



2017 Orthopaedic National Symposium: *Stronger Together*

Preliminary Schedule

Full session descriptions, speaker biographies and times will be posted on the website soon. Keep watching for updates. New presentations and speakers will be added.

London Convention Centre: Friday, October 20, 2017: 5:30 - 10:00 PM

- Conference Opening and **Keynote: *Gray Cook***
- Reception

London Convention Centre: Saturday, October 21, 2017: 8:00 AM - Midnight

- 8:00 AM - 5:15 PM: Education Sessions, including **Keynote: *Dave Walton***
- 6:00 - 7:00 PM: Reception
- 7:00 PM - Midnight: Gala

Hilton by DoubleTree: Sunday, October 22, 2017: 9:00 AM - 12:30 PM

- Education Sessions
- **Keynote: *Carol Kennedy***

Keynote Sessions

Keynote: The Functional Movement Systems and How They Interact: The Language of Movement is Written in Feel - *Earl Grayson "Gray" Cook* MSPT, OCS, CSCS

Functional Movement Systems deconstructs human movement to identify mistakes in your movement health, physical education, personal fitness, physical rehabilitation and athletic development. These are simply programming errors, to borrow language from the realm of computers and their operating systems. In this session, Gray Cook will discuss how we set ourselves up for failure when we try to reprogram (develop, correct or rehabilitate) our own movement without taking the time to learn the operating system's language. The language of movement isn't written in words or pictures. The language of movement is written in feel.

When your body is broken, when your exercise program is broken, when your lifestyle is broken, when your culture's physical expression is broken . . . The Selective Functional Movement Assessment, Functional Movement Screen and Fundamental Capacity Screen measure how broken they are and

identify the proper level of movement at which to fix the programming errors. Through these screens and assessments, we cultivate your original movement operating system. Then, you grow movement.

Objectives

Lecture attendees should finish this session with the ability to:

- Recall the importance of perception and the SAID (Specific Adaptation to Imposed Demand) principle to physical development and describe how they are represented in the Three Principles that guide Functional Movement Systems.
- Describe common programming errors in strength and conditioning programming and their causes.
- Apply movement principles to overcome strength and conditioning programming errors.
- Identify the purpose, scope and basic application of the Functional Movement Systems (SFMA, FMS and FCS) and how they work with natural movement principles.
- Develop programs that use feel to progress training naturally, safely and efficiently.

Keynote: Time Does Not Heal All Wounds: understanding chronic pain from a stress-diathesis perspective - *Dave Walton*, PhD, PT, FCAMPT

Chronic pain continues to represent a health epidemic in Canada, with 1 in 5 Canadian adults living with daily chronic pain, and issues such as addiction to opioids becoming daily news stories. The genesis of chronic pain remains elusive, though we now know that much of it can be traced back to an initiating trauma to the musculoskeletal system. Important questions remain however, not the least of which being: why do about half of those who experience an injury recover smoothly while the other half experience prolonged problems, and about 15-25% develop severe chronic pain?

In this enlightening talk, Dr. Dave Walton will present historical context around the attempts to identify the 'cause' of chronic pain, and will present new models and scientific findings that explain why those attempts have so far failed but additionally why there is renewed cause for optimism in the search for chronic pain mechanisms. The focus of this talk will be around the concept of stress dysregulation in the peri-traumatic period and how this dysregulation may be influenced by genetics and early life adversities.

Attendees will leave with a new understanding of the complexities of acute and chronic pain management, but also with concrete tools for identifying potentially at risk patients and strategies for dealing with that risk to stem the tide of chronic pain in Canada.

Keynote: Topic TBA - *Carol Kennedy*

Sessions for October 21 and 22: Range from 15 minutes to One hour in duration

Mobilization with Movement: The Intersection of Manual Therapy and Pain Sciences - [Jim Millard](#) BScPT, MCISc(PT), tDPT, FCAMPT *and* [Dr. Jack Miller](#) B.Sc.(P.T.), Dip.MT. (N.Z.), MCISc, DPT, FCAMPT

Mobilization with Movement (MWM) lies at the intersection between manual therapy and pain science. MWM combines joint mobilization with functional activities in full control of the patient. MWMs are pain free. MWM is patient centered manual therapy! The joint application of mobilization and movement with active patient involvement allows for pain modulation both somatically and psychologically. Utilizing this concept as a bridge to patient empowerment can enhance clinical outcomes across patient settings. MWM is manual therapy that makes sense!

Introduction to the Fundamentals of Concussion Rehabilitation - A Case Study - [Luke Cruickshank](#) BSc, MScPT, MCISc (Manip), FCAMPT, Sport Dip

Concussions have been dominant in our culture for the past few years now. From news stories to lawsuit battles to major motion pictures, concussion has become a popular buzzword. We are now wise enough to know how to recognize when a concussion has happened and how to mitigate the risks, but the majority of the general population are still oblivious to the treatment options that are available to help with the recovery process. Luckily for us, research has shown that we can use our exceptional Physiotherapy skills to effectively reduce symptom severity and reduce the overall recovery time. This presentation will delve into the specific patho-anatomical factors that can contribute to symptoms, provide the assessment tools necessary to evaluate these domains and offer insight on how to incorporate these findings into a comprehensive and customized treatment plan, to help ensure that our patients return to work, school or sport as quickly and safely as possible.

Is the Pelvic Floor the Missing Link? A multidisciplinary novel approach to manage low back pain and non-arthritic hip pain - [Carolyn Vandyken](#) PT, BHSc, [Brittany Vandyken](#) PT, [Darryl Yardley](#) PT, FCAMPT

Orthopaedic physical therapists (PTs) have historically addressed pelvic floor dysfunction (PFD) using kegels to correct underlying weakness and improve core stability. This session will focus on research that supports that 94% of women presenting to an orthopedic clinic for LBP demonstrate PFD, and the clinical implications of the large proportion that had overactive PFMs. A pelvic floor screening tool will be introduced to assist orthopaedic PTs in correctly identifying PFD before initiating core strengthening exercises. Those that attend this session will develop strategies and expertise for assessing and managing all forms of PFD and how to successfully cross-refer to a colleague with internal palpation skills.

American Physical Therapy Association (APTA) Neck Pain Clinical Practice Guideline - Revision 2017 - [Anita Gross](#) MSc, PT, FCAMPT; [Dave Walton](#), PhD, PT, FCAMPT

The Orthopaedic Section of the American Physical Therapy Association (APTA) has an ongoing effort to create evidence-based practice guidelines for orthopaedic physical therapy management of patients with musculoskeletal impairments described in the World Health Organization's International Classification of Functioning, Disability, and Health (ICF). The purpose of these revised clinical practice

guidelines is to review recent peer-reviewed literature and make recommendations related to neck pain. We will discuss evidence-based OPT practice including diagnosis, prognosis, intervention, and outcome assessment,

- Classify and define common NP using the World Health Organization's terminology related to impairments of body function and structure, activity limitations, and participation restrictions,
- Identify interventions supported by current best evidence,
- Identify appropriate outcome measures to assess change, and
- Provide information for patients, payers, policy makers, and claims reviewer.

Exploring the Pathogenesis of Post-Concussion Syndrome - An Evidence Based Approach - [Luke Cruickshank](#) BSc, MScPT, MCISc (Manip), FCAMPT, Sport Dip

Should we really be afraid of concussions? Can a concussion cause permanent brain damage? What is the actual risk that a concussion will never fully resolve? Can a concussion really ruin your life? Dealing with these questions can evoke a strong emotional response, but it is important that the answers we seek be based in fundamentally sound research. We will delve into the research surrounding why some people do not get better after sustaining a concussion, and explore the various non-pathoanatomical factors that come into play. We will then synthesize this information by examining the interactive relationships of these factors within the context of an evidence based holistic model. Finally, we will discuss a clinical narrative that provides pragmatic approaches on how we can help these patients, who are stuck in symptom limbo, break the cycle and gradually work toward their recovery. Together, we will learn how to turn our fear of concussions into infectious empowerment for our patients, as we help them navigate their path to recovery.

Mechanical Traction for Neck Pain with or without Radiculopathy - [Nadine Graham](#) MSc, BHScPT, BA

If you are a busy clinician and want to know the best evidence to guide your practice for those patients that have neck pain, then this series of presentations is for you. The presenters will provide a summary of the evidence for conservative treatment of neck pain from a series of systematic reviews conducted by the Cervical Overview Group, an internationally and multidisciplinary team of clinicians and researchers.

Exercises for Mechanical Neck Disorders: A Cochrane review update - [Meg Smith](#) MSc(c), BHScPT, BSc(HK)

Neck pain is common, disabling, costly and typically treated with exercise. The purpose of this Cochrane systematic review update was to assess the effectiveness of exercises to improve pain, disability, function, patient satisfaction, quality of life, work days lost and global perceived effect in adults with neck pain. Due to the heterogeneity of exercise interventions described in the literature, we used sub-classification by exercise element to clarify the effectiveness of exercise for: mechanical neck disorder, whiplash associated disorder, neck disorders with radiculopathy and cervicogenic headache.

The Immediate Effects of Lumbar Gap Manipulation and Graded Lumbar Mobilization on Balance and Gait - *Kara Patterson* PT, MSc, PhD, *Jackie Sadi* PT, MSc, FCAMPT

Somatosensory input such as vibration and haptic cues can influence the control of gait and balance. It has been proposed that manual therapy can influence the inflow of sensory information into the central nervous system. Thus, we propose that manual therapy may have an immediate effect on gait and balance via this influence on sensory information. This study determines the immediate effects of spinal manipulation (SMT) and mobilization (MOB) on gait and balance in people with low back pain (LBP) and without (NOLBP) LBP.

Relevance: It discusses how LBP impacts motor control of gait and standing. This paper is relevant to orthopedic physiotherapist whose practice involves LBP and SMT.

Mobilization for Neck Pain: A Cochrane Review update - *Rhonda Reardon* MSc, PT, FCAMPT

Our caseloads at any given time includes patients with neck pain. We often use mobilization techniques as a treatment strategy to decrease pain and disability. How effective is the use of this technique? Our clinical experience and judgement can offer us an answer to this question but what does the literature say?

Application of the McKenzie System of Mechanical Diagnosis and Therapy (MDT) in Patients with Shoulder Pain; a prospective longitudinal study - *Richard Rosedale* PT, Dip MDT

There have been calls in the literature for new classification and treatment approaches to the shoulder. This study is the first to look at the application of the McKenzie system of MDT to the shoulder in a cohort of patients and determine if these classifications have any meaning in regards to prognosis and outcome. It demonstrated clearly that patients with Derangements whether from the spine or at the shoulder do respond rapidly, have better outcomes and are discharged sooner. The study also showed that;

- 29% of the patients presenting for treatment with 'shoulder pain' had the source of their problem as a Cervical spine Derangement and responded purely to spinal intervention. This demonstrates how critical a thorough MDT screening of the cervical spine is with all presentations of shoulder problems.
- 38% had a shoulder Derangement.
- 2/3 of the patients (spinal + shoulder Derangements) achieved a rapid response to MDT intervention in regards to pain and function and an early discharge.
- 21% were Dysfunctions achieving a slower but steady improvement.

These are encouraging numbers and demonstrate the potential implications for the use of MDT in the shoulder.

Mobilization-Manipulation and Exercises for Neck Pain: A Cochrane Review Update - [Nejin Chacko](#)
MSc, PT

This Cochrane review update assesses if manual therapy and exercise improved pain, function/disability, patient satisfaction, quality of life, and global perceived effect in adults with acute/subacute/chronic neck pain with or without headache or radicular findings. Moderate quality evidence supports the use of manual therapy plus exercises in the management of neck pain. Research should focus on large trials by disorder subtype, follow CONSORT guidelines to maximize trial methodological quality and detail dosage factors.

Making the Connection; Linking the Therapeutic Alliance to Patient Outcomes - [Jim Millard](#) BScPT, MCISC(PT), tDPT, FCAMPT, [Jasdeep Dhir](#) BSc(PT), TDPT, MCISC (MT), FCAMPT

Given the frequency and duration of our interactions with patients, the means by which we communicate should not be viewed as passive, but as a fundamental, strategized form of care that is thoughtfully selected for each patient in a similar manner to other interventions. A strong therapeutic alliance improves patient outcomes. Acquisition and improvement of these communication skills should not be overlooked. The speakers will present the CARE model as a means to assist clinicians in navigating and enhancing the therapeutic alliance to improve patient outcomes in their clinical practice. How we deliver our CARE matters! Utilizing the alliance is science!

Diagnostic Imaging and Rehabilitative Ultrasound Imaging (RUSI) Training & Legislation in Physiotherapy: A pan-Canadian survey of university programs, provincial colleges and Canadian Armed Forces - [Raymonde Fortin](#) BSc (KIN), PT, DSc

Information provided by diagnostic imaging (DI) and more recently by Rehabilitative Ultrasound Imaging (RUSI) help physical therapists play their expert role in human function and mobility by contributing to the development of a precise and realistic intervention strategy. Considering the rapidly evolving role of physical therapists in health care delivery, obtaining an actual and projected overview (within 5 years) of the Canadian legislative situation and university curricula in Di/RUSI seemed paramount.

The results of 3 questionnaires completed in 2016-2017 (provincial legislative bodies, universities, Canadian Armed Forces) will be presented. They may support further discussions on educational planning of content and resources as well as future prescribing rights for Canadian physical therapists.

Lumbar Spine Manipulation: Subjective and Objective Indicators Guiding Clinical Decision Making - A Delphi Study Part 1 - [Lenerdene Levesque](#)

Coming Soon.

Lumbar Spine Manipulation: Subjective and Objective Indicators Guiding Clinical Decision Making - A Delphi Study PART 2: A Clinical Algorithm - [Lenerdene Levesque](#)

Coming Soon.

Patient Practices: Factors that Influence a Patient's Decision to Discontinue Physiotherapy following an Anterior Cruciate Ligament (ACL) Reconstruction - *Alliya Remtulla* PhD (cand.), M.Sc., B.Sc.Kin

Approximately 250,000 ACL injuries occur each year in Canada and the United States. Reconstruction of the ACL, followed by rehabilitation, is often recommended for individuals who wish to return to sport. The rate of return to pre-injury sport level a year after ACL reconstruction ranges from 31% to 92%. It is likely that patient adherence to rehabilitation is linked to outcome. Although many studies have examined reasons patients adhere to rehabilitation, little is known about why patients discontinue their rehabilitation, specifically due to lack of social support, time commitment, monetary reasons, fear of re-injury, specifically following ACL reconstruction and whether this plays a role in the athlete's ability to return to sport. Therefore, the purpose of this study is to determine the usual amount of time that patients attend physiotherapy post ACL reconstruction, which factors influence a patient's decision to discontinue their rehabilitation, and whether patients return to sport at a similar level.

Clinical Use of the Star Excursion Balance Test (SEBT) to Assess Dynamic Postural Stability Deficits Following a Lateral Ankle Sprain in Prognosis of Chronic Ankle Instability - *Allison Gaudet* MCISc PT (Manip), MScPT, BScKin, *Anthony Giorgianni* MCISc PT(Manip), MPT, BScKin

Chronic ankle instability (CAI) post-lateral ankle sprain (LAS) adversely impacts activity, quality of life, health, and economic costs. Advanced technologies testing for postural stability and sensorimotor deficits are validated in patients who experience CAI post-LAS. Clinicians with limited access to technology require alternate testing strategies. There is need for a non-instrumented test identifying dynamic postural stability deficits which differentiate those with and without CAI post-LAS.

Pragmatically, the Star Excursion Balance Test (SEBT) aides clinicians to enhance treatment planning, progress monitoring and establishing baselines for return to play decisions. Recent consensus statements recommend improved assessment after a lateral ankle sprain (LAS) for prevention, management and identification of factors leading to chronic ankle instability (CAI). Our objective was to systematically review the literature to determine if the SEBT demonstrates the same dynamic postural stability deficits as found in instrumented tests and therefore help determine the prognosis of CAI. SEBT scores correlate with validated technologies. The SEBT provides clinicians with information regarding ongoing sensorimotor deficits in patients post-LAS. This information is beneficial for early identification and proactive treatment of CAI.

Death and Cervical Spine Manipulation, Is There a Relationship? A case report and literature review on vascular pathophysiology and examination procedures - *Pierre Langevin* Pht, MCISc, FCAMPT

On November 19th 2014, a therapist has performed two cervical manipulations with the intent to improve a woman's neck pain and headache. Twelve hours later, she died from an intracranial hemorrhage originated from a right vertebral artery aneurysm rupture. In this presentation, the clinical case, vascular traumatic pathophysiology and facts about the woman's vascular lesion will be described. With the information provided and your own clinical reasoning skills, you will reflect on the relationship between the death and the manipulation. An evidence-informed pre-manipulative screening clinical approach will also be presented.

Can a Knowledge Translation Intervention Improve the Evidence Based Management of Lateral Ankle Sprains by Canadian Armed Forces Physiotherapists? - [Eric Robitaille](#) PT, PhD

This presentation will outline how a knowledge translation implementation strategy was tailored for Physiotherapists employed in Canadian Armed Forces Health Services Centres, to improve their evidence based management of lateral ankle sprains. Attendees can expect to learn an overview of knowledge translation implementation strategies currently recommended for physical therapists and evidence based management strategies currently recommended for lateral ankle sprains.

Five Keys to Understanding and Managing Chronic Hip Pain - [David Lindsay](#) BHMS, BPhy, MSc

While structural anomalies such as femoral-acetabular impingement (FAI) likely contribute to chronic hip joint pain (CHJP), what is often overlooked is the critical role muscle balance plays in maintaining the normal function of a joint that has more muscles attaching around it than any other single joint in the body. The purpose of this very practical one hour long presentation is to better understand the biomechanics and muscle physiology of this amazing joint as well as highlight scientifically supported rehabilitation strategies.

At the end of this lecture, the attendees will:

1. Know how to differentiate the most common causes of insidious onset hip pain,
2. Better appreciate which labral tears (& FAI) require surgical management,
3. Have a rationale for establishing the CRITICAL elements in conservative management of CHJP.

Rehabilitation Strategies Following Anterior Cruciate Ligament Reconstruction - [Morgan Jennings](#) BA Honors Specialization Kinesiology, MSc Health & Rehabilitation Candidate

Anterior cruciate ligament (ACL) tears are among the most common knee injuries. This debilitating injury requires an extensive recovery process. This presentation will take a closer look at ACL rehabilitation and current testing protocols to fill the gap in current patient care. It will outline the importance of objective measurement within the clinical setting and will highlight the introduction and design of a user-friendly clinical tool. This new tool will provide an accessible measure of patient progress throughout rehabilitation using a common functional task – the drop vertical jump.

Reliability and Validity of the Star Excursion Balance Test (SEBT) for Chronic Patellar Instability - [Andrew Firth](#) BSc, MSc

Functional tests are becoming increasingly popular in the clinical-decision making and the Star Excursion Balance Test (SEBT) has the ability to describe reach deficits in injured patients and provide useful information to clinicians. There is currently a lack of evidence regarding functional tests in a population following patellar dislocations: a relatively young, active population who could become asymptomatic or be plagued by instability. If the SEBT is to be used in this population to make decisions about return to

sport, to detect change, or to predict patients who are likely to become chronic (to direct rehabilitation), then it must first be shown to be reliable and valid.

Performance Optimization: Execution of a Quality Strategy to Evaluate Outcomes and People - [Darryl Yardley](#) PT, FCAMPT

In every health care business, there is financial pressure to improve the performance of the practice and its clinicians. Orthopaedic physical therapists and clinic owners need tools to withstand marketplace stressors and thrive in today's competitive rehabilitation environment. We need to acknowledge that you cannot change or improve what you do not measure. PTs must embrace performance systems for operational and fiscal sustainability and to truly validate his/her patient outcomes. This session is for those who want to learn how to convert patient outcomes into higher profitability/earnings.

Physiotherapy Framework for the Assessment and Treatment of Adolescents and Adults with Scoliosis - [Maureen Dwight](#) R.P.T. B.Sc.P.T.

Traditionally scoliosis has been managed in North America with bracing and surgery. Increasingly consumers are demanding other options. Research is showing the efficacy of physiotherapy intervention for different stages and concerns related to this condition. After attending this session participants will have a working knowledge of best evidence practices in the management of scoliosis including: diagnosis, pain and curve progression. A review of types of exercise and indicators for treatment will be included for both adults and adolescents.

[Watch for new presentations to be added](#)