

*Dec 20, 2022*

**Alycia Marie Markowski PT, DPT, MPhyS (manipulative), FAAOMPT, OCS, RMSK**

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Department of Physical Therapy Movement & Rehabilitation Sciences

Northeastern University

<http://www.northeastern.edu/bouve/directory/alycia-markowski/>

**Education:**

**Northeastern University**, Boston, Massachusetts

January 2005- June 2007

Doctor of Physical Therapy

**University of Queensland**, Brisbane, Australia

December 1998 – December 1999

Master of Physiotherapy Studies – Manipulation

**Northeastern University**, Boston Massachusetts

September 1990 – June 1995

Bachelor of Science in Physical Therapy

**Licensure Information:**

Massachusetts License # 10449

Massachusetts Allied Board of Health 1995 to present

New York License # 015817 1996 to 2006

**Certifications:**

Registered in Musculoskeletal Sonography (RMSK)- 2022 #285096

Certification in Musculoskeletal Ultrasound Imaging (Cert. MSKUS) 2017

Board Certified Clinical Specialist in Orthopedic Physical Therapy (OCS) -2011 #10015103

APTA Credentialed Manual Therapy Fellowship awarded (FAAOMPT) - 2000, 2011

CPR and AED re-certification 2017, 2020

Emergency Medical Response for the Athlete (ERA) Certification (3 years)- March 2019, March 2022

**Employment:**

**Clinical Professor**

Department of Physical Therapy, Movement and Rehabilitation Sciences

Northeastern University

Boston Massachusetts

Dec 2000 - Present

**Physical Therapist**

Cape Costal Physical Therapy, Cotuit Massachusetts

May 2016- Present

**Physical Therapist**

Barnstable Physical Therapy, Hyannis Massachusetts

May 2019- Present

**Adjunct Faculty**

Evidence in Motion, Louisville KY

Sept 2010-Present

**Per Diem Physical Therapist**

Cape Cod Orthopedics, Sports Medicine and Physical Therapy, Hyannis Massachusetts

May 2015 – May 2016

**Physical Therapist**

Physiotherapy Therapy Associates, Falmouth Massachusetts

May 2007- Sept 2014

**Senior Staff In-patient/Out-patient Physical Therapist**

Saint Vincent Hospital, Worcester, Massachusetts

Sept 1998 – Oct 2006

**Senior Clinical Specialist**

**Clinical Assistant Professor to Northeastern University contracted part-time**

New England Baptist Hospital, Boston, Massachusetts

Dec 2000 – March 2003

**Senior Physical Therapist**

Milford – Whitinsville Hospital Outpatient Clinic, Milford, Massachusetts

May 2000 – Oct 2001

**Staff Physical Therapist / Clinical Instructor**

Stratton Veterans Affairs Medical Center, Albany, New York

Aug 1996 – May 1998

**In-Patient Physical Therapist / Clinical Instructor**

University of Massachusetts Medical Center, Worcester, Massachusetts

May 1995 – June 1996

**Physical Therapist**

Fairlawn Rehabilitation Hospital, Worcester, Massachusetts

May 1995 – June 1996

## **Peer Reviewed Publications:**

1. **Markowski, A.**, Watkins, M., Maitland, M., Manske, R., Podoll, K., & Hayward, L. (2022). Exploring the integration of diagnostic musculoskeletal ultrasound imaging into clinical practice by physical therapists. *Physiotherapy Theory and Practice*, DOI: [10.1080/09593985.2022.2135979](https://doi.org/10.1080/09593985.2022.2135979)
2. Manske, R., **Markowski, A.**, Hayward, L., Watkins, M., Maitland, M., Physical Therapists Use of Diagnostic Ultrasound Imaging in Clinical Practice: A Review of Case Reports . (JoPTTandP October 2022 review)
3. Hayward, L., **Markowski, A.**, Maitland, M., Watkins, M., Manske, R., Beneck, G. (2022). Element of Learning and Integration of Musculoskeletal Diagnostic Ultrasound Imaging into Clinical Practice by Physical Therapists *J Phys Ther Education* September 36(3), 243-255 doi: 10.1097/JTE.0000000000000232
4. **Markowski A**, Hayward L, Watkins M, Manske R, Beneck G, Maitland M Exploring the Integration of Musculoskeletal Diagnostic Ultrasound Imaging into Clinical Practice by Physical Therapists *J Orthop Sports Phys Ther* (Manuscript in progress)
5. Bednarczyk, V., **Markowski, A.** Temporomandibular Joint Anterior Disc Displacement without Reduction. *Orthopedic Sports Physical Therapy. J Orthop Sports Phys Ther Cases* 2021;1(4):xxx-xxx. doi:10.2519/josptcases.2021.10555
6. Archambault-Ezenwa, L., **Markowski, A. M.**, Barral, J.-P. A comprehensive physical therapy evaluation for Male Chronic Pelvic Pain Syndrome: A case series exploring common findings. *Journal of Bodywork and Movement Therapies*. 2019 <http://www.sciencedirect.com/science/article/pii/S1360859219301950>
7. **Markowski, A. M.**, Watkins, M., Pavlich A, A., Lacke, K., Bredahl, J. Reliability of Measuring the Medial Knee Joint Space using Ultrasound Imaging. *International Archives of Orthopedic Research*,2019; 2(1), 5. <https://www.arvinmedonline.org/assets/article-pdf/reliability-of-measuring-the-medial-knee-joint-space-using-ultrasound-imaging.pdf>
8. **Markowski A**, Watkins MK, Dzaugis P, Etzel V, Lindau A Incorporating Real Time Ultrasound Imaging Education Within a Doctor of Physical Therapy Program: A Needs Assessment. *Int J Musculoskelet Disord*: 2018 IJMD-106. DOI: 10.29011/IJMD-106. 000006 Received Date: 23 June, 2018; Accepted Date: 05 July, 2018; Published Date: 16 July, 2018  
Selected as one of three most influential articles in manual therapy in the bi annual International Federation of Manual Physio Therapy Reveiw. <http://www.ifompt.org/ReportsDocuments.html>
9. **Markowski A**, Watkins M, Barret T, Ho M, Ling M. Using real-time ultrasound imaging to enhance Physical Therapist students' confidence and ability to perform joint traction of the knee. *Musculoskeletal Science and Practice* 2018; 34: 83-88. doi.org/10.1016/j.msksp.2018.01.005.

10. Curley, R, **Markowski A**. Imaging helps guide physical therapy treatment in a patient with Diffuse Systemic Sclerosis (Scleroderma) *J Orthop Sports Phys Ther* 2018;48(3):226. doi:10.2519/jospt.2018.7662.
11. **Markowski A**, Greenwood K, Parker J, Corkery M, Dolce M. A Novel Interprofessional Faculty Approach for Integrating Oral Health Promotion Competencies into Physical Therapist Curriculum. *Journal Allied Health* 2018;47(1):19-24
12. Hunt C, **Markowski A**. Displaced Fracture Dislocation of the Proximal Humerus in a Male Skier. *Orthopedic Sports Physical Therapy. J Orthop Sports Phys Ther* 2018;48(9):728. doi:10.2519/jospt.2018.6208
13. Archambault-Ezenwa L, Brewer J, **Markowski A**. A Comprehensive Physical Therapy Approach including visceral manipulation after failed biofeedback therapy for Constipation. *Techniques in Coloproctology* 2016; 20: 603. doi:10.1007/s10151-016-1489-4
14. Yen SC, Corkery MB, **Markowski A**, Fitzpatrick DF, Wang YC, Chui KK. Effectiveness of manual therapy on the elderly with low back pain. *Topics in Geriatric Rehabilitation* 2015: 31 (3), 199-202
15. **Markowski A**, Gorgol L, Physical Therapy Helps Patient with Hip Pain Avoid Surgery. *The Rheumatologist* 2015 February <http://www.the-rheumatologist.org/article/physical-therapy-helps-patient-with-hip-pain-avoid-surgery/>
16. **Markowski A**, Sanford S, Pikowski J, Fauvell D, Cimino D, Caplan S. A Pilot study analyzing the effects of Chinese cupping as an adjunct treatment for patients with subacute low back pain in relieving pain, improving ROM and function. *Journal of Alternative and Complementary Medicine* Dec, 3, 2013
17. Barker L, **Markowski A**, Henneman K. The Use of Digital Infrared Thermal Imaging to Document Physiological Changes Before and After Physical Therapy Treatment *Orthopedic Sports Physical Therapy*. 2012; 42(3):291.
18. Cahalin LP, **Markowski A**, Hickey M, Hayward LA. Cardiopulmonary Instructor's Perspective on a Standardized Patient Experience: Implications for Cardiopulmonary Physical Therapy Education. *Cardiopulmonary Physical Therapy Journal*. 2011 Sep; 22(3):21-30.
19. Cleland J, **Markowski A**, Childs J. The Cervical Spine: Physical Therapy Patient Management Utilizing Current Evidence. *Orthopedic Section of the APTA for Home Study Module*. Spring 2006
20. Hayward L, Blackmer B, **Markowski A**. Standardized Patients and Communities of Practice: A Realistic Strategy for Integrating the Core Values in a Physical Therapist Education Program. *Journal of Physical Therapy Education*. 2006; 20(2): 29-37

**Book Chapter:**

21. Corkery, M, **Markowski, A**, Fitzpatrick, D, Hensley, C. Geriatric Rehabilitation, 1<sup>st</sup> ed, Ch 24 Lumbar Spine , Editor Carole B. Lewis, Invited author, ISBN; 978-1-4963-4333-8: 2017
22. Kristin Greenwood, **Alycia Markowski**, Innovation in Oral Health, Ch 5 Simulation Learning, Simulation 1 Oral examination and dental referral.  
<https://www.northeastern.edu/oralhealth/toolkit/> Last updated 2016

### **Abstracts:**

23. **Markowski, A.**, Maitland, M., Hayward, L., Watkins, M., Manske, R., Beneck, G. (2022) Uncovering Expert Use of Musculoskeletal Diagnostic Ultrasound Imaging in Physical Therapy Practice *J Orthop Sports Phys Ther* 2022;52(1):CSM1–CSM24.  
 doi:10.2519/jospt.2022.52.1.CSM1
24. **Markowski A**, Watkins. The benefits of using real-time ultrasound to teach knee traction in physical therapist education. *Journal of Manual and Manipulative Therapy Annual Conference*, Salt Lake City, UT October 2017
25. R Sikes, **A Markowski**, C Fraley, S Kim, K McAdow, K Overmyer, S Rate. From the Slices to the Loaf: Using 3-D Design and Printing Software to Enhance Learning and Interpretation of 3-D Structures Within MRI Slices and the Clinical Application to Diagnostic Imaging  
*The Federation of American Societies of Experimental Journal* 2015:29 (1 Supplement), 692.14

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

#### **INTERNATIONAL**

1. **Markowski A**, Ultrasound Imaging Contributes to Differential Diagnosis of Anterior Knee Pain in a Young Gymnast. *International Federation of Manual Physiotherapist Conference*, Melbourne, Australia 2020. (Conference canceled COVID)
2. **Markowski A**, Integrating Ultrasound Imaging as an Innovative Adjunct Teaching Tool Longitudinally Across the Musculoskeletal Physical Therapy Curriculum, Master Class *International Federation of Manual Physiotherapist Conference*, Melbourne, Australia 2020. (Conference canceled COVID)
3. **Markowski A**, Watkins M, How can Ultrasonography Enhance Medical and Physical Therapy Education. *International Conference on Medical Imaging and Case Reports*, Boston MA, November 2019
4. **Markowski A**, Watkins M, Day L, The Benefit of Incorporating Ultrasound Imaging as Adjunct Teaching Tools to Enhance Physical Therapist Students' Ability And Confidence to Perform Manual Therapy. *International Conference on Medical Imaging and Case Reports*, Baltimore MD, October 2018

5. **Markowski A**, Greenwood K. Evaluation of an Active Learning Experience for Educating Physical Therapists Students on Oral Health Screening for Health Promotion. International Federation of Manual Physiotherapist Conference, Glasgow Scotland 2016.
6. **Markowski A**, Watkins M, Thompson, Vasquez J. Development of an Injury Risk Assessment Workplace Wellness Screening Tool. International Federation of Manual Physiotherapist Conference, Glasgow Scotland 2016.
7. **Markowski A**, Watkins M, "Importance of screening participants for health and wellness programs to ensure safety and endorse individual health promotion." International Federation of Manual Physiotherapist conference, Quebec Canada 2012.
8. **Markowski A**, Pikowski J, Fauvell D, Cimino D, Caplan S. "A Pilot study analyzing the effects of Chinese cupping as an adjunct treatment for patients with subacute low back pain in relieving pain, stiffness and improving function." International Federation of Manual Physiotherapists conference, Quebec Canada 2012.
9. **Markowski A**, Hayward L, Prignanao S, Hoedkand J, Hechman H. "The role of Rehabilitative Ultrasound Imaging in the acquisition of manual palpation Skills International Federation of Manual Physiotherapist Conference, Rotterdam Netherlands 2008.
10. Corkery M, **Markowski A**. "Literature review of facet coupling in the lumbar spine" International Federation of Manual Physiotherapist Conference, Rotterdam Netherlands 2008.

## NATIONAL

11. Brooks, W., **Markowski, A.**, Taylor, K., Breunig, M. (2023) HOCUS POCUS: Integrating Ultrasound and Anatomy Across the Health Professions symposium. *American Association for Anatomy annual conference Washington DC*. March 25-27, 2023 (Accepted, 2022)
12. Manske, R., **Markowski, A.**, Hayward, L., Watkins, M., Maitland, M. (2023) Physical Therapists. Integration MSK-US Integration into Physical Therapist Clinical Practice: Directions Exemplified By Case Reports, Panel discussion, *Combined Sections Meeting (CSM)* San Diego CA, Feb. (Accepted 2022)
13. **Markowski, A.**, Maitland, M., Hayward, L., Watkins, M., Manske, R., Beneck, G. (2022) Uncovering Expert Use of Musculoskeletal Diagnostic Ultrasound Imaging in Physical Therapy Practice 2022 *Combined Sections Meeting (CSM)* San Antonio, TX from February 2-5.
14. Hayward, L., **Markowski, A.**, Watkins, M., Manske, R., Beneck, G., Maitland, M. (2022) Expert Clinical Reasoning and Decision-Making that Incorporates Musculoskeletal Ultrasound Imaging into Physical Therapists' Diagnostic Strategies *Education Leadership conference (ELC)* Atlanta GA October, 22-24
15. Watkins M, **Markowski A**: Oral presentation, Ultrasound Imaging Impact on Physical Therapy Education. AIUM April 2021

16. Watkins M, **Markowski A**, Chorlian A, Faley O, Kang J, Kuppens C. Ultrasound Imaging As an Adjunct Teaching Tool to Enhance Learning Four Shoulder Special Tests APTA Combined Sections Meeting, February 2021
17. **Markowski A**, Watkins M, Pavlich A, Lacke K, Bredahl J. Reliability of Measuring the Medial Knee Joint Space using Ultrasound Imaging. Platform Presentation, American Academy of Manual Physical Therapist Annual Conference, Reno, NV November 2018
18. Day L, **Markowski A**, Watkins M. Using Real-time Ultrasound Imaging to Enhance Students' Learning of Anatomical Knowledge in Physical Therapy Education. American Anatomist Association Conference 2018
19. Greenwood K, **Markowski A**. Teaching Oral Health Screening using Interprofessional Faculty Debriefing Simulation Model. The 2<sup>nd</sup> Interprofessional Simulation Conference Simulation as a Tool to Promote Interprofessional Education and Practice, Atlanta GA November 2017
20. **Markowski A**, Watkins M. The Benefits of Using Ultrasound to teach Knee traction in Physical Therapist Education. Platform Presentation, American Academy of Manual Physical Therapist Annual Conference, Salt Lake City, UT October 2017
21. **Markowski A**, Watkins M, Day L. Using real-time ultrasound imaging to enhance students' learning manual skills to include accurate palpation and effective joint distraction in physical therapy education. NEXT APTA Conference, Boston MA June 2017
22. Greenwood K, Kiami S, **Markowski A**, Hickey M, Canali A, Iversen M. Beyond Acute Care: Interprofessional Simulation in a DPT curriculum. Platform presentation at Education Leadership Conference October 2016.
23. **Markowski A**, Greenwood K. Curricular Implementation of Oral Health Screening Education Platform Presentation at American Academy of Manual Therapy Annual Conference, St Louis MO October 2015 (AWARD)
24. Watkins M, **Markowski A**, Gauthier P, Pempkowski L. Functional Movement Screen for Recreational Dancers: A Systematic Review, International Association for Dance Medicine & Science 25th Annual Meeting Pennsylvania, October 2015
25. Sikes R, **Markowski A**, Fraley C, Kim SH, McAdow K, Overmyer K, Rate S, Smith R. From the Slices to the Loaf: Using 3-D Design and Printing Software to Enhance Learning and Interpretation of 3-D Structures Within MRI Slices and the Clinical Application to Diagnostic Imaging, Experimental Biology Conference, Boston MA March 2015
26. **Markowski A**, Watkins M, Lampl J, Toy R, Whalen D, Rodgers R. The Effects of an Employee-Based Health and Wellness Program on Change in General Health Behaviors. APTA Combined Sections Meeting, 2014

27. **Markowski A**, Watkins M, Bogins A, Morris L, Perkins L, Rodgers R. Effectiveness of a comprehensive workplace wellness and exercise program on self-reported quality of life measures and health. APTA Combined Sections Meeting, 2014
28. Skwira R, Corkery M, **Markowski A**. “Long term follow-up of a patient with multilevel cervical spinal fusions.” American Academy of Orthopedic and Manual Physical Therapy Annual conference, 2010.
29. Hayward L, Blackmer B, **Markowski A**, Hickey M, Cahalin L. “The impact on the curriculum after implementation of the standardized patient” SOTL scholarship of teaching and learning Platform Presentation Combined Sections Meeting, 2007.
30. **Markowski A**. “Appraisal of Transversus Abdominis Retraining with the Use of Real-time Ultrasound for Biofeedback” New England American Physical Therapy Association Annual Conference, 2000.

## **REGIONAL**

31. Watkins M, **Markowski A**, Enhancing Physical Therapy Education with Ultrasound Imaging to promote Physical Therapist Excellence. APTA MA Fall Conference, Waltham MA Oct. 2017
32. **Markowski A**, Watkins M, Day L, Burnett T, Ho M, Ling M, Adams J, Dodge K, Sanfiorenzo V, Wagner G. Using Ultrasound Imaging to Provide Real- Time Visualization in Physical Therapy Learning Conference for Advancing Evidence-Based Teaching (CAET) at Northeastern University, Boston MA May 2017.
33. Watkins M, **Markowski A**, Moriarty K, Barnum J, De Monts de Savasse C, Hopkins L, Santos M Are Health and Wellness Needs Being addressed for College Students? Poster Presentation at APTA MA Fall Conference, Waltham MA Nov. 2015
34. Sikes R, **Markowski A**, Fraley C, Kim SH, McAdow K, Overmyer K, Rate S, Smith R. From the Slices to the Loaf: Using the latest technology to Development of a teaching tool to Enhancing understanding and interpretation of 3-D structures in MRI slices, CATLR teaching with technology conference, Boston MA 2015
35. **Markowski A**, Thompson L, Vasquez J, Watkins M. Exploring the Need for a Wellness Program Screening Tool. APTA of MA Fall Conference and Exposition, Waltham MA 2014.
36. **Markowski A**, Watkins M, Fenerlis A, Foley K, Szmaida K. The effects of exercise on physical and perceived health. APTA of MA Fall Conference and Exposition, 2012.

## **Non-Peer Reviewed Presentations:**

1. **Markowski, A**. “Application of Musculoskeletal Diagnostic Ultrasound Imaging” Northeastern University Sports Performance Center invited speaker Feb 8<sup>th</sup>, 2022



2. **Markowski, A.** “High Five Talk: FTNTT Faculty Fellowships” | ADVANCE: Office of Faculty Development <https://faculty.northeastern.edu/advance/event/high-five-talk-ftntt-faculty-fellowships/> Nov 2022
3. **Markowski A,** MacNeil, M, Harvan, A. Panelist, The Center for Integration of Primary Care and Oral Health and the HSDM Initiative to Integrate Oral Health and Medicine presents: Interprofessional Education: The Devil is in the Details May 6<sup>th</sup>, 2021 [https://harvard.zoom.us/webinar/register/WN\\_QxyvqxbWRhmcYAOJ8I1tMA](https://harvard.zoom.us/webinar/register/WN_QxyvqxbWRhmcYAOJ8I1tMA)
4. **Markowski, A** Panelist, Presenting Innovations and Opportunities for Collaborations as Ultrasound Imaging Emerges as a Clinical Tool “The Echoscope”. Health in Translation, Northeastern University, Boston MA January 13, 2020 <https://news.northeastern.edu/2020/01/13/health-in-translation-event-jumpstarts-collaboration-among-disciplines-to-find-solutions-to-vexing-health-challenges>
5. **Markowski, A** Teaching Session leader for Hands-on Ultrasound Symposium for Frontline Providers June 1<sup>st</sup>, 2019. [Bostonchildrens.org/ultrasoundcme](http://Bostonchildrens.org/ultrasoundcme)
6. **Markowski A,** Watkins M, Pavlich A, Lacke K, Bredahl J. Reliability of Measuring the Medial Knee Joint Space using Ultrasound Imaging. Northeastern University RISE Research Expo, 2018. Undergraduate Research Award Finalist
7. **Markowski A,** Panelist for Interprofessional student organization on pain management across the professions April 2017
8. **Markowski A,** Watkins M, Burnett T, Ho M, Ling M. Using real-time ultrasound imaging to enhance learning and clinical application of joint distraction in physical therapy education. Northeastern University RISE Research Expo, 2017. Undergraduate Research Award Finalist
9. **Markowski A.** Osteoporosis what does it mean to me, Invited Speaker, Sandwich, Women’s Group. Oct 2015
10. Watkins M, Gauthier P, Pempkowski L, **Markowski A.** Can the Functional Movement Screen Identify Risk for Injury in the Recreational Dance Population? A Systematic Review. Northeastern University RISE Research Expo, 2014.
11. **Markowski A.** Integrating rehabilitative ultrasound imaging into spinal stabilization. Bay State PT Rehab Symposium, Invited speaker 2013
12. **Markowski A,** Watkins M, Lamp J, Toy R, Whalen D, Rodgers R. “The Effects of an Employee-Based Health and Wellness Program on Change in General Health Behaviors:” Northeastern University RISE Research Expo, 2013.
13. **Markowski A,** Watkins M, Bogins A, Morris L, Perkins L, Rodgers R. “Effectiveness of a Comprehensive Workplace Wellness and Exercise Program on Self-Reported Quality of Life Measures and Health Indicators:” Northeastern University RISE Research Expo, 2013.

14. **Markowski A.** Integrating the iPad into the Classroom. Northeastern University Sixth Annual Teaching with Technology Mini-Conference on Mobile Learning. Invited speaker, 2012.
15. **Markowski A,** Watkins M, DeFilippo A, Hafensteiner A, Petit S. “Effects of a 10 Week Exercise Program on Cardiovascular Risk Factors and Biometrics:” Northeastern University RISE Research Expo, 2012.
16. **Markowski A,** Watkins M, LeMarier A, Pariente J. “Analysis of Heart Rate Recovery in a 10-Week Exercise Program:” Northeastern University RISE Research Expo, 2012.
17. **Markowski A,** Watkins M, Fenerlis A, Foley K, Szmaida K.” The Effects of Exercise on Physical and Perceived Health:” Northeastern University RISE Research Expo, 2012.
18. **Markowski A,** DeChristoforo A, Cunha J, Maher E, Read E. “Evaluation of Physical Therapy Faculty Palpation Skills Using Ultrasound Imaging, A Pilot Study” Northeastern University RISE Research Expo, 2008.
19. **Markowski A.** “The Application and Utilization of Ultrasound Imaging/Sonography in the Physical Therapy Profession” Key Note Speaker for American Physical Therapy Association MA Chapter Annual Conference, 2006.
20. **Markowski A.** “International Approach to Manual Therapy” Key Note Speaker for American Physical Therapy Association MA Chapter Spring Conference, 2005.
21. **Markowski A,** Keating L. “Advanced Cervical Spine Stabilization” Co-instructed, developed and marketed a post professional continuing education course a two day lecture and lab course Nashville, TN. 2004.
22. **Markowski A.** “Advanced Evaluation and Treatment of the Thoracic Spine” Instructed, developed and marked a post professional continuing education course on a two day lecture and lab course. Martha’s Vineyard, MA. 2003.
23. **Markowski A.** “Mobilization with Movement and associated current concepts in Taping” Morton Hospital Physical Therapy Department. Taunton, MA. 2003.
24. **Markowski A.** “Rotator Cuff Injuries” St. Vincent Physical Therapy Department Worcester, 2003.
25. **Markowski A.** “The Latest Developments in Physical Therapy Diagnosis and Treatment of the Spine” Northeastern University Lane Health Center, 2002.
26. **Markowski A.** “The Latest Research on the Spine and Clinical Implications” Fenway Community Health Center, 2002.

27. **Markowski A.** “The Prevention of Neck and Back Injuries” Northeastern University Law School, 2001, 2002, 2003.
28. **Markowski A.** “Cervical Spine and Associated Shoulder Dysfunction” a two-day lecture and lab course. Martha’s Vineyard Hospital Staff, 2001.
29. Jull G, **Markowski A.** “The Cervical Spine, Research Based Clinical Practices” a two-day lecture and lab course, Chicago, IL 2000.
30. Jull G, **Markowski A.** “Physiotherapy Management of Cervicogenic Headaches” a two-day lecture and lab course, Seattle, WA 2000.

**Funded/In Review Grant Activity External:**

1. **Markowski A,** Hayward L Watkins M, Maitland M, Beneck G, Manske Submitted \$40,000 The Impact Diagnostic Musculoskeletal Ultrasound Imaging on the Physical Therapist’ Examination and Diagnosis November 2021  
APTA Orthopedic Section Small Grants Unrestricted: In review
2. Hayward L, **Markowski A** Watkins M, Maitland M, Beneck G, Manske Submitted \$40,000 Diagnostic Musculoskeletal Ultrasound Imaging in Physical Therapy Practice: Expert-Informed Pedagogy for Teaching Physical Therapist Clinicians and Students  
APTA foundation grant: Not funded
3. Hayward L, Maitland M, Watkins M, Beneck G, **Markowski A,** Manske 2020 Awarded 8,000 November 2020, Submitted \$25,000  
Point of Care Ultrasound in Physical Therapy Practice, Uncovering Novice to Expert Professional Pathways to Inform an Evidence-Based Pedagogical Approach.  
National APTA Academy of Education Grant
4. **Markowski A,** Greenwood K (C0-PI) Awarded: \$2,000  
To compare the effects of using simulation experiences vs reflection and simulation or case based studies and reflection in teaching 3<sup>rd</sup> year professional Physical therapy students to complete an oral health screen.  
Dental Quest 2015
5. **Markowski A** Awarded: \$60,000  
Using Real time Ultrasound Imaging to improve clinical practice and teaching.  
Private Health and Wellness Benefactor. 2015
6. Greenwood K, **Markowski A** (C0-PI) Awarded: \$2,000  
Creation and Implementation of an Educational Module in the Doctor of Physical Therapy Curriculum to Promote Oral Health Screening and Collaborative Interprofessional Patient Care.  
Dental Quest 2014
7. **Markowski A (PI)** Jack Dennerlein Rejected: \$15,000

The Emerald Small Business Model Health and Wellness Program Pilot *Aimed to disseminate integrated worker health programs among small/medium employer.*  
HSPH Center for Work, Health and Wellbeing with Pilot Project Program Harvard 2013

8. **Markowski A**, Rejected: \$40,000  
Assessing the compliance and effectiveness and of an evidence based employer sponsored health and wellness program on changes in cardiovascular risk factors, perceived health, wellness and fitness.  
American Physical Therapy Foundation 2011
9. Hayward L (PI), **Markowski A (CO-PI)**, Cahalin L (CO-PI). Awarded: \$10,000  
Evaluate the comfort and benefits of the I Bracelet on wrist pain while working at a computer station.  
Wellgate Company 2007.

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

1. **Markowski A**. Full-Time Faculty Professional Development Fund (FFPDF) Applied: \$2000  
Registered Musculoskeletal Sonographer (RMSK) certification in diagnostic ultrasound imaging. 2022
2. **Markowski A**, Watkins M, Day L Awarded: \$15,000  
Using Real-time Ultrasound Imaging to enhance learning and clinical application of anatomy, biomechanics, motor control and patient care across the Physical Therapy Curriculum.  
Grants for Advancing Undergraduate Teaching and Learning at Northeastern Tier 3 2016
3. Sikes R, **Markowski A** (Co-PI) Awarded: \$10,000  
Advancing Undergraduate Teaching and Learning at Northeastern. From the Slices to the Loaf: Using 3-D printing to enhance learning and clinical application of cross-sectional neuroanatomy and diagnostic imaging. 2014
4. **Markowski A (PI)** Awarded: iPad2  
Application of mobile digital media to facilitate and streamline the creation of education/podcast material and the development of student faculty interactive assessments for use in the community and classroom. Northeastern University Education and Technology Digital Media Grant, Dec 2011.
5. **Markowski A**, Watkins M. Faculty Supervisor, Awarded: \$1625  
Emerald Health and Wellness Project- Reducing Cardiovascular Risk Factors,  
NU Provost Undergraduate Research Grant, 2011.
6. **Markowski A**, Watkins M. Faculty Supervisor, Awarded: \$1696  
Emerald Health and Wellness Project- Heart Rate Recovery Group, NU Provost Undergraduate Research Grant, 2011.

7. **Markowski A**, Watkins M. Faculty Supervisor, Awarded: \$1470  
The Effects of Exercise in Physical and Perceived Health, NU Provost Undergraduate Research Grant 2011.
8. **Markowski A**, Watkins M. Faculty Supervisor, Awarded: \$1000  
A Pilot study analyzing the effects of Chinese cupping as an adjunct treatment for patients with subacute low back pain in relieving pain, stiffness and improving function, NU Provost Undergraduate Research Grant 2009.
9. **Markowski A (PI)** Awarded: Digital Camera with HD capabilities  
Designing an educational module to be utilized in Musculoskeletal evaluation and treatment PTG225 to create an online forum to further analyze therapeutic exercise prescription for specific patient case scenarios. Northeastern University Education and Technology Digital Media Grant, 2009.
10. **Markowski A**, Faculty Supervisor, Awarded: \$1000  
Evaluating the effects of education on faculty palpation skills, NU Provost Undergraduate Research Grant 2007.
11. **Markowski A(PI)**, Lorna Hayward(CO-PI), Awarded \$5000  
Uncovering Motor Control Mechanisms below the Surface: Real Time Ultrasound as Teaching Methodology for Physical Therapist Students. Provost Internal Instructional Development Grant, 2006.
12. Hayward L, **Markowski A**, Faculty Supervisor. Awarded \$1000  
Uncovering Motor Control Mechanisms below the surface. NU Provost Undergraduate Research Grant, 2005

**Current/Active Research Activity:** I am collaborating with a group of clinicians and educators from across the country to design and pilot test an expert and evidence informed pedagogical framework to teach clinicians and students the clinical reasoning and psychomotor skills required for diagnostic MSK-US use in clinical practice. We meet weekly throughout the year to perform the research and disseminate our findings.

**Membership in Scientific/Professional Organizations:**

American Physical Therapy Association 1993 -Present  
 Massachusetts Chapter member  
 Orthopedic section  
 Imaging Sig  
 American Academy of Manual Physical Therapy 1998 -Present  
 Accepted as a fellow of the Academy in 1999, renewal 2010  
 Australian Physiotherapist Association 1999 -2004  
 Accepted as a member of Manual Physiotherapist Association 1999 –2004

**Consultative and Advisory Positions Held:** See service to the profession

### **Community Services:**

1. Hero's in Transition Board of Directors, Board Member 2017- 2021
2. Hero's in Transition Medical Support Coordinator Ruck for Relay 2016- present
3. Falmouth Road Race Volunteer 2014, 2015, 2017, 2018
4. Volunteered for Massage Therapy for Pan Mass Challenge 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019
5. Invited Presenter at Healthy Living Expo- Cape Cod, MA 2010, 2011, 2012
6. Participated in health fair for Liberty Mutual 2004
7. Performed MA State House ergonomic assessments 2003
8. Annual Boston YMCA injury screening clinic 2002

### **Service to the Profession:**

1. American Academy of Orthopedic Physical Therapy Imaging Sig Research Committee 2020-present
2. Reviewer for publication in the Eastern Mediterranean Health Journal 2015-2020
3. Reviewer for publication in the Journal of Physiotherapy Theory and Practice 2022
4. member of The American Institute of Ultrasound in Medicine (AIUM) 2021- present
5. Editorial Review Board for Musculoskeletal Imaging Manuscripts for Journal of Orthopedic Sports Physical Therapy Dec 2011- 2019
6. Appointed as an External Assessor of Fellowship programs for the Member organizations of IFOMPT (International Federation of Manual Physiotherapy) 2016
7. American Academy of Manual Physical Therapy Standards Committee 2011-present- Chair 2015-present
8. AAOMPT Ethic and Code of Conduct Task force – Chair 2019- 2020
9. Task force, Bid Committee for hosting IFOMPT 2024 2018- present- secretary
10. Bid Committee for hosting IFOMPT 2020 and submitted 20 page bid and video 2016,
11. American Academy of Manual Physical Therapy Capitol Hill Advocacy 2011
12. American Academy of Manual Physical Therapy International Affairs Committee 2004-2017
13. American Academy of Manual Physical Therapy Nominating Committee elected 2004 Chair (2006-7)
14. American Academy of Manual Physical Therapy Education Committee 2002 – 2004

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

#### *University*

Sports performance diagnostic ultrasound clinic for the athletes 3 hours a week Fall and Spring semesters 2022

#### *Bouvé College of Health Sciences*

Graduate Curriculum Committee, member, 2018-present

Health in Translation Conference Committee- 2019-2020

Ad-Hoc Clinical Promotions Committee 2013- 2014, 2019- present

Ultrasound Planning Conference Group 2018- 2019

Undergraduate Curriculum Committee, member, 2010-present, Chair 2014- 2018

Annual Faculty Phonathon, participant spring 2003- 2018

Health Science Fridays, Faculty representative, 2003- 2015

Undergraduate Academic Affairs Committee, member 2002-2005, 2006-2010, Chair 2004, 2007- 2010  
Graduate Open House, Faculty representative, 2008  
Fostering international partnerships, Australia- Bond University 2009  
Alumni Host Committee, Faculty representative, summer 2004  
Interdisciplinary Committee “Pain Grand Rounds” spring 2003

#### *Physical Therapy Department*

Administrative Council 2018- present  
Director of Curriculum and Outcomes 2018- present  
Clinical Promotions Committee, member, 2012-2014, 2018- present  
Post Baccalaureate Application Review Committee 2017- 2018, 2020-present  
Admission coffee hours for perspective students 2021  
Curriculum Committee, member, 2003-2004, chair 2010- 2018  
Mock Boards Coordinator 2013- 2018  
Department Search Committee, member, 2012-2014, 2015  
Faculty Class Representative 2002- 2003, 2007-2014  
Alumni Committee, member, 2004- 2017, co-chair 2009-2010, 2014-2016  
Merit Committee, member, 2003- 2004, 2006- 2012  
Outcomes Committee, member, 2006- 2010, chair 2007-10  
PT/ AT task force, member, 2006- 2007  
Continuing Education Committee, member, 2004- 2006  
PT Club, advisor, 2003- 2006  
Musculoskeletal Steering Committee, member, 2000

#### **Awards:**

1. AIUM Sonographer/Sonography **Student Professional Education and Growth Scholarship** supported by the AIUM future fund Awarded \$500 2021
2. Recipient of **the Full-time Non Tenure-Track (FTNTT) Faculty Fellowship** to pursue my Registered Musculoskeletal Sonographer (RMSK) certification in diagnostic ultrasound imaging 2021-2022
3. **AAOMPT Innovation Award.** The Innovation Award is an individual award for an AAOMPT member whose achievements have promoted excellence through extraordinary innovation. American Academy of Orthopedic Manual Physical Therapy 2021
4. **Undergraduate Research Presentation Finalist** Markowski A, Watkins M, Pavlich A, Lacke K, Bredahl J. Reliability of Measuring the Medial Knee Joint Space using Ultrasound Imaging. Northeastern University RISE Research Expo, 2018.
5. **Undergraduate Research Presentation Finalist** -Markowski A, Watkins M, Burnett T, Ho M, Ling M. Using real-time ultrasound imaging to enhance learning and clinical application of joint distraction in physical therapy education. Northeastern University RISE Research Expo, 2017
6. **Innovation in Teaching Award** - Northeastern University Department of Physical Therapy, Movement and Rehabilitation Sciences – 2017

7. **First Place Best 5 x5 Cervical / Thoracic Platform** – AAOMPT annual conference **Dr. Alycia Markowski** and her co-investigators: "Examining physical therapy students' ability to evaluate findings from an oral health screening in evaluation and management of the temporomandibular joint" -2016
8. **Mentor for Dean's Medal recipient**, Lyne Archambault-Ezenwa, doctoral capstone project, 2015; Archambault-Ezenwa L, Brewer J, **Markowski A.** A Comprehensive Physical Therapy Approach including visceral manipulation after failed biofeedback therapy for Constipation. Tech Coloproctol 2016.
9. **Excellence in Teaching Award Nomination** Northeastern University College of Professional Studies-2013

### Continuing Education Attended

- |      |  |
|------|--|
| 2022 | <ol style="list-style-type: none"> <li>1. Emergency Medical Response for the Athlete Re-Certification Course 20 CEU- March Boston, MA 2022</li> <li>2. American Academy of Orthopedic Manual Therapy Annual Conference- San Diego California Nov 2022</li> <li>3. Combined Sections Meetings CSM- San Antonio TX Feb</li> <li>4. RMSK registry review course Masters Msk Ultrasound – 22 contact hours -virtual</li> <li>5. Physics Exam refresh – 20 contact hours</li> <li>6. Gulf Coast Ultrasound Academy Review Course, 16 contact hours St. Petersburg FL., April 14<sup>th</sup></li> </ol> |
| 2022 | <ol style="list-style-type: none"> <li>7. AIUM and Sports Medicine Ultrasound Academy webinars 12 contact hours</li> </ol>   |
| 2021 | <ol style="list-style-type: none"> <li>1. American Academy of Orthopedic Manual Therapy Annual Conference- Cleveland OH</li> <li>2. <i>Combined Sections Meetings CSM</i>- Virtual Feb 2021</li> <li>3. Masters Msk Ultrasound</li> <li>4. Webinars on MSK-US image ,</li> <li>5. Racial &amp; Cultural Literacy Trainings</li> </ol>  |
| 2020 | <ol style="list-style-type: none"> <li>1. American Academy of Orthopedic Manual Therapy Annual Conference –November 2020- Virtual</li> <li>2. <i>Combined Sections Meetings CSM</i>- Virtual</li> </ol>  |
| 2019 | <ol style="list-style-type: none"> <li>1. Emergency Medical Response for the Athlete Certification Course 20 CEU- March Boston, MA</li> <li>2. Hands-on Ultrasound Symposium for Frontline Providers June 1<sup>st</sup>.Boston MA.<br/><a href="http://Bostonchildrens.org/ultrasoundcme">Bostonchildrens.org/ultrasoundcme</a></li> <li>3. American Academy of Orthopedic Manual Therapy Annual Conference –Orlando, FL</li> <li>4. Medical Imaging and Case Report Conference – Boston, MA</li> </ol>   |



- 2018
1. *American Academy of Orthopedic Manual Therapy Annual Conference* –Reno, NV
  2. *Medical Imaging and Case Report Conference* – Baltimore, MD
  3. *NASEM Health and Medicine Conference: The Role of Nonpharmacological Approaches to Pain Management.*
- 2017
1. *Certification in Musculoskeletal Ultrasound Sonography 72CEU*
  2. *Module 1 (upper extremity)*
  3. *Module 2 (lower extremity and lumbar spine)*
  4. *Modules 1 Practical Workshop* – Astoria, NY
  5. *Modules 2 Practical Workshop* – Astoria, NY
  6. *American Academy of Orthopedic Manual Therapy Annual Conference* –Salt Lake City, UT
  7. *2017 CATLR Teaching with Technology Conference-* Boston, MA
  8. *NEXT APTA Annual Conference* – Boston, MA
  9. *American Physical Therapy Association MA Chapter Fall Conference and Exposition* Needham, MA
- 2016
1. *International Federation of Manual Physiotherapist Conference* – Glasgow, Scotland
  2. *American Academy of Orthopedic Manual Therapy Annual Conference* –St. Louis, MO
  3. *Combined Sections Meetings CSM-* Anaheim, CA
- 2015
1. *American Physical Therapy Association MA Chapter Fall Conference and Exposition* Needham, MA
  2. *American Academy of Orthopedic Manual Therapy Annual Conference* –Louisville, KY
  3. *2015 CATLR Faculty Teaching with Technology Conference-* Boston, MA
  4. *Experimental Biology Conference, March* –Boston, MA
  5. *CPS 2015 Fall Faculty Conference-* Boston, MA
- 2014
1. *Shifting the Paradigm, the CPS Faculty Development Conference-* Boston, MA
  2. *Combined Sections Annual APTA conference* – Las Vegas, NV
  3. *American Physical Therapy Association MA Chapter Fall Conference and Exposition* Needham, MA
  4. *Monthly 5 Minute teaching Development Seminars* – Online
- 2013
1. *American Academy of Orthopedic Manual Therapy Annual Conference-* Cincinnati, OH
  2. *2013 Bay State PT Rehab Symposium* – Boston, MA
  3. *Introduction to E-Learning Instructor Training-* Online course

### **Current Northeastern University Teaching Load**

### **2022-2023 PhD Human Movement and Rehabilitation Sciences program Qualifying Exam Committee Member for Corey Lanois**

#### **Fall – Contract 2022**

1. MS 3 new course – 3 credits

2. MS 3 lab new course – 1 credit 2 contact hours
3. Diagnostic Imaging – 3 credits
4. Medical screening – 4 credits

### **Spring – Off Contract**

1. NTT- Faculty Fellowship

### **½ Summer - Off Contract**

1. Musculoskeletal 2 Lecture 4 credits
2. Musculoskeletal 2 Lab- 1 credit 3.5 contact hours
3. Northeastern University College of Professional Studies Faculty- Diagnostic Imaging – 4 credits

### **All Continuing Education**

- 1996 *Joyner Sports Medicine National Conference* – Hilton head, SC  
22.5 contact hours  
*Eighth Annual Stroke Rehabilitation Conference* – Boston, MA  
12 contact hours  
*On the Offensive for Coaches and Athletes* – Braintree, MA  
6 contact hours  
*The Impact of ADA on Clinical Education* – Needham, MA  
8 contact hours
- 1997 *Counseling Strategies to Improve Student Performance* – Albany, NY  
8 contact hours  
*Iontophoresis Update* – Saratoga, NY  
8 contact hours
- 1998 *Maitland Approach to peripheral Joint Mobilization* – Saratoga, NY  
21 contact hours  
*Amputee Running Clinic* – Glens Falls, NY  
12 contact hours
- 1999 *The Complex Shoulder by Sally Hess* – Taronga, Queensland  
12 contact hours  
*Diagnosis and Dynamic Assessment and Management of the Complex Shoulder*  
by Mary Magarey and Mark Jones - St Lucia, Queensland  
8 contact hours  
*Real-time Ultrasound Application and Equipment* by Julie Hides - Taronga, Queensland  
20 contact hours
- 2000 *International Federation of Manual Physiotherapist Conference* – Perth, Australia  
40 contact hours  
*Mulligan Nags and Snags* - Perth, Australia

20 contact hours  
*Pain Core Curriculum* – Milford, MA  
2.1 contact hours

- 2001 *New England American Physical Therapy Conference* - Portland, ME  
16 contact hours  
*Advance Shoulder Rehabilitation* – Portland, ME  
4 contact hours
- 2002 *American Academy of Orthopedic Manual Therapy Annual Conference* – Orlando, FL  
21 contact hours
- 2004 *International Federation of Manual Physiotherapist Conference* – Cape Town, South Africa  
40 contact hours  
*Arthritic Athletic Knee-* Boston, MA  
8 contact hours
- 2004 *American Academy of Orthopedic Manual Therapy Annual Conference* – Louisville, KY  
21 contact hours  
*Amputee current treatment at rehabilitation-* Stoughton, MA  
12 contact hours
- 2005 *Ten Easy Ways to Lose your License* – Boston, MA  
1.5 contact hours  
*Enrolled in the Transitional DPT at Northeastern University-* Boston, MA  
*Medical Screening*  
4 quarter hours  
*Diagnostic Imaging*  
4 quarter hours  
*Nutrition*  
4 quarter hours  
*Pharmacology*  
3 quarter hours
- 2006 *Enrolled in the Transitional DPT at Northeastern University-* Boston, MA  
*Capstone Case Course*  
3 quarter hours  
*American Physical Therapy Association MA Chapter Annual Conference-* Marlboro, MA  
6 contact hours  
*American Academy of Orthopedic Manual Therapy Annual Conference* – Charlotte, NC  
21 contact hours
- 2007 *Combined Sections Meeting of the APTA* – Boston, MA  
5 contact hours  
*American Academy of Orthopedic Manual Therapy Annual Conference* – St. Louis, MO  
21 contact hours

- 2008 *International Federation of Manual Physiotherapist Conference – Rotterdam, Netherlands*  
40 contact hours  
*American Physical Therapy Association South East MA Chapter Annual Conference- Cape Cod, MA*  
3 contact hours
- 2009 *American Academy of Orthopedic Manual Therapy Annual Conference –Washington DC*  
21 contact hours  
*Neurosurgeon evening lecture on advances in Kyphoplasty- Barnstable, MA*  
6 contact hours  
*American Physical Therapy Association South East MA Chapter Annual Conference -Cape Cod, MA*  
3 contact hours
- 2010 *American Academy of Orthopedic Manual Therapy Annual Conference –San Antonio, TX*  
21 contact hours  
*Evidence Based practice of Musculoskeletal Imaging in Orthopedic Physical Therapy– Boston MA*  
8 contact hours
- 2011  
*American Academy of Orthopedic Manual Therapy Annual Conference –San Antonio, TX*  
*Evidence Based Practice of Musculoskeletal Imaging in Orthopedic Physical Therapy– Boston MA*
- 2012  
*American Physical Therapy Association MA Chapter Annual Conference- Wellesley, MA*  
*International Federation of Manual Physiotherapist Conference – Quebec, Canada*  
*American Physical Therapy Association Audio conference-PTs in the Community: Innovative Marketing to Grow Your Brand and Business*  
*Combined Sections Annual APTA conference – Chicago, IL*  
*Northeastern's sixth annual Teaching with Technology mini-conference on Mobile Learning - Boston, MA*  
*Association for the Assessment of Learning in Higher Education Second Annual conference. - Albuquerque, NM*