

CURRICULUM VITAE

Daryl Lawson, PT, DSc

Education:

Loma Linda University, Loma Linda, CA (Sept. 21, 1998 to June 11, 2005)

- Degree: Doctorate of Science (DSc)

Dissertation: The Effect of Electrical Stimulation on Blood Flow in Chronic Wounds in Patients with and without Diabetes

University of Southern California, Los Angeles, CA (Sept. 16, 1985 to May 23, 1987)

- Degree: Masters of Physical Therapy (MPT)

Central Michigan University, Mt. Pleasant, MI (Sept. 5, 1978 to May 14, 1983)

- Degree: Major in Health Fitness Programming, Minor in Biology and Public Health (BS)

Licensure Information/ Registration Numbers:

Certification MSK US (musculoskeletal ultrasound imaging)-November 2019

RMSK (registered musculoskeletal Ultrasound) Test in Jan 2021

Michigan Physical Therapy License number: 5501019055 expires 7/31/2021

AHA/BLS (CPR and AED) program: Borgess Medical Center expires 6/2021

Employment and Positions Held:

June 2018 to present

Associate Professor-Western Michigan University Department of Physical Therapy

Kalamazoo, MI

Primary teaching responsibilities are orthopedics and wound management.

Primary research interest is wound management and orthopedics

<https://wmich.edu/physicaltherapy/directory/lawson>

July 2008-May 2018

Associate Professor-Elon University Department of Physical Therapy

Elon, NC

Primary teaching responsibilities are orthopedics

Primary research is wound, and orthopedics

July 2009-March 2018

Staff PRN Physical Therapist-Alamance Regional Medical Center

Burlington, NC

Patient care in the out-patient orthopedic department

Patient care in the out-patient wound center

August 2011 to 2015

Staff PRN Physical Therapist-Cone Health Systems

Greensboro/Kernersville, NC

Patient care in the out-patient orthopedic department

July 5, 2005-June 2008

University of Nevada, Reno-Director of the Integrated Health Center

Reno, NV

Faculty, School of Public Health

Clinical Assistant Professor, UNR School of Medicine (Family and Internal Medicine) <http://hhs.unr.edu/ihc>

Center for vestibular, gait/motion and musculoskeletal analysis-faculty clinical practice and research

- Establish a center for student experience
- Clinical Research at University of Nevada and partner in research at the major medical centers
- Pre-PT advisor for the University

Aug. 1, 1994–Sept. 3, 2004

Renown Health, Reno, NV

Manager and clinician of Renown Therapy

- Administrative responsibilities including a \$500,000 budget at Washoe Therapy Center, Washoe Home Care, Washoe Progressive Care, Washoe Wound Center and Washoe Medical Center at South Meadows
- 18 years' experience as a physical therapist completed residency for Maitland/eligible to sit for the exam of manual therapy for the University of St. Augustine and APTA board certification for orthopedics

Aug. 7, 1989–April 8, 1994

Kaiser Permanente-Hayward CA

Hayward, CA

Senior Physical Therapist

Out-patient orthopedics

Finished residency for Maitland techniques

Jan. 9, 1989–July 28, 1989

CHART Therapies

San Leandro, CA Staff Physical Therapist

One year with industrial medicine

Oct 3, 1988–Jan 2, 1989

Associated Healthfocus

Greensboro, NC

Staff Physical Therapist

Mainly outpatient orthopedics

Peer Reviewed Publications

1. **Lawson D**, Lee KH, Kang HB, Takamatsu S, Llewellyn T, Yang N (in press). *Efficacy of microcurrent therapy for treatment of acute knee pain: a randomized double-blinded controlled clinical trial*. Journal of Clinical Rehabilitation.(2020)
2. Neal, Sara and **Lawson, Daryl**. "Rehabilitation of Common Knee Injuries and Conditions – UpToDate Journal." UpToDate. Accessed April 7, 2020. <https://bit.ly/34hsNGY>
3. Lee, A, **Lawson, D**, Randall, KL, Russel, T, & Wolf, S. Telehealth: An Innovative Instructional Strategy to Develop Clinical Reasoning. In, Musolino, GM & Jensen, GM, eds., *Clinical Reasoning and Decision Making in Physical Therapy: Facilitation, Assessment and Implementation*, Sept. 2019, Thorofare, NJ: Slack Publications, ISBN: 978-63091-408-0
4. **Lawson, Daryl**, Heather Hettrick, Srikant Vallabhajosula, and James Matthew Hale. "How Is Wound Care and Integumentary Education Being Taught in Professional-Level Physical Therapy Programs?" *Journal of Acute Care Physical Therapy* 10, no. 1 (2019).
5. **Lawson D**, Kelly M: *Musculoskeletal Ultrasound Evaluation of a Person with Anterior Knee Pain Following a Motor Vehicle Accident*. *Orthopaedic Practice*. 2017 29: 118-121.
6. **Lawson D**, Hoffmeyer A, Pearsall A and Vallabhajosula S (2015) *Kinesio® Tex Tape: Valuable Conservative Treatment for Plantar Fasciitis?* J Nov Physiother 5:271.doi:10.4172/2165-7025.1000271
7. **Lawson D**. *Does it Need to be New to be Novel?* (editorial) J Nov Physiother, 2015 vol 5 (1)
8. **Lawson D** and Herron D. *Telehealth for Wound Care*. Advance Physical Therapy & Rehab Medicine magazine. Posted on: December 11, 2014 on Advance website at: <http://goo.gl/Xftn00>
9. Escobar LT, Sanders ME, **Lawson D**, Benitez CB. A case study: *Mobility and health impact of an aquatic fitness program for a woman with intellectual and physical disabilities*. International Journal of Aquatic Research & Education. 2013;7(2):147-156.
10. **Lawson D**, Petrofsky J. *The effect of monophasic vs. biphasic current on healing rate and blood flow in people with pressure and neuropathic ulcers*. J ACUTE CARE PHYS THER. 2013;4(1):26-33.
11. **Lawson D**, Petrofsky J, Bamberger S, Lodi T, Delai R. *Comparison of a Standard Abdominal Curl and Six Different Exercises Using a Portable Abdominal Machine*. Journal of App Res. 2011 11(1):37-43.

12. Chambers KL, Kemp JR, **Lawson D**. *The Effects of an Independent Exercise Program on an Adolescent with Cerebral Palsy*. JSPTR. 2011; 4(1):1-9.
13. Sanders ME, **Lawson D**. In the Pool; Knee Anterior Cruciate Ligament Recovery Program. ACSM's Health & Fitness Journal. 2010; 14(4): 34-40.
14. Petrofsky JS, **Lawson D**, Berk L, Suh HJ. *Enhanced healing of diabetic foot ulcers using local heat and electrical stimulation for 30 min three times per week*. Journal of Diabetes 2;2010:1-6.
15. Suh HJ, Petrofsky JS, Lo T, **Lawson D**, Yu T, Pfeifer TM, Morawski T. *The Combined Effect of a Three-Channel Electrode Delivery System with Local Heat on the Healing of Chronic Wounds*. Diabetes Technol Ther 2009;10:681-688.
16. Suh H, Petrofsky J, Fish A, Hernandez V, Mendoza E, Collins K, Yang T, Abdul A, Batt J, **Lawson D**. *A New Electrode Design to Improve Outcomes in the Treatment of Chronic Non-Healing Wounds in Diabetes*. Diabetes Technol Ther. 2009 May;11(5):315- 22.
17. Petrofsky J, **Lawson D** et al. *Effects of a 2-, 3- and 4-electrode stimulator design on current dispersion on the surface and into the limb during electrical stimulation in controls and patients with wounds*. Journal of Medical Engineering & Technology, Vol. 32, No. 6, November/December 2008
18. Petrofsky J, Prowse M, Bain M, Suh HJ, Batt J, **Lawson D**, et al. *Estimation of the distribution of intramuscular current during electrical stimulation of the quadriceps muscle*. Eur J Appl Physiol 2008 103:265-273
19. **Lawson D**, Petrofsky J. *A randomized control study on the effect of biphasic electrical stimulation in a warm room on skin blood flow and healing rates in chronic wounds of patients with and without diabetes*. Med Sci Monit, 2007; 13(6): CR258-263
20. Petrofsky JS, Schwab I, Lo T, Cuneo M, **Lawson D**. *The thermal effect on the blood flow response to electrical stimulation*. Med Sci Monit, 2007 Nov; 13(11):CR498-504.
21. Petrofsky JS, **Lawson D**, et al. *The influence of local versus global heat on the healing of chronic wounds in patients with diabetes*. Diabetes Technol Ther 2007 Dec; 9(6):535-44.
22. **Lawson D**, Revelino K, Owen D. *Clinical Pathways To Improve Patient Outcomes*. Phy Ther Reviews, 2006; 11:269-272
23. Petrofsky J, Schwab E, Cu´neo M, George J., Kim J, Almalty A, **Lawson D**, et al. *Current distribution under electrodes in relation to stimulation current and skin blood flow: are modern electrodes really providing the current distribution during stimulation we believe they are?* Journal of Medical Engineering & Technology, Vol. 30, No. 6, November/December 2006, 368 – 381

24. **Lawson D**, Petrofsky J, Lee S, Almalty A, Cohn J, Loo R, Marchis G. *Improvement in Glabrous Skin Perfusion with Heat Exposure and Electrical Stimulation in Diabetic Foot Wounds*. Diabetes; 2005 54:A50.
25. Sanders M, **Lawson D**. *A Knee Up To Play*. Idea Fitness Journal, 2006. Vol 3, (8), 55- 63.

Peer Reviewed Scientific Conference Posters and Invited Professional Presentations

Lawson D, Kang HB, Kahn H, Lopshire K, Xavier K, Papin B. *The Effect of Transcutaneous Electrical Nerve Stimulation (TENS) on Athletes with Muscle Fatigue*. Accepted poster and that will be presented on February 18, 2021 in a Virtual Conference at the Combined Section Meeting of the American Physical Therapy Association.

Lawson D, Llewellyn T, Yang N. *Efficacy of Microcurrent Therapy for Treatment of Acute Knee Pain*. Accepted poster presented on February 14, 2020 in Denver, CO at the Combined Section Meeting of the American Physical Therapy Association.

Jamin M, Lashlee D, Pozella-Burling M, Fields KB, Evans ES, **Lawson D**. *Effect of a compression sleeve on swelling, pain and function during exercise in subjects 50-80 years of age with knee OA*. Presented at the American Physical Therapy Combined Section Meeting, Washington, DC. January 25, 2019

Hale JM, Hettrick H, Vallabhajosula S, **Lawson D**. A Survey of Wound Management Curricula in United States Physical Therapy Education Programs. Presented at the American Physical Therapy Combined Section Meeting, New Orleans, LA. February 23,, 2018

Lawson D and Fields B. *Home Exercise Physical Therapy Program with and without a compression sleeve for treatment of Osteoarthritis of the knee*. Invited speaker to the Graduate Medical Education: A Day of Scholarship at Cone Health. Wednesday, March 29th, 2017.

Lawson D. Invited Speaker: Tendinopathy: Diagnostic Musculoskeletal Ultrasound: How Can it Guide our Treatment? August 27, 2016. Friesen Physio Fitness Summit: Tending in Sports Medicine.PNC arena, Raleigh, NC.

Wentz A, Jung O, Arena C, **Lawson D**. *Development of a Therapeutic Boot to Increase the Healing Rate of Neuropathic Wounds on People who have Diabetes*. July 15, 2016. SURE Conference, Elon, NC.

Calhoun R, Dineen S, Rock L, Stribrny B, **Lawson D**. *Healing Rates of Tendinopathy using Nitroglycerin patches: A Retrospective Study*. Presented at the American Physical Therapy Combined Section Meeting, Indianapolis, IN. February 5th , 2015

Lawson D and Fields B. Invited Speaker at the 2015 AHEC conference. *Presentation: A New Standard of Care – Using Topical NTG for Tendinopathy*. March 12, 2015, Cone Medical Center, Greensboro, NC

Agostini I, Saez A, Selman N, Arena C, **Lawson D**. *Development of a therapeutic boot that combines electrical stimulation with heat to increase the healing rate of neuropathic wounds*. Poster presentation at the Southeast Regional Meeting of the Biomedical Engineering Society Oct 23, 2015.

Lawson D, Hoffmeyer A, Belk J, Pearsall A, Pine R. *Kinesio® Tex Tape: valuable Conservative Treatment for Plantar Fasciitis?* Presented as a poster presentation on February 6, 2015 at the American Physical Therapy Association Combined Section Meeting. Indianapolis, IN

Lawson D. *Use of Telehealth as a Teaching Method in Wound Care for Year 3 DPT students.* Presented as a poster presentation on Tuesday, February 4, 2014 at the American Physical Therapy Association Combined Section Meeting. Las Vegas, NV.

Peer Reviewed Scientific Conference Posters and Invited Professional Presentations-cont.

Abrahams C, Jones J, Kuenzel J, **Lawson D.** *Is there a relationship between FMS score and injury rate in pediatric gymnastics?* Presented at the North Carolina Physical Therapy Association Fall Conference, Greensboro, NC. 2014

Canuto J, Raber N, Selby K, Murphy B, **Lawson D.** *Case Study: The effect of wearing a ROOKE boot on blood flow with people that have diabetes and smoke.* Presented at the North Carolina Physical Therapy Association Fall Conference, Raleigh, NC. 2013

Lawson D, Farrow L, Stout J, Young A. *The Future of Physical Therapy: Media Devices and Innovative Technology.* Presented as a poster presentation on January 23, 2013 at the American Physical Therapy Association Combined Section Meeting. San Diego, CA.

Ackard K, Isbell B, Smeltz L, **Lawson D.** *Are Personal Trainers the New 21st Century Caregivers?* Presented at the Elon University physical therapy poster presentations. December 2012

Lawson D, Curtis J, VanWagenen N, Bryan J. *The Effect of Genu Recurvatum on Ligament Laxity of the Knee.* Presented at the North Carolina Physical Therapy Association 2012 Fall Conference, Greensboro, NC. February 11-13, 2012

Lawson D, Pancake G, Van Hal B. *Validity of the Quadriceps Contraction Score (Q-Score) Using Electromyography.* Presented at the North Carolina Physical Therapy Association 2012 Fall Conference, Greensboro, NC. February 11-13, 2012

Lawson D. Invited Platform presentation: *Monophasic versus Biphasic Current on Healing Rate and Blood Flow in People With Chronic Wounds With and Without Diabetes.* American Physical Therapy Combined Section Meeting, Chicago, ILL. February 9, 2012.

Chambers K, Kemp J, **Lawson D.** *The Effects of an Independent Exercise Program on an Adolescent with Cerebral Palsy.* North Carolina Physical Therapy Conference (NCPTA) Fall and Chapter meeting, Greensboro, NC. October 14-16, 2010.

Lawson D, Petrosky J, Sue HJ, Lee B: *Enhanced healing of diabetic foot ulcers using local dry heat for 30-minutes 3 times per week: a pilot study.* American Physical Therapy Combined Section Meeting Platform/Poster Presentation. San Diego, CA, February 19, 2010.

Petrofsky JS, Suh HJ, **Lawson D,** Berk L. Abstract, *Enhanced healing of diabetic foot ulcers using local dry heat for 30 minutes 3 times per week: a pilot study* was presented to the American Diabetes Association's 69th Scientific Sessions in New Orleans, LA, June 5-9, 2009.

Lawson D: Platform Presentation: Electrical Stimulation Improves Perfusion to the Skin. 65th Scientific Sessions of the American Diabetes Association, San Diego, CA June 12, 2005.

Patents

Lawson D and Arena C, 2018. *Devices, Methods, and Systems for the Treatment and/or Monitoring of Damaged Tissue*. Patent Application 62/627,028, submitted February 6, 2018. Patent Pending.

Non-Peer Reviewed Presentations

Lawson D: *Musculoskeletal Ultrasound and Physical Therapy*. Michigan Physical Therapy Association. Invited to give presentation at WMU on October 15, 2019.

Lawson D: *The Bum Knee; diagnosis, rehabilitation and the use of Musculoskeletal Ultrasound*. Open House, Department of Physical Therapy. September 12, 2015

Lawson D: *Musculoskeletal Ultrasound for Physician Assistants*. Department of Physician Assistants, Elon University. August 2, 2015

Lawson D: Submitted and accepted by the *Aquatic Exercise Association*. The AKWA is an on-line publication of the Aquatic Exercise Association that featured our case study on *YouTube with a Woman With Intellectual and Physical Disabilities and her progression of therapy*. The video allowed members to see the positive progression using aquatic therapy. November 2012

Lawson D. *Overuse Injuries*. Elon University Open House, Elon NC. September 22, 2012

Lawson D. *Getting into Physical Therapy School*. Diversity Pre-Health Professions Club, North Carolina State University, Raleigh, NC. February 20, 2012.

Lawson D. *Preparing for a Physical Therapy Career*. Bishop McGuinness Catholic High School, Kernersville, NC. February 15, 2012.

Lawson D. *Everything you wanted to know about being a physical therapist but was afraid to ask*. Wake Forest University, Winston-Salem, NC. November 11, 2011.

Lawson D. *Prevention of ACL injuries in High School and Jr. High Athletes. Wound care and prevention in the athletic setting*. 2nd Annual Sports Medicine Symposium. Alamance Regional Medical Center, Burlington, NC, August 4, 2011

Lawson D, Dibiaso P. *Being a consumer of the literature; How can the clinician find evidence-based articles for their patients*. Alamance Regional Medical Center, Burlington, NC. July 26, 2011 (clinicians able to receive continuing education credit toward their licensure for attending the 2-hour course).

Lawson D. *What is physical Therapy? Making it a career choice.* High Point University, High Point, NC. March 9, 2010.

Lawson D. *Overuse injuries with recreational running.* Wellness lunch series, Elon University, Elon NC. April 29, 2009

Lawson D: *Overuse in the Lower extremity with female track athletes-do orthotics help?* Presented to the University of Nevada Medical School, department of family practice. Reno, NV, April 2006

Lawson D: *Chronic Diabetic non-healing wounds and electrical Stimulation.* Presented to Renown wound and ostomy center. Reno, NV August 2006.

Lawson D: *Thermal injuries to Korean War soldiers: how the war improved military gear.* Presented to the Korean War Veterans of Nevada, Reno, NV September 2006.

Lawson D: *Motion Analysis, EMG and physical therapy; Can we prevent athletic injuries.* Presented to University of Nevada Athletic department. Reno, NV November 2006

Lawson D: *Motion Analysis and orthopedic injuries.* Presented to University of Nevada School of Medicine family and internal medicine. Reno, NV February 2007.

Lawson D: *Wound care in the nursing home and ambulatory care; can modalities help?* Accelerated Care Plus for physical therapists continuing Education credits. Reno, NV March 2007.

Lawson D. *Referral for Profit.* Presentation to the Ethics class at the School of Public Health, University of Nevada, Reno, NV, February 2008.

Grant Activity

A. External Grants/Funding

1. In Preparation

- Mi-TRACK grant-\$250,000. Collaboration with WMU School of engineering on electrodes for wound healing. Agency: State of Michigan

2. Funded-In Progress

- Chronic Knee Pain-\$68,328- The Effects of Transcutaneous Electrical Nerve stimulation on People with Knee Osteoarthritis (OA) and or chronic knee pain. Agency: Omron Health
- Sports Knee TENS project-\$65,555.The Effect of Transcutaneous Electrical Nerve Stimulation on People with Muscle Fatigue Due to Training and Sports. Agency: Omron Health.

3. Completed

- Omron Healthcare, Inc- \$40,000. February 2018-Grant awarded to do a blinded, RCT on microcurrent and acute knee pain.

- Omron Healthcare, Inc-\$50,000. -Grant awarded for study of Microcurrent and musculoskeletal pain. NC
- NC Biotechnology Innovation Grant –\$100,000. October 2016: Received \$100,000-for patent and Phase I of clinical trials of boot I developed that is used to heal chronic neuropathic wounds in people with diabetes.
- Osborn Medical \$10,000, January 2015. -Grant awarded to fund ROOKE boot and perfusion study on people with neuropathic ulcers who smoke.
- State of Nevada grant - \$100,000, August 2007-CO-PI for “Preventing Osteoporosis among Nevada Women: A Randomized clinical Trial of a Novel Physical Activity at University of Nevada, Reno
- Saviier Company-\$20,000, September 2006-Grant looking at the 6-second abdominal machine and EMG. University of Nevada, Reno

4. Submitted and not funded

- **Nano-Materials Consortium (NBMC)**-6/2019, \$585,000-Project for developing a boot with electrical stimulation, heat, monitoring devices. Research was to be done at WMU (department of physical therapy and engineering) and Virginia Tech. Follow-up phone call stated it was not a good fit for what they were funding in this round.
- **Reynolds Foundation grant for Rural North Carolina**-10/2012: \$25,000- Primary PI: Using Tele-fitness to help manage people with diabetes in rural North Carolina.
- **NIH grant-STTR grant**-3/2009:\$500,000- Submitted for the research on March 2009 titled: Controlling Diabetes with Exercise on a National Scale Using Mobile Software The grant was not funded on 7/1/09 but encouragement to reapply. I did not re-submit for the grant OMNIBUS SOLICITATION OF THE NIH FOR STTR [R41/R42])

.

B. Internal Grants/Funding

In Preparation-Not submitted

- **WMU: Faculty Research Travel Fund (FRTF)**-TBD-Funds help to cover APTA CSM conference in Denver, CO, January 2020. Will be presenting: Efficacy of Microcurrent Therapy for Treatment of Acute Knee Pain

Funded-In Progress

- **WMU: Faculty Research and Creative Activities Award (FRACCA)**-\$8,840.00-July 1st, 2019-July 30th 2019. Title of Project: People who have Diabetes and a non-healing wound.

Completed

- **WMU: Faculty Research Travel Fund (FRTF)**-\$800.00-Funds help to cover APTA CSM conference in Washington, DC January 2019. Poster presentation at the conference: Effect of a compression sleeve on swelling, pain, and function during exercise in subjects 50-80 years of age with knee OA.
- **Elon University: ATACC grant**-July 2016: \$100.00 grant for comparing webcasting software as used for tele-education (classroom and the clinic).
- **Elon University: Student Undergraduate Research Education (SURE)**-June 2016: \$795.00 for equipment to build and conduct research on a boot that helps increase blood flow at the lower extremity for people who have diabetes and a wound: pilot project.
- **Elon University: ATACC grant**-March 2014: \$1500-"robot" system consisting of a product called swivel, iPad, and microphone that will allow virtual/remote encounters with clinicians and other distance education events.
- **Elon University: ATACC grant**-January 2014: \$90 for trial of software called Papers. A potential software that will aid students and faculty in research.
- **Elon University: School of Health Science Dean's Grant**-July 2013: \$950 support for travel to Andrews Sports Medicine Center
- **Elon University: Teaching and Learning Grants from The Center for the Advancement of Teaching**- Spring 2013: \$1200.00-support training for the Treason t3200 Musculoskeletal [Ultrasound system](#), which can create real-time images of muscles, tendons, nerves, bones, arteries, and veins.

Internal Grant/Funding-completed-continued

- **Elon University: CATL travel grant-12/2012:** \$650.00-Funding for telemedicine project. Grant was awarded for for travel to Renown Medical Center, Reno, NV to explore creating a telemedicine link from the Renown Wound Center to Elon. This grant made it possible to create “virtual rounds” during 2013 DPT Integumentary course.
- **Elon University: Elon 2nd year faculty research award-2010:** \$3,400-Grant for 2nd year faculty to pursue research
- **Elon University: Dean’s Summer Grant-2010:** \$1,500-Grant money for research and supplies for the summer.
- **Elon University: Dean’s Summer Grant-2009:** \$1,500.Grant money for research and supplies for the summer.
- **Elon’s ATACC Software Grants-2009:** \$650.00-Grant money will help Interactive learning software for the Physical Therapy Student

Current/Active Research Activity

1. Research-working with the concept of transcutaneous nerve stimulation (TENS) and decreasing pain with people that have chronic knee pain. The goal is to find a non-pharmacological approach to chronic pain. Research trials are being conducted at WMU
2. Research-working with the WMU athletes to observe if TENS will decrease delayed muscle onset soreness. Active trials are occurring at WMU
3. Research-FRACCA grant to continue work on chronic non-healing wounds and people with diabetes. Active work is occurring at the Engineering school along with a pilot study at the WMU Unified Clinic.

Membership in Scientific/ Professional Organizations

- I. Why Wound Care? Advisory Board. Part of the Wound Care Learning Network for Medical, Nursing, Physical Therapy and practicing clinicians. HMP Wound Care-2019 to present: <https://www.whywoundcare.com/group/112/advisory-board>
 - II. Michigan Physical Therapy Association-Research Committee. 2019-present.
 - III. American Physical Therapy Association: Been an active member of APTA for 30-years
 - Elected chair of the Biophysical Agents Special Interest group under the section of the Academy of electrophysiology and wound management (2018)
 - Elected to serve on the research committee for the Imaging special interest group of the orthopedic section in 2014 to present
- Member of the following APTA Academies
- a. Health Policy & Administration Section with emphasis on the Special Interest Group (SIG) of Technology and Pro Bono Clinic development
 - b. Academy of Orthopedic Physical Therapy with emphasis on the imaging special interest group.
 - c. American Academy of Sports Physical Therapy with emphasis on the SIG: Pediatric Sports Physical Therapy
 - d. Academy of Electrophysiology and Wound Management
 - e. Academy of Physical Therapy Education
 - f. Section on Research with emphasis on the SIG of Evidence based practice

Journal/Book Reviewer and Advisory Positions Held

Journal of Acute Care Physical Therapy: 2011 to present –Reviewer;

Diabetes Technology and Therapeutics June 2005-2016- Reviewer,
Wounds, blood flow and laser Doppler flowmeter, area of
expertise.

Journal of Visualized Experiments (JoVE)-Reviewer July 2011 to 2015

Physical Therapy in Sport Journal-reviewer September 2010 to 2015

Journal of Medical Engineering & Technology-reviewer January 2008 to 2014

- Consultant for an external site review at Loma Linda University. February 16-17, 2010. Graduate programs of DSc, Post Professional-MPT and DPT were reviewed with recommendations to the University.
- Adjunct Research Fellow of RMUoHP; currently serving on two Doctoral Committees. July 2009 to 2014

June 2005-2019 Contributor to a book reviewer for Orthopedic Physical Therapy Practice

- a. **Lawson, D.** Review of A Clinician's Guide to Balance and Dizziness: Evaluation and Treatment. Doody's Review Service (on-line). Available: <http://www.doody.com> and Orthopedic Physical Therapy Practice.
- b. **Lawson, D.** Reviewed the text in 2014: ISBN 9780199673278, Johnson / Transcutaneous Electrical Nerve Stimulation (TENS): Research to Support Clinical Practice in April Orthopedic Physical Therapy Practice
- c. **Lawson, D.** Review text in 2010. Cram's Introduction to Surface Electromyography, 2nd Edition. Jones & Bartlett Learning, 2011, \$96.95. ISBN: 978-0-7637-3274-5, NLM: WE 500, 412 pages, soft cover. Doody's Review Service (on-line). Available: <http://www.doody.com>. (12/3/10).

Contributor to American Physical Therapy Hooked on Evidence database July 2004 to 2014

Community Service

AHEC CHHS Immersion Day-October 2018. I led a tour of 34 High school juniors and seniors to a tour of the EWB building and finished with a lecture on the field of physical therapy.

Kalamazoo Gospel Mission-2018-present: Volunteer to serve food at the food at the “Credo Café, located at 448 B. Burdick St, Kalamazoo.

U.S. Masters Swimming High Performance Camp-Aug 22-27, 2015: Volunteer for screening of swimmers during camp.

Our Lady of Grace School-Volunteer softball coach-2012: manager for the softball team for 5-8th graders.

GIHN (Guilford Interfaith hospitality Network-2010-2011: spent night with homeless families. Shared in fellowship with the adults, played basketball with the kids and assisted with breakfast. Most of all, gave hope and motivation for the parents that they can find a job or go back to school.

Eastern Alamance High School -2009 and 2010:Dr. Cope and I assisted in organizing the event of 32 high school students. The 1st, 2nd and 3rd year DPT students created six stations for the high school students to learn different areas of physical therapy. And, all were hands-on. The stations were:

- 1) Goniometry measurements
- 2) Joint Mobilization
- 3) Manual Muscle testing, Sensation, Reflex testing
- 4) Electrical Stimulation that was done on the students
- 5) Neurological section with brain and spinal cord dissection. Implications of stroke, brain injury were discussed and its effect of different areas of the brain. Students had the opportunity to touch the lobes of the brain and spinal cord.
- 6) Wii Station: How the Wii could be used therapeutically to help patients regain function following a stroke. The students were invited to play the Wii but with a few catches. One student had to balance on a rocker board while the other student had to sit on a theraball and balance while playing Wii tennis.

Service to the University/ School on Committees/ Councils/ Commissions

Service to the University

2018-present-Unified Clinics Taskforce

2019-present-Physical Therapy coordinator for the Unified Clinics

2019-Wed, August 21st, invited by Julie Apker to be part of the “Real Deal Panel” to discuss my first year experience during the WMU faculty orientation.

2018-Monday, August 27th, representing physical therapy during academic kickoff

Service to the Department

Program Evaluation and Assessment (PEAC) committee-2019-present. Chair of PEAC

Research and Scholarship Committee-2019-present. Committee member

Community Outreach and Partnerships-2019-present. Committee member

Service to the Profession

Leadership position at the state level for the Michigan Physical Therapy Association (MPTA):

October 2019-present

- a. Research Chair for the MPTA-assist with evaluating posters/presentations for Fall and Spring conferences.

Leadership positions at the national level for the American Physical Therapy Association include (2018-present):

- a. Nominated to serve as chair of the Biophysical Special Interest group for the Academy of Electrophysiology and Wound Management
- b. Nominated to serve as research member on imaging for the Academy of Orthopedic Physical Therapy

Mar 19, 2007-74th Session of the Nevada Legislature, I introduced AB 468 with Assembly person Ohrenschall. Spoke at both Senate and Assembly chambers on behalf of bill. The bill was voted into law in Nevada. The legislation read:

"Requires providers of health care to provide disclosure of certain financial interests when referring a patient to or recommending physical therapy to a patient." (BDR 54-1300).

Honors and Awards

WMU New Faculty Seminar-2018-2019: The provost and office of faculty development recognized participation in the new faculty seminars.

Elon University Pro Bono Clinic-December 2018: Recognized for outstanding serve and dedication as Elon's Pro Bono clinic (HOPE clinic) clinic supervisor.

Sabbatical at Elon University-April 2014: Awarded a to focus on the use of musculoskeletal ultrasound and Doppler in orthopedics and integumentary problems.

Granted Promotion and Tenure at Elon University-March 2012

Wound Management Research Award -February 9, 2012: selected for the second annual by the American Physical Therapy Association Special Interest group in Wound Care during the American Physical Therapy Association Combined Section Meeting in Chicago.

Loma Linda University Graduate Student Award: "In recognition for demonstrating outstanding potential and promise in the profession of physical Therapy"-June 12, 2005: Faculty Award while finishing my Doctoral Studies at Loma Linda University

Continuing Education Attended

2019 ACRM96th Annual Conference: November 3-8, 2019. Chicago, Ill

- Deborah L. Wilkerson Early Career Award: Mobile Rehabilitation for Daily Life Participation after Stroke
- Rehabilitation Technologies to Support Aging-In-Place for People with Long-Term Mobility Disabilities
- Innovative Outpatient Rehabilitation for Total Knee Replacement: Findings and Recommendations from a RCT
- Use of Frequency Specific Microcurrent in Pediatric Rehabilitation

Musculoskeletal Ultrasound Imaging-Upper Extremities. July 20-21, 2018. Presented by Randy Moore, DC, RDMS, RMSK and Hands-On-Seminars.

Musculoskeletal Ultrasound Imaging-Lower Extremities. November 9-10, 2018. Presented by Randy Moore, DC, RDMS, RMSK and Hands-On-Seminars.

Dry Needling: A tool for Physical Therapy Practice: course 2. June 1-3, 2018. Elon, NC. Presented by Emmanuel Easterling, PT, DPT, ECS, OCS, CMTPT and Mary Hannah PT, DPT, OCS, SCS. 28 CME credits.

The Sonographic Evaluation of Greater Trochanteric Pain Syndrome. April 18, 2017. Presented by the American Institute of Ultrasound in Medicine (AIUM). 1 AMA PRA credit.

APTA Combined Section Meeting: February 21-24, 2018. New Orleans, LA,

APTA Combined Section Meeting: February 15-18, 2017. San Antonio, TX

Dry Needling: A tool for Physical Therapy Practice: course 1. August 5-7, 2016, Elon, NC. Presented by Emmanuel Easterling, PT, DPT, ECS, OCS, CMTPT and Mary Hannah PT, DPT, OCS, SCS. 28 CME credits.

APTA Combined Section Meeting: February 17-20, 2016. Anaheim, CA

The Burwin Institute for MSK US

- Musculoskeletal Ultrasound of the Shoulder & Upper Limbs Part One. Home study course sponsored by The Burwin Institute. Date completed: 4/16/15. Awarded 15 CME credits.
- Musculoskeletal Ultrasound of the Hip and Lower Limbs. Part Two. Home study course sponsored by The Burwin Institute. Date completed: 4/16/15. Awarded 15 CME credits.

APTA Combined Section Meeting: February 4-7, 2015. Indianapolis, IN

- Management of Lower Extremity Tendinopathies. February 7, 2015. APTA CSM in

Indianapolis, IN. Presented by R. Barry Dale,, EdD, ATC PhD, Craig Denegar PT, PhD, ATC, FNATA Jeremiah Tate PT, PhD, Gary Wilkerson

- Ask-a-Librarian: Better Searching in 2 Hours or Less. February 6, 2015. APTA CSM in Indianapolis, IN. Presented by Gini Blodgett Birchett, MSLS
- Setting Yourself Up To Succeed At Institutions Without An Established Research Culture. February 5, 2015. APTA CSM in Indianapolis, IN. Presented by Scott Stackhouse PT, PhD, Katherine Rudolph, PT, PhD, Rebecca Craik PT, PhD, Kathy Lemley PT, MS, PhD, Ryan Mizner PT, PhD, Joanne Wagner, PT, PhD, Joshua Cleland, PT, PhD
- TENS: Evidence-Based Practice in Physical Therapy. February 5, 2015. APTA CSM in Indianapolis, IN. Presented by Dana Daniley PT, PhD and Carol Vance PT, PhD
- Upper Extremity Injuries of The Adolescent Throwing Athlete. February 5, 2015. APTA CSM in Indianapolis, IN. Presented by Drew Jenk, PT, DPT, Kevin J McHorse PT, MSPT, SCS, Cert MDT, Joseph Molony PT, MS, SCS, CSCS, Rafael Escamilla, PT, MPT, PhD, MS, CSCS

Trident Sports Medicine Symposium, Sports Medicine for the Primary Care Provider. May 3, 2014, Charlotte, SC. Presented by Trident Health Care team

APTA Combined Section Meeting. February 3-6, 2014. Las Vegas, NV

- Application of Ultrasound Imaging for Orthopaedic and Sports Conditions. February 3, 2014. APTA CSM in Las Vegas, NV. Presented by Scott Epsley, PT, SCS, Wayne Smith DPT, SCS, ATC, MEd, RMSK, Douglas M White, DPT, OCS, RMSK

Unraveling the Tendinitis Myth: Embracing the Tendinopathy Paradigm. May 17, 2013, NCPTA Spring Conference in Winston-Salem, NC. Presented by Randall Lazicki, PT, DPT, SCS, ATC, CSCS

What's the Point? Intramuscular Manual Therapy In Physical Therapy. February 22, 2013 Elon, NC. Andrew M. Ball, PT, DPT, PhD, OCS (1 CEU)

CITI Collaborative Institutional Training Initiative (CITI). Biomedical Responsible Conduct of Research: This course is for investigators, staff and students with an interest or focus in Biomedical Research. This course contains text, embedded case studies AND quizzes. Offered through Sponsored Projects at Elon University, Elon, NC. Completed on 6/26/2012. (Ref # 6210339)

APTA Combined Section Meeting. January 21-24, San Diego, CA

APTA Combined Section Meeting. February 7-10, 2012, Chicago, ILL

- Intellectual Property and Partnerships: The Value Of Your Ideas. February 10, 2012. American Physical Therapy Combined Sections Meeting, Chicago, ILL. Carla Sabus, PT, PhD, Patricia Kluding, PT, PhD, Lisa VanHoose, PT, PhD, Lisa A. Stehno-Bittel, PT, PhD, James Baxendale, MS, MBA.
- Physical Therapist Entry-Level Integumentary Content: What Should I Include and How Do I Do It? February 8, 2012. American Physical Therapy Combined Sections Meeting, Chicago, ILL. Karen A. Gibbs, Sharon Lucich, PT, CWS, Heather McCormack, PT, DScPT, CWS, Stephanie L. Woelfel, PT, MPT, CWS, FACCWS. Full Day pre-conference course.

Collaborative Institutional Training Initiative: Biomedical Research-Basic Curriculum . November 17, 2011. Offered through Sponsored Projects at Elon University, Elon, NC

Moses Cone Health System 2011 Corporate Compliance Training. August 31st. By the administration and human resources of Cone Health, Greensboro, NC.

Moses Cone Health System Safety@Work training. August 31st, 2011. By the administration and human resources of Cone Health, Greensboro, NC.

NC Physical Therapists Learning and Serving in Post-Earthquake Haiti. March 8, 2011. NCPTA Continuing Competence Approval # 11-0307-001, presented at Elon University, Elon, NC. Tiffani S Bacon, PT, MPT, Betsy Murphy, PT, MPT, Jennifer Robers, PT, DPT, CKTP and Robin Waldron, PT, DPT

APTA Combined Section Meeting. February 11-13, New Orleans, LA

- The Creation, Launch, and Growth of a Student-Led Pro Bono Physical Therapy Clinic: fostering Leadership Skills and Core Values While Meeting Community Needs in a Sustainable Manner. February 12, 2011. American Physical Therapy Combined Sections Meeting, New Orleans, LA. Robin Lee Dole, PT, EdD, PCS, Jill Black Lattanzi, PT, EdD, Vanessa Rose Kershaw, SPT, Mallory E. Meyer, SPT, Kerstin M. Palombaro, PT, MS, Aaron Michael Pepper, SPT
- Platform Presentations on the Foot and Ankle. February 12, 2011. American Physical Therapy Combined Sections Meeting, New Orleans, LA. 8 different presentations
- Knee Changes From The Sports Injury to the TKS, Part 1: the Athlete, Articular Cartilage, and Meniscal Injuries. February 11, 2011. American Physical Therapy Combined Sections Meeting, New Orleans, LA. Barton N. Bishop, PT, DPT, SCS, CKTP, TPI, CGFI-MP2, CSCS, Lori Bolgla, PT, PhD, ATC, Susan A. Falsone, PT, MS, SCS, ATC, CSCS, Randal Scott Lazicki, PT, DPT, LAT, ATC, CSCS, Whitney Anne Meier, PT, DPT, Felix Savioe, MD
- Attitudes and Beliefs of Physical Therapists about Evidence-based Practice: How Do We Facilitate the Translation of Evidence Into Practice Behaviors? February 11, 2011. American Physical Therapy Combined Sections Meeting, New Orleans, LA. Gerald P. Brennan, PT, PhD, Anthony Delitto, PT, PhD, FAPTA, Julie Fritz PT, PhD, Stephen J. Hunter, PT, OCS, James J. Irrgang, PT, PhD, ATC, FAPTA, David Scalzitti, PT, PhD, OCS

Alamance Regional Medical Center Corporate Compliance Training. Jan 15, 2011. At ARMC, Burlington, NC. Presented by the administration and clinical staff of ARMC.

Jurisprudence Exercise I. North Carolina Board of PT Examiners. December 20, 2010. Elon University, Elon, NC. Ben Massey, Jr., PT

Evidence Based Practice Institute: Expanding Evidence Based Practice in Your Professional Curriculum. November 5-6, 2010, Elon University, Elon, NC. Julie Tilson, PT, DPT, NCS and Linda Fetters, PT, PhD, FAPTA

Moses Cone Health System Clinical Orientation. July 15, 2010. Provided by the physical therapy staff at Cone Health System. Greensboro and Kernersville, NC>

Screening the Lower Quarter for Alignment, Soft Tissue Extensibility and Foot Orthotic Intervention. October 15-16, 2010 at the North Carolina Physical Therapy Association Fall Chapter Meeting Education Session, Greensboro, NC. Michael T. Gross, PT, PhD

Musculoskeletal Ultrasound Diagnosis and Injections: A Live Model and Cadaver Workshop. August 12-13th, 2010. Duke Sports Medicine. David J Berkoff, M.D., FAAEM, CAQSM, Blake R. Boggess, D.O., CAQSM, Kevin Burroughs, M.D., Karl Fields, M.D., Scott Primack, D.O., Harry Stafford, M.D.

Musculoskeletal Ultrasound. July 30, 2010. At the Moses Cone Sports Medicine Fellowship in Greensboro, NC. Dr. Fields, MD.

University of St. Augustine (USA):

University of St. Augustine Continuing Education Series in manual therapy (**S1**-Introduction to Spinal Evaluation and Manipulation, **E1**-Extremity Evaluation & Manipulation, **MF1**-Myofascial Manipulation, **S2**-Advanced Evaluation & Manipulation of Pelvis, Lumbar & Thoracic Spine Including Thrust, **S3**-Advanced Evaluation & Manipulation of CranioFacial, Cervical & Upper Thoracic Spine, **S4**-Functional Analysis & Management of Lumbo-Pelvic-Hip Complex). 1988 until present. **One more course then sitting for manual Therapy certification.**

Kaiser Residency Program. One year residency program in orthopedics. 1984-1985. Kaiser-Hayward, CA.