

Curriculum Vitae

Kurt Jackson, MPT, PhD

Associate Professor / Neurology Coordinator
Department of Physical Therapy
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Dayton, OH 45429
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Education:

Doctor of Philosophy in Rehabilitation Science - The Union Institute and University, Cincinnati, OH
2001

Masters of Physical Therapy - Loma Linda University, Loma Linda, CA, 1992

Bachelors Health Science - Loma Linda University, Loma Linda, CA, 1992

License:

Ohio Physical Therapist PT-70149

Certifications:

Geriatric Certified Specialist by the American Physical Therapy Association, May 2000 – May 2020

Employment:

University of Dayton

Associate Professor - 2012 – Present
Assistant Professor - 2006 - 2012

Physical Therapist - Kettering Medical Center, Dayton, OH, Clinical Specialist treating outpatients with neurological disorders. October 2004-2016

Associate Professor - Andrews University, Dayton, OH, Department of Physical Therapy, M.P.T. Program - Dayton, Ohio. 1996 – 2004

Physical Therapist - Grandview Medical Center, Dayton, Ohio 1999-2001. Inpatient rehabilitation

Physical Therapist - Fidelity Home Health Care, Dayton, Ohio. 1996-1998. Home Care

Physical Therapist - St. John's Regional Health Care Center, Springfield, MO, January 1994-December 1995.
Acute Care

Physical Therapist - Rusk Rehabilitation, Columbia, MO, August 1993-January 1994. Inpatient neuro rehab

Physical Therapist - West Health Care, San Diego, CA, Staff Physical Therapist, May 1993-August 1993.
Home care.

Physical Therapist - Physical Therapy Institute San Diego, CA, June 1992 - May 1993. Outpatient Orthopedics

Peer Reviewed Journal Publications:

- **Jackson K**, Bigelow K, Hollis S. The Effects of Carbon and Plastic Ankle-foot Orthoses on Gait, Balance and Mobility in Persons with Multiple Sclerosis: A Pilot Study. *Journal of Prosthetics and Orthotics*. In press
- Golembowski C, Shultz J, Reissman T, Messinger, J, **Jackson K**, Merriman H, Bigelow K. The Effects of a Positional Feedback Device on Rollator Walker Use: A Validation Study. *Assistive Technology*. July 2019. DOI: 10.1080/10400435.2019.1637380
- **Jackson K**, Sample R, Bigelow K. Use of an Instrumented Timed Up and Go (iTUG) for Fall Risk Classification. *Physical and Occupational Therapy in Geriatrics*. January 2019;36(3)1-12
- Reinert S, Kinney A, **Jackson K**, Diestelkamp W, Bigelow K. Age Stratification and Sample Entropy Analysis Enhance the Limits of Stability Tests for Older Adults. *Journal Of Applied Biomechanics* [serial online]. December 1, 2017;33(6):419-423.
- Sample R, Kinney A, **Jackson K**, Diestelkamp W, Bigelow K. Identification of key outcome measures when using the instrumented timed up and go and/or posturography for fall screening. *Gait & Posture*. September 2017;57:168-17.
- Sample R, **Jackson K**, Kinney A, Bigelow K. Manual and cognitive dual-tasks contribute to Fall-Risk differentiation in posturography measures. *Journal of Applied Biomechanics*. 2016; 32(3): 541-547
- Rodrigues C, **Jackson K**, Barrios J, Laubach L, Edginton-Bigelow K. Task-Oriented Ankle and Foot Training for Improving Gait, Balance, and Strength in Individuals with Multiple Sclerosis: A Pilot Study. *Journal of Exercise Medicine Online*. 2016;1(1):1-13.
- Ordway, J.D., Laubach, L.L., Vanderburgh, P.M., **Jackson, K.J.**, The effects of backwards running training on forward running economy in trained males. *Journal of Strength and Conditioning Research*. 2016;30(3): 763-7 .
- Smith K, **Jackson K**, Bigelow K, Laubach L. A Multi-Directional Treadmill Training Program for Improving Gait, Balance, and Mobility in Individuals with Parkinson's Disease: A Case Series. *International Journal of Exercise Science*. 2015; 8(4): 372-384,
- Bigelow K, **Jackson K**. Immediate Influence of Carbon Composite Ankle Foot Orthoses on Balance and Gait in Individuals with Peripheral Neuropathy: A Pilot Study. *Journal of Prosthetics and Orthotics*. October 2014;4(26)
- Smoot-Reinert S, **Jackson K**, Bigelow K. Using Posturography to Examine the Immediate Effects of Vestibular Therapy for Children with Autism Spectrum Disorders: A Feasibility Study. *Physical and Occupational Therapy in Pediatrics*. 2015;35(4):365-80.
- Trubee NW, Vanderburgh PM, Diestelkamp WS, **Jackson KJ**. Effects of heat stress and sex on pacing in marathon runners. *Journal of Strength and Conditioning Research*. 2014 Jun;28(6):1673-8
- **Jackson KJ**, Edginton-Bigelow K. Measures of balance performance are affected by a rested versus fatigued testing condition in people with multiple sclerosis. *PM&R*. November 2013;5(11): 949-946.
- Long L, **Jackson KJ**, Laubach L. A Home-based Exercise Program for the Foot and Ankle to Improve Balance, Muscle Performance and Flexibility in Community Dwelling Older Adults: A Pilot Study. *International Journal of Physical Medicine and Rehabilitation*. 2013, 1:3.
<http://dx.doi.org/10.4172/jpmr.1000120>
- **Jackson K**, Edginton-Bigelow K, Cooper C, Merriman H. A group kickboxing program for balance, mobility, and quality of life in individuals with multiple sclerosis: A pilot study. *Journal of Neurological Physical Therapy*. 2012;36(3):131-137.
- **Jackson KJ**, Edginton-Bigelow K, Bowsheir C, Weston M, Grant E. Feasibility and effects of group kickboxing program for individuals with multiple sclerosis: A pilot report. *Journal of Bodywork and Movement Therapies*. 2012 Jan;16(1):7-13
- **Merriman HL**, Braehler CJ, Jackson K. Systematically controlling for the influence of age, sex, hertz and time post-whole-body vibration exposure on four measures of physical performance in community-dwelling older adults: a randomized cross-over study. *Current Gerontology and Geriatrics Research*. 2011;2011:747094. Epub 2011 Sep 29.
- **Jackson KJ**, Merriman HL, Campbell J. Use of an elliptical machine for improving functional walking capacity in individuals with chronic stroke: a case series. *Journal of Neurological Physical Therapy*. 2010 34: 168-174.
- Merriman HL, **Jackson KJ**. The use of whole-body vibration in aging adults: a systematic review. *Journal of Geriatric Physical Therapy*. 2009; 32:134-145.

- **Jackson, K.J.**, Merriman H.L., Vanderburgh P.M., Brahler C.J. Acute Effects of whole-body vibration on lower-extremity muscle performance in persons with multiple sclerosis. *Journal of Neurologic Physical Therapy*. 2008; 32:171-176.
- **Jackson KJ**, Mulcare JA, Duncan RC. Effects of Seat-Tube Angle on the Metabolic Cost of the Cycle-Run Transition in Triathletes. *JEPonline* 2008; 11(1):45-52.
- **Jackson et al.** Home balance training intervention for people with multiple sclerosis. *International Journal of MS Care*. 2007;9:111–117.
- **Jackson KJ**, Mulcare JA, Petersen DR: Physiologic Responses During Un-weighted Ambulation of Patients With Below-Knee Amputation: A Pilot Study. *Physical Therapy Case Reports*. 1999; 2(3), 99-103.

Peer Reviewed Book Chapters

- **Jackson KJ.** (2013) Multiple Sclerosis. In ACSM's Guide to Exercise Testing and Prescription (9thEd). Philadelphia: Lippincot Williams & Wilkins
- **Jackson K.J.**, Mulcare, J.A. (2009). Multiple sclerosis. In Durstine, J.L., Moore, G.E. Editors (3rd Ed), ACSM's Exercise management for persons with chronic diseases and disabilities. Champaign, IL: Human Kinetics
- **Jackson KJ**, Mulcare JA. (2009) Multiple Sclerosis. In: Myers J, Nieman D, eds. *ACSM's Resources for Clinical Exercise Physiology: Musculoskeletal, Neuromuscular, Neoplastic, Immunologic, and Hematologic Conditions 2nd ed.* Philadelphia: Lippincot Williams & Wilkins; 34-43
- **Jackson, K.J.** Mulcare, J.A. (2007). Neuromuscular diseases and exercise. In Kaminski, L.A. Editor (5th Ed), ACSM's resource manual for guidelines for exercise testing and prescription. Baltimore, MD: Lippincott Williams and Wilkins
- **Jackson KJ**, Mulcare JA, Neuromuscular Diseases In: ACSM's Resource Manual for Guidelines for Exercise Testing and Prescription (5th Ed). Human Kinetics, 2005.
- Mulcare JA, **Jackson KJ.** *Multiple Sclerosis and Exercise* In: Clinical Exercise Physiology: Application and Principles, Lippincott Williams & Wilkins, 2004.
- **Jackson KJ**, Mulcare JA. *Multiple Sclerosis* In: ACSM's Exercise Management for Persons with Chronic Diseases and Disabilities (2nd Ed), Human Kinetics, 2003.

Peer Reviewed Scientific and Professional Presentations

- Reisman M, **Jackson K.** Clinical Utility of Laser Light Visual Feedback for Stepping Task in Stroke and Multiple Sclerosis Populations. ISB/ASB, Calgary Canada, July 31-Aug 4 2019. *Poster*
- Bigelow K, **Jackson K**, Reissman T, Walsh –Messinger J. Working Across Disciplines to Maximize Impact - Addressing Rolling Walker Misuse. ASB Midwest Regional Meeting, Dayton, OH. February 28, 2019. *Keynote Address*
- Nowaki K, Schepers L, Dues B, Bigelow K, **Jackson K**, Reissman M. Box Step Task for Stroke and Multiple Sclerosis Populations: Impact of Laser Light Visual Feedback. ASB Midwest Regional Meeting, Dayton, OH. February 28, 2019. *Platform Presentation*
- Hollis S, **Jackson K**, Bigelow K. The Effect of Ankle Foot Orthosis Fitting and Footwear Tuning on Gait and Balance in Persons with Neurological Disorders: A Case Series. ASB Midwest Regional Meeting, Dayton, OH. February 28, 2019. *Platform*
- Golembiewski C, Shultz J, **Jackson K**, Bigelow K, Merriman H, Reissman T. The Effects of a Positional Feedback Device on Rollator Walker Use. APTA Combined Sections Meeting, Washington, DC. January 26. 2019. *Poster*.
- Golembiewski C, Shultz J, **Jackson K**, Bigelow K, Merriman H, Reissman T. Fostering Increased Independence and Health Outcomes for Older Adults Through Increased Postural Stability During Ambulation: Development of a Smart Walker. World Congress of Biomechanics, Dublin, Ireland, July 2018. *Poster*
- Bigelow K, Reissman M, **Jackson K.** The Use of Visual Feedback Through Body Worn Lasers to Improve Motor Control. World Congress of Biomechanics, Dublin, Ireland, July 2018. *Poster*
- Francesangelo G, Marchant V, Westover J, **Jackson K**, Reisman M. The Use of Laser Guided Visual Feedback for Improving Lower Extremity Motor Performance in an Individual with Chronic Stroke. APTA Combined Sections Meeting, New Orleans, LA, February 2018. *Poster*

- Merriman H, **Jackson K**, Erwin B, Hutchison A, Loew M, Schutter P, Snyder E. Test-retest reliability of the repetitive step test in community dwelling older adults. American Physical Therapy Association's (APTA) Combined Sections Meeting (CSM), New Orleans, LA, February 22, 2018. *Platform*
- Goubeaux H, Macy C, Trauner T, **Jackson K**. The Influence of Carbon Composite and Plastic Ankle-Foot Orthoses on Balance and Gait in Individuals with Multiple Sclerosis: A Pilot Study. APTA Combined Sections Meeting, New Orleans, LA, February 2018. *Poster*
- Merriman H, **Jackson K**, Horn W, Jones J, Price E, Spicer J. Differences in interlimb performance during a repetitive step test in older adults. Fall Scientific Symposium of the Ohio Physical Therapy Association (OPTA), Columbus, OH, October 20, 2017. *Poster*
- Hollis S, Clark H, Ingram P, Erlich T, Hill T, **Jackson K**, Bigelow K. The influence of carbon composite and plastic ankle foot orthoses on balance, gait and fatigue in individuals with multiple sclerosis. Midwest American Society of Biomechanics Meeting, Grand Rapids, MI, February 23, 2017. *Poster*
- Merriman H, **Jackson K**, Conkel E, McIntyre D, Rizvi Q, Sharkey P. A repetitive step test based on leg length as a novel dynamic standing balance test in older adults. American Physical Therapy Association's (APTA) Combined Sections Meeting (CSM), San Antonio, TX, February 16, 2017. *Poster*
- Merriman H, **Jackson K**, Breneman M, Collins A, McEldowney T, Swinford A. A Novel Rapid Step Test Differentiates Between Older Adults who are Fallers and Non-Fallers, APTA Combined Sections Meeting, Anaheim, CA, 2/19/2016. *Platform*
- Sample R, Reinhart S, **Jackson K**, Bigelow K. Manual and Cognitive Dual-Tasks Contribute to Fall-Risk Differentiation in Posturography Measures. 40th Annual Meeting of the American Society of Biomechanics, Raleigh, NC, August 3, 2016. *Poster*
- Rodrigues C, **Jackson K**, Barrios J, Laubach L, Edginton-Bigelow K. Task-Oriented Ankle and Foot Training for Improving Gait, Balance and Strength in Individuals with Multiple Sclerosis. Anaheim, CA, 2/18/2016
- Smith K, **Jackson K**, Laubach L. Multi-directional treadmill training for improving gait, balance and mobility in individuals with Parkinson's Disease. American College of Sports Medicine's Annual Meeting, San Diego, CA. 5/28/2015. *Poster*
- **Jackson K**, Bigelow K. Immediate Influence of Carbon Composite Ankle Foot Orthoses on Balance and Gait in Individuals with Peripheral Neuropathy. AAOP Spring Technical Meeting, Columbus, OH, March 28, 2015. *Oral Presentation*
- **Jackson K**, Bigelow K. Immediate Influence of Carbon Composite Ankle Foot Orthoses on Balance and Gait in Individuals with Peripheral Neuropathy, AOPA Orthotic and Prosthetic National Assembly, Las Vegas, NV, September 2014. *Poster*
- Sample R, **Jackson K**, Bigelow K. Effects of Compliant Flooring on Postural Stability in an Older Adult Population, 7th World Congress of Biomechanics, Boston, MA, August 2014. *Poster*
- Reinhart S, **Jackson K**, Bigelow K. The Acute Effect of a Sensory Integration Therapy Intervention on Postural Stability and Gaze Patterns of Children with Autism Spectrum Disorder: A Feasibility Study, 7th World Congress of Biomechanics, Boston, MA, August 2014. *Poster*
- **Jackson K**, Bigelow K. Immediate Influence of Carbon Composite Ankle Foot Orthoses on Balance and Gait in Individuals with Peripheral Neuropathy, 7th World Congress of Biomechanics, Boston, MA, August 2014. *Poster*
- **Jackson K**, Bigelow K, Carr L, Fronck S, Lynskey M, Sterling M. Measures of Balance Performance are Affected by a Rested Versus Fatigued Testing Condition in People with Multiple Sclerosis, OPTA Scientific Symposium, Columbus OH, October 2013. *Poster*
- Bigelow K, **Jackson K**. The effects of rest and fatigue on balance performance in persons with Multiple Sclerosis. 37th Annual Meeting of the American Society of Biomechanics, Omaha, NE, September 5, 2013. *Poster*
- Beach R, **Jackson K**, Bigelow K. Effect of compliant flooring on postural stability in an older adult population. 37th Annual Meeting of the American Society of Biomechanics, Omaha, NE, September 5, 2013. *Poster*
- **Jackson K**, Bigelow K, Carr L, Fronck S, Lynskey M, Sterling M. The Effects of Fatigue on Balance and Postural Control in Individuals with Multiple Sclerosis. International Multiple Sclerosis Gait and Balance Symposium, Portland, OR, October 2012. *Poster*

- **Jackson K**, Edginton-Bigelow K, Cooper C, Merriman H. Effects of a Group Kickboxing Program for Individuals with Multiple Sclerosis: A pilot Study. International Multiple Sclerosis Gait and Balance Symposium, Portland, OR, October 2011. *Poster*
- **Jackson K**. Community Based Kickboxing Program for Improving Gait, Balance and Quality of Life for Persons with Multiple Sclerosis. UD STARS. November 30, 2011. *Oral Presentation*
- **Jackson K**, Edginton-Bigelow K. Feasibility and Effects of a Group Kickboxing Program for Individuals with Multiple Sclerosis: A Case Series. OPTA Spring Conference, Columbus, OH, April 2011. *Poster*
- **Jackson K**, Edginton-Bigelow K, Cooper C, Merriman H. Feasibility of Group Kickboxing to Improve Balance and Gait in Patients with Multiple Sclerosis. Poster Presentation. American Society of Biomechanics, Rhode Island, August 2010. *Poster*
- **Jackson K**, Merriman H, Campbell J. Use of a Commercially Available Elliptical Machine for Exercise Training in Three Individuals with Chronic Stroke: A Case Series. APTA Combined Sections Meeting, San Diego, CA, February 2010. *Poster*
- Rayburn J, Johnson K, Riner J, **Jackson K**, Brahler J, Merriman H. Acute Effects of Whole Body-Vibration on Functional Mobility, Balance and Flexibility in Community Dwelling Elderly: A Randomized, Double-blind, Crossover Study. OPTA Fall Conference. October 16, 2009. *Poster*
- Rayburn J, Johnson K, Riner J, **Jackson K**, Brahler J, Merriman H. Acute Effects of Varied Treatment Duration and Frequency of Whole-Body Vibration on Balance, Muscular Strength and Muscular Power in Healthy Elderly Individuals: a Randomized, Double-Blind, Crossover trial. OPTA Fall Conference. October 16, 2009. *Poster*
- **Jackson K**, Vanderburg P, Laubach L. Acute Effects of whole-body vibration on lower-extremity muscle performance in persons with multiple sclerosis. OPTA State Meeting, Mason, OH. October, 2008. *Platform*
- **Jackson K**, Anloague P, Merriman H, Cropper J, Linderman J Health, Fitness and Activity Levels in Doctor of Physical Therapy Students. Poster Presentation: OPTA State Meeting, Mason, OH. October, 2008. *Poster*
- **Jackson K**, Anloague P, Merriman H, Cropper J, Linderman J Health, Fitness and Activity Levels in Doctor of Physical Therapy Students. Poster Presentation. APTA National Meeting, San Antonio, TX. June, 2008. *Poster*
- **Jackson K**, Mulcare J. *Use of the Gait Assessment Rating Scale (GARS) in Individuals with Neurological Disorders*. ACSM National Conference. June 5, 2004. *Poster*
- **Jackson K**, Mulcare J, Rodgers M, Fillmore B. *The Effects of Balance Training on Individuals with Multiple Sclerosis*. APTA National Meeting, Cincinnati, OH. June 2002. *Poster*
- **Jackson K**, Mulcare J. *The Effects of Harness Supported Treadmill Ambulation on Gait Characteristics in a Person with Parkinson's Disease*. ACSM annual conference, Indianapolis, IN. June 2000. *Poster*
- **Jackson K**, Mulcare J. *Effects of Body-weight Unloading and Orthotic Inserts on Plantar Pressure During Treadmill Ambulation*. American College of Sports Medicine Annual Conference. Seattle, WA. June 1999. *Platform*
- **Jackson K**, Mulcare J. *Physiologic Responses During Un-weighted Ambulation of Patients With Below-Knee Amputation: A pilot study*. American College of Sports Medicine Annual Conference. Orlando, FL. June 1998. *Postee*
- **Jackson K**, Stuart D. *So You Want to do PBL; Where Do You Begin?* National APTA Conference. San Diego, CA. June 1997. *Poster*
- **Jackson K**. *A New Harness System for Functional Rehabilitation*. OPTA State Conference, Columbus, OH. April 1997. *Poster*
- **Jackson K**, Stuart D. *On the Road of Problem-Based Learning*. OPTA State Conference, Columbus, OH. April 1996. *Platform*

Non-Peer Reviewed Publications

- **Jackson KJ**, Edginton-Bigelow K. Kickboxing: A creative approach to improving balance in patients with multiple sclerosis. *Lower Extremity Review*. March 2013: 14-18.
- **Jackson K**, Merriman H. Whole body vibration: neuro-rehab applications. *Lower Extremity Review*. January 2010: 43-47.
- **Jackson K**. *Exercise and Persons with Stroke*: On-line resource. www.ncpad.com, 2001
- **Jackson K**. *Exercise for Persons with Parkinson's Disease*: On-line resource. www.ncpad.com, 2001.
- **Jackson K**. *Exercise and Persons with Multiple Sclerosis*: On-line resource. www.ncpad.com, 2001.
- **Jackson KJ**: *Foot Orthoses Compliment Harness Unloading*: *Biomechanics Magazine*, November 1999.

Invited Presentations

- *Treatment Strategies in MS*. 4 hr public educational symposium. Wilmington OH, September 11, 2010.
- *Parkinson's Research at the University of Dayton*. Active Parkinsonian's Support Group meeting. Kettering Hospital, Dayton, OH July 8, 2008.
- *Staying Active with Parkinson's Disease*. Kettering Hospital. Dayton, OH. March 12, 2002.
- *Staying active with MS*. Mt. Calvary Lutheran Church. Dayton, OH. June 8, 2001 and Celina, OH July 7, 2001.
- *Strength Training and Parkinson's Disease*. Kettering Hospital. Dayton, OH. May 8, 2001.
- *Strength Training and Multiple Sclerosis*. Mt. Calvary Lutheran Church. Dayton, OH. April 26, 2001.
- *Strength Training for Seniors*. Engineers Club. Dayton, OH. April 10, 2001.
- *An Intensive Task-Oriented Approach to Neurologic Rehabilitation*. Andrews University, Dayton, OH. August 28, 2000. *Promoting Active and Self-directed Learning in Physical Therapy Education*. Andrews University, Dayton, OH. March 23, 2000.
- *Strength Training for Seniors*. Presented at West Central District meeting of the OPTA. January 2000.
- *Balance and Fall Considerations Following Stroke*. Presented for local support group. October 1999
- *Nursing Considerations for Managing Spasticity*. Beverly Manor, Dayton, OH. May 1999
- *Exercising with Multiple Sclerosis*. Presented at Wellness Series. April 1999
- *Exercising with Myasthenia Gravis*. Presented for local support group. March 1999
- *Motor Learning, Practical Applications for the Physical Therapist*. Presented at West Central District meeting of the OPTA. February 1999.

Funded Research Grants

- Bigelow K, Reissman T, **Jackson KJ** (Co-I), Development of a Smart Walker – STEM Catalyst Grant University of Dayton. \$33,000, 2017-2018
- Sherlock S, **Jackson K** (UD Co-PI), Bigelow K. Dayton Foundation's Del Mar Grant with supporting funds from Goodwill/Easter Seals. Safety With Every Step: Fall Assessment and Intervention for Older Adults with Dementia using Easter Seals Adult Day Services. 9/14-8/16. \$167,000.
- **Jackson KJ** (Co-PI), Bigelow K. Goodwill Easter Seals Del Mar Grant – \$167,000 Jan 2015 – Dec 2015
- **Jackson KJ** (PI), Bigelow K, Effects of Group Kickboxing Program on Gait and Balance on Individuals with Multiple Sclerosis. \$4,000. UD Research Council Seed Grant awarded 1/15/2010
- **Jackson KJ** (PI) – UD Faculty Fund for Vocational Exploration Grant \$5,000. Awarded 4/12/2010
- **Jackson KJ** (PI) Use of a Commercially Available Elliptical Trainer in Persons with Neurological Disorders: Effects on Gait and Functional Performance Measures (A Pilot Study). UD Research Council Seed Grant \$5,000. Awarded 1/1/08.
- **Jackson KJ** (PI) Acute Effects of Whole-Body Vibration on Muscle Performance in Persons with Multiple Sclerosis. UD Research Council Seed Grant \$7,500. Awarded 1/1/07.
- Mulcare JP (PI), **Jackson KJ** (Co-investigator) VA Merit Award Grant: Energy Expenditure of Activities of Daily Living and Leisure for Persons with Physical Impairment. 2000-2004: Total

Award: \$500,000

- **Jackson KJ** (PI) Effects of Body-Weight Supported Treadmill ambulation on Energy Expenditure in Amputees. Andrews University new investigator grant. \$4000. 1997.

Non-Funded Grants

- NIH R15, \$250,000, Co-investigator, Toward Improved Walker Use and Safety: A Multi-Dimensional Characterization of Rolling Walker Use for Identification of Ideal. 2019
- NIH R15, \$300,000, Co-investigator, Improving Function in Multiple Sclerosis through Data-Driven AFO Prescription. 2015

Thesis Advising

- Kyra Twohy. Master's Thesis. Effects of AFOs on Reactive Balance Control. August 2020. (Committee Member)
- Sean Gallivan. PhD. Construct Validity and Internal Consistency of the Physical Therapist Student Evaluation of Clinical Experience and Clinical Instruction. May 2019 (Committee Member)
- Stephen McFadden. Undergraduate honors thesis. Determining Recovery Response to Slips on a Slip Trainer. December 2018. (Co-advisor)
- Lauren Rivera. Undergraduate honors thesis. Effects of a Walker Light on Mobility in Older Adults Regularly Using Walkers. December 2018. (Co-advisor)
- Courtney Golembiewski. Master's thesis. The Effects of a Visual Distance Feedback Device on Rollator Walker Position and User Posture: A Validation Study. May 2018. (Committee Member)
- Jaclyn Franz. Undergraduate honors thesis. Development of an Evidence-Based Strength Training Program for Individuals with Dementia Participating in Adult Day Services. May 2017 (Primary Advisor)
- Jamie Wynk. Undergraduate honor thesis. Fall Risk Assessment of Older Adults with Dementia Attending Goodwill Easter Seals Adult. May 2016. (Primary Advisor)
- Renee L. (Beach) Sample. PhD. The Influence of Dual-task Conditions on Postural Control and Instrumented Timed Up and Go Performance in Fallers and Non-fallers. August 2016. (Committee Member)
- Senia Smoot Reinert. National Science Foundation Graduate Fellow. Enhancing posturography stabilization analysis and Limits of Stability Assessment. August 2016. (Committee Member)
- Melissa R. Taylor. Master's thesis. The effect of input parameters on Detrended Fluctuation Analysis of postural control data. December 2015. (Committee Member)
- Taylor Schemmel. Undergraduate Honors Thesis. Nonlinear Analysis of Balance Data in the Easter Seals Adult Day Services Population. May 2016. (Co-Advisor)
- Jason Ordway. Master's Thesis. The effects of backwards running training on forward running economy in trained males. May 2015. (Committee Member)
- Mary Willard. Undergraduate honors thesis. Muscle Activity With the Use of a Compact Elliptical Trainer. May 2015. (Primary Advisor)
- Cizelle Rodrigues. Master's thesis – Health and Sports Science. A task-specific ankle and foot exercise program for improving gait, balance and strength in individuals with multiple sclerosis: A case series. August 2015. (Primary Advisor)
- Kimberly Smith. Master's thesis – Health and Sports Science. A multi-directional treadmill training program for improving gait, balance, and function in individuals with Parkinson's disease (A Case Series). December 2014. (Primary Advisor)
- Brenna Bird. Master's Thesis – Counselor Education. Motivations For Under-Reporting Concussions In Collegiate Athletics. August 2014. (Committee Member)
- Renee L. Beach. Master's thesis. Effect of compliant flooring on postural stability in an older adult population and in individuals with Parkinson's disease. December 2013. (Committee Member)
- Senia I. Smoot. Master's thesis. A pilot study of the effect of an acute vestibular therapy on postural stability, gait variability, and gaze patterns of children with Autism Spectrum Disorders.

- December 2013. (Committee Member)
- Nathan Trubee. Master's Thesis. Effects of heat stress and sex on pacing in marathon runners. Journal of Strength and Conditioning Research. May 2013 (Committee Member)
- Daniel J. Petit. Master's thesis. The utilization of nonlinear dynamics in the assessment of balance and gait kinematics in multiple sclerosis. August 2012. (Committee Member)
- Mark T. Rigsby. Master's thesis. Validation of the MiniSun IDEEA Data Recorder for the analysis of walking on uneven ground. December 2011. (Committee Member)
- Laurel Long. Master's Thesis. A Home-based Exercise Program for the Foot and Ankle to Improve Balance, Muscle Performance and Flexibility in Community Dwelling Older Adults. August 2011. (Primary Advisor)
- Erika Goodwin. PhD. "Educational Leadership" Union Institute and University 2006 (Committee Member)
- Betsy Fillmore. PhD. "Education and Physical Therapy" Union Institute and University 2002 (Committee Member)

Membership & Positions held in Scientific/professional/honorary societies

- American Physical Therapy Association, Member 1990 to present
Sections: Neurology
- Delegate to Ohio Physical Therapy Association 1997-2003.
- Public relations committee chairman for the West Central District of the Ohio Physical Therapy Association. 1998-2003

Consultative and Advisory Positions Held:

- Health Advisory Committee Member for Kettering Seventh Day Adventist Church, 2000 - 2012
- Member of the Clinical Advisory Committee for the Dayton Chapter of the Multiple Sclerosis Society 1997-Present.
- Manuscript Reviewer: *Journal of Clinical Exercise Physiology, Clinical Kinesiology, Journal of Exercise Physiology Online, Journal of Rehabilitation Medicine, Archives of Physical Medicine and Rehabilitation, Journal of Neurological Physical Therapy, Medicine Science Sports and Exercise, Clinical Rehabilitation.*

Community Service:

- Goodwill Easter-Seals equipment loaner program volunteer 2015- present
- Assist with organization a management of the UD MS aquatics program 2010 - Present
- Speaker for local MS, Parkinson's and Stroke groups (4-8 x per year)
- Perform home assessments in the Dayton, OH region for the National MS society.
- Provide pro-bono services to numerous individuals with neurological disorders
- Volunteer at Multiple Sclerosis annual walk.
- Monthly Columnist for "The Senior Chronicle" on health and exercise for seniors 2006-2012.
- Provide balance screenings at numerous senior health fairs.

Services to University/School/Department

- *Physical Therapy Department:*
 - 2006 – Present Admissions Committee (Chair 2015 – present)
 - 2006 – Present Physical Therapy Faculty Council member
 - 2006 – Present Curriculum Committee member
 - 2006 – Present Promotion and Tenure committee member
 - 2006 – Present Faculty search chair (x 2)
 - 2006 – Present Faculty search committee member (x 4)
- *School of Education and Health Sciences*
 - 2012-2015 Faculty Affairs Committee

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| 2015 | Clinical Faculty Promotion Policy Development Sub-Committee Chair |
| 2012 | Physician Assistant Department Chair search committee (Chair) |
| 2015 - 2018 | Promotion and Tenure Committee |
| 2018 – Present | Graduate Academic Affairs Committee (Chair 2018-2020) |
- *University*

2020 - Present	IRB committee (Chair)
2012 – 2014	Student Evaluation of Teaching (SET) Development Committee
2008 – 2015	Institutional review board medical sub-committee chair
2008 – 2015	Institutional review board member
2013 – 2019	Graduate Student Fellowship Proposal Reviewer
2008 – Present	UD triathlon club advisor

Honors and Awards:

- University of Dayton Alumni Teaching Award 2019
- Dayton Multiple Sclerosis “Unsung Hero” Award” 2018
- School of Education and Health Sciences Teaching Award 2017
- School of Education and Health Sciences Junior Scholarship Award 2009.
- Kettering Health Network Outstanding Team Award 2010
- Fred B. Moore Award for Outstanding Clinical Performance. Loma Linda University, 1992.

Continuing Education Attended

- APTA Combined Sections Meeting (CSM) 2007 – present
- Educational Leadership Conference (ELC 2017, Columbus, OH)

Current Teaching Responsibilities

DPT 821 Intro to Clinical Examination – Lab instructor
 DPT 818 Neuroscience – Course instructor
 DPT 971 General Medicine I – Lab instructor
 DPT 972 General Medicine II – Lab instructor
 DPT 973 Examination and Intervention: Neurology I - Course Coordinator and Primary Instructor
 DPT 983 Clinical Issues Seminar: Neurology I - Course Coordinator and Primary Instructor
 DPT 988 Advanced therapy II – Neurology Specialty Track – Co-coordinator and Instructor
 DPT 911 Professional Seminar IV – Guest lecturer
 DPT 847 Maturation Science II – Guest lecturer