

Curriculum Vitae Michael J Bade, PT, DPT, PhD, OCS, FAAOMPT January 30, 2025

Michael J Bade, PT, DPT, PhD, OCS, FAAOMPT Mailstop C244, 13121 East 17th Avenue, Aurora, CO 80045 303-724-9025

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

Education:

Regis University, Denver, CO	DPT in Physical Therapy	2012 - 2014
University of Colorado, Aurora, CO	PhD in Clinical Science	2008 - 2012
University of North Carolina, Chapel Hill, NC	MPT in Physical Therapy	2003 - 2005
University of Colorado, Boulder, CO	BA in Molecular Biology	1993 - 1998

<u>Licensure Information/Registration Number:</u>

Colorado #PTL.0009977

Certifications:

APTA Certified Clinical Instructor 2007- Present

Fellow of the American Academy of Orthopaedic Manual Physical Therapists 2009-Present APTA Orthopedic Clinical Specialist 2014-2024, Emeritus 2024-Present

Employment and Positions Held:

2019 - Present	Associate Professor, School of Medicine, Physical Therapy Program, University of Colorado Denver, Anschutz Medical Campus, Aurora, CO
2016 – 2019	Assistant Professor, School of Medicine, Physical Therapy Program, University of Colorado Denver, Anschutz Medical Campus, Aurora, CO
2012 - 2016	Assistant Professor and Director of the Orthopedic Manual Physical Therapy Fellowship School of Physical Therapy, Regis University, Denver, CO
2012 - 2016	Physical Therapist, RegisCares Faculty Practice, Regis University, Denver, CO
2008 - 2012	Lecturer and Lab Assistant, School of Medicine, Physical Therapy Program, University of Colorado Denver, Anschutz Medical Campus, Aurora, CO
2006 - 2008	Lecturer and Lab Assistant, School of Medicine, Physical Therapy Program, Duke University, Durham, NC
2007 - 2008	Senior Physical Therapist, Duke University Medical Center, Durham, NC
2005 - 2007	Physical Therapist, Duke University Medical Center, Durham, NC

Scholarly Agenda:

The overall goal of my research agenda is to find innovative methods to improve health span and rehabilitation of geriatric musculoskeletal conditions with a specific focus on osteoarthritis and joint replacement.

Peer Reviewed Publications:

- 1. Bade MJ, Christiansen CL, Zeni JA Jr, Dayton MR, Forster JE, Cheuy VA, Christensen JC, Hogan C, Koonce R, Dennis D, Peters A, Stevens-Lapsley JE. Movement Pattern Biofeedback Training After Total Knee Arthroplasty: A Randomized Controlled Trial. *Arthritis Care Res (Hoboken)*. Epub ahead of print.
- 2. Mañago MM, Dunkle Z, Cohen ET, <u>Bade M</u>. Go with the Flow? Considerations for Blood Flow Restriction Training in People with Neurologic Conditions. *Phys Ther*. Epub ahead of print.
- 3. Mañago MM, Cohen ET, Alvarez E, Hager ER, Owens JG, <u>Bade M</u>. Feasibility of Low-Load Resistance Training Using Blood Flow Restriction for People With Advanced Multiple Sclerosis: A Prospective Cohort Study. *Phys Ther*. Epub ahead of print.
- 4. Marshall A, Johnson R, Jennings J, Dennis D, Stevens-Lapsley J, <u>Bade M</u>. Immediate inelastic compression garment for swelling management after total knee arthroplasty: a feasibility study. *J Clin Trans Res.* 2024. 10(5): 296-306.
- Marshall A, Bandholm T, Kleeman-Forsthuber L, Koonce R, Dennis D, Stevens-Lapsley J, <u>Bade M</u>. The Effect of Therapeutic Arthrocentesis on Quadriceps Activation, Strength, and Function in Individuals with Knee Osteoarthritis or After Total Knee Arthroplasty: an Exploratory Study. *Aca J Spo Sci & Med*. 2024. 1(5): AJSSM.MS.ID.000524
- 6. Churchill L, <u>Bade M</u>, Koonce RC, Stevens-lapsley JE, Bandholm T. The past and future of perioperative interventions to reduce arthrogenic quadriceps muscle inhibition after total knee arthroplasty: a narrative review. *Osteoarthr Cartil Open.* 2023;6(1)100429.
- 7. Graber J, Churchill L, Struessel T, O'Malley S, <u>Bade M</u>, Stevens-Lapsley J. Expert Consensus for the Use of Outpatient Rehabilitation Visits After Total Knee Arthroplasty: A Delphi Study. *J Orthop Sports Phys Ther.* 2023;0(9):1-9.
- 8. Garbin AJ, Stevens-Lapsley JE, Gritz RM, Tucker CA, <u>Bade MJ</u>. Long-Term Career Earnings in Academia Might Offset the Opportunity Cost of Full-Time PhD and Postdoctoral Education for Physical Therapists Who Hold a Doctor of Physical Therapy Degree. *Phys Ther*. 2023;103(4).
- 9. Mañago MM, Cohen ET, Cameron MH, Christiansen CL, <u>Bade M</u>. Reliability, Validity, and Responsiveness of the Patient-Specific Functional Scale for Measuring Mobility-Related Goals in People With Multiple Sclerosis. *J Neurol Phys Ther*. 2023;47(3):139-145.
- 10. Graber J, Kittelson A, Juarez-Colunga E, Jin X, <u>Bade M</u>, Stevens-Lapsley J. Comparing "people-like-me" and linear mixed model predictions of functional recovery following knee arthroplasty. *J Am Med Inform Assoc.* 2022; 29(11): 1899-1907

- 11. Carmichael J, Flynn S, Struessel T, Bini S, <u>Bade M</u>, Stevens-Lapsley J. Assessment of a downloadable application with avatar guidance for PT-prescribed home exercise after total knee arthroplasty: A 30-day usability and feasibility study. *Advances in Aging Research*. 2022; 11:98-115.
- 12. Manago MM, Kimbrell K, Hager ER, Dwight H, Owens J, <u>Bade M</u>. Clinical use of blood flow restriction in people with neurologic conditions: a cross-sectional survey. *J Phys Ther Sci.* 2022; 34(4):275-283
- 13. Capin J, <u>Bade M</u>, Jennings J, Dennis D, Snyder-Mackler L, Stevens-Lapsley J. Importance of strength and function after total knee arthroplasty: strength is vital for function and does not compromise range of motion. *Phys Ther*. 2022;102(6):pzac033.
- 14. Graber J, Juarez-Colunga E, Thigpen C, Waugh D, <u>Bade M</u>, Stevens-Lapsley J, Kittelson A. Development of reference charts for monitoring quadriceps strength with hand held dynamometry after total knee arthroplasty. *Disabil Rehabil*. 2022; 44(24):7535-7542.
- 15. Kolb WH, <u>Bade MJ</u>, Bradberry C. Implementation of clinical practice guidelines for low back pain: A case control cohort study of knowledge translation in a multi-site healthcare organization. *J Eval Clin Pract*. 2022;28(2):288-302
- 16. Carmichael J, Dennis D, Jennings J, Stevens-Lapsley J, <u>Bade M</u>. Feasibility and initial efficacy of a multimodal swelling intervention after total knee arthroplasty: A prospective pilot study with historical controls. *Knee*. 2022;35:25-33.
- 17. Rauzi M, Foran J, <u>Bade M</u>. Multimodal conservative management of arthrofibrosis after total knee arthroplasty compared to manipulation under anesthesia: a feasibility study with retrospective cohort comparison. *Pilot Feasibility Stud*. 2022; 8(1):71.
- 18. Falvey J, <u>Bade MJ</u>, Forster JE, Stevens-Lapsley JE. Poor Recovery of Activities-of-Daily-Living Function Is Associated With Higher Rates of Postsurgical Hospitalization After Total Joint Arthroplasty. *Phys Ther.* 2021;101(11).
- 19. Kittelson A, Carmichael J, Stevens-Lapsley JE, <u>Bade M</u>. Psychometric properties of the 4-meter walk test after total knee arthroplasty. *Dishabil Rehabil*. 2020; 5:1-7.
- 20. Owens J, Rauzi M, Kittelson A, Graber J, <u>Bade M</u>, Johnson J, Nabhan D. How New Technology is Improving Physical Therapy. *Curr Rev Musculoskelet Med.* 2020; 13(2):200-211.
- 21. <u>Bade M</u>, Christensen J, Zeni J, Christiansen C, Dayton M, Forster J, Cheuy V, Stevens-Lapsley J. Movement pattern biofeedback training after total knee arthroplasty: randomized clinical trial protocol. *Contemp Clin Trials*. 2020; 91:105973.
- 22. Falvey JR, <u>Bade MJ</u>, Forester JE, Hogan C, Stevens-Lapsley JE. Pre-operative activities of daily living dependency is associated with readmissions following total joint arthroplasty. *Clin Orthop Relat Res.* 2020;478(2)231-237.

- 23. Loyd BJ, Stackhouse S, Dayton M, Hogan C, <u>Bade M</u>, Stevens-Lapsley J. The relationship between lower extremity swelling, quadriceps strength, and functional performance following total knee arthroplasty. *Knee*. 2019; 26(2): 382-391
- 24. Zeni JA, Flowers P, <u>Bade M</u>, Cheuy V, Stevens-Lapsley J, Snyder-Mackler L. Stiff knee gait may increase risk of second total knee arthroplasty. *J Orthop Res.* 2019; 37(2):397-402.
- 25. Falvey JR, <u>Bade MJ</u>, Forster JE, Burke RE, Jennings JM, Nuccio E, Stevens-Lapsley JE. Homehealth-care physical therapy improves early functional recovery of medicare beneficiaries after total knee arthroplasty. *JBJS*. 2018; 100(20): 1728-1734.
- 26. Burns S, Cleland J, Cook C, <u>Bade M</u>, Rivett D, Snodgrass S. Predictor variables associated with improved pain and function for individuals with a primary complaint of low back pain: a secondary analysis. *J Manipulative Physiol Ther*. 2018; 41(6): 467-474.
- 27. <u>Bade M</u>, Struessel T, Paxton R, Winters J, Baym C, Stevens-Lapsley J. Performance on a clinical quadriceps activation battery is related to a laboratory measure of activation and recovery after total knee arthroplasty. *Arch Phys Med Rehab*. 2018; 99(1): 99-106.
- 28. Cheuy VA, Foran JRH, Paxton RJ, <u>Bade MJ</u>, Zeni JA, Stevens-Lapsley JE. Arthrofibrosis associated with total knee arthroplasty. *J Arthroplasty*. 2018; 32(8): 2604-2611
- 29. <u>Bade M</u>, Struessel T, Dennis D, Foran J, Kim R, Miner T, Wolfe P, Kohrt W, Stevens-Lapsley J. High-intensity versus low-intensity rehabilitation after total knee arthroplasty: a randomized controlled trial. *Arthritis Care Res.* 2017: 69(9): 1360-1368.
- 30. <u>Bade MJ</u>, Cobo-Estevez M, Neeley D, Pandya J, Gunderson T, Cook C. Effects of manual therapy and exercise targeting the hips in patients with low back pain a randomized controlled trial. *J Eval Clin Pract.* 2017; 00:1-7.
- 31. <u>Bade MJ</u>, Chi TL, Farrell KC, Gresel AJ, Hammel LJ, Koster BN, Leatzow AB, Thomas EC, McPoil TG. The use of a static measure to predict foot posture at midsupport during running. *Int J Sports Phys Ther*. 2016; 11(1): 64-71.
- 32. McPoil T, Ford J, Fundaun J, Gallegos C, Kinney A, McMillan P, Murphy J, Sky E, Torba D, <u>Bade M</u>. The use of a static measure to predict foot posture at midstance during walking. *Foot (Edinb)*. 2016; 28: 47-53.
- 33. <u>Bade MJ</u>, Aaron K, McPoil TG. Accuracy of self-reported foot strike pattern in intercollegiate and recreational runners during shod running. *Int J Sports Phys Ther.* 2016;11(3):350-5.
- 34. <u>Bade M</u>, Baertlein S, Bouten T, Conboy K, Kim A, Van Portfliet M, Young E, Vasquez S, McPoil T. A comparison of lower extremity alignment risk factors between competitive and recreational runners. *Orthopaedic Practice*. 2016; 28(2) 100-108.
- 35. Stevens-Lapsley JE, <u>Bade MJ</u>, Wolfe P, Dayton MR. Minimally invasive total knee arthroplasty does not improve outcomes 1 year after surgery: a randomized controlled trial. *J Clin Trials*. 2015. 5(1).

- 36. Christiansen CL, <u>Bade MJ</u>, Paxton R, Stevens-Lapsley JE. Measuring movement symmetry using tibial-mounted accelerometers for people recovering from total knee arthroplasty. *Clin Biomech*. 2015; 30(7):732-7.
- 37. Christiansen CL, <u>Bade MJ</u>, Davidson BS, Stevens-Lapsley JE. Effects of weight-bearing biofeedback training on function movement patterns following TKA: A Pilot Study. *J Orthop Sports Phys Ther.* 2015; 45(9): 647-55.
- 38. <u>Bade MJ</u>, Kittelson JM, Kohrt WM, Stevens-Lapsley JE. Predicting functional performance and range of motion outcomes after total knee arthroplasty. *AJPM&R*. 2014; 93(7): 579-85.
- 39. McPoil TG, Haager M, Hilt J, Klapheke J, Martinez R, VanSteenwyk C, Weber N, Cornwall MW, Bade M. Can static foot posture measurements predict midfoot plantar surface area? *Foot* (*Edinb*). 2014; 24(4):161-8.
- 40. Dayton MR, <u>Bade MJ</u>, Muratore T, Shulman BC, Kohrt WM, Stevens-Lapsley JE. Minimally invasive total knee arthroplasty: surgical implications for recovery. *J Knee Surg*. 2013; 26:195-202.
- 41. Christiansen CL, <u>Bade MJ</u>, Weitzenkamp DA, Stevens-Lapsley JE. Factors predicting weight-bearing asymmetry 1 month after unilateral total knee arthroplasty: a cross-sectional study. *Gait Posture*. 2013; 37(3): 363-367.
- 42. Stevens-Lapsley JE, <u>Bade MJ</u>, Shulman BC, Kohrt WM, Dayton MR. Minimally invasive total knee arthroplasty improves early knee strength but not functional performance: a randomized controlled trial. *J Arthroplasty*. 2012; 27(10):1812-1819.
- 43. <u>Bade MJ</u>, Stevens-Lapsley JE. Restoration of physical function in patients following total knee arthroplasty an update on rehabilitation practices. *Curr Opin Rheumatol*. 2012; 24(2):208-214.
- 44. <u>Bade MJ</u>, Wolfe P, Zeni JA, Stevens-Lapsley JE, Snyder-Mackler L. Predicting poor physical performance after total knee arthroplasty. *J Orthop Res.* 2012; 30(11):1805-1810.
- 45. Christiansen CL, <u>Bade MJ</u>, Judd D, Stevens-Lapsley JE. Weight-bearing asymmetry during sit to stand transitions related to impairment and functional mobility after total knee arthroplasty. *Arch Phys Med Rehabil*. 2011; 92(10):1624-9.
- 46. <u>Bade MJ, Stevens-Lapsley JE.</u> Early high-intensity rehabilitation following total knee arthroplasty improves outcomes. *J Orthop Sports Phys Ther.* 2011; 41(12): 932-941.
- 47. Rapport MJ, Rodriguez J, <u>Bade MJ</u>. Use of a community volunteer program to develop value for patient centered care in physical therapy education. *J. Phys. Ther. Educ.* 2010; 24(2):53-59.
- 48. <u>Bade MJ</u>, Kohrt WM, Stevens-Lapsley JE. Outcomes before and after total knee arthroplasty compared to healthy adults. *J Orthop Sports Phys Ther.* 2010; 40(9):559-567.
- 49. Lutz GJ, Bremner SN, <u>Bade MJ</u>. Identification of myosin light chains in *Rana Pipiens* skeletal muscle and their expression patterns along single fibers. *J Exp Biol*. 2001; 204:4237-48

Peer Reviewed Scientific & Professional Presentations:

- Capin JJ, <u>Bade MJ</u>, Zeni J, Cheuy V, Yang C, Hogan C, Koonce R, Foran J, Christensen JC, Forster JE, Stevens-Lapsley JE. Perioperative Predictors of Gait Biomechanics Six Months after Total Knee Arthroplasty. Abstract accepted for presentation at APTA Combined Sections Meeting; Houston, TX, February 2025.
- Bade MJ, Capin JJ, Zeni J, Peters A, Christiansen CL, Smith A, Davis-Wilson HC, Weeks C, Churchill L, Stevens-Lapsley JE. Perioperative Predictors of Sit to Stand Biomechanics Six Months after Total Knee Arthroplasty. Abstract accepted for presentation at APTA Combined Sections Meeting; Houston, TX, February 2025.
- 3. <u>Bade MJ</u>, Edwards E, Juan J, Sapinsley Z, Thomsen PB, Peters A, Zeni J, Cheuy V, Christiansen CL, Stevens-Lapsley JE. Comparison of Clinic-Based Biomechanical Measures during Walking to Laboratory Measures after Total Knee Arthroplasty. Abstract accepted for presentation at APTA Combined Sections Meeting; Houston, TX, February 2025.
- 4. Garg, A, <u>Bade MB</u>, Hanney WJ, Kolber MJ. Measuring Physical Therapists' Guideline Adherence Using Analysis of Current Procedural Terminology Codes: A Validation Study. Abstract accepted for presentation at APTA Combined Sections Meeting; Houston, TX, February 2025.
- 5. Garg, A, <u>Bade MB</u>, Hanney WJ, Kolber MJ. Unraveling the Knowledge to Practice Gap Among Physical Therapists for Management of Low Back Pain. Abstract accepted for presentation at APTA Combined Sections Meeting; Houston, TX, February 2025.
- Carson NM, Graber, J, O'Malley SM, Youngberg JA, Webb W, Meline Z, Peters A, <u>Bade MJ</u>, Stevens-Lapsley J. 90-day outcomes for Veterans after total knee arthroplasty: are we serving those who served? Abstract accepted for presentation at APTA Combined Sections Meeting; Houston, TX, February 2025.
- 7. Bhattacharjee R, Christensen J, Cheuy V, Souza R, <u>Bade M</u>, Christiansen C, Stevens-Lapsley J. Non-surgical Knee Biomechanics After Unilateral Total Knee Arthroplasty Are Linked To Longterm Changes In Cartilage Composition. Abstract accepted for presentation at ORS Annual Meeting; Phoenix, AZ, February 2025.
- 8. Carson NM, Graber, J, O'Malley SM, Youngberg JA, Meline Z, Peters A, <u>Bade MJ</u>, Stevens-Lapsley J. 90-day outcomes for Veterans after total knee arthroplasty: are we serving those who served? Abstract presented at the Orthopedic Research Symposium and D'Ambrosia Diversity Lectureship; Aurora, CO, October 2024.
- 9. Garg A, <u>Bade M</u>, Hanney W, Kolber M. Awareness, agreement, adoption, and adherence to low back pain guidelines among outpatient physical therapists. Abstract presented at the American Academy of Orthopaedic Manual Physical Therapists Conference: Orlando, FL, October 2024.
- 10. Carson NM, Graber, J, O'Malley SM, Youngberg JA, Meline Z, Peters A, <u>Bade MJ</u>, Stevens-Lapsley J. 90-day outcomes for Veterans after total knee arthroplasty: are we serving those who served? Abstract presented at Eastern Colorado VA Research Day. Aurora, CO, September 2024.

- 11. <u>Bade M</u>, Christiansen C, Cheuy V, Zeni J, Forster J, Christensen J, Capin J, Dayton M, Dennis D, Peters A, Biondi E, Churchill L, Connors M, Stevens-Lapsley J. Movement Pattern Biofeedback Training after Total Knee Arthroplasty: A Randomized Controlled Trial. Abstract accepted for platform presentation at APTA Combined Sections Meeting; Boston, MA, February 2024.
- 12. Churchill L, Graber J, Mealer M, Matlock DD, Thigpen C, Lutz A, <u>Bade MJ</u>, Stevens-Lapsley JE. Perceptions of Personalized Clinical Decision Support in Rehabilitation after Total Knee Arthroplasty: A Qualitative Study. Poster presentation: American Physical Therapy Association Combined Sections Meeting; Boston, MA, February 2024.
- 13. Graber J, Juarez-Colunga E, Jin X, Churchill L, Matlock DD, Kittelson A, Thigpen C, <u>Bade M</u>, Stevens-Lapsley J. Effectiveness of personalized clinical decision support in outpatient rehabilitation after total knee arthroplasty. Marilyn Gossman Platform Presentation: American Physical Therapy Association Combined Sections Meeting; Boston, MA, February 2024.
- 14. Christiansen C, Thomsen P, <u>Bade M</u>, Melton D, Gaffney B, Stoneback J. Transfemoral Osseointgrated Prosthesis Limb-Load Symmetry Training: Study Protocol and Year 1 Progress. Abstract accepted for presentation at the 2024 Military Health System Research Symposium.
- 15. Alejehani M, Snyder-Mackler L, Giordano A, <u>Bade M</u>, Stevens-Lapsley J, Zeni J. Normative Data for Patients prior to and Following Total Knee Arthroplasty. Abstract accepted for presentation at APTA Combined Sections Meeting; Boston, MA, February 2024.
- 16. Carmichael C, Weber K, Rubinstein S, Svoboda E, <u>Bade M</u>. Scapular pain in cervical radiculopathy: a scoping review. Abstracted presented at the Association of Chiropractic Colleges Research Agenda Conference; San Diego, CA, February, 2024.
- 17. Cheuy V, Stevens-Lapsley JE, Christiansen CL, Connors M, Peters A, Koonce R, Hogan C, <u>Bade MJ</u>. Effects of real-time biofeedback using instrumented insoles on recovery after total knee arthroplasty. Abstract presented at International Society for Technology in Arthroplasty, Sept 2023.
- 18. Carmichael C, Weber K, Rubinstein S, Svoboda E, <u>Bade M</u>. Scapular pain in cervical radiculopathy: a scoping review protocol. Abstract presented at 18th International Forum for Back and Neck Pain Research in Primary Care, Sept 2023.
- 19. Dayton M, Marshall A, Bandholm T, Koonce R, Dennis D, Hogan C, Stevens-Lapsley J, <u>Bade M</u>. Therapeutic Arthrocentesis in Individuals with Knee Osteoarthritis or TKA. Abstract presented at Western Orthopedic Association, Aug 2023.
- 20. Churchill L, Graber J, Mealer M, <u>Bade MJ</u>, Stevens-Lapsley JE. A qualitative study exploring patient perceptions of personalized prediction and monitoring in rehabilitation after total knee arthroplasty. Abstract presented at OARSI 2023 World Congress on Osteoarthritis, Mar 2023.
- 21. <u>Bade MJ</u>, Cheuy V, Zeni J, Christiansen CL, Stevens-Lapsley JE. Effects of real-time biofeedback using instrumented insoles on recovery after total knee arthroplasty: a pilot study. Abstract presented at OARSI 2023 World Congress on Osteoarthritis, Mar 2023.

- 22. Dayton M, Marshall A, Koonce R, Hogan C, Jennings J, Owens J, Stevens-Lapsley J, <u>Bade M</u>. Neuromuscular Electrical Stimulation and Blood Flow Restriction: Total Knee Arthroplasty. Western Orthopedic Association, Aug 2023.
- 23. Marshall A, Johnson R, Jennings J, Dennis D, Stevens-Lapsley J, <u>Bade M</u>. Immediate Inelastic Compression Garment for Swelling Management after Total Knee Arthroplasty: A Feasibility Study. Abstract presented at the APTA Combined Sections Meeting. Feb 2023.
- 24. Marshall A, Koonce R, Hogan C, Jennings J, Stevens-Lapsley J, <u>Bade M</u>. Combined Neuromuscular Electrical Stimulation and Blood Flow Restriction after Total Knee Arthroplasty: A Feasibility Study. Abstract presented at the APTA Combined Sections Meeting. Feb 2023.
- 25. Manago M, Hager E, Cohen E, Owens J, <u>Bade M</u>. Feasibility of low-load resistance training with blood flow restriction for people with severe multiple sclerosis. Abstract presented at the APTA Combined Sections Meeting. Feb, 2023. Awarded Best Platform ANPT DDSIG.
- 26. Marshall A, <u>Bade M.</u> Immediate Inelastic Compression Garment for Swelling Management after Total Knee Arthroplasty: A Feasibility Study. Abstract presented at APTA Colorado Chapter Rocky Mountain Annual Conference, Sep 2022.
- 27. Graber J, Maldonado A, <u>Bade M</u>, Stevens-Lapsley J. Creating web-based tools for independent monitoring of functional recovery following total hip arthroplasty. Poster presentation: Academy of Physical Therapy Research Retreat, Advances in Rehabilitation Technology; July 2022
- 28. <u>Bade MJ</u>, Cheuy V, Zeni J, Christiansen CL, Stevens-Lapsley JE. Effects of real-time biofeedback using instrumented insoles on recovery after total knee arthroplasty: a pilot study. Abstract presented at the Academy of PT Research Retreat on Rehabilitation Technology, July 2022.
- 29. Dwight H, Hoffman R, Cohen ET, Owens J, <u>Bade MJ</u>, Mañago MM. Case Report: Blood Flow Restriction and Therapeutic Exercise for a Patient with Multiple Sclerosis and Advanced Disability. Abstract Presented at the Consortium of Multiple Sclerosis Centers Annual Meeting, June, 2022.
- 30. Graber J, Thigpen C, Van Sciver-Richardson K, Lutz A, Maldonado A, <u>Bade M</u>, Stevens-Lapsley J. Preliminary feasibility and effectiveness of a new clinical decision support tool in knee arthroplasty rehabilitation. Abstract presented at the Colorado Pragmatic Research in Health Conference, May 2022.
- 31. Stevens-Lapsley J, Graber J, <u>Bade M</u>. Clinical Practice Guidelines and the Use of Clinical Decision Support Tools in TKA Rehabilitation. Abstract presented at the OARSI annual meeting, April 2022.
- 32. Carmichael J, Flynn S, Struessel T, Bini S, <u>Bade M</u>, and Stevens-Lapsley J. App-Based Home Exercise after Total Knee Arthroplasty: A Randomized Pilot Study. Abstract presented at the APTA Combined Sections Meeting, February 2022
- 33. Graber J, Juarez-Colunga E, Jin X, Kim C, <u>Bade M</u>, Stevens-Lapsley J, Kittelson A. Comparing Methodologies for Predicting Functional Recovery after Total Knee Arthroplasty. Abstract presented at the APTA Combined Sections Meeting, February 2022.

- 34. Dwight H, Hoffman R, Cohen ET, Owens J, <u>Bade MJ</u>, Mañago MM. Blood Flow Restriction for a Patient with Multiple Sclerosis and Advanced Disability: A Case Report. Abstract Presented at the APTA Combined Sections Meeting, February, 2022.
- 35. Mañago MM, Kimbrell K, Hager ER, Dwight H, <u>Bade MJ</u>. Application and Perceptions of Blood Flow Restriction in People with Neurologic Conditions: A Practitioner Survey. Abstract presented at the APTA Combined Sections Meeting, February, 2022.
- 36. Graber J, <u>Bade M</u>, Thigpen C, Van Sciver-Richardson K, Stevens-Lapsley J. Evaluating the need for a new clinical decision support tool in knee arthroplasty rehabilitation. Abstract presented at Colorado Pragmatic Research in Health Conference, May 2021.
- 37. Carmichael J, Stevens-Lapsley J, <u>Bade M</u>. Feasibility and initial efficacy of a multimodal swelling intervention after total knee arthroplasty: a pilot study with historical cohort comparison. Abstract presented at Chiropractic Academy of Research Leadership CARLoquium Conference, March 2021. **Awarded 3**rd **Place for Best Poster**.
- 38. Graber J, Kittelson A, <u>Bade M</u>, Juarez-Colunga E, Thigpen C, Waugh D, Stevens-Lapsley J. Development of a reference chart for monitoring quadriceps strength recovery after knee arthroplasty. Abstract presented at APTA Combined Sections Meeting, Feb 2021.
- 39. Graber J, Kittelson A, <u>Bade M</u>, Waugh D, Thigpen C, Davenport J, Mayberry M, Stevens-Lapsley J. Translation from Concept to Clinic: A Novel Tool for Patient-Centered Care in Knee Arthroplasty Rehabilitation. Abstract presented at the Colorado Pragmatic Research in Health Conference, Aug 2020.
- 40. Cheuy V, Christensen J, <u>Bade M</u>, Thomsen P, Lewis S, Zeni J, Edwards E, Christiansen C. Preoperative Strength and Movement Asymmetries in Older Adults with Unilateral Osteoarthritis. Abstract presented at APTA Combined Sections Meeting, Feb 2020.
- 41. Aljehani M, <u>Bade MJ</u>, Stevens-Lapsley JE, Christiansen J, Zeni J. Knee Adduction Moment is not Associated with Contralateral Osteoarthritis Progression after Knee Arthroplasty. Abstract presented at APTA Combined Sections Meeting, Feb 2020.
- 42. Carmichael J, Foran J, Levy D, Garnett A, Stevens-Lapsley JE, <u>Bade MJ</u>. Multimodal Swelling Management after Total Knee Arthroplasty: A Pilot Study with Cohort Comparison. Abstract presented at APTA Combined Sections Meeting, Feb 2020.
- 43. Carmichael J, Stevens-Lapsley JE, <u>Bade MJ</u>. Multimodal Edema Management after Total Knee Arthroplasty: A Pilot Study with Retrospective Historical Cohort Comparison. Abstract presented at the ACR Annual Conference, Nov 2019.
- 44. Foran J, Stevens-Lapsley JE, <u>Bade MJ</u>. Multimodal Conservative Management of Stiffness after Total Knee Arthroplasty: A Pilot Study with Retrospective Historical Cohort Comparison. Abstract presented at APTA Combined Sections Meeting, Jan 2019.
- 45. Falvey JR, Jennings JM, Burke RE, <u>Bade MJ</u>, Dennis DA, Stevens-Lapsley JE. Predictors of hospital readmission from home health care following total knee arthroplasty. Abstract presented at AAOS Annual Meeting, Mar 2018.

- 46. Zeni J, Madara K, Stevens-Lapsley J, Snyder-Mackler L, <u>Bade M</u>. Stiff-legged gait patterns predict the need for future contralateral total knee arthroplasty. Abstract presented at the APTA Combined Sections Meeting, Feb 2018.
- 47. Zeni J, Madara K, Stevens-Lapsley J, Snyder-Mackler L, <u>Bade M</u>. Risk factors for contralateral total knee arthroplasty. Abstract presented at the APTA Combined Sections Meeting, Feb 2018.
- 48. <u>Bade MJ</u>, Cheuy V, Loyd B, Jaeckel M, Zeni J, Christiansen CL, Stevens-Lapsley JE. Effects of real-time biofeedback using instrumented insoles on recovery after total knee arthroplasty: a pilot study. Abstract presented at the APTA Combined Sections Meeting, Feb 2018.
- 49. Parsons J, Kinney A, <u>Bade M</u>. Differential diagnosis of dizziness in a 67-year old female hiker presenting to outpatient physical therapy: a case report. Abstract presented at the APTA Combined Sections Meeting, Feb 2018.
- 50. Cobo-Estevez M, Cook CC, <u>Bade MJ</u>. Effects of manual therapy and exercise targeting the hips in patients with low back pain a randomized controlled trial. Abstract presented at the 53° Congreso Chileno de Ortopedia y Traumatología, Nov 2017.
- 51. Falvey J, Nuccio E, Burke R, <u>Bade M</u>, Stevens-Lapsley J. Utilization of rehabilitation services is associated with better functional outcomes and reduced readmissions for Medicare home health users following total knee arthroplasty. Presented at the AcademyHealth Annual Research Meeting, June 2017.
- 52. Falvey J, Nuccio E, <u>Bade M</u>, Burke R, Struessel T, Stevens-Lapsley J. Recovery of physical function and hospital readmissions in Medicare fee for service beneficiaries after total knee arthroplasty: the continued importance of rehabilitation. Accepted for presentation at the Center on Health Services Research and Training Summer Institute, June 2017.
- 53. Cheuy VA, Loyd BJ, <u>Bade MJ</u> Christiansen CL, Stevens-Lapsley JE. Effects of Movement Pattern Biofeedback Training After Total Knee Arthroplasty. American Society of Biomechanics Annual Meeting August, 2017.
- 54. Cheuy VA, Loyd BJ, <u>Bade MJ</u> Christiansen CL, Stevens-Lapsley JE. Movement Asymmetry During Stepping is Related to Quadriceps Strength Asymmetry and Functional Impairment. Rocky Mountain American Society of Biomechanics Annual Regional Meeting April, 2017.
- 55. McPoil T, Ford J, Fundaun J, Gallegos C, Kinney A, McMillan P, Murphy J, Sky E, Torba D, <u>Bade M</u>. The use of a static measure to predict foot posture at midstance during walking. Abstract presentated at APTA Combined Sections Meeting, 2017.
- 56. Burns SA, Snodgrass S, Rivett D, Cleland J, Cook C, <u>Bade M</u>. Predictors of response to manual therapy and exercise for individuals with a primary complaint of low back pain: a secondary analysis. Abstract presented at AAOMPT Annual Conference, 2016.

- 57. Hammerich A, Anemaet W, Braddock Z, Branchaud S, Abigail A, Griffin M, Hahn S, Lundberg J, Medberry S, Steinkraus K, <u>Bade M</u>. Efficacy of eccentric resistance training in persons with knee osteoarthritis. Abstract presented at APTA Conference Next June 2016.
- 58. Dennis D, <u>Bade M</u>, Foran J, Kim R, Miner T, Dayton M, Struessel T, Stevens-Lapsley J. High-intensity versus low-intensity rehabilitation after total knee arthroplasty: a randomized controlled trial. Abstracted presented at the AAOS annual meeting March, 2016
- 59. McPoil T, Chi T, Farrell K, Gresl A, Hammel L, Koster B, Leatzow A, Thomas E, <u>Bade M</u>. Use of static measure to predict foot posture and mobility at midsupport during running. Abstract presented at the APTA Combined Sections Meeting Feb 2016.
- 60. Loyd BJ, <u>Bade MJ</u>, Paxton RJ, Stackhouse S, Dayton MR, Eckhoff D, Stevens-Lapsley JE. Poor quadriceps activation 72 hours after total knee replacement is related to poor functional performance at 1 month. Abstracted presented at the APTA Combined Sections Meeting Feb 2016.
- 61. <u>Bade M</u>, Struessel T, Dennis D, Foran J, Kim R, Miner T, Wolfe P, Kohrt W, Stevens-Lapsley J. High-intensity versus low-intensity rehabilitation after total knee arthroplasty: a randomized controlled trial. Abstract presented at the APTA Combined Sections Meeting Feb 2016.
- 62. <u>Bade MJ</u>, Cook CC, Cobo-Estevez M. Does prescriptive treatment of the hips improve outcomes in patients with low back pain? Preliminary data from a randomized controlled trial (HiLoBaS). Abstract presented at the AAOMPT Annual Conference Oct 2015.
- 63. O'Reilly S, MacDonald C, <u>Bade MJ</u>. A multimodal treatment approach emphasizing impairment-based manual therapy for a pediatric distal fibular fracture with persistent dorsal-lateral pain during ambulation: a case report. Abstract presented at the AAOMPT Annual Conference Oct 2015.
- 64. Gaffney BM, Christiansen CL, Stevens-Lapsley JE, Bade MJ, Davidson BS. Movement analysis based on the separation of angular momentum: Gait progression and segment rotation in patients with TKA. Abstract presented at Summer Biomechanics, Bioengineering, Biotransport Conference July, 2015.
- 65. Gaffney BM, Johnston WM, <u>Bade MJ</u>, Stevens-Lapsley JE, Christiansen CL, Davidson BS. Whole-body angular momentum differences after unilateral TKA. Presented at ACSM Annual Meeting May 2015.
- 66. Hammerich A, <u>Bade MJ</u>, Domsky A, Fritz B, Gilbert D, Haas M, Harrington R, Medin R, Parks S, Richardt T, Anemaet W. The effects of balance training and combination of resistance training and balance training on strength, balance, gait, and function in community-dwelling older adults with knee osteoarthritis. Presented at Regis University's URSC Research Symposium April 2015.
- 67. <u>Bade MJ</u>, McPoil TM, Aaron K. Accuracy of self-reported foot strike pattern in experienced runners. Presented at Regis University's URSC Research Symposium April 2015.

- 68. Kolb W, <u>Bade MJ</u>, Estabrooks P. Implementation of evidence-based physical therapy practice guidelines for low back pain: a pilot study. Presented at APTA Combined Sections Meeting Feb 2015.
- 69. <u>Bade MJ</u>, McPoil TM, Aaron K. Accuracy of self-reported foot strike pattern in experienced runners. Presented at APTA Combined Sections Meeting Feb 2015.
- 70. Struessel T, Miller K, <u>Bade MJ</u>, Paxton R, Stevens-Lapsley JE. Comparing two methods of quantifying home exercise program adherence for a clinical trial. Presented at APTA Combined Sections Meeting Feb 2015.
- 71. Hammerich A, <u>Bade MJ</u>, Domsky A, Fritz B, Gilbert D, Haas M, Harrington R, Medin R, Parks S, Richardt T, Anemaet W. The effects of balance training and combination of resistance training and balance training on strength, balance, gait, and function in community-dwelling older adults with knee osteoarthritis. Presented at APTA Combined Sections Meeting Feb, 2015
- 72. Kolb W, <u>Bade MJ</u>, Estabrooks P. Implementation of evidence-based physical therapy practice guidelines for low back pain: a pilot study. Presented at the AAOMPT Annual Meeting Oct, 2014.
- 73. Kolb W, <u>Bade MJ</u>, Estabrooks P. Implementation of evidence-based physical therapy practice guidelines for low back pain: a pilot study. Presented at the 7th Annual Carilion Clinic Research Day, April 2014.
- 74. Eckhoff D, <u>Bade MJ</u>, Strussel TS, Stevens-Lapsley JE. The impact of hip abduction strength to functional performance in individuals with knee osteoarthritis. Presented at the Association of Bone and Joint Surgeons Annual Meeting May, 2014.
- 75. <u>Bade MJ</u>, Strussel TS, Eckhoff D, Stevens-Lapsley JE. The contribution of hip abduction strength to functional performance in persons with knee osteoarthritis. Presented at the APTA Combined Sections Meeting Feb, 2014.
- 76. Christiansen CL, <u>Bade MJ</u>, Dayton M, Hogan C, Stevens-Lapsley JE. Effects of weight-bearing biofeedback training on gait mechanics following total knee arthroplasty. Presented at the APTA Combined Sections Meeting Feb, 2014.
- 77. <u>Bade M</u>, Chong N, Hammond D, Jensen J, Naputi D, Talbot I, Wright L, McPoil T. Establishing normative values, reliability, and responsiveness for two measures of weight-bearing dorsiflexion in healthy adults. Presented at the APTA Combined Sections Meeting Feb, 2014.
- 78. McPoil TG, Haager M, Hilt J, Klapheke J, Martinez R, VanSteenwyk C, Weber N, Cornwall MW, Bade M. Can static foot posture measurements predict midfoot plantar surface area? Presented at the APTA Combined Sections Meeting Feb, 2014.
- 79. Christiansen CL, <u>Bade MJ</u>, Stuart P, Stevens-Lapsley JE, Davidson B. Weight-bearing biofeedback improves symmetry during bilateral stance after total knee arthroplasty. Presented at the American College of Sports Medicine Annual Meeting May, 2013.

- 80. <u>Bade MJ</u>, Winters JD, Stevens-Lapsley JE. Recovery of eccentric knee extensor strength after total knee arthroplasty. Presented at the American College of Sports Medicine Annual Meeting May, 2013.
- 81. <u>Bade MJ</u>, Kittelson A, Kohrt WM, Kittelson JM, Stevens-Lapsley JE. Relationship between preoperative, acute and long-term outcomes after total knee arthroplasty. Presented at the APTA Combined Sections Meeting Jan, 2013.
- 82. <u>Bade MJ</u>, Reynolds M, Davidson BS, Stevens-Lapsley JE, Christiansen CL. Weight-bearing biofeedback training following total knee arthroplasty: a randomized controlled trial. Presented at the APTA Combined Sections Meeting Jan, 2013.
- 83. <u>Bade MJ</u>, Reynolds M, Davidson BS, Stevens-Lapsley JE, Christiansen CL. Weight-bearing biofeedback training following total knee arthroplasty: a randomized controlled trial. Presented at the 15th Annual Rehabilitation Education Forum at the University of Colorado Hospital Sept, 2012.
- 84. Dayton MR, <u>Bade MJ</u>, Shulman BC, Kohrt WM, Stevens-Lapsley JE. Minimally invasive total knee arthroplasty: impact on knee strength and functional performance. Presented at the American Academy of Orthopaedic Surgeons Annual Meeting Feb, 2012.
- 85. Christiansen CL, <u>Bade MJ</u>, Luce M, Stevens-Lapsley JE. Factors predicting weight-bearing asymmetry 1 month after unilateral total knee arthroplasty. Presented at at the APTA Combined Sections Meeting Feb, 2012.
- 86. <u>Bade MJ</u>, Dayton MR, Shulman BC, Kohrt WM, Stevens-Lapsley JE. Minimally invasive total knee arthroplasty improves early knee strength but not functional performance: a randomized controlled trial. Presented at the APTA Combined Sections Meeting Feb, 2012.
- 87. Dayton MR, <u>Bade MJ</u>, Shulman BC, Kohrt WM, Stevens-Lapsley JE. Minimally invasive total knee arthroplasty: impact on knee strength and functional performance. Presented at American Association of Hip and Knee Surgeons Annual Meeting Nov, 2011.
- 88. Muratore T, Stevens-Lapsley JE, <u>Bade MJ</u>, Armour J, Dayton M. Minimally invasive total knee arthroplasty: does technique affect implant positioning? Presented at the Western Orthopaedic Association Annual Meeting July, 2011.
- 89. <u>Bade MJ</u>, Christiansen CL, Stevens-Lapsley JE. The relationship between weight bearing asymmetry, quadriceps strength, and stair climbing time after total knee arthroplasty. Presented at the APTA Combined Sections Meeting Feb. 2011.
- 90. <u>Bade MJ</u>, Struessel T, Stevens-Lapsley JE. Early progressive rehabilitation following total knee arthroplasty improves outcomes. Presented at the American College of Rheumatology Annual Meeting Nov, 2010.
- 91. Christiansen CL, <u>Bade MJ</u>, Stevens-Lapsley JE. Rehabilitation implications related to weight-bearing asymmetry after total knee arthroplasty. Presented at the 13th Annual Rehabilitation Education Forum at the University of Colorado Hospital Sept, 2010.

- 92. <u>Bade MJ</u>, Wolfe P, Zeni JA, Stevens-Lapsley JE, Snyder-Mackler L. Determination of optimal timing for total knee arthroplasty using preoperative clinical measures. Presented at the APTA Combined Sections Meeting Feb, 2010.
- 93. <u>Bade MJ</u>, Struessel TA, Kohrt WM, Stevens-Lapsley JE. Quadriceps strength and stair climbing time after total knee arthroplasty. Presented at the APTA Combined Sections Meeting Feb, 2010.
- 94. <u>Bade MJ</u>, Stevens-Lapsley JE. Total knee arthroplasty outcomes compared to age-matched healthy adults pre-operatively and 6 months post-operatively. Presented at the APTA Section on Research meeting Aug, 2009.
- 95. <u>Bade MJ</u>, Balter JE, Kramer LR, Kohrt WM, Stevens-Lapsley JE. Relationship between limb unloading and quadriceps strength loss after total knee arthroplasty. Presented at the American College of Sports Medicine Annual Meeting May, 2009.

Non-Peer Reviewed Publications:

- Bade MJ, Bell KA, Stevens-Lapsley JE, Manal TJ. Surgical Management and Rehabilitation of Knee Arthroplasty. Joint Arthroplasty: Advances in Surgical Management. Vol 20(2): American Physical Therapy Association Orthopedic Section; 2010.
- 2. Cheuy VA, Foran JRH, Paxton RJ, <u>Bade MJ</u>, Zeni JA, Stevens-Lapsley JE. Response to Letter to the Editor on "Arthrofibrosis Associated With Total Knee Arthroplasty". *J Arthroplasty*. 2018;33(3):968-969.

Non-Peer Reviewed Scientific and Professional Presentations:

- 1. Bade M. Innovations in Rehabilitation after Total Knee Arthroplasty. CO APTA Geriatrics Special Interest Group Webinar. Oct, 2024.
- 2. Tucker CA, Stevens-Lapsley JE, <u>Bade MJ</u>. The value of post-professional residency, fellowship and PhD training. American Council for Academic Physical Therapy Webinar. Sept 12, 2024.
- 3. Bade M. Swelling management after total knee arthroplasty. Invited presentation for Colorado Joint Replacement Education Day. July, 2024.
- 4. Tucker CA, Stevens-Lapsley JE, <u>Bade MJ</u>. The value of post-professional residency, fellowship and PhD training. Platform presented at the APTA Combined Sections Meeting. Feb, 2023.
- 5. Bade M. Current clinical practice guidelines for individuals after TKA, challenges, and future research directions. Presented at Duke University Medical Center Joint Health Program Quarterly Meeting, Sept, 2022.
- 6. Bade M, Stevens-Lapsley J. Value of a PhD, post-professional education & career in PT academia. Webinar presented to APTA California Chapter. May 2022.

- 7. Bade M, Harris-Love M, Stevens-Lapsley J. Value of a PhD, post-professional education & career in PT academia. Webinar presented to HBCU DPT programs. April 2022. https://acapt.org/events/recorded-events/value-of-a-phd-post-professional-education-career-in-pt-academia
- 8. Tucker CA, Stevens-Lapsley JE, <u>Bade MJ</u>. The value of post-professional residency, fellowship and PhD training. Platform presented at the APTA Combined Sections Meeting. Jan, 2022.
- 9. Tucker CA, Stevens-Lapsley JE, <u>Bade MJ</u>. The value of post-professional residency, fellowship and PhD training. Platform presented at the APTA Combined Sections Meeting. Feb, 2021.
- 10. Zeni J, <u>Bade M</u>, Jennings J, Stevens-Lapsley J. Updates in knee arthroplasty: Innovations in rehabilitation and surgery. Platform presented at the APTA Combined Sections Meeting, Feb, 2021.
- 11. Tucker CA, Stevens-Lapsley JE, <u>Bade MJ</u>. The value of post-professional residency, fellowship and PhD training. Platform presented at the APTA Combined Sections Meeting. Feb, 2020.
- 12. <u>Bade M</u>, Jennings J, Zeni J. Pushing the envelope of exercise: PT and medical management of the active patient with arthritis. Platform presented at the APTA combined Sections Meeting. Feb, 2020.
- 13. <u>Bade M.</u> Current Concepts in Knee Osteoarthritis and Aging. Presented at University of Colorado at Boulder Integrative Physiology Graduate Seminar: Physiology of Aging. Nov, 2019.
- 14. Tucker CA, Stevens-Lapsley JE, <u>Bade MJ</u>. The value of post-professional residency, fellowship and PhD training. Platform presented at the APTA Combined Sections Meeting. Jan, 2019.
- 15. Jennings J, Kittelson A, Stevens-Lapsley J, <u>Bade M</u>. Innovations in Knee Arthroplasty: State of the Art in Surgery and Rehabilitation. Platform presented at APTA Combined Sections Meeting. Jan, 2019.
- 16. Tucker CA, Stevens-Lapsley JE, <u>Bade MJ</u>. The value of post-professional residency, fellowship and PhD training. Presented at the APTA Combined Sections Meeting. Feb, 2018.
- 17. Stevens-Lapsley JE, <u>Bade MJ</u>. The value of post-professional residency, fellowship and PhD training. Presented at the APTA National Student Conclave Meeting. Oct, 2017.
- 18. <u>Bade MJ</u>. New Frontiers in Rehabilitation. Regis University Research Night Keynote Address. May, 2017.
- 19. <u>Bade MJ</u>. Future Directions in Rehabilitation after Total Knee Arthroplasty. University of Colorado Physical Therapy Alumni Reunion Sept, 2016.
- 20. <u>Bade MJ</u>, Little CL, Robertson E. Moving artificial pillars. Presented at the AAOMPT Annual Conference, Oct 2013.
- 21. <u>Bade MJ</u>. Improving strength and function after total knee arthroplasty. Presented at the Colorado APTA Mile High District Meeting, March 2013.

- 22. <u>Bade MJ</u>. Improving strength and function after total knee arthroplasty. Presented at the Regis Faculty Forum at Regis University, Feb 2013.
- 23. <u>Bade MJ</u>, Stevens-Lapsley JE, Zeni JA, Baker E, Logerstedt D, Snyder-Mackler L. Hot off the press: incorporating evidence-based practice into the continuum of care after total joint replacement. Platform presentation in the Orthopedics Section at the APTA Combined Sections Meeting Jan, 2013.

Funded/In Review Grant Activity:

Ongoing Support

Stevens-Lapsley JE (PI). Implementation of Neuromuscular Electrical Stimulation after Total Knee Arthroplasty, NIH R01 AG084683 8/15/24-07/31/29 (\$3,895,755)

Role: Co-investigator

Bade (PI). Swelling management after Total Knee Arthroplasty. NIH R21 AR082101. 08/02/23-06/30/2026. (\$581,469).

Role: Primary Investigator

Stevens-Lapsley JE (PI). Movement Pattern Biofeedback Training after Total Knee Arthroplasty, NIH R01 AG0565850 9/15/17-04/30/25 (\$2,452,489)

Role: Co-investigator

Stevens-Lapsley (PI). Improving Rehabilitation for Veterans after Total Knee Arthroplasty Using Individualized Recovery Trajectories. VA RR&D I01RX003770 4/01/22-3/31/26 (\$1,198,128). Role: Co-Investigator

Christiansen (PI). Transfemoral Osseointegrated Prosthesis Limb-Load Symmetry Training. DOD 1/28/23-9/30/2026 (\$225,041). Role: Co-Investigator

Completed Support

Stevens-Lapsley (PI). Novel Strategies for Personalized Clinical Decisions in Knee Arthroplasty. AHRQ R01 HS025692; 9/1/18-6/31/23 (\$1,922,505). Role: Co-Investigator

Manago (PI). Feasibility of low-load resistance training using blood flow restriction for people with multiple sclerosis and marked mobility restriction. Consortium of Multiple Sclerosis Centers Pilot Award. 3/1/21-08/31/22 (\$40,000). Role: Co-Investigator

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

Bade M (PI). NIH Loan Repayment Program. 07/01/16-06/30/20 (\$117,867). Role: Mentored Researcher

Bade M (PI). Responsiveness of Bioelectrical Impedance Spectroscopy after Total Knee Arthroplasty. University of Colorado Denver Internal Award 09/01/2018-03/31/2020 (\$28,560) Role: Primary-Investigator

Kittelson A (PI). Decision-Making in Arthroplasty Rehabilitation: Implementation of a Novel Structured Approach, University of Colorado Denver Internal Award 01/01/18-12/31/2019 (\$113391). Role: Coinvestigator

Stevens-Lapsley JE (PI). VA Geriatric Scholars Rehabilitation Training Program. 10/1/18-9/30/19 (\$128,354). Role: Researcher

Stevens-Lapsley JE (PI). Movement Pattern Training after Total Knee Arthroplasty NIH R56-AG048943 09/15/15-08/31/17 (\$382,625). Role: Co-investigator

Stevens-Lapsley JE (PI). Progressive Rehabilitation for Total Knee Arthroplasty NIH R01-HD065900 08/15/11-05/31/17 (\$2,469,362). Role: Investigator

<u>Bade, MJ</u> (Trainee). Stevens-Lapsley JE (Mentor). Foundation for Physical Therapy Promotion of Doctoral Studies Level II. Pre-doctoral Training Grant 2011 (\$15.000).

Christiansen CL (PI). Improving Function after Total Knee Arthroplasty with Weight-Bearing Biofeedback. Foundation for Physical Therapy Research Grant 01/01/11-12/31/12 (\$40,000). Role: Research Assistant

<u>Bade, MJ</u> (Trainee), Stevens-Lapsley JE (Mentor), Schwartz RS (PI). Improving Strength and Function after Total Knee Arthroplasty. T32 pre-doctoral training award; Center Aging Training Grant T32-AG000279; 05/01/10-04/31/12 (\$15,000).

<u>Bade, MJ</u> (Trainee). Stevens-Lapsley JE (Mentor). Adopt-A-Doc Award from the American Physical Therapy Association Geriatrics Section 2010-2012. (\$4000).

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

<u>Bade, MJ</u> (Trainee), Stevens-Lapsley JE (Mentor). ACR REF/Abbott Health Professional Graduate Student Research Preceptorship 05/01/09-04/31/10 (\$3,500 to trainee; \$2,500 to mentor).

<u>Bade, MJ</u> (Trainee). Stevens-Lapsley JE (Mentor). Foundation for Physical Therapy Florence Kendall Doctoral Scholarship. 2008 (\$5000).

Stevens-Lapsley JE (PI). Early NMES to improve quadriceps muscle function after total knee arthroplasty. NIH K23-AG029978. 10/01/08-09/31/13 (\$716,144). Role: Research Assistant

Stevens-Lapsley JE (PI). Functional outcomes following minimally invasive total knee arthroplasty. NIH R03-AR054538. 03/01/08-02/28/12. (\$150,000). Role: Research Assistant

Mentored Grants

Carson N, Garbin A, **Bade M** (Mentor). University of Colorado "Integrative Physiology of Aging" Training Grant (T32AG000279). 12/01/2024-11/30/2026

Carson N, **Bade M**. (Mentor) ACR REF/Abbott Health Professional Graduate Student Research Preceptorship (\$4,000 to preceptor). 07/01/2024-06/30/2025.

Smith M, **Bade M** (Mentor) Denver Health Pilot Study Grant: Blood Flow Restriction in Patients with Lower Extremity Fractures (\$25,000). 11/01/2024-12/01/2025.

Marshall A, **Bade M**. (Mentor) ACR REF/Abbott Health Professional Graduate Student Research Preceptorship (\$4,000 to preceptor). 05/01/2020-04/30/2021.

Graber, Jeremy, **Bade M** (Mentor). Veterans Affairs (VA) Advanced Geriatrics Fellowship. 09/01/2021 - 08/31/2023.

Continuing Education Workshops Conducted/Organized

- 1. <u>Bade MJ</u>. Challenges, Clinical Reasoning, and Innovations in Total Knee Arthroplasty. Academy of Orthopaedic Physical Therapy Annual Conference, April, 2019.
- 2. <u>Bade MJ</u>, Kittelson AJ, Stevens-Lapsley JE. Rehabilitation strategies after total knee arthroplasty for a changing healthcare landscape. Colorado APTA Spring Symposium April, 2017.
- 3. <u>Bade MJ</u>, Kittelson AJ, Judd DL, Stevens-Lapsley JE. Optimizing Rehabilitation after Total Joint Replacement in a Changing Healthcare Landscape. University of Colorado Physical Therapy Program Marquette Challenge Sept, 2016.
- 4. <u>Bade MJ</u>, Mintken PE. Evidenced-based manipulation for the spine and extremities. Colorado APTA Spring Symposium March, 2013.
- 5. <u>Bade MJ</u>, Struessel TA. Management of Lower Extremity Osteoarthritis and Joint Replacement. University of Colorado at Denver Service trip to Nicaragua 3.5 day presentation to community physical therapists and professors Jan, 2010.

Membership in Scientific/Professional Organizations:

APTA Member (Orthopaedic, Research, Geriatrics, Education Academy Member) 2004 – Present Academy of Physical Therapy Research Evidence-based Practice SIG Member 2018-Present

Positions Held:

APTA TKA Clinical Practice Guideline Revision Co-Chair 2024-Present
APTA Academy of Physical Therapy Research Nominating Committee Member 2013 – 2016
APTA Academy of Orthopaedic Physical Therapy Research Committee Member 2014 - 2017
APTA Academy of Orthopaedic Physical Therapy Nominating Committee Member 2018 – 2022

American Academy of Orthopedic Manual Physical Therapists Member 2004 – Present Positions Held:

Fellowship Directors SIG Member 2013-2016

ACAPT Clinical Reasoning Curricula & Assessment Consortium Member 2018-2024

Colorado APTA Member 2008- Present Positions Held:

Colorado APTA Mentoring Committee Co-Chair 2012 – 2020

Association of Rheumatology Professionals 2020-Present

Review and Referee Work

Editorial Board Member

Physical Therapy & Rehabilitation Journal 2022- 2024

Ad Hoc Peer-Review Journal Reviewer

Arthritis Care & Research, Journal of Orthopaedic & Sports Physical Therapy, Archives of Physical Medicine and Rehabilitation, Physical Therapy, European Journal of Physical and Rehabilitation Medicine, Physiotherapy Canada, Disability and Rehabilitation, The Knee, Journal of Manual and Manipulative Therapy, and Foot (Edinburgh, Scotland), Osteoarthritis and Cartilage, BMJ Medicine

Grant Review Committee

APTA Orthopaedic Section Research Committee Member 2014 - 2017

Community Service:

9 Health Fair Faculty Preceptor 2012 – 2016

A Matter of Balance Volunteer for the Center for African American Health 2013 - 2014

Community Bike Fitting Clinic Faculty Preceptor 2008 – 2013

Arupe High School Physical Therapy Faculty Preceptor 2012

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

School of Medicine Faculty Promotions Committee Member 2024-Present

PMR Department Evaluation Committee 2020-2024, Co-Chair 2022-2024

Senior Advisory Committee Member 2024-Present

Senior Faculty Committee 2019-Present, Chair 2022-Present

Curriculum Committee 2016 - 2024

DPT Hybrid Education Executive Taskforce 2018-2024

Student Promotions Committee 2016 – 2022, Chair 2021-2022

Residency Task Force Member 2016-2021

UCHealth Collaboration Task Force Member 2016-2021

Honors & Awards:

PM&R Professionalism Award 2023

American Physical Therapy Association Jack Walker Award 2022

Academy of Orthopaedic Physical Therapy Rose Excellence in Research Award 2020

APTA Margaret L. Moore Award Nominee 2015

Outstanding PhD Student in Clinical Investigation Award 2008

Duke University Health System Shining Star Award 2006

APTA Mary McMillan Award 2005

Medical Alumni Loyalty Award – University of North Carolina 2004

North Carolina Physical Therapy Association Scholarship 2004

Sharp Memorial Auxiliary Scholarship 2003

University Merit Assistantship Award – University of North Carolina 2003

Summa Cum Laude Honors - University of Colorado 199

Continuing Education Attended:

Combined Sections Meeting, APTA, Boston, MA, 2024

Combined Sections Meeting, APTA, San Diego, CA, 2023

The Power of Connection in Physical Therapist Practice: Exploring Opportunities in Client and Community Health Promotion. Aurora, CO, 2022

Combined Sections Meeting, APTA, San Antonio, TX, 2022.

C-STAR MR3 Conference, online conference, 2021

Combined Sections Meeting, APTA, online conference, 2021.

Combined Sections Meeting, APTA, Denver, CO, 2020.

Personalized Blood Flow Restriction Rehabilitation, Owens Recovery Science, Golden, CO 2019

AOPT Annual Conference, Denver, CO 2019

Combined Sections Meeting, APTA, Washington D.C. 2019

Combined Sections Meeting, APTA, New Orleans, LA 2018

Astym Treatment for the Upper Extremity, Shoulder Girdle, Lower Extremity, Pelvis and Lumbar Spine, ASTYM, Commerce City, CO 2017

Motivational Interviewing, University of Colorado, Aurora, CO 2016

Spring Conference, CO APTA, Keystone, CO 2016

Combined Sections Meeting, APTA, Anaheim, CA 2016

Annual Conference, AAOMPT, Louisville, KN 2015

Combined Sections Meeting, APTA, Indianapolis, IN 2015

Annual Conference, AAOMPT, San Antonio, TX 2014

Functional Dry Needling Level 1, Kinetacore, Denver, CO 2014

Combined Sections Meeting, APTA, Las Vegas, NV 2014

Combined Sections Meeting, APTA, San Diego, CA 2013

Manipalooza, Evidence in Motion, Denver, CO 2013

Combined Sections Meeting, APTA, San Diego, CA 2013

Sports Competency Course, Evidence in Motion, Denver, CO 2012

Combined Sections Meeting, APTA, Chicago, IL 2012

Mentoring

Academic Advisor to DPT Students

- 1. Madeline Bane (2024-present)
- 2. Noah Weiss (2024-present)
- 3. Mikayla Zaske (2024-present)
- 4. Taryn Banfield (2023-present)
- 5. Zabrina Motwani Condor (2023-present)
- 6. Linda Neely (2023-present)
- 7. Brandon Chase (2022-2024)
- 8. Sydney Davidson (2022-2024)
- 9. Riri Uchida (2022-2023)
- 10. Cassidy Weeks (2022-2024)
- 11. Cody Anschutz (2021-2023)
- 12. Heidi Hanson (2021-2023)
- 13. Samantha Ruckle (2021-2023)
- 14. Brian Andreatta (2020-2022)

- 15. Jessica Juan (2020-2022)
- 16. Kyle Ohnemus (2020-2022)
- 17. Justin Callison (2019-2022)
- 18. Michelle Driessnack (2019-2020)
- 19. Emily Groshens (2019-2021)
- 20. John Bercel (2018-2020)
- 21. Diana Celestino (2018-2020)
- 22. Katherine Oosthuizen (2018-2020)
- 23. Abigail Chris (2017-2019)
- 24. Zachary Davis (2017-2019)
- 25. Anna Mitchell (2017-2019)
- 26. Amy Sauerhagen (2017-2019)
- 27. Julie Burkhardt (2016-2018)
- 28. Davis Hackman (2016-2018)
- 29. Megan Jaeckel (2016-2018)
- 30. Cory Rovzar (2016-2018)
- 31. Amanda Webb (2015-2016)
- 32. Vanessa Way (2015-2016)
- 33. Erin Anderson (2014-2016)
- 34. Jordana Saliman (2014-2016)
- 35. Kiersten Steinkraus (2014-2016)
- 36. Marlene Lundy (2014-2016)
- 37. Nathan Ferger (2014-2016)
- 38. Sallie Marchant (2014-2016)
- 39. Cody Anderson (2013-2015)
- 40. Kristina Sercel (2013-2015)
- 41. Leslie Padget (2013-2015)
- 42. Megan Haas (2013-2015)
- 43. Steven Vasquez (2013-2015)

Research mentor to PhD students

- 1. Nina Carson (2023-Present) Primary
- 2. Peter Thomsen-Freitas (2024-Present) Dissertation Committee
- 3. Katie Boncella (2024-Present) Dissertation Committee
- 4. Arun Garg (2022-2024) Dissertation Committee
- 5. Lauren Hinrichs (2019 2023) Secondary
- 6. Michelle Rauzi (2019-2023) Secondary
- 7. Jeremy Graber (2019-2023) Primary, Dissertation Committee Chair
- 8. Andrea Marshall (2019-2022) Primary
- 9. Cameron MacDonald (2016-2020) Secondary
- 10. Joel Carmichael (2016 2021) Primary Dissertation Committee
- 11. Allison Gustavson (2016 2019) Secondary Dissertation Committee
- 12. Jason Falvey (2016 2019) Secondary

Research mentor to Post-doctoral Trainees

- 1. Alex Garbin (2022-2024) Secondary
- 2. Laura Churchill (2022-2024) Secondary
- 3. Jeremy Graber (2023-2024) Secondary

- 4. Jacob Capin (2019-2021) Secondary
- 5. Jesse Christiansen (2017-2019) Secondary
- 6. Victory Cheuy (2016 2019) Secondary

Primary Research mentor to Fellowship students

- 1. William Kolb (2013-2014)*
- 2. Christopher Edmundson (2014-2016)*
- 3. Darren Neeley (2014-2016)* †
- 4. Brad Dalton (2014-2016)*
- 5. Travis Gunderson (2014-2016)* †
- 6. Jeevan Pandya (2014-2016)* †

Primary Research mentor to DPT students

- 1. lan Talbot (2012-2014) *
- 2. David Naputi (2012-2014) *
- 3. Daniel Hammond (2012-2014) *
- 4. Lydia Wright (2012-2014) *
- 5. Nicole Chong (2012-2014) *
- 6. Jennifer Jensen(2012-2014)
- 7. Trevor Bouten (2013-2015) * †
- 8. Anne Kim (2013-2015) * †
- 9. Ethan Young (2013-2015) * †
- 10. Michael Van Porfliet (2013-2015) * †
- 11. Kyle Conboy (2013-2015) * †
- 12. Stephanie Baertlein (2013-2015) * †
- 13. Alicia Domsky (2013-2015)*
- 14. Barbara Fritz (2013-2015)*
- 15. Dain Gilbert (2013-2015)*
- 16. Megan Haas (2013-2015)*
- 17. Ryan Harrington (2013-2015)*
- 18. Rebecca Medin (2013-2015)*
- 19. Scott Parks (2013-2015)*
- 20. Timothy Richardt (2013-2015)*
- 21. Danielle Scialdo (2013-2015)*
- 22. Amanda Szafranski (2013-2015)*
- 23. Timothy Chi (2014-2016) * †
- 24. Kelly Farrell (2014-present) * †
- 25. Amanda Gresl (2014-2016) * †
- 26. Laura Hammel(2014-2016) * †
- 27. Bradley Koster (2014-2016) * †
- 28. Ashley Leatzow (2014-2016) * †
- 29. Zachary Braddock (2014-2016)*
- 30. Stephanie Branchaud (2014-2016)*
- 31. Michael Griffin (2014-2016)*
- 32. Sarah Hahn (2014-2016)*
- 33. Steven Medberry (2014-2016)*
- 34. Kiersten Steinkraus (2014-2016)*
- 35. Abigail Burger (2014-2016)*

36. Emily Thomas (2014-2016)*

37. Jonathan Lundberg (2014-2016)*

*Presented work at national conference

†Co-author on manuscript

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

Fall 1 (Semester 2)

DPTR 5621: Evidence Based Practice (3 credits); Instructor

Spring 1 (Semester 3)

DPTR 5631: Clinical Reasoning I (1 credit); Instructor

Fall 2 (Semester 5)

DPTR 6612: Clinical Reasoning II (1 credit); Course Coordinator & Instructor

Spring 2 (Semester 6)

DPTR 6633: Clinical Reasoning III (2 credits), Course Coordinator & Instructor