



## Physical Therapy

SCHOOL OF MEDICINE  
UNIVERSITY OF COLORADO  
ANSCHUTZ MEDICAL CAMPUS

Curriculum Vitae | Mattie E. Pontiff, PT, DPT,  
PhD June 2025

Mattie E. Pontiff, PT, DPT, PhD  
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Doctor of Physical Therapy Program, University of Colorado, Anschutz Medical Campus

<b><u>Education</u></b>	<b><u>Degree</u></b>	<b><u>Dates</u></b>
Louisiana State University Health Sciences Center (LSUHSC)- New Orleans	Doctor of Philosophy (PhD)	2016 - 2022
<b>Dissertation:</b> <i>Assessment of Lower Extremity Muscle Power in Individuals with Cerebral Palsy and Its Relationship to Muscle Structure, Activity, and Participation</i>		
LSUHSC- New Orleans	Doctor of Physical Therapy	2008 - 2011
Louisiana State University, Baton Rouge	BS, Kinesiology	2004 - 2008

### **Licensure Information/Registration Number**

Colorado #PTL.0018511

### **Certifications**

5/2016-Present	Certification in Integrative Dry Needling
5/2014-Present	Board-Certified Clinical Specialist in Orthopedic Physical Therapy, American Physical Therapy Association

<b><u>Academic Positions</u></b>	<b><u>Rank</u></b>	<b><u>Dates</u></b>
University of Colorado, PT Program	Assistant Professor	2025 - present
University of Colorado, PT Program	Postdoctoral Fellow	2022 - 2025
Denver-Seattle VA Center of Innovation For Veteran Centered & Value Drive Care	Advanced Research Fellow	2022 - 2025
LSUHSC- New Orleans, PT Program	Instructor	2016 - 2022
LSUHSC- New Orleans, PT Program	Associated Faculty	2014 - 2016

### **Clinical and Professional Positions**

### **Dates**

Physical Therapist Specialist, LSUHSC Faculty Practice Clinic, New Orleans, LA	2016 - 2022
Physical Therapist, Ochsner Health System, Metairie, LA	2014 - 2015
Physical Therapist & Orthopedic Resident, Ohio State University Wexner Medical Center, Columbus, OH	2012 - 2013
Physical Therapist, Ochsner Health System, Metairie, LA	2011 - 2012

### **Scholarly Agenda**

My scholarly agenda focuses on integrating user-centered approaches to developing and implementing power training interventions to improve mobility outcomes in older adults with the goal of providing more personalized rehabilitative care.

### **Peer Reviewed Publications**

1. Pontiff ME, Oral E, Moreau NG. Muscle architecture predicts lower extremity power generation during a power leg press test in individuals with Cerebral Palsy. 2025; *In Review- Journal of Biomechanics*
2. Hinrichs-Kinney LA, Derlein DL, Pontiff ME, Malone D, Holtrop JS, Stevens-Lapsley JE. Using the Implementation Research Logic Model to Examine High-Intensity Resistance Rehabilitation Implementation in Skilled Nursing Facilities: A Mixed Methods Multi-Site Case Study. *Implementation Science Communications- In Press*. 2025.
3. Pisegna J, Hinrichs-Kinney LA, Pontiff ME, Beisheim-Ryan EH, Butera KA, Stevens-Lapsley JE. Occupational Therapy Practitioner Experiences Applying High-Intensity Rehabilitation: A Qualitative Analysis. *In Press; Physical & Occupational Therapy In Geriatrics*, 1–16.  
<https://doi.org/10.1080/02703181.2025.2518960>
4. Pontiff ME, Moreau N.G. Age-Related Trajectories of Muscle Strength and Power in Individuals with Cerebral Palsy and the Relationship to Walking Capacity. *Gait and Posture*. 2025 Apr 3; 20:66-71. doi: 10.1016/j.gaitpost.2025.03.028. Epub ahead of print. PMID: 40188701
5. Beisheim-Ryan EH, Hinrichs-Kinney LA, Butera KA, Derlein DL, Pontiff ME, Pisegna J, Altic R, Malone D, Stevens-Lapsley JE. "No Matter the Age or Medical Complexity, People Benefit From That Intensity of Exercise": A Mixed-Methods Study Describing Rehabilitation Provider Perceptions of High-Intensity Resistance Training Among Veterans Receiving Post-Acute Care. *J Geriatr Phys Ther*. 2025 Jan 27. doi: 10.1519/JPT.0000000000000443. Epub ahead of print. PMID: 39868702.
6. Pontiff ME, Batra A, Li L, Moreau N. Muscle power is associated with higher levels of walking capacity and self-reported gait performance and physical activity in individuals with cerebral palsy. *Frontiers in Physiology*. 2025/01; 15. doi:10.3389/fphys.2024.1488905.

7. Hinrichs-Kinney LA, Pisegna J, Pontiff ME, Beisheim-Ryan EH, Altic R, Coats H, Stevens-Lapsley JE. Mixed-Method Evaluation to Understand Clinician Perspectives of a Program to Implement High-Intensity Resistance Rehabilitation Into Skilled Nursing Facilities. *Arch Phys Med Rehabil*. 2024 Sep 26;. Doi: 10.1016/j.apmr.2024.09.006. PubMed PMID: 39341442.
8. Hinrichs-Kinney LA, Pontiff ME, Gustavson AM, Stevens-Lapsley JE. "Is Clinical Research as Helpful to Clinicians as it Could Be?" Turolla a, Guccione AA, Tedeschi R, Pillastrini P. *Phys Ther*. 2023; 103(8):pzad060
9. Pontiff ME, Moreau NG. Age-Related Differences in Muscle Size and Strength between Individuals with Cerebral Palsy and Individuals with Typical Development. *Phys Occup Ther Pediatr*. 2023 Nov 30:1-14. doi: 10.1080/01942638.2023.2287463. Epub ahead of print. PMID: 38037369.
10. Pontiff, ME, Li, L., & Moreau. N. G. Reliability, Validity and Minimal Detectable Change of a Power Leg Press Test in Individuals with Cerebral Palsy, *Phys & Occ Ther In Pediatrics*. 2023 Feb; DOI: [10.1080/01942638.2023.2173039](https://doi.org/10.1080/01942638.2023.2173039)
11. Pontiff ME, Moreau N.G. Safety and Feasibility of 1-Repetition Maximum (1-RM) Testing in Children and Adolescents With Bilateral Spastic Cerebral Palsy. *Pediatr Phys Ther*. 2022 Oct 1;34(4):472-478.
12. Pontiff ME, Li Li, Moreau N.G. Reliability and validity of three clinical measures to measure Lower extremity muscle power. *International Journal of Kinesiology and Sports Science*. 2020; 9(1):1-8.
13. Pontiff ME, Ithurburn M, Ellis T, Cenkus K, DiStasi S. Pre- and post-operative self-reported function and quality of life in women with and without generalized joint laxity following hip arthroscopy. *International Journal of Sports Physical Therapy*. 2016; 11(3): 378-87.

### **Peer Reviewed Scientific and Professional Presentations: Platform and Poster Presentations**

1. Pontiff M, Hinrichs L, Pisegna J, Beisheim-Ryan E, Derlein D, Case V, Satchidanand A, Altic R, Stevens-Lapsley J. Mixed-methods comparison of an instructor-led and learner-directed high-intensity rehabilitation program in skilled nursing facilities. Combined Sections Meeting, Boston, MA, February 15, 2024.
2. Hinrichs L, Pisegna J, Beisheim-Ryan E, Pontiff M, Derlein D, Holtrop J, Sidelinker J, Diedrich D, Stevens-Lapsley J. Are functional outcomes measuring patient change? A protocol for ensuring outcomes reliability in pragmatic trials. Poster session presented at: Colorado Pragmatic Research in Health Conference. Aurora, CO. June 5-6 2023.
3. Pontiff M, Pisegna J, Beisheim-Ryan E, Hinrichs L, Derlein D, Malone D, Holtrop J, Forester J, Diedrich D, Stevens-Lapsley J. Shifting Paradigms in Medically Complex Rehabilitation: An Effectiveness-Implementation Trial Protocol in Skilled Nursing Facilities. Poster session presented at: Colorado Pragmatic Research in Health Conference. Aurora, CO. June 5-6 2023.

4. Pontiff M, Moreau NG. Lower Extremity Muscle Power Is Significantly Related to Muscle Architecture in Individuals with Cerebral Palsy. Combined Sections Meeting, San Diego, CA, February 2023.
5. Pontiff M, Moreau NG. Safety and Feasibility of 1-Repetition Maximum Testing in Children and Adolescents with Cerebral Palsy. September 2022; American Academy for Cerebral Palsy and Developmental Medicine's Annual Meeting. Las Vegas, NV.
6. Pontiff M, Moreau NG. Reliability, Validity and Minimal Detectable Change of a Novel Power Leg Press Test in Individuals with Cerebral Palsy. American Academy for Cerebral Palsy and Developmental Medicine's Annual Meeting. September 2022. Las Vegas, NV.
7. Pontiff M, Moreau NG. Safety and Feasibility of 1-Repetition Maximum Testing in Children and Adolescents with Cerebral Palsy. February 2022; APTA Combined Sections Meeting; San Antonio, TX.
8. Pontiff M, Moreau NG. Feasibility, Reliability, and Precision of a Novel Power Leg Press Test in Cerebral Palsy. Combined Sections Meeting. February 2022; San Antonio, TX.
9. Pontiff M, Bramley K, Gioe C, Singletary J, Hart E. Conservative Management of Femoroacetabular Impingement Syndrome: A Systematic Review. February 2020; APTA Combined Sections Meeting. Denver, CO
10. Pontiff M, Moreau NG. Reliability and Validity of Three Methods to Assess Lower Extremity Muscle Power. School of Allied Health Professions Research Symposium. April 2019; New Orleans, LA.
11. Pontiff M, Moreau NG. Reliability and Validity of Three Methods to Assess Lower Extremity Muscle Power. February 2019; APTA Combined Sections Meeting. Washington, DC.
12. Pontiff M, Robertson M, Connick B, Rabalais T, Moreau NG. Changes in muscle structure and function with aging in individuals with cerebral palsy compared to those who are typically developing. February 2019; APTA Combined Sections Meeting. Washington, DC.
13. M Pontiff, T Rabalais, B Connick, R Morgan, N Moreau. Age Related Changes in Muscle Size and Strength Across the Lifespan in Individuals with Cerebral Palsy. September 2018; American Academy for Cerebral Palsy and Developmental Medicine's Annual Meeting. Cincinnati, OH.
14. Falgoust B, Handwerger B, Rouly L, Blaha O, Pontiff M, Eason, JM. Accuracy of wearable activity monitors in the measurement of step count and distance. February 2018; Platform presentation American Physical Therapy Association Combined Sections Meeting. New Orleans, LA.
15. Pontiff M, Biu A, Wiegmann J, Williams F, Moreau N. Comparison of Two Methods to Measure Lower Extremity Muscle Power. February 2018; APTA Combined Sections Meeting. New Orleans, LA.

16. Pontiff M, Eason J, Hoang T. Normative values for the Y balance test in healthy, active young adults. February 2017; Poster presentation American Physical Therapy Association Combined Sections Meeting. San Antonio, TX.
17. Pontiff M, Rae G. Prevalence of pathology in the cadaveric heart, lungs, liver and kidneys. April 2016; Experimental Biology: American Association of Anatomists, San Diego, CA.
18. Pontiff M, Ithurburn M, Ellis T, Cenkus K, DiStasi S. Preoperative hip function and quality of life in women with femoroacetabular impingement does not differ between females with and without generalized laxity. February 2014; APTA Combined Sections Meeting. Las Vegas, NV.

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

#### **Funded Support**

Mattie E. Pontiff Principal Investigator 1/1/2026- 12/31/2030  
*Development of a Power Training Program to Improve Mobility in Older Veterans*  
The overall purpose of this project is to develop a power training intervention with Veteran input to improve mobility outcomes for older Veterans engaged in Gerofit, effectively reducing the occurrence of adverse health events associated with the age-related mobility decline. Awarded by: Department of Veterans Affairs- Rehabilitation Research and Development (RR&D): IK2RD000459  
\$1,176,020 PI: Mattie E. Pontiff

#### **Completed Support**

Mattie E. Pontiff Co-Investigator 10/1/2023-9/30/2024  
*Improving physical rehabilitation for rural Veterans with complex care needs- ORH Year 4*  
This project aims to extend our prior work in training clinicians to provide high-intensity physical rehabilitation to rural Veterans using critical training elements to improve nationwide reach and sustainment of evidence-based practices.  
Awarded by: Department of Veterans Affairs – Office of Rural Health  
\$118,871. PI: Jennifer Stevens-Lapsley.

Mattie E. Pontiff Postdoctoral Fellow 8/2022-8/2025  
*Comparison of an Instructor Led and Learner-directed High-Intensity Rehabilitation Program in Skilled Nursing Facilities*  
The purpose of this study was to compare the feasibility, acceptability, and effectiveness between instructor-led and learner-directed versions of a High-Intensity Rehabilitation continuing education training program for physical and occupational therapy clinicians in VA skilled nursing settings. Awarded by: Department of Veterans Affairs- Denver-Seattle Center of Innovation for Veteran-Centered and Value Drive Care (COIN)- Eastern Colorado Healthcare System. Funded full-time fellowship.

Mattie E. Pontiff Principal Investigator 1/1/2020-6/30/2022  
*Evaluation of a Power Leg Press Tests in Cerebral Palsy: Reliability, Sensitivity to Change and Functional Significance.*

The Aim of this project was to develop and validate a test for lower extremity muscle power in children and adults with cerebral palsy and to evaluate the associations between muscle power with lower extremity muscle structure, activity and participation. Awarded by: Academy of Pediatric Physical Therapy of the American Physical Therapy Association: Mentored Research Grant. \$7,352.99. Principal Investigator: Mattie E. Pontiff; Mentor: Noelle G. Moreau.

### **Continuing Education Workshops Conducted**

Hinrichs-Kinney L, Garbin A, O'Malley S, Pontiff ME, Stevens-Lapsley JE. Title: Closing the Research to Clinical Practice Gap: Using Implementation Science to Empower Clinicians and Researchers. APTA Combined Sections Meeting: Instructional Course; February 2025. (2 CEUs). Role: Co-presenter and co-developer.

Pontiff, M, Moreau, N. Title: Just OK is not OK: Importance of One-Repetition Maximum Testing for Dosing in Cerebral Palsy. APTA Combined Sections Meeting Instructional Course; 2/23/2021 (2 CEUs). Role: Co-presenter and co-developer.

Pontiff, M, Moreau, N. Title: When it comes to dosing, just OK is not OK- Why we should be doing 1-repetition maximum testing in children with Cerebral Palsy. AACPDM Annual Conference- Educational Session; Virtual format. 8/19/2020 (2 CEUs). Role: Co-presenter and co-developer.

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

2009-present American Physical Therapy Association  
Research Section Member: 2017-present  
Orthopedic Section Member: 2011-present  
Pediatric Section Member: 2019-2024  
2018-2023 American Academy of Developmental Medicine & Child Neurology (AACPDM)  
2015-2022 American Association of Anatomists

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

#### **Louisiana State University Health Sciences Center (LSUHSC)**

##### **Physical Therapy Program- Departmental Committees**

2017-2022 Member, Admissions Committee, Department of Physical Therapy- LSUHSC.  
2017-2022 Co-chair 2021-2022, Member 2017-2021, DPT I Promotions Committee, Department of Physical Therapy- LSUHSC  
2018-2019 Member, Curriculum Committee

##### **LSUHSC School of Allied Health Professions Committees**

2017-2022 Member, Honors Committee, School of Allied Health Professions- LSUHSC

2017-2021     Member, Faculty Practice Committee, School of Allied Health Professions-  
LSUHSC

### **Honors and Awards**

“Best Platform Presentation” for abstract titled “Safety and Feasibility of 1-Repetition Maximum Testing in Children and Adolescents with Cerebral Palsy”. February 2022; Academy of Pediatric Physical Therapy, Combined Sections Meeting, San Antonio, TX.

### **Continuing Education Attended**

2012-2025	APTA Combined Sections Meeting
8/2016	Faculty Development Workshop for New PT/PTA Faculty (30.5 CEU)
5/2016	Advanced Integrative Dry Needling for Pain Management and Performance Enhancement
3/2016	Functional Biomechanics of the Lower Quarter: Implications for the Evaluation and Treatment of Musculoskeletal Disorders
10/2015	Integrative Dry Needling Foundation Course for Pain Management and Sports Rehabilitation.
10/2014	Advances in Clinical Education & North American Sports Medicine Institute: Selective Functional Movement Assessment
10/2014	Advances in Clinical Education and North American Sports Medicine Institute: Lower Quarter Management of overuse & traumatic injuries related to the running athlete.
4/2014	Maitland Australian Physiotherapy Seminars: MT-2: Basic Spinal Seminar
6/2013	Evaluation and Treatment of the Complex Shoulder
4/2013	Ohio State University Wexner Medical Center Hip Symposium: The Complicated Hip: A multidisciplinary approach to the management of hip pathology in active patients.
11/2012	Cleveland Clinic Spine Symposium: Cleveland Clinic Sports and Health Symposium: The Spine
8-11/2012	Ohio State University Wexner Medical Center, Doctor of Physical Therapy Program: Advanced Manual Techniques; 1-hour semester credit.
3/2012	Maitland Australian Physiotherapy Seminars: MT-1 Basic Peripheral Seminar
6/2011	Manual Therapy Management of the Lumbopelvic Spine
3/2010	Clinical Management and Integration of the International Classification of Function (ICF) for Individuals with Back Pain
3/2009	Update on the Foot and Ankle Biomechanics, Evaluation and Treatment

### **Past Teaching Responsibilities**

#### **Courses Previously Taught in CU DPT Curriculum**

DPTR 5631 Clinical Reasoning I (Residential Pathway- Spring 2025)- Instructor; supported course coordinator and overall course administration through creating mini-lectures, grading, and leading small group student discussion related to integrating current evidence with critical reasoning into practice through patient cases.

DPTR 6632 Clinical Reasoning II (Residential Pathway- Fall 2024)- Instructor; supported course coordinator through leading small group discussion with students related to integrating current evidence with critical reasoning in the ICF framework to facilitate patient-centered decision-making in the examination, prognosis and for intervention for complex patient cases. Participating in student grading and feedback related to course elements.

DPTR 6633 Clinical Reasoning III (Residential Pathway- Spring 2024)- Instructor; guided individual students in the integration of evidence by providing feedback on question development, literature searching, and discussion forums regarding focused clinical questions related to examination, intervention, and prognosis for actual patient cases.

### Courses Previously Taught in LSUHSC DPT Curriculum

PHTH 7131 Movement Science I. School of Allied Health Professions, LSUHSC- New Orleans. (Course Coordinator and Primary Instructor).

PHTH 7101 Evidence- Based PT I: Clinical Analyses (Lecture & Laboratory skills related to palpation, goniometry and manual muscle testing). School of Allied Health Professions, LSUHSC- New Orleans. (Course Instructor).

PHTH 7261 Diagnosis and Management in Musculoskeletal Dysfunction I. School of Allied Health Professions, LSUHSC-New Orleans. (Course Coordinator & Primary Instructor).

PHTH 7262 Diagnosis and Management in Musculoskeletal Dysfunction II. School of Allied Health Professions, LSUHSC-New Orleans. (Course Coordinator & Primary Instructor).

PHTH 7102: Evidence-Based PT II: Clinical Analyses (Lecture & Laboratory skills related to patient mobility skills, transfers, and use of assistive devices). School of Allied Health Professions, LSUHSC- New Orleans. (Course Coordinator & Primary Instructor).

PHTH 7233 Therapeutic Interventions. School of Allied Health Professions, LSUHSC-New Orleans. (Course Coordinator & Primary Instructor).

PHTH 7130 Foundational Science of Movement. School of Allied Health Professions, LSUHSC- New Orleans. (Course Coordinator & Primary Instructor).

PHTH 7204: Evidence-Based PT IV: Research Analyses. School of Allied Health Professions, LSUHSC-New Orleans. (Course Instructor- Semester 1 of Capstone Research Project).

PHTH 7305: Evidence-Based PT V: Research Analyses. School of Allied Health Professions, LSUHSC-New Orleans. (Course Instructor- Semester 2 of Capstone Research Project).

PHTH 7306: Evidence-Based PT VI: Capstone Completion & Defense. School of Allied Health Professions, LSUHSC-New Orleans. (Course Instructor- Semester 3 of Capstone Research Project).

### Additional Teaching Activity



PHTH 7000: Allied Health Gross Anatomy (LSUHSC School of Allied Health-Summer 2016): Graduate Teaching Assistant; Lecture and Cadaveric Laboratory Dissection & Instruction for PT, OT and PA students

HLSC 2412: Human Anatomy (LSUHSC School of Nursing-Spring 2017): Graduate Teaching Assistant in Bachelor of Science Nursing (BSN) Program; Lectures given across gross anatomy, histology, and embryology of human systems as well as laboratory instruction for cadaveric dissection.

ANAT 100: Gross & Developmental Anatomy (LSUHSC School of Medicine-Fall 2015): Student Tutor and Lab Assistant in Medical Gross & Developmental Anatomy

AMI 6000: Anatomy (Ohio State University Physical Therapy Program- Summer 2012): Laboratory Teaching assistant for DPT students.

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

DPTH 6632 Clinical Reasoning II (Year 2, Semester 5)- Course Coordinator/ Instructor

DPTH 6633 Clinical Reasoning III (Year 2, Semester 6) Course Coordinator/ Instructor

DPTR 5001 Anatomy I (Year 1, Semester 1) Lab Assistant

DPTR 6002 Anatomy II (Year 2, Semester 4) Lab Assistant