M, Marcinowski EC, Hsu LY, Stankus J, Jancart KL, Lobo MA, Dusing SC, McCoy SW, Bovaird JA, **Willett S**, Harbourne RT. Object Permanence and the Relationship to Sitting Development in Infants With Motor Delays. *Pediatr Phys Ther*. 2022 Jul 1;34(3):309-316. doi: 10.1097/PEP.0000000000000909. Epub 2022 Jun 10. PMID: 35653237; PMCID: PMC9200226.

Gehringer JE, Fortin E, Surkar SM, Hao J, **Jensen-Willett S**. Hand Arm Bimanual Intensive Training in Virtual Reality: A Feasibility Study. *Pediatr Phys Ther*. 2023 Jan 1;35(1):85-01. Doi: 101097/PEP.0000000000000975. epub 2022 Dec 2. PMID:36459077.

Ennis B, **Jensen-Willett S**. Commentary on “Early Developmental Trends in High-Risk Neonates Later Diagnosed with Autism Spectrum Disorder”. *Pediatr Phys Ther*. 2023 Jan 1;35(1):35. doi: 10.1097/PEP.0000000000000979. PMID: 36638024.

McCarty DB, **Willett S**, Kimmel M, Dusing SC. Benefits of maternally-administered infant massage for mothers of hospitalized preterm infants: a scoping review. *Matern Health, Neonatol and Perinatol*. 2023 9(6): 2 – 16. <https://doi.org/10.1186/s40748-023-00151-7>

Ketch K, **Willett S**, Harbourne R, Hsu LY, Sargent B, Dusing S. “Early Mobility and Crawling: Perspectives and Practices of Pediatric Physical Therapists in the United States”. Under Review, *Pediatr Phys Ther*. 2023.

Koziol N, Kretch K, Harbourne RT, Lobo MA, McCoy s, Molinini R, Hsu LY, Babik I, Cunha AB, **Willett SL**, Bovaird J, Dusing SC. START-Play physical Therapy intervention indirectly impacts cognition through changes in early motor-based problem-solving skills. *Pediatr Phys Ther*. 2023 Jul 1;35(3):293-302. DOI: 10.1097/PEP.0000000000001016. Epub 2023 Apr 18.

Fiss AL, Hakstad, RB, Looper J, Pereira S, Sargent B, Silveira J, **Willett S**, Dusing S. Embedding Play to Enrich Physical Therapy. *Behav Sci*. 2023 MAY 24;13(6):440. DOI:10.3390/BS13060440.



Kretch, K. S., Koziol, N. A., Marcinowski, E. C., Hsu, L., Harbourne, R. T, Lobo, M. A., McCoy, S. W., Willett, S. L., & Dusing, S. C. (in press). Sitting capacity and performance in infants with typical development and infants with motor delay. *Phys Occupat Ther Pediatr*.

Babik I, Cunha AB, Dongho C, Koziol N, Hsu LY, Harbourne RT, Dusing SC, McCoy SW, Bovaird J, Willett SL, Lobo M. Socioeconomic status and home affordances moderate effects of motor delay and intervention. *J App Dev Psych*. 2023(87):101563. ISSN 0193-3973. <https://doi.org/10.1016/j.appdev.2023.101563>

Invited Conference Presentations

CDC Learn the Signs: Act Early (LTSAE): A conversation about the Updates and Implementing these in the Classroom with Expert PT Clinician Sandra Willett and Early Childhood Educator/LTSAE Ambassador Kerry Miller. Town Hall Meeting for the Academy of Pediatric Physical Therapy Academic Coordinators of Education SIG. Virtual Presentation, April 12, 2023.

Early Surveillance, Detection and Intervention for Motor Delays. Nebraska Physical Therapy Association Spring Meeting, Omaha, NE April 1, 2023.

International Consensus Consortium: Perspective on Play in Physical Therapy Intervention. Hosted by the University of Southern California, Motor Development Lab and The Arctic University of Norway. Los Angeles, CA Feb 27 – 28, 2023.

Learn the Signs. Act Early. Evidence for Developmental Surveillance Milestones and Crawling vs. Early Mobility. APTA Combined Sections Meeting, San Diego, CA February 24, 2023.

Deformational Plagiocephaly: Early Identification and Management Strategies. Nebraska Medicine NICU Nursing Seminar. Omaha, NE November 8, 2022.

NICU to Home Research Planning and Consensus Conference. Hosted by the University of California Motor Development Lab and the Cerebral Palsy Foundation. Las Vegas, NV September 20 – 21, 2022.

“An Introduction to the START-Play Approach” Israeli Child Development and Rehabilitation Association, Synchronous and Asynchronous Virtual Presentation, Jerusalem Israel, January 18, 2022.

“Early Intervention: from Conception to Community” Institute of Education Sciences Annual Principal Investigators Meeting: Advancing Equity and Inclusion in the Education Sciences. Virtual presentation January 25, 2022.

“Therapy in the Newborn Intensive Care Unit: A Panel Discussion” Healthy Moms Healthy Babies Summit, Children’s Hospital and Medical Center, Omaha NE September 16, 2021.

“Developmental Care of the NICU Infant” Nebraska Medical Center NICU Developmental Committee/Neonatal Nursing, Omaha, NE June 29, 2021



"An Introduction to START-Play Approach to Early Intervention" Omaha Public Schools, Early Development Network, Virtual Conference, Omaha, NE February 19, 2021.

"START-Play: Building Brains in Early Intervention" with the START-Play Consortium, APTA Academy of Pediatric PT Annual Conference, Virtual presentation asynchronous and synchronous, November 22, 2020

"Maximizing Motor Capacity: Early Detection and Intervention Strategies" New Frontiers in Neonatology, Neonatal Care Conference, Omaha, NE March 6, 2020

"Maternal Cognitions and the Origins of Sensorimotor Based Play in Infants Born Preterm", Academy of Pediatric Physical Therapy Research Summit V, Alexandria, VA, October 18, 2019.

"Developmental and Motor Testing in the NICU: Is it of Value?" Nebraska Methodist College/Women's Hospital Neuroprotective Care in the NICU Conference, Omaha, NE, June 14, 2018.

"Movement Matters: The link between early motor and other developmental domains", University of Nebraska at Kearney Community Early Childhood Conference, Kearney, NE, September 22, 23, 2017.

"Developmental Frameworks in Pediatric Physical Therapy Assessment and Intervention", UNMC Summer Physical Therapy Education for Chinese Students Program (SPECS), College of Allied Health Professions and Asia Pacific Rim Development Program, Omaha, NE, August 2, 2017.

"Deformational Plagiocephaly: Early Identification and Management", March of Dimes and Children's Hospital and Medical Center Prematurity Summit, Omaha, NE, September 1, 2016.

"Impact of Motor Development on Overall Feeding in the NICU", Nebraska Medicine, NICU, Omaha, NE, May 11, 2016.

"Deformational Plagiocephaly: Early Identification and Management", Nebraska Methodist Women's Hospital, Neonatal Nursing, Omaha, NE, July 16, 2014.

Keynote Speaker, UNMC Division of Physical Therapy Education, School of Allied Health Professions White Coat Ceremony, UNMC, September 7, 2013.

"Comprehensive Neurobehavioral Assessment of Infants in the Neonatal Intensive Care Unit". Munroe Meyer Institute, Graduate Program, Infancy Course, March 12, 2013.

"Neurobehavioral Assessment of the Pre-term Infant: An Introduction for PT students". SUNAPTA University of Nebraska Medical Center, Omaha, NE, November 28, 2012.

MMI Interdisciplinary Symposium: Cerebral Palsy, "Intensity, Frequency and other difficult PT Decisions", University of Nebraska Medical Center, Omaha, NE, April 29, 30, 2011.

"Occupational and Physical Therapy for the Medically Fragile Infant in the NICU", Nebraska Medical Center NICU Nursing Staff, Omaha, NE, September 8, 2010, April 11, 2011; Nebraska Methodist Women's Hospital, Omaha,



NE, December 8, 2010.

"Fine and Gross Motor Development: Birth to Three", OPS Early Childhood Special Education Certification Program, Omaha, NE, June 1, July 20, and December 2, 2010.

"Neurobehavioral Assessment of the Medically Fragile Infant: An Introduction for PT's", Sociedad Espanola de Fisioterapia Pediatrica (SEFIP), Murcia, Spain, November 2008.

Early Intervention in "Natural Environments", Sociedad Espanola de Fisioterapia Pediatrica (SEFIP), Murcia, Spain, November 2008.

"Introduction to the Test of Infant Motor Performance." Millard Public Schools Early Development Network, Omaha, NE, May 2005; NICU Special Interest Group, Omaha, NE, August 2007.

"Advances in Genetics: Implications for the Pediatric Physical Therapy", November 2004. Transitional DPT program for University of Nebraska Medical Center physical therapy graduates.

"Genetics: Has technology changed the role of the PT and the team?" American Physical Therapy Association, Combined Sections Meeting, San Antonio, TX, February 2001.

"Pediatric NDT", "Developmental Intervention in the NICU." Creighton School of Allied Health, Physical Therapy Division. Omaha, NE, November 1996, 1997.

"Developmental Follow-up and Outcomes in Graduates of the NICU", Sharing our Best Conference, Lincoln, NE, October 1997.

Assistant Instructor for Pediatric Neurodevelopmental Treatment Certification Course, Sponsored by Munroe Meyer Institute and the Neurodevelopmental Treatment Association, Omaha, NE, June/July 1990.

"The Chronically Ill Infant: Motor Assessment and Intervention", "Developmental Considerations with the Chronically Ill Infant", Graduate Psychology Course in Early Childhood Intervention, University of Nebraska Lincoln, Fall, 1989; Spring, 1990.

Poster or Platform Presentations/Abstracts:

"Case Series: Standard versus Virtual Reality Supplemented Hand Arm Bimanual Intensive Therapy in Children with Unilateral Cerebral Palsy", Academy of Pediatric Physical Therapy Annual Conference, Platform Presentation, Omaha NE, October 2023.

"Parental Perceptions and User Needs for Modified Ride-On Cars", Academy of Pediatric Physical Therapy Annual Conference, Poster Presentation, Omaha NE, October 2023.

"Exploratory Behavioral Video Coding of a Traditional Hand-Arm Bimanual Intensive Training Camp", Academy of Pediatric Physical Therapy Annual Conference, Poster Presentation, Omaha NE, October 2023.

"Executive Function in Relation to SES, Home Affordances and Object Exploration in Children with Motor



Delays", Society for Research in Child Development, Poster Presentation, Salt Lake City, UT, March 25, 2023.

"Children's Mastery Motivation is Associated with their Developmental Trajectories", Society for Research in Child Development, Poster Presentation, Salt Lake City, UT, March 25, 2023.

"Executive Function in Relation to Cognitive, Language and Motor Skills in Children with Motor Delays, APTA Combined Sections Meeting, Poster Presentation, San Diego, CA, February 24, 2023.

"Longer-Term Effects of START-Play Intervention in Infants with Neuromotor Disorders: A Multi-site Randomized Clinical Trial", Platform Presentation, San Diego CA, February 24, 2023.

"Early Versus Late Reaching Mastery's Effect on Object Permanence in Infants with Motor Delays Receiving START-Play and Usual Care-Early Intervention", Poster Presentation, American Academy of Cerebral Palsy and Developmental Medicine Annual Meeting, Las Vegas, NV, September 22, 2022.

"Early Maternal-Infant Sensorimotor Play Interactions in Infants Born Preterm: A Mixed Methods Approach", American Physical Therapy Association, Combined Sections Meeting, poster presentation, Denver, CO, February 15, 2020.

"The Wheels on the Car Go Round and Round: Feasibility of Modified Ride on Cars in School Environments.", Academy of Pediatric Physical Therapy Annual Conference, poster presentation, Anaheim, CA, November 16, 2019.

"Sit Matters! Developmental differences between sitters and non-sitters in a cohort of premature, at-risk infants at six months corrected age", American Physical Therapy Association, Combined Sections Meeting, poster presentation, New Orleans, LA, February 22, 2018; CYFS Summit on Early Childhood Research, Lincoln, NE, April 25, 2018.

"Hand arm bimanual intensive therapy (HABIT) improves frontal cortex activation during motor actions of children with hemiplegic cerebral palsy," poster presentation, American Physical Therapy Association, Combined Sections Meeting, San Antonio, TX, February 2017.

"Pelvic Alignment in Early Sitting Distinguishes Children with Typical vs. Atypical Developmental Motor Progress," poster presentation, American Physical Therapy Association, Combined Sections Meeting, Anaheim, CA, February 2016.

"Learning to Sit: The Impact of Postural Control upon Object Manipulation and Coordinated Joint Attention," poster presentation, American Physical Therapy Association, Combined Sections Meeting, Indianapolis, IN, February, 2015.

"Intervention to Advance Postural Transitions in Young Children with Neuromotor Disabilities and Resulting Effects on Play ", poster presentation, American Physical Therapy Association, Combined Sections Meeting, Indianapolis, IN, February, 2015

"Intervention for Postural Control in Sitting and Interaction with Play in Children with Severe or Moderate



Cerebral Palsy,” poster presentation, American Physical Therapy Association, Combined Sections Meeting, San Diego, CA, January, 2013.

“A comparison of developing sitting postural control in 2 infants receiving different treatment approaches,” poster presentation, American Physical Therapy Association, Combined Sections Meeting, Nashville, TN, 2008.

“Student Perceptions vs. Computer Based Instruction in a Neuroscience Course”, poster presentation, American Physical Therapy Association, Combined Sections Meeting, San Diego, CA, 2006.

“Clinical Decision Making with the SWASH Orthosis: A Case Study”, poster presentation, American Physical Therapy Association, Combined Sections Meeting, Tampa, FL, February, 2003.

"A Comparison of Trunk Muscle Activation Patterns in Infant Kicking and Stepping Behaviors”, poster presentation, American Physical Therapy Association, Combined Sections Meeting, Reno, NV, February 1995.

"A Comparative Trial of Lower Extremity Joint Compression and Traction in Children with Ataxia", poster presentation, National American Physical Therapy Association Convention, Nashville, TN, June, 1989.

Other

START-Play: hybrid CEU course offered through Duquesne University On-line Learning. 13/15 online learning modules authored and developed by Willett, 2021- 2022. <https://start-play.unl.edu/continuing-education-course>

APTA Consumer Guideline for Developmental Delay in Children
<http://www.moveforwardpt.com/SymptomsConditionsDetail.aspx?cid=0cb9916b-6b09-44ab-8708-cfc52eb351f5> ; Authors: S. Willett and R. Harbourne, August, 2012.

Pediatric Physical Therapy Podcasts:

Creator: Pediatric Physical Therapy

Duration:

Pediatric Physical Therapy June 2023, Issue 35 Number 3

INTERVIEWS IN THIS EDITION:

Sandra Willett, PT PhD, PCS, Director of Physical Therapy, Munroe Meyer Institute, University of Nebraska Medical Center, Omaha NE

TITLE: START-Play physical Therapy intervention indirectly impacts cognition through changes in early motor-based problem-solving skills

"START-Play Physical Therapy Intervention Blends Motor With Cognitive Development"

OMAHA, USA—In this report filmed in Omaha, Nebraska, USA, Peter Goodwin interviews the authors of a research study investigating the “START-Play” combined physical therapy intervention in which motor and cognitive skills are developed together to improve outcomes among children with motor delay.

Web link: https://youtu.be/Z_-zO9AJX-U [youtu.be]



Creator: Pediatric Physical Therapy

Duration: 47:12

Pediatric Physical Therapy [July 2019, Volume 31, Issue 3; \[journals.lww.com\]](#)

INTERVIEWS IN THIS EDITION

Sandra Jensen-Willett PT MS PCS, Director of Physical Therapy, Munroe Meyer Institute, University of Nebraska Medical Center, Omaha NE

TITLE: Sitting Matters! Differences Between Sitters and Nonsitters at 6 Months' Adjusted

"This retrospective study examines differences in prematurity-related risk and compares developmental outcomes between sitters and non-sitters at 6 months adjusted-age."

OMAHA, NE—An investigation of factors influencing ability to sit upright at six months age—noted from neonatal intensive care unit follow up among infants born preterm or those considered to be at risk of developmental delay—show that motor function drives early development.

Web link:

[https://journals.lww.com/pedpt/Pages/podcastepisodes.aspx?podcastid=1&utm_source=email_marketing&utm_medium=email&utm_campaign=health_hlrp_2021-MEDPR-Society-PT%20Rehab.05-SEND-1Q017E&rid=V_0000000049917131&mkt_tok=NjgxLUZIRSO0MjkAAAF9L5jZbyduaLZWIKHfa58XnE54t48nJUfhXjNlkZGgMgiyU6reWVRDA-hqk74TFo7c7nTktqGIVg8a5EsBqQxiViM8lnTmexFKBTLEvhcF_9gsmDVQNfp4\[journals.lww.com\]](https://journals.lww.com/pedpt/Pages/podcastepisodes.aspx?podcastid=1&utm_source=email_marketing&utm_medium=email&utm_campaign=health_hlrp_2021-MEDPR-Society-PT%20Rehab.05-SEND-1Q017E&rid=V_0000000049917131&mkt_tok=NjgxLUZIRSO0MjkAAAF9L5jZbyduaLZWIKHfa58XnE54t48nJUfhXjNlkZGgMgiyU6reWVRDA-hqk74TFo7c7nTktqGIVg8a5EsBqQxiViM8lnTmexFKBTLEvhcF_9gsmDVQNfp4[journals.lww.com])

Creator: Pediatric Physical Therapy

Duration: 47:38

Pediatric Physical Therapy [July 2021, Volume 33, Issue 3;](#)

INTERVIEWS IN THIS EDITION:

Sandra Jensen-Willett PT PhD PCS, Director of Physical Therapy, Munroe Meyer Institute, University of Nebraska Medical Center, Omaha NE

TITLE: The Influence of Maternal Cognitions upon Motor Development in Infants Born Preterm: A Scoping Review

DESCRIPTION: *This scoping review summarizes the extent, nature, and type of evidence linking broadly defined maternal cognitions to motor outcomes in infants born preterm.*

WebLink:

https://hwcdn.libsyn.com/p/c/b/8/cb8470c3d803ec22/210701_PPT_33.3_Production_MASTER_.mp3?c_id=106413191&cs_id=106413191&expiration=1633723782&hwt=96a59d4b0795c01c1c17a4ac7537411f

Professional Memberships

American Physical Therapy Association (APTA) member, 1984-present; member Early Intervention and NICU SIG, 2007 - present; regional Early Intervention SIG representative, 2007-2010; Residency and Fellowship ABPTRFE Task Force 8/13 – 7/20, SIG 7/20 – 2022; APTA Academy of Pediatric Physical Therapy APPTAC Midwestern Task Force 2020/2023.

Nebraska chapter of the APTA (NPTA) member, 1984-present.

Chapter-student Liaison Committee Member 1986-1992;

Committee Coordinator for National Student Conclave, Omaha, NE, Nov 2-4, 1990.



Omaha Pediatric Special Interest Group member, 2005 – 2010; Founding/coordinating member, 2015 – 2023; NICU SIG, 2011 - 2015.

Service:

University/Institute

Munroe Meyer Institute/University of Nebraska Medical Center:

Appointment, Promotion and Tenure Committee, 7/2021 – 6/2023.

Quality Council: Interdisciplinary committee for employee recognition and appreciation, 7/2015 – 1/2020.

Faculty Senate Alternate, 2017.

Tracking Infant Progress State Wide (TIPS) Research: Interdisciplinary research committee to explore questions, strategies to improve access and implementation of a state-wide NICU follow-up program; member 2011 – present.

PT Director/Faculty Search Committee, member: 2013 – 2015: OT Director/Faculty Search Committee Chair: 2021 – 2022.

Celebration of Excellence: Reviewer for annual nominations for research excellence, 2021 – 2023.

University of Nebraska Medical Center, Division of Physical Therapy Education, School of Allied Health

Professions:

Interdepartmental Curriculum Committee, 1994- 2023; adjunct faculty 1994 – 2023.

University of Nebraska Medical Center, Interprofessional Academy of Educators:

Annual review of award nominations, 2019 – 2023.

Department

Munroe Meyer Institute for Genetics and Rehabilitation, Nebraska Medical Center, Omaha, NE, 2/88-present

Director, Physical Therapy (March 2017 - 2023)

Interim Director, Physical Therapy (July 2015 – March 2017)

Omaha and Bellevue Public Schools, Related Services Contract Liaison (July 2015 - 2023)

Director, Pediatric Physical Therapy Residency Program (2013 - 2022)

Leadership Education in Neurodevelopmental and Related Disabilities (LEND) faculty member (2013 – 2022)

Center Coordinator of Clinical Education (CCCE) (2004 – 2012)

Pediatric therapist for medically related out-patient services, educationally-related school-based and early intervention services. (February 1988 – June 2023)

Clinical supervisor of physical therapy students. (1989 – 2012)



Community

Nebraska Health System, Omaha NE:

NICU Consultant; developmental care team member, 2/1990 – 6/2023)
Developmental and Planning Task-Force for Small Babies (22- 24 weeks): Planning committee to develop a special care team for extremely preterm infants. August 2020 -

Implementation of Developmental Care in the NICU. Division of Neonatal Nursing, 5/98-5/00;
Developmental Care Committee, Division of Neonatal Nursing, 7/10 – 12/13; 3/20 – present

March of Dimes Parent Hour, NICU Educational Support Group, 2016 – 2023.

Nebraska Methodist Women's Hospital, Omaha, NE, 2013 – 2023.

Neonatal Intensive Care Unit Developmental Consultant
Tracking Infant Progress Statewide (TIPS) NICU Follow-Up Clinic

International:

Special Olympics International, Early Childhood Development Advisory Committee: consultant for development of International Toolkit for families and providers, 3/2019 – present.

National

Manuscript reviewer for Journals: Pediatric Physical Therapy, Physical Therapy Journal, Child, Health and Development, Occupational and Physical Therapy in Pediatrics, Child Development, Journal of Clinical Medicine

Regional

State of Nebraska: Early Childhood Interagency Coordinating Council, appointed by Governor Johanns, 1/03 – 12/06.

Magic in Motion Hippotherapy Program, Treynor, IA. Volunteer, 2000-2006.

Founder GoBabyGo! Nebraska, MMI, Omaha NE (August 2016)

Local

Healthy Athletes Preschool Special Olympics Program, MMI, Omaha NE (2015 - 2022)

Fun Fitness Volunteer, Special Olympics NE, Omaha, NE (2015 - 2021)



Advising:

University/Institute level:

MMI LEND Student Faculty Advisor, 2015 – 2023.
Graduate Faculty, UNMC MSIA Program, 2019 – present.

Honors and Awards:

National

APTA Academy of Pediatric Physical Therapy Toby Long Award: Best paper in 2023. "Learn the Signs. Act Early: Updates and Implications for Physical Therapists."

AACPDM Gayle G. Arnold Award for Excellence: Best Scientific Paper, 2022. "The Effect of Early versus Late Reaching Mastery on Object Permanence and START-Play Intervention in Children with Neuromotor Delays."

APTA Chattanooga Award: Best Research Paper in Physical Therapy Journal 2021.

AACPDM Gayle G. Arnold Award for Excellence: Best Scientific Paper, 2019. "Efficacy of the START-Play Program for Infants with Neuromotor Disorders: Cognitive Outcomes."

APTA Academy of Pediatric Physical Therapy Toby Log Award: Best Paper in 2018. "Hand Arm Bimanual Intensive Therapy Improves Prefrontal Cortex Activation in Children with Hemiplegic Cerebral Palsy."

Mary McMillan Scholarship, American Physical Therapy Association (6/86)

Regional:

Wayne Perdue Fellow, Nebraska Physical Therapy Association, 2017

Local:

UNeMed, 2019 Innovation Award for New Invention (Virtual Reality for HABIT training)

Interprofessional Academy of Educators, UNMC (2017)

University-wide Departmental Teaching Award, University of Nebraska (2005-2006)

UNMC Silver "U" Recipient (1/07)