Mary Beth Holmes, PT, DPT, PhD
Board-Certified Clinical Specialist in Neurological Physical Therapy
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ACADEMIC APPOINTMENTS

2026 – present	**Clinical Associate Professor, Program Director,** Department of Physical Therapy Boston University Sargent College of Health & Rehabilitation Sciences
2014 – 2026	**Clinical Assistant Professor, Co-Director of Clinical Education,** Department of Physical Therapy Boston University Sargent College of Health & Rehabilitation Sciences
2020 – present	**Program Director**, Neurological Physical Therapy Residency Program Boston University Sargent College of Health & Rehabilitation Sciences
May 2014	**Adjunct Instructor,** Massachusetts General Hospital Institute of Health Professions Co-Instructor for Principles of Teaching and Learning (PT 626)
2012 – 2014	**Laboratory Instructor,** Massachusetts General Hospital Institute of Health Professions Taught examination and treatment of individuals with cardiovascular and pulmonary conditions to students in the Cardiopulmonary Clinical Laboratory course (PT 771) of the Doctor of Physical Therapy Program.
2012 – 2014	**Laboratory Instructor,** Massachusetts General Hospital Institute of Health Professions Taught in the Clinical Management of Neuromuscular Disorders I (PT 766) course of the Doctor of Physical Therapy Program.
2011 – 2014	**Laboratory Instructor,** Massachusetts General Hospital Institute of Health Professions Taught in the Cardiovascular and Pulmonary Disorders (PT 672) course of the Doctor of Physical Therapy Program.

CLINICAL APPOINTMENTS

2014 – present	**Physical Therapist,** Beth Israel Lahey Deaconess Medical Center As a per diem Neurologic Clinical Specialist Physical Therapist, responsibilities include evaluating patients across various medical and surgical services at a level one trauma center and teaching hospital. Developed individualized treatment plans and facilitated discharge planning while working on a multidisciplinary team.
2014	**Clinical Instructor,** MGH Physical Therapy Center for Clinical Education and Health Promotion (MGH Institute of Health Professions)

The Center provided pro bono PT services to individuals with varying diagnoses who would otherwise not receive Physical Therapy care. Supervised and mentored students as a clinical instructor.

2005 – 2014

Physical Therapist, Beth Israel Lahey Deaconess Medical Center

Clinical Care

- Provided expert care for patients in the Cardiovascular ICU, Neurologic Medical and Surgical ICU, as well as the Medicine, Vascular, Orthopedic, and Trauma services at a level one teaching hospital.
- Specialized in examination, evaluation, diagnosis, prognosis, intervention, and discharge planning for patients with functional impairments and disabilities in an acute hospital setting.

Supervision & Mentorship

- Supervised and mentored Doctor of Physical Therapy students from multiple academic institutions.
- Guided junior physical therapists and support personnel, providing mentorship on clinical decision-making and evidence-based practice.

Strategic Initiatives

Weaning and Sedation Committee

- Collaborated on a multi-disciplinary team to implement early detection of ICU delirium using standardized tools.
- Focused on preventing delirium through pharmacological and non-pharmacological interventions, and revised sedation protocols for ICU patients.

Physical Therapy Mentorship Program

- Mentored newer staff, emphasizing acute care clinical decision-making and application of evidence to practice.

Early ICU Mobility Committee

- Worked with a multi-disciplinary team to develop and implement pathways for early and aggressive mobilization of critically ill, mechanically ventilated patients in the Medical ICU

EDUCATION

2018 – 2022

PhD Human Development and Learning
Lesley University, Cambridge MA
Dissertation Title: A Mixed Methods Approach to Understanding Common Factors Associated with Pain and Functional Outcomes in Musculoskeletal Pain Conditions

2012 – 2013

Doctor of Physical Therapy
Massachusetts General Hospital Institute of Health Professions
Boston MA

2003 – 2005

Master of Science in Physical Therapy
Sacred Heart University
Fairfield, CT

1999 – 2003 **Bachelor of Science in Exercise Science**
Sacred Heart University
Fairfield, CT

BOARD CERTIFICATIONS AND LICENSURE

2005 – present **Physical Therapy License #17319**
Commonwealth of Massachusetts, Division of Registration in Allied Health Professions

2010 – current **Board Certified Clinical Specialist in Neurological Physical Therapy**
American Board of Physical Therapy Specialists

2006 – current **Credentialed Clinical Instructor**
American Physical Therapy Association

AWARDS / GRANTS

Year	Grant Title & Funder	Project Description	Role	Award Amount	Product(s)
2025	Sargent College Clinical Faculty Scholarship Grant	Explored first-year DPT student characteristics (curiosity, motivation, loneliness, resilience) and their relationship to GPA	PI	$4,000	Two poster presentations at the APTA Educational Leadership Conference
2024	Sargent College Clinical Faculty Scholarship Grant	Studied pain classifications and patient expectations in musculoskeletal conditions	PI	$4,000	Poster at APTA Combined Sections Meeting (Oakland)
2023	Sargent College Clinical Faculty Scholarship Grant	Quantitative analysis of therapeutic alliance and patient-reported outcomes in knee OA	PI	$4,000	Poster at APTA Combined Sections Meeting (Boston)
2022	BU Assessment Mini Grant (Provost Office)	Impact of small group simulated patient experiences on learning and confidence	Co-PI	$3,970	Poster at APTA CSM; Presentations at BU Assessment Symposium and Faculty Forum
2022	Sargent College Clinical Faculty Scholarship Grant	Qualitative study on non-specific factors in the PT-patient relationship for musculoskeletal pain	PI	$4,000	2024 manuscript in The International Journal of Therapy and Rehabilitation

2020	BU Dudley Allen Sargent Research Fund	Empathy in simulated telehealth encounters: student and standardized patient perspectives	PI	$5,635	Abstract/poster at national conference; 2022 manuscript in The Journal of Patient Experiences
2020	BU Assessment Mini Grant (Provost Office)	Development and implementation of a comprehensive DPT curriculum review	Co-PI	$4,000	—
2019	BU Dudley Allen Sargent Research Fund	Longitudinal study on empathy in DPT students across two programs	Co-PI	$1,900	Educational presentation; 2022 manuscript in The Journal of Allied Health
2018	BU Dudley Allen Sargent Research Fund	Study on empathy and work engagement in PTs across settings and experience levels	Co-PI	$5,635	2019 manuscript in The Journal of Allied Health
2017	BU Assessment Mini Grant (Provost Office)	Developed simulated patient activities to enhance student self-reflection skills	Co-PI	$3,850	Presentation at BU Assessment Symposium

SCHOLARLY ACTIVITY

Peer-Reviewed Publications

11. Riley,E**,** Health A, **Holmes MB.** Adaptive Learner Characteristics Among First-Year Physical Therapy Students: A Cluster Analysis of Curiosity, Mindset, Motivation, Resilience, and Learning Approach. *Journal of Physical Therapy Education. In revisions*
Contributions: *I collaborated with authors to design, implement and execute the study. I mentored the first author, conducted all analyses.*

10. **Holmes MB,** Friend C, Gary G., George SZ. Patient-Identified Outcomes of Importance: Association with Expectations, Therapeutic Alliance, and Outcomes in Painful Musculoskeletal Conditions. *JOSPT Open.* Accepted January 2026.
Contributions: *First author. I conceived the study, participated in data collection, conducted all the analysis, and led the preparation of the manuscript.*

9. McDonnell, B., **Holmes MB**. Improving Therapists' Confidence in Applying the Principles of Shared Decision Making to Discharge Planning: A Pilot Quality Improvement Initiative. *Journal of Acute Care Physical Therapy.* Accepted August 2025.
Contributions: *Co-author. Collaborated on the concept, execution of the quality improvement project, conducted all analyses, and contributed to the preparation of the manuscript.*

8. Porciuncula, F., Cavanaugh, J.T., Zajac, J. Wendel,N., Baker, T., Arumukom,R., Eklund,N., **Holmes MB**, Awad, L., Ellis, T. Amplifying walking activity in Parkinson's disease through autonomous music-based rhythmic auditory stimulation: randomized controlled trial. *npj Parkinsons Dis.* 11, 100 (2025). https://doi.org/10.1038/s41531-025-00952
Contributions: *Contributing author. Primary role was leading the qualitative arm of the study, including developing the qualitative methods, analysis, and interpretation.*

7. **Holmes MB,** Jackson G, George SZ. Clinimetric Properties of the Working Alliance Inventory and Credibility Expectancy Questionnaire: Screening Options for Musculoskeletal Pain. *Arch Phys Med Rehabil.* 2024 Aug;105(8):1471-1479. doi: 10.1016/j.apmr.2024.02.724. Epub 2024 Mar 2. PMID: 38432329.*)* *https://www.sciencedirect.com/science/article/pii/S0003999324008347?via%3Dihub*
Contributions: *First author. I conceived the study, participated in data collection, conducted the data analysis and led the manuscript preparation.*

6. **Holmes MB**, Camarinos J, Driscoll L. Exploring How Common Factors Influence Experience and Outcomes in Painful Musculoskeletal Conditions: A Qualitative Study. *International Journal of Therapy and Rehabilitation (2024) https://www.magonlinelibrary.com/doi/abs/10.12968/ijtr.2023.0036*
Contributions: *First author. I conceived the study, participated in data collection, conducted the data analysis and led the manuscript preparation.*

5. **Holmes MB,** Scott A, Camarinos J, Marinko L, George SZ. Working Alliance Inventory (WAI) and its relationship to patient-reported outcomes in painful musculoskeletal conditions. Disabil Rehabil. 2023 Apr;45(8):1363-1369. doi: 10.1080/09638288.2022.2060337. Epub 2022 Apr 13. PMID: 35416110.*)* *https://www.tandfonline.com/doi/abs/10.1080/09638288.2022.2060337*
Contributions: *First author. I conceived the study, participated in data collection, conducted the data analysis and led the manuscript preparation.*

4. **Holmes MB,** Starr JA. A Comparison of Doctor of Physical Therapy Students' Self-Reported Empathy With Standardized Patients Perceptions of Empathy During a Simulated Telehealth Encounter. J Patient Exp. 2022 Jul 7;9:23743735221112226. doi: 10.1177/23743735221112226. PMID: 35836780; PMCID: PMC9274409.*https://journals.sagepub.com/doi/full/10.1177/23743735221112226*
Contributions: *First author. I conceived the study, participated in data collection, conducted the data analysis and led the manuscript preparation.*

3. Driscoll L, **Holmes MB**, Starr J**,** Murphy E: A longitudinal Study of Empathy Among Students at Two Doctor of Physical Therapy Programs. *Journal of Allied Health (2021).*
Contributions: *Co-author. Co-led the research project from developing the research question to collecting data, contributed to data analysis and manuscript preparation.*

2. Starr JA, **Holmes MB**, Riley E, McDonnell B, Driscoll L, Camarinos J, Grabowska W, Harbaugh AG. A Quantitative Measurement of Physical Therapists' Empathy and Exploration of the Relationship With Practice Setting and Work Engagement. Eval Health Prof. 2020 Dec;43(4):255-263. doi: 10.1177/0163278719864687. Epub 2019 Jul 22. PMID: 31331189. https://pubmed.ncbi.nlm.nih.gov/31331189/
Contributions: *Co-author. Co-led the research project from developing the research question to collecting data, contributed to data analysis and manuscript preparation.*

1. **Holmes MB,** Driscoll L, Murphy E, Starr JA. A Cross-Sectional Study of Empathy Among Students at Two Doctor of Physical Therapy Programs in Boston. J Allied Health. 2019 Fall;48(3):181-187. PMID: 31487356. https://pubmed.ncbi.nlm.nih.gov/31487356/
Contributions: *First author. Led the research project from developing the research question to collecting data, contributed to data analysis and manuscript preparation.*

Peer-Reviewed Abstracts/Posters

25. L'Italien D, Martin S, **Holmes MB.** Are Students Ready? Clinical Instructors' Perspectives on Readiness for DPT Full-Time Clinical Experiences. American Physical Therapy Association Educational Leadership Conference; October 14-18 2026; Washington, DC

24. Baghdoyan S., Sheedy T., Brown L., Dalton D., **Holmes MB**. Application of Principles of Motor Learning in an Individual with Cervical Dystonia: A Case Study. American Physical Therapy Association Combined Sections Meeting; February 12-4, 2026; Anaheim, CA

23. Sheedy T., Baghdoyan S., D, Porciuncula F, Baker TC, Eklund N, Revi D, Wendel N, Zajac J, Awad L, Cavanaugh J, **Holmes MB**, Ellis T What Characteristics Determine Responsiveness to a Closed-Looped Music-Based Walking Intervention in People with Parkinson Disease? American Physical Therapy Association Combined Sections Meeting; February 12-4, 2026; Anaheim, CA

22. **Holmes MB,** Health A *(Poster Presentation):* Curiosity, Motivation, and the Adaptive Mind: A Cluster Analysis of First-Year DPT Learners. American Physical Therapy Association Educational Leadership Conference, October 2025, Kansas City, MO.

21. **Holmes MB,** Health A *(Poster Presentation):* Alone in the Cohort? Investigating Loneliness and Its Relationship to Motivation and Curiosity in First-Year DPT Students. American Physical Therapy Association Educational Leadership Conference, October 2025, Kansas City, MO.

20. McAuley A, Dupre AM, **Holmes MB,** Benner A., *(Poster Presentation):* Readiness ratings for first full-time clinical education experiences in integrated and terminal curricula. American Physical Therapy Association Educational Leadership Conference, October 2025, Kansas City, MO.

19. Porciuncula F, Cavanaugh JT, Zajac J, Wendel NC, Baker TC, Revi D, Eklund N, **Holmes MB**, Awad L, and Ellis T, Amplifying Real-World Walking in Parkinson's Disease through Autonomous Music-Based Rhythmic Auditory Stimulation: Randomized Controlled Trial. American Physical Therapy Association Combined Section Meeting Conference, February 2025, Houston, TX.

18. McDonnell B, **Holmes MB**, Beliefs, Self-Reported Use, and Confidence of Inpatient PT/OTs in Utilizing Shared Decision Making in Discharge Planning. American Physical Therapy Association Combined Section Meeting Conference, February 2025, Houston, TX.

17. Eklund N, Abel D, Borders E, Cavanaugh J, Zajac J, Revi D, Wendel N, Baker TC, Awad LN, Ellis T, Porciuncula F, and **Holmes MB**. Harmonizing Insights: Patient Perspectives about Using an Autonomous

Music-Based Digital Walking Intervention for Parkinson's Disease. American Physical Therapy Association Combined Section Meeting Conference, February 2025, Houston, TX.

16. **Holmes MB**, Friend C, Gary G, George SZ. Unveiling Patient Expectations: Clustering Importance Ratings and Their Impact on Physical Therapy Outcomes. American Physical Therapy Association Combined Section Meeting Conference, February 2025, Houston, TX.

15. Borders E**,** Abel D, Porciuncula F, Baker TC, Eklund N, Revi D, Wendel N, Zajac J, Awad L, Cavanaugh J, **Holmes MB**, Ellis T. Relationships between Self-Report Habit Strength and Walking Behavior in People with Parkinson's Disease. American Physical Therapy Association Combined Section Meeting Conference, February 2025, Houston, TX.

14. McAuley A, Dupre AM, **Holmes MB,** Benner A., *(Poster Presentation):* Agreement between DPT Students' and Clinical Instructors' Assessments of Readiness for First Full-Time CEEs. American Physical Therapy Association Educational Leadership Conference, October 2024, Oakland, CA.

13. **Holmes MB,** Jackson G, George S., *(Poster Presentation):* Clinimetric Properties of the Working Alliance Inventory and Credibility Expectancy Questionnaire: Screeners for Musculoskeletal Pain. American Physical Therapy Association Combined Sections Meeting; February 2024, Boston, MA

12. **Holmes MB**, L'Italien D, Dalton D, Brown S., *(Poster Presentation):* Change Is Hard: Simulation as a Learning Activity for Applied Behavior Change Techniques. American Physical Therapy Association Combined Sections Meeting; February 2024, Boston, MA

11. **Holmes MB**, Neogi T, Marinko L, Senderling B, Gheller M, Georgiev P, Kumar D. *(Poster Presentation):* Association of Therapeutic Alliance with Changes in Knee Osteoarthritis Outcomes after Physical Therapist Delivered Intervention. Poster Presentation. American Physical Therapy Association Combined Sections Meeting; February 2024, Boston, MA

10. Fleshman J, Malaspina S, Porciuncula F, **Holmes MB,** Baker T, Duncan R, Cavanaugh J, Fulford D, Girnis J, Hessler M, Lavalley M, Nordal T, Rawson K, Hilaire M, Thomas C, Zajac J, Earhart G, Ellis T. *(Poster Presentation):* The Impact of Stigma on Home and Community Mobility in People with Parkinson Disease. Poster Presentation. American Physical Therapy Association Combined Sections Meeting; February, 2024, Boston, MA

9. **Holmes MB**, Neogi T, Marinko L, Gheller M, S. Reza Jafarzadeh, Lukas Adamowicz, MS, Pirinka Georgiev, Lars Viktrup, MD, PhD, Charmaine Demanuele, PhD, Paul Wacnik, PhD, Kumar D. *(Poster Presentation):* Relation of therapeutic alliance and adherence with changes in pain and function after a physical therapist delivered exercise intervention in people with knee osteoarthritis. OARSI 2023 World Congress on Osteoarthritis, March 17^{th,} 2023, Denver, CO. *****Invited for Poster Tour***

8. Vinacco K, Jacobson K, Cavanaugh J, DeAngelis T, Duncan R, Girnis J, Hessler M, **Holmes MB**, Nordahl T, Rawson K, Zajac J, Earhart G, Porciuncula F, Ellis T. *(Poster Presentation):* Using the Biopsychosocial Model to Explore Real World Walking Activity in People with Parkinson's Disease. Poster Presentation. American Physical Therapy Association Combined Sections Meeting; February 22-25, 2023; San Diego, CA

7. Murphy J, **Holmes MB**. *(Poster Presentation):* Exploring Physical Therapists' Perceptions of the Therapeutic Alliance across Different Practice Settings. Poster Presentation. American Physical Therapy Association Combined Sections Meeting; February 2-5, 2022; San Antonio, Texas

6. **Holmes MB**, Starr J*(Poster Presentation):* A comparison of Doctor of Physical Therapy students' self-reported empathy with standardized patient perceptions of empathy during a simulated telehealth encounter. Poster presentation, Educational Leadership Conference, Fall 2021, Atlanta, Georgia.

5. Girnis J., Ko C., Cavanaugh J., Colón-Semenza C., DeAngelis T., Duncan R., Hessler M., **Holmes MB**., Nordahl T., Rawson K., Shumate S., Earhart G., PT, Ellis T., *(Poster Presentation):* Is Fatigue Associated with Physical Activity in People with Parkinson's Disease? APTA Combined Sections Meeting, January 2021, Virtual Conference.

4. **Holmes MB**, Driscoll L, Starr JA, Murphy E, *(Poster Presentation):* An Evaluation of Empathy Levels in Doctor of Physical Therapy Students. APTA Educational Leadership Conference, October 2019, Bellevue, Washington

3. Starr JA, **Holmes MB**, Riley E, Driscoll L, McDonnell B, Camarinos J. *(Poster Presentation):* A Quantitative Measurement of Physical Therapists' Empathy and Exploration of the Relationship with Practice Setting and Work Engagement. APTA Combined Sections Meeting, January 2019, Washington, D.C.

2. **Holmes MB**, Driscoll L, Murphy E, Starr JA. *(Poster Presentation):* A Cross-sectional Study of Empathy in Doctor of Physical Therapy Students at Two Programs in Boston. APTA: Combined Sections Meeting, Education Section, February 2018, New Orleans, LA

1. Driscoll L, Carforo R, **Holmes MB.** *(Poster Presentation):* Physical Therapy Students' Knowledge, Attitudes and Beliefs Regarding APTA Membership. APTA: Combined Sections Meeting, February 2017, San Antonio, TX

Invited Presentations

10. **Holmes, MB.** Panelist for the Massachusetts Pain Special Interest Group. *Managing a Patient with Low Back Pain Through the Different Settings: A Conversation Around Managing Chronic Pain.* Virtual, Oct 7, 2024

9. **Holmes, MB.** University of Southern Florida Professional Development. *Empowering Education: Integrating Learning Sciences and Motivational Theory for a Supportive Learning Environment.* Tampa, FL, April 2024

8. **Holmes, MB.** University of Southern Florida Commitment to Professionalism Keynote Speaker. *The Vital Role of Human Connection in Healthcare: Elevating Physical Therapists as Agents of Holistic Care.* Tampa, FL, April 2024

7. **Holmes, MB.** Panelist, Boston University Faculty Forum. *Experiential Learning*, April 2024

6. **Holmes MB,** L'Italien D, Dalton D, Brown S. Assessing Small Group Simulated Patient Experiences on Students' Perceptions of Learning and Confidence. Boston University Assessment Symposium, Boston, MA, 2023.

5. **Holmes MB.** *Common Factors, Unique Alliances: Exploring the Role of Common Factors in Physical Therapy Practice.* Boston University Sargent College Doctor of Physical Therapy Programs Grand Rounds, 2022.

4. **Holmes MB,** Wetherbee E. *The Influence of the Learning Environment in Clinical Education. From Theory to Application.* New England Consortium of Clinical Educators, Boston, MA, 2019

3. **Holmes MB,** Dalton, D. *The role of Debriefing in Reflective Practicing Using Simulation-Based Learning.* Boston University Assessment Symposium, Boston, MA, 2018

2. **Holmes MB,** Naidoo K. The Collaborative Learning Model in Clinical Education, NEC-ACCE Clinical Faculty Institution, Boston MA, 2015

1. **Holmes MB.** Understanding Respiratory Failure and Oxygen Delivery, MGH-IHP Program in Physical Therapy, Boston, MA, 2014

Peer-Reviewed Oral Presentations

9. Naidoo K, Plummer L, Dutton L, Jette D, Nordstrom T, **Holmes MB,** Riley R, Canham L, Wert D. Both Sides of the Review: Following a Manuscript from Submission to Publication. American Physical Therapy Association Educational Leadership Conference; October 14-18; Washington, DC

8. Riley, E,. Heath, A., **Holmes MB**., Self-Reported Learner Traits and Academic Outcomes in First-Year D.P.T. Students: A Pilot Study (*Platform Presentation)* American Physical Therapy Association Combined Sections Meeting; February 12-4, 2026; Anaheim, CA

7. **Holmes MB.,** (*Symposium*): Empowering Education: Integrating Learning Sciences and Motivational Theory for a Supportive Learning Environment. American Physical Therapy Association Educational Leadership Conference, October 2024, Oakland, CA.

6. Koch K, Sweeney N, Cavanaugh J, DeAngelis T, Duncan R, Girnis J, Hessler M, **Holmes MB**, Nordahl T, Rawson K, Zajac J, Earhart G, Ellis T. *(Platform Presentation)*: Does ZIP Code Influence Daily Steps in Individuals with Parkinson's Disease? American Physical Therapy Association Combined Sections Meeting; February 2-5, 2022; San Antonio, Texas.

5. Driscoll L, Starr JA, **Holmes MB**, Murphy E. (*Platform Presentation):* A Longitudinal Study of Empathy Among Students at Two DPT Programs in Boston. APTA Combined Sections Meeting, February 2020, Denver, CO.

4. **Holmes MB**, Maguire S, Robinson J. (*Symposium*): Aneurysmal subarachnoid hemorrhage: medical management and role of PT in the acute setting, Combined Section Meeting, APTA, Feb 2018, New Orleans, LA

3. Wetherbee-McDevitt E, **Holmes MB.** (*Platform Presentation):* Clinical Instructors' Interpretation of Clinical Performance Definition of Entry-Level Performance: A Qualitative Analysis, APTA Educational Leadership Conference, Oct. 2016, Phoenix, AZ

2. Driscoll L, **Holmes MB**. (*Symposium*): Applying the Evidence to Discharge Planning, Combined Section Meeting, APTA, 2013, San Diego, CA.

1. Driscoll L, **Holmes MB.** (*Symposium*): Applying the Evidence to Discharge Planning, APTA Of Massachusetts Annual Meeting, 2012, Norwood, MA.

TEACHING

PT 773 Comprehensive Clinical Reasoning

Co-Instructor 2023 – present

In my role as one of the primary course instructors, my responsibilities include developing complex patient cases, defining course objectives consistent with accreditation needs and aligned with current best practices, developing grading rubrics, mentoring facilitators, and providing support to students.

Group Facilitator 2020, 2015 – 2018, 2009 – 2011

This course is a case-based course taught in small tutorial groups (~ 6-7 students) using the problem-based learning format. The course is intended to enhance the integration of course content taught elsewhere in the curriculum within the context of a physical therapy case study. Students are expected to use a variety of resources, including primary literature, to solve complex patient cases. Issues to be discussed include evidence-based patient examination, clinical decision-making, effective physical therapy intervention, likely prognosis, clinical teaching, the role of the PT concerning other health care providers, issues involved in the delivery of physical therapy, including professionalism, interpersonal skills, communication, third-party payers, and ethics.

PT720 Education Theory and Practice

Primary Instructor 2020-present

This course explores several theories related to identity, learning, motivation, and behavior change as they relate to the ability of the physical therapist to interact with an individual seeking care to maximize the individual's outcome. Students will learn how these theories are relevant when developing a biopsychosocial and patient-centered approach to care. Application of these theories will be emphasized, which will allow the student to understand an individual's attitudes and beliefs about their health condition, personal goals, motivation, and outcome expectation, and how each relates to patient outcome. Skills grounded in these theories will be included to help the student form a productive therapeutic alliance, improve the individual's self-efficacy, facilitate adherence to treatment recommendations, and maximize outcomes important to the individual.

PT511 Cardiovascular and Pulmonary System

Laboratory Primary Instructor 2024 – present

As the primary instructor for the first-year Doctor of Physical Therapy Cardiovascular and Pulmonary Lab I course, I lead a cohort of approximately 80 students during their initial fall semester. This foundational course emphasizes the examination and treatment of cardiovascular and pulmonary conditions, integrating clinical reasoning and hands-on skill development. I coordinate and supervise four lab instructors to ensure consistent and high-quality lab experiences. I co-developed a cross-course simulated learning activity focused on the

differential diagnosis of chest pain, promoting critical thinking and clinical decision-making. Additionally, I designed a peer-to-peer learning lab activity with second- and third-year students as peer instructors, emphasizing transfer training and patient guarding techniques to enhance safety and practical competence.

Laboratory Instructor 2010 – 2023

This course reviews the anatomy and physiology of the cardiopulmonary system. This course will highlight the adult and pediatric dysfunctions of the cardiopulmonary system, medical and surgical care of this patient population, and the appropriate physical therapy interventions. Emphasis is placed on patient evaluation, medical assessment, treatment planning, and the performance of the appropriate procedures. In addition, patient compliance issues, ethical and legal aspects of physical therapy care, and the health care professional's own cardiopulmonary function will be addressed. Current research will be introduced throughout the course as appropriate.

PT555 Integrated Clinical Experience I

Primary Instructor 2023, 2014 – 2019

Co-instructor 2020 – 2022

Using class discussion, standardized patients, community service opportunities, and clinical observations, students will practice patient education strategies, appreciate the role of the physical therapist in other health care providers, and apply skills related to professionalism, interpersonal skills, and communication.

PT 565 Integrated Clinical Experience II

Primary Instructor 2014 – 2020

Through review of patient records, patient interviews, and observation and treatment of non-complex patients or diagnoses, students will develop skills in the process of clinical decision making, obtaining patient data, and treatment progression. This course will be closely aligned with concomitant academic preparation to enable students to practice recently learned skills in a clinical environment. Additionally, the student will begin to understand clinical teaching, the role of the PT in relation to other health care providers, and issues involved in the delivery of physical therapy, including professionalism, interpersonal skills, communication, and law and ethics.

PT791 Full-Time Clinical Experience I

Co-Instructor 2020 – present

Primary Instructor 2014 – 2019

This is the first of three/four full-time clinical experiences in the DPT curriculum. It is designed to focus on the synthesis of knowledge, skills, and behaviors learned in the classroom and laboratory and addressed during the part-time integrated clinical experiences. Students are expected to demonstrate the ability to make sound clinical decisions in the management of non-complex patient problems in a moderately paced environment. Students are supervised in clinical and community settings by qualified physical therapists.

PT 653 Neurological System II

Laboratory Instructor 2014, 2016 – 2018

This course (60-70 students) is the first of a series of 2 courses on the Examination and Treatment of Neurological Systems for Doctor of Physical Therapy Students. The purpose of this course is to provide a foundation for examining, evaluating, and determining appropriate interventions for individuals who have movement dysfunction secondary to neurological deficits. Students will learn key elements of a hypothesis-driven neurological examination guided by the ICF model of disablement framework, including the pathophysiology, patient history, and functional deficits associated with or resulting from disease or injury to the nervous system. Laboratory sessions develop students' skills in movement analysis, examination, and evaluation of movement dysfunction in partnership with community participants as lab instructors who have a neurologic dysfunction such as a stroke. Emphasis will be on enhancing students' ability to use a hypothesis-oriented, problem-solving approach to conduct an efficient, streamlined examination of patients with neurological dysfunction. Students will be able to demonstrate appropriate intervention strategies applied across the continuum of care, following a synthesis of examination findings, the goals established, and the predicted outcomes. A strong emphasis is placed on developing the communication skills of the students with a focus on patient-first language and motivational interviewing skills.

CURRICULAR DESIGN AND DEVELOPMENT

PT555 Integrated Clinical Experience I
In 2016, I led the redesign of the Integrated Clinical Experience to introduce standardized patient encounters, with a strategic emphasis on enhancing patient communication skills. This initiative incorporated small-group, peer-led learning activities, utilizing third-year students as peer instructors—marking the first formal peer-to-peer teaching opportunity within our program. Furthermore, this was the inaugural integration of structured simulation into our curriculum, setting a precedent for future innovations in experiential learning.

PT720 Education Theory and Practice
In 2020, I developed a course centered on contemporary evidence in patient education and behavior change, with a strong focus on fostering active student participation. This course advanced the use of simulation within our program by introducing the department's first cross-course simulation. Collaborating with faculty from the Cardiovascular and Pulmonary, as well as Musculoskeletal courses, we designed an integrated simulation that emphasized patient education and motivational interviewing. This innovative approach enhanced learning and strengthened the practical application of evidence-based teaching methodologies.

PT 773 Comprehensive Clinical Reasoning
In collaboration with a co-instructor, we completed a comprehensive overhaul of the course, which included the creation of new assessment rubrics and the integration of self-reflection and individualized facilitator feedback. Additionally, four clinical cases were updated to align with current best practices and the latest evidence, and facilitator development workshops were developed aimed at refining faculty skills in effective questioning techniques, enhancing clinical reasoning, and ensuring consistency in instructional delivery throughout the course.

NEUROLOGIC PHYSICAL THERAPY RESIDENCY

The Boston University Doctor of Physical Therapy Residency Program admits two residents annually, offering a comprehensive focus on clinical practice, teaching, and research. Residents spend six months in acute care

and six months in outpatient settings. They serve as lab instructors within the DPT curriculum and collaborate with clinicians at the Center for Neurologic Rehabilitation, providing patient care and conducting research. The residency program partners with Spaulding Rehabilitation in Medford and Beth Israel Deaconess Lahey Medical Center in Boston.

2020-present: *Program Director*: Responsibilities include:

- Guide prospective residents through the admissions process to ensure a smooth and welcoming experience.
- Build and maintain strong relationships with clinical partners to secure high-quality clinical placements.
- Develop and support mentors to provide exceptional guidance to residency participants.
- Provide personalized coaching and mentorship to facilitate residents' professional growth and achievement of goals.
- Assist residents with research projects by offering necessary resources and expert guidance.
- Maintain comprehensive records to ensure the program meets all accreditation standards.

2011-2013: *Clinical Mentor:* Responsibilities included:

- Provide daily support to residents in the acute care setting to ensure continuous professional development.
- Offer scaffolding and expert guidance to help residents progress toward their professional goals.
- Foster the development of advanced clinical reasoning skills to enhance resident decision-making.
- Ensure residents achieve higher competency in treating individuals with neurologic conditions.

Program Highlights:

- 25 residents have successfully graduated from the program.
- 100% pass rate on the American Physical Therapy Board-Certified Neurologic Clinical Specialist exam
- >95% of residents have had peer-reviewed posters or platforms at national conferences.
- Many alumni now hold leadership positions within their institutions and/or within the professional organizations (e.g., American Neurologic Physical Therapy Special Interest Group Chairs, Director of the Rhode Island American Physical Therapy Association, mentors in residency programs across the country, faculty positions)

ADVISOR/MENTOR

Doctor of Physical Therapy Academic Practicum Mentor

The Academic Practicum experience provides students (~ 1-6 students/varies by year) with the opportunity to apply and enhance their knowledge and skills while completing a more in-depth and practical experience in one of four areas of their choosing: education, health promotion, clinical research, or health care management. The experience also provides for the refinement and development of skills and behaviors in a wide variety of collateral areas not immediately associated with the primary content area. I have mentored projects with a focus on constructs related to the patient-provider relationship, such as empathy, the therapeutic alliance, and patient expectations.

Year	*Students*	*Project*	*Product*

2023	Friend, C & Gary, G	Impact of Patient-Identified Outcomes of Importance and Expectations on Physical Therapy Treatment	This project led to an abstract that was accepted for a poster presentation at a national conference.
2022	Jackson,G	An Investigation into Psychometric Properties of Surveys Addressing Common Factors Present in the Patient-Provider Relationship	This project led to an abstract that was accepted for a poster presentation at a national conference, and a manuscript published in *Archives of Physical Medicine and Rehabilitation*.
2021	Kaiser,M	Development of an Educational Module on Motivational Interviewing for Physical Therapists	This project focused on enhancing the understanding and use of Motivational Interviewing (MI) among physical therapists to better facilitate behavior change in patients, particularly around physical activity and health behaviors. The end product was a podcast designed to educate physical therapists on MI, addressing current barriers, increasing knowledge, and boosting confidence in utilizing MI techniques in clinical practice
2021	Swannie, E	Exploring the Relationship Between Patient-Perceived Provider Empathy and Outcomes in Painful Musculoskeletal Conditions	This project led to a Platform Presentation accepted at a national conference.
2021	Nunes, F	An Overview of Common Factors in Physical Therapy	This project led to the development of a remote module on the impact of common factors on patient experiences that was presented to Physical Therapist at two local teaching hospitals.
2020	Murphy, J	Exploring Physical Therapists' Perceptions of the Therapeutic Alliance in 3 Different PT Settings	This project led to an abstract that was accepted for a poster presentation at a national conference.
2019	Scott, A	Does a higher measure of patient-perceived therapeutic alliance correlate to better outcomes in pain, disability, and	This project led to an abstract that was accepted for a poster presentation at a national conference, and a manuscript

		adherence in acute and chronic orthopedic physical therapy conditions?	published in *Disability and Rehabilitation.*
2019	Lee, B	Communication Skills Training for First-Year Physical Therapy Students at Boston University	This project led to a lecture and resource development for first year DPT students in their Integrated Clinical Experience courses.
2017	Capone, J	Utilizing Innovative Equipment to Promote Evidence-Based Early Physical Therapy Intervention in the Intensive Care Unit	This project led to projects supporting one teaching hospital in Boston with increased utilization of patient safe handling equipment in the intensive care units.
2017	Young, S	Implementation and evaluation of the use of standardized patients in student assessments within a first year DPT curriculum	This project led to a presentation at the Boston University Assessment Symposium.
2016	Carfaro, R	Physical Therapy Students' Knowledge, Attitudes and Beliefs Regarding APTA Membership	This project led to an abstract that was accepted for a poster presentation at a national conference.

Master's Thesis External Advisor 2025

Student: Stephanie Zenzola

Project Aims:

1. Assess adherence to an evidence-based community physical activity intervention conducted across various sites within a community and compare differences in adherence rates across sites.
2. Evaluate the impact of the intervention site and adherence rates on any analyzed changes in social isolation and loneliness in older adults.

I am an external advisor for a physician assistant student at Boston University Medical Campus, providing mentorship and content expertise. The project examines how group community-based exercise affects individuals' levels of loneliness and social isolation. Loneliness is a social determinant of health that negatively correlates with various physical and mental health outcomes. Positive patient-provider relationships have been shown to reduce loneliness. My work and understanding of the therapeutic alliance enable me to serve as a content expert for Stephanie's work.

SERVICE TO THE PROFESSION

2024-present **Editorial Board Member,** The Journal of Physical Therapy Education

As a member of the editorial board, I serve in an editorial capacity, supporting the editor-in-chief in maintaining the quality and integrity of the journal's content. My responsibilities include overseeing the peer review process, synthesizing reviewer feedback, and providing authors with clear, constructive editorial guidance. I make

informed recommendations on manuscript decisions, such as acceptance, revision, or rejection, ensuring alignment with the journal's scholarly standards and editorial policies.

2024 – present **Accreditation Onsite Review Member,** American Board of Physical Therapy Residency and Fellowship Education (ABPTRFE)
As a member of the national on-site review team for residency and fellowship programs accredited by the American Board of Physical Therapy Residency and Fellowship Education (ABPTRFE), the role involves a collaborative evaluation process to determine whether programs meet established quality standards. This includes a thorough review of submitted application materials, followed by an on-site visit to programs across the country to verify the implementation of processes through discussions with program leadership, faculty, current participants, and graduates

2023 – present **Educational Leadership Conference Co-Chair,** American Physical Therapy Association
The Educational Leadership Conference is the premier national event dedicated to advancing best practices in Doctor of Physical Therapy education at both entry-level and post-professional stages, attracting over 2,000 attendees annually. Responsibilities include leading the review of more than 1,000 submissions, curating educational programming, and directing comprehensive marketing efforts to ensure the success and impact of the conference.

2023 – present **Manuscript Reviewer**, *Physical Therapy Journal*

- Recognized as a top Distinguished Manuscript Reviewer of 2024

2023 – present **Manuscript Reviewer,** *Journal of Physical Therapy Education*

2017-2020 **Co-Chair of the New England Consortium of Clinical Educators,** Clinical Faculty Institute
The committee co-chair is responsible for organizing free continuing education activities for clinicians and academic faculty involved in clinical education for Doctor of Physical Therapy students. This role includes coordinating with committee members, developing relevant programming, managing logistics, and ensuring the content meets the professional development needs of faculty and clinical educators. The co-chair also oversees outreach and communication efforts to engage participants and promote the events.

2014 – present **Member,** New England Consortium of Clinical Educators

2022 – present **Member,** American Council of Academic Physical Therapy Clinical Reasoning and Assessment Consortium.

- Additional task force member for clinical reasoning assessment resources.

2021, 2019 **Education Section Moderator,** APTA Combined Sections Meeting

2021 – present **Manuscript Reviewer**, *Journal of Allied Health*

2019 – present **Abstract Reviewer**, American Physical Therapy Association Academy of Education Combined Sections Meeting National Conference

2018-present **Abstract Reviewer,** American Physical Therapy Association Academy of Education Educational Leadership National Conference

SERVICE TO THE UNIVERSITY/COLLEGE/DEPARTMENT

2022 – present **Chair,** Doctor of Physical Therapy Curriculum Committee
Member (2014 – 2022)
As the chair of the curriculum committee, my responsibilities include:

- Lead curriculum mapping initiatives to ensure alignment of courses with overarching program themes, enhancing cohesion and clarity in the Doctor of Physical Therapy curriculum.
- Facilitate dialogue across courses and coordinate surveys, gathering data from multiple stakeholders to ensure curriculum relevance and quality.
- Organize faculty retreats to foster discussions on course content integration, promoting a collaborative approach to curriculum development.
- Engage thought leaders in the field by inviting them to meet with the committee, addressing emerging trends and innovations in Doctor of Physical Therapy education.

Accomplishments while chairing the committee:

- Conducted a comprehensive review of credit allocation and course clock hours to ensure appropriate student workload distribution. This resulted in a reduction of clock hours for two courses and an increase for another, better aligning instructional time with course demands and learning outcomes.
- Evaluated courses for curricular alignment, redundancy, and opportunities for integration. This review led to the removal of one course and the intentional redistribution of its content across other courses to enhance coherence and reduce overlap.
- Partnered with faculty to design and implement integrated simulation experiences using standardized patients. These simulations were strategically aligned with objectives across cardiovascular, musculoskeletal, and teaching and learning courses, promoting interdisciplinary collaboration and real-world clinical reasoning
- Mentored new faculty members on strategies to create supportive learning environments and utilize evidence-based educational strategies to improve student engagement.

2023 – present **Co-chair,** Doctor of Physical Therapy program Awards Committee
As one of the founding members of the Department of Physical Therapy's Awards Committee, I help lead efforts to identify and nominate colleagues for local and national awards, in line with our department and university's goals of increasing visibility and recognition. Since the committee's inception, we have successfully nominated faculty who have received one university, one local, and two national awards.

2014 – present **Member,** Doctor of Physical Therapy Admission Committee
Reviewed applications, conducted online interviews, and met with prospective students.

Spring 2019 **Member,** DPT program Search Committee for Lecturer position

2019 – 2020 **Member,** Sargent College Undergraduate Education Curriculum Committee

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS

2007 – present **Member**, American Physical Therapy Association (APTA)

- 2015 – present: APTA Academy of Neurology Member
- 2015 – present: APTA Academy of Education Member
- 2011 – present: APTA Neurological Section Member

2014 – present **Member**, New England Consortium of Clinical Educators