Title of presentation
“Transformative Exercise for People with Disabilities: Restore, Improve, Prevent”

Presenters: Tricia H. Creel, PT, DPT, Board Certified Neurologic Clinical Specialist;
Elissa C. Held Bradford, PT, PhD, MSCS, Board Certified Neurologic Clinical Specialist

Course description
While the benefits of physical activity are universal, physical activity and exercise are an especially important tools in helping people with disabilities manage and prevent secondary conditions and chronic disease. Unfortunately, nearly half of adults in the United States with a disability are physically inactive (do not participate regularly in aerobic physical activity lasting 10 min or more). Inactive adults with a disability are 50% more likely to report one or more chronic diseases compared to those who are physically active. After being discharged from rehabilitation, people with disabilities often fail to transition successfully into effective and safe community physical activity and exercise programs. In this presentation, attendees will learn about the transformative exercise framework (Rimmer J. Lai B. Disabil Rehabil 2017 Jan;39(2):173-180) that aims to prevent chronic and/or secondary health conditions that occur with sedentary behavior, while also furthering the health and mobility of people with disabilities. Local and national resources, along with case examples, supporting transformative exercise will be shared. Given the skills and expertise of physical therapists, the profession has a responsibility to promote physical activity and transformative exercise to address disparities in long-term health trajectories of people with disabilities. This can be accomplished through both clinical and community roles.

Course learning objectives
Upon successful completion of this course, participants should be able to:
1) Discuss current physical activity and exercise opportunities, barriers, and participation levels for people with disabilities.
2) Describe transformative exercise framework for supporting people with disabilities in life-long physical activity and exercise (Rehabilitation, Condition-specific Exercise, Fitness and Physical Activity).
3) Explain the role that physical therapists can take to reduce sedentarism, promote physical activity and exercise participation and prevention of secondary conditions for people with disabilities.
4) Utilize local and national resources to support transformational exercise for persons with disabilities.

Speaker information
Elissa C. Held Bradford, PT, PhD, MSCS, Board Certified Neurologic Clinical Specialist – Employer: Paraquad

Elissa Held Bradford is an Assistant Professor in the Department of Physical Therapy and Athletic Training at Saint Louis University and a practicing physical therapist. She earned a Bachelor of Science in Exercise Science in 2000, a Masters in Physical Therapy in 2002, and a Doctorate of Philosophy in Health Promotion and Wellness in 2015. She is a board-certified specialist in Neurologic Physical Therapy and a Multiple Sclerosis certified specialist. Her teaching, clinical practice and research centers on health promotion for those with neurodegenerative disease through the intersection of movement analysis and behavior change to enhance physical activity and health-related quality of life. Dr. Held Bradford has presented information related to neurodegenerative disease, wellness, clinical reasoning, and visual analysis of human movement at local, national and international conferences and published several related articles. She is co-author of ‘Health Promotion and Wellness Strategies Applied to Neurorehabilitation’, an online continuing education course through the Academy of Neurologic Physical Therapy released in 2018.

Tricia H. Creel, PT, DPT, Board Certified Neurologic Clinical Specialist - Employer: Saint Louis University Department of Physical Therapy and Athletic Training

Tricia H. Creel is Health and Wellness Director at the Stephen A. Orthwein Center at Paraquad, a fully adapted fitness center serving people with disabilities and older adults. Prior to Paraquad, she worked for the American Parkinson Disease Association (APDA) - Greater St. Louis Chapter as Program Coordinator. Dr. Creel earned her bachelor’s degree in Business Administration from the University of North Carolina at Chapel Hill and received her Doctorate of Physical Therapy in 2009 from Georgia State University. She
is a board-certified specialist in Neurologic Physical Therapy. Her clinical interests include vestibular rehabilitation and balance impairments. She has written articles for the APDA, as well as presented at local and national conferences, on physical activity promotion for Parkinson’s disease.

**Keywords:** physical activity, exercise, disability, prevention, health disparities

**Recommended participant level:** intermediate

**Title of presentation**  

**Presenter:** Lauren Billotti, PT, DPT, ATC

**Course description**  
This course will provide the basic principles of effectively treating children with autism using a variety of treatment strategies, and providing a refresher on ASD characteristics and appropriate behavioral interventions as well.

**Course learning objectives**  
Upon successful completion of this course, participants should be able to:

1. Identify common motor impairments in children with autism.
2. Identify three behavioral intervention strategies in treating a child with autism.
3. Identify the benefits of physical activity in gross motor development and motor planning in children with autism.

**Speaker information**  
Lauren Billotti, PT, DPT, ATC – Employer: SSM Health Physical Therapy, St. Louis, MO

Lauren Billotti is an experienced Physical Therapist and Athletic Trainer who has specialized in pediatric and sports rehabilitation for 6 years. Prior to her time as a physical therapist, Lauren worked with collegiate and high school athletes as an athletic trainer in Western New York, covering a variety of athletic events including gymnastics, soccer, and ice hockey. She has previously worked as a graduate assistant at Daemen College as a lab instructor in a therapeutic modalities course, and is currently pursuing her Ed.D at Maryville University in St Louis, MO. Lauren is passionate about clinical education, specifically on the topics of pediatric rehab, and sports related injury recovery and prevention. She has worked in outpatient settings for the last 6 years treating a variety of diagnoses including but not limited due post-surgical ACL recovery, neurodevelopmental delay, torticollis, ASD, plagiocephaly, LE postural deformities and many others.

**Keywords:** autism, clinical treatment strategies, behavioral strategies

**Recommended participant level:** beginner

**Title of presentation**  
“Movement Training for Patients with Parkinson’s disease: An Evidence Based Approach”

**Presenter:** Pradip Kumar Ghosh, PT, PhD, DMS, MS

**Course description**  
Parkinson’s disease (PD) is the second most common neurodegenerative disorder after Alzheimer’s disease. Approximately four million individuals are living with PD worldwide. Evaluation and Treatment patient with PD is a great challenge to today’s health care professional. Although most patients survive and maintain their daily activities, many survivors are left with significant movement disorders leading to functional deficits that produce long-term need for assistance from caregivers and from society. This course will focus on review and analysis of relevant topics including movement disorders, medical management and movement training for patients with PD. The most current evidence for effective gait training and improvement of posture and balance in individuals with Parkinson's disease.
PD will be addressed. An overview of common medications used for the management of PD and the impact of their side effects on movement training will also be emphasized. This course will be taught through lecture, case studies, and video-clip presentation and is designed for participants with an intermediate level of experience.

**Course learning objectives**

Upon successful completion of this course, participants should be able to:

1. Explain the pathophysiology of PD and associate them to the signs and symptoms
2. Explain the common medications used in the treatment of patients with PD and how their effects can influence movement therapy
3. Implement different treatment techniques to reduce rigidity and tremor and associate them to the existing evidences
4. Integrate different treatment techniques in movement therapy to improve posture, balance, walking and reduce fall risk in patients with PD and relate them to the current evidences
5. Examine the scientific basis of current investigations of movement therapy for individuals with PD

**Speaker information**

Pradip Kumar Ghosh, PT, PhD, DMS, MS – Employer: Maryville University

Pradip Ghosh, PT, PhD, DMS, MS, is a professor in the Physical Therapy Program at Maryville University, St. Louis, where he teaches graduate courses related to neuroanatomy, neurophysiology, neurological diseases along with treatment and pharmacology. He has over 32 years of teaching experience on subjects including physiology, biochemistry, and physical therapy in different Universities including India, Spain and USA. In addition to teaching, Dr. Ghosh is also currently engaged in research on stroke, Parkinson’s disease as well as two collaborative research projects on Parkinson’s disease and cancer with Universities in Spain and India. He received his MS and PhD degree in Physiology from the University of Calcutta, Doctorate in Homeopathic Medicine degree from Calcutta Homeopathic Medical College and his PT from the Ohio State University. He has provided more than 375 continuing education courses on subjects including stroke, neurodegenerative disease, pharmacology, neuroplasticity, diabetes, osteoporosis, yoga and meditation throughout USA and abroad. In addition, Dr. Ghosh presented numerous scientific presentations before state, national, and international meetings related to physiology and physical therapy. Dr. Ghosh has authored and co-authored 51 peer-reviewed research papers and 60 abstracts.

**Keywords:** Parkinson's disease, balance, gait training

**Recommended participant level:** intermediate

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**SATURDAY, APRIL 18**

**Title of presentation**

“Bridging the Gap from Student to Practice Owner (or Clinical Manager)”

**Presenter:** Brian Gallagher, PT

**Course description**

Getting accepted into PT school was one of the greatest accomplishments of my life. I recall how I felt in the lecture halls, labs, and later affiliations. I found it so new and exciting until after graduation, when I was suddenly on my own to figure out what career path I wanted to take. Not to mention all the questions as to what skills I would need as an employee, as a staff therapist, and as a clinical manager someday? At the same time I was working on getting married, buying a house, and becoming a dad. Time suddenly became a scarce commodity. Work/life balance was quickly becoming harder to manage. For my sanity I needed to get off that busy life train and invest in the training I needed to acquire the skills that I knew I hadn’t learned in PT school. After all, it’s often what you don’t know that is holding you back in private practice. In this session, we will discuss the operational skills and mindset that happy, successful PT professionals had to learn the hard way. With the proper training (versus “teachings”), you’ll find that you can achieve that coveted work/life balance.

**Course learning objectives**

Upon successful completion of this course, participants should be able to:
1) Develop their ideal scene for balance in their life and professional career as a guiding beacon to be followed when making decisions.
2) Apply the principles of management by statistical performance for optimal company culture.
3) Understand the leadership and communication skills necessary to be the ideal "Go-Getter" owner.

Speaker information
Brian Gallagher, PT – MEG Business Management
In 1997, Brian founded what became one of Maryland’s largest therapy staffing companies, while at the same time launching a multi-site private practice which resulted in a sale in 2006. Brian re-acquired the practice in 2008 and doubled it before winning “Practice of the Year” in 2011. MEG Business Management began in 2006 as an educational coaching company training owners and their key employees on innovative practice management strategies. Today, MEG has taken another major leap forward by developing a Virtual Training platform for practice owners to now have the tools and training resources to professionally enhance, track and manage employee performance & compliance. When Brian is not coaching or working on the virtual training platform, he can be found giving lectures at the APTA, PPS and CSM Annual Conferences, as well as APTA State Chapters and DPT Schools.

Keywords: leadership, personnel, business model, private practice

Recommended participant level: intermediate

Title of presentation
“Early Outpatient Telerehabilitation Improves Functional Outcomes in Patients Following Hospitalization for COVID-19”

Presenters: Jennifer Stone, PT, DPT and Chelsea Harrison, PTA

Course description
The presenters will discuss the design, implementation, and outcomes of a pilot program for rehabilitation of patients following hospitalization for COVID-19. This will include details of assessment methodology, exercise prescription, and screening for other needed services as well as the data gathered showing results of the program. Presenters will also discuss the utilization of telerehabilitation for these patients, including challenges and discoveries, and lead a discussion about best practices and future efforts.

Course learning objectives
Upon successful completion of this course, participants should be able to:
1) Discuss needed elements of recovery program design for patients who have been diagnosed with COVID-19.

Speaker information
Jennifer Stone, PT, DPT and Chelsea Harrison, PTA – Employer: University of Missouri

Jennifer Stone, PT, DPT, OCS, PHC, is a clinical manager in a hospital-based outpatient program in Columbia, MO, where she sees a mixture of pelvic health and other outpatient orthopedic diagnoses in addition to functioning as part of the leadership team for her department. Jennifer enjoys teaching pelvic health and orthopedic topics, and especially appreciates opportunities to explore the interplay between the two. She also participates in research and has recently published a randomized controlled trial exploring the role of physical therapists in the care of patients who delivered via cesarean section. In her spare time, Jennifer enjoys outdoor activities, gardening, knitting, and spending time with her husband and five children.

Chelsea Harrison is a Physical Therapist Assistant who graduated from Linn State Technical College in 2010. She spent the first 5 years of her career working in outpatient physical therapy specializing in orthopedics and aquatic therapy. Her interest in orthopedics led her to the Missouri Orthopaedic Institute where she has broadened her interests in research, edema management, and shoulder treatment.

Keywords: COVID, physical therapy, telehealth

Recommended participant level: intermediate
Title of presentation
“Smile: Every physical therapist can competently treat a person after facial nerve injury”

Presenter: Joni G. Barry, PT, DPT, Board Certified Neurologic Clinical Specialist

Course description
This will be a 3-hour presentation designed to help all PTs feel comfortable to evaluate and treat a patient with a facial nerve injury with competence with an evidence-based approach. It will begin with some review of the anatomy of the facial nerve and muscles of facial expression including some ways facial muscles are similar and also different than other skeletal muscles. There will be discussion of common diagnoses that lead to facial nerve injury, the medical and surgical management of these diagnoses along with the prognosis for these disorders. We will go over a basic assessment of the function of facial muscles and some outcome measures. Then we will cover intervention strategies for these patients separating the acute phase from the more chronic phase. The participants should leave this presentation feeling more comfortable treating this population and have some resources available to help them to provide the care these patients should need so that everyone is left smiling!

Course learning objectives
Upon successful completion of this course, participants should be able to:
1) List 3 ways facial muscles differ from other skeletal muscles
2) Know common diagnoses leading to facial nerve injuries and the prognosis.
3) Discuss evaluation of patients with facial nerve injuries including outcome measures
4) Plan interventions for patients with a facial nerve injury based on chronicity.

Speaker information
Joni G. Barry, PT, DPT, Board Certified Neurologic Clinical Specialist – Employer: Maryville University

Dr. Joni Barry is a Professor at Maryville University where she has been teaching full-time since 2004. She has had her board certification as an NCS since 1997 to the present. Dr. Barry has worked in a variety of settings with neurologic patients including treating individuals with facial nerve injuries.

Keywords: facial nerve rehabilitation

Recommended participant level: beginner to intermediate

Research Presentations
The Reliability of Assessing Upper Thoracic Costovertebral Mobility in Those With and Without Neck Pain
Presenter: Michael Cibulka, PT, DPT, MHS, FAPTA

Research information: Michael Cibulka is currently on faculty at Maryville University in St. Louis. Cibulka is widely recognized as a specialist in musculoskeletal disorders and conditions. He has published extensively in a variety of publications, including the Journal of Orthopedics and Sports Physical Therapy, Manual Therapy and Physical Therapy. Cibulka is a past president of APTA MO, the APTA Orthopaedic Section and past president of the Journal of Orthopaedic & Sports Physical Therapy for APTA. He has served on national and statewide APTA committees and he has received numerous awards to recognize his clinical and research expertise, as well as his service to the profession.

Exercise-Based Low Back Pain Treatments Require Different Numbers of Booster Sessions When Prescription is Performance-Based - Vanessa M. Lanier, PT, DPT, OCS, Quenten L. Hooker, MS, Keith R. Lohse, PhD, PStat, Linda R. van Dillen PT, PhD, FAPTA
Presenter: Vanessa Lanier, PT, DPT, OCS

Speaker information: Vanessa Lanier is an Assistant Professor of Physical Therapy, and an Assistant Professor of Orthopaedic Surgery at Washington University in St. Louis. She is a board-certified Orthopedic Specialist. She specializes in Outpatient orthopedics with special interests in the spine and TMJ (temporomandibular joint), and bleeding disorders. She has published extensively and has received numerous awards for her research and clinical expertise. She has served in several district leadership positions and currently serves APTA MO as Research Chair.

Learning Objectives: Learn how research data is collected and compiled and see how research results can impact practice.

Recommended participant level: beginner to intermediate
Title of presentation
“Fear Avoidance Behaviors in Concussion Management... Using the Pain Science Framework to Improve Outcomes”

Presenters: Rebecca Bliss, PT, DPT, DHSc and Jeff Bridges, PT, DPT

Course description
Characteristics of individuals at risk for experiencing post-concussive syndrome (PCS) include a previous history of psychological conditions such as anxiety, depression and/or mood disorders, history of headaches/migraines and post-concussive vestibular ocular dysfunction. The nature and extent of PCS is complex and has been associated with fear-avoidance behaviors similar to those with chronic pain, fibromyalgia and persistent postural perceptual dizziness (3PD). Fear-avoidance behavior has been associated with chronic disability in musculoskeletal conditions and has recently shown to be a predictor of adverse clinical outcomes associated with concussion injury. Patients with mTBI have potential to misinterpret information regarding their injury, catastrophizing their symptomology, with resultant increased levels of anxiety and avoidance behavior over time.

Physical therapists are in a unique role to alter behaviors contributing to protracted recovery through education and self-care promotion, which are hallmarks for success in the pain science model. Early intervention utilizing active rehabilitation in concussion can reconceptualize fear avoidance and potentially alter neurophysiology associated with these behaviors, decreasing the significant cost associated with post-concussive symptomology. This course aims to show the parallels between post-concussive rehab strategies and pain neuroscience to assist in combatting post concussion symptoms for improved outcomes.

Course learning objectives
Upon successful completion of this course, participants should be able to:

1) Conceptualize the Fear Avoidance Behavior Model as it relates to Post-Concussive Syndrome for earlier recognition and intervention
2) Demonstrate utilization of pain neuroscience framework to include patient education and earlier patient self-care promotion based on current evidence supporting active recovery.
3) Discuss available patient reported outcome measures to assist in identifying those at risk for fear avoidance behaviors
4) Demonstrate language changes and “growth mindset” approach with focus on abilities and progress during patient interactions

Speaker information
Rebecca Bliss, PT, DPT, DHSc, Board Certified Neurologic Clinical Specialist – Employer: University of Missouri

Jeff Bridges, PT, DPT, ATC, Board Certified Orthopedic Clinical Specialist – Employer: University of Missouri

Becky Bliss, PT, DPT, DHSc is a Clinical Assistant Teaching Professor in the Doctor of Physical Therapy program at the University of Missouri and is a board certified in Neurological Physical Therapy. She holds her Certificate in Vestibular Rehabilitation from the APTA, as well as Advanced Vestibular Certificate and is an Impact Trained Physical Therapist. Becky graduated from Ithaca College Department of Physical Therapy with a combined undergraduate-graduate Master of Physical Therapy in 2001. She completed her Doctorate in Physical Therapy from Des Moines University in 2014 and her Doctorate of Health Science from the University of Indianapolis in 2019. Becky has been actively practicing in the field of physical therapy for 19 years with specialization in concussion management since 2006. Her research interests include dysfunction of the vestibular ocular reflex following mild traumatic brain injury as well as early detection of impairments that lead to post-concussion syndrome and currently has several active studies specific to higher level motor control deficit identification in the sport athlete. Becky is active within the Academy of Neurological Physical Therapy, and is currently involved in the Knowledge Translation Project related to evidence based practice @ MU Health.

Jeff Bridges, PT, DPT, OCS, ATC is a Clinical Assistant Teaching Professor in the Doctor of Physical Therapy program at the University of Missouri and is a board certified specialist in Orthopedic Physical Therapy. He holds a Therapeutic Pain Specialist certification through Evidence in Motion and is also a certified Athletic Trainer. Jeff graduated from the University of Missouri with a Master of Physical Therapy in 2001. He completed his Doctorate in Physical Therapy from AT Still University in 2008. Jeff has been actively practicing in the field of physical therapy with specialization in sports medicine, spine care, and chronic pain.

Keywords: concussion, fear avoidance behavior, pain neuroscience

Recommended participant level: intermediate
Title of presentation
"Gender Affirming Care for the Rehabilitation Professional"

Presenter: – Jennifer Stone, PT, DPT

Course description
Studies have shown that physical therapists are one of the least culturally aware categories of healthcare providers in providing care for patients who identify as transgender or nonbinary. This course applies to physical therapist professionals in all settings and teaches the basics of gender affirming care as well as specific needs that may be experienced by this patient population.

Course learning objectives
Upon successful completion of this course, participants should be able to:

1) Provide definitions for at least 3 commonly used terms when defining genders and individuals who identify in different ways across the gender spectrum

Speaker information
Jennifer Stone, PT, DPT – Employer: University of Missouri

Jennifer Stone, PT, DPT, OCS, PHC, is a clinical manager in a hospital-based outpatient program in Columbia, MO, where she sees a mixture of pelvic health and other outpatient orthopedic diagnoses in addition to functioning as part of the leadership team for her department. Jennifer enjoys teaching pelvic health and orthopedic topics, and especially appreciates opportunities to explore the interplay between the two. She also participates in research and has recently published a randomized controlled trial exploring the role of physical therapists in the care of patients who delivered via cesarean section. In her spare time, Jennifer enjoys outdoor activities, gardening, knitting, and spending time with her husband and five children.

Keywords: transgender, care, cultural awareness

Recommended participant level: intermediate