



## **APTA South Carolina 2025 Annual Conference**

March 21<sup>st</sup> – 22<sup>nd</sup>, 2025

MUSC – Charleston, SC

### **Course Descriptions**

#### **Friday March 21<sup>st</sup>, 2025 – 12:00 – 2:00 pm**

##### **Course Title: Holistic Shoulder Pain Management in SCI: Comprehensive Examination and Treatment**

**Speaker:** Sara Kraft PT, DPT, NCS and Gretchen Seif PT, DPT, OCS, FAAOMPT

**Description:** Shoulder pain has been reported in 30-73 % of people with spinal cord injury (SCI). The most common shoulder injury after SCI is rotator cuff pathology, which includes rotator cuff tears, impingement, and tendinopathy. Many patients with SCI get referred to Physical therapy to manage this shoulder pain. Traditional physical therapy often handles management, including rotator cuff strengthening, ROM, and modalities. Patients with SCI have more complex needs after shoulder injury as compared to their able-body counterparts. Wheelchair setup and propulsion, transfers, bed mobility, and sleep position are a few areas that must be evaluated and addressed in this population when they present with shoulder pain. The holistic approach is critical to allow these individuals to have a complete recovery while maintaining their independence.

This course will comprehensively discuss examination and treatment for individuals with SCI and shoulder pain. Participants will learn traditional orthopedic and neurological examination components and have the opportunity for hands-on practice. Case studies will guide the discussions throughout the course, and participants will be left with a comprehensive tool for evaluating and treating shoulder pain in the SCI individual.

##### **Course Title: Help! My Patient Has Myasthenia Gravis! What Do I Do?**

**Speaker:** Liz Plowman, PT, DPT, M.Ed, OCS, TPS

**Description:** Myasthenia Gravis (MG) is a rare neuromuscular disorder characterized by the hallmark symptoms of rapidly fatigable and fluctuating muscle weakness, presenting unique challenges in physical therapy intervention. Due to the potential risk of symptom exacerbation, typical exercise prescriptions may not only be ineffective but could also be dangerous for individuals with MG. However, MG patients still require interventions to support strength, balance, mobility, activities of daily living (ADLs), and overall safety. This session will focus on both assessment and treatment strategies specific to MG, providing physical therapists with a

comprehensive toolkit for managing these patients effectively. Attendees will gain insight into the intricacies of MG symptom management, with an emphasis on safe exercise modifications and patient-centered adjustments. Through real-world case examples and evidence-based strategies, participants will learn how to evaluate MG-specific treatment needs, tailor interventions to enhance function, and prevent symptom exacerbation. Practical recommendations will include targeted assessment tools, adaptive exercise protocols, and safety guidelines, empowering therapists to provide safe, effective care for patients with MG.

## **Course Title: Maximizing the Impact of Home Exercise: Challenges and Opportunities of Telehealth**

**Speaker:** Catherine Lewan, PT DPT C-IAYT

**Description:** This presentation explores the challenges and solutions in optimizing home exercise programs for post-stroke patients in a telehealth-supported research trial. The study had two phases:

Phase 1: In-lab gait training, balance, and meditation sessions (20 minutes each, 3x/week) supervised by PT/OT.

Phase 2: At-home gait training, balance, and meditation sessions (20 minutes each, 3-5x/week), monitored remotely by the PT/OT team.

**Challenges:** Ensuring a safe, effective at-home regimen was challenging due to variable caregiver support, limited access to equipment, cognitive deficits, and complexities with a paired cerebellar e-stimulation device. Compliance and motivation were difficult to maintain amid logistical and health constraints.

**Solutions:** Safety was ensured through in-lab supervision and customized at-home programs, frequently modified based on participant feedback. DPT students were employed to provide additional oversight, enhancing participant safety and engagement. Caregivers were trained to support adherence, and motivational interviewing helped sustain engagement. Telehealth enabled at-home supervision and real-time adjustments, creating a flexible, supportive framework to help participants successfully complete an active three-month intervention.

## **Course Title: Comprehensive Cadaveric Prosection of the Upper Extremity, Back, and Neck**

\*Recommended course prior to dry needling course on Saturday

\*\*limited to 18 attendees

**Speaker:** Stephanie McGowan, PT, DSc, OCS and Scott Hutchison, OTD, OTR/L, MSR, AS

**Description:** In the dynamic field of physical therapy, a profound understanding of anatomy is essential for effective patient care. This course is designed for practicing physical therapists seeking to refresh their anatomical knowledge and enhance their comprehension of the three-dimensional relationships and structures they treat daily, with a specific focus on the shoulder, upper back and neck regions.

Hosted in a cadaver lab, this immersive experience will reintroduce participants to the intricate anatomy of the shoulder. Through hands-on dissection and detailed examination, therapists will revisit key anatomical landmarks, muscle groups, ligaments, nerves, vessels, and other critical structures of the shoulder. The course emphasizes the interconnectedness of these components, highlighting how deviations in one area can impact overall shoulder function.

## **Friday March 21<sup>st</sup>, 2025 – 2:30 – 3:30 pm**

### **5x5 Presentation: Ortho/Research Group**

Immediate Effects of Dry Needling on Gluteus Medius Performance: An Experimental Study

**Presenter:** Jacob Thorpe and James Floyd

Associations Between Landing Error Scoring System and Lower Extremity Stiffness During Hopping

**Presenter:** Jonathan Goodwin

Relationship between Echo Intensity and Functional Muscular Endurance in Strength Athletes

**Presenter:** Jonathan Goodwin

The Rate of Force Development Between Various Strength Training Disciplines

**Presenter:** Jonathan Goodwin

Functional Movement Screen and Complimentary Assessments on Injury and Risk Prediction Accuracy of Collegiate Athletes

**Presenter:** Schuyler Ossman, Zach Markiewicz, Angela Stagliano,

Comparing the Impact of BFR on Quadriceps Fatiguability in Luteal vs. Non-Luteal Phases

**Presenter:** Angela Stagliano, Bailey Treadway, Jonathan Masters

Physical Therapy Management of Anterior Ankle Impingement

**Presenter:** Bret Cassaday

### **5x5 Presentations: Neuro/Geriatrics Group**

Discharge Your Patient Home: Implementing Functional Caregiver Training for Patients with Stroke in Inpatient Rehabilitation

**Presenter:**

Examining Differences in Instrumented 20-Meter Walk Test Between Parkinson's Disease Subtypes

**Presenter:** Jordyn Mattison and Roxi Rikard

Differences in backward walking speed and forward walking gait variability for people with multiple sclerosis who experience falls compared to those who do not.

**Presenter:** Meghan O'Farrell

Effects of power training on muscular and locomotor function in chronic stroke: a case report

**Presenter:** Cailin Dorsey

## **5x5 Presentation: Education/Acute Care/Cardio**

Functional Recovery Following LVAD Implantation in Muscular Dystrophy: Patient Case Study

**Presenter:** Katie Rogers PT, DPT and Mackenzie Mullan, PT, DPT

Measuring the Possibilities: Feasibility of Functional Outcomes Post-LVAD Implantation

**Presenter:** Amanda Ward, PT, DPT, GCS

Lived Experience of Caregivers for Patients in Pro Bono University Clinics: An Interpretative Phenomenological Analysis

**Presenter:**

Exploring financial toxicity in a pro bono rehabilitation clinic: a study protocol

**Presenters:** Alena Joyce, Jessica Baxter, Jami Tham

Assessing health-related quality-of-life changes in underinsured patients receiving rehabilitation services in an interprofessional student-run free clinic: a protocol

**Presenters:** Alison Shuler, Gretchen Seif, Corey Morrow

## **Friday March 21<sup>st</sup>, 2025 – 3:45 – 4:45 pm**

### **Course Title: Pedaling Across Pediatric Settings: How to Incorporate Adaptive Cycling into Your PT Practice**

**Speaker:** Kaitlyn (Kaitie) Burke PT, DPT, PCS; Ethan Lyle PT, DPT; Kelly Boyle

**Description:** Adaptive cycling is a common intervention used in physical therapy practice to improve outcomes related to health, well-being and participation of children with disabilities across the International Classification of Functioning, Disability and Health ICF. Evidence has shown that children with cerebral palsy who perform adaptive cycling demonstrate improved gross motor function, cardiovascular fitness, hamstring strength and balance.<sup>1</sup> Adaptive cycling's benefits are also documented to support children's self-esteem and social relationships with children using adjectives such as "fun", "wicked", and "proud" to describe their adaptive cycling experiences.<sup>5,6</sup> However, body of evidence surrounding adaptive cycling is currently evolving and requires additional high-quality research to explore cycling dosing, parameters (of what the child's characteristics, cycles qualities??), benefits across the ICF including the environmental access to DME.<sup>1,3,4</sup>

This presentation aims to discuss and highlight current evidence and directions for future research, explore adaptive cycling programs and related outcomes across multiple pediatric settings in South Carolina (i.e., outpatient, inpatient, school based, and the community), and review currently available adaptive cycles and funding possibilities.

**Course Title: Treatment for Chemotherapy-Induced Peripheral Neuropathy with Physical Therapy – A Hands-on, Evidence-Based Workshop.**

**Speaker:** Katie Schmitt, PT, DPT, CLT, Board-Certified Clinical Specialist in Oncologic Physical Therapy

**Description:** 65% of patients receiving chemotherapy will develop neuropathy in their hands or feet. Neuropathy presents as pain, numbness, tingling, burning, swelling and discomfort that affects quality of life. Currently there is no protocol for treating CIPN. Physical therapy, broadly, has been shown to be helpful for CIPN. Physical therapy techniques such as manual therapy, resistance exercises, stretching and balance training have shown themselves to be effective for similar conditions such as diabetic neuropathy, Morton's Neuroma, and Plantar Fasciitis. Combining the evidence and putting it into practice, we are developing a protocol, shown to be 80% effective in patients with various cancer types with CIPN, to decrease symptoms, decrease fall risk, and get patients back to walking and feeling like themselves over the course of about 8-12 weeks. This course will cover the background of why chemotherapy causes neuropathy, what the previous evidence is about treating neuropathy, study of outcome measures and tests for evaluating neuropathy, a review of a case series of 20 patients treated at Hollings Cancer Center, with both multiple myeloma and breast cancer, over 2 years, and hands on education of the manual therapy technique and resistance band exercise for treating patients with CIPN.

**Course Title: Demystifying Evidence-Based Neurologic Rehab: Translating CPGs to Practice**

**Speaker:** Sara Kraft PT, DPT, NCS; Victoria Wilson Harris, PT, DPT, NCS; Eric Monsch, PT, DPT, NCS; Sarah Cline Elder PT, DPT, NCS

**Description:** Studies show that 55% of patients in the US received care consistent with the latest evidence. There are many reasons cited for why practitioners do not engage in evidence-based practice (EBP) ranging from time, importance, and having a lack of knowledge on how to search or access to evidence. This disparity between practice and evidence creates a gap that physical therapists must address. The APTA Neurological Academy has published several clinical practice guidelines (CPG) on neurological diagnosis. Despite these published CPG's many clinicians are not integrating current evidence into practice. This failure to implement CPG's has been cited in the literature with the reason for failure to implement ranging from lack of clarity of recommendations to the lack of applicability. This session will discuss the Locomotor CPG and the Parkinson's Disease CPG. We will identify barriers to translating knowledge and introduce the knowledge-to-action translation cycle in context with clinical case studies to facilitate translation to practice. Participants will apply the information from these CPG's to the case studies presented to facilitate knowledge translation in the clinic.

## **Course Title: Screening for Medical Referral: The “Do Not Want to Miss List” of Serious Medical Conditions.**

**Speaker:** William Boissonnault PT, DPT, DHSc, FAAOMPT, FAPTA

**Description:** Physical therapists have a critical responsibility to recognize patients who require referral to other health care providers. However, the possibility of serious underlying pathology should always be considered when examining a patient. This interactive session will include a pragmatic approach to the medical screening process with an emphasis on 5 medical conditions (skin cancer, deep vein thrombosis, pulmonary embolism, major depressive disorder and suicide risk) that carry great significance in terms of incidence, morbidity, mortality, health care costs, and diagnostic challenges for clinicians. These conditions are relevant to all practice settings and to a majority of patient populations. Skin cancer is among the most common disorders in the United States and many people of color don't “fit” the classic/expected skin cancer presentation. Pain from deep vein thrombosis and pulmonary embolism is often absent in early stages of the disorder, so how can clinicians recognize patients at risk for these potentially deadly disorders. Last, due to losses many of our patients suffer, vigilance for early signs of a major depressive disorder and potential suicide risk is critical. Strategies to collect this potentially sensitive and personal information will be provided, followed by strategies for situations where the patient acknowledges suicide ideation. Using patient case examples and current perspectives in clinical practice, an emphasis will be placed on describing pertinent patient history and physical examination findings that will prompt physical therapists to initiate timely physician referrals.

**Saturday March 22<sup>nd</sup>, 2025 – 8:00 – 9:00 am**

**Course Title: Sit down and buckle up! Let's talk about car seat safety**

**Speaker:** Amber Gadow PT, DPT, PCS, CPST

**Description:** Children under the age of 8 should be riding in the car using a safety seat, however, car seats are frequently misused or are not correctly installed, making car accidents a leading cause of death in children. Learn basic facts about car seat usage, how to pick the correct seat and position for a child's size and age and common misuses or installation errors. The more we know the better we can provide helpful patient education to parents. If you are treating pediatric patients this means a large portion of your population should be using a car seat. Other settings are also welcome to attend! We know many patients might attend PT with an infant or child along with them, such as those patients attending pelvic health PT postpartum.

**Course Title: Beyond Cauda Equina: Managing Urinary Incontinence in Patients with LBP**

**Speaker:** Kristen Vick PT, DPT, WCS

**Description:** Urinary incontinence is common in patients with low back pain, primarily female patients. While physical therapy professionals are often familiar with the correlation between cauda equina syndrome or lumbar disc herniation on bladder function and the need for advanced referral to MD, they may be less prepared to deal with the impact of stress and urgency incontinence associated with non-specific low back pain on their patients/clients. Low back pain and urinary incontinence are associated in large epidemiological studies, and the presence of one condition seems to predispose the development of the other. But what does the evidence say about how best to manage these concurrent conditions? This presentation will focus on a review of the latest evidence, the quality-of-life impact of urinary incontinence, and provide tools for addressing the psychosocial and physical components of this presentation. By the end of this presentation, attendees will learn how to implement basic pelvic floor strengthening into their treatment "toolbox" to support their patients in the rehabilitation process.

**Course Title: Nip Preclinical Mobility Limitations in the Bud: APTA Geriatrics' Annual Mobility Screen Initiative**

**Speaker:** Michelle M. Lusardi PT, DPT, PhD, FAPTA. (representing the APTA Geriatrics Annual Mobility Screen Task Force)

**Description:** Geriatricians have recently defined a "preclinical" transitional stage on the disablement trajectory from independence through mobility limitation to disability in community living older adults. Physical Therapists, as the health care professions who truly understand movement, are best prepared to identify subtle decline in functional performance. Learn about

APTA Geriatric's Annual Mobility Screen Initiative, focused on preventative care and wellness. Its evidence-based protocol is based on age and gender reference values (norms) on commonly used functional tests and measures. Review performance interpretation guidelines to identify pre-clinical and overt mobility limitation. Access additional resources, including a participant "report card", recommendations for participant education and intervention based on screening results, referral forms, and list of community resources aimed at increasing activity. Learn how to integrate screening into your practice and consider taking part in a national "roll out" of the initiative in Oct. 2025 PT month. Use the protocol to bring new patients into your practice, providing the care and education they need to embrace activity and improve their mobility. Join APTA Geriatric's clinical research effort to build "big data" that will improve accuracy of reference values and enhance clinical decision making.

### **Course Title: Leverage Employer Benefits to Maximize Your Paycheck**

**Speaker:** Elizabeth Gumbiner, M.Ed. Director of Student Financial Literacy

**Description:** In this engaging one-hour session, participants will discover practical ways to increase their take-home pay, grow their savings, and make the most of their employer-provided benefits. Through interactive discussions and real-world examples, attendees will learn strategies to enhance their financial well-being and leverage workplace benefits effectively for long-term success.

**Student Track: 9:00 – 10:00 am**

### **Course Title: Smart Borrowing: Managing Student Loans and Preparing for Repayment**

**Speaker:** Elizabeth Gumbiner, M.Ed. Director of Student Financial Literacy

#### **Description:**

This interactive one-hour session includes a student loan repayment simulation designed to help students make informed borrowing decisions and develop a clear strategy for repayment. Participants will explore best practices for managing student loans and gain experience simulating repayment options to ensure financial wellness post-graduation. \*Bring personal device (phone, iPad, or laptop) for simulation.

**Saturday March 22<sup>nd</sup>, 2025 – 11:30 – 12:30 pm**

**Course Title: Lisa Saladin Lecture Series**

**Speaker:** Gretchen Seif, PT, DPT, OCS, FAAOMPT



## **Saturday March 22<sup>nd</sup>, 2025 – 1:30 – 5:00 pm**

### **Course Title: Targeted Dry Needling: Rotator Cuff and Upper Trapezius in Clinical Practice (\*\*limited to 32 attendees)**

**Speaker:** Gretchen Seif, PT, DPT, OCS, FAAOMPT; Dana Meadows LaGana, PT, DPT, OMT-C, OCS; Jason S St Clair PT, DPT, OCS, FAAOMPT

**Description:** This 3 ½ hour course will focus on advanced dry needling techniques specifically targeting the rotator cuff and upper trapezius muscles, two critical areas for managing myofascial pain and dysfunction in the shoulder and neck regions. Participants will explore the anatomy, pathophysiology, and dry needling application for treating common musculoskeletal conditions such as rotator cuff tendinopathy, upper trapezius myofascial trigger points, and associated pain syndromes. This course emphasizes hands-on practice, safety considerations, and integrating dry needling into evidence-based clinical decision-making.

## **Saturday March 22<sup>nd</sup>, 2025 – 1:30 – 3:30 pm**

### **Student Track: Mock House of Delegates**

Students will participate in a Mock House of Delegates. Students will learn how the APTA uses the House of Delegates to set forth motions and make decisions on issues for the association and the profession of physical therapy.

### **Course Title: BARIatric mobility: Beyond Ankle Pumps to Rehabbing Individuals of Size**

**Speaker:** Jennifer Dewyea, PT and Noelle Sublett, PT, MS

**Description:** How many times have you entered a patient's room, and your first thought was "Oh, boy! Where do I start?" This thought might occur for myriad reasons, one of which may be related to your patient's size. What if you had the right knowledge, equipment, and confidence to make a positive impact on this patient's health instead of feeling overwhelmed?

This interactive session will explore the importance of high-quality, safe, therapeutic mobilization for patients of size. We will discuss injuries to healthcare workers, safe patient handling and mobility equipment, mobility screening tools, exercises, and ways to provide seamless care, all as they relate to patients of size. The session will include a hands-on lab using a bariatric suit to simulate patients of size and how to safely mobilize these patients with specially designed equipment. The goals are for participants to gain awareness of how they can use what they already have and advocate for items they need to provide care that is safe for their patients and themselves.

## **Course Title: Debunking the Mysterious and Perplexing Nature of Common Jaw Pain**

**Speaker:** Matthew de Ruig, PT, DPT, DHSc, OCS, CMTPT

**Description:** Physical therapy education hasn't historically prepared entry level clinicians to be proficient in comprehensive examination and management of temporomandibular dysfunction (TMD). This has resulted in a lack of confidence and a reticence to tackle TMD cases by many physical therapists. Patients with jaw pain periodically present in outpatient physical therapy clinics and physical therapists should be prepared to competently address and treat these conditions. This 2-hour session consists of lecture and hands-on laboratory time where the most common conditions affecting the jaw will be reviewed, examination techniques demonstrated and evidence-based treatments will be practiced. The goal of this teaching session is to instill and enhance confidence and competence in the evaluation and treatment of common temporomandibular dysfunctions.

## **Course Title: Adding Life to Days: Holistic and Interdisciplinary Rehabilitation for Individuals Living with the Effects of Cancer**

**Speaker:** Katie Schmitt PT, DPT, CLT, Board-Certified Clinical Specialist in Oncologic Physical Therapy; Valerie Salmon, OTD, OTR/L, CLT; Scott Hutchison, OTD, OTR/L

**Description:** With the Prospective Surveillance Model being worked into the guidelines for the Committee on Cancer for NCI designated cancer centers and National Accreditation for Breast Centers survivorship is taking a more proactive role. Advances in cancer treatment have led to increased numbers of survivors. In addition to the effects of cancer, limitations may be due to treatments such as surgery, radiation, and chemotherapy. Lymphedema, radiation fibrosis, cancer related fatigue, neuropathy, cognitive issues, pain, deconditioning and other side effects limit full return to daily activities, leisure, and vocation. The full spectrum of effects, from biomechanical to participation, necessitates multiple disciplines focus their specialties in concert with each other. Instead of a multidisciplinary approach to rehabilitation, this course will provide physical therapy practitioners with the skills to implement an interdisciplinary program. Instead of “dividing a client in half,” each client will meet their highest level of “normal” by PT and OT care planning together, choosing interventions based on the client’s needs and working towards the client’s goals. Elevating our practice together will elevate the client’s quality of life. While advances in medicine have added days to each cancer patient’s life, collaborative rehabilitation will add life to their days

**Saturday March 22<sup>nd</sup>, 2025 – 3:45 – 4:45 pm**

**Course Title: Imposter Among Us: Overcoming Imposter Phenomenon in PT Students**

**Speaker:** Amanda Feller, PT, DPT, Jasmine Jones, SPT, Amanda Lubkemann, SPT

**Description:** Imposter phenomenon (IP) often described as "self-doubt of intellect, skills, or accomplishments" often affects high-performing individuals, especially in healthcare. In recent studies, IP is highly prevalent in student physical therapists. Those students with higher levels of IP may experience anxiety, depression, increased rates of burnout, and overall, negatively impacted health. Once IP is identified, students can be equipped with strategies to identify and confront imposter phenomena. This session will allow students and others to self-assess for Imposter Phenomenon, increase knowledge of strategies to combat IP, and have group discussions regarding implementing those strategies.

### **Course Title: Hip Arthroscopy: “It’s here to stay”**

**Speaker:** Mitchell Hanks, PT, DPT, SCS, CSCS

**Description:** The concept of femoroacetabular impingement gained traction in the early 2000's, and since then the identification, classification, and treatment of hip pain has significantly evolved. Rates of hip arthroscopy have increased, and despite good success, there are still cases of patients with return of symptoms and/or inability to return to previous activity levels. Not all patients are candidates for hip arthroscopy, but when correctly identified and treated, the success can be highly rewarding for all parties. Physical therapists can play a pivotal role in the prescription of conservative care to avoid surgical intervention, or the identification of surgical candidates. In this presentation we hope to review the clinical presentation, current best practice in conservative care, identifying surgical referrals, and current rehabilitation practices following surgical procedures. As the profession of physical therapy grows our independence as practitioners, it is vital that we sharpen our role in the decision making process.

### **Course Title: The Importance of Screening for Pelvic Floor Dysfunction in Athletes**

**Speaker:** Ellen E Spiller, DPT MSc MPH OCS WCS CAPP-pelvic and Nancy K. Imbeau DPT OCS MCT

**Description:** Athletes in high-impact sports, such as gymnastics, dance, weightlifting, and running, face unique demands that increase the risk of pelvic floor dysfunction (PFD). Left unaddressed, PFD can lead to symptoms like urinary incontinence, pelvic pain, and even prolapse, which negatively impact athletic performance, confidence, and long-term health. Despite these risks, pelvic health screening is rarely integrated into sports programs, often due to limited awareness and stigma around pelvic issues.

This presentation will explore the critical role of PFD screening in athletic settings, presenting data on how early detection benefits performance and quality of life. We will discuss effective screening tools, including physical assessments and targeted questionnaires, and emphasize a multidisciplinary approach involving physical therapists, coaches, and medical providers.

Challenges such as the stigma surrounding pelvic health and limited resources for athletes will be addressed, and case studies will illustrate positive outcomes in athletes who received early intervention for PFD. We will recommend integrating PFD screening protocols into athletic training programs to proactively reduce injury risks and support athlete well-being. This presentation aims to increase awareness and advocate for systematic PFD screening to empower athletes and improve their long-term health and performance outcomes.