



Physical Therapy

SCHOOL OF MEDICINE

UNIVERSITY OF COLORADO
ANSCHUTZ MEDICAL CAMPUS

Curriculum Vitae | Cory L Christiansen, PT, PhD
March 2025

Cory L. Christiansen, PT, PhD, FAPTA
Mailstop C244, 13121 East 17th Avenue, Aurora, CO 80045
303-724-9101 / cory.christiansen@cuanschutz.edu
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

2024 – Present	Interim Section Director of Research and Development, Physical Medicine & Rehabilitation, University of Colorado, Anschutz Medical Campus, Aurora, CO
2019 - Present	Professor, School of Medicine, Physical Therapy Program, University of Colorado, 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, 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, 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, Green River, 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. Shaw KG, Awad ME, Melton D, Gaffney BMM, Christiansen CL, Stoneback JW. Patient-reported outcomes of pain and related quality of life 1 year after bone-anchored limb implantation in patients with lower-limb amputation. *JBJS*. 2025; Epub ahead of print. DOI: 10.2106/JBJS.24.00148. PMID: 40014677.
2. Mancini M, Afshari M, Almeida Q, Amundsen-Huffmaster S, Balfany K, Camicioli R, Christiansen CL, Dale ML, Dibble L, Earhart G, Ellis T, Griffith G, Hackney M, Hopkins J, Horak F, Jones K, Ling L, O'Keefe J, Kwei K, Olivier G, Rao A, Sivaramakrishnan A, Corcos D. Digital gait biomarkers in Parkinson's disease: susceptibility/risk, progression, response to exercise, and prognosis. *npj Parkinson's Disease*. 2025; accepted.
3. Swink LA, Akay RB, Rich T, Anderson CA, Schmid AA, Christiansen CL, Nearing KE. "I was angry that I fell" all the way to "If I fall, I fall": A qualitative study of the spectrum of behavioral fall risk factors for Veterans with dysvascular lower-limb amputation. *Disabil Rehabil*. 2025; Epub ahead of print. doi: 10.1080/09638288.2025.2451206. PMID: 39819166.
4. Kline PW, Hanlon SL, Richardson VL, Hoffman RM, Melanson EL, Juarez-Colunga E, Stevens-Lapsley JE, Christiansen CL. Functional capacity at rehabilitation discharge predicts physical activity characteristics twenty-four weeks later for people with total knee arthroplasty: a secondary analysis of a randomized controlled trial. *Arch Phys Med Rehabil*. 2025; Epub ahead of print. doi: 10.1016/j.apmr.2025.01.416. PMID: 39826881.
5. Bade MJ, Christiansen CL, Zeni J, Dayton M, Forster J, Cheuy V, Christensen J, Hogan C, Dennis R, Koonce R, Dennis D, Peters A, Stevens-Lapsley J. Movement pattern biofeedback training after total knee arthroplasty: a randomized controlled trial. *Arthrit Care Res (Hoboken)*. 2024; Epub ahead of print. doi: 10.1002/acr.25489. PMID: 39711097.
6. Swink LA, So N, Nearing KA, Juarez-Colunga E, Plummer P, Schmid AA, Christiansen CL. Exploring dual-task relationships for Veterans with lower-limb amputation. *Occup Ther Health Care*. 2024; Epub ahead of print. doi: 10.1080/07380577.2024.2442016. PMID: 39688141.
7. Griffith G, Mehta N, Lamotte G, McKee K, Suttman E, Haus JM, Joslin E, Balfany K, Kohrt WM, Christiansen CL, Melanson EL, Chahine LM, Christou DD, Patterson CG, Corcos DM. Effects of 6 months of endurance exercise on motor function, exercise capacity, and autonomic function based on presence of autonomic dysfunction in individuals with early Parkinson's disease. *J Parkinsons Dis*. 2024; Epub ahead of print. DOI: 10.1177/1877718X241308813.

8. Gaffney BMM, Gimarc D, Thomsen PB, Pattee J, Wong C, Milius D, Melton DH, Christiansen CL, Stoneback JW. Associations Between Skeletal Alignment and Biomechanical Symmetry Before and After Transfemoral Bone-Anchored Limb Implantation. *Clin Orthop Relat Res*. 2024;1-13. Epub ahead of print. doi: 10.1097/CORR.0000000000003344. PMID: 39745233.
9. Mañago MM, Forster JE, Biondi E, Schenkman ML, Cameron MH, Christiansen CL. Proximal Muscle Resistance Training to Improve Walking in People with Multiple Sclerosis: A Pilot Study. *J Neurol Phys Ther*. 2024; Epub ahead of print. PMID: 39589358.
10. Davis-Wilson H, Hoffman R, Cheuy V, Christensen J, Judd DL, Stevens-Lapsley JE, Christiansen CL. Gait Compensations, Pain, and Functional Performance During the Six Minute Walk Test in Individuals with Unilateral Hip Osteoarthritis. *Clin Biomech*. 2024; Epub ahead of print. PMID: 39490051. PMCID: PMC11789618.
11. Rauzi MR, Abbate LM, Churchill L, Garbin A, Forster J, Christiansen CL, Stevens-Lapsley JE. Multicomponent telerehabilitation program for veterans with multimorbidity: a randomized controlled feasibility study. *PM&R*. 2025; 1-15. doi: 10.1002/pmrj.13299
12. Vandenberg NW, Wheatley BB, Carpenter D, Christiansen CL, Stoneback JW, Gaffney BMM. Feasibility of predicting changes in gait biomechanics following muscle strength perturbations using optimal control in patients with transfemoral amputation. *Comput Methods Biomech Biomed Engin*. 2024; doi: 10.1080/10255842.2024.2399038. Epub ahead of print. PMID: 39256913.
13. Tracy JB, Gaffney BMM, Thomsen PB, Awad ME, Melton DH, Christiansen CL, Stoneback JW. Dynamic gait stability and stability symmetry for people with transfemoral amputation: A case-series of 19 individuals with bone-anchored limbs. *J Biomech*. 2024; 171:112208. doi: 10.1016/j.jbiomech.2024.112208. Epub 2024 Jun 25. PMID: 38941842. PMCID: PMC11251498.
14. Thomsen PB, Gaffney BMM, Tracy JB, Vandenberg NW, Awad ME, Stoneback JW, Christiansen CL. Cumulative Loading Increases and Loading Asymmetries Persist During Walking for People with a Transfemoral Bone-Anchored Limb. *Gait Posture*. 2024; 113: 46-52. PMID: 38843706. PMCID: PMC11381168.
15. Christiansen CL, Kline PW, Anderson CB, Melanson EL, Sullivan WJ, Richardson VL, Juarez-Colunga E, Stevens-Lapsley JE. Optimizing Total Knee Arthroplasty Rehabilitation with Physical Activity Behavior Change: A Randomized Clinical Trial. *Phys Ther*. 2024; pzae088.doi: 10.1093/ptj/pzae088. Online ahead of print. PMID: 39001713.
16. Vinson AL, Vandenberg NW, Awad ME, Christiansen CL, Stoneback JW, Gaffney BMM. The Biomechanical Influence of Transtibial Bone-Anchored Limbs during Walking. *J Biomech*. 2024; 168:112098. PMID: 38636112. PMCID: PMC11151175.
17. Rauzi MR, Tran MK, Plew, J, Christiansen CL, Mealer ML, Nearing KA, Stevens-Lapsley JE. Older Veteran Experiences of using Technology during a Multicomponent Telerehabilitation Program: A Convergent Mixed Methods Study. *Cogent Gerontology*. 2024; 3(1). doi: 10.1080/28324897.2024.2340549. PMID: 39035459. PMCID: PMC11259315.

18. Awad ME, Melton DH, Shaw KG, Lev G, Christiansen CL, Stoneback, JW. How Comprehensive and Efficient are Patient-reported Outcome Measures for Individuals with Lower Extremity Amputation Undergoing Implantation of Osseointegrated Bone-Anchored Limbs? *JBJS Rev.* 2024 Mar 15;12(3). PMID: 38489397.
19. Gaffney BMM, Thomsen PB, Leijendekkers R, Christiansen CL, Stoneback JW. Lumbopelvic Movement Coordination during Walking Improves with Transfemoral Bone Anchored Limb Implantation: Implications for Low Back Pain. *Gait Posture.* 2024; 109: 318-326. PMID: 38432038.PMCID: PMC11015906.
20. Mañago MM, Will R, Strahler T, Van Valkenburgh L, Harris-Love M, Forster J, Cameron M, Christiansen CL. Blood Flow Restriction and Veterans with Multiple Sclerosis (BRaVe-MS) who Have Advanced Disability: Protocol for a Randomized Controlled Trial. *Phys Ther.* 2024; pzae037, <https://doi.org/10.1093/ptj/pzae037>. PMID: 38452199.
21. Anderson CB, Fatone S, Christiansen CL. A Narrative Review of Prosthesis Design Decision Making After Lower-Limb Amputation for Developing Shared Decision-Making Resources. *Curr Phys Med Rehabil Rep.* 2024; 12, 26–38. doi: 10.1007/s40141-024-00432-y.
22. Anderson CB, Fatone S, Mañago MM, Swink LA, Kittelson AJ, Magnusson DM, Christiansen CL. Development and Alpha Testing of a Patient Shared Decision Aid for Prosthesis Design for New Lower Limb Prosthesis Users. *Prosthet Orthot Int.* 2024 Mar 19. doi: 10.1097/PXR.0000000000000314. Epub ahead of print. PMID: 38506643. PMCID: PMC11411013.
23. Griffith G, Lamotte G, Mehta N, Fan P, Nikolich J, Springman V, Suttman E, Joslin E, Balfany K, Dunlap M, Kohrt WM, Christiansen CL, Melanson EL, Josbeno D, Chahine LM, Patterson CG, Corcos DM. Chronotropic Incompetence during Exercise Testing as a Marker of Autonomic Dysfunction in Individuals with Early Parkinson's Disease. *J Parkinson Dis.* 2024;14(1):121-133. doi: 10.3233/JPD-230006. PMID: 38189712. PMCID: PMC10836543.
24. Judd DL, Cheuy V, Peters A, Graber J, Hinrichs L, Forster JE, Christiansen CL, Stevens-Lapsley JE. Incorporating Functional Strength Integration Techniques during Total Hip Arthroplasty Rehabilitation: A Randomized Controlled Trial. *Phys Ther.* 2023 Dec 15:pzad168. doi: 10.1093/ptj/pzad168. Epub ahead of print. PMID: 38102757.
25. Roda GF, Awad ME, Melton DH, Christiansen CL, Stoneback JW, Gaffney BMM. The Amputated Limb Gluteus Medius is Biomechanically Disadvantaged in Patients with Unilateral Transfemoral Amputation. *Ann Biomed Engin.* 2024;52(3):565-574. doi: 10.1007/s10439-023-03400-0. Epub 2023 Nov 9. PMID: 37946055; PMCID: PMC10922424.
26. Swink LA, Mealer ML, Miller MJ, Anderson CB, Cook PF, Stevens-Lapsley JE, Christiansen CL. Telehealth Walking Self-Management for Individuals with Amputation: A Qualitative Study of Therapist Perspectives on Adoption. *Phys Ther.* 2024; DOI: 10.1093/ptj/pzad155. PMID: 37944092. PMCID: PMC10902556.
27. Hoffman R, Davis-Wilson HC, Hanlon SL, Swink LA, Kline PW, Juarez-Colunga EJ, Melanson EL, Christiansen CL. Maximal Daily Stepping Cadence Partially Explains Functional Capacity of Individuals with End-Stage Knee Osteoarthritis. *PM&R.* 2024; 16(6):532-542. DOI:10.1002/pmrj.13082. PMID: 37819260. PMCID: PMC11006829.

28. Hanlon SL, Swink LA, Akay RB, Fields TT, Cook PF, Gaffney BMM, Juarez-Colunga EJ, Christiansen CL. Walking Exercise Sustainability through Telehealth (WEST) for Veterans with Lower-Limb Amputation: A Study Protocol. *Phys Ther*. 2024 Jan 1;104(1):pzad112. doi: 10.1093/ptj/pzad112. PMID: 37615982; PMCID: PMC10979409.
29. Vandenberg NW, Stoneback JW, Davis-Wilson HC, Christiansen CL, Awad ME, Melton DH, Gaffney BMM. Unilateral Transfemoral Osseointegrated Prostheses Improve Joint Loading during Walking. *J Biomech*. 2023; 155:111658. PMID: 37276681. PMCID: PMC10330663.
30. Gaffney BM, Davis-Wilson HC, Awad ME, Tracy J, Melton DH, Lev G, Stoneback JW, Christiansen CL. Daily steps and stepping cadence increase one-year following prosthesis osseointegration in people with lower-limb amputation. *Disabil Rehabil*. 2023; DOI: 10.1080/09638288.2023.2200036. PMID: 37073780. PMCID: PMC10584988.
31. 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; April: 104:105948. PMID: 37043833. PMCID: PMC10988390.
32. 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;47(3):139-45. PMID: 36897202. PMCID: PMC10329992.
33. 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.
34. 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*. 2023;47(1):26-42. PMID: 35622457. PMCID: PMC9691789.
35. 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*. 2023 Aug 1;47(4):343-349. PubMed PMID: 36701203. PMID: 36701203.
36. 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*. 2023 Feb;45(4):723-732. PMID: 35389313. PMCID: PMC9537359.
37. Kline PW, Christiansen CL, Judd DL, Mañago MM. Clinical utility of the Trendelenburg test in people with Multiple Sclerosis. *Physiother Theory Pract*. 2023 May;39(5):1016-1023. PMID: 35073816. PMCID: PMC9536282.

38. 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.
39. 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.
40. 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. PMCID: PMC9771874.
41. 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; 103(9):1723-1729. PMCID: PMC9536024.
42. 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.
43. 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. PMCID: PMC8522385
44. 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. PMCID: PMC8691225.
45. 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.
46. 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.
47. 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.

48. Kline PW, So N, Fields T, Juarez-Colunga, Christiansen CL. Error-manipulation gait training for Veterans with nontraumatic lower limb amputation: a randomized controlled trial protocol. *Phys Ther*. 2021; Nov 1;101(11): pzab192. PMID: 34379777. PMCID: PMC8639646.
49. 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.
50. 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.
51. 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.
52. 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.
53. 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.
54. 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.
55. 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.
56. 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.
57. 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.
58. 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.

59. 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.
60. 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.
61. 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
62. 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.
63. 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.
64. 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.
65. 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.
66. 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.
67. 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.
68. 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.

69. 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.
70. 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.
71. 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.
72. 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.
73. 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.
74. 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.
75. 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.
76. 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. PMID: 28263256. PMCID: PMC5357185.
77. 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.
78. 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.
79. 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.

80. 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.
81. 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.
82. 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.
83. 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.
84. 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.
85. 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.
86. 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.
87. 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.
88. 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.
89. 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. PMCID: PMC3529981.
90. 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.
91. 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
92. 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.

93. 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.
94. 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: 19441128. PMCID: PMC2744295.
95. 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.
96. 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. Awad ME, Earley EJ, Melton DH, Gaffney BMM, Christiansen CL, Stoneback JW. Patient Screening and Selection for Bone-Anchored Limb Implantation in Individuals with Transfemoral Amputation: Eligibility Criteria and Risk Factor Analysis [platform presentation] *International Society for Prosthetics and Orthotics 20th World Congress*, Stockholm, Sweden; June 2025. [accepted]
2. Earley EJ, Milius DW, Awad ME, Melton DH, Gaffney BMM, Christiansen CL, Stoneback JW. Prosthesis Prescription Consensus for Case Patients with Transfemoral Bone-Anchored Limbs [platform presentation] *International Society for Prosthetics and Orthotics 20th World Congress*, Stockholm, Sweden; June 2025. [accepted]
3. Earley EJ, Milius DW, Awad ME, Melton DH, Gaffney BMM, Christiansen CL, Stoneback JW. Prosthesis Prescription Consensus for Case Patients with Transtibial Bone-Anchored Limbs [platform presentation] *International Society for Prosthetics and Orthotics 20th World Congress*, Stockholm, Sweden; June 2025. [accepted]
4. Earley EJ, Shaw KG, Awad ME, Gaffney BMM, Christiansen CL, Iorio ML, Stoneback JW, Melton DH. Phantom Limb, Residual Limb, and Bodily Pains in Persons with Unilateral Lower Limb Amputation [platform presentation] *International Society for Prosthetics and Orthotics 20th World Congress*; June 2025. [accepted]
5. Vandenberg N, Wheatley B, Carpenter D, Melton D, Christiansen CL, Stoneback JW, Gaffney BMM. Simulated Movement Symmetry Improves Joint Loading Symmetry in Unilateral Transfemoral Bone-Anchored Limb Users. [platform presentation] *I.S.P.O. 20th World Congress*, Stockholm, Sweden; June 2025. [accepted]
6. Swink LA, Akay RB, Rich T, Anderson CA, Schmid AA, Christiansen CL, Nearing KA. A spectrum of behavioral fall risk factors for Veterans with dysvascular lower limb amputation: A critical need for occupational therapy intervention. [platform presentation] *INSPIRE American Occupational Therapy Association Annual Conference*, Philadelphia, PA; April 2025. [accepted]

7. Swink LA, Diprinzio D, Pritchard K, Brown J, Novak D, Christiansen CL, Mañago M. Loneliness for People with Parkinson's Disease in Community-based Group Exercise Classes and the Significant Impact on Quality of Life. [poster presentation] *INSPIRE American Occupational Therapy Association Annual Conference*, Philadelphia, PA; April 2025. [accepted]
8. Bhattacharjee R, Christensen J, Cheuy V, Souza R, Bade MJ, Christiansen CL, Stevens-Lapsley JE. Non-surgical knee biomechanics after unilateral total knee arthroplasty are linked to long-term changes in cartilage composition. [poster presentation] *Orthopaedic Research Society Annual Conference*, Phoenix, AZ; Feb 2025. [accepted]
9. Thomsen PB, Stoneback JW, Swanson AE, Fowkes HA, Brink Akay R, Awad ME, Gaffney BMM, Christiansen CL. Free-Living Performance Characteristics of Daily Sit-Stand and Stand-Sit Transitions among Transfemoral Bone-Anchored Limb Users [platform presentation, Marilyn Gossman Graduate Student Research Seminar]. *Combined Sections Meeting of the American Physical Therapy Association*. Houston, TX; February 2025. [accepted]
10. Rauzi M, Tran M, Plew J, Abbate L, Christiansen CL, Stevens-Lapsley JE, Mealer M, Nearing K. Exploring Veterans' Social Health Outcomes Following a Multicomponent Telerehabilitation Program: A Convergent Mixed Methods Study [poster presentation]. *Combined Sections Meeting of the American Physical Therapy Association*. Houston, TX; February 2025. [accepted]
11. Bade M, Edwards E, Juan J, Sapinsley Z, Thomsen P, Peters A, Zeni J Jr, Cheuy V, Christiansen CL, Stevens-Lapsley J. Comparison of Clinic-Based Biomechanical Measures During Walking to Laboratory Measures after Total Knee Arthroplasty. [poster presentation] *Combined Sections Meeting of the American Physical Therapy Association*. Houston, TX; February 2025. [accepted]
12. Cheuy VA, Christensen JC, Dayton MR, Hogan CA, Miller CN, Christiansen CL, Stevens-Lapsley JE, Judd DL. Interrelationships between Recovery of Muscle Strength, Physical Function, and Physical Activity after Total Hip Arthroplasty. [poster presentation] *Combined Sections Meeting of the American Physical Therapy Association*. Houston, TX; February 2025. [accepted]
13. Rauzi MR, Abbate LM, Plew J, Tran M, Mealer M, Nearing K, Christiansen CL, Stevens-Lapsley JE. Exploring Changes in Veterans' Social Health Following a Multicomponent Telerehabilitation Program: An Embedded Convergent Mixed Methods Study. [poster presentation] *American Congress of Rehabilitation Medicine*, Dallas, TX; November 2024. ***Military & Veterans Affairs Networking Group Early Career Poster Award**
14. Thomsen PB, Stoneback JW, Tracy JB, Gaffney BMM, Awad ME, Melton DH, Christiansen CL. Cumulative joint loads and loading symmetry during sit-to-stand transitions for transfemoral bone-anchored limb users: a case series. [platform presentation] *Global Collaborative Congress on Osseointegration Annual Conference*. Charlotte, NC; November 2024.

15. Gaffney BMM, Ekdahl M, Awad ME, Melton DH, Christiansen CL, Stoneback JW. Dynamic Hip Muscle Force Symmetry is Improved with Transfemoral Bone-Anchored Limb Use. [platform presentation] *Global Collaborative Congress on Osseointegration Annual Conference*. Charlotte, NC; November 2024.
16. Earley EJ, Milius D, Awad ME, Melton DH, Christiansen CL, Gaffney BMM, Stoneback JW. An International Delphi Method Study to Develop Consensus on Prosthetic Prescription for Bone-Anchored Limbs. [poster presentation] *6th Annual CU Orthopedic Research Symposium*, Denver, CO. October 2024.
17. Akay RB, Gaffney BMM, Stephenson R, Juarez-Colunga E, Cook P, Christiansen CL. Walking Exercise Sustainability through Telehealth for Veterans with Lower-Limb Amputation (WEST). [online presentation] Medical Rehabilitation Research Resource (MR3) Network's 4th Annual Scientific Retreat. Online Conference; September 2024.
18. Vandenberg N, Wheatley B, Carpenter D, Christiansen CL, Stoneback J, Gaffney BMM. Simulated Gait Retraining for Patients with Unilateral Transfemoral Bone-Anchored Limbs. [poster presentation] *Eastern Colorado Health Care System VA Research Day*. Aurora, CO; September 2024.
19. Shaw KG, Awad ME, Melton DH, Gaffney BMM, Christiansen CL, Stoneback JW. Patient-Reported Outcomes of Pain and Quality of Life Following Implantation of Bone-Anchored Limb. [platform presentation] *Western Orthopedic Association (WOA) Annual Meeting*. Huntington Beach, CA; August 2024.
20. Christiansen, CL, Thomsen PB, Bade MJ, Juarez-Colunga E, Melton DH, Gaffney BMM, Stoneback JW. Transfemoral Osseointegrated Prosthesis Limb-Load Symmetry Training: Study Protocol and 1-Year Progress. [platform presentation] *2024 Military Health System Research Symposium (MHSRS)*. Kissimmee, FL; August 2024.
21. Gaffney BMM, Gimarc DC, Thomsen PB, Awad ME, Melton DH, Christiansen CL, Stoneback JW. The Role of Pre-Operative Skeletal Alignment on Post-Operative Lumbopelvic Biomechanics in Transfemoral Bone-Anchored Limbs. [platform presentation] *2024 Military Health System Research Symposium (MHSRS)*. Kissimmee, FL; August 2024.
22. Ekdahl M, Vandenberg N, Melton DH, Christiansen CL, Stoneback JW, Gaffney BMM. Hip Muscle Force Changes after Transfemoral Bone-Anchored Limb Implantation. [thematic poster presentation] *American Society of Biomechanics Annual Meeting*. Madison, WI. August 2024.
23. Vandenberg N, Wheatley B, Carpenter D, Christiansen CL, Stoneback JW, Gaffney BMM. Feasibility of In-Silico Gait Retraining for Patients with Unilateral Transfemoral Bone-Anchored Limbs. [thematic poster presentation] *American Society of Biomechanics Annual Meeting*. Madison, WI. August 2024.

24. Hoffman RM, Hanlon SL, Kline PW, Richardson V, Juarez-Colunga E, Melanson EL, Christiansen CL. Brisk Cadence is Possible and Enhanced Following Physical Activity Behavior Intervention After Total Knee Arthroplasty. [platform presentation] *7th International Conference on Ambulatory Monitoring of Physical Activity and Movement*. Rennes, France; June 2024.
25. Hoffman RM, Hinrichs-Kinney L, Forster JE, Dayton MD, Dennis D, Judd DL, Christiansen CL, Stevens-Lapsley JE. Improvements in Physical Capacity May Not Indicate Reductions in Real-World Sedentary Activity: A Longitudinal Post-Total Hip Arthroplasty Study. [platform presentation] *7th International Conference on Ambulatory Monitoring of Physical Activity and Movement*. Rennes, France; June 2024.
26. Rauzi MR, Abbate LM, Christiansen CL, Forster JE, Stevens-Lapsley JE. Multicomponent Telerehabilitation Program for Older Veterans with Multimorbidity: A Randomized Controlled Feasibility Trial [platform presentation]. *Combined Sections Meeting of the American Physical Therapy Association*. Boston, MA; February 2024.
27. Christiansen CL, Kline PW, Anderson CB, Melanson EK, Sullivan WJ, Juarez-Colunga E, Stevens-Lapsley JE. Optimizing Physical Activity Outcomes after Total Knee Arthroplasty: A Randomized Controlled Trial [platform presentation]. *Combined Sections Meeting of the American Physical Therapy Association*. Boston, MA; February 2024.
28. Thomsen PB, Gaffney BMM, Tracy JB, Vandenberg NW, Awad ME, Stoneback JW, Christiansen CL. Cumulative Loading during Overground Walking in People with Transfemoral Amputation after Bone-Anchored Limb Implantation [platform presentation]. *Combined Sections Meeting of the American Physical Therapy Association*. Boston, MA; February 2024.
29. Swanson A, Awad ME, Thomsen PB, Christiansen CL, Gaffney BMM, Stoneback JW. Quality of Life Improvements in People with Lower Extremity Bone Anchored Limbs using the SF-36 [poster presentation]. *Combined Sections Meeting of the American Physical Therapy Association*. Boston, MA; February 2024.
30. Bade MJ, Christiansen CL, Cheuy V, Zeni J, Forster J, Christensen J, Capin J, Dayton M, Dennis D, Peters A, Biondi E, Churchill L, Connors M, Stevens-Lapsley JE. Movement Pattern Biofeedback Training after Total Knee Arthroplasty: A Randomized Controlled Trial [platform presentation]. *Combined Sections Meeting of the American Physical Therapy Association*. Boston, MA; February 2024.
31. Awad ME, Lev G, Shaw KG, Thomsen PB, Melton D, Gaffney B, Christiansen CL, Stoneback JW. Colorado Limb Donning - Timed Up and Go (COLD -TUG) Test: Development and Preliminary Validation in Patients with Lower Limb Amputation Before and After Implantation of Bone Anchored Limb [platform presentation]. *Global Collaborative Congress on Osseointegration*. Charlotte, NC. November 2023.
32. Awad ME, Shaw KG, Melton D, Gaffney B, Christiansen CL, Stoneback JW. Predictors of Postoperative Complications Following Two-stage Bone Anchored Limb Implantation in Patients with Trans-femoral Amputation: An Analysis of 30-, 90-Day, One-year Incidence and Patient Risk Factors [platform presentation]. *Global Collaborative Congress on Osseointegration*. Charlotte, NC. November 2023.

33. Awad ME, Shaw KG, Melton D, Gaffney BB, Christiansen CL, Stoneback JW; The Incidence of Secondary Disabilities, Residual Limb Complications, and Mortality following Lower Limb Amputations in the United States: A Multicenter Database Analysis [poster presentation]. *Orthopedic Research Symposium & D'Ambrosia Diversity Lectureship*. Aurora, CO. October 2023.
34. Vandenberg NW, Wheatley B, Awad ME, Melton DH, Christiansen CL, Stoneback JW, Gaffney BMM. In-Silico Hip Strength Changes Affect Movement Patterns and Joint Loading in Patients with Transfemoral Bone-Anchored Limbs [poster presentation]. *Orthopedic Research Symposium & D'Ambrosia Diversity Lectureship*. Aurora, CO. October 2023.
35. Awad ME, Guy L, Shaw KG, Thomsen PB, Melton D, Gaffney BB, Christiansen CL, Stoneback JW; Colorado Limb Donning - Timed Up and Go (COLD -TUG) Test: Development and Preliminary Validation in Patients with Lower Limb Amputation Before and After Implantation of Bone Anchored Limb [poster presentation]. *Orthopedic Research Symposium & D'Ambrosia Diversity Lectureship*. Aurora, CO. October 2023.
36. Rauzi MR, Abbate LM, Connors M, Forster JE, Christiansen CL, Stevens-Lapsley JE. A Multicomponent Telerehabilitation Program for Older Veterans with Multimorbidity: A Randomized Feasibility Study [poster presentation]. *VA Research Days*; Aurora, CO. September 2023.
37. Swink LA, Akay R, Nearing K, Juarez-Colung EJ, Schmid A, Christiansen CL. Veterans with Avascular Lower Limb Amputation: Exploring dual-tasking, falls, and instrumental activities of daily living [poster presentation]. *VA Research Days*; Aurora, CO. September 2023.
38. Gaffney BMM, Vandenberg NW, Awad ME, Melton DH, Tracy JB, Thomsen PB, Christiansen CL, Stoneback JW. Effects of Transfemoral Prosthesis Osseointegration on Cumulative Hip Joint Loading in Civilian Adults [platform presentation]. *2023 Military Health System Research Symposium (MHSRS)*. Kissimmee, FL. August 2023.
39. Tracy JB, Christiansen CL, Awad ME, Melton DH, Gaffney BMM, Stoneback JW. Balance Confidence and Walking Margins of Stability after Lower-Extremity Prosthesis Osseointegration: A case series [poster presentation]. *2023 Military Health System Research Symposium (MHSRS)*. Kissimmee, FL. August 2023.
40. Tracy JB, Awad ME, Melton DH, Stoneback JW, Gaffney BMM, Christiansen CL. Balance confidence and walking margin of stability symmetry after lower-extremity prosthesis osseointegration: a case series [platform presentation]. *American Society of Biomechanics Annual Meeting*. Knoxville TN. August 2023.
41. Vinson AL, Vandenberg NW, Awad ME, Melton DH, Christiansen CL, Stoneback JW, Gaffney BMM. Knee Joint Biomechanics Before and After Transtibial Prosthesis Osseointegration [platform presentation]. *American Society of Biomechanics Annual Meeting*. Knoxville TN. August 2023.
42. Roda GF, Awad ME, Melton DH, Christiansen CL, Stoneback JW, Gaffney BMM. Biomechanical Disadvantage of Amputated Limb Gluteus Medius in Patients with Unilateral Transfemoral Amputation [poster presentation]. *American Society of Biomechanics Annual Meeting*. Knoxville TN. August 2023.

43. Vandenberg NW, Wheatley B, Awad ME, Melton DH, Christiansen CL, Stoneback JW, Gaffney BMM. Predicting the Effects of Hip Strength Changes on Gait Dynamics in Patients with Transfemoral Amputation [platform presentation]. *American Society of Biomechanics Annual Meeting*. Knoxville TN. August 2023.
44. 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.
45. 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.
46. 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.
47. 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.
48. 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.
49. 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.
50. 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.
51. Judd D, Lovely M, Constone 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.

52. 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.
53. 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.
54. 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.
55. 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.
56. 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.
57. 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.
58. 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.
59. 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.

60. 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.
61. 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.
62. 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.
63. 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.
64. 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.
65. 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.
66. 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.
67. 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.
68. 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.

69. 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.
70. 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.
71. 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.
72. 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.
73. 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.
74. 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.
75. 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.
76. 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.
77. 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.

78. 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**
79. 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.
80. 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**
81. 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.
82. 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.
83. 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.
84. 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.
85. 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.
86. 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.

87. 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.
88. 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.

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

1. Christiansen CL. Research Career Planning, Biobehavioral Nursing PhD students, College of Nursing, University of Colorado, Aurora, CO; September 2024.
2. Christiansen CL. Physical Exercise for People with Parkinson Disease: Current Science [invited presentation]. 11th Annual Parkinson's Disease Symposium, University of Colorado Movement Disorders Clinic, Aurora, CO; August 2024.
3. Christiansen CL. Planning for Tenure/Promotion as an Early Career Biomechanist [invited small group leader]. American Society of Biomechanics Annual Meeting, Madison, WI; August 2024.
4. Stoneback JW, Melton DH, Swanson A, Christiansen CL. Osseointegration: Restoring and Optimizing Limbs with an Interdisciplinary Team [invited symposium]. American Congress of Rehabilitation Medicine, Atlanta, GA; November 2023.
5. Christiansen CL & Gaffney BM. Clinical gait analysis [invited presentation]. Resident Didactic Training, Department of Physical Medicine & Rehabilitation, University of Colorado, Aurora, CO; October 2023.
6. Christiansen CL. Research Career Planning, Biobehavioral Nursing PhD students, College of Nursing, University of Colorado, Aurora, CO; September 2023.
7. Christiansen CL, Dusing S, Morgan K. Perspectives on Transition from Career Development Award to Independent Researcher [invited presentation]., Comprehensive Opportunities for Rehabilitation Research Training (CORRT) Annual Meeting, Newark, DE; June 2023.
8. Stoneback JW, Melton DH, Christiansen CL, Thompsen G, Howell J. Clinical Management and Treatment of Patients with Osseointegrated Prosthesis [invited symposium]. Academy of Orthotists and Prosthetists Annual Meeting, Nashville, TN; March 2023.

9. 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.
10. 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.
11. 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.
12. Christiansen CL. Research mentorship mindset [invited presentation]. Cardiovascular Center Trainee Development Seminar, Medical College of Wisconsin, virtual; July 2021.
13. 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.
14. Christiansen CL. Advanced clinical gait analysis [invited presentation]. Resident Didactic Training, Department of Physical Medicine & Rehabilitation, University of Colorado, Aurora, CO; March 2021.
15. Christiansen CL. Gait analysis [invited presentation]. Resident Didactic Training, Department of Physical Medicine & Rehabilitation, University of Colorado, Aurora, CO; March 2019.
16. Christiansen CL. Optimizing physical activity for people with dysvascular lower limb amputation [Keynote presentation]. Hanger Educational Fair, Las Vegas, NV; Feb 2019.
17. Christiansen CL. VA rehabilitation research [invited presentation]. Comprehensive Opportunities in Rehabilitation Research Training, Washington University, St. Louis, MO; May 2018.
18. 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.
19. 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

VA RR&D I01RX005012 Stevens-Lapsley (PI) 04/01/24-03/31/28
Multicomponent Telerehabilitation to Engage Veterans in Effective Self-Management of
Complex Health Conditions
The primary goal of this study is to determine the effectiveness of a multicomponent
telerehabilitation program for improving physical function.
Amount: \$1,999,997
Role: Co-I

NIH/NICHHD R03HD111012 Gaffney (PI) 05/15/23-04/30/25
Dynamic Bone-Implant Loading in Osseointegrated Prostheses
The goals of this study are to: 1) determine how bone-implant loading during activities of
daily living differs between transfemoral and transtibial osseointegrated prostheses, 2)
establish associations between clinical outcomes and bone-implant interface loading, and 3)
evaluate the impact of simulated rehabilitation on bone-implant loading mechanics in
patients with osseointegrated prostheses.
Amount: \$288,800
Role: Co-I

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) 09/25/19-07/31/27
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)
Total Amount: \$18,827,868 (multi-site)
Role: Site PI

NIH R01NR018450	Christiansen (PI)	08/01/19-05/31/25
Improving health self-management using walking biobehavioral intervention for people with dysvascular lower limb amputation		

Amount: \$1,305,250

VA RR&D I01RX003237 Christiansen (PI) 11/01/19-10/31/26
Optimizing gait rehabilitation for Veterans with non-traumatic lower limb amputation

Amount: \$629,855

VA RR&D IK2 RX004242 Mañago (PI) 10/01/22-09/30/26
Low-load resistance training with blood flow restriction in people with Multiple Sclerosis and
advanced disability: a randomized control trial

Amount: \$775,751

NIH R01AG056585 Stevens-Lapsley (PI) 09/15/17-04/30/25
Movement Pattern Biofeedback Training Following Total Knee Arthroplasty

Amount: \$3,004,535

Davis Phinney Foundation Award	Mañago (PI)	04/01/23-06/30/24
Feasibility of low-load resistance training with blood flow restriction in people with advanced disability due to Parkinson's disease		

Amount: \$99,121

Role: Co-I

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

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

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 (Co-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 UCHHealth 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

Co-Coordinator, National Biomechanics Day for High School Students, 2023

PT Volunteer, 9 Health Fair, Denver, CO, 2008-2020

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

Mentor, American Society of Biomechanics Annual Meeting Mentor Match Program, Aug 2024

Scientific Reviewer, VA Spinal Cord Injury/Disorders & Neuropathic Pain Rehabilitation Research and Development Parent IRG Panel, VA Office of Research & Development, Aug 2024

Scientific Reviewer, NIH National Institute of Child Health and Human Development Special Emphasis Panel, Function, Integration, and Rehabilitation Sciences Study Section, Jun 2024

Scientific Reviewer, VA Spinal Cord Injury/Disorders & Neuropathic Pain Rehabilitation Research and Development Parent IRG Panel, VA Office of Research & Development, Feb 2024

Scientific Reviewer, Scientific Review Committee, Foundation for Physical Therapy Research, 2022-2023

Scientific Reviewer, PODS Review Committee, Foundation for Physical Therapy Research, 2023

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

Reviewer, PreF31 Mock Study Section, Colorado Clinical & Translational Sciences Institute, 2024

Member, University of Colorado Assessment Committee, 2011-present

Reviewer, PreK Mock Study Section, Colorado Clinical & Translational Sciences Institute, 2024

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

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

Facilitator, Interprofessional orientation, 2008-2012

School of Medicine

Reviewer, Department of Physical Medicine & Rehabilitation Pilot Research Grant Proposals, 2024

Member, Grand Round Planning Committee, Department of Physical Medicine & Rehabilitation, 2023-present

Member, Research Oversight Committee, Department of Physical Medicine & Rehabilitation, 2023-present

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

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

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

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

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, GRECC Advanced Geriatric Fellowship Program, 2020-present

Member, VA Regional Amputation Center, 2017-present

Reviewer, VA ECHCS Research Promotion Panel, 2022

Honors and Awards

2024 Elite Reviewer, Archives of Physical Medicine and Rehabilitation. January 2025.

Catherine Worthingham Fellow of the American Physical Therapy Association. July 2024.

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)

Global Collaborative Congress on Osseointegration. Charlotte, NC; November 2024.

Military Health System Research Symposium. Kissimmee, FL; August 2024.

American Society of Biomechanics Annual Conference. Madison, WI; August 2024.

Rocky Mountain American Society of Biomechanics Conference. Estes Park, CO; April 2024.

Combined Section Meeting, APTA. Boston, MA; February 2024.

Parkinson Study Group Annual Meeting. Austin, TX; December 2023.

Global Collaborative Congress on Osseointegration. Charlotte, NC; November 2023.

Annual Conference, ASB. Knoxville, TN; August 2023.

Combined Section Meeting, APTA. San Diego, CA; February 2023.

Parkinson Study Group Annual Meeting. Phoenix, AZ; June 2022.

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.

Rocky Mountain American Society of Biomechanics Conference. 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.

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

American Occupational Therapy Foundation Implementation Research Grant (2024-2025).

Awardee: Laura Swink, OTR/L, PhD.

Role: Primary Mentor, Faculty Awardee.

NIH F32 1F32HD113195-01A1 Award (2024-2026). Awardee: James Tracy, PhD.

Role: Primary Mentor, Post-doctoral Fellow Awardee.

Veterans Administration RR&D Career Development Award (CDA2) (2022-2025). Awardee: Mark Mañago, DPT, PhD.

Role: Primary Mentor, Faculty Awardee.

Veterans Administration RR&D Career Development Award (CDA1) (2021-2022). Awardee: Laura Swink, OTR, PhD.

Role: Primary Mentor, Post-doctoral Fellow Awardee.

NIH K12 HD055931 K12 Award (2020-2023). Awardee: Mark Mañago, DPT, PhD.
Role: Primary Mentor, Faculty K12 Awardee.

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

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

Veterans Administration Advanced Geriatric Fellowship (2019). Awardee: Laura Swink, OTR, PhD.
Role: Primary Mentor, Post-doctoral Fellow Awardee.

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 Awardee.

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

APTA Biomechanics Student Travel Award (2018). Awardee: Paul Kline, DPT, PhD.
Role: Primary Mentor, Post-doctoral Fellow Awardee.

Veterans Administration Advanced Geriatric Fellowship (2017). Awardee: Matthew Miller, DPT.
Role: Primary Mentor, PhD Student Awardee.

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

Federal Physical Therapy Section Conference Scholarship (2017). Awardee: Matthew Miller, DPT.
Role: Primary Mentor, PhD Student Awardee.

PhD Trainees

Peter Thomsen, DPT (2023-current). Trainee Position: PhD Student, University of Colorado.
Current Position: student
Role: Primary Mentor

Rachael Akay, DPT (2022-current). Trainee Position: PhD Candidate, University of Colorado.
Current Position: student
Role: Primary Mentor

Chelsey Anderson, CPO (2017-2022). 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, ATC, PhD (2022-2024). Trainee Position: Post-Doctoral Fellow, University of Colorado Anschutz Medical Campus.

Current Position: Assistant Professor (University of California Fullerton)

Role: Primary Mentor

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: Assistant Professor (Colorado State University)

Role: Primary Mentor

Paul Kline, DPT, PhD (2017-2020). Trainee Position: Post-Doctoral Fellow, University of Colorado.

Current Position: Assistant Professor (Virginia Commonwealth University)

Role: Primary Mentor

Amanda Murray, DPT, PhD (2014-2016). Trainee Position: Post-Doctoral Fellow, University of Colorado.

Current Position: Associate 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

Nicholas Vandenberg, MS (2024). Engineering and Applied Physics, University of Colorado, Denver.

Zane Colvin, MS (2024). Integrative Physiology, University of Colorado, Boulder.

Michelle Rauzi, PT, DPT, ATC (2023); 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.