

Jennifer E. Stevens-Lapsley, PT, PhD Mailstop C244, 13121 East 17<sup>th</sup> Avenue, Aurora, CO 80045 303-724-9170 Doctor of Physical Therapy Program, University of Colorado, Anschutz Medical Campus

<u>Education</u> : University of Florida, Gainesville, FL	Post-Doctoral Fellow	2002 - 2005
University of Delaware, Newark, DE	PhD in Biomechanics	1998 - 2002
University of Delaware, Newark, DE	MS in Physical Therapy	1996 - 1998
University of Virginia, Charlottesville,	BA in Biology	1991 - 1995

Licensure Information: Colorado #PTL.0009104

Employment and Positions Held:

2016 - Present	Director, Rehabilitation Sciences PhD Program, Physical Therapy Program, University of Colorado Denver, Anschutz Medical Campus, Aurora, CO
2016 - Present	Health Scientist, Geriatric Research Education and Clinical Center, VA Eastern Colorado Healthcare System, Denver, CO
2015 - Present	Professor with Tenure, Physical Therapy Program, University of Colorado, Anschutz Medical Campus, Aurora, CO
2010 - 2015	Associate Professor, Physical Therapy Program, University of Colorado, Anschutz Medical Campus, Aurora, CO
2006 - Present	Director, Muscle Performance Laboratory, Department of Physical Medicine and Rehabilitation, University of Colorado, Anschutz Medical Campus, Aurora, CO
2006 - 2010	Assistant Professor, Physical Therapy Program, University of Colorado, Anschutz Medical Campus, Aurora, CO
2005	Physical Therapist, Oak Hammock Continuous Retirement Community, Gainesville, FL
2004 - 2005	Associate Investigator, Post-doctoral Fellow, Malcom Randall VA Medical Center, Brain Rehabilitation and Research Center, Gainesville, FL
2002 - 2003	Post-doctoral Fellow, University of Florida, Gainesville, FL
2003 - 2005	Per Diem Physical Therapist, Select Medical, Outpatient Physical Therapy Clinic, Gainesville, FL

- 1998 2001 Per Diem Physical Therapist, University of Delaware Physical Therapy Clinic
- 1998 2002 Research Assistant in muscle physiology at the University of Delaware, Department of Physical Therapy
- 1994 1995 Research Assistant in plant genetics at Mountain Lake Biological Station
- 1991 1993 Research Assistant in Bacterial Genetics at the National Institutes of Health

## Scholarly Agenda:

Focused on identifying, integrating and advancing innovative evidence-based medicine and technology-enabled solutions for older adults through highly effective and efficient research methods and partnerships. Dr. Stevens-Lapsley's investigations use a multifaceted approach to evaluate intervention strategies designed to enhance the effectiveness of rehabilitation in older adult patient populations with an emphasis on joint arthroplasty and medically complex populations.

## Peer Reviewed Publications:

- Falvey JR, Bade MJ, Hogan C, Forster JE, <u>Stevens-Lapsley JE</u>. Preoperative Activities of Daily Living Dependency is Associated With Higher 30-Day Readmission Risk for Older Adults After Total Joint Arthroplasty. Clin Orthop Relat Res. 2019 Oct 31. [Epub ahead of print] PubMed PMID: 31688209.
- Kittelson AJ, Hoogeboom TJ, Schenkman M, <u>Stevens-Lapsley JE</u>, van Meeteren NLU. Person-Centered Care and Physical Therapy: A "People-Like-Me" Approach. Phys Ther. 2019 Oct 14;. doi: 10.1093/ptj/pzz139. [Epub ahead of print] PubMed PMID: 31608928.
- Loyd BJ, Stackhouse SK, Hogan C, Dayton MR, <u>Stevens-Lapsley JE</u>, Kittelson AJ. Peripheral Nociception Is Associated with Voluntary Activation Deficits and Quadriceps Weakness Following Total Knee Arthroplasty. J Bone Joint Surg Am. 2019 Sep 4;101(17):1539-1545. doi: 10.2106/JBJS.18.01457. PubMed PMID: 31483396.
- Judd DL, Wolfe P, LeDoux CV, Hogan C, Dayton MR, <u>Stevens-Lapsley JE</u>. Trajectories of functional performance and muscle strength recovery differ after total knee and total hip replacement: a performance-based, longitudinal study. Int J Rehabil Res. 2019 Sep;42(3):211-216. PubMed PMID: 31219844; PubMed Central PMCID: PMC6687517.
- Falvey JR, Mangione KK, Nordon-Craft A, Cumbler E, Burrows KL, Forster JE, <u>Stevens-Lapsley</u> <u>JE</u>. Progressive Multicomponent Intervention for Older Adults in Home Health Settings Following Acute Hospitalization: Randomized Clinical Trial Protocol. Phys Ther. 2019 Sep 1;99(9):1141-1149. doi: 10.1093/ptj/pzz069. PubMed PMID: 31004493; PubMed Central PMCID: PMC6736217.
- Jones CD, Falvey J, Hess E, Levy CR, Nuccio E, Barón AE, Masoudi FA, <u>Stevens-Lapsley J</u>. Predicting Hospital Readmissions from Home Healthcare in Medicare Beneficiaries. J Am Geriatr Soc. 2019 Aug 29;. doi: 10.1111/jgs.16153. [Epub ahead of print] PubMed PMID: 31463941.

- Myers CA, Laz PJ, Shelburne KB, Judd DL, Winters JD, <u>Stevens-Lapsley JE</u>, Davidson BS. Simulated hip abductor strengthening reduces peak joint contact forces in patients with total hip arthroplasty. J Biomech. 2019 Aug 27;93:18-27. doi: 10.1016/j.jbiomech.2019.06.003. Epub 2019 Jun 6. PubMed PMID: 31221457; PubMed Central PMCID: PMC6698423.
- Judd DL, Cheuy VA, Forster JE, Christiansen CL, <u>Stevens-Lapsley JE</u>. Incorporating Specific Functional Judd DL, Cheuy VA, Forster JE, Christiansen CL, Stevens-Lapsley JE. Incorporating Specific Functional Strength Integration Techniques to Improve Functional Performance for Veterans After Total Hip Arthroplasty: Protocol for a Randomized Clinical Trial. Phys Ther. 2019 Aug 8;. doi: 10.1093/ptj/pzz109. [Epub ahead of print] PubMed PMID: 31392991.
- Gustavson AM, Falvey JR, Forster JE, <u>Stevens-Lapsley JE</u>. Predictors of Functional Change in a Skilled Nursing Facility Population. J Geriatr Phys Ther. 2019 Jul/Sep;42(3):189-195. doi: 10.1519/JPT.000000000000137. PubMed PMID: 28650398; PubMed Central PMCID: PMC5740023.
- Falvey JR, Burke RE, Ridgeway KJ, Malone DJ, Forster JE, <u>Stevens-Lapsley JE</u>. Involvement of Acute Care Physical Therapists in Care Transitions for Older Adults Following Acute Hospitalization: A Cross-sectional National Survey. J Geriatr Phys Ther. 2019 Jul/Sep;42(3):E73-E80. doi: 10.1519/JPT.000000000000187. PubMed PMID: 29533283; PubMed Central PMCID: PMC6135710.
- Gustavson AM, Drake C, Lakin A, Daddato AE, Falvey JR, Capell W, Lum HD, Jones CD, Unroe KT, Towsley GL, <u>Stevens-Lapsley JE</u>, Levy CR, Boxer RS. Conducting Clinical Research in Post-acute and Long-term Nursing Home Care Settings: Regulatory Challenges. J Am Med Dir Assoc. 2019 Jul;20(7):798-803. doi: 10.1016/j.jamda.2019.04.022. PubMed PMID: 31248598; PubMed Central PMCID: PMC6703170.
- Jennings JM, Loyd BJ, Miner TM, Yang CC, <u>Stevens-Lapsley J</u>, Dennis DA. A prospective randomized trial examining the use of a closed suction drain shows no influence on strength or function in primary total knee arthroplasty. Bone Joint J. 2019 Jul; 101-B(7\_Supple\_C): 84-90. doi: 10.1302/0301-620X.101B7.BJJ-2018-1420.R1. PMID: 31256644.
- Loyd BJ, Burrows K, Forster JE, Stackhouse SK, Hogan C, <u>Stevens-Lapsley JE</u>. Reliability and precision of single frequency bioelectrical impedance assessment of lower extremity swelling following total knee arthroplasty. Physiother Theory Pract. 2019 May 29;:1-7. doi: 10.1080/09593985.2019.1619886. [Epub ahead of print] PubMed PMID: 31140887; NIHMSID:NIHMS1529856.
- 14. Falvey JR, Gustavson AM, Price L, Papazian L, <u>Stevens-Lapsley JE</u>. Dementia, Comorbidity, and Physical Function in the Program of All-Inclusive Care for the Elderly. J Geriatr Phys Ther. 2019 Apr/Jun;42(2):E1-E6. doi: 10.1519/JPT.0000000000000131. PubMed PMID: 28437317; PubMed Central PMCID: PMC5650947.
- 15. Loyd BJ, Stackhouse S, Dayton M, Hogan C, Bade M, <u>Stevens-Lapsley J.</u> The relationship between lower extremity swelling, quadriceps strength, and functional performance following total knee arthroplasty. Knee. 2019 Mar;26(2):382-391. doi: 10.1016/j.knee.2019.01.012. Epub 2019

Feb 14. PubMed PMID: 30772186; PubMed Central PMCID: PMC6486428.

- Miller MJ, Cook PF, Kline PW, Anderson CB, <u>Stevens-Lapsley JE</u>, Christiansen CL. Physical Function and Pre-Amputation Characteristics Explain Daily Step Count after Dysvascular Amputation. PM R. 2019 Feb 6;. doi: 10.1002/pmrj.12121. [Epub ahead of print] PubMed PMID: 30729727.
- 17.Zeni JA Jr, Flowers P, Bade M, Cheuy V, <u>Stevens-Lapsley J</u>, Snyder-Mackler L. Stiff knee gait may increase risk of second total knee arthroplasty. J Orthop Res. 2019 Feb;37(2):397-402. doi: 10.1002/jor.24175. Epub 2018 Dec 17. PubMed PMID: 30387528.
- 18. Bamman MM, Cutter GR, Brienza DM, Chae J, Corcos DM, DeLuca S, Field-Fote E, Fouad MN, Lang CE, Lindblad A, Motl RW, Perna CG, Reisman D, Saag KM, Savitz SI, Schmitz KH, <u>Stevens-Lapsley J</u>, Whyte J, Winstein CJ, Michel ME. Medical Rehabilitation: Guidelines to Advance the Field with High-Impact Clinical Trials. Arch Phys Med Rehabil. 2018 Aug 24. pii: S0003-9993(18)31113-4. doi: 10.1016/j.apmr.2018.08.173. [Epub ahead of print] PubMed PMID: 30148997.
- Myers CA, Laz PJ, Shelburne KB, Judd DL, Huff DN, Winters JD, <u>Stevens-Lapsley JE</u>, Rullkoetter PJ. The impact of hip implant alignment on muscle and joint loading during dynamic activities. Clin Biomech (Bristol, Avon). 2018 Mar;53:93-100. doi: 10.1016/j.clinbiomech.2018.02.010. Epub 2018 Feb 14. PubMed PMID: 29482087; PubMed Central PMCID: PMC5890933.
- 20. Miller MJ, Magnusson DM, Lev G, Fields TT, Cook PF, <u>Stevens-Lapsley JE</u>, Christiansen CL. Relationships Among Perceived Functional Capacity, Self-Efficacy, and Disability After Dysvascular Amputation. PM R. 2018 Mar 24. pii: S1934-1482(18)30163-1. doi: 10.1016/j.pmrj.2018.03.014. [Epub ahead of print] PubMed PMID: 29580940.
- 21. Bade M, Struessel T, Paxton R, Winters J, Baym C, <u>Stevens-Lapsley J</u>. Performance on a clinical quadriceps activation battery is related to a laboratory measure of activation and recovery after total knee arthroplasty. Arch Phys Med Rehabil. 2018 Jan;99(1):99-106. doi: 10.1016/j.apmr.2017.07.013. Epub 2017 Aug 31. PubMed PMID: 28864244; PubMed Central PMCID: PMC5748250.
- 22. Maffiuletti NA, Gondin J, Place N, Stevens-Lapsley J, Vivodtzev I, Minetto MA. The Clinical Use of Neuromuscular Electrical Stimulation for Neuromuscular Rehabilitation: What Are We Overlooking? Arch Phys Med Rehabil. 2017 Dec 9. pii: S0003-9993(17)31395-3. doi: 10.1016/j.apmr.2017.10.028. [Epub ahead of print] PubMed PMID: 29233625.
- 23. Gustavson AM, Falvey JR, Forster JE, <u>Stevens-Lapsley JE</u>. Predictors of Functional Change in a Skilled Nursing Facility Population. J Geriatr Phys Ther. 2017 Jun 21. doi: 10.1519/JPT.00000000000137. [Epub ahead of print] PubMed PMID: 28650398.
- 24. Cheuy VA, Foran JRH, Paxton RJ, Bade MJ, Zeni JA, Stevens-Lapsley JE. Arthrofibrosis Associated With Total Knee Arthroplasty. J Arthroplasty. 2017 Aug;32(8):2604-2611. doi: 10.1016/j.arth.2017.02.005. Epub 2017 Feb 14. Review. PubMed PMID: 28285897.

- 25. Loyd BJ, Jennings JM, Falvey JR, Kim RH, Dennis DA, <u>Stevens-Lapsley JE</u>. Magnitude of Deformity Correction May Influence Recovery of Quadriceps Strength After Total Knee Arthroplasty. J Arthroplasty. 2017 Sep;32(9):2730-2737. doi: 10.1016/j.arth.2017.04.030. Epub 2017 Apr 27. PubMed PMID: 28559195; PubMed Central PMCID: PMC5572744.
- 26. Loyd BJ, Jennings J, Judd D, Kim R, Wolfe P, Dennis D, <u>Stevens-Lapsley J.</u> Influence of Hip Abductor Strength on Functional Outcomes before and after Total Knee Arthroplasty: Post Hoc Analysis of a Randomized Controlled Trial. Physical Therapy. 2017 Sep 1;97(9):896-903. doi: 10.1093/ptj/pzx066. PubMed PMID: 28969350.
- 27. Paxton RJ, Forster J, Miller M, Gerron K, <u>Stevens-Lapsley JE</u>, Christiansen CL. Feasibility study for improved physical activity after total knee arthroplasty: a randomized controlled trial. J Aging Phys Act. 2018 Jan 1;26(1):7-13. doi: 10.1123/japa.2016-0268. Epub 2017 Nov 30. PubMed PMID: 28338406; PubMed Central PMCID: PMC5654685.
- 28. Gustavson AM, Falvey JR, Jankowski CM, <u>Stevens-Lapsley JE</u>. Public Health Impact of Frailty: Role of Physical Therapists (2017). J Frailty Aging. 2017;6(1):2-5. doi: 10.14283/jfa.2017.1. PubMed PMID: 28244550; PubMed Central PMCID: PMC5446186.
- Miller MJ, <u>Stevens-Lapsley J</u>, 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 Apr;55:10-15. doi: 10.1016/j.cct.2017.01.008. Epub 2017 Jan 31. PubMed PMID: 28153768; PubMed Central PMCID: PMC5360171.
- 30.Bovet C, <u>Stevens-Lapsley JE</u>, Taylor MR. Functional Performance and Muscle Strength after Enzyme Replacement Therapy in a Patient with Pompe Disease. JSM Biochemistry and Molecular Biology. 2017 January 19.
- 31. Falvey, JR, Gustavson, AM, Price, L, Papazian, L, and <u>Stevens-Lapsley, JE</u>. Dementia, comorbidity, and physical function in the program of all inclusive care for the elderly. J Geriatr Phys Ther. 2017 Apr 21. doi: 10.1519/JPT.0000000000000131. [Epub ahead of print] PubMed PMID: 28437317; PubMed Central PMCID: PMC5650947.
- 32. Bade MJ, Struessel T, Dayton M, Foran J, Kim R, Miner T, Wolfe P, Kohrt W, Dennis D, <u>Stevens-Lapsley JE</u>. Early High-Intensity Versus Low-Intensity Rehabilitation after Total Knee Arthroplasty: A Randomized Controlled Trial. Arthritis Care Res (Hoboken). 2017 Sep;69(9):1360-1368. doi: 10.1002/acr.23139. Epub 2017 Aug 13.
- 33. Hayes B, Kittelson A, Loyd B, Wellsandt E, Flug J, <u>Stevens-Lapsley J</u>. Assessing radiographic knee osteoarthritis: an online training tutorial for the Kellgren-Lawrence grading scale. MedEdPORTAL Publications. 2016;12:10503. <u>https://doi.org/10.15766/mep\_2374-8265.10503</u>.
- 34. Callahan DM, Tourville TW, Slauterbeck JR, Ades PA, <u>Stevens-Lapsley J</u>, Beynnon BD, Toth MJ. Reduced rate of knee extensor torque development in older adults with knee osteoarthritis is associated with intrinsic muscle contractile deficits. Exp Gerontol. 2015 Dec;72:16-21. PubMed PMID: 26343257; PubMed Central PMCID: PMC4654635.

- 35. Gustavson AM, Jones J, Morrow KJ, <u>Stevens-Lapsley JE</u>. Preparing for the Future of Post-Acute Care: A Metasynthesis of Qualitative Studies. *Home health care management & practice.* 2017 May 01; 29(2):70-80.
- 36. Burke RE, Jones CD, Coleman EA, Falvey JR, <u>Stevens-Lapsley JE</u>, Ginde AA. Use of post-acute care after hospital discharge in urban and rural hospitals. *The American Journal of Accountable Care*. 2017;5(1):16-22.
- 37. Paxton RJ, Sherk KA, Murray AM, <u>Stevens-Lapsley JE</u>, Christiansen CL. Physical activity, ambulation, and comorbidities in people with diabetes and lower-limb amputation. J Rehabil Res Dev. 2016; 53(6): 1069–1078. doi: 10.1682/JRRD.2015.08.0161. PubMed PMID: 28355032; PubMed Central PMCID: PMC5474964.
- 38. Loyd BJ, Fields TT, Stephenson RO, <u>Stevens-Lapsley J</u>, Christiansen CL. Explaining 2-minute walk outcomes in Veterans with traumatic or non-traumatic lower limb amputation. J Rehabil Res Dev. 2016;53(6):1035-1044. doi: 10.1682/JRRD.2015.03.0038.
- 39. Spector P, Laufer Y, Gabyzon ME, Kittelson AJ, <u>Stevens Lapsley JE</u>, Maffiuletti NA. Neuromuscular Electrical Stimulation Therapy to Restore Quadriceps Muscle Function in Orthopedic Surgery Patients. A Novel Structured Approach. *Journal of Bone and Joint Surgery*. 2016 Dec; 98:2017-24. http://dx.doi.org/10.2106/JBJS.16.00192.
- 40. Falvey JR, Burke RE, Malone D, Ridgeway KJ, McManus BM, <u>Stevens-Lapsley JE</u>. Role of Physical Therapists in Reducing Hospital Readmissions: Optimizing Outcomes for Older Adults During Care Transitions from Hospital to Community. Phys Ther. 2016 Aug;96(8):1125-34. PMID: 26939601; PMCID: PMC4992143.
- 41. Gustavson AM, Wolfe P, Falvey JR, Eckhoff DG, Toth MJ, <u>Stevens-Lapsley JE</u>. Men and Women Demonstrate Differences in Early Functional Recovery After Total Knee Arthroplasty. *Arch Phys Med Rehabil.* 2016 July;97(7):1154-62. PMID: 27063363.
- 42. Judd DL, Winters JD, <u>Stevens-Lapsley JE</u>, Christiansen CL. Effects of neuromuscular reeducation on hip mechanics and functional performance in patients after total hip arthroplasty: A case series. Clin Biomech (Bristol, Avon). 2016 Feb;32:49-55. PMID:2680253; PMCID: PMC4779395.
- 43. Reeder, Blaine, Chung, Jane, & <u>Stevens-Lapsley</u>, <u>Jennifer</u>. Current telerehabilitation research with older adults at home: an integrative review. Journal of Gerontological Nursing. 2016 Feb 4:1-6.
- 44. Dennis DA, Kittelson AJ, Yang CC, Minter TM, Kim RH, <u>Stevens-Lapsley JE</u>. Does tourniquet use in TKA affect recovery of lower extremity strength and function? A randomized trial. Clin Orthop Relat Res. 2016 Jan;474(1):69-77. PMID: 26100254; PMCID: PMC4686529.
- 45. <u>Stevens-Lapsley JE</u>, Loyd BJ, Falvey JR, Figiel GJ, Kittelson AJ, Cumbler EU, Mangione KK. Progressive multi-component home-based physical therapy for deconditioned older adults following actue hospitalization: A pilot randomized controlled trial. Clin Rehabil. 2016 Aug;30(8):776-85. PubMed PMID: 26337626

- 46. Dayton MR, Judd DJ, Hogan CA, <u>Stevens-Lapsley JE</u>. Performance-based versus self-reported outcomes using the Hip Disability and Osteoarthritis Outcome Score after total hip arthroplasty. Am J Phys Med Rehabil. 2016 Feb;95(2):132-8. PMID: 26259051.
- 47. Gaffney BM, Harris MD, Davidson BS, <u>Stevens-Lapsley JE</u>, Christiansen CL, Shelburne KB. Multijoint compensatory effects of unilateral total knee arthroplasty during high-demand tasks. Ann Biomed Eng. 2016 Aug;44(8):2529-4. PMID: 26666227.
- 48. Kittelson AJ, <u>Stevens-Lapsley JE</u>, Schmiege SJ. Determination of pain phenotypes in knee osteoarthritis: A latent class analysis using data from the osteoarthritis initiative study. Arthritis Care Res (Hoboken). 2016 May;68(5):612-20. PubMed PMID: 26414884
- 49. Falvey JR, Burke RE, <u>Stevens-Lapsley JE</u>. Physical function and hospital readmissions. JAMA Intern Med. 2015 Oct;175(10):1722. PMID: 26436745.
- 50. Paxton RJ, Melanson EL, <u>Stevens-Lapsley JE</u>, Christiansen CL. Physical activity after total knee arthroplasty: A critical review. World J Orthop. 2015 Sep 18;6(8):614-22. PMID: 26396937; PMCID: PMC4573505.
- 51. Falvey J, Mangione K, <u>Stevens-Lapsley JE</u>. Rethinking Hospital-Associated Deconditioning: Proposed Paradigm Shift. Phys Ther. 2015 Sep;95(9):1307-15. PMID: 25908526; PMCID: PMC4556957.
- 52. Christiansen CL, Bade MJ, Davidson BS, Dayton MR, <u>Stevens-Lapsley JE</u>. Effects of weightbearing biofeedback training on functional movement patterns following total knee arthroplasty: A randomized controlled trial. J Orthop Sports Phys Ther. 2015 Sep;45(9):647-55. PMID: 26207975; PMCID: PMC4558346.
- 53. Christiansen CL, Bade MJ, Paxton RJ, <u>Stevens-Lapsley JE</u>. Measuring movement symmetry using tibial-mounted accelerometers for people recovering from total knee arthroplasty. Clin Biomech (Bristol, Avon). 2015 Aug;30(7):732-7. PMID: 25979222; PMCID: PMC4523451.
- 54. Christiansen CL, Fields T, Lev G, Stephenson RO, <u>Stevens-Lapsley JE</u>. Functional outcomes after the prosthetic training phase of rehabilitation after dysvascular lower extremity amputation. PM R. 2015 Nov;7(11):1118-26. PMID: 25978948; PMCID: PMC4643436.
- 55. Hoogeboom TJ, van Meeteren N, Schank, Kim RH, Miner T, <u>Stevens-Lapsley JE</u>. Risk factors for delayed inpatient functional recovery after total knee arthroplasty. BioMed Res Int. 2015; Apr 16 [Epub ahead of print]. PMID: 25961001; PMCID: 4415448.
- 56. <u>Stevens-Lapsley JE</u>, Bade MJ, Wolfe P, Kohrt WM, Dayton MR. Minimally invasive total knee arthroplasty does not improve outcomes 1 year after surgery: A randomized controlled trial. J Clin Trials. 2015 Jan;5(1):207.
- 57. Kittelson A, Thomas A, Kluger B, <u>Stevens-Lapsley J</u>. Corticospinal and intracortical excitability of the quadriceps in patients with knee osteoarthritis. Experimental Brain Research. Exp Brain Res. 2014 Dec;232(12):3991-9. PMID: 25183161; PMCID: PMC4404306.

- 58. Thomas AC, Judd DhoogeL, Davidson BS, Eckhoff DG, <u>Stevens-Lapsley JE</u>. Quadriceps/Hamstrings Co-Activation Increases Early After Total Knee Arthroplasty. The Knee: 2014 Dec;21(6):1115-9. PMID: 25218971.
- 59. Bade MJ, Kittelson JM, Kohrt WM, <u>Stevens-Lapsley JE</u>. Predicting Functional Performance and Range of Motion Outcomes After Total Knee Arthroplasty. Am J Phys Med Rehabil. 2014 Jul;93(7):579-85. PMID: 24508937
- 60. Judd DL, Dennis DA, Thomas AC, Wolfe P, Dayton MR, <u>Stevens-Lapsley JE</u>. Muscle Strength and Functional Recovery During the First Year after THA. Clin Orthop Relat Res. 2014 Feb;472(2):654-64. PMID: 23817756
- 61. Judd DL, Thomas AC, Dayton MR, <u>Stevens-Lapsley JE</u>. Strength and functional deficits in individulas with hip osteoarthritis compared to healthy, older adults. Disabil Rehabil. 2014;36(4)307-12. PMID: 23659184, PMCID: PMC4165337
- 62. Kittelson AJ, George SZ, Maluf KS, <u>Stevens-Lapsley JE</u>. Future Directions in Painful Knee Osteoarthritis:Harnessing Complexity in a Heterogeneous Population. Phys Ther. 2014 Mar;94(3):422-32. PMID: 24179141, PMCID: PMC3432951
- 63. Kittelson A, Stackhouse S, <u>Stevens-Lapsley JE</u>. Neuromuscular electrical stimulation after total joint arthroplasty: a critical review of recent controlled studies. Euro J Phys Rehabil Med. 2013 Dec;49(6)909-20. PMID: 24285026
- 64. Davidson BS, Judd DL, Thomas AC, Mizner RL, Eckhoff DG, <u>Stevens-Lapsley JE.</u> Muscle activation and coactivation during five-time-sit-to-stand movement in patients undergoing total knee arthroplasty. J Electromyogr Kinesiol. 2013 Dec;23(6):1485-93. PMID: 23953763
- 65. Struessel T, Balter JE, <u>Stevens-Lapsley JE</u>. Does Delay in Total Knee Arthroplasty Impact Performance? A Case-Based Illustration. J Knee Surg. 2013 Dec;26 Suppl 1:S081-8. PMID: 23288763
- 66. Winters JD, Christiansen CL, <u>Stevens-Lapsley JE</u>. Preliminary Investigation of Rate of Torque Development Deficits Following TKA. Knee. 2013 Oct 23. PMID: 24238649
- 67. Robinson TN, Wu DS, Sauaia A, Dunn CL, <u>Stevens-Lapsley JE</u>, Moss M, Stiegmann GV, Gajdos C, Cleveland JC Jr, Inouye SK. Slower Walking Speed Forecasts Increased Postoperative Morbidity and 1-Year Mortality across Surgical Specialties. Ann Surg. 2013 Oct;258(4):582-90. PMID: 23979272, PMCID: PMC3771691
- 68. Hoogeboom TJ, van Meeteren NL, Kim RH, <u>Stevens-Lapsley JE</u>. Linear and Curvilinear Relationship between Knee Range of Motion and Physical Functioning in People with Knee Osteoarthritis: A Cross-Sectional Study. PLoS One. 2013 Sep 26;8(9):e76173. PMID: 24086704, PMCID: PMC3784410
- 69. Dinkins E, Stevens-Lapsley JE. Management of symptoms of Restless Legs Syndrome with use of

a traction straight leg raise: A preliminary case series. Manual Therapy. 2013 Aug;18(4):299-302. PMID: 23276629

- 70. Dayton MR, Bade MJ, Muratore T, Shulman BC, Kohrt WM, <u>Stevens-Lapsley JE.</u> Minimally Invasive Total Knee Arthroplasty: Surgical Implications for Recovery. J Knee Surg. 2013 Jun;26(3):195-201. PMID: 23288738, PMCID: PMC4162390
- 71. Christiansen CL, Bade MJ, Weitzenkamp DA, <u>Stevens-Lapsley JE</u>. Factors predicting weightbearing asymmetry 1 month after unilateral total knee arthroplasty: a cross-sectional study. Gait Posture. 2013; 37:363-367. PMID: 22980137, PMCID: PMC3529981
- 72. Marmon A, <u>Stevens-Lapsley JE</u>, Snyder-Mackler L. Single step test for unilateral limb ability following total knee arthroplasty. Journal of Orthopaedic & Sports Physical Therapy: 2013 Feb;43(2):66-73. PMID: 23160309, PMCID: PMC4096695
- 73. <u>Stevens-Lapsley JE</u>, Thomas AC, Hedgecock JB, Kluger BM. Corticospinal and Intracortical Excitability of the Quadriceps in Active Older and Younger Healthy Adults. Arch Gerontol Geriatr. 2013 Jan-Feb;56(1):279-84. PMID: 22951029, PMCID: PMC3502668
- 74. <u>Stevens-Lapsley JE</u>, Bade MJ, Shulman BC, Kohrt WM, Dayton MR. Minimally Invasive Total Knee Arthroplasty Improves Early Knee Strength but Not Functional Performance: A Randomized Controlled Trial. Journal of Arthroplasty. 2012 Dec;27(10):1812-1819. PMID: 22459124, PMCID: PMC3413785
- 75. Bade MJ, Wolfe P, Zeni JA, <u>Stevens-Lapsley JE</u>, Snyder-Mackler L. Predicting Poor Physical Performance after Total Knee Arthroplasty. Journal of Orthopaedic Research. Nov 2012; 30(11): 1805-10. PMID: 22539338, PMCID: PMC3417156
- 76. <u>Stevens-Lapsley JE</u>, Balter JE, Wolfe P, Eckhoff DG, Schwartz RS, Schenkman M, Kohrt WM. Relationship between intensity of Quadriceps Neuromuscular Electrical Stimulation and Strength Recovery after Total Knee Arthroplasty. Physical Therapy. Sept 2012; 92(9):1187-96. PMID: 22652985, PMCID: PMC3432951
- 77. <u>Stevens-Lapsley JE</u>, Kluger BM, Schenkman M. Quadriceps Muscle Weakness, Activation Deficits and Fatigue with Parkinson's Disease. Journal of Neurorehabilitation and Neural Repair. 2012 Jun;26(5):533-41. PMID: 22140196
- 78. Kittelson A, <u>Stevens-Lapsley JE.</u> Gait speed in the total joint arthroplasty population. Topics in Geriatric Rehabilitation. April/June 2012; 28(2):104-109.
- 79. Thomas AC, <u>Stevens-Lapsley JE</u>. Importance of Attenuating Quadriceps Activation Deficits After Total Knee Arthroplasty. Exercise and Sport Science Reviews. 2012 Apr;40(2):95-101. PMID: 22249398, PMCID: PMC 3311712
- 80. Bade MJ, <u>Stevens-Lapsley JE.</u> Restoration of physical function in patients following total knee arthroplasty: an update on rehabilitation practices. Curr Opin Rheumatol. 2012 Mar;24(2):208-14.

PMID: 22249349

- 81. Bauer M, Wang L, Onibonoje OK, Parrett C, Sessler DI, Mounier-Soliman L, Zaky S, Krebs V, Buller LT, Donohue MC, <u>Stevens-Lapsley JE</u>, Ilfeld BM. Continuous femoral nerve blocks: decreasing local anesthetic concentration to minimize quadriceps femoris weakness. Anesthesiology 2012 Mar; 116: 665-72. PMID: 22293719, PMCID: PMC3288409
- 82. Judd DL, Eckhoff DG, <u>Stevens-Lapsley JE</u>. Muscle Strength Loss in the Lower Limb After Total Knee Arthroplasty. American Journal of Physical Medicine and Rehabilitation. 2012 Mar;91(3):220-6. PMID: 22257971, PMCID: PMC4140618
- 83. <u>Stevens-Lapsley JE</u>, Balter JE, Wolfe P, Eckhoff DG, Kohrt WM. Early Neuromuscular Electrical Stimulation to Improve Quadriceps Muscle Strength after Total Knee Arthroplasty: A Randomized Controlled Trial. Physical Therapy. Feb 2012; 92(2):210-26. PMID: 22095207, PMCID: PMC3269772
- 84. Bade MJ, <u>Stevens-Lapsley JE.</u> Early High Intensity Rehabilitation Following Total Knee Arthroplasty Improves Outcomes. J Orthop Sports Phys Ther. Dec. 2011;41(12):932-41. PMID: 21979411
- 85. Christiansen CL, Bade MJ, Judd DL, <u>Stevens-Lapsley JE.</u> Weight-Bearing Asymmetry During Sit-Stand Transitions Related to Impairment and Functional Mobility After Total Knee Arthroplasty. Oct 2011; 92(10), 1624-9. PMID: 21839986
- 86. <u>Stevens-Lapsley JE</u>, Schenkman ML, Dayton MR. Comparison of self-reported Knee injury and Osteoarthritis Outcome Score (KOOS) to objective measures of performance in patients after total knee arthroplasty. Physical Medicine and Rehabilitation. June 2011; 3(6):541-9. PMID: 21665167
- 87. <u>Stevens-Lapsley JE</u>, Kramer LR, Balter JE, Jirikowic J, Boucek D, Taylor M. Functional Performance and Muscle Strength Phenotypes in Men and Women with Danon Disease. Muscle and Nerve. 2010 Dec42(6):908-14. PMID: 21104865, PMCID: PMC3058480
- 88. <u>Stevens-Lapsley JE\*</u>, Ye F\*, Liu M, Borst SE, Conover C, Yarasheski KE, Walter GA, Sweeney HL, Vandenborne K. Impact of viral mediated IGF-I gene transfer on skeletal muscle following cast immobilization. Am J Physiol Endocrinol Metab. Nov 2010; 299(5):E730-40. \*These authors contributed equally to this work. PMID: 20739512, PMCID: PMC2980362
- 89. Christiansen CL, <u>Stevens-Lapsley JE.</u> Weight-bearing asymmetry in relation to measures of impairment and functional mobility for people with knee osteoarthritis. Archives of Physical Medicine and Rehabilitation. 2010 Oct;91(10):1524-8. PMID: 20875509, PMCID: PMC2948025
- 90. <u>Stevens-Lapsley JE</u>, Petterson SC, Mizner RL, Snyder-Mackler L. Impact of Body Mass Index on Functional Performance after Total Knee Arthroplasty. The Journal of Arthroplasty. 2010 Oct;25(7):1104-9. PMID: 19879722, PMCID: PMC2891410
- 91.Bade MJ, Kohrt WM, <u>Stevens-Lapsley JE.</u> Outcomes before and after total knee arthroplasty compared to healthy adults. J Orthop Sports Phys Ther. 2010 Sep;40(9)559-67. PMID: 20710093,

### PMCID: PMC3164265

- 92. <u>Stevens-Lapsley JE</u>, Balter JE, Kohrt WM, Eckhoff D. Quadriceps and Hamstrings Muscle Dysfunction after Total Knee Arthroplasty. Clinical Orthopaedics and Related Research, 2010 Sep;468(9):2460-8. PMID: 20087703, PMCID: PMC2919870
- 93. Lui M, <u>Stevens-Lapsley JE</u>, Jayaraman A, Fan Y, Conover C, Walter GA, Bose P, Thompson FJ, Borst SE, Vandenborne K. Impact of treadmill locomotor training on skeletal muscle IGF-I and myogenic regulator factors in spinal cord injured rats. Eur J Appl Physiol. 2010 Jul;109(4):709-20. PMID: 20213470
- 94. <u>Stevens-Lapsley JE</u>, Kohrt WM. Osteoarthritis in women: effects of estrogen, obesity and physical activity. Womens Health (Lond Engl). 2010 Jul;6(4):601-15. PMID: 20597623
- 95. Ilfeld BM, Moeller LK, Mariano ER, Loland VL, <u>Stevens-Lapsley JE</u>, Fleisher AS, Girard PJ, Donohue MC, Ferguson EJ, Ball ST. Continuous peripheral nerve blocks: is local anesthetic dose the only factor, or do concentration and volume influence infusion effects as well? *Anesthesiology*. 2010:112: 347-54. PMID: 20098137
- 96. Petterson SC, Mizner RL, <u>Stevens JE</u>, Raisis L, Bodenstab A, Newcomb W, Snyder-Mackler L. Improved function from progressive strengthening interventions after total knee arthroplasty: a randomized clinical trial with an imbedded prospective cohort. *Arthritis Rheum*. Feb 2009 15;61(2):174-83. PMID: 19177542
- 97. Fisher TB, <u>Stevens JE</u>. Rehabilitation of a marathon runner with Guillain Barré Syndrome. *Journal of Neurological Physical Therapy*. Dec 2008: 32:203-209. PMID: 19265762
- 98. Shah PK, Gregory CM, <u>Stevens JE</u>, Pathare NC, Jayaraman A, Behrman AL, Walter GA, Vandenborne K.. Non-invasive assessment of lower extremity muscle composition after incomplete spinal cord injury. *Spinal Cord.* 2008;46(8):565-70. PMID: 18347608
- 99. Jayaraman A, Shah P, Gregory C, Bowden M, <u>Stevens J</u>, Bishop M, Walter G, Behrman A, Vandenborne K. Locomotor training and muscle function after incomplete spinal spinal cord injury: a case series. J Spinal Cord Med. 2008;31(2):185-193. PMID: 18581666
- 100. Mintken PE, Carpenter KJ, Eckhoff D, Kohrt WM, <u>Stevens JE</u>. Early neuromuscular electrical stimulation to optimize quadriceps muscle function following total knee arthroplasty: a case study. J Orthop Sports Phys Ther. 2007;37(7):364-371. PMID: 17710905
- Pathare N, Vandenborne K, Liu M, <u>Stevens JE</u>, Li Y, Frimel TN, Walter GA. Alterations in inorganic phosphate in mouse hindlimb muscles during limb disuse. NMR Biomed. 2008 Feb;21(2):101-110. PMID: 17516466
- 102. <u>Stevens JE</u>, Liu M, Bose P, O'Steen WA, Thompson FJ, Anderson DK, Vandenborne K. Changes in soleus muscle function and fiber morphology with one week of locomotor training in spinal cord contusion injured rats. J Neurotrauma. 2006 Nov;23(11):1671-1681. PMID: 17115912

- 103. <u>Stevens JE</u>, Pathare NC, Tillman S, Scarborough MT, Gibbs CP, Shah P, Jayaraman A, Walter GA, Vandenborne K. Relative contributions of muscle activation and muscle size to plantarflexor torque during rehabilitation after immobilization. J Orthop Res. 2006;24(8):1729-1736. PMID: 16779833
- 104. Pathare NC, <u>Stevens JE</u>, Walter GA, Shah P, Jayaraman A, Tillman SM, Scarborough MT, Parker Gibbs C, Vandenborne K. Deficit in human muscle strength with cast immobilization: contribution of inorganic phosphate. Eur J Appl Physiol. 2006;98(1):71-78. PMID: 16841201
- 105. Shah PK, <u>Stevens JE</u>, Gregory CM, Pathare NC, Jayaraman A, Bickel SC, Bowden M, Behrman AL, Walter GA, Dudley GA, Vandenborne K. Lower-extremity muscle cross-sectional area after incomplete spinal cord injury. Arch Phys Med Rehabil. 2006;87(6):772-778. PMID: 16731211
- 106. Jayaraman A, Gregory CM, Bowden MG, <u>Stevens JE</u>, Bishop M, Walter G, Behrman A, Vandenborne K. Locomotor training and muscle function after incomplete spinal cord injury: case series. Spinal Cord. 2006 Nov;44(11):680-687. PMID: PMC2578797
- 107. Mizner RL, Petterson SC, <u>Stevens JE</u>, Axe MJ, Snyder-Mackler L. Preoperative quadriceps strength predicts functional ability one year after total knee arthroplasty. J Rheumatol. 2005;32:1533-1539. PMID: 16078331
- 108. Pathare NC, Walter GA, <u>Stevens JE</u>, Yang Z, Okerke E, Gibbs JD, Esterhai JL, Scarborough MT, Gibbs CP, Sweeney HL, Vandenborne K. Changes in inorganic phosphate and force production in human skeletal muscle after cast immobilization. J Appl Physiol. 2005 Jan;98(1):307-314. PMID: 15333614
- 109. Mizner RL, Petterson SC, <u>Stevens JE</u>, Vandenborne K, Snyder-Mackler L. Early quadriceps strength loss after total knee arthroplasty. The contribution of muscle atrophy and failure of voluntary muscle activation. J Bone Joint Surg. 2005;87:1047-1053. PMID: 15866968, PMCID: PMC1167681
- 110. <u>Stevens JE</u>, Walter GA, Okereke E, Scarborough MT, Esterhai JL, George SZ, Kelley MJ, Tillman SM, Gibbs JD, Elliott MA, Frimel TN, Gibbs CP, Vandenborne K. Muscle adaptations with immobilization and rehabilitation after ankle fracture. Med Sci Sports Exerc. 2004;36(10):1695-1701. PMID: 15595289
- 111. White LJ, McCoy S, Castellano V, Gutierrez G, <u>Stevens JE</u>, Walter GA, Vandenborne K. Resistance training improves strength and functional capacity in persons with multiple sclerosis. Mult Scler. 2004 Dec;10(6):668-674. PMID: 15584492
- 112. <u>Stevens JE</u>, Mizner RL, Snyder-Mackler L. Neuromuscular electrical stimulation for quadriceps strengthening after bilateral total knee arthroplasty: a case series. J Orthop Sports Phys Ther. 2004 Jan;34(1):21-29. PMID: 14964588
- <u>Stevens JE</u>, Mizner RL, Snyder-Mackler L. Quadriceps strength and volitional activation before and after total knee arthroplasty for osteoarthritis. J Orthop Res. 2003;21(5):775-779. PMID: 12919862

- 114. Mizner R, <u>Stevens JE</u>, Snyder-Mackler L. Voluntary activation and decreased force production of the quadriceps femoris muscle after total knee arthroplasty. Phys Ther. 2003;83(4):359-365. PMID: 12665406
- 115. <u>Stevens JE</u>, Stackhouse SK, Binder-Macleod SA, Snyder-Mackler L. Are voluntary muscle activation deficits in older adults meaningful? Muscle Nerve. 2003;27(1):99-101. PMID: 12508301
- 116. Stackhouse SK, Stevens JE, Johnson CD, Snyder-Mackler L, Binder-Macleod S. Predictability of maximum voluntary quadriceps force from submaximal contractions in the elderly. Muscle Nerve. 2003;27(1):40-45. PMID: 12508293
- 117. Scott W, Stevens JE, Binder-Macleod SA. Human skeletal muscle fiber type classifications. Phys Ther. 2001;81:1810-1816. PMID: 11694174
- 118. Lewek M, Stevens JE, Snyder-Mackler L. The use of electrical stimulation to increase quadriceps femoris muscle strength in an elderly patient following total knee arthroplasty. Phys Ther. 2001;81:1565-1571. PMID: 11688592
- 119. Stevens JE, Snyder-Mackler L, Binder-Macleod S. Characterization of the human quadriceps muscle in active elders. Arch Phys Med Rehabil. 2001;82:973-978. PMID: 11441388
- 120. Stackhouse SK, Stevens JE, Pearce KM, Lee SCK, Snyder-Mackler L, Binder-Macleod SA. Maximum voluntary activation in nonfatigued and fatigued muscle of young and elderly individuals. Phys Ther. 2001;81(5):1102-1109. PMID: 11319935
- 121. McCauley DE, <u>Stevens JE</u>, Peroni PA, Raveill JA. The spatial distribution of chloroplast DNA and allozyme polymorphisms within a population of Silene Alba (Caryophyllaceae). Am J Bot. 1996;83(6):727-731.
- 122. Kullik I, <u>Stevens J</u>, Toledano MB, Storz G. Mutational analysis of the redox-sensitive transcriptional regulator OxyR: regions important for DNA binding and multimerization. J Bacteriol. 1995

## Peer Reviewed Scientific and Professional Presentations:

- Cheuy V, Loyd B, Thigpen C, Waugh D, Kittelson A, <u>Stevens-Lapsley J.</u> Comparison of Performance Based Versus Self-Reported Functional Measures Early After Total Knee Arthroplasty. American Physical Therapy Association Combined Sections Meeting 2019. Washington, D.C.
- Foran J, <u>Stevens-Lapsley J</u>, Bade M. Multimodal Conservative Management of Stiffness after Total Knee Arthroplasty: A Pilot Study with Retrospective Historical Cohort Comparison. American Physical Therapy Association Combined Sections Meeting 2019. Washington, D.C.
- 3. LeDoux C, Falvey J, Forster J, Seidler K, <u>Stevens-Lapsley J</u>. Physical therapy improves functional performance in Medicare patients with a primary diagnosis of dementia. American Physical Therapy Association Combined Sections Meeting 2019 (platform presentation). Washington, D.C.

- Gustavson AM, Moriarty D, Shelton S, Bajwa A, Ruse R, Malone D, <u>Stevens-Lapsley J</u>. Implementation of High-Intensity Rehabilitation in Skilled Nursing Facilities: Preliminary Results. American Physical Therapy Association Combined Sections Meeting 2019 (platform presentation). Washington, D.C.
- S.M. Flynn, V.Y. Oviedo, W.N. Hoffmann, J. Stevens-Lapsley, P. Roberts, S. Bini. Reliability, Validity and Usability of a digital education and self-assessment app for adults with knee osteoarthritis. International Gerontechnology Conference. St. Petersburg, FL. Gerontechnology 2018;17
- Gustavson AM, Malone D, Boxer RS, Saboorizadeh M, Ruse R, Stevens-Lapsley JE. Interpreting the Impact of Physical Function in Skilled Nursing Facility Residents. American Medical Director's Association Conference 2018. Grapevine, Texas. J Am Med Dir Assoc, 19(3), B27. doi:10.1016/j.jamda.2017.12.083.
- Gustavson A, Baym C, Maurer D, Stolpher S, Ruse R, Malone D, <u>Stevens-Lapsley JE.</u> Using data to characterize a skilled nursing facility population: preliminary results to inform clinical decisionmaking tools. American Physical Therapy Association Combined Sections Meeting. New Orleans, LA, 2018.
- Miller M.J., Magnusson D.M., Lev G., Fields T.T., Cook P.F., Stevens-Lapsley J.E., Christiansen C.L. (2017) Relationships among perceived functional capacity, self-efficacy, and disability after dysvascular amputation. (National Institute on Aging Directors Regional Meeting, Aurora, CO. November 2017)
- Falvey, JR, Papazian, L, Burkhardt, B, Gustavson (Kosir), AM, <u>Stevens-Lapsley, JE</u>. Short Physical Performance Battery Scores Predict Hospitalization Risk in Older Adults Receiving Long Term Services and Supports. Accepted for presentation at the American Physical Therapy Association, Combined Sections Meeting, New Orleans LA, Feb. 2018.
- Falvey, JR, Burke, RE, Nuccio, E, Forster, JE, <u>Stevens-Lapsley, JE</u>. Predictors of Hospital Readmission from Home Health Care Following Total Knee Arthroplasty. Accepted for presentation at the American Physical Therapy Association, Combined Sections Meeting, New Orleans LA, Feb. 2018.
- 11. Loyd, BJ, Gerron, K, Ruse, R, Iannitto, JL. Pineda, M, Hogan, C, Dayton, M, <u>Stevens-Lapsley</u>, <u>JE</u>. An Innovative Approach to Measuring the Trajectory of Lower Extremity Swelling Following Total Knee Arthroplasty. Combined Sections Meeting; 2018 Feb. 21-24. New Orleans, LA.
- 12. Cheuy, VA, Loyd, BJ, Hafner, WB, Iannitto, JL, Kittelson, AJ, Waugh, D, <u>Stevens-Lapsley, JE</u>. Influence of diabetes on the recovery trajectories of patients' physical function deficits after total knee arthroplasty. APTA Combined Sections Meeting; 2018 Feb. 21-24. New Orleans, LA.
- 13. Falvey, JR, Nuccio, E, Bade, M, Burke, RE, <u>Stevens-Lapsley, JE</u>. Utilization of Rehabilitation Services Is Associated with Better Functional Outcomes and Reduced Readmissions for Medicare Home Health Users Following Total Knee Arthroplasty. (Academy Health Annual Research Meeting. Top Abstracts Section, Surgical and Perioperative Care Special Interest Group Meeting,

New Orleans, LA 2018).

- 14. Falvey, JR, Nuccio, E, Bade, M, Burke, RE, Struessel, T, <u>Stevens-Lapsley, JE</u>. Recovery of Physical Function and Hospital Readmissions in Medicare Fee For Service Beneficiaries After Total Knee Arthroplasty: The Continued Importance of Rehabilitation. (Center on Health Services Research and Training Summer Institute, Boston, MA, June 2017).
- 15. Falvey, JR, Nuccio, E, Bade, M, Burke, RE, <u>Stevens-Lapsley, JE</u>. Utilization of Rehabilitation Services Is Associated with Better Functional Outcomes and Reduced Readmissions for Medicare Home Health Users Following Total Knee Arthroplasty. (Academy Health Annual Research Meeting. Top Abstracts Section, Surgical and Perioperative Care Special Interest Group Meeting, New Orleans, LA 2017).
- 16. Falvey, JR, Nuccio, E, Bade, M, Burke, RE, Struessel, T, <u>Stevens-Lapsley, JE</u>. Recovery of Physical Function and Hospital Readmissions in Medicare Fee For Service Beneficiaries After Total Knee Arthroplasty: The Continued Importance of Rehabilitation. (Center on Health Services Research and Training Summer Institute, Boston, MA, June 2017).
- Iannitto JL, Loyd BJ, Johnson R, Eschen C, Levy D, Jennings J, <u>Stevens-Laplsey JE</u>. Assessment of commonly used measures of lower extremity swelling following total knee arthroplasty [abstract]. In: Annual Meeting at Experimental Blology; 2017 Apr 22-25; Chicago, IL. Bethesda (MD): AAA; 2017. Absract nr 4489.
- 18. Gustavson AM, Falvey JR, King D, Smith R, Maurer D, Baym C, Malone D, <u>Stevens-Lapsley JE</u>. A Quality Improvement Initiative to Improve Function for Patients in a Skilled Nursing Facility. American Physical Therapy Association, Combined Sections Meeting (poster presentation). San Antonio, TX. February 2017
- 19. Loyd BJ, Hafner W, Himawan M, Kittelson AJ, Waugh D, DelGiorno J, Burnikel B, <u>Stevens-Lapsley</u> <u>J</u>. Performance verses self-reported outcomes after total knee arthroplasty in a large prospective cohort of patients seen as part of routine clinical practice. APTA Combined Sections Meeting. San Antonio, TX. February 2017.
- 20. Loyd BJ, Hafner W, Kittelson AJ, Waugh D, DelGiorno J, <u>Stevens-Lapsley J</u>. Using a large prospective cohort of patients to examine differences in performance and self-reported outcomes following Total Knee Replacement. American College of Rheumatology Annual Meeting. Washington D.C. November 2016. Stevens-Lapsley JE, Kittelson AK, Laufer Y, Gabyzon M, Spector P, Maffiuletti NA. An Algorithm for NMES Therapy after Knee Surgery: A Novel Structured Approach. International Society of Electrophysiology and Kinesiology. Chicago, IL. July 2016.
- 21. <u>Stevens-Lapsley JE</u>, Kittelson AK, Laufer Y, Gabyzon M, Spector P, Maffiuletti NA. An Algorithm for NMES Therapy after Knee Surgery: A Novel Structured Approach. International Society of Electrophysiology and Kinesiology. Chicago, IL.
- 22. Falvey, JR, Price, L, Muller, M, Papazian, L, Gustavson, AM, and <u>Stevens-Lapsley, JE</u>. Prognostic Value of Physical Performance in the Program of All Inclusive Care for the Elderly. Accepted for presentation at the Center on Health Services Research and Training Summer Institute in Boston,

MA. June 2016

- 23. Hayes B, Kittelson A, Loyd B, <u>Stevens-Lapsley JE</u>. Assessing Radiographic Knee Osteoarthritis: An Online Training Tutorial for the Kellgren-Lawrence Grading Scale [poster presentation]. Experimental Biology. San Diego, CA. Award recipient for best Capstone presentation for Modern Human Anatomy program. April 2016
- 24. Dennis D, Bade M, Foran J, Kim R, Miner T, Dayton M, Struessel T, <u>Stevens-Lapsley JE</u>. Highintensity versus low-intensity rehabilitation after total knee arthroplasty: A randomized controlled Trial. American Academy of Orthopedic Surgeons Annual Meeting, Orlando, FL. March 2016
- 25. Hasson D, Kittelson AJ, Hogan C, Somoza F, Dayton M, <u>Stevens-Lapsley JE</u>. Inflammation and the Discrepancy Between Radiography And Pain In Patients With Knee Osteoarthritis. American Academy of Orthopedic Surgeons Annual Meeting, Orlando, FL. March 2016
- 26. Miner TM, Paxton RJ, Kim RH, Yang C, Downing T, Forster J, Dennis DA, <u>Stevens-Lapsley JE</u>. Pre-operative quadriceps activation deficits are related to activation deficits after total knee arthroplasty. American Academy of Orthopedic Surgeons Annual Meeting, Orlando, FL.March 2016
- 27. Myers CA, Shelburne KB, Laz PJ, Judd DL, Christiansen CL, <u>Stevens-Lapsley JE</u>, Rullkoetter PJ. The impact of hip implant positioning on muscle and joint loading during a dynamic step down. Orthopaedic Research Society Annual Meeting, Orlando, FL. March 2016
- 28. Murray A, Gaffney B, Davidson B, Christiansen C, <u>Stevens-Lapsley JE</u>. Stair Climb Performance and Movement Compensations in Patients with Diabetes and Transtibial Amputation. Combined Sections Meeting, APTA, Anaheim, CA. February 2016
- Murray A, Paxton R, Larson M, Schultz M, Christiansen C, <u>Stevens-Lapsley JE</u>. Characterization of Physical Activity Levels Following Dysvascular Transtibial Amputation. Combined Sections Meeting, APTA, Anaheim, CA. February 2016
- 30.Bade M, <u>Stevens-Lapsley JE</u>. High-Intensity versus Low-Intensity Rehabilitation after Total Knee Arthroplasty: A Randomized Controlled Trial. Combined Sections Meeting, APTA, Anaheim, CA February 2016
- 31. Stolper S, Reeder B, Christiansen C, <u>Stevens-Lapsley JE</u>. Exploring Patient Rehabilitation Experience after Lower Limb Amputation: A Qualitative Analysis. Combined Sections Meeting, APTA, Anaheim, CA. February 2016
- 32. Huang C, Paxton RJ, Downing T, Miner T, Kim R, Papazian L, Forster J, <u>Stevens-Lapsley JE</u>. Preoperative quadriceps activation deficits are related to activation deficits after total knee arthroplasty. Combined Sections Meeting, APTA, Anaheim, CA. February 2016
- 33. Loyd BJ, Bade MJ, Paxton RJ, Stackhouse S, Dayton MR, Eckhoff D, <u>Stevens-Lapsley JE</u>. Poor quadriceps activation 72 hours after total knee replacement is related to poor functional performance at 1 month. Combined Sections Meeting, APTA, Anaheim, CA. February 2016

- 34.Loyd BJ, Kittelson A, Waugh D, DelGiorno J, Burnikel B, Hoogeboom T, <u>Stevens-Lapsley JE</u>. Examination of Selection Bias in Arthroplasty Research using Clinically Collected Data. Combined Sections Meeting, APTA, Anaheim, CA. February 2016
- 35. Kittelson A, Loyd BJ, DelGiorno J, Waugh DA, Forster JE, van Buuren S, van Meeteren NLU, <u>Stevens-Lapsley JE</u>. Development of Reference Charts for Functional Recovery Following Total Knee Arthroplasty: a Strategy for Improved Monitoring of Postoperative Rehabilitation. Combined Sections Meeting, APTA, Anaheim, CA. February 2016
- 36. Judd DL, Loyd BJ, Jennings J, Baym CL, Dennis D, Struessel T, Wolfe P, <u>Stevens-Lapsley JE</u>. The relation of hip abductor strength to functional performance before and after TKA. Combined Sections Meeting, APTA, Anaheim, CA. February 2016
- 37. Falvey JR, Kosir A, Papazian L, Cobo B, Shaver J, Krigbaum LA, <u>Stevens-Lapsley JE</u>. Physical performance in the PACE population: Preliminary results from the Innnovage Prevention of Functional Decline and Falls quality improvement project. Combined Sections Meeting, APTA, Anaheim, CA. February 2016
- 38.Kosir A, Falvey JR, King D, Smith R, Maurer D, <u>Stevens-Lapsley JE</u>. Capacity for functional improvement in a medically-complex skilled nursing facility population: Preliminary results. Combined Sections Meeting, APTA, Anaheim, CA. February 2016
- 39. Loyd BJ, Fields TT, Stephenson RO, <u>Stevens-Lapsley JE</u>, Christiansen CL. Modifiable gait parameters associated with functional mobility in lower limb amputees. AAPM&R Annual Assembly. Boston, MA. October 2015
- 40. Foran J, Dennis D, Bade M, Kim R, Miner T, Dayton M, Struessel T, <u>Stevens-Lapsley JE</u>. Highintensity versus low-intensity rehabilitation after total knee arthroplasty: A randomized controlled Trial. Presented at the International Society for Technology in Arthroplasty Annual Congress, Vienna, Austria, September 2015.
- 41. Foran J, Kittelson AJ, Dayton MR, Hogan CA, Schmiege S; <u>Stevens-Lapsley JE</u>. Identification of pain phenotypes in knee OA: Data from the osteoarthritis initiative. Presented at the International Society for Technology in Arthroplasty Annual Congress, Vienna, Austria. September 2015
- 42. Myers CA, Laz PJ, Shelburne KB, Judd DL, Christiansen CL, <u>Stevens-Lapsley JE</u>, Davidson BS. Simulated hip abductor strengthening reduces peak joint contact forces during stair descent in patients with total hip arthroplasty. 39th Annual Meeting of the American Society of Biomechanics. Columbus, OH. August 2015
- 43. Simons CJ, Christiansen CL, <u>Stevens-Lapsley JE</u>, Shelburne KB, Davidson BS. A support vector machine based on vertical ground reaction force to supplement observational gait evaluation. Bioengineering and Biotransport Conference Snowbird Resort, UT. June 2015
- 44. Gaffney BM, Johnston WM, Christiansen CL, <u>Stevens-Lapsley JE</u>, Shelburne KB, Davidson BS. Movement analysis based on the separation of angular momentum: Gait progression and segment rotation in patients with TKA. Bioengineering and Biotransport Conference Snowbird Resort, UT. June 2015

- 45. Gaffney BM, Johnston WM, Bade MJ, <u>Stevens-Lapsley JE</u>, Christiansen CL, Davidson BS. Wholebody angular momentum differences after unilateral TKA. ACSM Annual Meeting, San Diego, CA. May 2015
- 46. Simons CJ, Christiansen CL, <u>Stevens-Lapsley JE</u>, Shelburne KB, Davidson BS. A support vector machine to supplement observational gait evaluations. Rocky Mountain Regional American Society of Biomechanics Meeting. Estes Park, CO. April 2015
- 47. Dennis DA, Judd DL, Winters JD, Jennings J, Miner TM, Dayton MR, <u>Stevens-Lapsley JE</u>. Multi-Component Rehabilitation Following Total Hip Arthroplasty: A Randomized Controlled Trial. Orthopedic Research Society, Las Vegas, AZ. March 2015
- 48. Gaffney BM, Harris MD, <u>Stevens-Lapsley JE</u>, Christiansen CL, Shelburne KB. Multi-joint effects of TKA during high-demand tasks. Annual Meeting of the Gait and Clinical Movement Analysis Society. Portland, OR. March 2015
- 49. Judd D, Winters J, Dennis D, Miner T, Dayton M, <u>Stevens-Lapsley JE</u>. Multi-Component Rehabilitation Following Total Hip Arthroplasty: A Randomized Controlled Trial. Combined Sections Meeting, APTA, Indianapolis, IN. February 2015
- 50. Loyd B, Nolte M, Kittelson A, Figiel G, Falvey J, Cumbler E, Mangione K, <u>Stevens-Lapsley JE</u>. Progressive Multi-Component Home Based Physical Therapy Intervention Following Acute Hospitalization: A Small Randomized Control Trial. Combined Sections Meeting, APTA, Indianapolis, IN. February 2015
- 51. Loyd B, Kittelson A, Dennis D, Kim R, Miner T, <u>Stevens-Lapsley JE</u>. Intraoperative tourniquet use negatively impacts quadriceps strength following TKA: A randomized controlled trial. Combined Sections Meeting, APTA, Indianapolis, IN. February 2015
- 52. Struessel T, Miller K, Wolfe P, <u>Stevens-Lapsley JE</u>. Choice Between Severity Modifiers in Functional Limitation Reporting/G Code Categorization: Does the Functional Measure Matter? Combined Sections Meeting, APTA, Indianapolis, IN. February 2015
- 53. Kittelson A, Schmiege S, <u>Stevens-Lapsley JE</u>. Identification of Pain Phenotypes in Knee Osteoarthritis using Latent Class Analysis: Data from the Osteoarthritis Initiative. Combined Sections Meeting, APTA, Indianapolis, IN. February 2015
- 54. Struessel T, Miller K, Bade M, Paxton R, <u>Stevens-Lapsley JE</u>. Comparing two methods of quantifying home exercise program adherence for a clinical trial. Combined Sections Meeting, APTA, Indianapolis, IN.
- 55. <u>Stevens-Lapsley JE</u>, Mangione K, Field-Fote E.C., Sinacore D.R. Clinical Trials: Challenges with Recruitment, Retention, and Fidelity. Combined Sections Meeting, APTA, Indianapolis, IN. February 2015

- 56. Christiansen CL, Akuthota V, Sherk K, <u>Stevens-Lapsley JE</u>. Early physical function for patients with type 2 diabetes following transibila amputation. Annual Assembly for Physical Medicine and Rehabilitation. San Diego, CA. November 2014
- 57. Winters JD, <u>Stevens-Lapsley JE</u>, Rainville K, Christiansen CL. Quadriceps function remains asymmetrical 3-Months after total knee arthroplasty. World Congress of Biomechanics, Boston, MA. July 2014
- 58. Gaffney BM, Davidson BS, Harris MD, <u>Stevens-Lapsley JE</u>, Christiansen CL, Shelburne KB. Quadriceps force and movement strategies during high-demand activities after unilateral total knee arthroplasty. World Congress of Biomechanics, Boston, MA. July 2014
- 59. Eckhoff DG, Bade MJ, Struessel TS, <u>Stevens-Lapsley JE</u>. The Impact of Hip Abduction Strength on Functional Performance in Individuals with Knee Osteoarthritis. The Association of Bone and Joint Surgeons, New York, NY. May 2014
- 60. Paxton RJ, Glick SD, <u>Stevens-Lapsley JE</u>, Melanson EL, Christiansen CL. Lack of Physical Activity Level Alteration Post-Total Knee Arthroplasty. American College of Sports Medicine, Orlando, FL. May 2014
- 61. Kittelson AJ, Huang C, Loyd B, <u>Stevens-Lapsley JE</u>. Relationship between chemical inflammatory mediators and experimental measures of pain processing in patients with knee osteoarthritis. American Pain Society Annual Meeting, Tampa, FL. May 2014
- 62. Gaffney BM, Davidson BS, Harris MD, <u>Stevens-Lapsley JE</u>, Christiansen CL, Shelbourne KB. Unique movement strategies during high-demand activities after unilateral TKA. Rocky Mountain Regional American Society of Biomechanics Meeting. Estes Park, CO. April 2014
- 63. Winters JD, <u>Stevens-Lapsley JE</u>, Rainville K, Christiansen CL. Quadriceps function remains asymmetrical 3 months after total knee arthroplasty. Rocky Mountain Regional American Society of Biomechanics Meeting. Estes Park, CO. April 2014
- 64. Gaffney BM, Davidson BS, Harris MD, <u>Stevens-Lapsley JE</u>, Christiansen CL, Shelbourne KB. Limb asymmetry during high-level functional tasks after unilateral total knee arthroplasty. Orthopaedic Research Society Annual Meeting. New Orleans, LA. March 2014
- 65. Bade M, Struessel T, Eckhoff D, <u>Stevens-Lapsley JE</u>. The Contribution of Hip Abduction Strength to Functional Performance in Persons with Knee Osteoarthritis. Combined Sections Meeting, APTA, Las Vegas, NV. February 2014
- 66. Kittelson A, Rainville K, Winters J, <u>Stevens-Lapsley JE</u>. Does body perception differ between patients with painful knee osteoarthritis and pain-free older adults? Combined Sections Meeting, APTA, Las Vegas, NV. February 2014
- 67. Judd D, Schlottman C, Dayton M, <u>Stevens-Lapsley JE</u>. Comparison of self-reported function using the HOOS and performance-based function after Total Hip Arthroplasty. Combined Sections

Meeting, APTA, Las Vegas, NV. February 2014

- Christiansen C, Bade M, Dayton M, Hogan C, <u>Stevens-Lapsley JE</u>. Effects of Weight-Bearing Biofeedback Training on Gait Mechanics following Total Knee Arthroplasty. Combined Sections Meeting, APTA, Las Vegas, NV. February 2014
- 69. Dennis DA, Judd DL, Dayton MR, <u>Stevens-Lapsley JE</u>. Comparison of Strength and Functional Outcomes during the first 6 months after THA and TKA. The Hip Society Meeting, Rochester, MN. October 2013
- 70. Winters JD, Christiansen CL, <u>Stevens-Lapsley JE</u>. Rate of torque development deficits following total knee arthroplasty [poster presentation]. American Society of Biomechanics. Omaha, NE. August 2013
- 71. Christiansen CL, Bade MJ, Stuart PS, <u>Stevens-Lapsley JE</u>, Davidson BS. Weight-bearing Biofeedback Improves Symmetry during Bilateral Stance after Total Knee Arthroplasty. American College of Sports Medicine Annual Meeting, Indianapolis, IN. May/June 2013
- 72. Thomas AC, Kittelson A, Kluger BM, <u>Stevens-Lapsley JE</u>. Corticospinal and Intracortical Excitability Do Not Differ Between Patients with Knee Osteoarthritis and Healthy Adults. American College of Sports Medicine Annual Meeting, Indianapolis, IN. May/June 2013
- 73. Judd D, Sherk V, Roberts E, Kohrt W, <u>Stevens-Lapsley JE</u>. Using Peripheral Quantitative Computed Tomography (pQCT) to estimate soft-tissue characteristics in patients with knee osteoarthritis. American College of Sports Medicine Annual Meeting, Indianapolis, IN. May/June 2013
- 74.Bade MJ, Winters JD, <u>Stevens-Lapsley JE</u>. Recovery of Eccentric Knee Extensor Strength after Total Knee Arthroplasty. American College of Sports Medicine Annual Meeting, Indianapolis, IN. May/June 2013
- 75. Kittelson A, Struessel T, <u>Stevens-Lapsley JE</u>. Validity of Hand-Held Dynamometry for Measuring Lower Extremity Muscle Strength in Patients Undergoing Total Knee Arthroplasty for Osteoarthritis. American College of Sports Medicine Annual Meeting, Indianapolis, IN. May/June 2013
- 76. Robinson TN, Wu DS, Sauaia A, Dunn CL, <u>Stevens-Lapley JE</u>, Moss M, Stiegmann GV, Gajdos C, Cleveland JC, Inouye SK. Slower Walking Speed Forecasts Increased Postoperative Morbidity and One-Year Mortality Across Surgical Specialties. Presented at the American Surgical Association; 133rd Annual Meeting. April 2013
- 77. Hoogeboom TJ, van Meeteren N, Kim R, <u>Stevens-Lapsley JE</u>. No proof for a correlation between clinical thresholds in knee range of motion and functioning in patients with endstage knee osteoarthritis. Dutch Orthopaedic Conference. February 2013
- 78. Shelburne K, Fitzpatrick C, Davidson B, Laz P, Christiansen C, <u>Stevens-Lapsley JE</u>, Rullkoetter P. A lower extremity model for muscle-driven simulation of activity using explicit finite element modeling. Orthopaedic Research Society Annual Meeting, San Antonio, TX. January 2013

- 79. Bade M, Kittelson A, Kohrt W, Kittelson J, <u>Stevens-Lapsley JE.</u> Relationship between Preoperative, Acute and Long-term Outcomes After Total Knee Arthroplasty. Combined Sections Meeting, APTA, San Diego, CA. January 2013
- 80. Judd D, Thomas A, Wolfe P, Dennis D, Kim R, Dayton M, <u>Stevens-Lapsley JE</u>. Time course of muscle strength and functional recovery during the first year following THA. Combined Sections Meeting, APTA, San Diego, CA. January 2013
- 81. Judd D, Struessel T, Eckhoff D, Dayton M, <u>Stevens-Lapsley J</u>. Strength and Functional Outcomes after THA and TKA: A performance based, longitudinal study. Combined Sections Meeting, APTA, San Diego, CA.. January 2013
- 82. Hoogeboom T, Oosting E, <u>Stevens-Lapsley J</u>, Vriezekolk J, Veenhof C, Siemonsma P, de Bie R, van den Ende C, van Meeteren N. Therapeutic validity and effectiveness of preoperative exercise on functional recovery after total hip or knee replacement: A Delphi study, systematic review and meta-analysis. Combined Sections Meeting, APTA, San Diego, CA. January 2013
- 83.Bade M, Reynolds M, Davidson B, <u>Stevens-Lapsley J</u>, Christiansen Cory. Weight-bearing biofeedback training following total knee arthroplasty: a randomized controlled trial. Combined Sections Meeting, APTA, San Diego, CA. January 2013
- 84. Chmielewski, TL, Miller, GT, <u>Stevens-Lapsley</u> J, Nohe, LE, Burton, SN, Dalmolin, JD, Englebrecht, LA, Kettles, ME, Leary, MP, Taylor, LC. International Physical Therapy Service Learning: Building a model for future service learning and educational trips abroad. Combined Sections Meeting, APTA, San Diego, CA. January 2013
- 85. Dennis D, Judd D, Thomas A, Wolfe P, Kim R, Dayton MR, <u>Stevens-Lapsley J</u>. Functional Performance Recovery After THA. The Hip Society Meeting, Rochester, MN. September 2012
- 86. Dayton MR, Judd D, Thomas A, Dennis D, Kim R, <u>Stevens-Lapsley J</u>. Physiologic and Functional Recovery Following Total Hip Arthroplasty versus Healthy Controls: Outcomes through One Year, Presented at the American Association of Hip and Knee Surgeons, Dallas, TX. November 2012
- 87. Davidson BS, Judd DL, Thomas AC, <u>Stevens-Lapsley JE</u>. Eccentric Muscle Activation Patterns During a Five-time-sit-to-stand Movement. Presented at the American College of Sports Medicine Annual Meeting, San Francisco, CA. May 2012
- 88. Christiansen CL, Judd DL, Thomas AC, Rogers E, <u>Stevens-Lapsley JE</u>. Use of accelerometers to quantify movement symmetry during stair walking for people with knee osteoarthritis. Combined Sections Meeting, APTA, Chicago, IL. February 2012
- 89. <u>Stevens-Lapsley JE</u>, Balter JE, Pamela W, Eckhoff DG, Kohrt WM. Early neuromuscular electrical stimulation improved quadriceps performance after total knee arthroplasty: A randomized controlled trial. Combined Sections Meeting, APTA, Chicago, IL. February 2012
- 90. Bade MJ, Dayton MR, Shulman BC, Kohrt WM, <u>Stevens-Lapsley JE.</u> Minimally Invasive Total Knee Arthroplasty Improves Early Knee Strength but Not Functional Performance: A Randomized

Controlled Trial. Combined Sections Meeting, APTA, Chicago, IL. February 2012

- 91.Kittelson A, <u>Stevens-Lapsley JE</u>. Examination of changes in walking speed after total knee replacement. Combined Sections Meeting, APTA, Chicago, IL. February 2012
- 92. Christiansen CL, Bade MJ, Luce MA, <u>Stevens-Lapsley JE</u>. Factors predicting weight-bearing asymmetry 1 month after unilateral total knee arthroplasty. Combined Sections Meeting, APTA, Chicago, IL. February 2012
- 93. Judd DL, Davidson BS, Thomas AC, <u>Stevens-Lapsley JE</u>. Lower Extremity Muscle Activity During Gait Before and After Unilateral Total Knee Arthroplasty. Combined Sections Meeting, APTA, Chicago, IL. February 2012
- 94. Eckhoff DG, Balter JE, Pamela W, Kohrt WM, <u>Stevens-Lapsley JE</u>. Neuromuscular Electrical Stimulation Improved Function after Knee Arthroplasty: Randomized Controlled Trial. American Academy of Orthopaedic Surgeons Annual Meeting. February 2012
- 95. Dayton MR, Bade MJ, Shulman BC, Kohrt WM, <u>Stevens-Lapsley JE.</u> Minimally Invasive Total Knee Arthroplasty: Impacts on Knee Strength and Functional Performance. American Association of Hip and Knee Surgeons (November 2011) and American Academy of Orthopaedic Surgeons meeting (February 2012). Mar;177(5):1285-1291. PMCID: PMC176735

Non-Peer Reviewed Publications:

- 1. Bade MJ, Karla B, <u>Stevens-Lapsley JE</u>, Manal TJ. Monograph for the APTA: Joint Replacement: Advances in Surgical Management and Rehabilitation, 2010.
- 2. <u>Stevens JE</u>. Older exercise participants. In: Snyder-Mackler L. and Kolt G, eds. *Physical Therapies in Sport and Exercise, 2nd Ed*. Churchill Livingstone; 2007:484-498.
- Non Peer Reviewed Scientific and Professional Presentations: Local
- 1. A New Era for Rehabilitation after Total Joint Replacement. Modern Human Anatomy Program. University of Colorado. November 2017.
- 2. A Focus on Function: Reducing avoidable hospital readmissions; Interdisciplinary Grand Rounds, UCHealth. October 2017.
- 3. Innovative approaches to adult movement and quality of life. Academy of Lifelong Learning. October 2017.
- 4. The Sky's the Limit: Revolutionizing Geriatric Rehabilitation Practice and Outcomes; Physical Therapy Program 70th Anniversary Educational Sessions. September 2017.
- 5. Optimizing Physical Function in Older Adult Veterans; VA Morning Report Session. March 2017.
- 6. The Value of Post-Professional Residency, Fellowship and PhD Training; webinar presented with Michael Bade, PT, PhD. October 2016

- 7. Big Data in Rehabilitation, ACCORDS Big Data Workshop.October 2016
- 8. Optimizing Physical Function in Older Adult Veterans; VA Joint Grand Rounds; MIRECC, COIN, GRECC. October 2016
- 9. Maximizing Veteran Physical Function after Hospitalization. Denver VA Research Day. April 2016
- 10. Shaping our Future by Integrating Outcome Measures into Clinical Practice: Gait Speed as an Example, Colorado Chapter Physical Therapy Association, Webinar. May 2015
- 11. "Move"ing towards stronger models of transitional care for older adults following hospitalization, Geriatrics Grand Rounds, University of Colorado Denver. December 2014
- 12. Shaping our Future by Integrating Outcome Measures into Clinical Practice: Gait Speed as an Example, Physical Therapy Program Alumni Reunion, University of Colorado. September 2014
- 13. Improving Walking Speed to Help Older Adults Outrun the Grim Reaper PM&R Grand Rounds, University of Colorado. September 2014
- 14. Keynote Speaker for Nurses Improving Care for Health Systems Elders Conference: Mobility in the Elderly- It's a Joint Effort, University of Colorado Hospital. May 2014
- 15. Strategies to Maximize Knee Range of Motion Outcomes after Knee Arthroplasty, Panorama Orthopaedics, Colorado. November 2013
- 16.Rehabilitation strategies to maximize performance in patients after total knee replacement, Department of Rheumatology, University of Colorado May 2013
- 17. Applying the Most Recent Evidence-Based Practices to Patients after Joint Arthroplasty, PM&R Grand Rounds, University of Colorado. May 2013
- 18. Strategies to Maximize Rehabilitation Outcomes after Knee Arthroplasty, Panorama Orthopaedics, Colorado. March 2013
- 19. Clinical Gait Analysis: Geriatrics Fellow Conference, University of Colorado; Lead Instructor: Cory Christiansen, PT, PhD. February 2013
- 20. Weight-bearing biofeedback training following total knee arthroplasty: a randomized controlled trial. 14<sup>th</sup> Annual Rehabilitation Medicine Forum, University of Colorado Hospital, Aurora, CO. September 2012
- 21. Walking Speed as the 6th vital sign. Geriatrics Grand Rounds, University of *Colorado*. September 2012

National/International

22. The Value of Post-Professional Residency, Fellowship and PhD Training. APTA Student Conclave,

Portland, Oregon, October 2017.

- 23. Optimizing Rehabilitation after Total Knee Replacement in a Changing Health Care Arena, Duke University. July 2017.
- 24. A Health Services Research Agenda: Is Undertreatment of Patients a Problem in Bundling ... or in Other Alternative Payment Models? CoHSTAR Conference, Boston. June 2017.
- 25. Advances in TKA rehab and How They Relate to Bundled Payment; Part of Rehabilitation for Older Adults: Consensus and Controversies, Arcadia University, Philadelphia, PA. October 2016.
- 26. Rehabilitation Strategies to Improve Function in Older Veterans, GRECC Directors Forum. September 2016
- 27. Recruitment and Retention. NIH NCMRR Clinical Trials Workshop; Co-hosted by the REACT Center, Bethesda, MD. September 2016.
- 28. Optimizing Rehabilitation after Total Knee Replacement in a Changing Health Care Arena, University of Alabama Center for Exercise Medicine Distinguished Lecture Series, Birmingham, AL. December 2015
- 29. Improving muscle function with NMES after total knee arthroplasty. Spectrum Health, Grand Rapids, MI, November 2015.
- 30. Current Perspectives in Arthroplasty: When conservative management fails. Annual Orthopaedic Section Meeting, American Physical Therapy Association, Scottsdale, AZ. May 2015
- 31. Clinical Trials: Challenges with recruitment, retention, and fidelity. American Physical Therapy Association, Combined Sections Meeting, Indianapolis, IN. February 2015
- 32. Mechanisms of muscle dysfunction with trauma; using knee arthroplasty as a model. Department of Medicine Department of Medicine Research and Innovation Conference. November 2014.
- 33. Walking Speed in Clinical Practice. APTA Combined Sections Meeting, Las Vegas. February 2014
- 34. How a Decade of Research has Helped Shape Clinical Practice following Joint Arthroplasty. TRIA Orthopaedic and Sports Medicine Conference Speaker, Minnesota. June 2013
- 35. Hot off the Press: Incorporating Evidence-based Practice into the Continuum of Care after Total Joint Replacement APTA Combined Sections Meeting, San Diego. Physiologically-based rehabilitation strategies to optimize muscle function in patients after total knee replacement. Rehabilitation Seminars series. University of Florida. October 2012.
- 36. Walking Speed: A Vital Sign and Even More. APTA Combined Sections Meeting, Chicago. January 2012
- 37.Assessing Walking Speed in Everyday Clinical Practice: A 'Vital Sign' for Function. APTA Combined

Sections Meeting Presentation, San Diego. Rehabilitation Strategies for Total Knee Arthroplasty: What Does the Future Hold? Arcadia University. Total knee arthroplasty update: quadriceps weakness affects function: utilizing the research of NMES and progressive exercise to achieve optimal functional outcomes. American Physical Therapy Association Combined Sections Meeting. Nashville, TN. January 2012

- 38. Understanding morphological, neural, and metabolic contributions to muscle weakness after limb disuse. Marquette University. Practicing physical therapy in developing countries and in war torn areas of the world. American Physical Therapy Association Combined Sections Meeting, Boston, MA.
- 39. Creating international physical therapy opportunities in developing countries for student education. American Physical Therapy Association Combined Sections Meeting, San Diego, CA.

# Funded/In Review Grant Activity: Ongoing Support

<u>Stevens-Lapsley</u> (PI). Novel Strategies for Personalized Clinical Decisions in Knee Arthroplasty. AHRQ R01 HS025692; 9/1/18-6/31/23 (\$1,922,505). The goal of this study is to develop and implement a clinical decision tool for shared decision making to facilitate personalized approaches to care for patients after total knee arthroplasty.

<u>Stevens-Lapsley</u> (PI). Movement Pattern Biofeedback Training after Total Knee Arthroplasty. NIH R01 AG056585 9/15/2017-4/30/22 (\$3,004,535). The major goal of this study is to determine if the addition of a novel movement pattern training program to contemporary progressive rehabilitation improves functional movement pattern quality more than contemporary progressive rehabilitation alone after unilateral TKA.

<u>Stevens-Lapsley JE</u> (PI). Progressing Home Health Rehabilitation Paradigms for Older Adults. NIH R01-NR016209; 7/1/16-5/31/21 (\$2,946,919). The major goal of this study is to determine if an interdisciplinary approach to home health rehabilitation including nutritional supplementation, improves physical function and reduces re-hospitalizations more than usual care.

<u>Stevens-Lapsley JE</u> (PI). Advancing Rehabilitation after Total Hip Arthroplasty. VA RR&D I01 RX002251 10/1/16-9/30/21 (\$1,099,636). 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 THA.

<u>Stevens-Lapsley JE</u> (PI). Improving Function in Older Veterans with Hospital-associated Deconditioning. VA Merit Award RR&D I01 RX-001978; 4/1/16-3/31/20 (\$1,000,099). The major goal of this project is to evaluate whether high intensity, front-loading of home health rehabilitation following hospitalization can improve community mobility, quality of life, and reduce caregiver burden in older Veterans.

<u>Stevens-Lapsley JE</u> (PI). Shifting Rehabilitation Paradigms in Skilled Nursing Facilities. VA RR&D I21 RX00219; 10/1/16-9/30/18 (\$198,912). The major goal of this project is to evaluate whether an

interdisciplinary rehabilitation program that integrates principles of physiologic tissue overload in skill nursing facilities is more effective than the standard of care.

<u>Stevens-Lapsley</u> (PI) Developing Individualized Estimates of Patient Prognosis Following Knee Replacement. AHRQ R03 HS024316; 4/1/16-3/31/18; \$100,000. The major goal of this study is to develop individualized patient prognoses for total knee arthroplasty using novel statistical methodologies to better inform clinical intervention targets.

Binder E (PI); <u>Stevens-Lapsley</u> JE (Co-I). Combining Testosterone and Exercise to Improve Function Post Hip Fracture. NIH R01 AG051647 10/01/2017-09/30/2022 (\$4,142,501). This clinical trial will evaluate whether adding an anabolic hormone stimulus to exercise results in improved functional outcomes after hip fracture in older women when compared with exercise alone.

Toth M (PI); <u>Stevens-Lapsley</u> (Co-I). Skeletal muscle atrophy and dysfunction following total knee arthroplasty. NIH R01 AG050305 12/1/2016 – 5/31/2021 (\$422,667). The goal of this investigation is to define the effect of total knee replacement on skeletal muscle size and contractile and mitochondrial function and the modulating effect of neuromuscular electrical stimulation.

Flynn S (PI); <u>Stevens-Lapsley</u> (Co-I). The Oaks: A Mobile Exercise and Education Program for People with Osteoarthritis of the Knee. NIH R44 AG055341. 2/1/18-1/31/19 (\$725,915). The goal is to develop and test of a minimum viable product of The Oaks, a perioperative, digital, education, assessment and guided exercise software application for adults with osteoarthritis of the knee awaiting total knee replacement surgery.

Christiansen C (PI); <u>Stevens-Lapsley</u> JE (Co-I). Optimizing Physical Activity Outcomes for Veterans after Total Knee Arthroplasty VA RR&D I01RX002417 11/1/18-10/30/22 (\$1,077,824). 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.

Christiansen C (PI); <u>Stevens-Lapsley</u> JE (Co-I). Physical Activity Behavior Change for Older Veterans after Dysvascular Amputation. VA RR&D I21 RX-002054 4/1/16-3/31/18 (\$200,000). The major goal of this project is to determine the feasibility of using a physical-activity behavior-change intervention targeting improved physical activity and reduced disability in Veterans 1-5 years following dysvascular lower-limb amputation.

# Completed Support

<u>Stevens-Lapsley</u> (PI) Movement Pattern Training Following Total Knee Arthroplasty NIH R56 AG048943; 09/15/15-09/14/17 (\$382,625). The goal of this project is to determine if the addition of a novel movement pattern training program to contemporary rehabilitation after total knee arthroplasty improves movement pattern quality and functional outcomes compared to contemporary rehabilitation alone.

<u>Stevens-Lapsley</u> (Advisory Board Member) Promoting Healthy Cancer Survivorship in Rural Colorado Primary Health Care. NIH R25-CA160013. Sept 2012-Aug 2017 (\$1,466,839). The purpose of this project is to teach primary care physicians about the special medical needs of cancer survivors and to empower them to appropriately treat cancer survivors. <u>Stevens-Lapsley JE</u> (PI). Progressive Rehabilitation for Total Knee Arthroplasty. NIH R01-HD065900; 8/15/11-5/31/17 (\$2,469,362). The major goal of this project is to evaluate the effectiveness of a more intensive rehabilitation program compared to traditional rehabilitation after total knee arthroplasty. Overholser L (Co-PI), Garrington T (Co-PI), Hodgson C (Co-PI);

<u>Stevens-Lapsley</u> (PI) The Impact of Physical Therapy on Improving Function and Reducing Hospitalizations in Medicare Home Health Populations. Center on Health Services Training and Research (CoHSTAR); 2/15/16-2/14/17; \$25,000. The major goal of this investigation is to evaluate the relationship between physical therapy service delivery characteristics and either restoration of physical function or hospital admissions in home health settings using a Medicare claims database.

<u>Stevens-Lapsley JE, (PI).</u> Determination of pain phenotypes in older adults with knee osteoarthritis. NIH R21-AG044710; 8/1/13-10/30/16 (\$425,740). The major goals of this project are to establish the strength of the relationship between potential explanatory variables and pain severity in a population of older adults with knee OA, and determine whether these clinically measurable variables are representative of distinct pain phenotypes within knee OA.

Falvey J (PI); <u>Stevens-Lapsley JE</u> (mentor). Enhancing Physical Therapy Participation in Models of Transitional Care. APTA Health Policy Administration Section grant. 7/1/2015 - 6/30/2016 (\$15,000). The major goal is to determine how physical therapists are engaged in models of transitional care aimed at reducing hospital readmissions. Mixed methods qualitative and survey study.

<u>Stevens-Lapsley JE (PI)</u>, Kohrt (Mentor); Schenkman M (Mentoring Team) Early NMES to improve quadriceps muscle function after total knee arthroplasty. NIH K23-AG029978. Sept 2008-Aug 2014 (\$716,144). The major goal of this project is to provide career development training in geriatric clinical research through investigation of the effectiveness of NMES in older adults after TKA.

Judd D (PI); <u>Stevens-Lapsley (Co-I)</u>. Multicomponent Rehabilitation after Total Hip Arthroplasty. Orthopaedic Section of the American Physical Therapy Association. June 2012-May 2014 (\$15,000). The purpose of this study is to investigate the effects of a comprehensive, multi-component (CMC) rehabilitation program after THA on muscle strength, neuromuscular control and functional performance.

<u>Stevens-Lapsley JE (PI)</u>. Improving Activity, Participation and Function after Acute Hospitalization in Older Adults. American Physical Therapy Association's Home Health Section Research Grant. Nov 2012-Oct 2013. (\$10,000) The purpose of this study is to determine if a progressive multi-component intervention, initiated upon discharge from an acute care hospital, improves gait speed at the end of one 60-day episode of care, more than documented usual care physical therapy.

Christiansen CL (PI), <u>Stevens-Lapsley JE (Co-I)</u>, Akuthota V (Co-I), Sherk K (Co-I). Early physical function during rehabilitation following dysvascular transtibial amputation. The Foundation for Physical Medicine & Rehabilitation. Nov 2012-Oct 2013. (\$30,000). The goals of this project are to: 1) examine common physical function measures and 2) characterize standard of care rehabilitation for patients with diabetes following dysvascular transtibial amputation.

<u>Stevens-Lapsley JE (Co-PI)</u>, Christiansen C (Co-PI). Limb Loading Asymmetry with Total Knee Arthroplasty. Bob Doctor Memorial Research Award 1/09-6/12 (\$8,000). The major goals of this pilot

study are to 1) examine the presence of lower limb loading asymmetry during and 2) examine the relationship between limb loading asymmetry and both functional mobility and muscle strength.

<u>Stevens-Lapsley JE (PI)</u>. Functional outcomes following minimally invasive total knee arthroplasty. NIH R03-AR054538. March 2008-March 2012. (\$150,000). The major goals of this project determine whether minimally invasive total knee arthroplasty improves functional outcomes when compared with traditional TKA.

<u>Stevens-Lapsley JE (PI)</u>. Quadriceps muscle function after minimally invasive total knee arthroplasty. Arthritis Foundation New Investigator Award. July 2008-October 2012. (\$100,000). The goal of this study is to determine if minimally invasive TKA improves quadriceps muscle force production, activation, and muscle mass compared to traditional TKA.

Schenkman M (PI), Carollo JJ, Christiansen CL, Davidson BS, Maluf KS, Solomonow M, <u>Stevens-Lapsley J</u> (Co-I). Interdisciplinary Movement Science Laboratory. Sept 2008-August 2012. Academic Enrichment Fund New Strategic Research Initiative, School of Medicine. University of Colorado Denver.

<u>Stevens-Lapsley JE (PI)</u>. Optimizing lower extremity muscle function after total knee arthroplasty. American College of Rheumatology New Investigator Award. July 2007-Oct 2010. (\$100,000). The goal of this study is to investigate quadriceps force and reflex inhibition after TKA and explore rehabilitation strategies to minimize these deficits after TKA.

<u>Stevens-Lapsley JE (PI)</u>. NMES after Total Knee Arthroplasty to Improve Muscle Function. Empi Electrotherapy Research Program. March 2009-February 2010 (\$50,000). The major goal of this project is to expand upon preliminary results using neuromuscular electrical stimulation acutely after total knee arthroplasty.

<u>Stevens JE (PI)</u>. NMES after total knee arthroplasty to counter quadriceps muscle activation deficits. Foundation for Physical Therapy Pittsburgh-Marquette Challenge Grant. March 2007-June 2008. (\$40,000). The aim of this pilot study was to test the safety, feasibility, and optimal parameters for use of NMES immediately after TKA for improving quadriceps muscle strength.

<u>Stevens J (PI)</u>. Early NMES for quadriceps muscle activation deficits following total knee replacement. GCRC Pilot and Feasibility Grant. January 2006-March 2007. (\$18,000). The aim of this pilot study is to test the safety and feasibility of using NMES use acutely after TKA to maintain quadriceps muscle strength.

<u>Stevens J (PI)</u>, Vandenborne K (Mentor) Anderson D (Mentor). Skeletal muscle plasticity after spinal cord injury in human and rodent models. VA-B3461H Post-doctoral fellowship. January 2004-December 2005. (\$112,000). The overall goal of this work was to examine changes in muscle morphology and function after spinal cord injury in response to rehabilitation training paradigms using human and rodent spinal cord injury models.

## Other Scholarly Products

Falvey, Jason. <u>Stevens-Lapsley JE</u> (Mentor) NIH F31-AG056069 Impact of impaired physical function on emergency room utilization, hospitalization, and nursing home admission in community-based long-term care settings. \$31,066/year. Award Period: 12/1/17-11/30/19.

Carmichael JP, <u>Stevens-Lapsley JE.</u> (Mentor) ACR Rheumatology Research Foundation Medical and Graduate Student Preceptorship (\$3000 to student; \$1000 to preceptor). Jan 2019-Aug 2019. The goal of this award is to introduce students to rheumatology-related health care by supporting a full-time research experience in the broad area of rheumatic disease. This project seeks to quantify the effects of self-administered, in-home edema management treatments in patients after TKA surgery, and determine whether multimodal edema management can improve quadriceps activation and functional performance at 1 month.

LeDoux CV, Stevens-Lapsley JE. (Mentor) ACR Rheumatology Research Foundation Graduate Student Preceptorship (\$3000 to student; \$1,000 to preceptor). October 2018-December 2018. The goal of this award is to introduce graduate students to rheumatology-related health care by partially supporting full-time research. This mixed methods project seeks to identify the environmental, sociocultural, and behavioral determinants of physical activity in older adults with end-stage knee osteoarthritis to improve care pathways and increase intervention effectiveness.

Gustavson, Allison. <u>Stevens-Lapsley JE</u> (Mentor). Foundation for Physical Therapy Promotion of Doctoral Studies Level II. Pre-doctoral Training Grant (\$15,000). 2017.

Falvey, Jason. <u>Stevens-Lapsley JE</u> (Mentor). Foundation for Physical Therapy Promotion of Doctoral Studies Level II. Pre-doctoral Training Grant (\$7,500). 2018.

Christiansen, Jesse, <u>Stevens-Lapsley JE</u>. (Mentor) ACR REF/Abbott Health Professional Graduate Student Research Preceptorship (\$3000 to student; \$1,000 to preceptor). Dec 2016-April 2017. The goal of this award is to introduce students to rheumatology-related health care by partially supporting full-time research. This project seeks to identify the baseline characteristics of patients who are both relatively young and poor functioning after TKA surgery and determine whether this group differs from those with a more typical recovery response postoperatively.

Falvey, Jason (PI). <u>Stevens-Lapsley JE</u> (Co-I and Mentor). Research Grant Recipient, Home Health Section of the American Physical Therapy Association. March 2016-March 2017. The impact of physical therapy on reducing re-hospitalizations and improving function in Medicare home health beneficiaries. (\$10,000).

Falvey, Jason. <u>Stevens-Lapsley JE (Mentor</u>). Burke, RE (Co-Mentor); Schwartz RS (PI). T32 predoctoral training award; Center Aging Training Grant T32-AG000279; August 2016-August 2017. The prognostic value of physical performance measures in the prediction of older adults at risk for adverse outcomes in community-based long term care settings. This award provides salary support for Jason Falvey's PhD training focused on improving the identification of community-based long term care beneficiaries at risk for falls, emergency room visits, and hospitalization. Grant awarded to trainees based on a competitive application process.

Gustavson, Allison. <u>Stevens-Lapsley JE (Mentor)</u>. Boxer R. (Co-Mentor); Schwartz RS (PI). T32 predoctoral training award; Center Aging Training Grant T32-AG000279; July 2016-July 2017. Advancing Rehabilitation Strategies for Older Adults Post-Hospitalization. This award provides salary support for Allison Gustavson's PhD training focused on advancing rehabilitation strategies to maximize outcomes for older adults following hospitalization. Grant awarded to trainees based on a competitive application process.

Loyd, Brian. <u>Stevens-Lapsley JE</u> (Mentor). ACR REF/Abbott Health Professional Graduate Student Research Preceptorship (\$3,500 to student; \$2,500 to preceptor). January 2015-April 2016. The goal of this award is to introduce students to rheumatology-related health care by partially supporting full-time research. This study will develop estimates individual prognosis following Total Knee Arthroplasty.

Gustavson, Allison. <u>Stevens-Lapsley JE</u> (Mentor). Academy of Geriatric Physical Therapy Fellowship for Geriatric Research (\$1,000), 2016.

Loyd, Brian, <u>Stevens-Lapsley JE</u> (Mentor). Academy of Geriatric Physical Therapy Adopt-A-Doc Award (\$2,000), 2016.

Falvey, Jason. <u>Stevens-Lapsley JE</u> (Mentor). Foundation for Physical Therapy Promotion of Doctoral Studies Level I. Pre-doctoral Training Grant (\$7,500). 2016.

Gustavson, Allison. <u>Stevens-Lapsley JE</u> (Mentor). Foundation for Physical Therapy Promotion of Doctoral Studies Level I. Pre-doctoral Training Grant (\$7,500). 2016.

Gustavson, Allison. <u>Stevens-Lapsley JE</u>. (Mentor) ACR REF/Abbott Health Professional Graduate Student Research Preceptorship (\$3,500 to student; \$1,000 to preceptor, \$1,000 for research costs). March 2015-January 2016. The goal of this award is to introduce students to rheumatology-related health care by partially supporting full-time research. This study will evaluate how the development of individualized predictions of recovery following TKA can be used to improve care at an individual level.

Falvey, Jason. <u>Stevens-Lapsley JE</u> (Mentor). ACR REF/Abbott Health Professional Graduate Student Research Preceptorship (\$3,500 to student; \$2,500 to preceptor). May 2015-August 2015. The goal of this award is to introduce students to rheumatology-related health care by partially supporting full-time research. This study will evaluate how radiographic alignment changes impact quadriceps strength loss after total knee arthroplasty.

Falvey, Jason (PI). <u>Stevens-Lapsley JE</u> (Co-I and Mentor). Research Grant Recipient, Health Policy and Administration Section of the American Physical Therapy Association. Optimizing the role of physical therapists in models of transitional care (\$15,000), May 2015-May 2016. Falvey, Jason. <u>Stevens-Lapsley JE</u> (Mentor). Foundation for Physical Therapy Promotion of Doctoral Studies Level I. Pre-doctoral Training Grant (\$7,500), 2015-2016.

Gustavson, Allison. <u>Stevens-Lapsley JE</u> (Mentor). Foundation for Physical Therapy Promotion of Doctoral Studies Level I. Pre-doctoral Training Grant (\$7,500), 2015-2016.

Kittelson, Andrew. <u>Stevens-Lapsley JE</u> (Mentor). Foundation for Physical Therapy Promotion of Doctoral Studies Level II. Pre-doctoral Training Grant (\$15,000), 2015-2016.

Kittelson, Andrew, <u>Stevens-Lapsley JE</u> (Mentor). Adopt-A-Doc Award from the American Physical Therapy Association Academy of Geriatric Physical Therapy (\$2,000), 2015.

Gustavson, Allison. Stevens-Lapsley JE (Mentor). Foundation for Physical Therapy Florence P. Kendall

Scholarship (\$5,000), 2015.

Falvey, Jason. <u>Stevens-Lapsley JE</u> (Mentor). Foundation for Physical Therapy Florence P. Kendall Doctoral Scholarship. (\$5,000). 2015.

Falvey, Jason. <u>Stevens-Lapsley JE</u> (Mentor). Academy of Geriatric Physical Therapy. Fellowship for Geriatric Research (\$1,000), 2015.

Kittelson, Andrew. <u>Stevens-Lapsley JE</u> (Mentor). Foundation for Physical Therapy Promotion of Doctoral Studies Level II. Pre-doctoral Training Grant (\$15,000), 2015.

Loyd, Brian. <u>Stevens-Lapsley JE (Mentor)</u>. Christiansen C (Co-Mentor); Schwartz RS (PI). T32 predoctoral training award; Center Aging Training Grant T32-AG000279; Sept 2013-August 2015. Improving prognosis for older adults undergoing TKA surgery. This award provides salary support for Brian Loyd's PhD training focused on improving the precision of prognosis after TKA. Grant awarded to trainees based on a competitive application process.

Kittelson, Andrew, <u>Stevens-Lapsley JE</u> (Mentor). Adopt-A-Doc Award from the American Physical Therapy Association Academy of Geriatric Physical Therapy (\$2,000), 2014.

Paxton, Roger, <u>Stevens-Lapsley JE.</u> (Mentor); Christiansen C (Co-Mentor); Schwartz RS (PI). T32 predoctoral training award; Center Aging Training Grant T32-AG000279; Sept 2013-August 2015. Collaborative-care Intervention to Promote Physical Activity After Total Knee Arthroplasty. This award provides salary support for Roger Paxton's Post-doc training focused on physical activity interventions in older adult populations. Grant awarded to trainees based on a competitive application process.

Loyd, Brian. <u>Stevens-Lapsley JE (Mentor</u>). Foundation for Physical Therapy Florence Kendall Doctoral Scholarship (\$5,000), 2014.

Kittelson, Andrew. <u>Stevens-Lapsley JE</u> (Mentor). Foundation for Physical Therapy Promotion of Doctoral Studies Level II. Pre-doctoral Training Grant (\$15,000), 2014.

Kittelson, Andrew. <u>Stevens-Lapsley JE</u> (Mentor). Foundation for Physical Therapy Promotion of Doctoral Studies Level I. Pre-doctoral Training Grant (\$7,500), 2013.

Kittelson, Andrew. <u>Stevens-Lapsley JE.</u> (Mentor); Maluf K (Co-Mentor); Schwartz RS (PI). T32 predoctoral training award; Center Aging Training Grant T32-AG000279; May 2012-April 2013. Determination of pain phenotypes in older adults with knee osteoarthritis. This award provides salary support for Andrew Kittelson's PhD training focused on identifying subgroups of patients with knee OA. Grant awarded to trainees based on a competitive application process.

Judd, Dana, <u>Stevens-Lapsley JE</u> (Mentor). Adopt-A-Doc Award from the American Physical Therapy Association Geriatrics Section; 2012, 2013.

Judd, Dana. <u>Stevens-Lapsley JE.</u> (Mentor); Schenkman (Co-Mentor); Schwartz RS (PI). T32 predoctoral training award; Center Aging Training Grant T32-AG000279; July 2012-April 2013. Multicomponent Rehabilitation after Total Hip Arthroplasty. This award provides salary support for Dana Judd's s PhD training focused on rehabilitation outcomes after total hip arthroplasty. Grant awarded to trainees based on a competitive application process.

Christiansen CL (PI), <u>Stevens-Lapsley JE</u> (Mentor). Improving Function after Total Knee Arthroplasty with Weight-Bearing Biofeedback. Foundation for Physical Therapy Research Grant 1/11-12/12 (\$40,000). The major goals of this pilot study are to: 1) determine effects of the weight-bearing biofeedback intervention on WB asymmetry during sit-stand transitions and walking, 2) determine effects of the weight-bearing biofeedback intervention on functional activity performance, and 3) determine safety of the weight-bearing biofeedback intervention.

Bade, Michael, <u>Stevens-Lapsley JE</u>. (Mentor); Schwartz RS (PI). T32 pre-doctoral training award; Center Aging Training Grant T32-AG000279; May 2010-April 2012. Improving Strength and Function after Total Knee Arthroplasty. This award provides salary support for Michael Bade's PhD training focused on rehabilitation outcomes after total knee arthroplasty. Grant awarded to trainees based on a competitive application process.

Kittelson, Andrew <u>Stevens-Lapsley JE</u>. (Mentor) ACR REF/Abbott Health Professional Graduate Student Research Preceptorship (\$3,500 to student; \$2,500 to preceptor). May 2012-April 2012. The goal of this award is to introduce students to rheumatology-related health care by partially supporting full-time research. This study will evaluate how novel measures of central nervous system function may help to explain the pain experience in older adults with knee osteoarthritis.

Bade, Michael. <u>Stevens-Lapsley JE</u> (Mentor). Foundation for Physical Therapy Promotion of Doctoral Studies Level II. Pre-doctoral Training Grant (\$15.000), 2012.

Kittelson, Andrew. <u>Stevens-Lapsley JE</u> (Mentor). Foundation for Physical Therapy Promotion of Doctoral Studies Level I. Pre-doctoral Training Grant (\$7,500), 2012.

Thomas, Abbey. <u>Stevens-Lapsley JE</u>. (Mentor); Schwartz RS (PI). T32 pre-doctoral training award; Center Aging Training Grant T32-AG000279; May 2011-April 2012. Muscle Strength and Function Before and After Joint Replacement Surgery. This award provides salary support for Abbey Thomas for work focused on mechanisms for quadriceps muscle activation deficits after total knee arthroplasty. Grant awarded to trainees based on a competitive application process.

Judd, Dana, <u>Stevens-Lapsley JE</u>. (Mentor) ACR REF/Abbott Health Professional Graduate Student Research Preceptorship (\$3,500 to student; \$2,500 to preceptor). May 2010-April 2011. The goal of this award is to introduce students to rheumatology-related health care by partially supporting full-time research. This study will evaluate whether adults with total hip arthroplasty have post-operative deficits in strength of the surgical lower extremity, postural control, and functional performance compared to healthy, age-matched counterparts.

Bade, Michael. <u>Stevens-Lapsley JE</u> (Mentor). Adopt-A-Doc Award from the American Physical Therapy Association Geriatrics Section; 2010-2011.

Bade, Michael. <u>Stevens-Lapsley JE</u> (Mentor). Foundation for Physical Therapy Promotion of Doctoral Studies Level I. Pre-doctoral Training Grant (\$7,500), 2010.

Bade, Michael, <u>Stevens-Lapsley JE</u>. (Mentor) ACR REF/Abbott Health Professional Graduate Student Research Preceptorship (\$3,500 to student; \$2,500 to preceptor). May 2009-April 2010. The goal of this award is to introduce students to rheumatology-related health care by partially supporting full-time research. This project is specifically focused on assessing the initial efficacy of a progressive rehabilitation program compared to a standard rehabilitation program after TKA.

Bade, Michael. <u>Stevens-Lapsley JE (Mentor)</u>. Foundation for Physical Therapy Florence Kendall Doctoral Scholarship, 2008.

Continuing Education Workshops Conducted/Organized:

- 1. Rehabilitation Strategies after Total Knee Arthroplasty for a Changing Healthcare Landscape. Colorado APTA Spring Conference, May 2017.
- 2. Physical Function Conference (targeting rehabilitation professionals), Boston, VA. May 2017.
- 3. Optimizing Rehab After Total Joint Replacement in a Changing Healthcare Landscape. Marquette Challenge Continuing Education Course, Sept 2016.
- 4. The Changing Role of NMES. In conjunction with the 2014 Cleveland Clinic Sports Health Symposium, Nov 2014.
- 5. Employing NMES for improved muscle strength following joint arthroplasty. Sponsored by St. Cloud Orthopaedics, St. Cloud, MN, Oct 2014.
- 6. Elevating exercise progression; are you optimizing patient outcomes? UCD, co-taught with Cory Christiansen and David James, May 2014.
- 7. Utilizing NMES for improved muscle strength following TKA surgery. Armstrong Atlantic State University. March 2014.
- 8. Strategies for Successful Treatment of Total Knee Arthroplasty. Berkana Rehabilitation Institute, Ft. Collins, Colorado, March, 2012.
- 9. Total Knee Replacement Rehabilitation Guidelines for Inpatient and Outpatient Practice; APTA/Colorado Chapter's 39th Annual Spring Convention, April 2009.
- 10. Total Knee Replacement Workshop: Surgical and Rehabilitation Management in Outpatient Setting; Eastern Washington University, Spokane, WA, April 3-4<sup>th</sup>, 2009.

<u>Membership in Scientific/Professional Organizations:</u> Arthritis Foundation, 2006 - Present

Association of Rheumatology Health Professionals, 2006 - Present

American College of Sports Medicine, 2001 - Present

American Physical Therapy Association, 1997 - Present

Stevens-Lapsley, Jennifer Curriculum Vitae October 2019 Page 34 of 41

Section on Research, APTA National

Nominating Committee, APTA National, 2008 - 2011

Research Planning Retreat Committee: Regenerative Medicine Retreat; 2012

Research Planning Retreat Committee: Pain, 2015.

Research Co-Chair, Colorado Chapter, 2008 - Present

<u>Consultative and Advisory Positions Held:</u> Delphi International Panel on Therapeutic Validity in Exercise Therapy, 2012 - Present Gait as a Vital Sign Task Force 2010 - Present

Invited Reviewer of PhD program in Rehabilitation Sciences at New York University Steinhardt School of Culture, Education, and Human Development, Nov 2013. American Academy of Orthopaedic Surgeons Appropriate Use Criteria for Treatment of Osteoarthritis of the Knee Writing Panel, Jan 2013 - July 2013.

Scientific Advisory Board for Promoting Healthy Cancer Survivorship in Rural Colorado Primary Health Care Practice, NIH R25-CA160013.

Technical Expert Panel member for the Minnesota Evidence-based Practice Center's project on Physical Therapy for Knee Pain Secondary to Osteoarthritis; Sponsored by Agency for Health Research and Quality 2011

Delphi Panel for Total Knee Arthroplasty Rehabilitation 2008 - 2009

Community Service:

Grant Review Panels and Advisory Boards (past 5 years)

National Institutes of Health (NIH) NCMRR National Advisory Board on Medical Rehabilitation Member 2017-present.

Ad Hoc member, NIH Grant Review Panel, Small Business: Musculoskeletal Rehabilitation Sciences Study Section, June 2017.

Reviewer, NIH Special emphasis panel, ZRG1 BDCN-W (04), March 2017.

Ad Hoc Reviewer, NIH Grant Review Panel, Neurological, Aging, and Musculoskeletal Epidemiology (NAME) Study Section, December 2013, October 2015.

School of Medicine, Early Career Scholars Program, February 2014, 2015, 2017.

Ad Hoc Reviewer, NIH National Institute of Child Health and Human Development T32 training award applications, December 2015.

Ad Hoc Member, NIH Grant Review Panel, Physiology and Pathobiology of Musculoskeletal, Oral, and Skin Systems, F10B, March 2014.

Reviewer, NIH Special Emphasis Panel, ZRG1 BBBP-T (59), Genomic Underpinnings of Response To Rehabilitation Interventions, June 2014.

## Peer-Review Journal Reviewer

Physical Therapy, Muscle and Nerve, Journal of Orthopaedic and Sports Physical Therapy, Archives

Of PM&R, Journal of Applied Biomechanics, Clinical Biomechanics, Arthritis Care and Related Research Neurorehabilitation and Repair

Editorial Board Member

Journal of Physical Therapy (2018-present)

Data Safety Monitoring Boards

Data Safety Monitoring Board for the Study of Hyperkyphosis, Exercise and Function, R01 (Katzman, PI) January 2013 - Present

Data Safety Monitoring Board for The Diagnosis and Treatment of Critical Illness Polyneuropathy, R01 (Moss, PI) May 2010 – Present

Observational, safety and monitoring board (OSMB) for Multicenter Osteoarthritis Study (MOST), 2017-present

Volunteer, Inner City Health Center (August 2013 - Present); serve as physical therapist, for low income patients.

Program Director, Nicaragua Physical Therapy Outreach through Health Volunteers Overseas. Responsibilities include coordinating volunteers for overseas assignments to provide instruction to physical therapy professors and local clinicians in Managua, Nicaragua. Endorsed by APTA. 2003 - Present.

Program Coordinator, Nicaragua Outreach for University of Colorado Denver, University of Florida, and Southwestern Texas University Physical Therapy Programs. Coordinator/translator for short instructional courses taught in Nicaragua as follows:

University of Colorado Denver Nicaragua Courses

Physiological Basis for Diabetes Management: Taught by Beth Anne Fisher and Jennifer Stevens-Lapsley, January 13-17, 2014.

Low Back Pain and Movement: Taught by Denize Stelzner and Mark Manago, January 14-18, 2013 Movement Analysis. Taught by Cory Christiansen and Betti Krapfl, January 14-22, 2012.

Clinical Decision Making and Practical Interventions in Pediatric Physical Therapy. Taught by Lisa Dannemiller, Mary Jane Rapport, and Diane Brians, January 15-23, 2011.

Physical Therapy for the Hip and Knee: From Osteoarthritis to Replacement. Taught by Michael

Bade and Tami Struessel, January 11-15, 2010.

Movement Impairment Syndromes: Examination and Evaluation Scheme. Taught by Denise Stelzner. January 12-16, 2009.

Spinal cord injury: evaluation and treatment. Taught by Betti Krapfl. Translating assistance by Jennifer Stevens. January 14-18, 2008.

#### University of Florida Courses

Core and More...The Development of Balanced Trunk Extension, Flexion and Core Stability in Children. Taught by Claudia Senesac and Shelly Trimble, February 22-26, 2010.

Effective Teaching Methods. Taught by Gloria Miller and Terri Chmielewski, February 25-29<sup>th,</sup> 2009.

Management of diabetes. Taught by Mark Bishop and Eugene Fuego. March 3-7, 2008.

Treatment classification system for low back pain. Taught by Mark Bishop, translated by Jennifer Stevens. February 18-26, 2006.

Rehabilitation for subacromial impingement syndrome. Taught by Terri Chmielewski and Claudia Senesac, translated by Jennifer Stevens. February 26-March 7, 2005.

Proprioceptive neuromuscular facilitation. Taught by Gloria Miller, translated by Jennifer Stevens.ebruary 29-March 7, 2004.

Recent advances in motor control. Taught by Gloria Miller, translated by Jennifer Stevens. February

22-March 1, 2003.

#### Southwestern Texas University Courses

Joint mobilization techniques/gait training principles. Co-taught with Suzy Dougherty. February 21 28, 2004.

Properties of muscle, tendon, bone and implications for exercise prescription. Co-taught with Suzy Dougherty, March 2-9, 2003.

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

Scientific and Advisory Review Committee (SARC), Nov 2008 - 2014

Postdoctoral Research Day Judge, 2011, 2012.

#### Physical Therapy Program

Physical Therapy Program Associate Professor Search committee, 2014 - 2015.

Physical Therapy Program Assistant Professor Search committee, 2014 - 2016.

Physical Therapy Program Advisory Committee, 2014 - Present

PM&R Research Oversight Committee, Feb 2014 - Present

Rehabilitation Science PhD Program Advisory Committee member, 2012 - Present

Women's Health Task Force 2012

Scientific Inquiry Committee, August 2010 - 2012

Patient Care Seminar Committee, Spring 2008 - 2013

Exercise Science Thread Committee, Jan 2008 - June 2008

Physical Therapy Program Assistant Professor Search committee, 2007.

### Honors and Awards:

American Physical Therapy Association (APTA) Marian Williams Research Award. 2019

APTA Dorothy Briggs Memorial Scientific Inquiry Award: Falvey JR, Burke RE, Levy CR, Gustavson AM, Price L, Forster JE, Stevens-Lapsley JE. Impaired Physical Performance Predicts Hospitalization Risk for Participants in the Program of All Inclusive Care for the Elderly. Phys Ther. Jan 2019.

University of Colorado Excellence in Doctoral Mentoring Award. 2016

Outstanding Research Poster Award: Multi-Component Rehabilitation Following Total Hip Arthroplasty: Randomized, Controlled Trial, Judd D, Winters J, Dennis D, Miner T, Dayton M, Stevens-Lapsley JE, American Physical Therapy Association Orthopedic Section. 2015

American Physical Therapy Association Jack Walker Award for a clinical research publication in Physical Therapy for: <u>Stevens-Lapsley JE</u>, Balter JE, Wolfe P, Eckhoff DG, Kohrt WM. Early Neuromuscular Electrical Stimulation to Improve Quadriceps Muscle Strength after Total Knee Arthroplasty: A Randomized Controlled Trial. Physical Therapy. Feb 2012; 92(2):210-26. 2013

American Physical Therapy Association's, Geriatrics Section, Excellence in Research Award. 2013

American Physical Therapy Association's Margaret L. Moore Award for Outstanding New Faculty Member. 2011

Outstanding Research Mentor Award for the Clinical Science Program, University of Colorado, Anschutz Medical Campus. 2009

American Physical Therapy Association (APTA) Viva J. Erickson/Promotion of Doctoral Studies II Scholarship Recipient, September 2001

Chattanooga Research Award for the best clinical research publication in *Physical Therapy* for. Stackhouse SK, <u>Stevens JE</u>, Lee SK, Pearce KM, Snyder-Mackler L, Binder-Macleod SA. Maximum Voluntary activation in nonfatigued and fatigued muscle of young and elderly individuals. 2001

American Physical Therapy Association (APTA) Promotion of Doctoral Studies I Scholarship recipient, September 2000

Phi Beta Kappa, University of Virginia 1995

Barry M. Goldwater Scholarship Recipient, University of Virginia 1994

<u>Continuing Education Attended (last 5 years):</u> Motivational Interviewing, Jan 2016.

Examine Yourself: Are you using the best evidence in clinical practice? Marquette Challenge Lecture, January 2015.

CRISP Pragmatic Trials Workshop, Sept 2014.

National Perspectives on Recruitment and Retention by Kevin Getz, University of Colorado, Oct 2013.

Dissemination and Implementation (D&I) Training Workshop, University of Colorado, Sept 2013

TRIA Orthopaedics and Sports Medicine Conference: The Way Forward-Current Concepts in Joint Preservation, Minneapolis, MN, June 2013.

Update on Musculoskeletal Pain for Practicing Clinicians: Marquette Challenge Lecture; March 2013.

Scientific Writing from the Reader's Perspective: A New Way to Gain Control of the English Language,

by George D. Gopen, University of Colorado, March 2013.

Colorado Mentor Program 4 day classes, Nov 2012 - April 2013.

Leadership: Why Me? Why Now? Building YOUR Leadership Capacity, Sept 2012.

Crucial Conversations, April 2012.

#### Clinical Science PhD, primary mentor (UCD)

Michael Bade, MPT (2008-2012), Assistant Professor, University of Colorado Dana Judd, DPT (2009-2014), Assistant Professor, University of Colorado

#### Post-doctoral Fellow (primary mentor)

Abbey Thomas, PhD, ATC (2010-2012), Assistant Professor, University of North Carolina Joshua Winters, PhD (2012-2014), Assistant Professor, University of Kentucky Roger Paxton, PhD (2013-2016) Victor Cheuy, PhD (2015-present)

Committee Member, qualifying exams

Kenji Narazaki (2007) PhD, Integrative Phys, UC Boulder (Advisor: Roger Enoka, PhD) Zachary A. Riley (2007), PhD, Integrative Phys, UC Boulder (Advisor: Roger Enoka, PhD) Diba Mani (2016), PhD, Integrative Phys, UC Boulder (Advisor: Roger Enoka, PhD)

# Committee Member, dissertation

Allison Kosir Gustavson (in process), PhD, Rehabilitation Science Doctoral Program, U. Colorado Brian Loyd (in process), PhD, Rehabilitation Science Doctoral Program, U. Colorado Jason Falvey (in process), PhD, Rehabilitation Science Doctoral Program, U. Colorado Yasmin Ahamed (2014), PhD, Rehabilitation Science Doctoral Program, U. Colorado Nicholas Burrows (2014), MS, University of South Wales, Sydney Australia Thomas Linding Jakobsen (2014), PhD Copenhagen, Denmark (Advisor: Thomas Bandholm) Andrew Kittelson, PhD, Rehabilitation Science Doctoral Program, U. Colorado Dana Judd (2014), PhD, Clinical Science, University of Colorado Michael Bade (2012), PhD, Clinical Science, University of Colorado Josh Winters (2012), PhD, Biomechanics and Movement Science, U. Delaware (Advisor: Katherine Rudolph)
Brach J. Poston (2006), PhD, Integrative Physiology, UC Boulder (Advisor: Roger Enoka, PhD) Sharon Criss (2006), DPT, Physical Therapy Program, University of N. Carolina at Chapel Hill

Co-mentor (junior mentor) to Adam Marmon (PhD candidate) on T32 Aging Training Grant with Roger Enoka, PhD

Jane Deloach (2006), DPT, Physical Therapy Program, University of N. Carolina at Chapel Hill

Research Mentor to DPT students in Muscle Performance Laboratory at UCD

1030	carcin mentor to Dr 1 students in muscle r	
	Jason Platt (2016-present)	Stacey Haugen (2016-present)
	Kourtney Betts (2016-present)	Alexa Tovsen (2016-present)
	Carol Baym (2015-present)* ¥	Michael Himawan (2015-present)* ¥
	Michelle Pineda (2015-present)	Brian Burkhardt (2015-present)
	Deanna Maurer (2014-present)* ¥	Walter Hafner (2014-present)* ¥
,	Johanna Schanbacher (2014-present)	Samantha Stolper (2014-present)* ¥
	Cynthia Huang (2013-2016)* ¥	Rose Brooks (2013-2016)
	Melissa Nolte (2012-2015)*	Katie Carbenier (2012-2015)
	Kat Rainville (2012-2015)*	Stephanie Glick (2012-2015)*
	Liza Maciorowski (2013-2014)	Christy Schlottman (2011-2013)*
	Kelsey Miller (2011-2014)*	Erica Hylton (2011-2012)
	Mitchell Luce (2010-2013)*	Stacey Sellner (2010-2013)
	Emily Roberts (2010-2013)*	Kristin Thomas (2010-2013)
	Erin Evers (2010-2012)	Emily Hoke (2009-2012)* ¥
	Laura Borgstede (2009-2011)*	Ashley Whalen (2009-2011)
	Tasia Robertson (2008-2011)*	Allison Agee (2008-2011)
	Katherine Kulp (2008-2011)	Laurie Kramer (2007-2010)* ¥
,	John Kvale (2007-2009)*	Mahera Jeevanjee (2007-2009)*
	Sheng Wu (2006-2009)*	Kristin Carpenter (2006-2008)* ¥
,	Jenna Baker (2017-present)	Jessica Heilman (2006-2007)
	Mikayla Jansen (2017-present)	

Regan Celik (2017-present) Thomas Clemens (2017-present) Jordan Lenkin (2017-present)

\* Presented work at national conference ¥ Co-author on manuscript

Mentoring:

Student Mentoring

Rehabilitation Science PhD, primary Mentor (UCD) Andrew Kittelson, PhD (2011-2016),Post-Doctoral Fellow, University of Colorado Brian Loyd (2013-present) Jason Falvey (2014-present) Allison Kosir (2014-present)

### Mentor to CU Denver Internship Students and Masters of Human Anatomy Students

Lucine Papazian (2012-present)
Bethany Hayes (2015-2016)-Best
Capstone Poster Presentation 2016
Nazlee Zardoshtian (Fall 2014)
Min Ma (Spring 2014)
Michelle Vien (Fall 2013 & Spring 2014)

Participated in Engineering Design Project fall 2012-spring 2013 (ENGR 3313) to build a quadriceps/hamstrings strength testing device with engineering students.

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

Spring Semester

DPTR 7112: Applied Exercise Science

# Summer Semester

DPTR 7212: International Cross-Culture Collaboration (Nicaragua)