



Dana L. Judd, PT, DPT, PhD  
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Doctor of Physical Therapy Program, University of Colorado, Anschutz Medical Campus

<u>Education</u>	<u>Degree</u>	<u>Dates</u>
University of Colorado, Boulder	BA in Kinesiology	1995 - 1999
University of Colorado, Health Sciences	MS in Physical Therapy	2001 - 2003
University of Colorado, Health Sciences	Doctor of Physical Therapy	2003 - 2005
University of Colorado, Anschutz Medical	Doctor of Philosophy (PhD) Clinical Science, Dissertation: <i>Improving Rehabilitation Outcomes after Total Hip Arthroplasty</i> Certificate: Clinical Translational Science	2009 - 2014

**Licensure Information/Registration Number**  
Colorado #PTL.0008385

<u>Academic Positions</u>	<u>Rank</u>	<u>Dates</u>
University of Colorado, PT Program	Adjunct Faculty	2004 - 2014
University of Colorado	Graduate Research Assistant/ Doctoral Trainee	2009 - 2014
University of Colorado, PT Program	Assistant Professor	2014- Present

<u>Clinical and Professional Positions</u>	<u>Dates</u>
Physical Therapist, Levy and Associates Physical Therapy, Denver, CO	2003 - 2004
Physical Therapist, Foothills Physical Therapy, Englewood, CO	2004 - 2008
Physical Therapist Specialist, University of Colorado Hospital, Aurora, CO	2008 - 2013

### **Scholarly Agenda**

My scholarly agenda is twofold. First, my clinical research focuses on investigating human movement patterns and muscle performance during functional activity, and ways physical therapists can intervene to optimize movement quality and therefore physical function and quality of life for patients following total hip replacement. Second, my educational research focuses on exploring educational methods related to teaching evidence-based practice and clinical reasoning for entry-level DPT students and exploring the use of technology on educational outcomes.

### **Peer Reviewed Publications**

1. Judd DL, Winters JD, Davidson BS, Schenkman MS, Dennis DA, Stevens-Lapsley JE. Incorporating Neuromuscular Reeducation Techniques During Postoperative Rehabilitation Improves Functional Performance After Total Hip Arthroplasty: A Preliminary Study. *Journal of Surgery and Rehabilitation*. In Review.
2. Judd DL, Wolfe P, Hogan C, Dayton MR, Stevens-Lapsley JE. Trajectories of functional and muscle strength recovery differ after total knee and total hip replacement. *International Journal of Rehabilitation Research*. 2019 Sep;42(3):211-216.
3. Myers CA, Laz PJ, Shelburne KB, Judd DL, Winters JD, Stevens-Lapsley JE, 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.
4. Judd DL, Cheuy V, Christiansen CL, Stevens-Lapsley JE. Incorporating Specific Functional Strength Integration Techniques to Improve Movement Quality for Veterans after Total Hip Arthroplasty: Protocol for a Randomized Clinical Trial. *Phys Ther*. 2019 Nov 25;99(11):1453-1460.
5. Rovzar C, Judd DL, Magnusson D. Disparities in Geographic Proximity to Outpatient Physical Therapist Services in a Large Metropolitan Area. *The Physical Therapy Journal of Policy, Administration and Leadership*. 2019 August; 3:5-12.
6. Myers CA, Laz PJ, Shelburne KB, Judd DL, Huff D, Winters JD, Stevens-Lapsley JE, Rullkoetter PJ. The Impact of Hip Implant Alignment on Muscle and Joint Loading during Dynamic Activities. *Clin Biomech*. 2018 Feb 14; 53:93-100.
7. Loyd BJ, Jennings J, Judd DL, Kim R, Wolfe P, Dennis D, Stevens-Lapsley JE. Influence of Hip Abductor Strength on Functional Outcomes before and after Total Knee Arthroplasty. *Phys Ther*. 2017 Sep 1;97(9):896-903.
8. Thompson KG, Judd DL, Myers CA, Stevens-Lapsley JE, Davidson BS. Video-Based quantification of the Trendelenburg Test in candidates for total hip arthroplasty. *Gait Posture*. In Review.
9. Dayton MR, Judd DL, Hogan CA, Stevens-Lapsley JE. Performance Based versus Self-Reported Outcomes Using the HOOS Following Total Hip Arthroplasty. *Am J Phys Med Rehabil*. 2016 Feb;95(2):132-8.
10. Judd DL, Winters JD, Stevens-Lapsley JE, Christensen CL. Effects of Neuromuscular Reeducation on Hip Mechanics and Functional Performance in Patients after Total Hip Arthroplasty: A Case Series. *Clin Biomech*. 2015 Dec 31;32:49-55

11. Thomas AC, Judd DL, Davidson BS, Eckhoff DG, Stevens-Lapsley JE. Quadriceps/Hamstrings Co-Activation Increases Early After Total Knee Arthroplasty. *Knee*. 2014 Dec;21(6):1115-9.
12. Judd DL, Thomas AC, Dayton MR, Stevens-Lapsley JE. Strength and Functional Deficits in Individuals with Hip Osteoarthritis Compared to Healthy, Older Adults. *Disabil Rehabil*. 2014;36(4):307-12.
13. Judd DL, Dennis DA, Thomas AC, Wolfe P, Dayton MR, Stevens-Lapsley JE. Muscle Strength and Functional Recovery During the First Year Following THA. *Clin Orthop Relat Res*. 2014 Feb;472(2):654-64
14. Davidson BS, Judd DL, Thomas AC, Mizner RL, Eckhoff DG, Stevens-Lapsley JE 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.
15. Judd DL, Eckhoff DG, Stevens-Lapsley JE. Muscle Strength Loss in the Lower Extremity Following Total Knee Arthroplasty. *Am J Phys Med Rehabil*. 2012 Mar;91(3):220-6; quiz 227-30.
16. Christiansen CL, Bade MJ, Judd DL, Stevens-Lapsley JE. Weight-bearing asymmetry during sit-stand transitions related to impairment and functional mobility after total knee arthroplasty. *Arch Phys Med Rehabil*. 2011 Oct;92(10):1624-9.

### **Peer Reviewed Scientific and Professional Presentations**

1. Mahnken H, Hedgecock J, Zeigler K, Muir N, Judd, DL. Development and implementation of an EBP educational program for a multidisciplinary rehabilitation department. Accepted as a short course at the 2020 AOTA Annual Conference & Expo, Boston, MA. March, 2020.
2. Judd DL, Kelly B, Corral J. Virtual Reality in a Doctor of Physical Therapy Curriculum. Accepted for oral presentation at the Anschutz Medical Campus Academy of Medical Educators Education Scholarship and Innovation Symposium. March 2020.
3. Judd DL, McDevitt AW. Beginning at the End: Fostering Clinical Reasoning Development Through Patient Simulation Early in Curriculum Anschutz Medical Campus Academy of Medical Educators Education Scholarship and Innovation Symposium. March 2020.
4. Hedgecock J, Zeigler K, Mahnken H, Muir N, Judd, DL. Closing the Gap: Implementation of an EBP training program for a multidisciplinary pediatric rehabilitation department. Accepted for presentation at the APTA Combined Sections Meeting, Denver, CO. February 2020.
5. Judd DL, Kelly B, Corral J. Virtual Reality in a Doctor of Physical Therapy Curriculum. Platform presentation at the APTA Educational Leadership Conference, Bellevue, WA. October 2019.
6. Judd DL, Kelly B, Corral J. Virtual Reality in Physical Therapy Education. Presented at the

Colorado Learning and Teaching with Technology (COLTT) Conference, Boulder, CO.  
July 2019.

7. Gisbert RL, Judd DL. Let's Talk About Sex(ual) Health in Physical Therapy. Presented at the Colorado Chapter of the APTA Rocky Mountain Annual Conference and PT Expo. October 2018.
8. Judd DL, Rapport MJ. Measuring Competence and Confidence in Physical Therapy Students' Use of Evidence-Based Practice. Presented at the University of Colorado Anschutz Medical Campus Academy of Medical Educators Education Scholarship and Innovation Symposium. January 2018.
9. Deutsch J, Gill-Body K, Judd DL, Quiben M, Schenkman M. Integrating Clinical Reasoning and the Movement System Across Health Conditions. Educational session presented at the American Physical Therapy Association Combined Sections Meeting. February 2018.
10. Rovzar C, Judd DL, Magnusson D. A spatial analysis of disparities in access to physical therapy services in the Denver metro region using mapping technology. Presented as a platform presentation at the American Physical Therapy Association Combined Sections Meeting, February 2018.
11. Judd DL, Rapport MJ. Measuring Confidence and Competence in Physical Therapy Students' Use of Evidence-Based Practice. Presented at the University of Colorado Anschutz Medical Campus Academy of Medical Educators Education Scholarship and Innovation Symposium. February 2018.
12. Judd DL, Maluf KS. Evidence Based Practice in a Doctor of Physical Therapy Curriculum: From Classroom to Clinical Practice. Presented at the University of Colorado Anschutz Medical Campus Academy of Medical Educators Education Scholarship and Innovation Symposium. January 2017.
13. Davis M, Gisbert R, Himawan M, Judd DL. Bridging Gaps: The role of physical therapy in an inter-professional student-run free clinic. Presented at the University of Colorado Rehabilitation Education Forum. September 20, 2106.
14. Judd DL. Optimizing Movement Quality in Rehabilitation. Presentation at the University of Colorado Physical Therapy Program Alumni Reunion. September 2016.
15. Loyd BJ, Jennings J, Baym CL, Dennis D, Struessel T, Judd DL\*, Wolfe P, Stevens-Lapsley, JE. The relation of hip abductor strength to functional performance before and after TKA. Presented as a platform presentation at the American Physical Therapy Association Combined Section Meeting, February 2016. \*Presenter
16. Judd DL, Winters JD, Stevens-Lapsley JE, Christensen CL. Effects of Neuromuscular Reeducation on Hip Mechanics and Functional Performance in Patients after Total Hip Arthroplasty: A Case Series. Presented at the American Physical Therapy Association Combined Sections Meeting, February 2016.
17. Dennis DA, Judd DL, Winters JD, Miner TM, Dayton MR, Davidson BS, Stevens-Lapsley JE. Multi-component Rehabilitation after Total Hip Arthroplasty: A Randomized Controlled Trial. Presented at the 2<sup>nd</sup> Annual Pan Pacific Orthopedic Congress, July 2015.

18. Judd DL. Rehabilitation after Total Hip Arthroplasty. Presented at the University of Colorado Physical Medicine and Rehabilitation Annual Gersten Day Research Symposium June 2015.
19. Paxton RJ, Judd DL, Sanchez K, Papazian L, Stevens-Lapsley JE. Relation of Thigh Muscle Attributes to Force Production in Patients with End-Stage Knee Osteoarthritis. Presented at the American College of Sports Medicine Annual Meeting, May 2015.
20. Dennis DA, Judd DL, Winters JD, Jennings J, Miner TM, Dayton MR, Davidson BS, Stevens-Lapsley JE. Multi-component Rehabilitation after Total Hip Arthroplasty: A Randomized Controlled Trial. Presented at the Orthopedic Research Society Annual Meeting, March 2015.
21. Judd DL, Dennis DA, Winters JD, Miner TM, Dayton MR, Davidson BS, Stevens-Lapsley JE. Multi-component Rehabilitation after Total Hip Arthroplasty: A Randomized Controlled Trial. Presented at the American Physical Therapy Association Combined Sections Meeting, February 2015.
22. Dennis DA, Judd DL, Winters JD, Miner TM, Dayton MR, Davidson BS, Stevens-Lapsley JE. Multi-component Rehabilitation after Total Hip Arthroplasty: A Randomized Controlled Trial. Presented at the Summer Meeting of the Hip Society, September 2014.
23. Judd DL, Schlottman C, Dayton MR, Stevens-Lapsley JE. Comparison of Self-reported Function Using the HOOS and Performance-based Function after Total Hip Arthroplasty. Presented at the American Physical Therapy Association Combined Sections Meeting, February 2014.
24. Dennis DA, Judd DL, Dayton MR, Stevens-Lapsley JE. Comparison of Strength and Functional Outcomes during the first 6 months after THA and TKA. Presented at the Summer Meeting of the Hip Society, October 2013.
25. Judd DL, Sherk V, Rogers E, Kohrt WM, Stevens-Lapsley JE. Using Peripheral Quantitative Computed Tomography (pQCT) to Estimate Soft Tissue Characteristics in Patients with Knee Osteoarthritis. Presented as a poster presentation at the American College of Sports Medicine Annual Meeting, May 2013.
26. Judd DL, Struessel T, Eckhoff DE, Dayton MR, Stevens-Lapsley JE. Strength and Functional Outcomes after THA and TKA: A performance based, longitudinal study. Presented for the Marilyn Gossman Graduate Student Seminar at the American Physical Therapy Association Combined Sections Meeting, January 2013.
27. Judd DL, Thomas AC, Wolfe P, Dennis D, Kim R, Dayton MR, Stevens-Lapsley JE. Time course of muscle strength and functional recovery during the first year following THA. Presented as a poster presentation at the American Physical Therapy Association Combined Sections Meeting, January 2013.
28. Dayton MR, Judd DL, Thomas AC, Wolfe P, Dennis DA, Kim R, Stevens-Lapsley JE. Physiologic and Functional Recovery Following Total Hip Arthroplasty versus Healthy Controls: Outcomes at One Year. Presented as a poster at the American Association of Hip and Knee Surgeons Annual Meeting, November 2012.

29. Dennis DA, Judd DL, Thomas AC, Wolfe P, Kim R, Dayton MR, Stevens-Lapsley JE. Functional Performance Recovery after THA. Presented as a platform presentation at the 2012 Summer Meeting of the Hip Society, September 2012.
30. Davidson BS, Judd DL, Thomas AC, Stevens-Lapsley JE. Eccentric Muscle Activation Patterns During a Five-Time-Sit-to-Stand Movement. Presented at the American College of Sports Medicine Annual Meeting, May 2012.
31. Judd DL, Davidson BS, Stevens-Lapsley JE. Muscle Activity During Gait after Unilateral Total Knee Arthroplasty. Presented as a poster at the American Physical Therapy Association Combined Sections Meeting, February 2012.
32. Christiansen CL, Judd DL, Roberts E, Stevens-Lapsley JE. Use of Accelerometers to Quantify Movement Asymmetry During Stair Climbing For People with Knee Osteoarthritis. Presented as a poster at the American Physical Therapy Association Combined Sections Meeting, February 2012.

### **Funded/In Review Grant Activity**

#### Ongoing Support

Dana L. Judd Principal Investigator 2/1/2019-2/1/2020  
*Efficacy of Virtual Reality Training for Physical Therapy Students*  
The study is designed to investigate the efficacy of virtual reality (VR) for deliberate practice of movement analysis as part of the physical therapist examination and clinical reasoning process. The primary goals of the project are to understand the feasibility of utilizing VR in a physical therapy curriculum and understand PT students' attitudes about utilizing VR to practice movement analysis and examination skills.  
Awarded by: University of Colorado Academy of Medical Educators, Rymer Grant. \$3,750.

Dana L. Judd Co-Investigator 11/2016-11/2020  
*Improving Rehabilitation Outcomes after Total Hip Arthroplasty*  
The aim of this investigation is to determine the effect of a rehabilitation program emphasizing functional strength integration through neuromuscular reeducation techniques after THA on function and movement quality.  
Awarded by: Department of Veterans Affairs Merit Review Award Number I01 RX002251 \$1,091,276. PI: Jennifer Stevens-Lapsley.

#### Completed Support

Dana L. Judd Trainee 5/2012-07/2014  
Award amount: \$22,700/year, *Multi-Component Rehabilitation after Total Hip Arthroplasty*,  
The major goal of this project is to determine the effectiveness of a multi-component rehabilitation intervention following total hip arthroplasty. Awarded by: National Institute on Aging of the National Institutes of Health, T32AG000279.

Dana L. Judd Principal Investigator 6/2012-12/2014

Award amount: \$15,000, *Multi-Component Rehabilitation after Total Hip Arthroplasty*

The overall goal of this project is to investigate the effects of a comprehensive, multi-component rehabilitation program after total hip arthroplasty on muscle strength, neuromuscular control and functional performance as well as support the feasibility and safety the program. Awarded by: American Physical Therapy Association Orthopedic Section Clinical Research Grant Program, New Investigator Award.

Dana L. Judd

Graduate Student/PI

7/2010-7/2011

Award amount: \$3500, *Strength and Function Following Total Hip Arthroplasty*

The overall goal of this longitudinal study is to determine whether adults who have undergone total hip arthroplasty (THA) for end-stage osteoarthritis have post-operative deficits in strength of the surgical lower extremity, postural control, and functional performance compared to healthy, age-matched counterparts Awarded by: American College of Rheumatology REF/Abbot Health Professional Graduate Student Research Preceptorship Award

### **Research Activity**

Examination of outcomes following total hip arthroplasty: Dana L. Judd, PT, PhD, Jennifer Stevens-Lapsley, PT, PhD, Cory Christensen, PT, PhD Grant Funded

Educational scholarship regarding examination of the movement system and using new technologies: Dana L. Judd, PT, PhD.

### **Continuing Education Workshops Conducted**

Children's Hospital Colorado Rehabilitation Department. Titled: Evidence-Based Practice Seminars. April 2019-December 2020. Co-organizer and primary presenter of this repeating 6-part seminar series.

APTA Colorado Chapter Fall Conference. Titled: Let's Talk About Sex(ual) Health in Physical Therapy. October 26, 2018. Co-organizer and co-presenter of this 4 hours workshop.

University of Colorado Physical Therapy Marquette Challenge Series. Titled: Optimizing Rehabilitation after Total Joint Replacement in a Changing Healthcare Landscape. September 17, 2016. Co-organizer and co-presenter of this daylong seminar.

Improving Rehabilitation Outcomes after Total Hip Arthroplasty, Research Physical Therapist Training. Created educational curriculum and presented daylong training sessions for VA Physical Therapists who will treat patients as part of the VA Merit Award THA Study.

### **Membership in Scientific/Professional Organizations**

American Physical Therapy Association Member since 2002. Member of Education, Orthopedics, Neurology, and Research Sections.

American College of Sports Medicine, 2011 - 2013

## **Community Service**

PT Student Preceptor, DAWN (Dedicated to Aurora's Wellness and Needs) Clinic, 2015 – Present

Volunteer, 9News Health Fair, 2013-2014.

Participant/Member, Roots and Branches Foundation of the Rose Community Foundation, 2016-2017.

Board Member, Jenna's Miles of Smiles Foundation, 2010 - Present

## **Service to the University/College/School on Committees/Councils/Commissions:**

### **Physical Therapy Program**

Chair, Graduation Committee, 2016 - Present

Chair, Movement System and Patient Examination Task Force, 2016 – Present

Member, Curriculum Committee, 2019-Present.

Member, Absences Committee, 2016 - Present

Member, Writing Task Force, Member, 2016 - Present

Member, Social Committee, 2015 – Present

### **University of Colorado Anschutz Medical Campus**

Member, Healthy Campus Steering Committee, 2017-Present

Representative, School of Medicine Faculty Senate, 2018-Present

Member, Anschutz Medical Campus Commencement Steering Committee, 2016-Present

Poster Judge, Anschutz Medical Campus Academy of Medical Educators Education Scholarship and Innovation Symposium, 2019.

Poster Judge, Modern Human Anatomy Program, Mentored Scholarly Activity/Capstone Projects, 2019.

### **American Physical Therapy Association**

Member, Academy of Neurologic Physical Therapy Movement System Task Force 2017-Present.

Nominating Committee Member, APTA Section on Research, 2015 - 2019

## **Honors and Awards**



Academy of Medical Educators Award for Curriculum Development or Educational Innovation. Awarded July 2019.

Research Poster Award Recipient: Educational Research. *Measuring Confidence and Competence in Physical Therapy Students' Use of Evidence-Based Practice*. Awarded at the Education Innovation and Scholarship Symposium hosted by the Academy of Medical Educators' at the University of Colorado, February 2018.

Outstanding Research Poster Award, *Multi-Component Rehabilitation Following Total Hip Arthroplasty: A Randomized, Controlled Trial*. Awarded by American Physical Therapy Association Orthopedic Section, February 2015.

Adopt-A-Doc Award, American Physical Therapy Association Section on Geriatrics, 2013

Adopt-A-Doc Award, American Physical Therapy Association Section on Geriatrics, 2012

Outstanding PhD Student Award, Clinical Investigation Track, Clinical Science Program, 2010

### **Continuing Education Attended**

APTA Educational Leadership Conference, October 2019.

Colorado Learning and Teaching with Technology (COLTT) conference, August 2019.

APTA Colorado Chapter Fall Conference, October 2018.

APTA Combined Sections Meetings, yearly, 2010-2020.

Motivational Interviewing Clinical Training. January 15 and 22, 2016.

### **Current Teaching Responsibilities in the Entry-level Physical Therapy Program**

#### **Spring Semester**

DPTR 5631: Clinical Reasoning I, Coordinator, 1 credit hour. 65-70 students

DPTR 6633: Clinical Reasoning III, Small group facilitator, 2 credit hours, 12 students

#### **Summer Semester**

DPTR 5211: Foundations of Intervention I, Coordinator, 2 credit hours

DPTR 7651: Clinical Reasoning Capstone, Small group facilitator, 3 credit hours, 8 students

#### **Fall Semester**

DPTR 5202: Examination & Evaluation II, Coordinator, 2 credit hours, 65-70 students

DPTR 5212: Foundations of Intervention II, Lecturer, 2 credit hours, 65-70 students

DPTR 6632: Clinical Reasoning II, Small group facilitator, 1 credit hour, 20 students

### **Past Teaching Responsibilities**

#### **Courses Previously Coordinated in DPT Curriculum**

Scientific Inquiry II, Course Coordinator/Instructor, 65 students, Fall Semester 2014  
Scientific Inquiry III, Course Coordinator/Instructor, 65 students, Spring Semester 2015  
Patient Care Seminar II, Instructor/Small Group Facilitator, 6 students, 2014-2015  
Patient Care Seminar III, Project Mentor, 6 students, 2012-2015  
Evidence Based Practice, Course Coordinator/Instructor, 68 students, Fall Semester 2015

Teaching Activity as Adjunct Faculty

Lab Instructor, Examination and Evaluation I and Examination and Evaluation II, 2003-2014  
Lab Instructor, Musculoskeletal Conditions/Orthopedic Management, 2003-2006  
Tutor/Mentor, CU Physical Therapy extra-curricular practice labs, 2003-2005.