

CURRICULUM VITAE

Harold L. Merriman, PT, PhD, CLT

Associate Professor; General Medicine Coordinator
Department of Physical Therapy
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EDUCATION:

- MPT (Physical Therapy 1997), Andrews University, Dayton, OH, 1995-1997
- PhD (Biochemistry, 1990), Loma Linda University, Loma Linda, CA, 1984-1990
- BA (Biology, 1982), Atlantic Union College, S. Lancaster, MA, 1979-1982
- Goethe Institute Mittelstufe (German Language, 1979), Seminar Schloß Bogenhofen, Austria, 1978-1979

LICENSURE INFORMATION:

- Ohio PT008048

CERTIFICATIONS:

- Certified Lymphedema Therapist (CLT) Manual Lymph Drainage-Complete Decongestive Therapy (Vodder Method Certification course). Horst Weissleder, MD and Hans Pritschow, MLD/CDT, Certified Instructor. Dayton, OH, November, 2002.

EMPLOYMENT AND POSITIONS HELD:

- **University of Dayton, Dayton, OH** - Associate Professor & General Medicine Coordinator, Doctor of PT Program in the Department of Health & Sport Science, July 2012-current.
- **University of Dayton, Dayton, OH** - Assistant Professor & General Medicine Coordinator, Tenure-Track, Doctor of PT Program in the Department of Health & Sport Science, July 2006-June 2012.
- **Kettering Health Network, OH** - PRN (as needed) PT in acute care setting at various hospitals, August 2015-Current
- **Trinity Community, Beavercreek, OH** and **Patriot Ridge Community, Fairborn, OH** - PRN PT in skilled nursing setting, contracted by HealthPRO/Heritage located in Greenville, SC, October 2010-March 2020
- **Riverside Nursing Center, Dayton, OH** - PRN PT in skilled nursing setting, contracted by Kindred Healthcare Inc. located in Louisville, KY, October 2010-June 2017
- **Riverside Farm Institute, Zambia, Africa** - Volunteer Mission Work as PT and Anatomy Teacher, March-May 2006
- **Bear Hill Nursing Center, Stoneham, MA; Blaire House, Tewksbury, MA** - Traveling PT in
- **Guyana, S. America** - Volunteer Mission Work as PT and Anatomy Teacher, 2004-2005
- **Andrews University - MPT Program, Dayton, OH** - Associate Professor & General Medicine Coordinator, Non-Tenure-Track, 1999-2004
- **Community Hospital, Springfield, OH** - Staff Physical Therapist in acute care, skilled nursing and outpatient settings, 1997-2004
- **University of Massachusetts Medical Center, Worcester, MA** - Post-doctoral Research Fellow, Department of Cell Biology, 1993-1995
- **Atlantic Union College, S. Lancaster, MA** - Assistant Professor of Biology, 1990-1993

PEER REVIEWED PUBLICATIONS:

In Press:

Published:

- **Merriman H.** The Lymphatic System. In: Hillegass E. *Essentials of Cardiopulmonary Physical Therapy*. 5th ed. St. Louis, Mo: Saunders Elsevier; 2022.
- Day JM, Lucado AM, Dale RB, **Merriman H**, Marker CD, Uhl TL. The effect of scapular muscle strengthening on functional recovery in patients with lateral elbow tendinopathy: a pilot randomized controlled trial. *J Sport Rehabil*. 2021 Jan 13;30(5):744-753. Doi: 10.1123/jsr.2020-0203.
- **Merriman H.** Infectious Diseases. In: Paz JC, West MP, Panasci K, Greenwood KC. *Acute Care Handbook for Physical Therapists*. 5th ed. St. Louis, Mo: Elsevier Saunders; 2020:329-352.
- Golembiewski C, Shultz J, Reissman T, **Merriman H**, Walsh-Messinger J, Jackson K, Bigelow KE. The effects of a positional feedback device on rollator walker use: a validation study. *Assist Technol*. 2019 Jul 24:1-8. doi: 10.1080/10400435.2019.1637380. [Epub ahead of print]
- **Merriman H.** Academy of Geriatric Physical Therapy, Health Promotion and Wellness Special Interest Group, Evidence-based Blast Cast Series: Community-based physical activity programs for people with arthritis. Available at: <https://geriatricspt.org/special-interest-groups/health-promotion-wellness/HPW%20Blast%20Cast%20Arthritis.pdf>. Accessed February 28, 2017.
- **Merriman H.** The Lymphatic System. In: Hillegass E. *Essentials of Cardiopulmonary Physical Therapy*. 4th ed. St. Louis, Mo: Saunders Elsevier; 2016:650-673.
- Fisher MI, Donahoe-Fillmore B, Leach L, O'Malley C, Paepow C, Prescott T, **Merriman H.** Effects of yoga on arm volume among women with breast cancer related lymphedema: a pilot study. *J Bodyw Mov Ther*. 2014;18(4):559-65.
- **Merriman H.** Infectious Diseases. In: Paz JC, West MP. *Acute Care Handbook for Physical Therapists*. 4th ed. St. Louis, Mo: Elsevier Saunders; 2014:313-334.
- Garrity C, **Merriman H**, Brahler CJ. Whole-body vibration improves functional mobility, flexibility, and relative risk for falling in the assisted living elderly: a case series. *J Stud Phys Ther Res*. 2013;6(1):28-37.
- **Merriman H.** Is whole-body vibration an effective and safe treatment choice for older adults? (continuing education PT 44). *Today in PT*. 2012;6(9):30-35.
- 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. *J Neuro Phys Ther*. 2012;36:131-137.
- **Merriman HL**, Brahler 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. *Curr Gerontol Geriatr Res*. 2011;2011:747094. Epub 2011 Sep 29.
- **Merriman H.** Lymphedema presents therapeutic challenges. *Lower Extremity Rev*. 2011;3:57-61. (note that this manuscript was editor invited)
- **Merriman H.** The Lymphatic System. In: Hillegass E. *Essentials of Cardiopulmonary Physical Therapy*. 3rd ed. St. Louis, Mo: Saunders Elsevier; 2011:682-707.
- Jackson K, **Merriman H**, Campbell J. Use of an elliptical machine for improving functional walking capacity in individuals with chronic stroke: a case series. *J Neuro Phys Ther*. 2010;34:168-174.
- Jackson K, **Merriman H.** Whole body vibration: neuro-rehab applications. *Lower Extremity Rev*. 2010;2:43-47. (note that this manuscript was editor invited)
- **Merriman H**, Jackson K. The effects of whole-body vibration training in aging adults: a systematic review. *J Geriatr Phys Ther*. 2009;32:134-145.
- **Merriman HL.** Lipedema: often confused with lymphedema (continuing education PT 07). *Today in PT*. 2009;3(1):46-51.
- Jackson K, **Merriman H**, Vanderburgh P, Brahler CJ. Acute effects of whole-body vibration on muscle performance in persons with multiple sclerosis. *J Neuro Phys Ther*. 2008;32(4):171-176.
- **Merriman HL**, Brahler CJ, Dinan LJ, Finzer LE. Gender differences in motivation to resolve eating and body image concerns in college students. *JEPonline*. 2008;11(5):24-34.
- **Merriman HL**, Hegyi CA, Albright-Overton CR, Carlos Jr J, Putnam BW, Mulcare JA. A

comparison of four electrical stimulation types on *staphylococcus aureus* growth in vitro. *J Rehabil Res Dev.* 2004;41(2):139-46.

- **Merriman HL**, van Wignen AJ, Hiebert S, Bidwell JP, Fey E, Lian J, Stein J, Stein GS. The tissue-specific nuclear matrix protein, NMP-2, is a member of the AML/CBF/PEBP2/runt domain transcription factor family: interactions with the osteocalcin gene promoter. *Biochemistry.* 1995;34(40):13125-32.
- Bagchi M, Van Wijnen A, Katar M, **Merriman H**, Lian J, Stein J, Stein G, Maisel H. Sequence-specific DNA binding activities of nuclear matrix proteins of mammalian lens epithelial cells. *J Cell Biochem.* 1995;58:1-5.
- Bidwell JP, van Wijnen AJ, Fey EG, **Merriman H**, Penman S, Stein JL, Stein GS, Lian JB. Subnuclear distribution of the vitamin D receptor. *J Cell Biochem.* 1994;54:494-500.
- Bidwell JP, van Wijnen AJ, Banerjee C, Fey E, **Merriman H**, Penman S, Stein J, Lian J, Stein GS. Parathyroid-responsive modifications in the nuclear matrix of ROS 17/2.8 rat osteosarcoma cells. *Endocrinology.* 1994;134(4):1738-44.
- Strong DD, **Merriman HL**, Landale EC, Baylink DJ, Mohan S. The effects of the insulin-like factors and transforming growth factor β on the *jun* proto-oncogene family in MC3T3-E1 cells. *Calcif Tissue Int.* 1994;55:311-315.
- Amarnani S, **Merriman HL**, Linkhart TA, Baylink DJ, Mohan S. Autocrine regulators of MC3T3-E1 cell proliferation. *J Bone Miner Res.* 1993;3:157-165.
- **Merriman HL**, La Tour D, Linkhart TA, Mohan S, Bayline DJ, Strong DD. Insulin-like growth factor-I and insulin-like growth factor II induce c-fos in mouse osteoblastic cells. *Calcif Tissue Int.* 1990;46:258-262.

PEER REVIEWED SCIENTIFIC AND PROFESSIONAL PRESENTATIONS:

Platform Presentations:

- **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.
- **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.
- Fisher MI, Ford M, Morris O, Cho M, Feucht K, **Merriman H**, Donahoe-Fillmore B. Yoga in women with breast cancer related upper extremity lymphedema: effects on arm function, arm volume, and balance. *American Physical Therapy Association's (APTA) Combined Sections Meeting (CSM)*, Indianapolis, IN, February 6, 2015.
- **Merriman H**, Jackson K, Braehler, J. Acute effects of whole-body vibration on functional mobility, balance and flexibility in community-dwelling elderly: a randomized, double-blind, crossover study. *Annual Meeting of the Ohio Physical Therapy Association (OPTA)*, Columbus, OH, October 15-17, 2009.
- Jackson KJ, **Merriman HL**, Vanderburgh PM. Acute effects of whole-body vibration on lower-extremity performance in persons with multiple sclerosis. *Annual Meeting of the Ohio Physical Therapy Association (OPTA)*, Mason, OH, October 16-18, 2008.

Peer Reviewed Poster Presentations

Presented:

- **Merriman H**, Jackson K, Deaton K, Schuck L. Determining the concurrent and predictive validity of the Repetitive Step Test in individuals with Parkinson's. *Linking Evidence & Practice (LEAP) of the Ohio Physical Therapy Association (OPTA)*, Columbus, OH, September 24, 2021.
- **Merriman H**, Jackson K, Wynk J, Gordon M, Quinn K, Welsh S. Predicting Falls in Community-Dwelling Older Adults Using the Repetitive Step Test. *American Physical Therapy Association's (APTA) Combined Sections Meeting (CSM)*, Denver, CO, February 13, 2020.
- **Merriman H**, Jackson K, Beigel K, Simpson S, Smith J, Wynk J. Inter-rater and intra-rater reliability of the repetitive step test in community dwelling older adults. *Optimize: Lecture Series & Research Showcase of the Ohio Physical Therapy Association (OPTA)*, Columbus, OH, September 27, 2019.

- Jackson K, Bigelow KE, Golembiewski CL, Reissman T, **Merriman H**, Shultz J. The effects of a positional feedback device on rollator walker use. *American Physical Therapy Association's (APTA) Combined Sections Meeting (CSM)*, Washington, DC, January 26, 2019.
- Golembiewski C, Shultz J, Reissman T, Messinger J, Jackson K, **Merriman H**, Bigelow K. Fostering increased independence and health outcomes for older adults through increased postural stability during ambulation: development of a smart walker posture monitor. *World Congress of Biomechanics*, Dublin, Ireland, July 2018.
- **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.
- **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. *American Physical Therapy Association's (APTA) Combined Sections Meeting (CSM)*, Anaheim, CA, February 18, 2016.
- Brahler CJ, **Merriman H**, Price S, Duncan M, Pertner A, Hahn H, Anaya-Cisneros M, Thakker P. Physical activity and smoking history affect QT interval duration in cardiac patients. *American Physical Therapy Association's (APTA) Combined Sections Meeting (CSM)*, Las Vegas, NV, February 4, 2014.
- **Merriman H**, Brahler CJ, Price S, Duncan M, Pertner A, Hahn H, Anaya-Cisneros M, Thakker P. Physical activity and smoking history affect QT interval duration in cardiac patients. *Fall Scientific Symposium of the Ohio Physical Therapy Association (OPTA)*, Columbus, OH, October 11, 2013.
- Brahler CJ, **Merriman H**, Price S, Duncan M, Pertner A, Hahn H, Anaya-Cisneros M, Thakker P. Physical Activity and Smoking History Affect QT Interval Duration in Cardiac Patients. *60th Annual Meeting of the American College of Sports Medicine (ACSM)*, Indianapolis, IN, June 1, 2013.
- Jackson K, Edginton-Bigelow K, Cooper C, **Merriman H**. Effectiveness of group kickboxing as a means to improve gait and balance in individuals with multiple sclerosis. *1st International Symposium on Gait and Balance in Multiple Sclerosis*, Oregon Health & Science University, Portland, OR, October 1, 2011.
- **Merriman H**, Barth E, Rhein K, Brahler J, Jackson K. Acute effects of whole body vibration on counter movement jump, timed one-legged stance, timed get-up-and-go, and sit-and-reach tests in college students. *Annual Meeting of the Ohio Physical Therapy Association (OPTA)*, Dublin, OH, April 7-9, 2011.
- **Merriman H**, Barth E, Rhein K, Brahler J, Jackson K. Acute effects of whole body vibration on counter movement jump, timed one-legged stance, timed get-up-and-go, and sit-and-reach tests. *American Physical Therapy Association's (APTA) Combined Sections Meeting (CSM)*, New Orleans, LA, February 9-13, 2011.
- 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. *American Physical Therapy Association's (APTA) Combined Sections Meeting (CSM)*, San Diego, CA, February 17-20, 2010.
- Jackson K, **Merriman H**, Campbell J. Use of a commercially available elliptical machine for exercise training in three patients with chronic stroke: a case series. *American Physical Therapy Association's (APTA) Combined Sections Meeting (CSM)*, San Diego, CA, February 17-20, 2010.
- Jackson K, **Merriman H**, Campbell J. Use of a commercially available elliptical machine for exercise training in three patients with chronic stroke: a case series. *Annual Meeting of the Ohio Physical Therapy Association (OPTA)*, Columbus, OH, October 15-17, 2009.
- Rayburn J, Johnson K, Riner J, Jackson K, Brahler J, **Merriman H**. Acute effect 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 study. *Annual Meeting of the Ohio Physical Therapy Association (OPTA)*, Columbus, OH, October 15-17, 2009.
- Jackson KJ, Anloague P, **Merriman HL**, Cropper J, Linderman JK. Health, fitness and activity levels of doctor of physical therapy students. *Healthy People 2009: Lifestyle Strategies for the Prevention and Intervention of Obesity and Type-2 Diabetes. Annual Meeting of the Loma Linda University School of Public Health*, Loma Linda, CA, March 10-11, 2009.

- Jackson KJ, Anloague P, **Merriman HL**, Cropper J, Linderman JK. Health, fitness and activity levels of doctor of physical therapy students. *Annual Meeting of the Ohio Physical Therapy Association (OPTA)*, Mason, OH, October 16-18, 2008.
- Jackson K, Anloague P, **Merriman H**, Cropper J, Linderman J. Health fitness and activity levels of doctor of physical therapy students. *Phys Ther.* 2008;88. Abstract [online]. *Annual Meeting of the American Physical Therapy Association*, San Antonio, TX. June, 2008.
- **Merriman HL**, Brahler CJ, Dinan LJ, Finzer LE. Gender differences in motivation to work on eating and body image concerns between college students. *Annual Meeting of the Ohio Association for Health, Physical Education, Recreation and Dance (OAHPERD)*, Columbus, OH, November 29-30, 2007.
- Weber JC, Buckner CA, **Merriman HL**. Radio broadcasts promoting healthy aging in the baby boom generation. *Annual Meeting of the Ohio Physical Therapy Association (OPTA)*, Columbus, OH, October, 2003.
- Amarnani S, **Merriman HL**, Linkhart TA, Baylink DJ, Mohan S. Autocrine regulators of mouse osteoblast cell proliferation. *Program and Abstracts of the 31st Annual Meeting of the American Society for Cell Biology*, Special Poster Session S58, Boston, MA, December, 1991.

ABSTRACTS:

- Strong DD, **Merriman HL**, Baylink DJ, Mohan S. Growth factors which have opposing effects on cell proliferation differentially regulate proto-oncogene expression in bone cells. *J Bone Min Res* 6 (supl 1):221, 1991.
- **Merriman HL**, Strong DD, Baylink DJ, Mohan S. Differential activation of the jun-B proto-oncogene by IGF and TGF- β 1. *J Cell Biol* 111:10A, 1990.
- LaTour D, **Merriman H**, Kasperk C, Linkhart T, Mohan S, Strong D, Baylink D. The proto-oncogene c-fos—a potential regulator of bone cell proliferation—is induced by bone growth factors. *J Bone Min Res* 3 (supl 1):554, 1988.
- **Merriman H**, Mohan S, Linkhart T, Linkhart T, Mohan S, Strong D, Baylink D. Evidence that a skeletal growth-factor-like (SGF-like) factor is an autocrine effector of osteoblast collagen synthesis. *J Bone Min Res* (supl 1) 1:455, 1986.

MEMBERSHIP AND SERVICE IN SCIENTIFIC PROFESSIONAL ORGANIZATIONS:

- American Physical Therapy Association (from 1995 to current)
 - Academy of Acute Care Physical Therapy (2006 to current)
 - Academy of Geriatric Physical Therapy (2006 to current)
 - Balance and Falls Special Interest Group (June 2011 to current)
 - Health Promotion and Wellness Special Interest Group (HPW SIG) (June 2011 to current)
 - Nominating Committee of the HPW SIG (February 2017 to February 2022)
 - Cardiovascular & Pulmonary Section (2006 to current)
 - Council on Prevention, Health Promotion and Wellness (Inception in February 2018 to current)
- National Lymphedema Network (NLN) (from 2006 to current)
- Ohio Physical Therapy Association (OPTA) (from 1995 to current)
 - State Affairs Committee Representative, West Central District, OPTA (from September 2013 to current)
 - Reimbursement Chair, West Central District, OPTA (from March 2010 to September 2013)
 - (Co) Vice-President, West Central District, OPTA (from 2002 to 2004)