

APTA New Hampshire Annual Conference

October 26, 2024



Conference Day - Need to Know!

more coming soon

PT Day of Service

To recognize PT Month and Day of Service, we are asking attendees to bring non perishable items to donate to local food pantries and shelters.

Parking

Continuing Competency Certificates

Networking

Student and Early Professional Kickoff

Please join immediately following the Annual Conference at Stark Brewery (walking distance) for appetizers and cash bar. This event will also include the 2024 Student Scholarship Award announcement.

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Schedule

Check-in / Light Breakfast | 7:00 - 8:00 am

Session 1 | 8:00 – 9:30 am

Think Outside the Box for the Neck & Shoulder Complex with Integrative Manual Therapy (IMT) - An Indirect 3 Planar Myofascial Release IMT Technique

Thomas A. Giammatteo, DC, PT, Ph.D., IMTC

Helping patients use their smartwatch for HRV and Nervous System Regulation

Cristin Zaimes PT, DPT

Session 2 | 10:45 – 11:45 am

Cybernetics: Turning wearable device data into decision actionable information

Sean Collins, PT, ScD

Introduction to Advanced Strain and Counterstrain for the Autonomic Nervous System - An Integrated Systems Approach from Integrative Manual Therapy (IMT)

Thomas A. Giammatteo, DC, PT, Ph.D., IMTC

Session 3 | 1:00 – 2:20 pm

Extended Reality Innovations for Rehab

Theresa A. Schmidt, PT,DPT,OCS,LMT,CEAS, Educise.com; Caitlin Campbell, PsyD

Session 4 | 2:30 – 4:00 pm

Enabling Clinicians to Use AI Safely

Jacob Michalski

Somatic Approaches to Chronic Pain: A Trauma-Informed Physical Therapy.

Melissa Jean Jarzynski, MSPT, HPCS

Session 5 | 4:00 - 5:00 pm

Equine Movement in Physical Therapy: Enhancing Motor Function through Hippotherapy

Melissa Jean Jarzynski, MSPT, HPCS

Beyond the Basics of Remote Therapeutic Monitoring

Ami E. R. Faria PT, DPT

Course Descriptions

8:00 - 9:30am	Think Outside the Box for the Neck & Shoulder Complex with Integrative Manual Therapy (IMT) - An Indirect 3 Planar Myofascial Release IMT Technique
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Levels: Multiple

Areas of practice: Cardiovascular Pulmonary, Geriatrics, Innovative Technologies, Neurology, Orthopedic, Manual Therapy, Sports Medicine, Pain Management, Pediatrics, Pelvic Health

Learn a unique form of myofascial release with the Integrative Manual Therapy Indirect 3 Planar Fascial Fulcrum. The physical therapist is integral to treating the connective tissue and fascia systems of the body. Despite many forms of treating the fascia, this unique skill can be easily learned, easy to use, and provide sustainable results. Learn to treat the neck and shoulder complex with IMT Indirect 3 Planar Myofascial Release, which can be performed seated or supine. The fascia system, contiguous and continuous throughout the body is vital for the healthy function of the body. Alleviate fibrosis, stagnation, and improve outcomes of flexibility and reduced pain with the Indirect 3 Planar Myofascial Release technique from Integrative Manual Therapy. This technique can be added to the therapist's treatment session and helps improve outcomes.

Learning Objectives:

- PT will be able to understand how fascia and structure lead to function in Integrative Manual Therapy.
- PT will know the anatomy of fascia, the connective tissue system, and how it relates to body systems.
- PT will be able to evaluate static and dynamic posture, gait, and flexibility while highlighting compensatory patterns.
- PT will learn the 3-planar fascial fulcrum for IMT Myofascial Release for the neck and shoulder complex.
- PT will be able to apply the 3-planar fascial fulcrum for IMT Myofascial Release for the neck and shoulder girdle.

Thomas A. Giammatteo, DC, PT, Ph.D., IMTC, is a world renowned author, international lecturer, Medical Director of IMT Wellness Center, Co-developer of Integrative Manual Therapy. Co-founder of the Integrative Manual Therapy Association, and the Dean/Owner of the Connecticut School of Integrative Manual Therapy in West Hartford, CT. Major formulator/Owner of IMT Wellness - a Functional Medicine/Nutritional Wellness company. In his 30 year career of lecturing, he has spoken and offered health care solutions for multiple fields of healthcare and well-being.

8:00 - 9:30am

Helping patients use their smartwatch for HRV and Nervous System Regulation

Level: Basic

Areas of practice: Innovative Technologies, Pain Management, Pelvic Health, Private Practice: business strategies, marketing, cash based practice

This course is designed to help therapists understand and utilize smartwatches (Garmin, Polar, Apple, Fitbit, Oura) to monitor and improve Heart Rate Variability (HRV), sleep and movement which are key indicators of nervous system health that are essential for healing, pain management and performance. Participants will learn how to guide patients to utilize HRV data to monitor their overall health and to for guidance in nervous system regulation.

Learning Objectives:

- Introduction to Heart Rate Variability (HRV)
 - What is HRV?
- HRV norms and profiles of various individuals
- Factors influencing HRV (sleep, exercise, disease, emotions, nutrition, stress etc)
- Smartwatch devices and fitness monitoring
- Overview of smartwatch functionality and current market products
- Key features for health monitoring and how the devices measure key metrics
- How to use smartwatches and HRV to coach patients (How we use in our pelvic centered clinic)
- Pain conditions: pelvic health, persistent pain, endometriosis
- Peri/Menopause
- Cyclical strength training
- Tension related conditions: pelvic organ prolapse, muscle spasm, trauma informed healing

Dr. Cristin Zaimes holds a Doctorate in Physical Therapy from Simmons College and has specialized in the field of orthopedics and pelvic floor dysfunction for over 20 years. She opened Oceanside in 2011, when her frustrations with the healthcare and medical system became overwhelming to her as a practitioner and she broke away to create an environment that supported healing and thrived on providing the best clinical care. Oceanside is now the leader on the Seacoast for pelvic health with two clinics (Stratham and Dover) serving our community. Her mission is to expand to provide care for underserved people across the Seacoast.

She has extensive advanced training in pelvic floor, bladder, bowel and sexual dysfunction for all people. She believe in allowing all those against whom the traditional medical system has biases, to have access to care that supports, connects and empowers. Dr. Zaimes spends much of her time advocating for patients through community connections, workshops and speaking engagements. Her passions include advocating for proper menstrual health and the awareness of abnormalities in period and ovulatory health, supporting new mothers and parents and fighting cultural norms that impede the healing process after delivery, and providing knowledge, guidance and support to women transitioning toward and after menopause.

10:45 - 11:30am	Cybernetics: Turning wearable device data into decision actionable information
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Level: Basic

Areas of practice: Innovative Technologies

Raw wearable device data is voluminous, messy, and meaningless. Information is meaningful. To be clinically useful the meaning within information should be decision actionable. Prior to providing decision actionable information, data is acquired, processed, transformed, analyzed, and passed through algorithms. This presentation introduces these concepts, so participants understand the strengths, weaknesses, and assumptions of wearable devices; with a focus on common non-invasive sensors such as inertial measurement units for movement, optic sensors for photoplethysmogram waves, and electrodes for bipotential signals (ECG, EMG). These signals are data, but not decision actionable information. Development decisions about acquisition, processing, transformation, analysis, and algorithms are important and often under the hood. The algorithm step is dependent on prior steps and is the most difficult. Obtaining decision actionable information with the right algorithm is an area of weakness for technology developers. It is the most complicated, and they are least prepared to perform this step. Developers need clinicians that know what decision actionable information is clinically useful. Decision actionable information goes beyond data. It needs an interpretive framework for algorithm development. A framework for wearable device data is cybernetics (feedback and causal circularity). Movement can change pain and pain can change movement is an example of causal circularity and is important to generate actionable information. But it is woefully underutilized in the current wearable device market. This presentation introduces these concepts at a basic level to enable participants to engage with developers to point out the flaws of existing systems, hold them accountable to providing better decision actionable information, or even partner with developers. Much of the problem is based on a language barrier. The developers and the clinicians speak different languages.

Learning Objectives:

1. Participants will understand the pipeline that connects raw data to algorithms from IMU, optical photoplethysmogram and electric bipotential sensors.
2. Participants will be able to participate in discussions with technology developers and experts about wearable device tech specs such as data acquisition, processing, transformation, analysis, and algorithms.
3. Participants will understand the cybernetic framework for algorithm development to generate decision actionable information.
4. Participants will be able to provide examples of possible clinical uses of data obtained from wearable devices with consideration to cybernetic principles including feedback and causal circularity.
5. Starting with a desire for particular decision actionable information, participants will “reverse engineer” a wearable device system by considering the algorithm necessary for the information, the analysis needed for the algorithm, the transformations needed for the analysis, the processing needed for the transformations and the raw data acquisition needed to be processed.

Sean Collins is Professor of Physical Therapy at Plymouth State University and practicing physical therapist at Coppola Physical Therapy in Tilton NH. At UMass Lowell he had a joint appointment in the PhD in Biomedical Engineering program teaching quantitative physiology and serving on several PhD committees. He earned an ScD in 2003 and won the Kerr Award for Excellence in Ergonomics Research and Special Recognition at the International Conference on Occupational Health for his dissertation on Job Strain & Electrocardiograph Assessed Pathophysiologic Correlates. His dissertation used the technology available at the time to acquire ambulatory data for which he developed transformation, analysis, and algorithm methods for the physiological assessment of job stress of workers. He is Editor Emeritus of Cardiopulmonary PT, was awarded the Linda Crane Lecture Award, and is a member of IEEE Engineering in Medicine and Biology, as well as the Systems and Cybernetics Society. He has published over 60 publications and technical reports and has presented at numerous national and international conferences. For six years he directed a lab that secured over 100k in funding from the Department of Defense and industry partners to support the research and development of ambulatory accelerometry, electrocardiography and vital sign monitoring.

10:45 - 11:30am

Introduction to Advanced Strain and Counterstrain for the Autonomic Nervous System - An Integrated Systems Approach from Integrative Manual Therapy (IMT)

Levels: Multiple

Areas of practice: Cardiovascular Pulmonary, Geriatrics, Innovative Technologies, Neurology, Orthopedic, Manual Therapy, Sports Medicine, Pain Management, Pediatrics, Pelvic Health

In this course, learn a unique new tool to address posture, neck, and low back pain with Integrative Manual Therapy Advanced Strain and Counter strain for the Autonomic Nervous System. The majority of people have an episode of spine pain at some time during their life. The autonomic nervous system regulates certain body processes, including muscle spasm. Dysregulation of the autonomic nervous system can affect any body part or process such as posture, balance, gait, and flexibility. By using Integrative Manual Therapy's Advanced Strain and Counterstrain, the physical therapist can reduce the hypertonic state of smooth muscle. This will improve posture, fluidity of gait, and spinal movement. This technique can improve the results, enhance sustainability of treatments, and is easily added to the physical therapist's current treatment session.

Learning Objectives:

- PT will understand anatomy and physiology of the hypothetical model.
- PT will be able to recognize the hypertonicity of the muscular, soft tissue, and circulatory systems [Arterial, Venous and Lymphatic].
- PT will be able to apply individual techniques in a two-minute session per muscle group.
- PT will be able to apply this technique to their own practice.

Thomas A. Giammatteo, DC, PT, Ph.D., IMTC, is a world renowned author, international lecturer, Medical Director of IMT Wellness Center, Co-developer of Integrative Manual Therapy. Co-founder of the Integrative Manual Therapy Association, and the Dean/Owner of the Connecticut School of Integrative Manual Therapy in West Hartford, CT. Major formulator/Owner of IMT Wellness - a Functional Medicine/Nutritional Wellness company. In his 30 year career of lecturing, he has spoken and offered health care solutions for multiple fields of healthcare and well-being.

1:00 - 2:20 pm

Extended Reality Innovations for Rehab

What if you could make your therapy programs more entertaining and engaging to boost patient compliance with the treatment plan for better outcomes? Immersive virtual reality (VR) offers an exciting innovative approach to managing chronic pain. Extended reality (ER) integrates the virtual world into your real time clinical approach as a tool to maximize outcomes. In this foundational course, explore the incredible opportunities for engaging your patients in this emerging technology to achieve positive results they will rave about.

Learn how VR/ER offers a customizable environment to build therapy plans of care that stimulate patients' interest while providing the challenge they need to master mobility skills in greater comfort and enjoyment. In this brief introduction, we will focus on how to use VR for pain remediation and mobility enhancement. Explore how VR adds another dimension to your therapeutic approach patients look forward to.

Dive into the digital age with us as we explore the latest innovative technology that transforms an ordinary day of rehab into an immersive experience that facilitates compliance with therapeutic protocols to build those measurable outcomes you aim for.

Learning Objectives:

- Define Virtual Reality (VR)/ Extended Reality (ER) immersion technology and explain its role in rehabilitation for pain management.
- Discuss how immersive technology provides a compelling environment to stimulate patient engagement in the recovery and rehabilitation process.
- Employ plans of care to tackle pain with distracting environments that facilitate calmness within the nervous system using mindful activities and distraction. Shift focus away from pain into an engaging setting to retrain the brain on pain.
- Discuss the latest evidence on the effectiveness of VR/ER to craft positive outcomes for patients with pain

Theresa A. Schmidt, PT, DPT, OCS, LMT, CEAS, Educise.com; and Caitlin Campbell, PsyD

2:30 - 4:00 pm

Enabling Clinicians to Use AI Safely

Level: Basic

Areas of practice: Innovative Technologies

In this course, we'll explore Artificial Intelligence (AI) and why it's becoming increasingly important in healthcare. We'll start by breaking down what AI is and why it matters in the clinic today. But here's the thing: while AI is super cool, not all AI tools are safe for healthcare. Some, like ChatGPT and other OpenAI sources, aren't HIPAA compliant.. So, we'll also talk about how to use AI safely and responsibly in healthcare settings. In addition, we'll dive into how AI can help clinician's do their jobs better, especially when it comes to writing notes. By using AI-powered note-taking tools, clinician's can save time and work more efficiently. We'll also briefly touch on new companies making sure their AI tools follow strict privacy rules, so you can use them with confidence. That work inside your existing EMR!

Learning Objectives:

1. Gain insight into Artificial Intelligence (AI) and its growing significance in the healthcare industry, including why it matters in clinical practice.
2. Learn about the importance of using AI safely and responsibly in healthcare settings, particularly regarding patient privacy and compliance with regulations like HIPAA.
3. Explore how AI-powered note-taking tools can improve efficiency for clinicians, including physical therapists, by saving time and streamlining documentation processes.
4. Discover the importance of choosing AI tools that adhere to strict privacy rules, ensuring that patient data remains secure and protected.
5. Understand how AI can assist clinicians in their daily tasks, such as writing notes, and how leveraging AI tools can lead to improved productivity and patient care outcomes.

Jake Michalski, from Buffalo, New York, founded Comprehend PT, a tech startup that combines AI with medical documentation. Drawing on his experience from Moog Inc., where he developed flight code for top-secret military planes and satellites, his startup focuses on simplifying medical documentation for physical therapy. With assistance from his cousin Chris, a DPT who runs his own cash-based clinic, Jake developed a tool that uses AI to record patient encounters and automatically document the visit in your EMR. Simply review the AI-generated note and hit submit.

2:30 - 4:00 pm

Somatic Approaches to Chronic Pain: A Trauma-Informed Physical Therapy.

Level: Intermediate

Areas of practice: Communication, Professionalism, Self Care Diversity, Equity and Inclusion
Pain Management, Pelvic Health

In the evolving field of physical therapy, the integration of somatic practices offers a revolutionary approach to managing chronic pain, particularly in patients with trauma histories. This comprehensive course, "Somatic Approaches to Chronic Pain: A Trauma-Informed Physical Therapy," is designed to bridge the gap between traditional physical therapy methods and innovative somatic techniques that focus on the interconnection between mind and body.

Through an in-depth exploration of both physiological and psychological dimensions of pain, this course aims to equip physical therapists and healthcare professionals with the skills needed to enhance their practice, improve patient outcomes, and foster holistic healing.

Learning Objectives:

- Understand the Interrelationship Between Chronic Pain, Trauma, and Somatic Practices:
- Learn the key principles of somatic therapy, including the importance of body awareness, mindful movement, and the role of the nervous system in experiencing and managing pain.
- Acquire skills to effectively integrate somatic exercises and interventions into treatment plans for patients with chronic pain, with a focus on tailoring these interventions to individual needs.
- Review and discuss current research findings related to the effectiveness of somatic practices and trauma-informed approaches in managing chronic pain.

Melissa Jean Jarzynski excels in integrating physical therapy with equine-assisted practices, emphasizing trauma-informed care. As the owner of Happy Trotters, Melissa Jean PT, and Stable Friendships Foundation, and with over 19 years of expertise, Melissa is a board-certified Hippotherapy Clinical Specialist and certified with PATH International and EAGALA. Her pioneering spirit is most evident in her program, "Finding Peace in the Paddock™." This groundbreaking work focuses on the interplay between human and horse heart rates, revealing significant benefits for those dealing with trauma, stress, and chronic pain. Her research in this area, though preliminary, has already begun to illuminate the profound effects of equine-assisted therapy. It's not just about physical healing; Melissa's work highlights the deep emotional and psychological connections that can be fostered between humans and horses, offering a new dimension to trauma-informed care. This unique blend of therapy and equine interaction is a testament to her innovative approach to enhancing holistic well-being.

4:00 - 5:00 pm

Equine Movement in Physical Therapy: Enhancing Motor Function through Hippotherapy

Level: Intermediate

Areas of practice: Neurology, Orthopedic, Manual Therapy, Sports Medicine, Pain Management, Pediatrics, Pelvic Health

Imagine a treatment so powerful that it can achieve up to 5,000 repetitions in just 5 minutes, dramatically outpacing traditional therapeutic methods. This is the reality of hippotherapy, a groundbreaking strategy used exclusively by licensed physical, occupational, and speech therapy practitioners. By harnessing the unique movement of horses, hippotherapy transforms the way we approach rehabilitation.

This versatile intervention is suitable for individuals of any age and with a variety of conditions. Whether you're working with stroke survivors, individuals with multiple sclerosis (MS), or those in need of female pelvic floor therapy, hippotherapy offers a dynamic and effective solution. It promotes core stability, balance, and overall motor function, addressing a wide range of physical challenges.

Learning Objectives:

- **Harness the Power of Equine Movement:** Discover how the natural gait and rhythm of horses can revolutionize your therapeutic outcomes.
- **Targeted Diagnoses:** Learn which diagnoses benefit the most from hippotherapy, including applications for stroke, MS, and pelvic floor therapy, and understand the science behind its effectiveness.
- **Impact on Human Physiology:** Explore how equine movement directly enhances essential human organ systems, promoting overall health and well-being.
- **Interdisciplinary Integration:** Unlock the potential of integrating your discipline-specific knowledge with this innovative treatment strategy to elevate your practice.
- **Examine the Research:** Delve into the latest research supporting hippotherapy, understanding its evidence-based benefits and how to apply these findings to your practice.

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4:00 - 5:00 pm

Beyond the Basics of Remote Therapeutic Monitoring

Level: Intermediate

Areas of practice: Innovative Technologies

This 60 minute course is designed to provide healthcare professionals with comprehensive knowledge and practical skills for implementing and managing RTM systems. The course will cover various aspects of RTM, including its benefits, technology, regulatory considerations, data management, patient engagement, and clinical applications. This is the culmination of the trials and tribulations of being an early adopter of a new way of capturing the skills of our clinicians out in the field, and learning along the way how those services can be captured and reimbursed. This presentation does not advise on or endorse any particular FDA approved device for RTM. This course will equip healthcare professionals with the necessary skills and knowledge to effectively utilize remote therapeutic monitoring, ultimately improving patient outcomes and optimizing healthcare delivery.

Learning Objectives:

- Identify and describe CPT codes used for Remote Therapeutic Monitoring (RTM), and when to utilize each
- Identify and describe who can bill for RTM codes
- Demonstrate understanding of regulations related to RTM use and billing
- Demonstrate understanding of case studies related to RTM
- Most importantly, feel empowered to explore this innovative model of practice for yourself.

Ami Faria PT, DPT received her BS in PT from the University of New England in 1999 and her tDPT from MGH IHP in 2005. Ami has practiced in the acute care, home health, adult day health, outpatient and long term/skilled nursing care settings. For the past 19 years, Ami has worked for Powerback Rehabilitation with over 16 of those years spent in the analysis and management of payer denials. She is currently the Director of Reimbursement and leads a team of PT, OT, SLP and RN/LPN appeals specialists. Ami provides extensive education yearly to therapists, nurses and non-clinical staff related to documentation and denials. Ami has served both locally and nationally for APTA and is the current Vice President of APTA NH and the Chair of the APTA Reference Committee. Ami is also a Teacher/Lecturer for the Plymouth State University Doctor of Physical Therapy program, specifically in areas of Health Policy, Advocacy and Policy Analysis. Ami lives in Exeter, NH with her husband and two teenagers.

Posters

1. Leadership Development in Doctor of Physical Therapy Education: A Literature Review

Theresa O'Neil PT, MS, DPT, EdD, OCS; Taylor Abbott SPT; Alyson Fillion; Mathew Grazaille; Hannah Barry; Elke Shaumberg PT, MS, DPT, PhD

2. It Works, Now What? Translating a Novel Medical Device for Patients, Providers, and Payers

Kirsten Smayda, PhD

3. Interventions to Improve Spasticity and Contractures and Their Impact on Functional Outcomes: A Scoping Review of the Literature

Lisa Doyle, PT, DPT, MS, NCS Devin McManaway, SPT Samantha Dassatti, SPT Samantha Turgeon, SPT, Marjolijn Van Der Weide, SPT

4. Does Mindful Coloring Decrease Test-Taking Anxiety in DPT Students? A Pilot Study

Susan Mercik-Davis, PT, MS, DPT Tracie Klekotka, PT DPT, MPH, CLT-LANA

5. Student Readiness for Clinical Education Experiences Based on the Student Perspective

Lauren Arcibal, PT, DPT, GCS; Tracie Klekotka, PT, DPT, MPH, CLT-LANA; Nicholas Gott, SPT; Clark Marchand, SPT; Zachary Martin, SPT; Kyle Paynter, SPT; Jordan Wing, SPT

6. Expertise in Neurological Physical Therapy: A Scoping Review

Cory Hall DPT, ATC, NCS Lucas Utter SPT, Grace Howard SPT, Alex Zablan SPT, Andrew Ammon SPT

7. Management of long thoracic nerve palsy in a pickleball instructor due to parsonage turner syndrome

Frederick M Maurin Jr, PT, DPT, OCS

8. Quantifying Freezing of Gait in Parkinson's Disease with novel technology: a case study

Valerie Gibson, PT, DPT Lisa Donahue, PT, MPT, NCS