



Physical Therapy

SCHOOL OF MEDICINE

UNIVERSITY OF COLORADO
ANSCHUTZ MEDICAL CAMPUS

Curriculum Vitae | Cory L Christiansen, PT, PhD
March 2023

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Department of Physical Medicine & Rehabilitation, 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, Summa Cum Laude	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

Develop and test novel interventions to help older adults with movement dysfunction better self-manage their health through movement.

Peer Reviewed Publications

1. Davis-Wilson HC, Christiansen CL, Gaffney BMM, Lev G, Enabulele E, Hoyt C, Stoneback JW. Changes in Lower Extremity Joint Moments One-Year Following Osseointegration in Individuals with Transfemoral Lower-Limb Amputation: A Case Series. *Clin Biomech*. 2023; accepted.
2. Mañago MM, Cohen ET, Cameron M, Christiansen CL, Bade MJ. Reliability, validity, and responsiveness of the Patient-Specific Functional Scale for measuring mobility-related goals in people with multiple sclerosis. *J Neurol Phys Ther*. 2023; Publish Ahead of Print. doi:10.1097/NPT.0000000000000439
3. Gaffney BMM, Davis-Wilson HC, Christiansen CL, Awad ME, Lev G, Tracy J, Stoneback JW. Osseointegrated prostheses improve balance and balance confidence in individuals with unilateral transfemoral limb loss. *Gait Posture*. 2023 Feb;100:132-138. PMID: 36521257.
4. Patterson CG, Joslin E, Gill AB, Spigle W, Nemet T, Chahine L, Christiansen CL, Melanson E, Fantuzzi G, Kohrt WM, Mancini M, Josbeno D, Balfany K, Griffith G, Dunlap M, Lamotte G, Suttman E, Larson D, Branson C, McKee KE, Goelz L, Poon C, Tilley B, Kang UJ, Tanse MG, Luthra N, Tanner CM, Haus JM, McFarland NR, Gonzalez-Latapi P, Foroud T, Motl R, Schwarzchild MA, Simuni T, Marek K, Naito A, Lungu C, Corcos DM, and the SPARX3-PSG Investigators. Study in Parkinson's disease of exercise phase 3 (SPARX3): study protocol for a randomized controlled trial. *Trials*. 2022; 23(1):855. PMID: 36203214. PMCID: PMC9535216.
5. Davis-Wilson HC, Christiansen CL, Gaffney BMM, Lev G, Enabulele E, Stoneback JW. Improvements in disability and function in people with lower-limb amputation one-year following prosthesis osseointegration. *Prosthet Orthot Int*. Sept 2022. In Press. PMID: 36701203.
6. Gaffney BMM, Vandenberg NW, Davis-Wilson HC, Christiansen CL, Roda GF, Schneider G, Johnson T, Stoneback JW. Biomechanical Compensations during a Stand-to-Sit Maneuver using Transfemoral Osseointegrated Prostheses: A Case Series. *Clin Biomech*. 2022, 98: 105715. PMID: 35839740.
7. Kline PW, Davis-Wilson HC, So NF, Fields TT, Christiansen CL. Feasibility of repeated session error-augmentation gait training for people with non-traumatic transtibial amputation. *Prosthet Orthot Int*. 2022 Dec 1;46(6):553-559. PMID: 36037273.
8. Anderson CB, Fatone S, Mañago MM, Swink LA, Hager ER, Kittelson AJ, Christiansen CL, Magnusson DM. Improving shared decision-making for prosthetic care: a qualitative needs assessment of prosthetists and new lower-limb prosthesis users. *Prosthet Orthot Int*. 2022 May 25. doi: 10.1097/PXR.0000000000000142. Epub ahead of print. PMID: 35622457.

9. Anderson CB, Kittelson AJ, Wurdeman SR, Miller MJ, Stoneback JW, Christiansen CL, Magnusson DM. Understanding decision-making in prosthetic rehabilitation by prosthetists and people with lower-limb amputation: a qualitative study. *Disabil Rehabil.* 2022; 1-10. doi:10.1080/09638288.2022.2037745. PMID: 35389313. PMCID: PMC9537359.
10. Miller MJ, Hoffman R, Swink L, Barnes D, Christiansen CL. Post-amputation cognitive impairment is related to worse perceived physical function among middle age and older prosthesis users. *Arch Phys Med Rehabil.* 2022; doi:10.1016/j.apmr.2021.12.025. PMID: 35123974. PMCID: PMC9536024.
11. Kline PW, Christiansen CL, Judd DL, Mañago MM. Clinical utility of the Trendelenburg test in people with Multiple Sclerosis. *Physiother Theory Pract.* 2022; 1-8. doi:10.1080/09593985.2022.2030446. PMID: 35073816.
12. Mañago MM, Kline PW, Harris-Love MO, Christiansen CL. The validity of the single-leg heel raise test in people with Multiple Sclerosis: a cross-sectional study. *Front Neurol.* 2021; 12:650297. PMID: 34354656. PMCID: PMC8333614.
13. Mañago MM, Swink LA, Hager ER, Gisbert R, Earhart GM, Christiansen CL, Schenkman ML. The impact of COVID-19 on community-based exercise classes for people with Parkinson's disease. *Phys Ther.* 2021; 2021 Nov 1; 101(11). PMID: 34473303.
14. Christensen JC, Quammen DL, Rigby JH, Christiansen CL, Stevens-Lapsley JE. Trunk movement compensation identified by inertial measurement units is associated with deficits with physical performance, muscle strength and functional capacity in people with hip osteoarthritis. *Clin Biomech.* 2021; Aug; 88:105436. PMID: 34364100.
15. Kline PW, Christiansen CL, Hager ER, Alvarez E, Mañago MM. Movement compensations during a step ascent task are associated with stair climbing performance in people with multiple sclerosis. *Gait Posture.* 2021; 87:27-32. PMID: 33878510. PMCID: PMC8441993.
16. Anderson CB, Wurdeman SR, Miller MJ, Christiansen CL, Kittelson AJ. Development of a physical mobility prediction model to guide prosthetic rehabilitation. *Prosthet Orthot Int.* 2021; 45(3):268-275. PMID: 33840752. PMCID: PMC8422855.
17. Miller MJ, Mealer ML, Cook PF, Kittelson AJ, Christiansen CL. Psychometric assessment of the Connor-Davidson Resilience Scale for people with lower-limb amputation. *Phys Ther.* 2021; Apr 4;101(4):pzab002. PMID: 33421074. PMCID: PMC8023555.
18. Miller MJ, Blankenship JM, Kline PW, Melanson EL, Christiansen CL. Patterns of sitting, standing, and stepping after lower limb amputation. *Phys Ther.* 2021; 101(2):pzaa212. PMID: 33336706; PMCID: PMC7921296.
19. Miller MJ, Cook PF, Magnusson DM, Morris MA, Schenkman ML, Christiansen CL. Self-efficacy and social support are associated with disability for ambulatory prosthesis users after lower limb amputation. *PM & R.* 2021; 13(7):737-745. PMID: 32926546; PMCID: PMC7873129.
20. Miller MJ, Morris MS, Magnusson DM, Putnam K, Cook PF, Schenkman ML, Christiansen CL. Psychosocial factors influence physical activity after dysvascular amputation: a

convergent mixed-methods study. *PM & R*. 2021; 13(7):737-745. PMID: 32936512; PMCID: PMC7873162.

21. Anderson CB, Miller MJ, Murray AM, Fields TT, So NF, Christiansen CL. Falls after dysvascular transtibial amputation: a secondary analysis of falling characteristics and reduced physical performance. *PM & R*. 2021;13(1):19-29. PMID: 32249517; PMCID: PMC7541404.
22. Christensen JC, Kline PW, Murray AM, Christiansen CL. Movement asymmetry during low and high demand mobility tasks after dysvascular transtibial amputation. *Clin Biomech*. 2020; 80:105102. PMID: 32768801.
23. Kline PW, Murray AM, Miller MJ, So N, Fields TT, Christiansen CL. 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.
24. Miller MJ, Mealer ML, Cook PF, So N, Morris MA, Christiansen CL. Qualitative Analysis of Resilience Characteristics of People With Unilateral Transtibial Amputation. *Disability and Health*. 2020; Oct;13(4):100925. PMID: 32312526; PMCID: PMC7541554.
25. Christiansen CL, 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; 12(10):957-966. PMID: 32248638. PMCID: PMC8229675.
26. Mañago MM, Kline PW, Alvarez E, Christiansen CL. Trunk and pelvis movement compensation in people with MS: relationships to muscle function and gait performance. *Gait Posture*. 2020; 78:48-53. PMID: 32200163.
27. Bade MJ, Christensen JC, Zeni JA, Christiansen CL, 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.
28. Ferris AE, Christiansen CL, 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.
29. 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; 99(11):1453-1460. PMID: 31392991.
30. 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; PMCID: PMC6880787

31. 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.
32. 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; 11(10):1050-1058. PMID: 30729727. PMCID: PMC8259321.
33. 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.
34. 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.
35. 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.
36. 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.
37. 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.
38. 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.
39. Paxton RJ, Forster JE, Miller MJ, Gerron 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.
40. 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.

41. 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.
42. 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.
43. 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.
44. 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.
45. 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.
46. 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.
47. 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.
48. 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.
49. 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.
50. 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.
51. 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.
52. 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.

53. 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. PMCID: PMC4643436.
54. 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. PMCID: PMC4573505.
55. 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. PMCID: PMC4558346.
56. 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. PMCID: PMC4523451.
57. 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. PMCID: PMC3980026.
58. Christiansen CL, Bade MJ, Weitzkamp 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.
59. 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. PMCID: PMC4526185.
60. 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. PMCID: PMC3169785
61. 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. PMCID: PMC2948025.
62. 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.
63. Christiansen CL, Schenkman ML, McFann K, Wolfe P, Kohrt WM. Walking economy in people with Parkinson's disease. *Mov Disord*. 2009;24:1481-1487. PMCID: PMC2744295.
64. 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.
65. 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)

1. Anderson CB, Fatone S, Mañago MM, Swink LA , Kittelson AJ, Magnussen DM, Christiansen, CL. Utilizing Stakeholder Engagement in the Development of a Patient Decision Aid for the First Prosthesis Design after Lower Limb Amputation [Poster Presentation]. *Academy Health Annual Research Meeting*. Seattle, WA. June 2023. [accepted]
2. Swink LA, Hoffman R, Kline PW, Miller MJ, Hager ER, Larson C, Binder K, Christiansen CL. Life-space as a Contributor to Daily Step Count for Veterans with End-Stage Knee Osteoarthritis [Poster Presentation]. *American Occupational Therapy Association INSPIRE 2023 Annual Meeting*. Kansas City, MO. April 2023. [accepted]
3. Anderson CB, Fatone S, Mañago MM, Swink LA , Kittelson AJ, Magnussen DM, Christiansen, CL. Development and alpha testing of a patient shared decision aid for prosthesis design after lower-limb amputation [platform presentation]. *International Society of Orthotists and Prosthetists, 19th World Congress*. Guadalajara, Mexico. April 2023. [accepted]
4. Bade MJ, Cheuy V, 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]. *World Congress on Osteoarthritis OARSI*. Denver, CO. March 2023. [accepted]
5. Griffin NA, Awad ME, Davis-Wilson H, Gaffney BM, Christiansen CL, Enabulele E, Lev G, Stoneback JW. Outcomes of osseointegrated transfemoral prosthesis implantation limb reconstruction after radical amputation for lower extremity tumors [Poster Presentation]. *Orthopaedic Research Society 2023 Annual Meeting*. Dallas, TX. February 2023.
6. Vandenberg N, Stoneback JW, Christiansen CL, Awad ME, Melton DH, Wheatley B, Gaffney BMM. Predicting Effects of Muscle Strength Changes on Joint Loading after Transfemoral Osseointegrated Prostheses [Poster Presentation]. *Orthopaedic Research Society 2023 Annual Meeting*. Dallas, TX. February 2023.
7. Gaffney BMM, Roda GF, Carballido-Gamio J, Awad ME, Christiansen CL, Carpenter RD, Melton DH, Strickland CD, Stoneback JW. Feasibility of Quantitative Magnetic Resonance Imaging in Patients with Transfemoral Osseointegrated Prostheses [Poster Presentation]. *Orthopaedic Research Society 2023 Annual Meeting*. Dallas, TX. February 2023.
8. Judd D, Lovely M, Constance C, Biondi E, Christiansen CL, Stevens-Lapsley JE. Functional Strength Integration Techniques for Total Hip Arthroplasty Rehabilitation with Veterans: A Randomized Controlled Trial [platform presentation]. *Combined Sections Meeting of the American Physical Therapy Association*. San Diego, CA. February 2023.
9. Davis-Wilson HC, Stoneback JW, Gaffney BMM, Lev G, Bernhardt L, Mcfadden R, Baggett K, Awad ME, Christiansen CL. Physical activity and step cadence increase one-year following prosthesis osseointegration in people with lower-limb amputation [platform presentation]. *Combined Sections Meeting of the American Physical Therapy Association*. San Diego, CA. February 2023.

10. Sawyer E, Hansen S, Delapp J, Wilson D, Christiansen CL. A collaborative approach to bringing Interprofessional Education into a real-world clinical environment [platform presentation]. *Annual Academy of Medical Educators Education and Innovation Symposium*. Aurora, CO. March 2022. Also presented as poster at the *APTA Educational Leadership Conference*. Milwaukee, WI. October 2022.
11. Awad ME, Davis-Wilson HC, Gaffney BMM, Christiansen CL, Melton D, Stoneback JW. Defining the minimal clinically important difference of health-related quality of life measures following osseointegrated transfemoral prosthesis implantation [platform presentation]. *University of Colorado 4th Annual Orthopedic Research Symposium & D'Ambrosia Diversity Lectureship*; Aurora, CO. October 2022.
12. Awad ME, Davis-Wilson HC, Gaffney BMM, Christiansen CL, Melton D, Stoneback JW. The predictive ability of four frailty indices to predict mortality and complications following lower-limb amputation [poster presentation]. *University of Colorado 4th Annual Orthopedic Research Symposium & D'Ambrosia Diversity Lectureship*; Aurora, CO. October 2022.
13. Awad ME, Davis-Wilson HC, Gaffney BMM, Christiansen CL, Melton D, Stoneback JW. Osseointegrated transfemoral prostheses implantation improve patient-reported outcomes in transfemoral amputation: a stratified meta-analysis [poster presentation]. *University of Colorado 4th Annual Orthopedic Research Symposium & D'Ambrosia Diversity Lectureship*; Aurora, CO. October 2022.
14. Awad ME, Davis-Wilson HC, Gaffney BMM, Christiansen CL, Melton D, Stoneback JW. How comprehensive and efficient are patient-reported outcomes for osseointegrated prosthesis implantation in patients with lower-limb loss [poster presentation]? *University of Colorado 4th Annual Orthopedic Research Symposium & D'Ambrosia Diversity Lectureship*; Aurora, CO. October 2022.
15. Awad ME, Davis-Wilson HC, Gaffney BMM, Christiansen CL, Melton D, Stoneback JW. Limb reconstruction with osseointegrated transfemoral prosthesis implantation following radical amputation for lower extremity tumors [poster presentation]. *University of Colorado 4th Annual Orthopedic Research Symposium & D'Ambrosia Diversity Lectureship*; Aurora, CO. October 2022.
16. Awad ME, Davis-Wilson HC, Gaffney BMM, Christiansen CL, Melton D, Stoneback JW. What is the correlation between patient-reported outcome measures and patient satisfaction following osseointegrated transfemoral prosthesis implantation [poster presentation]? *University of Colorado 4th Annual Orthopedic Research Symposium & D'Ambrosia Diversity Lectureship*; Aurora, CO. October 2022.
17. Awad ME, Davis-Wilson HC, Gaffney BMM, Christiansen CL, Melton D, Stoneback JW. Minimal clinically important difference for change in case-specific patient reported outcome measures following osseointegrated transfemoral prostheses implantation [poster presentation]. *University of Colorado 4th Annual Orthopedic Research Symposium & D'Ambrosia Diversity Lectureship*; Aurora, CO. October 2022.
18. Shaw K, Awad ME, Gaffney BMM, Christiansen CL, Melton D, Stoneback JW. Patient-reported outcomes of pain and related quality of life one-year following osseointegration in patients with lower-extremity amputations [poster presentation]. *University of Colorado 4th*

Annual Orthopedic Research Symposium & D'Ambrosia Diversity Lectureship; Aurora, CO. October 2022.

19. Anderson CB, Fatone S, Mañago MM, Swink LA, Kittelson AJ, Magnusson DM, Christiansen CL. Utilizing a Novel Patient Roadmap Model for Developing a Shared Decision Support Tool in the Process of Lower Limb Prosthesis Design [poster presentation]. *Society for Medical Decision Making 44th Annual North American Meeting*; Seattle, WA. October 2022.
20. Swink, LA, Mealer ML, Miller MJ, Anderson CB, Cook PF, Stevens-Lapsley JE, Christiansen CL. Therapist perspectives on adoption of a telehealth self-management walking program for individuals with lower limb amputation [poster presentation]. *VA Research Days*; Aurora, CO. September 2022.
21. Gaffney BM, Vandenberg, NW, Davis-Wilson HC, Christiansen CL, Carpenter RD, Stoneback JW. Associations between hip joint biomechanics and patient-reported outcomes in civilian adults after transfemoral prosthesis osseointegration [platform presentation]. *Military Health System Research Symposium*. Kissimmee, FL. September 2022. [accepted]
22. Gaffney BM, Davis-Wilson HC, Christiansen CL, Lev G, Stoneback JW. Transfemoral osseointegrated prostheses improve balance during quiet standing [platform presentation]. *9th World Congress of Biomechanics*. Taipei, Taiwan. July 2022.
23. Bade MJ, Cheuy V, 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]. *Academy of PT Research Retreat on Rehabilitation Technology*. Beverly, MA; July 2022.
24. Awad ME, Davis-Wilson HC, Gaffney BM, Christiansen CL, Melton D, Stoneback JW. Bone-Anchored Leg Prostheses Improve Patient-Reported Outcomes in Transfemoral Amputation: A Stratified Meta-analysis [poster presentation]. *31st Annual meeting of Limb Lengthening and Reconstruction Society*; Portland, OR; July 2022.
25. Awad ME, Davis-Wilson HC, Gaffney BM, Christiansen CL, Melton D, Stoneback JW. The Sensitivity and Specificity of Frailty Indices in Predicting the Mortality and Complications following Lower-Limb Amputation [poster presentation]. *31st Annual meeting of Limb Lengthening and Reconstruction Society*; Portland, OR; July 2022.
26. Hoffman RM, Davis-Wilson HC, Balfany K, Kline PW, Juarez-Colunga E, Melanson E, Christiansen CL. Duration of Medium Cadence Stepping Bouts is Linked with Disability and Functional Mobility for People with End-Stage Knee Osteoarthritis [poster presentation]. *6th International Conference on Ambulatory Monitoring of Physical Activity and Movement*. Keystone, CO; June 2022.
27. Griffith G, Lamotte G, Suttman E, Fan P, Nikolich J, Springman V, Joslin E, Balfany K, Kohrt WM, Christiansen CL, Melanson EK, Josbeno DA, Chahine L, Patterson C, Corcos DM. Chronotropic incompetence during maximal cardiopulmonary exercise testing in individuals with early Parkinson's disease [poster presentation]. *34th Annual Parkinson Study Group (PSG) Symposium*. Phoenix, AZ; June 2022.

28. Davis-Wilson HC, Christiansen CL, Gaffney BM, Lev G, Enabulele E, Schneider G, Johnson T, Stoneback JW. Changes in gait biomechanics one-year following osseointegration in people with transfemoral amputation [poster presentation]. *American College of Sports Medicine 2022 Annual meeting*. San Diego, CA; June 2022.
29. Swink LA, Mealer ML, Miller MJ, Anderson CB, Cook PF, Stevens-Lapsley JE, Christiansen CL. Telehealth walking self-management for individuals with lower limb amputation: A qualitative study of barriers and facilitators to adoption [poster presentation]. *American Occupational Therapy Association INSPIRE 2022 Annual meeting*. San Antonio, TX. April 2022.
30. Gaffney BMM, Vandenberg NW, Davis-Wilson H, Christiansen CL, Schneider G, Johnson T, Stoneback JW. Changes in Hip Muscle Force Contributions during Stand-to-Sit Transition after Osseointegrated Amputation [platform presentation]. *Orthopaedic Research Society 2022 Annual Meeting*. Tampa, FL; February 2022.
31. Davis-Wilson HC, Christiansen CL, Gaffney BMM, Lev G, Enabulele E, Hoyt C, Stoneback JW. Patient-reported outcomes and Timed Up and Go following osseointegration in people with lower-limb amputation [platform presentation]. *Combined Sections Meeting of the American Physical Therapy Association*. San Antonio, TX; February 2022.
32. Miller MJ, Hoffman R, Swink L, Stoddard R, Barnes D, Christiansen CL. Cognitive impairment and predictors of physical function among middle and older aged prosthesis users [platform presentation]. *Combined Sections Meeting of the American Physical Therapy Association*. San Antonio, TX; February 2022.
33. Hinrichs L, Capin J, Judd D, Forster J, Samelson M, McCandless M, Peters A, Christiansen CL, Stevens-Lapsley JL. Daily step count is not associated with gait symmetry in individuals with end-stage hip osteoarthritis [poster presentation]. *Combined Sections Meeting of the American Physical Therapy Association*. San Antonio, TX; February 2022.
34. Quammen D, Christensen J, Rigby J, Christiansen CL, Stevens-Lapsley JL. Trunk movement compensation is associated with physical performance measures and fatigue deficits in hip osteoarthritis [poster presentation]. *American College of Rheumatology Convergence Annual Conference*. Online; November 2021.
35. Anderson CB, Fatone S, Mañago MM, Swink LA, Hager ER, Kittelson AJ, Christiansen CL, Magnusson DM. Exploring Decisional Needs of Prosthetists and Patients With Lower Limb Amputation for Prosthesis Design: A Qualitative Study to Inform Shared Decision-Making Resources [platform presentation]. *International Society of Orthotists and Prosthetists, 18th World Congress*. Online; November 2021. ***Best Paper – Advancing Psychosocial / Social-economic Science**
36. Mañago MM, Swink LA, Hager HR, Gisbert R, Earhart GM, Christiansen CL, Schenkman M. Community-based exercise class participation for people with Parkinson's disease and their class instructors during COVID-19 [poster presentation]. *Academy of Neurologic Physical Therapy Annual Conference*. Online; October 2021.
37. Hoffman RM, Salinas GJ, Christiansen CL, Mañago MM. Psychosocial Aspects of Perceived Fatigue are Associated with Mobility Outcomes in People with Multiple Sclerosis [poster

presentation]. *Academy of Neurologic Physical Therapy Annual Conference*. Online; October 2021. ***Best Clinical Research Poster**

38. Anderson CB, Fatone S, Mañago MM, Swink LA, Hager ER, Kittelson AJ, Christiansen CL, Magnusson DM. Patient Needs for Shared Decisions in Lower-Limb Prosthesis Design [platform presentation]. *American Orthotic & Prosthetic Association National Assembly*. Online; September 2021.
39. Davis-Wilson HC, Hoffman R, Cheuy V, Judd D, Stevens-Lapsley JE, Christiansen CL. Kinematics and spatiotemporal gait characteristics during the Six-Minute Walk in participants with hip osteoarthritis [podium presentation]. *American Society of Biomechanics Rocky Mountain Chapter Meeting*. Online; April 2021. Also presented as poster at the *American Society of Biomechanics Annual Meeting*. Online; August 2021.
40. Hoffman R, Davis-Wilson HC, Hinrichs L, Judd D, Stevens-Lapsley J, Christiansen CL. Turning spatiotemporal metrics and strategies with end-stage hip osteoarthritis [podium presentation]. *American Society of Biomechanics Rocky Mountain Chapter Meeting*. Online; April 2021. Also presented as poster at the *American Society of Biomechanics Annual Meeting*. Online; August 2021.
41. Swink LA, Schenkman ML, Christiansen CL, Hager ER, Earhart GM, Gisbert R, Mañago MM. Exercise patterns in a virtual world: Barriers and needs for people with Parkinson's disease during the COVID-19 pandemic [poster presentation]. *Occupational Therapy Summit of Scholars*. Online; June 2021.
42. Davis-Wilson HC, Gaffney BMM, Murray AM, Christiansen CL. Cumulative loading in individuals with non-traumatic lower limb amputation, individuals with diabetes mellitus, and healthy individuals [poster presentation]. Osteoarthritis Research Society International (OARSI) World Congress. Online; April 2021.
43. Christensen J, Wojnar K, Kline PW, Stevens-Lapsley JE, Christiansen CL, 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.
44. Kline, PW, Christiansen CL, 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.
45. 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.
46. Hoffman RM, Christiansen CL, Mañago MM. Responsiveness of the Patient-Specific Functional Scale to Changes in Walking Endurance: A Proof-of-Concept Analysis [poster presentation]. *10th International Symposium on Gait and Balance in MS*. Online; October 2020.

47. Kline PW, So NF, Fields TT, Christiansen CL. Repeated Error-Based Gait Training for Non-Traumatic Amputation: Proof of Concept Study [poster presentation]. *American Society of Biomechanics Annual Meeting*. Online; August 2020.
48. Kline PW, Christiansen CL, 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.
49. Mañago MM, Kline PW, Alvarez E, Christiansen CL. 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.
50. 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.
51. 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.
52. 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. ***Degenerative Diseases SIG Award**
53. 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.
54. 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.
55. 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.
56. Anderson C, Miller MJ, Murray AM, Fields TT, So N, Christiansen CL. 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.
57. 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.

58. 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.
 - Also published in *Int J MS Care*: 2020 March/April;22(2):100-1
59. Kline P.W., 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
60. 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.
61. 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.
62. Anderson CM, Wurdeman SR, Miller M, Colborn K, Stoneback J, Christiansen CL, 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.
63. 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.
64. 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.
65. 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.

Non-Peer Reviewed Publications

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

Invited Scientific and Professional Presentations (last 5 years)

1. Stoneback JW, Melton DH, Christiansen CL, Thompson G, Howell J. Clinical Management and Treatment of Patients with Osseointegrated Prosthesis, Academy of Orthotists and Prosthetists Annual Meeting, Nashville, TN; March 2023.
2. Christiansen CL & Gaffney BM. Instrumented clinical gait analysis [invited presentation]. Resident Didactic Training, Department of Physical Medicine & Rehabilitation, University of Colorado, Aurora, CO; August 2022.
3. Christiansen CL & So N. Clinical research collaborations with the VA Regional Amputation Center [invited presentation]. Gersten Day Research Presentations, Department of Physical Medicine & Rehabilitation, University of Colorado, Aurora, CO; June 2022.
4. Christiansen CL & Davis-Wilson HC. Applying instrumented and observational gait analysis in rehabilitation [invited presentation]. Resident Didactic Training, Department of Physical Medicine & Rehabilitation, University of Colorado, Aurora, CO; August 2021.
5. Christiansen CL. Research mentorship mindset [invited presentation]. Cardiovascular Center Trainee Development Seminar, Medical College of Wisconsin, virtual; July 2021.
6. Christiansen CL and Miller MJ. Psychosocial targets of rehabilitation after lower-limb amputation [invited presentation]. Amputation Research Interest Group, University of Washington, virtual; April 2021.
7. Christiansen CL. Advanced clinical gait analysis [invited presentation]. Resident Didactic Training, Department of Physical Medicine & Rehabilitation, University of Colorado, Aurora, CO; March 2021.
8. Christiansen CL. Gait analysis [invited presentation]. Resident Didactic Training, Department of Physical Medicine & Rehabilitation, University of Colorado, Aurora, CO; March 2019.
9. Christiansen CL. Optimizing physical activity outcomes for people with dysvascular lower limb amputation [Keynote presentation]. Hanger Educational Fair, Las Vegas, NV; Feb 2019.
10. Christiansen CL. VA rehabilitation research [invited presentation]. Comprehensive Opportunities in Rehabilitation Research Training, Washington University, St. Louis, MO; May 2018.
11. 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.
12. Christiansen CL. Observational gait analysis [invited presentation]. Resident Didactic Training, Department of Physical Medicine & Rehabilitation, University of Colorado, Aurora, CO; June 2017.

Funded/In Review Grant Activity

Ongoing Support

DoD OP220013 Christiansen & Gaffney (Co-PI) 02/01/23-01/31/26
 Transfemoral osseointegrated prosthesis limb load symmetry training (TOPLOAD)
 This randomized controlled trial will 1) determine the feasibility of a 40-week limb-load biofeedback training intervention, 2) determine if there is an intervention signal of efficacy, and 3) identify functional movement priorities for people with transfemoral osseointegrated prostheses.
 Amount: \$ 349,939
 Role: Co-PI

VA RR&D I01RX003917	Christiansen (PI)	11/01/22-10/31/26
Walking exercise sustainability through telehealth for Veterans with lower-limb amputation		
The goal of this clinical trial is to 1) determine if telerehabilitation walking exercise self-management program produces clinically meaningful exercise sustainability compared to attention-control education after LLA and 2) evaluate potential for large-scale clinical translation of walking exercise self-management program with RE-AIM framework assessments using a mixed-methods (qualitative and quantitative) approach.		
Amount: \$982,159		
Role: PI		

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

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		

VA RR&D I01RX003237	Christiansen (PI)	11/01/19-04/30/25
Optimizing gait rehabilitation for Veterans with non-traumatic lower limb amputation		
The goal of this clinical trial is to compare two groups of error-manipulation intervention to a supervised walking group of Veterans with unilateral, non-traumatic transtibial amputation.		
Amount: \$629,855		
Role: PI		

NIH R01AG056585 Stevens-Lapsley (PI) 09/15/17-04/30/24
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) 12/1/17-05/31/23
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 I21 RX003730 Stevens-Lapsley (PI) 07/01/21-08/31/23
Engaging Medically Complex Veterans in Tele-Rehabilitation Using a Biobehavioral Approach: A Pilot Study of Feasibility and Acceptability
The goal of this work is to assess the effectiveness of a multicomponent telerehabilitation using a two-group randomized crossover design.
Amount: \$114,700 (annual award)
Role: Co-I

Completed Support

CDMRP OPORP W81XWH-17-2-0029 Disla (PI) 9/30/17-9/29/22
Women with Amputation: The Unique Needs of an Underserved Population.
The investigation is a national, online survey-based needs assessment of the physical and psychosocial needs of women with amputation.
Amount: \$489,158
Role: Site PI

VA RR&D I01RX002251 Stevens-Lapsley (PI) 11/1/16-10/31/21
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

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

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

Research Core Pilot Award (PM&R UCD) Mañago (PI) 09/01/18-08/31/19
Instrumented Motion Analysis of Hip and Trunk Movement Compensations for People with Multiple Sclerosis

The goal of this project was to evaluate hip and trunk biomechanical compensatory strategies during functional activities in patients with multiple sclerosis.

Amount: \$10,000

Role: Co-I

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.

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 (PIs) 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 UHealth 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

Presentation Award Reviewer, Rocky Mountain Section of the American Society of Biomechanics, 2022

Scientific Reviewer, Scientific Review Committee, Foundation for Physical Therapy Research, 2022

Scientific Reviewer, PODS Review Committee, Foundation for Physical Therapy Research, 2022

Scientific Reviewer, National VA RR&D Scientific Merit Review Board (CDA Panel), 2021

Research Career Mentor, American Society of Biomechanics Annual Conference, 2021

Scientific Reviewer, NIH National Institute of Child Health and Human Development Special Emphasis Panel, NCMRR Early Career Research Award (R03), 2021

Scientific Reviewer, Orthotics and Prosthetics Outcomes Research Program (OPORP) of the Department of Defense Congressionally Directed Medical Research Programs (CDMRP), 2021

Article Reviewer, Vascular Medicine, 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

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

Scientific Reviewer, Grant Program for the Academy of Orthopedic Physical Therapy, 2020

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

Reviewer, American Physical Therapy Association Orthopedic Section Grants, 2020

Presentation Award Reviewer, Rocky Mountain Section of the American Society of Biomechanics, 2021

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

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

University of Colorado Anschutz Medical Campus

Member, Ad-Hoc Faculty Promotion Committee, University of Colorado Denver
Bioengineering Department, 2021

Reviewer, PreK Mock Study Section, Colorado Clinical & Translational Sciences Institute,
2021

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

Faculty Member / Mentor, Integrative Physiology of Aging T32 Training Program, 2022-

Faculty Research Panel, Integrative Physiology of Aging T32 Training Program, 2021

Member, School of Medicine Faculty Promotion Committee, 2019–2022

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 Rural Track Workgroup, 2021-2022

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, VA ECHCS Research Promotion Panel, 2022

Reviewer, GRECC Advanced Geriatric Fellowship Program, 2020-present

Member, VA Regional Amputation Center, 2017-present

Honors and Awards

American Physical Therapy Association, Federal Section 2022 Researcher Award. February 2022

Finalist, National Postdoctoral Association Gallagher Mentor Award. April 2021

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)

Combined Section Meeting, APTA. San Antonio, TX; February 2022.

Learning How to Learn, Oakley and Sejnowski, Deep Teaching Solutions, Coursera; January 2022.

Sustaining Behavior Change Conference, CU Anschutz Health and Wellness Center, University of Alabama Birmingham, and the University of Colorado. Online; October 2021.

Annual Conference, ASB. Online; August 2021.

Osseointegration in Amputees: Historical Origins, Patient Selection, Surgical Intervention, and Rehabilitation, Orthopedic Department, University of Colorado. Aurora, CO; April 2021.

Shaping the Future of Telerehabilitation through Research, Learning Health Systems Rehabilitation Research Network (LeaRRn) and Center on Health Services Training and Research (CoHSTAR), NIH. Online; April 2021.

Combined Section Meeting, APTA. Online; February 2021.

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

Annual Conference, ASB. Online; 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 (TIGRR), NIH. Charleston, SC; January 2017.

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

Mentoring

Mentored Awards

Veterans Administration RR&D Career Development Award (CDA2) (2022). Awardee: Mark Manago, DPT, PhD.
Role: Primary Mentor.

Veterans Administration RR&D Career Development Award (CDA1) (2021). Awardee: Laura Swink, OTR, PhD.
Role: Primary Mentor, Post-doctoral Fellow.

NIH K12 HD055931 K12 Award (2020). Awardee: Mark Mañago, DPT, PhD.
Role: Primary Mentor, K12 Awardee.

Veterans Administration Advanced Geriatric Fellowship (2020). Awardee: Hope Davis-Wilson, PhD.
Role: Primary Mentor, Post-doctoral Fellow.

Orthotic and Prosthetic Education and Research Foundation (OPERF) Fellowship Award (2020). Awardee: Chelsey Anderson, CPO.
Role: Primary Mentor, PhD Student.

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 (2017-2022Six). Trainee Position: PhD Student, University of Colorado.
Current Position: Post-doctoral Fellow (Children's Hospital Cincinnati)
Role: Primary Mentor

Matthew Miller, DPT (2015-19). Trainee Position: PhD Student, University of Colorado.
Current Position: Assistant Professor (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: Assistant Professor (University of Colorado)
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

James Tracy, PhD (2022-present). Trainee Position: Post-Doctoral Fellow, University of Colorado Anschutz Medical Campus.

Shawn Hanlon, PhD (2022-present). Trainee Position: Post-Doctoral Fellow, University of Colorado Anschutz Medical Campus.

Hope Davis-Wilson, PhD (2020-2022). Trainee Position: Post-Doctoral Fellow, Rocky Mountain VA Medical Center and the University of Colorado.
Current Position: Research Engineer (RTI International)
Role: Primary Mentor

Rashelle Hoffman, PT, DPT, PhD, GCS (2020-2022). Trainee Position: Post-Doctoral Fellow, Rocky Mountain VA Medical Center and the University of Colorado.
Current Position: Assistant Professor (Creighton University)
Role: Primary Mentor

Laura Swink, OTR, PhD (2019-2021). Trainee Position: Post-Doctoral Fellow, Rocky Mountain VA Medical Center and the University of Colorado.
Current Position: Rehabilitation Researcher (Rocky Mountain VAMC)
Role: Primary Mentor

Paul Kline, DPT, PhD (2017-2020). 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 Project Manager (Children's Hospital Colorado)
Role: Co-Mentor

Joshua Winters, CSCS, PhD (2012-14). Trainee Position: Post-Doctoral Fellow, University of Colorado.
Current Position: Associate Professor (University of Kentucky)
Role: Co-Mentor

Dissertation (PhD) Committee Member

Zane Colvin, MS (2022). Integrative Physiology, University of Colorado, Boulder.
[Comprehensive Exam Committee]

Michelle Rauzi, PT, DPT, ATC (current); Committee Chair. Rehabilitation Sciences.
University of Colorado, Anschutz Medical Campus.

Joseph Carzoli, MS (2022). Integrative Physiology, University of Colorado, Boulder.

Chelsey Anderson, CPO (2022). Rehabilitation Sciences. University of Colorado, Anschutz Medical Campus.

Matthew Miller, DPT (2019). Rehabilitation Sciences. University of Colorado, Anschutz Medical Campus.

Brian Loyd, DPT, PhD (2018). Rehabilitation Sciences, University of Colorado, Anschutz Medical Campus.

Brecca Gaffney, MS, PhD (2017). Mechanical Engineering, University of Denver.

Michael Bade, DPT, PhD (2012). Clinical Sciences, University of Colorado, Anschutz Medical Campus.

SIGNATURE: _____
DATE: _____