November 9, 2024

Fall Virtual Meeting

APTA Kansas
2024 Fall Conference

APTA Kansas
A Chapter of the American Physical Therapy Association

APTA Kansas 2024 Fall Conference Virtual Meeting

November 9

Saturday, November 9 – *all times listed in CST*
8.5 CEUS (8 CEUS for sessions and .5 CEUs for Business Meeting)

	Track 1 (Ortho)	Track 2 (Other Topics)
7:50am	**President's Welcome/Announcements** Camille Synder, PT, DPT, APTA Kansas President	
8:00-9:00am	**Mechanisms of Manual Therapy: Bridging Evidence, Efficacy, and Clinical Impact** Amy McDevitt, PT, DPT, PhD, OCS, FAAOMPT	**Navigating a Changing Landscape: Role of PT in the Emergency Department** Suzie Ryer, PT, DPT, GCS
9:00-10:00am	**Management of Patellofemoral Pain in Adults and Adolescents** Lori Bolgla, PT, PhD, MAcc, ATC	**Reframing Aging: Promoting Health and Wellness in the Fall Risk Population** Jennifer Nash, PT, DPT, NCS
10:00-10:45am	**Business Meeting**	
10:45am-12:45pm	**Potential Role of Blood Flow Restriction Training in Patients with Sarcopenia** Lawrence P. Cahalin, PT, PhD, FAPTA , Luke Hughes PhD, Johnny Gray Owens, PT, Daniel Ravelo, PT, DPT, Dror Yair, PT DPT, Philip Wiese	
12:45-1:15pm	**Lunch Break**	
1:15-2:15pm	**A Physical Therapist's Roadmap for Navigating the Complexities of Quadriceps Dysfunction After ACL Reconstruction** Megan Graham, PT, DPT, SCS, PhD(c)	**Skilled Maintenance Therapy: A Call to Action** Robert (Bobby) Hand, PT, DPT, NCS, ATP and Kelly Rowland, PT, DPT, NCS
2:15-3:15pm	**All Gas, No Brakes?: Testing and Training Deceleration in Sport** Steven Higbie, PT, DPT, SCS, CSCS	**Developing an Interprofessional Treatment Model for Physical Therapy and Acupuncture in an Outpatient Orthopedic Setting** Susan Stanford, DPT, L.Ac, M.Ac., Dipl.Ac., S.MAC
3:15-3:25pm	**Break**	
3:25-5:25pm	**Making An Impact: A Framework to Returning to High-Level Activity Following Total Joint Arthroplasty** Curtis Wu, PT, DPT OCS, SCS, CSCS	**Can people with Parkinson's Disease Learn Motor Skills?** Beth E Fisher, PT, Ph.D., FAPTA and Pooja Iyer, , PT, M.Sc.
5:25pm	**Adjourn**	

Session Information

Mechanisms of Manual Therapy: Bridging Evidence, Efficacy, and Clinical Impact

Track 1 | 8:00-9:00 AM

Amy McDevitt, PT, DPT, PhD, OCS, FAAOMPT

This session will explore the biophysiological, neurophysiological, and psychosocial mechanisms underlying manual therapy and its effectiveness in managing musculoskeletal pain. With a focus on the evolving evidence base and the role of mechanistic research, attendees will gain insight into how manual therapy interventions can be optimized for improved patient outcomes. The session will also discuss the challenges of inconsistent reporting of manual therapy interventions clinically and in trials, highlighting the need for better understanding of manual therapy interventions in clinical practice.

Objectives:

1. Identify the biophysiological, neurophysiological, and psychosocial mechanisms that contribute to the effectiveness of manual therapy interventions.
2. Summarize the current evidence supporting manual therapy techniques, focusing on areas of strong evidence and research gaps including reporting of manual therapy techniques.
3. Describe how mechanistic research can be applied in clinical practice to enhance the effectiveness of manual therapy interventions.

Dr. McDevitt is an Associate Professor in the Physical Medicine and Rehabilitation Department at the University of Colorado, USA. She teaches orthopaedics to entry-level physical therapy students. Clinically, she practices at the University of Colorado Health, CU Sports Physical Therapy and Rehabilitation. She is a board-certified Orthopaedic Clinical Specialist and a Fellow in the American Academy of Orthopaedic Manual Physical Therapists. She completed her PhD in Physiotherapy through the University of Newcastle, Australia. She has a track record for publications in manual therapy, regional interdependence, shoulder tendinopathy and clinical reasoning.

Navigating a Changing Landscape: Role of PT in the Emergency Department

Track 2 | 8:00-9:00 AM

Suzie Ryer, PT, DPT, GCS

The Emergency Department (ED) serves as the “front porch” to the hospital, with most patients being discharged without hospital admission as healthcare transitions to a value-based care approach. In addition, the patients receiving care in the ED are aging, with over 23.1 million annual ED visits occurring amongst those over the age of 65. Physical therapists are well positioned to be part of the interdisciplinary team in the “front porch” model of ED care to avoid unnecessary admissions and facilitate appropriate care transitions, particularly for older adults. Despite the clear impact of physical therapy in the ED, uptake of this clinical specialty area has been limited. This symposium focuses on the latest evidence supporting the role physical therapists play in improving outcomes for older adults within the emergency department setting. This course will present an overview of the current literature supporting PT outcomes in the emergency departments, guidelines for screening and assessment, and ways to address current ED challenges through physical therapy integration. Strategies for creating a business case to justify additional staffing resources leveraging data from the electronic health record and other hospital initiatives will also be discussed.

Objectives:

1. Evaluate the current literature supporting PT integration into the emergency department
2. Describe the unique needs of older adults in the ED and the benefits of PT evaluation before discharge.
3. Apply evidence and data to create an appropriate PT ED model.

Suzie Ryer PT, DPT, GCS is the Director of Senior Services at Advocate Health. She is a physical therapist who is board certified in Geriatrics with nearly 20 years of clinical experience in a variety of clinical settings. Her focus is

on interdisciplinary geriatric care with emphasis on fall prevention and emergency department care. She has led efforts to create Geriatric emergency departments in a large health system and serves on multiple national expert panels and task forces to standardize practice around the care of patients presenting to the emergency department after a fall. Suzie has created interdisciplinary fall prevention and mobility programs improve clinical outcomes and combat hospital-associated disability and readmission. Suzie is the co-chair of the Milwaukee County Falls Prevention Coalition and Suzie serves on the Executive Council for the Southeastern Regional Trauma Advisory Council and the steering committee of the Falls Free WI Coalition. Suzie has published and presented nationally on topics related to community fall prevention and care in the geriatric emergency department.

Management of Patellofemoral Pain in Adults and Adolescents

Track 1 | 9:00-10:00 AM

Lori Bolgla, PT, PhD, MAcc, ATC

The purpose of this course is to provide an overview of the management of patellofemoral pain in adults and adolescents. Information included in this session will be based off the 2019 Clinical Practice Guideline for Individuals with Patellofemoral Pain. As patellofemoral pain is considered a chronic condition, participants will receive information on non-mechanical factors (i.e., psychosocial factors) that may contribute to patellofemoral pain. The session will conclude with considerations for treating the adolescent population.

Objectives:

1. Participants will be able to apply recommendations from the 2019 Clinical Practice Guidelines for the Management of Patellofemoral Pain to clinical practice.
2. Participants will understand the influence of psychosocial factors on the management of patellofemoral pain.
3. Participants will identify treatment approaches to adolescents with patellofemoral pain.

Lori A. Bolgla, PT, PhD, MAcc, ATC is a tenured Professor in the Department of Physical Therapy and Kellett Chair in Allied Health Sciences at Augusta University (formerly the Medical College of Georgia). She is an accomplished educator with an emphasis on student-engaged learning strategies. Dr Bolgla is a 2020 recipient of the Augusta University Boundless Teaching Award and 2023 recipient of the College of Allied Health Sciences Distinguished Service Award. For over 20 years, her research has focused primarily on the management of individuals with patellofemoral pain. She has received both external (National Institute of Aging, National Athletic Trainers Association, Southeast Athletic Trainers Association, and Physical Therapy Association of Georgia) and internal funding to support works aimed at identifying biomechanical factors associated with PFP, best treatment strategies, and understanding the association between PFP in early adulthood and possible osteoarthritis onset in later years. To date, Dr Bolgla has 46 peer-reviewed publications, 55 peer-reviewed abstracts, 9 book chapters, and 4 monographs. Dr. Bolgla has given over 75 presentations at state, regional, national, and international conferences.

Reframing Aging: Promoting Health and Wellness in the Fall Risk Population

Track 2 | 9:00-10:00 AM

Jennifer Nash, PT, DPT, NCS

Falls are a leading cause of injury and loss of independence in the older adult population. This session will explore evidence-based strategies to assess and address fall risk while reframing the conversation around aging as a period of empowerment and wellness. Attendees will gain practical tools for incorporating movement-based interventions, environmental modifications, and patient education into their practice to encourage active, healthy lifestyles. This session aims to equip physical therapists with the skills necessary not only to prevent falls but also to enhance quality of life and foster a positive outlook on aging for those at risk.

Objectives:

By the end of this session, participants will be able to:

1. Reframe the conversation around aging to promote an active, empowering perspective in their patients.
2. Implement evidence-based movement and balance training interventions tailored to the fall-risk population.

3. Develop a comprehensive, patient-centered plan that includes environmental modifications and education to promote health and wellness.

Jennifer Nash, PT, DPT is a Board-Certified Neurologic Clinical Specialist, Credentialed Balance and Falls Professional, and Certified Exercise Expert for Aging Adults. She is an Associate Professor in the School of Integrated Health Sciences - Physical Therapy at the University of Nevada, Las Vegas. Jennifer is actively involved in research and community outreach, including evidence-based fall prevention programs for older adults. She emphasizes a holistic approach to physical therapy, advocating for the reframing of aging as an opportunity for empowerment and active living. A proud mother, Ironman athlete, and passionate educator, she is dedicated to equipping patients and fellow therapists with the tools to enhance quality of life and wellness at every stage.

Potential Role of Blood Flow Restriction Training in Patients with Sarcopenia

Lawrence P. Cahalin, PT, PhD, FAPTA

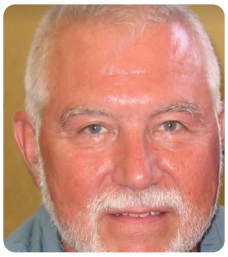
Luke Hughes, PhD

Johnny Gray Owens, PT

Track 1 | 10:45 AM-12:45 PM

Lawrence P. Cahalin, PT, PhD, FAPTA
Luke Hughes, PhD
Johnny Gray Owens, PT
Philip Wiese

Sarcopenia is a progressive and generalized skeletal muscle disorder found in older adults in whom there is loss of muscle strength and size. The loss of skeletal muscle strength impairs physical function and mobility and increases the likelihood of adverse outcomes including falls, fractures, physical disability, and mortality. Resistance training (RT) is recommended as first-line treatment for sarcopenia, but older people with or susceptible to sarcopenia may be unable or unwilling to perform the higher intensity of RT currently recommended which may also be unsafe. We challenge the current paradigm of RT for sarcopenia by using a novel method of



Philip Wiese

restricting blood flow during low-intensity RT (20% of 1RM) via auto-regulated cuffs placed on the limbs. A substantial amount of compelling evidence shows that blood fl ow restriction(BFR) RT significantly improves skeletal muscle strength via increased physiological stress and activation of several mechanisms that lead to positive muscle adaptation. Improved skeletal muscle strength has been shown to significantly improve functional performance in older adults susceptible to sarcopenia. Additionally, significant improvements in vascular health and cardiopulmonary function have also been observed with low-intensity BFR RT. This session will provide evidence, methods, and results of BFR training in patients with sarcopenia.

Objectives:

1. Understand the effects of BFR training in older adults without sarcopenia.
2. Understand sarcopenia and current first-line treatments for it.
3. Analyze the results of a recent paper entitled “A call to action for blood flow restriction training in older adults with or susceptible to sarcopenia: a systematic review and meta-analysis” and evaluate the available literature regarding the potential effects of BFR training in older adults with sarcopenia including:
    a. Feasibility and safety of BFR in sarcopenic populations
    b. Effects on skeletal muscle strength and hypertrophy
    c. Effects on cardiovascular and pulmonary function
    d. Effects on vascular health
    e. Effects on functional performance
    f. Effects on survival
4. Create and apply an optimal BFR training program for older adults with sarcopenia.

Dr. Cahalin is a Professor in the Department of Physical Therapy at the University of Miami in Miami, Florida. He received his BS in Physical Therapy at Saint Louis University, a MA in Physical Therapy at the University of Iowa, and a PhD in Gerontology at the University

of Massachusetts Boston. He enjoys integrating the interrelatedness of the cardiovascular, pulmonary, and muscular systems using novel examination and management techniques. Dr. Cahalin has been actively involved in clinical research and clinical practice in cardiovascular and pulmonary physical therapy for over 40 years. He is an APTA Board Certified Cardiovascular and Pulmonary Specialist and currently serves on the Editorial Board of both the APTA Cardiopulmonary Physical Therapy Journal and Physiotherapy Theory and Practice -An International Journal of Physical Therapy. Dr. Cahalin is a fellow of the American Heart Association, American Association of Cardiovascular and Pulmonary Rehabilitation, and American Physical Therapy Association.

Luke Hughes PhD is an Assistant Professor in Aerospace Physiology &Rehabilitation at Northumbria University in the Department of Sport Exercise and Rehabilitation, Newcastle upon Tyne, UK. Dr. His primary area of research is using blood flow restriction training for the optimization of human performance and rehabilitation in clinical, elite sport and high-performance populations. Dr. Hughes is currently working on two research campaigns through the European Space Agency,funded by the UK Space Agency, to investigate lumbopelvic deconditioning &reconditioning during spaceflight missions, working with astronauts before and after ISS missions and in individuals undergoing long duration bedrest on Earth. He has extensive experience with blood fl ow restriction training, with previous and ongoing research in the areas of post-surgery musculoskeletal rehabilitation, pain modulation,bone health and space flight.

Johnny Owens BS, MPT is Director of Clinical Education for Owens Recovery Science, INC and a Clinical Researcher at the Center for the Intrepid at San Antonio Military Medical Center where he was formerly the Chief of Human Performance Optimization Programs. He completed his undergraduate course work in Biology at The University of Texas at Austin and earned his Masters in Physical Therapy at The University of Texas Medical Branch. He serves as a medical consultant for teams in the NFL, NBA, MLB, NHL and collegiate sports. He is also involved in numerous clinical trials involving regenerative medicine, sports medicine,blood flow restriction and high energy trauma. Owens has been published extensively in the peer-reviewed literature, regularly speaks at the national and international level and his work has been featured on 60 Minutes, Time Magazine, NPR, Discovery Channel and ESPN.

Philip Wiese is a 73-year-old man who has led an active life. He served in the United States Marine Corps and worked in communications during the Vietnam War. After his service, he became a lifelong learner and attended four universities over four decades: Indiana University, Indiana University – Purdue University Indianapolis (IUPUI), Indiana Wesleyan University, and the University of South Florida. His coursework was tailored towards developing skills required for an executive in the transportation industry including courses in psychology, business administration, and finance. During his career, he owned and managed several trucking companies for over 20 years. In retirement, he enjoys woodworking, gardening, and building furniture in sunny South Florida.

A Physical Therapist's Roadmap for Navigating the Complexities of Quadriceps Dysfunction After ACL Reconstruction

Track 1 | 1:15 -2:15 PM

Megan Graham, PT, DPT, SCS, PhD

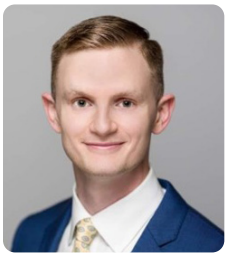
This course covers the complexities of quadriceps dysfunction following ACL reconstruction, guiding participants through the entire rehabilitation journey from initial injury to the late-stage return-to-sport phase. Attendees will gain valuable insights into the pathophysiology and potential causes of quadriceps muscle inhibition post-ACL injury and reconstruction, effective techniques for addressing early-stage quadriceps muscle inhibition with a special focus on the benefits of neuromuscular electrical stimulation, and strategies to enhance rehabilitation sessions to maximize quadriceps muscle hypertrophy, strength, and rate of force development. By the end of this lecture, participants will be equipped with a detailed roadmap to effectively manage quadriceps dysfunction and optimize patient outcomes after ACL reconstruction.

Objectives:

1. Attendees will better understand the pathophysiology and potential causes of quadriceps muscle inhibition following ACL injury and reconstruction.
2. Attendees will learn effective techniques for addressing early-stage quadriceps muscle inhibition.
3. Attendees will be able to prescribe appropriate exercises aimed at developing specific qualities of quadriceps muscle performance (e.g., hypertrophy, strength, and rate of force development).

Megan Graham is a Doctor of Physical Therapy and a PhD candidate in Exercise Science at the University of Kentucky. She completed her Doctorate in Physical Therapy at UK in 2015 and subsequently pursued a sports residency at Houston Methodist Sugar Land, finishing in 2016. Megan then served as a sports physical therapist at Texas Children's Hospital, where she also took on the role of sports residency mentor and coordinator. In 2021, she returned to the University of Kentucky to advance her research in ACL rehabilitation through her PhD studies. Megan also currently works part-time with the Performance Science Department at UK, focusing on the application of technology for return-to-sport and performance testing for the men's football team.

Skilled Maintenance Therapy: A Call to Action



Robert (Bobby) Hand, PT, DPT, NCS, ATP

Kelly Rowland, PT, DPT, NCS

Track 2 | 1:15 -2:15 PM

Robert (Bobby) Hand, PT, DPT, NCS, ATP

Kelly Rowland, PT, DPT, NCS

Physical therapists play a pivotal role in maintaining function and quality of life throughout the course of our patients' lives, especially in the presence of a progressive disorder. Legislation and guidelines have been established to support clinical decision-making and the provision of maintenance-based, rather than traditional "restorative" therapy; however many clinicians report barriers to implementation. This session will provide an overview toward identifying candidates, establishing a plan of care, documenting maintenance therapy, and discharging or transitioning patients between treatment paradigms.

Objectives:

1. Select the appropriate patient for a skilled maintenance therapy plan
2. Develop an impactful frequency and duration of care for a skilled maintenance therapy plan
3. Justify and document a skilled maintenance therapy plan

Robert (Bobby) C. Hand, PT, DPT, is a board-certified Neurologic Clinical Specialist (NCS) with extensive expertise in neurologic rehabilitation. He earned his Doctor of Physical Therapy from Saint Joseph's University, where he received the William B. Inverso, Jr. Award for Excellence in Physical Therapy Research. Bobby's passion for neurologic physical therapy was shaped by clinical internships, including his final placement at the Rancho Los Amigos National Rehabilitation Center.

In 2015, Bobby moved to Richmond, VA, to take on clinical leadership roles at Sheltering Arms Rehabilitation, focusing on neurodegenerative disorders. In 2018, he was awarded the Academy of Neurologic Physical Therapy Early Career Professional Award and the Degenerative Diseases Special Interest Group Volunteer Award. He worked at VCU Health's Parkinson's & Movement Disorders Center until returning to Philadelphia in 2023 to take on a faculty role at Drexel University. He continues to work clinically with Magee Rehabilitation Hospital and regularly collaborates with the Parkinson's Foundation, LiftPD, and other patient-facing organizations.

Kelly Rowland is a staff physical therapist at Novant Health in North Carolina. She is a Board-Certified Neurologic Clinical Specialist with her career spent in both the inpatient and outpatient neurologic settings. She is mentor with the Winston-Salem State University Physical Therapy Neurologic Clinical Residency Program. She has led the development of a community-based wellness program for individuals with Parkinson's disease and atypical parkinsonism and presented on this regionally. She has spoken nationally at CSM regarding delivering skilled maintenance therapy as well as through local DPT programs and patient support groups. She has worked with members of the ANPT DDSIG to create handouts and educational materials related to the delivery of skilled maintenance physical therapy.

All Gas, No Brakes?: Testing and Training Deceleration in Sport

Track 1 | 2:15 -3:15 PM

Steven Higbie, PT, DPT, SCS, CSCS

The ability to decelerate is a vital component of sport performance and deceleration is often involved in lower extremity injury mechanisms. Despite this, deceleration assessment and training is often neglected in end-stage rehabilitation and training programs. This session will highlight the importance of deceleration in sport, discuss joint and muscular loading during deceleration, and examine the implications of impaired deceleration performance on injury. Assessment methods and athlete monitoring data will be discussed to better quantify deceleration performance. Practical strategies and exercise progressions will be provided to assist in improving deceleration performance from the clinic to the field or court.

Objectives:

1. Discuss the importance of deceleration ability for sport performance.
2. Propose testing strategies and athlete monitoring data interpretation to assist the clinician in assessing deceleration performance.
3. Identify exercise progressions, deceleration drills, and training techniques to maximize deceleration performance.

Steven Higbie is a sports physical therapist at the Memorial Hermann Rockets Sports Medicine Institute in Houston, TX. He received his DPT from Duke University in 2016 and completed the RSMI sports residency in 2017. He is an adjunct faculty member at Houston Christian University and provides athletic coverage for HCU and George Ranch High School. He is a residency faculty member, participates in ACL-related research, and holds certifications in strength/conditioning and dry needling.

Developing an Interprofessional Treatment Model for Physical Therapy and Acupuncture in an Outpatient Orthopedic Setting

Track 2 | 2:15 -3:15 PM

Susan Sanford, DPT, L.Ac, M.Ac., Dipl.Ac., S.MAC

An overview of how one clinic is developing an inter-professional and collaborative practice model to manage chronic lower back with physical therapy and acupuncture to improve outcomes and increase revenue.

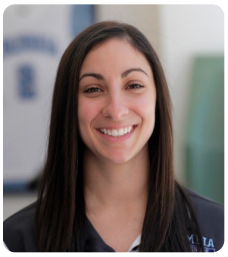
Objectives:

1. Define acupuncture and dry needling
2. Understand the benefits of inter-professional and collaborative practice
3. How to use a screen tool for acupuncture referral

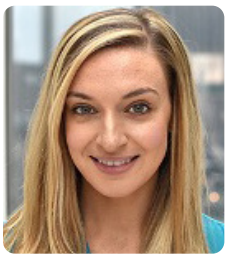
Susan graduated from The University of Connecticut with a Bachelor of Science in Physical Therapy in 1994 and from The New England School of Acupuncture with a Master of Science in Acupuncture in 2002. In 2010 Susan completed an advanced 250-hour Sports Medicine Acupuncture Certification program and in 2022 Susan earned her Doctorate Degree in Physical Therapy. Susan had published articles on Cupping and Subacute Lower Back Pain in 2010 in the Journal of Complementary and Alternative Medicine and an article Short Limb, Heel Lift Not so Fast Article in the Journal of Podiatric Medicine in 2017. Susan has also trademarked a posture and body mechanics strategy called "6B's". Susan is from Connecticut and has made Martha's Vineyard (an island off the coast of Cape Cod Massachusetts) her home since 1997. In 2003, Susan founded Vineyard Complementary Medicine, an orthopedic outpatient private practice specializing in interprofessional and collaborative medicine providing physical therapy, acupuncture and massage. Susan is a fitness enthusiast and loves spending time with her husband and 2 teenagers traveling, going to the beach, golfing and skiing.

Making An Impact: A Framework to Returning to High-Level Activity Following Total Joint Arthroplasty

Curtis Wu, PT, DPT OCS, SCS, CSCS



Michelle Cilenti



Ashleigh McAdam

Track 1 | 3:25 -5:25 PM

Curtis Wu, PT, DPT OCS, SCS, CSCS

Michelle Cilenti

Ashleigh McAdam

Return to sport (RTS) following primary total joint arthroplasty (TJA) remains an area that is controversial due to potential concerns of increased complications or poor outcomes. Current recommendations for RTS are typically made based on physician preference and survey data, with time being the most commonly reported deciding factor. Successful RTS has been reported following TJA, however there is a trend toward returning to lower-impact sport. Younger individuals and those with prior experience with the sport are most significant prognostic indicators for RTS, however most are likely to abandon moderate and high-impact sports to participate in low-impact sports. As a result, there is insufficient long-term data on outcomes related to participation in high-impact sports. The number of TJAs performed in the United States has been projected to continue to rise and for the individuals who wish to return to high-impact sports participation, research on outcomes is needed to guide the rehabilitation process. The purpose of this session is to describe the current state of rehabilitation following TJA and to use case presentations to describe the successful return to high-impact activity using a criterion-based framework that can be used to fill knowledge gaps and guide future research.

Objectives:

1. Describe the current state of the research evidence on returning to sport following total joint arthroplasty
2. Explore the current attitudes and decision-making processes surrounding recommendations on returning to sport
3. Describe existing frameworks and models utilized for other surgical procedures
4. Present a framework to apply and support the decision-making process for individuals who have undergone total joint arthroplasty.

Curtis is a clinical specialist at the Hospital for Special Surgery (HSS) and board certified in orthopedic and sports physical therapy. He is a graduate of New York University and completed the HSS Orthopedic Physical Therapy Residency. Curtis has continued to be involved with the residency program by serving as a lecturer and mentor. He also serves as an adjunct faculty for Doctor of Physical Therapy program at Seton Hall University. Clinically, he has particular interest critical thinking, critical inquiry, and its application clinical decision-making.

Michelle Cilenti is a Clinical Lead at the Hospital for Special Surgery (HSS) and is board certified in both orthopedic and sports physical therapy. She is a graduate of New York University (NYU) and completed an APTA accredited Sports Residency program at HSS. She currently serves as the site coordinator for the HSS sports residency program, as well as faculty and mentor. She is also the co-director of the Ivy Rehab/HSS Sports Residency Program. She serves as an adjunct faculty for the Doctor of Physical Therapy program at NYU and also lectures as part of their orthopedic residency program. Clinically, she has particular interest in injury reduction and return to sport testing, as well as an interest in the youth athlete population.

Ashleigh received her Doctor of Physical Therapy degree from Seton Hall University. She developed a strong passion for orthopedics and pursued her Clinical Residency in Orthopedic Physical Therapy at New York University. Ashleigh is employed at Hospital for Special Surgery in Paramus, NJ treating a variety of orthopedic diagnoses, both surgical and non-operative, across the lifespan. Ashleigh is a dual board-certified Clinical Specialist in Orthopedics (OCS) and Geriatrics (GCS) while serving as a mentor and educator in the HSS Orthopedic Physical Therapy residency program.

Can people with Parkinson's Disease Learn Motor Skills?

Beth E. Fisher, PT, PhD, FAPTA

Pooja Iyer, PT, M.Sc.

Track 2 | 3:25 -5:25 PM

Beth E. Fisher, PT, Ph.D., FAPTA

Pooja Iyer, PT, M.Sc.

The goal of rehabilitation in people with Parkinson's disease (PwPD) is maximizing functional independence ultimately driven by the individual's motor learning capability. How do clinicians tasked to retrain movement behavior contend with motor learning discrepancies that exist in the literature? Several studies demonstrate impaired learning in PwPD, whereas others show they can learn motor tasks. Consequently, the 2022 clinical practice guidelines by the American Physical Therapy Association does not provide recommendations to promote motor learning in PwPD due to the lack of randomized controlled trials. The purpose of this session is to resolve the aforementioned discrepancies in the motor learning literature and clarify motor learning capability in PwPD. Armed with this revised knowledge, clinicians will make informed decisions regarding physical therapy (PT) interventions. To achieve this aim, we will discuss how: i) neural substrates (e.g., basal ganglia, cerebellum, etc.) vary depending upon task design/ setup in the motor learning literature; ii) conditions (task-dependent and PD-specific factors) drive motor learning in PwPD; and iii) PT intervention can be designed to incorporate conditions favorable to motor learning in PwPD.

Objectives:

1. Identify the discrepancies in the motor learning literature with respect to Parkinson's disease (PD).
2. Understand the neural substrates associated with various motor learning tasks.
3. Recognize the favorable conditions that promote motor learning in PwPD.
4. Develop physical therapy intervention designed to maximize motor learning capability in PwPD.

Beth E. Fisher PT, PhD, FAPTA, is a Professor of Clinical Physical Therapy in the Division of Biokinesiology and Physical Therapy at the University of Southern California. Dr. Fisher is the director of the Neuroplasticity and Imaging Laboratory, primarily using Transcranial Magnetic Stimulation (TMS) to investigate brain-behavior relationships during motor skill learning and motor control in both non-disabled individuals and individuals with neurologic disorders. She previously worked at Rancho Los Amigos Medical Center on the Adult Neurology and Brain Injury Services and continues to consult and teach nationally and internationally on current concepts for the treatment of adults with neurological disorders. During her years as a clinician and rehabilitation specialist, it was her greatest ambition to be a part of developing physical therapy interventions that would maximize neural and behavioral recovery in individuals suffering from pathological conditions affecting the nervous system. In 2014, Dr. Fisher became a Catherine Worthingham Fellow of the American Physical Therapy Association. The FAPTA designation is the highest honor among APTA's membership categories and signifies the attainment of the topmost level of professional excellence. In 2019, Dr. Fisher was further honored by receiving the John H.P. Maley Lecture Award and had the pleasure of presenting on the recovery potential in individuals with stroke entitled, Beyond Limits: Unmasking Potential Through Movement Discovery. In 2022, the APTA further honored Dr. Fisher by selecting her to receive the Helen J Hislop Award for Outstanding Contributions to Professional Literature.

Pooja C. Iyer, PT, MS, received her physical therapy degree from the Maharashtra University of Health Sciences in 2016 and practiced as Asst. Physical Therapist in out and inpatient departments at several hospitals in Mumbai treating patients with acute and chronic stroke, Parkinson's Disease, and adults with cerebral palsy. She received her Master of Science Degree in Rehabilitation Sciences at the University of Illinois at Chicago (UIC) with a research emphasis in neurosciences. During her MS degree, she authored several publications. She presented in seminars explaining the role of priming to improve gait training using non-invasive brain stimulation techniques like transcranial direct current stimulation and underlying neurovascular mechanisms in people with chronic stroke. She also received the UIC Provost Diess Award (2018) and the Outstanding Graduate Research Award in the Neuroscience category (2018) for her Master's Dissertation project. She is a Ph.D. student at the Department of Biokinesiology and Physical Therapy, training under Dr. Beth E. Fisher at the Neuroplasticity and Imaging Laboratory. The ultimate goal of her Ph.D. dissertation is to find the relevance of cerebellar compensation in the context of motor learning to help physical therapists design new PT interventions in PD rehabilitation. To that end, using qualitative and quantitative approaches, her research focuses on understanding the cerebellum's role in promoting motor learning in people with PD (PwPD). Qualitatively, she intends to understand the experimental factors and PD-related characteristics across the motor learning literature in PD that could explain intact motor learning in PwPD. Quantitatively, she plans to test if the cerebellum compensates for basal ganglia dysfunction in PwPD to aid motor learning.

APTA Kansas
A Chapter of the American Physical Therapy Association

APTA Kansas 2023 Fall Conference
Virtual Meeting
November 4

APTA Kansas Terms and Conditions for the Conference

APTA Kansas
A Chapter of the American Physical Therapy Association

Cancellation and Refund Policies

APTA KANSAS hopes everyone who registers for OUR conference will be able to attend; however, APTA KANSAS knows extenuating circumstances do occur. The APTA KANSAS Cancellation and Refund Policies are as follows:

Conference Refund and Cancellation Policy

The APTA KANSAS Conference Cancellation and Refund Policy will be as follows to assure consistency and is applicable to the annual APTA KANSAS conference.

- Conference registration canceled on-line 90 days prior to the conference is refundable but subject to a $50 administrative fee.
- Registrants canceling within 0 – 90 days prior to the conference will not receive a refund. The refund and cancellation policy will not be waived. Registration fees may be transferred to another individual; the invoice for the new registration will be revised to reflect the new registrant's membership status.
- In the event APTA KANSAS must cancel the conference due to unforeseen circumstances, APTA KANSAS will refund the cost of registration. However, APTA KANSAS does not assume responsibility for any additional costs, charges, or expenses; to include, charges made for travel and lodging.

Unforeseen Circumstances Defined for Refund and Cancellation Policies

Unforeseen circumstances is used to describe an event that is unexpected and prevents APTA KANSAS from continuing with a conference, training, or webinar. Examples of such circumstances can include, but are not limited to, inclement weather or other natural disasters, site unavailability, technology challenges, and presenter absence.

APTA KS 2025 Spring Conference

SAVE THE DATE
March 14-15, 2025

Embassy Suites Olathe
Olathe, KS

APTA Kansas
A Chapter of the American Physical Therapy Association