

Cory L. Christiansen, PT, PhD
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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. Judd DL, Cheuy VA, Forster JE, Christiansen CL, 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 Aug 8; Epub ahead of print. PMID: 31392991.
2. Kline PW, Murray AM, Miller MJ, Fields TT, Christiansen CL. 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.
3. Aljehani M, Madara K, Snyder-Mackler L, Christiansen CL, 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.
4. Miller MJ, Cook PF, Kline PW, Anderson CB, Stevens-Lapsley JE, Christiansen CL. Physical function and pre-amputation characteristics explain daily step count after dysvascular amputation. *PM & R*. 2019 Feb 6; Epub ahead of print. PMID: 30729727.
5. Kline PW, Melanson EL, Sullivan WJ, Blatchford PJ, Miller MJ, Stevens-Lapsley JE, Christiansen CL. 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.
6. Miller MJ, Jones J, Anderson CB, Christiansen CL. Factors influencing participation in physical activity after dysvascular amputation: a qualitative meta-synthesis. *Disabil Rehabil*. 2018; 27:1-10. PMID: 30261758; PMCID: PMC6437000.
7. Christiansen CL, 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.
8. Hall DA, Moore C, Comella C; SPARX Study Group (Berman B, Christiansen CL, 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.
9. Miller MJ, Magnusson DM, Lev G, Fields TT, Cook PF, Stevens-Lapsley JE, Christiansen CL. Relationships among perceived functional capacity, self-efficacy, and disability after dysvascular amputation. *PM & R*. 2018; 10(10): 1056-61. PMID: 29580940; PMCID: PMC6153084.
10. Gaffney B, Christiansen CL, 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.
11. Paxton RJ, Forster JE, Miller MJ, Geron KL, Stevens-Lapsley JE, Christiansen CL. A feasibility study for improved physical activity after total knee arthroplasty. *J Aging Phys Act*. 2018;26:7-13. PMID: 28338406. PMCID: PMC5654685.

12. 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.
13. Gaffney BM, Christiansen CL, 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.
14. Murray AM, Gaffney BM, Davidson BS, Christiansen CL. 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.
15. Gaffney BM, Christiansen CL, 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.
16. Ferris AE, Christiansen CL, 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.
17. Christiansen CL, 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.
18. Miller MJ, Stevens-Lapsley J, Fields TT, Coons D, Bray-Hall S, Sullivan W, Christiansen CL. Physical activity behavior change for older veterans after dysvascular amputation. *Contemp Clin Trials.* 2017;55:10-15. PMCID: PMC5360171.
19. Gaffney BM, Christiansen CL, 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.
20. Loyd BJ, Fields TT, Stephenson RO, Stevens-Lapsley JE, Christiansen CL. 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.
21. Paxton RJ, Sherk KA, Murray AM, Stevens-Lapsley JE, Christiansen CL. Physical activity, ambulation, and comorbidities in people with diabetes and lower-limb amputation. *J Rehabil Res Dev.* 2016;53(6):1069-78. PMCID: PMC5474964.
22. Gaffney BM, Murray AM, Christiansen CL, 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.
23. Judd DL, Winters JD, Stevens-Lapsley JE, Christiansen CL. 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.
24. Gaffney BM, Harris MD, Davidson BS, Stevens-Lapsley JE, Christiansen CL, 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.

25. Christiansen CL, 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. PMID: PMC4643436.
26. Paxton RJ, Melanson EL, Stevens-Lapsley JE, Christiansen CL. Physical activity after total knee arthroplasty: a critical review. *World J Orthop*. 2015;6(8):614-22. PMID: PMC4573505.
27. Christiansen CL, 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. PMID: PMC4558346.
28. Christiansen CL, 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. PMID: PMC4523451.
29. Winters JD, Christiansen CL, Stevens-Lapsley JE. Preliminary Investigation of Rate of Torque Development Deficits Following Total Knee Arthroplasty. *The Knee*. 2014; 21(2):382-6. PMID: PMC3980026.
30. Christiansen CL, 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. PMID: PMC3529981.
31. Christiansen CL, 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. PMID: PMC4526185.
32. Schenkman ML, Ellis T, Christiansen CL, 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. PMID: PMC3169785
33. Christiansen CL, 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. PMID: PMC2948025.
34. Hsieh CT, Christiansen CL. The effect of approach on spike jump height for female volleyball players. *Int J Sports Sci Coach*. 2010;5:373-380.
35. Christiansen CL, Schenkman ML, McFann K, Wolfe P, Kohrt WM. Walking economy in people with Parkinson's disease. *Mov Disord*. 2009;24:1481-1487. PMID: PMC2744295.
36. Christiansen CL. The effects of hip and ankle stretching on gait function of older people. *Arch Phys Med Rehabil*. 2008;89:1421-1428. PMID: 18674977.
37. 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

1. Christiansen CL, 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. (accepted)
2. Cheuy VA, Thomsen P, Lewis S, Edwards E, Christensen J, Bade MJ, Zeni JA, Christiansen CL. 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. (accepted)
3. Kline PW, Christiansen CL, 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. (accepted)
4. Thomsen P, Christensen J, Gritton C, Christiansen CL, 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. (accepted)
5. Miller MJ, Morris MA, Magnusson DM, Putnam K, Cook PF, Schenkman ML, Christiansen CL. 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. (accepted)
6. Miller MJ, Blankenship JM, Kline PW, Melanson EL, Christiansen CL. 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. (accepted)
7. Anderson C, Miller MJ, Murray AM, Fields TT, So N, Christiansen CL. 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.
8. Kline PW, Christiansen CL, Hager ER, Mañago MM. Proximal frontal plane movement compensations during gait and step-ups in people with multiple sclerosis [poster presentation]. *9th International Symposium on Gait and Balance in Multiple Sclerosis*. Aurora, CO; September 2019.
9. Ferris AE, Christiansen CL, 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.
10. Blankenship J, Christiansen CL, 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.
11. Anderson CM, Wurdeman SR, Miller M, Colborn K, Stoneback J, Christiansen CL, Kittleson 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; Chicago, IL; March 2019.

12. Kline PW, Miller MJ, Murray AM, So NF, Christiansen CL. 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.
13. Miller MJ, Cook PF, Kline PW, Anderson CB, Christiansen CL. Physical function and pre-amputation characteristics explain walking behavior after dysvascular amputation. [platform presentation] *American Physical Therapy Association Combined Sections Meeting*. Washington, D.C.; February 2019.
14. Miller MJ, Morris MA, Anderson CB, Putnam K, Magnusson DM, Christiansen CL. 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.
15. 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.
16. Anderson C, Miller MJ, Murray AM, Fields TT, So N, Christiansen CL. Falls and physical activity after dysvascular transtibial amputation [podium presentation]. *American Orthotic and Prosthetic Association Assembly*. Vancouver, BC; September 2018.
17. 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.
18. Kline PW, Murray AM, Miller MJ, Fields TT, Christiansen CL. Motor Learning Response to Split-Belt Treadmill Walking after Non-Traumatic Amputation [poster presentation]. *American Society of Biomechanics Annual Meeting*. Rochester, MN; August 2018.
19. Miller MJ, Magnusson DM, Froetscher L, Lev G, Fields TT, Cook PF, Stevens-Lapsley JE, Christiansen CL. Relationships between functional capacity, walking behavior, and disability after dysvascular amputation [poster presentation]. *APTA Combined Sections Meeting*. New Orleans, LA; Feb 2018.
20. Bade MJ, Cheuy V, Loyd B, Jaeckel M, Zeni J, Christiansen CL, 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.
21. Kline PW, Melanson EL, Sullivan W, Blatchford PJ, Miller MJ, Stevens-Lapsley JE, Christiansen CL. 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.
22. Miller MJ, Magnusson DM, Lev G, Fields TT, Cook PF, Stevens-Lapsley JE, Christiansen CL. 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.
23. Cheuy VC, Loyd B, Bade MJ, Christiansen CL, 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.

24. Batrouny NA, Gaffney BM, Simons CJ, Christiansen CL, 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.
25. Simmons CJ, Christiansen CL, 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.
26. Ferris AE, Christiansen CL, 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.
27. Murphy SP, Ferris AE, Heise GD, Christiansen CL, 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.
28. Rentuma G, Ferris AE, Kellems VA, Heise GD, Christiansen CL, 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.
29. Batrouny NA, Gaffney BM, Simons CJ, Christiansen CL, 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.
30. 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 utility trial [poster presentation]. *Movement Disorders Society International Congress*. Vancouver, BC; June 2017.
31. Miller MJ, Paxton RJ, Murray AM, Stevens-Lapsley JE, Sherk KA, Poiniski-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.
32. Davidson M, Desmond B, Christiansen CL, Davidson BS. Effects of prophylactic ankle restriction on lower extremity kinetics during a fencing lunge [poster presentation]. American Society of Biomechanics Rocky Mountain Chapter Meeting. Estes Park, CO; April 2017.
33. Miller MJ, Cheuy V, Murray AM, Poiniski-McCoy SB, Gaffney BM, Davidson BS, Christiansen CL. 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.
34. Murray AM, Gaffney BM, Cheuy V, Miller MJ, Zugalla SP, Davidson BS, Christiansen CL. Trunk and hip compensations during turning in individuals with transtibial amputation [podium presentation]. *APTA Combined Sections Meeting*. San Antonio, TX; Feb 2017.
35. Miller MJ, Murray AM, Gaffney BM, Cheuy V, Davidson BS, Christiansen CL. Frontal plane movement adaptations for individuals with dysvascular transtibial amputation [podium presentation]. *Annual Meeting of the American Society of Biomechanics*. Raleigh, NC; August 2016.

36. Gaffney BM, Christiansen CL, 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.
37. Murray AM, Gaffney BM, Cheuy V, Davidson BS, Christiansen CL. Trunk compensations in individuals with transtibial amputation during step ascent [poster presentation]. *Annual Meeting of the American Society of Biomechanics*. Raleigh, NC; August 2016.
38. Gaffney BM, Christiansen CL, 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.
39. Ferris AE, Smith JD, Christiansen CL, 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.
40. Myers CA, Shelburne KB, Laz PJ, Judd DL, Christiansen CL, 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.
41. Judd DL, Winters JD, Stevens-Lapsley JE, Christiansen CL. 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.
42. Paxton RJ, Murray AM, Larson MA, Schultz M, Christiansen CL. Characterization of physical activity levels following dysvascular transtibial amputation [podium presentation]. *APTA Combined Sections Meeting*. Anaheim, CA; February 2016.
43. Murray AM, Gaffney BM, Davidson BS, Christiansen CL. Stair climb performance and movement compensations in patients with diabetes and transtibial amputation [podium presentation]. *APTA Combined Sections Meeting*. Anaheim, CA; February 2016.
44. Stolper S, Reeder B, Christiansen CL. Exploring the patient rehabilitation experience after lower limb amputation: a qualitative analysis [poster presentation]. *APTA Combined Sections Meeting*. Anaheim, CA; February 2016.
45. Loyd BJ, Fields TT, Stephenson RO, Stevens-Lapsley JE, Christiansen CL. Modifiable gait parameters associated with functional mobility in lower limb amputees [poster presentation]. *AAPM&R Annual Assembly*. Boston, MA; October 2015.
46. Gaffney BM, Christiansen CL, Davidson BS. Identification of compensatory movement patterns in patients with amputation using separation of angular momentum [poster presentation]. *Annual Meeting of the American Society of Biomechanics*. Columbus, OH; August 2015.
47. Myers CA, Laz PJ, Shelburne KB, Judd DL, Christiansen CL, Stevens-Lapsley JE, Davidson BS. Simulated hip abductor strengthening reduces peak joint contact forces during stair descent in patients with total hip arthroplasty [poster presentation]. *Annual Meeting of the American Society of Biomechanics*. Columbus, OH; August 2015.

48. Simons CJ, Christiansen CL, Stevens-Lapsley JE, Shelburne KB, Davidson BS. A support vector machine based on vertical ground reaction force to supplement observational gait evaluation [podium presentation]. *Summer Biomechanics, Bioengineering and Biotransport Conference*. Snowbird Resort, UT; June 2015.
49. Gaffney BM, Johnston WM, Christiansen CL, Stevens-Lapsley JE, Shelburne KB, Davidson BS. Movement analysis based on the separation of angular momentum: Gait progression and segment rotation in patients with TKA [poster presentation]. *Summer Biomechanics, Bioengineering and Biotransport Conference*. Snowbird Resort, UT; June 2015.
50. Gaffney BM, Christiansen CL, Shelburne KB, Davidson BS. A description of segmental angular momentum synergies using independent component analysis during gait [poster presentation]. *Summer Biomechanics, Bioengineering and Biotransport Conference*. Snowbird Resort, UT; June 2015.
51. Gaffney BM, Johnston WM, Bade MJ, Stevens-Lapsley JE, Christiansen CL, Davidson BS. Whole-body angular momentum differences after unilateral TKA [poster presentation]. *ACSM Annual Meeting*, San Diego, CA; May 2015.
52. Gaffney B, Christiansen CL, Davidson BS. Identification of movement strategies using angular momentum separation [podium presentation]. *Rocky Mountain Regional American Society of Biomechanics Meeting*. Estes Park, CO; April 2015.
53. Simons CJ, Christiansen CL, Stevens-Lapsley JE, Shelburne KB, Davidson BS. A support vector machine to supplement observational gait evaluations [poster presentation]. *Rocky Mountain Regional American Society of Biomechanics Meeting*. Estes Park, CO; April 2015.
54. Gaffney BM, Harris MD, Stevens-Lapsley JE, Christiansen CL, Shelburne KB. Multi-joint effects of TKA during high-demand tasks [podium presentation]. *Annual Meeting of the Gait and Clinical Movement Analysis Society*. Portland, OR; March 2015.
55. Christiansen CL, Lev G, Fields TT, Stephenson R. Physical rehabilitation factors and functional mobility changes after dysvascular amputation [poster presentation]. *APTA Combined Sections Meeting*. Indianapolis, IN; February 2015.

Non-Peer Reviewed Publications

1. Christiansen CL. Impaired Joint Mobility (Chapter 13). In: Guccione A, Wong R, Avers D, ed. *Geriatric Physical Therapy*, 3rd Edition. Philadelphia: Elsevier; 2011.

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

1. Christiansen CL. Gait analysis [invited presentation]. Resident Didactic Training, Department of Physical Medicine & Rehabilitation, University of Colorado, Aurora, CO; March 2019.
2. Christiansen CL. Optimizing physical activity outcomes for people with dysvascular lower limb amputation [Keynote presentation]. Hanger Educational Fair, Las Vegas, NV; Feb 2019.
3. Christiansen CL. VA rehabilitation research [invited presentation]. Comprehensive Opportunities in Rehabilitation Research Training, Washington University, St. Louis, MO; May 2018.
4. Christiansen CL. 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.

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 & Corcos (PIs) 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.

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 Physical Therapy Association (APTA), 1996-present

American Society of Biomechanics (ASB), 2005-present

Consultative and Advisory Positions Held

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

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

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

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

Community Service

Scientific Reviewer, Small Projects in Rehabilitation Research (SPIRE), Department of Veterans Affairs Office of Research and Development's Rehabilitation Research and Development Service (RR&D), 2019

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

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

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

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

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

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

Services to the University/College/School on Committees/Councils/Commissions

University of Colorado Denver

Member, Department of PM&R Executive Committee on Hybrid DPT Education, 2018 - Present

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 - 2009, 2010 - 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-current

Eastern Colorado Healthcare System; Veteran's Administration

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)

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 Labeikovskiy, 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.

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

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: Student
Role: Primary Mentor

Brian Loyd, DPT (2012-18). Trainee Position: PhD Student, University of Colorado.
Current Position: Post-doctoral Fellow (University of Utah)
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: Assistant Professor (University of Colorado).
Role: Co-Mentor

Post-Doctoral Fellowship Trainees

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.
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, Un