# Curriculum Vitae | Cory L Christiansen, PT, PhD December 2020

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Doctor of Physical Therapy Program, University of Colorado, Anschutz Medical Campus

# **Education**

University of Northern Colorado, Greeley, CO	Sport & Exercise Science PhD received 2007	2003-2007
Duke University, Durham, NC	Physical Therapy MS received 1996	1993-1996
Colorado State University, Fort Collins, CO	BS in Biological Sciences BS received 1992	1990-1992

# **Licensure Information/Registration Number**

Colorado #PTL.0005563

# **Employment and Positions Held**

2019 - Present	Professor, School of Medicine, Physical Therapy Program, University of Colorado Denver, Anschutz Medical Campus, Aurora, CO
2016 - Present	Rehabilitation Researcher, Geriatric Research Education and Clinical Center, VA Eastern Colorado Health Care System, Denver, CO
2013 - 2019	Associate Professor, School of Medicine, Physical Therapy Program, University of Colorado Denver, Anschutz Medical Campus, Aurora, CO
2012 - 2016	Physical Therapy Researcher, Rehabilitation & Physical Medicine, VA Eastern Colorado Health Care System (WOC), Denver, CO
2008 - 2015	Physical Therapist, Institute of Physical Medicine and Sports Therapy, Windsor, CO
2007 - 2013	Assistant Professor, School of Medicine, Physical Therapy Program, University of Colorado Denver, Anschutz Medical Campus, Aurora, CO
2005	Adjunct Professor, College of Applied Human Sciences, Department of Health and Exercise Science, Fort Collins, CO
2005	Lecturer, College of Natural and Health Sciences, Department of Sport and Exercise Science, Greeley, CO
1998 - 2000	Physical Therapist, Colorado Sport & Spine Clinic, Colorado Springs, CO
1996 - 1998	Physical Therapist, Castle Rock Medical Center, Rock Springs, WY

# **Scholarly Agenda**

Advance clinical research evidence by applying movement science principles to optimize rehabilitation for older adults with movement dysfunction.

## **Peer Reviewed Publications**

- 1. Anderson CA, Wurdeman SR, Miller MJ, <u>Christiansen CL</u>, Kittelson AJ. Development of a physical mobility prediction model to guide prosthetic rehabilitation. *Prosthet Orthot Int*. 2020; in press.
- 2. Miller MJ, Blankenship JM, Kline PW, Melanson EL, <u>Christiansen CL</u>. Patterns of sedentary behavior and physical activity after lower limb amputation. *Phys Ther*. 2020; online ahead of print.
- 3. Miller MJ, Cook PF, Magnusson DM, Morris MA, Schenkman ML, <u>Christiansen CL</u>. Self-efficacy and social support are associated with disability for ambulatory prosthesis users after lower limb amputation. *PM & R*. 2020; online ahead of print.
- 4. Miller MJ, Morris MS, Magnusson DM, Putnam K, Cook PF, Schenkman ML, <u>Christiansen CL</u>. Psychosocial factors influence physical activity after dysvascular amputation: a convergent mixed-methods study. *PM & R*. 2020; online ahead of print.
- 5. Christensen JC, Kline PW, Murray AM, <u>Christiansen CL</u>. Movement asymmetry during low and high demand mobility tasks after dysvascular transtibial amputation. *Clin Biomech*. 2020; online ahead of print.
- 6. Kline PW, Murray AM, Miller MJ, So N, Fields TT, <u>Christiansen CL</u>. Step length symmetry adaptation to split-belt treadmill walking after acquired non-traumatic transtibial amputation. *Gait Posture*. 2020; 80:162-167. PMID: 32516682; PMCID: PMC7369240.
- 7. Miller MJ, Mealer ML, Cook PF, So N, Morris MA, <u>Christiansen CL</u>. Qualitative Analysis of Resilience Characteristics of People With Unilateral Transtibial Amputation. *Disability and Health*. 2020; online ahead of print. PMID: 32312526
- 8. <u>Christiansen CL</u>, Miller MJ, Kline PW, Fields TT, Sullivan WJ, Blatchford PJ, Stevens-Lapsley JE. Biobehavioral intervention targeting physical activity behavior change for older veterans after non-traumatic amputation: a randomized controlled trial. *PM & R*. 2020; online ahead of print. PMID: 32248638.
- 9. Anderson CB, Miller MJ, Murray AM, Fields TT, So NF, <u>Christiansen CL</u>. Falls after dysvascular transtibial amputation: a secondary analysis of falling characteristics and reduced physical performance. *PM & R*. 2020; April 06 2020, online ahead of print. PMID: 32249517
- 10. Mañago MM, Kline PW, Alvarez E, <u>Christiansen CL</u>. Trunk and pelvis movement compensation in people with MS: relationships to muscle function and gait performance. *Gait Posture*. 2020; 78:48-53. PMID: 32200163
- 11. Bade MJ, Christensen JC, Zeni JA, <u>Christiansen CL</u>, Dayton MR, Forster JE, Cheuy VA, Stevens-Lapsley JE. Movement pattern biofeedback training after total knee arthroplasty:

- randomized clinical trial protocol. *Contemp Clin Trials.* 2020; 91:105973. PMID: 32171937; PMCID: PMC7263966.
- 12. Ferris AE, <u>Christiansen CL</u>, Heise GD, Hahn D, Smith JD. Biomechanical analysis of curb ascent in persons with Ertl and non-Ertl transtibial amputation. *Prosthet Orthot Int*. 2020; 44(1):36-43. PMID: 31713462.
- 13. Judd DL, Cheuy VA, Forster JE, <u>Christiansen CL</u>, Stevens-Lapsley JE. Incorporating specific functional strength integration techniques to improve functional performance for Veterans after total hip arthroplasty: protocol for a randomized clinical trial. *Phys Ther*. 2019; 99(11):1453-1460. PMID: 31392991.
- 14. Kline PW, Murray AM, Miller MJ, Fields TT, <u>Christiansen CL</u>. Error-augmentation gait training to improve gait symmetry in patients with non-traumatic lower limb amputation: A proof-of-concept study. *Prosthet Orthot Int.* 2019; 43(4):426-433. PMID: 31018771; PMCID: PMC6880787
- 15. Aljehani M, Madara K, Snyder-Mackler L, <u>Christiansen CL</u>, Zeni JA. The contralateral knee may not be a valid control for biomechanical outcomes after unilateral total knee arthroplasty. *Gait Posture*. 2019; 70(5):179-184. PMID: 30878729.
- 16. Miller MJ, Cook PF, Kline PW, Anderson CB, Stevens-Lapsley JE, <u>Christiansen CL</u>. Physical function and pre-amputation characteristics explain daily step count after dysvascular amputation. *PM & R*. 2019; 11(10):1050-1058. PMID: 30729727.
- 17. Kline PW, Melanson EL, Sullivan WJ, Blatchford PJ, Miller MJ, Stevens-Lapsley JE, <u>Christiansen CL</u>. Improving physical activity through adjunct telerehabilitation following total knee arthroplasty: randomized controlled trial protocol. *Phys Ther*. 2019; 99(1):37-45. PMID: 30329126; PMCID: PMC6314331.
- 18. Miller MJ, Jones J, Anderson CB, <u>Christiansen CL</u>. Factors influencing participation in physical activity after dysvascular amputation: a qualitative meta-synthesis. *Disabil Rehabil*. 2018; 27:1-10. PMID: 30261758; PMCID: PMC6437000.
- 19. <u>Christiansen CL</u>, Miller MJ, Murray AM, Stephenson RO, Stevens-Lapsley JE, Hiatt WR, Schenkman ML. Behavior-change intervention targeting physical function, walking, and disability after dysvascular amputation: a randomized controlled pilot trial. *Arch Phys Med Rehabil*. 2018; 99(11):2160-67. PMID: 29746823; PMCID: PMC6215727.
- 20. Hall DA, Moore C, Comella C; SPARX Study Group (Berman B, <u>Christiansen CL</u>, Kluger B, Kohrt WM, Melanson E, Schenkman ML, Corcos DM, Poon C, Delitto A, Josbeno DA, Jain S). Recruitment of patients with de novo Parkinson disease: successful strategies in a randomized exercise clinical trial. *Trials*. 2018; 19(1):630. PMID: 30428907; PMCID: PMC6237042.
- 21. Miller MJ, Magnusson DM, Lev G, Fields TT, Cook PF, Stevens-Lapsley JE, <u>Christiansen CL</u>. Relationships among perceived functional capacity, self-efficacy, and disability after dysvascular amputation. *PM & R*. 2018; 10(10): 1056-61. PMID: 29580940; PMCID: PMC6153084.

- 22. Gaffney B, <u>Christiansen CL</u>, Murray AM, Davidson BS. Trunk movement compensations and corresponding core muscle demand during step ambulation in people with unilateral transtibial amputation. *J Electromyogr Kinesiol*. 2018;39:16-25. PMID: 29413449. PMCID: PMC5857238.
- 23. Paxton RJ, Forster JE, Miller MJ, Gerron KL, Stevens-Lapsley JE, <u>Christiansen CL</u>. A feasibility study for improved physical activity after total knee arthroplasty. *J Aging Phys Act*. 2018;26:7-13. PMID: 28338406. PMCID: PMC5654685.
- 24. Schenkman ML, Moore CG, Kohrt WM, Hall DA, Delitto A, Comella CA, Josbeno DA, Christiansen CL, Berman BD, Kluger BM, Melanson EK, Jain S, Robichaud JA, Poon C, Corcos DM. Effect of high-intensity treadmill exercise on motor symptoms in patients with de novo Parkinson disease: a Phase 2 randomized clinical trial. *JAMA Neurol.* 2018;75(2):219-226. PMID: 29228079. PMCID: PMC5838616.
- 25. Gaffney BM, <u>Christiansen CL</u>, Murray AM, Myers CA, Laz PJ, Davidson BS. The effects of prosthesis inertial parameters on inverse dynamics: A probabilistic analysis. *J. Verif. Valid. Uncert.* 2017;2(3):031003-01-031003-8.
- 26. Murray AM, Gaffney BM, Davidson BS, <u>Christiansen CL</u>. Biomechanical compensations of the trunk and lower extremities during stepping tasks after unilateral transtibial amputation. *Clin Biomech*. 2017;49:64-71. PMID: 28888109. PMCID: PMC5863543.
- 27. Gaffney BM, <u>Christiansen CL</u>, Murray AM, Davidson BS. Trunk kinetic effort during step ascent and descent in patients with transtibial amputation using angular momentum separation. *Clin Biomech*. 2017;48:88-96. PMID: 28797673. PMCID: PMC5593790.
- 28. Ferris AE, <u>Christiansen CL</u>, Heise GD, Hahn D, Smith JD. Ertl and Non-Ertl amputees exhibit functional biomechanical differences during the sit-to-stand task. *Clinical Biomech*. 2017;44:1-6. PMID: 28273496.
- 29. <u>Christiansen CL</u>, Moore C, Schenkman M, Kluger B, Kohrt W, Delitto A, Berman B, Hall D, Josbeno D, Poon C, Robichaud J, Wellington T, Jain S, Comella C, Corcos D, Melanson E. Factors associated with ambulatory activity in de novo Parkinson's disease. *J Neurol Phys Ther*. 2017;41(2):93-100. PMCID: PMC5357185.
- 30. Miller MJ, Stevens-Lapsley J, Fields TT, Coons D, Bray-Hall S, Sullivan W, <u>Christiansen CL</u>. Physical activity behavior change for older veterans after dysvascular amputation. *Contemp Clin Trials*. 2017;55:10-15. PMCID: PMC5360171.
- 31. Gaffney BM, <u>Christiansen CL</u>, Murray AM, Silverman A, Davidson BS. Separation of rotational and translational segmental momentum used to assess movement coordination during walking. *Hum Movement Sci.* 2017;51:99-111. PMCID: PMC5266535.
- 32. Loyd BJ, Fields TT, Stephenson RO, Stevens-Lapsley JE, <u>Christiansen CL</u>. Explaining modified 2-minute walk test outcomes in Veterans with traumatic or non-traumatic lower limb amputation. *J Rehabil Res Dev.* 2016;53(6):1035-44. PMCID: PMC5475245.

- 33. Paxton RJ, Sherk KA, Murray AM, Stevens-Lapsley JE, <u>Christiansen CL</u>. Physical activity, ambulation, and comorbidities in people with diabetes and lower-limb amputation. *J Rehabil Res Dev.* 2016;53(6):1069-78. PMCID: PMC5474964.
- 34. Gaffney BM, Murray AM, <u>Christiansen CL</u>, Davidson BS. Identification of trunk and pelvis movement compensations in patients with transtibial amputation using angular momentum separation. *Gait Posture*. 2016;45:151-6. PMCID: PMC4794753.
- 35. Judd DL, Winters JD, Stevens-Lapsley JE, <u>Christiansen CL</u>. Effects of neuromuscular reeducation on hip mechanics and functional performance in patients after total hip arthroplasty: a case series. Clin Biomech. 2016;32;49-55. PMCID: PMC4779395.
- 36. Gaffney BM, Harris MD, Davidson BS, Stevens-Lapsley JE, <u>Christiansen CL</u>, Shelburne K. Multi-joint compensatory effects of unilateral total knee arthroplasty during high-demand tasks. *Ann Biomed Eng.* 2016;44(8);2529-41. PMCID: PMC4907879.
- 37. <u>Christiansen CL</u>, Fields TT, Lev G, Stephenson RO, Stevens-Lapsley JE. Functional outcomes after the prosthetic training phase of rehabilitation after dysvascular lower extremity amputation. *PM R*. 2015; 7(11):1118-26. PMCID: PMC4643436.
- 38. Paxton RJ, Melanson EL, Stevens-Lapsley JE, <u>Christiansen CL</u>. Physical activity after total knee arthroplasty: a critical review. *World J Orthop*. 2015;6(8):614-22. PMCID: PMC4573505.
- 39. <u>Christiansen CL</u>, Bade MJ, Davidson BS, Dayton MR, Stevens-Lapsley JE. Effects of weight-bearing biofeedback training on functional movement patterns following total knee arthroplasty: a randomized controlled trial. *J Orthop Sports Phys Ther*. 2015;45(9):647-55. PMCID: PMC4558346.
- 40. <u>Christiansen CL</u>, Bade MJ, Paxton RJ, Stevens-Lapsley JE. Measuring movement symmetry using tibial-mounted accelerometers for people recovering from total knee arthroplasty. *Clin Biomech*. 2015;30(7):732-7. PMCID: PMC4523451.
- 41. Winters JD, <u>Christiansen CL</u>, Stevens-Lapsley JE. Preliminary Investigation of Rate of Torque Development Deficits Following Total Knee Arthroplasty. *The Knee*. 2014; 21(2):382-6. PMCID: PMC3980026.
- 42. <u>Christiansen CL</u>, Bade MJ, Weitzenkamp DA, Stevens-Lapsley JE. Factors predicting weight-bearing asymmetry 1 month after unilateral total knee arthroplasty: a cross-sectional study. *Gait Posture*. 2013; 37:363-367. PMCID: PMC3529981.
- 43. <u>Christiansen CL</u>, Bade MJ, Judd D, Stevens-Lapsley JE. Weight-bearing asymmetry during sit-stand transitions related to impairment and functional mobility after total knee arthroplasty. *Arch Phys Med Rehabil*. 2011; 92:1624-1629. PMCID: PMC4526185.
- 44. Schenkman ML, Ellis T, <u>Christiansen CL</u>, Barón AE, Tickle-Degnen L, Hall DA, Wagenaar R. Profile of functional limitations and task performance among people with early and mid-stage Parkinson's disease. *Phys Ther*. 2011;91:1339-1354. PMCID: PMC3169785

- 45. <u>Christiansen CL</u>, Stevens-Lapsley JE. Weight-bearing asymmetry in relation to measures of impairment and functional mobility for people with knee osteoarthritis. *Arch Phys Med Rehabil*. 2010;91:1524-1528. PMCID: PMC2948025.
- 46. Hsieh CT, <u>Christiansen CL</u>. The effect of approach on spike jump height for female volleyball players. Int J Sports Sci Coach. 2010;5:373-380.
- 47. <u>Christiansen CL</u>, Schenkman ML, McFann K, Wolfe P, Kohrt WM. Walking economy in people with Parkinson's disease. *Mov Disord*. 2009;24:1481-1487. PMCID: PMC2744295.
- 48. <u>Christiansen CL</u>. The effects of hip and ankle stretching on gait function of older people. *Arch Phys Med Rehabil*. 2008;89:1421-1428. PMID: 18674977.
- 49. DeSimone NA, Christiansen CL, Dore D. Bactericidal effect of 0.95-mW helium-neon and 5-mW indium-gallium-aluminum-phosphate laser irradiation at exposure times of 30, 60, and 120 seconds on photosensitized Staphylococcus aureus and Pseudomonas aeruginosa in vitro. *Phys Ther*.1999;79:839-46. PMID: 10479784.

# Peer-Reviewed Scientific and Professional Presentations (last 5 years)

- Christensen J, Wojnar K, Kline PW, Stevens-Lapsley JE, <u>Christiansen CL</u>, Quammen D. Validity of inertial measurement units in assessing trunk motion in Veterans with total hip arthroplasty [poster presentation]. *Combined Sections Meeting of the American Physical Therapy Association*. Online; February 2021.[accepted]
- 2. Kline, PW, <u>Christiansen CL</u>, O'Connor M, Mañago MM. Trendelenburg test utility for people with multiple sclerosis: relationships with strength and functional mobility [podium presentation]. *Combined Sections Meeting of the American Physical Therapy Association*. Online; February 2021.[accepted]
- 3. Leutzinger T, Christensen J, Christiansen CL, Knarr B, Stevens-Lapsley JE. Subject strength and knee alignment to investigate knee joint contact forces post total knee arthroplasty [poster presentation]. *Combined Sections Meeting of the American Physical Therapy Association*. Online; February 2021.[accepted]
- 4. Hoffman RM, <u>Christiansen CL</u>, Mañago MM. Responsiveness of the Patient-Specific Functional Scale to Changes in Walking Endurance: A Proof-of-Concept Analysis [poster presentation]. 10<sup>th</sup> International Symposium on Gait and Balance in MS. Online; October 2020.
- 5. Kline PW, So NF, Fields TT, <u>Christiansen CL</u>. Repeated Error-Based Gait Training for Non-Traumatic Amputation: Proof of Concept Study [poster presentation]. *American Society of Biomechanics Annual Meeting*. Online; August 2020.
- 6. Kline PW, <u>Christiansen CL</u>, Hager ER, Mañago MM. Compensations during step ascent contribute to stair climbing ability in Multiple Sclerosis [podium presentation]. *American Society of Biomechanics Annual Meeting*. Online; August 2020.
- 7. Mañago MM, Kline PW, Alvarez E, <u>Christiansen CL</u>. Proximal movement compensations are related to muscle function and walking capacity in people with multiple sclerosis [poster

- presentation]. Annual Meeting of the Consortium of Multiple Sclerosis Centers. Orlando, FL; May 2020. (accepted) Also published in Int J MS Care. 2020;22(2):74.
- 8. <u>Christiansen CL</u>, Miller MJ, Kline PW, Sullivan WJ, Blatchford PJ, Fields TT, Stevens-Lapsley JE. Biobehavioral intervention targeting physical activity behavior change for older Veterans after dysvascular amputation [poster presentation]. *Combined Sections Meeting of the American Physical Therapy Association*. Denver, CO; February 2020.
- 9. Cheuy VA, Thomsen P, Lewis S, Edwards E, Christensen J, Bade MJ, Zeni JA, <u>Christiansen CL</u>. Preoperative strength and movement asymmetries in older adults with unilateral osteoarthritis [poster presentation]. *Combined Sections Meeting of the American Physical Therapy Association*. Denver, CO; February 2020.
- 10. Kline PW, <u>Christiansen CL</u>, Hager ER, Mañago MM. Clinical utility of the single-leg calf raise test in people with multiple sclerosis [platform presentation]. *Combined Sections Meeting of the American Physical Therapy Association*. Denver, CO; February 2020.
- 11. Thomsen P, Christensen J, Gritton C, <u>Christiansen CL</u>, Stevens-Lapsley JE. Assessing quadriceps strength and movement quality during a step-down task after total knee arthroplasty [poster presentation]. *Combined Sections Meeting of the American Physical Therapy Association*. Denver, CO; February 2020.
- 12. Miller MJ, Morris MA, Magnusson DM, Putnam K, Cook PF, Schenkman ML, <u>Christiansen CL</u>. Mechanisms of greater physical activity after dysvascular amputation: a convergent mixed-methods study [platform presentation]. *Combined Sections Meeting of the American Physical Therapy Association*. Denver, CO; February 2020.
- 13. Miller MJ, Blankenship JM, Kline PW, Melanson EL, <u>Christiansen CL</u>. Standing and stepping bouts are related to disability and functional capacity after lower limb amputation [poster presentation]. *Combined Sections Meeting of the American Physical Therapy Association*. Denver, CO; February 2020.
- 14. Anderson C, Miller MJ, Murray AM, Fields TT, So N, <u>Christiansen CL</u>. Describing falls in people with dysvascular lower-limb amputation using the Fall-Type classification framework [poster presentation]. *American Orthotic and Prosthetic Association Annual Assembly*. San Diego, CA; September 2019.
- 15. Anderson C, Miller MJ, Murray AM, Fields TT, So N, <u>Christiansen CL</u>. Use of the Fall-Type Classification Framework to evaluate falls, physical function, and physical activity in people with dysvascular lower-limb amputation [poster presentation]. *VA Research Days*. Aurora, CO; September 2019.
- 16. Kline PW, <u>Christiansen CL</u>, Hager ER, Mañago MM. Proximal frontal plane movement compensations during gait and step-ups in people with multiple sclerosis [poster presentation]. *9*<sup>th</sup> *International Symposium on Gait and Balance in Multiple Sclerosis*. Aurora, CO; September 2019.
  - Also published in Int J MS Care: 2020 March/April;22(2):100-1
- 17. <u>Kline P.W.</u>, Christiansen C.L., Hager E.R., Mañago M.M. (2020) Proximal frontal plane movement compensations during gait and step-ups in people with multiple sclerosis. Poster

- abstract from the Ninth International Symposium on Gait and Balance in Multiple Sclerosis. *International Journal of MS Care*: 2020 March/April;22(2):100-1
- 18. Ferris AE, <u>Christiansen CL</u>, Heise GD, Smith JD. Functional comparisons between people with Ertl and non-Ertl transtibial amputation [podium presentation]. *International Society of Biomechanics Annual Meeting*. Calgary, Canada; August 2019.
- 19. Blankenship J, <u>Christiansen CL</u>, Patterson C, Schenkman ML, Melanson E. Stepping behavior compensation after 12 Weeks of exercise training in de novo Parkinson's Disease: effects of intensity [poster presentation]. International Conference on Ambulatory Monitoring of Physical Activity and Movement. Maastricht, Netherlands; June 2019.
- 20. Anderson CM, Wurdeman SR, Miller M, Colborn K, Stoneback J, <u>Christiansen CL</u>, Kittelson A. Development of a physical function prediction model to guide prosthetic rehabilitation after lower limb amputation [platform presentation]. American Academy of Orthotics & Prosthetics Annual Meeting & Scientific Symposium; Orlando, FL; March 2019.
- 21. Kline PW, Miller MJ, Murray AM, So NF, <u>Christiansen CL</u>. Residual limb wounds and dysvascular transtibial amputation: incidence and patient characteristics [platform presentation]. *American Physical Therapy Association Combined Sections Meeting*. Washington, D.C.; February 2019.
- 22. Miller MJ, Cook PF, Kline PW, Anderson CB, <u>Christiansen CL</u>. Physical function and preamputation characteristics explain walking behavior after dysvascular amputation. [platform presentation] *American Physical Therapy Association Combined Sections Meeting*. Washington, D.C.; February 2019.
- 23. Miller MJ, Morris MA, Anderson CB, Putnam K, Magnusson DM, <u>Christiansen CL</u>. This is just the way it is: Patient experiences of physical therapy and disability after dysvascular amputation [poster presentation]. *American Physical Therapy Association Combined Sections Meeting*. Washington, D.C.; February 2019.
- 24. Kline PW, Murray AM, Miller MJ, Fields TT, Christiansen CL. Motor learning response to split-belt treadmill walking after non-traumatic amputation. *American Society of Biomechanics Annual Meeting* [poster presentation]. Rochester, MN; August 2018. Presented also at: *VA Research Days*. Aurora, CO; September 2018.
- 25. Anderson C, Miller MJ, Murray AM, Fields TT, So N, <u>Christiansen CL</u>. Falls and physical activity after dysvascular transtibial amputation [podium presentation]. *American Orthotic and Prosthetic Association Assembly*. Vancouver, BC; September 2018.
- 26. Miller MJ, Anderson CB, Mealer M, Cook P, Magnusson DM, Morris MA, Schenkman ML, Christiansen CL. Psychosocial targets for improved activity and participation after dysvascular amputation: a mixed-methods study protocol [poster presentation]. *VA Research Days*. Aurora, CO; September 2018.
- 27. Kline PW, Murray AM, Miller MJ, Fields TT, <u>Christiansen CL</u>. Motor Learning Response to Split-Belt Treadmill Walking after Non-Traumatic Amputation [poster presentation]. *American Society of Biomechanics Annual Meeting*. Rochester, MN; August 2018.

- 28. Miller MJ, Magnusson DM, Froetscher L, Lev G, Fields TT, Cook PF, Stevens-Lapsley JE, <u>Christiansen CL</u>. Relationships between functional capacity, walking behavior, and disability after dysvascular amputation [poster presentation]. *APTA Combined Sections Meeting*. New Orleans, LA; Feb 2018.
- 29. Bade MJ, Cheuy V, Loyd B, Jaeckel M, Zeni J, <u>Christiansen CL</u>, Stevens-Lapsley JE. Effects of real-time biofeedback using instrumented insoles on recovery after total knee arthroplasty: a pilot study [poster presentation]. *APTA Combined Sections Meeting*. New Orleans, LA; Feb 2018.
- 30. Kline PW, Melanson EL, Sullivan W, Blatchford PJ, Miller MJ, Stevens-Lapsley JE, <u>Christiansen CL</u>. Improving physical activity behavior through adjunct telerehabilitation following total knee arthroplasty: a study protocol [poster presentation]. *National Institute on Aging Directors Regional Meeting*. Aurora, CO; Nov 2017.
- 31. Miller MJ, Magnusson DM, Lev G, Fields TT, Cook PF, Stevens-Lapsley JE, <u>Christiansen CL</u>. Relationships among perceived functional capacity, self-efficacy, and disability after dysvascular amputation [poster presentation]. *National Institute on Aging Directors Regional Meeting*. Aurora, CO; Nov 2017.
- 32. Cheuy VC, Loyd B, Bade MJ, <u>Christiansen CL</u>, Stevens-Lapsley JE. Pilot study examining the effects of movement pattern biofeedback training on asymmetry during stepping and sit-to-stand after total knee arthroplasty [poster presentation]. *American Society of Biomechanics Annual Meeting*. Boulder, CO; Aug 2017.
- 33. Batrouny NA, Gaffney BM, Simons CJ, <u>Christiansen CL</u>, Davidson BS. Regression-based approach to hip moment prediction during the stance period of gait [poster presentation]. *American Society of Biomechanics Annual Meeting*. Boulder, CO; Aug 2017.
- 34. Simmons CJ, <u>Christiansen CL</u>, Davidson BS. Joint moment estimation using inertial sensor measurements with Gaussian process regression [podium presentation]. *American Society of Biomechanics Annual Meeting*. Boulder, CO; Aug 2017.
- 35. Ferris AE, <u>Christiansen CL</u>, Heise GD, Smith JD. Do kinetic differences exist during curb ascent in persons with Ertl and Non-Ertl transtibial amputations [poster presentation]. *American Society of Biomechanics Annual Meeting*. Boulder, CO; Aug 2017.
- 36. Murphy SP, Ferris AE, Heise GD, <u>Christiansen CL</u>, Smith JD. Using approximate and sample entropy to measure postural control in individuals with Ertl and Non-Ertl transtibial amputations [poster presentation]. *American Society of Biomechanics Annual Meeting*. Boulder, CO; Aug 2017.
- 37. Rentuma G, Ferris AE, Kellems VA, Heise GD, <u>Christiansen CL</u>, Smith JD. Postural stability during quiet standing in persons with Ertl and Non-Ertl transtibial amputations [poster presentation]. *American Society of Biomechanics Annual Meeting*. Boulder, CO; Aug 2017.
- 38. Batrouny NA, Gaffney BM, Simons CJ, <u>Christiansen CL</u>, Davidson BS. Hip moment prediction with a subset of inverse dynamics components [poster presentation]. *American College of Sports Medicine Annual Meeting*. Denver, CO; Jun 2017.

- 39. Schenkman ML, Moore CG, Kohrt WM, Hall DA, Delitto A, Comella CL, Josbeno DA, Christiansen CL, Berman BD, Kluger BM, Melanson EL, Jain S, Robichaud JA, Poon C, Corcos DM. Study in Parkinson's disease of exercise (SPARX): a randomized, controlled futility trial [poster presentation]. *Movement Disorders Society International Congress*. Vancouver, BC; June 2017.
- 40. Miller MJ, Paxton RJ, Murray AM, Stevens-Lapsley JE, Sherk KA, Poinski-McCoy S, Christiansen CL. Physical activity, ambulation, and comorbidities in people with diabetes and lower-limb amputation [poster presentation]. *VA Research Days*. Denver, CO; May 2017.
- 41. Davidson M, Desmond B, <u>Christiansen CL</u>, Davidson BS. Effects of prophylactic ankle restriction on lower extremity kinetics during a fencing lunge [poster presentation]. <u>American Society of Biomechanics Rocky Mountain Chapter Meeting</u>. Estes Park, CO; April 2017.
- 42. Miller MJ, Cheuy V, Murray AM, Poinski-McCoy SB, Gaffney BM, Davidson BS, <u>Christiansen CL</u>. Loading adaptations of the lower extremities during step descent in people with diabetes and transtibial amputation [podium presentation]. *APTA Combined Sections Meeting*. San Antonio, TX; Feb 2017.
- 43. Murray AM, Gaffney BM, Cheuy V, Miller MJ, Zugalla SP, Davidson BS, <u>Christiansen CL</u>. Trunk and hip compensations during turning in individuals with transtibial amputation [podium presentation]. *APTA Combined Sections Meeting*. San Antonio, TX; Feb 2017.
- 44. Miller MJ, Murray AM, Gaffney BM, Cheuy V, Davidson BS, <u>Christiansen CL</u>. Frontal plane movement adaptations for individuals with dysvascular transtibial amputation [podium presentation]. *Annual Meeting of the American Society of Biomechanics*. Raleigh, NC; August 2016.
- 45. Gaffney BM, <u>Christiansen CL</u>, Murray AM, Davidson BS. Associations between segmental rotational angular momentum and joint kinetics [poster presentation]. *Annual Meeting of the American Society of Biomechanics*. Raleigh, NC; August 2016.
- 46. Murray AM, Gaffney BM, Cheuy V, Davidson BS, <u>Christiansen CL</u>. Trunk compensations in individuals with transtibial amputation during step ascent [poster presentation]. *Annual Meeting of the American Society of Biomechanics*. Raleigh, NC; August 2016.
- 47. Gaffney BM, <u>Christiansen CL</u>, Murray AM, Myers CA, Laz PJ, Davidson BS. A probabilistic analysis to assess the influence of prosthesis inertial parameters on inverse dynamics [poster presentation]. *Annual Meeting of the American Society of Biomechanics*. Raleigh, NC; August 2016.
- 48. Ferris AE, Smith JD, <u>Christiansen CL</u>, Heise GD. Kinetic analysis of the sit to stand task in persons with Ertl and Non-Ertl transtibial amputations [poster presentation]. *Annual Meeting of the American Society of Biomechanics*. Raleigh, NC; August 2016.
- 49. Myers CA, Shelburne KB, Laz PJ, Judd DL, <u>Christiansen CL</u>, Stevens-Lapsley JE, Rullkoetter PJ. The impact of hip implant positioning on muscle and joint loading during a dynamic step down [podium presentation]. *Orthopedic Research Society Annual Meeting*. Orlando, FL; March 2016.

- 50. Judd DL, Winters JD, Stevens-Lapsley JE, <u>Christiansen CL</u>. Effects of neuromuscular reeducation on hip mechanics and functional performance in patients after total hip arthroplasty: a case series [poster presentation]. *APTA Combined Sections Meeting*. Anaheim, CA; February 2016.
- 51. Paxton RJ, Murray AM, Larson MA, Schultz M, <u>Christiansen CL</u>. Characterization of physical activity levels following dysvascular transtibial amputation [podium presentation]. *APTA Combined Sections Meeting*. Anaheim, CA; February 2016.
- 52. Murray AM, Gaffney BM, Davidson BS, <u>Christiansen CL</u>. Stair climb performance and movement compensations in patients with diabetes and transtibial amputation [podium presentation]. *APTA Combined Sections Meeting*. Anaheim, CA; February 2016.
- 53. Stolper S, Reeder B, <u>Christiansen CL</u>. Exploring the patient rehabilitation experience after lower limb amputation: a qualitative analysis [poster presentation]. *APTA Combined Sections Meeting*. Anaheim, CA; February 2016.

# **Non-Peer Reviewed Publications**

- 1. Chui KK, Yen SC, Chen T, <u>Christiansen CL</u>. Impaired Joint Mobility in Older Adults (Chapter 15). In: Avers D & Wong R, ed. Geriatric Physical Therapy, 4<sup>th</sup> Edition. Philadelphia: Elsevier; 2019.
- 2. <u>Christiansen CL</u>. Impaired Joint Mobility (Chapter 13). In: Guccione A, Wong R, Avers D, ed. Geriatric Physical Therapy, 3<sup>rd</sup> Edition. Philadelphia: Elsevier; 2011.

# Non-Peer Reviewed Scientific and Professional Presentations (last 5 years)

- 1. <u>Christiansen CL</u>. Gait analysis [invited presentation]. Resident Didactic Training, Department of Physical Medicine & Rehabilitation, University of Colorado, Aurora, CO; March 2019.
- 2. <u>Christiansen CL</u>. Optimizing physical activity outcomes for people with dysvascular lower limb amputation [Keynote presentation]. Hanger Educational Fair, Las Vegas, NV; Feb 2019.
- 3. <u>Christiansen CL</u>. VA rehabilitation research [invited presentation]. Comprehensive Opportunities in Rehabilitation Research Training, Washington University, St. Louis, MO; May 2018.
- 4. <u>Christiansen CL</u>. Physical activity rehabilitation for Veterans with total knee arthroplasty [invited presentation]. GRECC Associate Director for Research Conference, VA, Teleconference to all GRECC locations; August 2017.
- 5. <u>Christiansen CL</u>. Observational gait analysis [invited presentation]. Resident Didactic Training, Department of Physical Medicine & Rehabilitation, University of Colorado, Aurora, CO; June 2017.
- 6. <u>Christiansen CL</u>. Physical activity behavior change for older Veterans after dysvascular amputation [invited presentation]. GRECC Associate Director for Research Conference, VA, Teleconference to all GRECC locations; October 2016.

- 7. <u>Christiansen CL</u>. Rehabilitation after lower limb amputation [invited presentation]. Grand Rounds, Department of Physical Medicine & Rehabilitation, University of Colorado, Aurora, CO; June 2016.
- 8. <u>Christiansen CL</u> & Bodkin A. Clinical gait analysis [invited presentation]. Resident Didactic Training, Department of Physical Medicine & Rehabilitation, University of Colorado, Aurora, CO; July 2015.
- 9. <u>Christiansen CL</u>. Movement strategies and physical activity after dysvascular amputation [invited faculty presentation]. Gersten Day Research Meeting, Department of Physical Medicine & Rehabilitation, University of Colorado, Aurora, CO; June 2015.

# **Funded/In Review Grant Activity**

**Ongoing Support** 

NIH/NINDS 1U01NS113851

Corcos (PI)

09/25/19-07/31/24

Study in Parkinson disease of exercise Phase III clinical trial: SPARX3

The study goal is to establish the efficacy of high-intensity endurance exercise as first-line therapy for recently diagnosed people with Parkinson's disease (PD).

Annual Amount: \$3,261,040 (Year 1)

Role: Site PI

VA RR&D I01RX003237-01

Christiansen (PI)

11/01/19-10/31/23

Optimizing gait rehabilitation for Veterans with non-traumatic lower limb amputation. The goal of this clinical trial is to compare two forms of error-manipulation intervention to a supervised walking control group of Veterans with unilateral, non-traumatic transtibial amputation.

Amount: \$577,983

Role: PI

NIH R01NR018450

Christiansen (PI)

08/01/19-05/31/24

Improving health self-management using walking biobehavioral intervention for people with dysvascular lower limb amputation

The goals of this study are to: 1) test if walking biobehavioral intervention improves physical activity and 2) evaluate the potential for clinical implementation of a walking biobehavioral intervention early after lower-limb amputation.

Amount: \$1,305,250

Role: PI

Hanger Inc.

Christiansen (PI)

06/01/18-05/31/21

Personalized Reference Charts for Prosthetic Rehabilitation

The goal of this project is to develop personalized reference chart use to guide prognosis and care planning for patients following lower limb amputation. This mixed-methods design study will be used to design the reference chart, implement chart use as a pilot project, and determine chart use clinical feasibility.

Amount: \$30,000

Role: PI

NIH R01AG056585

Stevens-Lapsley (PI)

12/1/17-11/30/22

Movement Pattern Biofeedback Training Following Total Knee Arthroplasty

The goal of this study is to determine if the addition of a novel movement pattern training program (MOVE) to contemporary, progressive rehabilitation improves movement pattern quality more than contemporary progressive rehabilitation alone (CONTROL) after total knee arthroplasty.

Amount: \$3,004,535

Role: Co-I

VA RR&D I01RX002417

Christiansen (PI)

12/1/17-11/30/21

Optimizing Physical Activity Outcomes for Veterans after Total Knee Arthroplasty
The goal of this clinical trial is to determine the efficacy of physical activity behavior-change
telerehabilitation on improving physical activity after total knee arthroplasty.

Amount: \$1,077,824

Role: PI

VA RR&D I01RX002251

Stevens-Lapsley (PI)

10/1/16-9/30/21

Advancing Rehabilitation after Total Hip Arthroplasty

The goal of this investigation is to evaluate the effectiveness of a multi-modal core stabilization program for movement pattern retraining on functional outcomes after total hip arthroplasty.

Amount: \$1,099,636

Role: Co-I

#### Completed Support

VA RR&D I21RX002054-01A1 Christiansen (PI)

7/1/16-6/30/19

Physical Activity Behavior Change for Older Veterans after Dysvascular Amputation The goal of this project was to determine feasibility of a physical-activity behavior-change intervention targeting improved physical activity and reduced disability in Veterans 1-5 years following dysvascular lower limb amputation.

Amount: \$194,264

Role: PI

NIH R56 AG048943

Stevens-Lapsley (PI)

09/15/15-09/14/17

Movement Pattern Training Following Total Knee Arthroplasty

The goal of this project was to determine if the addition of a novel movement pattern training program to contemporary rehabilitation after total knee arthroplasty improved movement pattern quality and functional outcomes compared to contemporary rehabilitation alone.

Amount: \$382,625

Role: Co-I

NIH K12 HD055931

Mueller (PI)

09/01/13-06/30/16

Collaborative-care rehabilitation to improve functional outcomes after dysvascular amputation.

Project goals were to: 1) determine if a collaborative-care, home-based rehabilitation program improves physical function for people recovering from dysvascular transtibial amputation and 2) determine if the program improved functional activity for daily living.

Amount: \$360,000 Role: Scholar, Project PI

NIH R01 NS074343 Schenkman &

Schenkman & Corcos (Pls)

09/30/11-08/31/15

Exploratory Study of Different Doses of Endurance Exercise in People with Parkinson Disease

The aim of the study was to determine the futility or non-futility of conducting a Phase III randomized controlled trial to determine the effects of exercise on the progression of PD symptoms.

Amount: \$2,930,000

Role: Co-I

Research Core Pilot Award (PM&R UCD) Christiansen (PI) 07/01/14-06/30/15 Movement Strategies and Physical Activity after Dysvascular Amputation.

The goals of this project were to: 1) identify compensatory movement strategies for participants with diabetes after unilateral transtibial amputation using instrumented movement analysis and 2) determine the correlations between asymmetry in movement and; gait speed, overall physical activity, and self-reported disability.

Amount: \$10,000

Role: PI

The Foundation for PM&R

Christiansen (PI)

11/01/12-10/31/14

Early physical function during rehabilitation following dysvascular transtibial amputation.

The goals of this project were to: 1) examine common physical function measures and 2) characterize standard of care rehabilitation for patients with diabetes following dysvascular transtibial amputation.

Amount: \$30,000

Role: PI

Foundation for PT Research

Christiansen (PI)

01/01/11-06/30/13

Improving Function after Total Knee Arthroplasty with Weight-Bearing Biofeedback

The goal of this pilot study was to: determine the effects of the weight-bearing biofeedback intervention on WB asymmetry and functional task performance.

Amount: \$40,000

Role: PI

Bob Doctor Research Award Christiansen & Stevens-Lapsley (Pls) 01/01/09-06/1/12 Limb Loading Asymmetry with Total Knee Arthroplasty

The major goals of this study were to: 1) quantify limb-loading asymmetry during functional activities before and after TKA and 2) quantify the relationship between asymmetries in limb loading, functional mobility, and muscle strength before and after TKA.

Amount: \$8,000 Role: Co-PI

President's Teaching Scholars Program Christiansen (PI)

09/01/11-08/31/12

Student Perceptions of Classroom Response System Use in a DPT Curriculum

The goals of this project were to: 1) determine DPT student perception of classroom response system use in the course DPTR5101-Movement Science I, and 2) determine if perceptions differ based on student learning styles, age, and sex.

Amount: \$1500

Role: PI

R01 HD043770

Schenkman (PI)

04/01/08-03/31/11

Exercise, Physical Function, and Parkinson's Disease

The aim of the study was to determine whether targeted exercise intervention improves physical functional abilities in patients with mild to moderately severe Parkinson's disease.

Amount: \$1.125.000 Role: Study Coordinator

Academic Enrichment Fund UCD Schenkman (PI) 01/01/09-12/31/11

The major goal of this funded activity was to establish an interdisciplinary movement analysis

lab for use by researchers across the health sciences campus.

Amount: \$149,000

Role: Co-I

# **Continuing Education Workshops Conducted/Organized**

- 1. Christiansen CL, Kanai S, Elliott J, Delvecchio M, King R, Ott J, Carlson M, Lev G, McFadden R. Wooderson R. Gait: evidence-based examination and treatment of individuals across the continuum of care. University of Colorado Physical Therapy and UCHealth Conference, Aurora, CO; May 2019.
- 2. Fields TT, Mayer S, Coons D, Miller M, Christiansen CL. Agility training for Veterans with lower limb amputation. Annual Federal Advance Amputation Skills Training. Bethesda, MD; July 2017.
- 3. Christiansen CL, Marcus R, Drummond M. Unique Musculoskeletal System Considerations for the Older Adult. Continuing Education Presentation, APTA NEXT Conference, National Harbor, MD; June 2015.
- 4. Christiansen CL, James D, Stevens-Lapsley JE. Elevating Exercise Progression: Are You Optimizing Patient Outcomes? Continuing Education Workshop for Clinical Educators. Aurora, CO; May 2014.
- 5. Christiansen CL, Lev G, Luse D. Gait analysis & Intervention in Patients with LE Amputation. Continuing Education Seminar for the Colorado Acute and Rehabilitation Care Special Interest Group, Denver, CO; September 2012.
- 6. Christiansen CL. Clinical Gait Analysis. Continuing Education Workshop for the National University of Nicaragua. Granada, Nicaragua; January 2012.
- 7. Christiansen CL and Bodkin A. Clinical Gait Analysis Across the Lifespan. Continuing Education Workshop for the Colorado Chapter of the APTA. 41st Annual Spring Convention and Physical Therapist Expo. Arvada, CO; April 2011.

#### Membership in Scientific/Professional Organizations

American Society of Biomechanics (ASB), 2005-present

American Physical Therapy Association (APTA), 1996-present

# **Consultative and Advisory Positions Held**

Member, DPT Program Advisory Committee, University of Colorado, 2014-present

Member, Rehabilitation Sciences Advisory Committee, University of Colorado, 2014-present

Chair, Scientific Advisory Committee for the Foundation of Physical Therapy, 2019-2020

Member, Scientific Advisory Committee for the Foundation of Physical Therapy, 2013-2018

# **Community Service**

PT Volunteer, 9 Health Fair, Denver, CO, 2008-present

Local Coordinator, National Biomechanics Day for High School Students, 2016

PT Volunteer, National Western Stock Show Health Screening, 2015

PT Volunteer Pre-Participation Sports Screening, Windsor, CO, 2010-2012

#### **Professional Service**

Reviewer, American Physical Therapy Association Orthopedic Section Grants, 2020-present

Article Reviewer, Journal of Neurologic Physical Therapy, 2011-present

Article Reviewer, American Journal of Physical Medicine & Rehabilitation, 2011-present

Article Reviewer, Physical Medicine & Rehabilitation, 2009-present

Article Reviewer, Gait & Posture, 2009-present

Article Reviewer, Archives of Physical Medicine & Rehabilitation, 2007-present

Abstract Reviewer, American Society of Biomechanics Annual Meeting, 2017-2019

Session Moderator, Rocky Mountain Section of the American Society of Biomechanics, 2018

Article Reviewer, Journal of Geriatric Physical Therapy, 2011-2017

Abstract Reviewer, Rocky Mountain Section of the American Society of Biomechanics, 2016-17

Conference Co-Chair, Rocky Mountain Section of the American Society of Biomechanics, 2016

# <u>Services to the University/College/School on Committees/Councils/Commissions</u> <u>University of Colorado Denver</u>

Faculty Reviewer, Dean's Mentor and PhD Dissertation Awards, Graduate School, 2019

Member, University of Colorado Assessment Committee, 2011-present

Faculty Mentor, Geriatric Student Academic Community Space, 2008-2012

Facilitator, Interprofessional orientation, 2008-2012

#### School of Medicine

Member, School of Medicine Faculty Promotion Committee, 2019–present

Member, Rehabilitation Sciences PhD Program Admissions Committee, 2013-present

Member, DPT Hybrid Education Program Executive Steering Committee, Department of Physical Medicine & Rehabilitation, 2018-2019.

Member, Department of Physical Medicine & Rehabilitation Promotion and Appointment Committee, 2018-2019

Reviewer, Pre-K Grant Proposals, Colorado Clinical and Translational Sciences Institute (CCTSI) Pre-K program, 2019

Reviewer, Integrative Physiology of Aging T32 Training Program, 2018

Member, Rehabilitation Sciences Director Search Committee, 2014

Member, Physical Medicine & Rehabilitation Research Committee, 2010-2013

Faculty Mentor, Mentored Scholarly Activity, 2008-2011

Chair, Faculty Search Committee for Anatomy Faculty Position, 2009-2010

# Physical Therapy Program

Faculty Mentor, DPT Program, 2016-present

Chair, DPT Assessment Committee, 2015-present

Member, DPT Program Advisory Committee, 2014-present

Member, DPT Committee on Student Absences, 2008-present

Member, DPT Curriculum Committee, 2008-2017

Co-Coordinator of DPT Curriculum Electives, 2010-2015

Chair, DPT Curriculum Committee, 2010-2013

Chair, DPT Comprehensive Examination Task Force, 2011

Coordinator, DPT Geriatric Thread of Curriculum, 2008-2011

Member, DPT Patient Care Seminar Task Force, 2010

Chair, DPT Movement Analysis Task Force, 2008-2010

Chair, Faculty Search Committee for Musculoskeletal Faculty Position, 2009

#### University of Colorado Hospital

Member, Limb Restoration Clinic, 2017-present

# Eastern Colorado Healthcare System; Veteran's Administration

Reviewer, GRECC Advanced Geriatric Fellowship Program, 2020-present

Reviewer, National VA RR&D Scientific Merit Review Board (CDA), 2020-present

Reviewer, National VA RR&D Small Projects in Rehabilitation Research (SPiRE), 2019

Member, Amputation Clinic, 2017-current

#### **Honors and Awards**

Dean's Doctoral Mentoring Award. University of Colorado Anschutz Medical Campus. May 2018

Academy of Medical Educators "Excellence in Direct Teaching" Award. University of Colorado Anschutz Medical Campus. May 2012

#### **Continuing Education (last 5 years)**

Rehabilitation Research: Envisioning a Functional Future, NIH NICHD, Virtual; October 2020.

Annual Conference, ASB. Virtual; August 2020.

Communicating as a Leader, University of Colorado Human Resource Training, Online Training; July 2020.

Online Teaching Training, Association of College and University Educators, Online Training; March 2020.

Combined Section Meeting, APTA. Denver, CO; January 2020.

Team Science Workshop, CU Anschutz Department of Medicine. Denver, CO; November 2019.

Improving pain treatment with mindfulness, APTA. Online Course; November 2019.

Pain care innovation, APTA. Online Course; November 2019.

Team science, Department of Medicine, University of Colorado Anschutz Medical Campus. Aurora, CO; October 2019.

Modern study designs for pragmatic translational research, Adult and Child Consortium for Health Outcomes Research and Deliver Service & Center for Innovative Design/Analysis. Aurora, CO; June 2019.

Entering Mentoring, University of Colorado Graduate School. Aurora, CO; May 2019.

Combined Section Meeting, APTA. Washington, DC; January 2019.

Pain and healthcare in society: changing attitudes, behaviors, and health systems to address the opioid crisis, University of Colorado DPT Continuing Education. Aurora, CO; September 2018.

Annual Conference, ASB. Rochester, MN; August 2018.

Combined Section Meeting, APTA. New Orleans, LA; February 2018.

Updates in Diabetes management and Hypoglycemia prevention in the older adult, National VA GRECC Continuing Education, Willy Valencia, MD. Virtual Classroom, Washington, DC; January 2018.

High Impact Teaching Practices, Anschutz Medical Campus, L. Dee Fink, PhD. Denver, CO; September 2017.

Data Management Strategies, Office of Research Development and Education, University of Colorado, Wladimir Labeikovsky, PhD. Denver, CO; September 2017.

Movement System Impairment Syndromes of the Shoulder and Cervical Spine, Shirley Sahrmann, PT, PhD, FAPTA, University of Colorado, Marquette Challenge; September 2017.

The Aging Musculoskeletal System, APTA Continuing Education. Online Course; August 2017.

Getting Dissemination & Implementation Ideas Funded, Adult and Child Consortium for Health Outcomes Research and Delivery Science. Denver, CO; June 2017.

Combined Section Meeting, APTA. San Antonio, TX; February 2017.

Training in Grantsmanship for Rehabilitation Research, NIH. Charleston, SC; January 2017.

The Aging Neuromuscular System, APTA Continuing Education. Online Course; November 2016.

The Aging Integumentary System, APTA Continuing Education. Online Course; November 2016.

Annual Conference, ASB. Raleigh, NC; August 2016.

Rehabilitation Research at NIH: Moving the Field Forward. National Institutes of Health, Bethesda, MD; May 2016.

Combined Section Meeting, APTA. Anaheim, CA; February 2016.

Annual Conference, ASB. Columbus, OH; August 2015.

APTA NEXT Conference. National Harbor, MD; June 2015.

System Skills to Survive in a Changing Health Care Environment, presented by Alan Jette, PT, PhD, MPH. University of Colorado; March 2015.

Building Mentor-Mentee Relationships, presented by Christine Gilroy, MD, MSPH. University of Colorado Academy of Medical Educators; February 2015.

Combined Section Meeting, APTA. Indianapolis, IN; February 2015.

Examine Yourself: Are You Using the Best Evidence in Clinical Practice?, University of Colorado, Marquette Challenge; January 2015.

<u>Current Teaching Responsibilities in the Entry-level Physical Therapy Program (in sequence, by semester)</u>

## Fall Semester

DPTR 5101: Movement Science I, Course Coordinator, Lecturer, Lab Instructor DPTR 6102: Movement Science II, Course Coordinator, Lecturer, Lab Instructor

## **Student Mentoring**

#### Mentored Awards

Veterans Administration Advanced Geriatric Fellowship (2019). Awardee: Laura Swink, OTR. PhD.

Role: Primary Mentor, Post-doctoral Fellow.

Team Oriented Training Across the Translational Sciences Spectrum (TOTTS) TL-1 Post-Doctoral Award (2018-19). Awardee: Paul Kline, DPT, PhD.

Role: Primary Mentor, Post-doctoral Fellow.

Foundation for Physical Therapy Promotion of Doctoral Studies (PODS) I Scott C. Irwin Scholarship (2018). Awardee: Matthew Miller, DPT.

Role: Primary Mentor, PhD Student.

APTA Biomechanics Student Travel Award (2018). Awardee: Paul Kline, DPT, PhD.

Role: Primary Mentor, Post-doctoral Fellow.

Veterans Administration Advanced Geriatric Fellowship (2017). Awardee: Matthew Miller, DPT

Role: Primary Mentor, PhD Student.

Foundation for Physical Therapy Promotion of Doctoral Studies (PODS) I Scholarship (2017). Awardee: Matthew Miller, DPT.

Role: Primary Mentor, PhD Student.

Federal Physical Therapy Section Conference Scholarship (2017). Awardee: Matthew Miller, DPT.

Role: Primary Mentor, PhD Student.

## PhD Trainees

Chelsey Anderson, CPO (2017-present). Trainee Position: PhD Student, University of Colorado.

Current Position: Student Role: Primary Mentor

Matthew Miller, DPT (2015-2019). Trainee Position: PhD Student, University of Colorado.

Current Position: Post-doctoral Fellow (University of California, San Francisco)

Role: Primary Mentor

Brian Loyd, DPT (2012-18). Trainee Position: PhD Student, University of Colorado.

Current Position: Assistant Professor (University of Montana)

Role: Co-Mentor

Brecca Gaffney, MS, PhD (2013-17). Trainee Position: PhD Student, University of Denver.

Current Position: Post-doctoral Fellow (Washington University)

Role: Co-Mentor

Michael Bade, DPT, PhD (2008-12). Trainee Position: PhD Student, University of Colorado. Current Position: Associate Professor (University of Colorado).

Role: Co-Mentor

## Post-Doctoral Fellowship Trainees

Hope Davis-Wilson, PhD (2020-present). Trainee Position: Post-Doctoral Fellow, Rocky Mountain VA Medical Center and the University of Colorado.

Role: Primary Mentor

Rashelle Hoffman, PT, DPT, PhD, GCS (2020-present). Trainee Position: Post-Doctoral Fellow, Rocky Mountain VA Medical Center and the University of Colorado.

Role: Primary Mentor

Laura Swink, OTR, PhD (2019-present). Trainee Position: Post-Doctoral Fellow, Rocky Mountain VA Medical Center and the University of Colorado.

Role: Primary Mentor

Paul Kline, DPT, PhD (2017-present). Trainee Position: Post-Doctoral Fellow, University of Colorado.

Current Position: Assistant Professor (High Point University)

Role: Primary Mentor

Amanda Murray, DPT, PhD (2014-16). Trainee Position: Post-Doctoral Fellow, University of Colorado.

Current Position: Assistant Professor (University of Toledo)

Role: Primary Mentor

Roger Paxton, PhD (2013-16). Post-Doctoral Fellow, University of Colorado. Current Position: Clinical Research Coordinator (Children's Hospital Colorado)

Role: Co-Mentor

Joshua Winters, CSCS, PhD (2012-14). Trainee Position: Post-Doctoral Fellow, University of Colorado.

Current Position: Assistant Professor (University of Kentucky)

Role: Co-Mentor

# Dissertation Committee Member

Matthew Miller, DPT (2019). Rehabilitation Sciences. University of Colorado Brian Loyd, DPT, PhD (2018). Rehabilitation Sciences, University of Colorado Brecca Gaffney, MS, PhD (2017). Mechanical Engineering, University of Denver Michael Bade, DPT, PhD (2012). Clinical Sciences, University of Colorado