

REGENERATIVE ORTHOPAEDIC MEDICINE 37TH Annual Conference

Thursday October 26: Pre-Conference Workshops Friday October 27 – Saturday October 28, 2023 Inn at Laurel Point Victoria, British Columbia

The Division of Continuing Professional Development, University of British Columbia Faculty of Medicine (UBC CPD) is fully accredited by the Continuing Medical Education Accreditation Committee (CACME) to provide CPD credits for physicians. This activity is an Accredited Group Learning Activity (Section 1) as defined by the **Maintenance of Certification Program of the Royal College of Physicians and Surgeons of Canada**, and approved by UBC CPD. You may claim a maximum of 20.5 hours (credits are automatically calculated).

This one-credit-per-hour Group Learning program meets the certification criteria of the **College of Family Physicians of Canada** and has been certified by UBC CPD for up to 20.5 Mainpro+® credits. Each physician should claim only those credits accrued through participation in the activity. CFPC Session ID: 200845-001 (Maximum credits: PRP Preconference Workshop 7 hours, Friday Conference 7 hours, Saturday Conference 6.5

(Maximum credits: PRP Preconference Workshop 7 hours, Friday Conference 7 hours, Saturday Conference 6 hours)



CANADIAN ASSOCIATION OF ORTHOPAEDIC MEDICINE ASSOCIATION CANADIENNE DE MÉDECINE ORTHOPÉDIQUE

Updated: October 11, 2023

Thursday October 26, 2023 Pre-Conference Workshops

Plasma Rich Platelet Therapy Merino Room

As a result of attending this activity participants will be able to:

- Evaluate the current evidence for platelet-rich plasma (PRP)
- Compare methods of PRP production
- Appraise a practical demonstration of PRP.
- 0700h Breakfast

0750h	Welcome – Dr. Jannice Bowler
0800h	Platelet physiology – Dr. Ted Harrison
0815h	Platelet statistics/g force/time – Dr. Ted Harrison
0845h	PRP methods, and PRP for nerve hydrodissection – Dr. Jannice Bowler
0915h	Literature review lower limb – Dr. Francois Louw
0945h	Q and A
1015h	Nutrition Break
1045h	Cervical facet PRP - Dr. Rob Burnham, Dr. Ashley Smith
1140h	Intradiscal PRP - Dr. Helper
1210h	Q and A
1230h	Lunch
1330h	Literature review upper limb - Dr. Pam Squire
1400h	Meniscal PRP - Mr. Eric Lavoie
1430h	Nutrition and supplements prior to PRP - Dr. Levins
1440h	Q and A
1500h	Nutrition Break
1530h	Practical demonstrations

Concludes

1700h

Friday October 27, 2023

- 0715h Registration and Breakfast Main Foyer and Spirit Rooms
- 0800h Welcome and Announcements Dr. Nico Basson
- 0805h When Nonoperative Interventions aren't working, what's next? Surgical options for hand/wrist pain Dr. Sheena Sikora

At the conclusion of this activity, participants will be able to:

- Identify arthroscopic options in the hand/wrist.
- Outline open surgical options in the hand/wrist.
- Explore what's new and how the surgical field is advancing to minimize trauma and maximize function.

0845h Update in Migraine Treatment Dr. Sian Spacey

At the conclusion of this activity, participants will be able to:

- Review the pathophysiology and role of CGRP in migraine.
- Discuss the newer acute and preventative treatments in migraine.
- Understand how to incorporate the new CGRP drugs in migraine management.
- 0915h Moderated Question and Answer
- 0930h Clinical Trial Update: Stem Cells for Osteoarthritis Dr. Grant Pagdin

At the conclusion of this activity, participants will be able to:

- Clarify Health Canada position with respect to regenerative cell therapies.
- Review the study outline including inclusion and exclusion criteria.
- Identify risks for study participants.
- Review alternative treatment options for osteoarthritis.
- Discuss the preparation of Biologics for injection.
- Consider discharge recommendations.
- Examine outcomes data including adverse events reported to date.

1000h Nutrition Break

Exhibitor Booths are open



1030h The Best Clinical Tests for Low Back Disorders Dr. Ashley Smith

Low back disorders are commonly associated with nociception arising from discs, facet joints and the sacro-iliac complex. This presentation will provide a summary of clinical tests associated with increasing or decreasing the probability of these structures being associated with a person's pain experience.

At the conclusion of this activity, participants will be able to:

- Expound on diagnostic accuracy statistics relevant to musculoskeletal medicine and provide the clinical relevance of such.
- Summarize and visualize a demonstration of diagnostic accuracy statistics for lumbar facet, lumbar discogenic and sacroiliac joint sources of nociception that underly a person's pain experience.
- Identify examples of differential diagnosis in the low back region.

1100h Intraosseous Orthobiologics to Treat Knee Osteoarthritis Dr. Rob Burnham

At the conclusion of this activity, participants will be able to:

- Review the pathophysiology and pathoanatomy of knee osteoarthritis and how intraosseous orthobiologics may help.
- Describe the indications, contraindications, and technique of intraosseous knee injection.
- Explore the history, development, and evidence basis of intraosseous orthobiologics to treat knee osteoarthritis.
- 1140h Moderated Question and Answer
- 1200h Lunch Exhibitor Booths are open

1300h Welcome Back

1300h Want to be an expert at shoulder ultrasound? I'll teach you how in 29 minutes or less. Dr. Frank Johnson

At the conclusion of this activity, participants will be able to:

- Identify and treat the normal and abnormal subacromial bursa.
- Identify and treat the normal and abnormal supraspinatus tendon.
- Identify and treat the normal and abnormal glenohumeral joint.

1330h Psilocybin for Chronic Pain and Mental Health Indications Dr. Francois Louw

At the conclusion of this activity, participants will be able to:

• Explore the current literature evidence pertaining to psilocybin for chronic pain and mental health conditions.

	 Critique strengths and weaknesses of current studies for micro and macrodose psilocybin. Summarize areas of best evidence and focus on future research.
1400h	Ketamine for Mental Health Disorders Dr. Anita Sanan
	 At the conclusion of this activity, participants will be able to: Review the pharmacology of ketamine Identify how ketamine affects the brain in patients with depression Analyze current evidence for ketamine in TRD Verify safety of ketamine in outpatient treatment for mental illness Review consensus guidelines for ketamine in chronic pain
1440h	Moderated Question and Answer
1500h	Nutrition Break Exhibitor Booths are open
1530h	Indications for Radio Frequency Ablation/Rhizotomies Dr. Paul Etheridge
	 At the conclusion of this activity, participants will be able to: Establish a plan and referral for diagnostic and therapeutic interventions in the fluoroscopy suite. Identify patients that will benefit from radiofrequency (RF) ablations. Articulate the process involved in performing an RF ablation.
1600h	Scapulothoracic Dynamics and Injuries - Shoulder, Neck, Thorax, Fascia Dr. Adrian Gretton
	 At the conclusion of this activity, participants will be able to: Provide an overview of scapular anatomy and how it relates to shoulder, neck and spine, including fascia. Discover assessment and management approaches to scapular dynamics and interactions with neck, ribs, spine, and thoraco-lumbar fascia.
1630h	Moderated Question and Answer
1700h	Closing Comments Dr. Nico Basson
1715h	CAOM Annual General Meeting – All CAOM Members are welcome to attend Location: Spirit Rooms



Saturday October 28, 2023

- 0715h Registration and Breakfast Main Foyer and Spirit Rooms
- 0755h Welcome to Day Two Dr. Nico Basson

0800h Methylation Defects and Treatments for Busy Dummy MSK Doctors Dr. Brian Shamess

Methylation is a fundamental process happening in each of our cells with a minimum of 76 enzymatic pathways. Poor methylation affects up to 40 % of individuals. Yet there is a greater percentage in chronic MSK and chronic fatigue female patients. Poor methylation has been linked to fibromyalgia, heart disease, depression, anxiety, low energy, CVA and Alzheimer's. Supplementation and lifestyle interventions (ie reducing total body inflammation, optimizing gut flora, exercise, sufficient sleep can assist these patients.

At the conclusion of this activity, participants will be able to:

- Recognize which physiological processes are involved with methylation.
- Explore how methylation defects manifest in patients.
- Define treatments exist to assist patients with fatigue, depression, low energy and pain with methylation defects.

0830h Hypermobility Spectrum Disorder and Hypermobile Ehlers Danlos: An Approach to the Hypermobile Patient

Dr. Heather Underwood

At the conclusion of this activity, participants will be able to:

- Recognize the spectrum of hypermobility from one joint to generalized to hypermobile Ehlers Danlos.
- Evaluate generalized hypermobility using Beighton's Criteria and be familiar with 2017 diagnostic criteria for Hypermobile Ehlers Danlos Syndrome.
- Identify issues that are common in individuals with hypermobility which effect patient care.
- 0910h Moderated Question and Answer
- 0930h Nutrition Break Exhibitor Booths are open



1000hA. Intentional Neuroplasticity: An Introduction to Pain Reprocessing TherapyStone RoomDr. David Bowler

Imagine sharing readily available information with your patients about the neurobiology of persistent pain, coaching them in the use of these resources, and hearing that their pain has diminished or resolved without drugs or injections. Pain Reprocessing Therapy (PRT) is a peer-reviewed validated mindfulness-based approach that combines pain neuroscience education, somatic tracking, safety re-appraisal, and positive affect induction. Learn how to implement this into your practice in the (PRT) Workshop.

At the conclusion of this activity, participants will be able to:

- Define and recognize neuroplastic pain and its synonyms.
- Confidently evaluate patients with psychophysiological symptoms or stress-related disorders.
- Access and recommend further educational resources regarding the neuroscience of pain to integrate into a cooperative therapeutic plan.

Spirit Room B. Intro to Prolotherapy Dr. Adrian Gretton, Eric Lavoie, Dr. David Mann

At the conclusion of this activity, participants will be able to:

- Familiarize themselves with the basic concepts of tissue healing and Prolotherapy.
- Review anatomy and practice hands-on palpation and marking of peripheral joints.
- Observe and discuss Prolotherapy and PRP injections.

Merino C. Neck and Shoulder Myofascial Pain: Identifying and Treating Trigger Points for Pain Relief

Dr. Xiao Yuan and Dr. Sarah Pankratz

At the conclusion of this activity, participants will be able to:

- Examine neck and shoulder trigger points.
- Outline a basic approach to treating trigger points.
- Identify aftercare and prognosis.

1200h Lunch

Exhibitor Booths are open

<u>Breakout Session – Two</u>

1300h <mark>Spirit Room</mark>	A. Intro to Prolotherapy Dr. Adrian Gretton, Dr. Marc Lourens, Dr. Zuzana Triska
	 At the conclusion of this activity, participants will be able to: Familiarize themselves with the basic concepts of tissue healing and Prolotherapy. Review anatomy and practice hands-on palpation and marking of peripheral joints. Observe and discuss Prolotherapy and PRP injections.
Merino	B. Ultrasound Guided Nerve Hydrodissection Dr. Jannice Bowler, Dr. Francois Louw, Dr. Xiao Yuan
	 At the conclusion of this activity, participants will be able to: Discover how hydrodissection of nerves is accomplished Observe a practical demonstration of ultrasound-guided nerve hydrodissection as well as fascial hydrodissection Participate in practicing ultrasound-guided identification of lower limb nerves
Stone	C. Manual Diagnostic and Treatment Techniques in Lumbosacral, Hip and Lower Leg Pain Syndromes Dr. Pam Squire, Dr. Brian Shamess
	 At the conclusion of this activity, participants will be able to: Discover which indirect and direct manual diagnostic and treatment techniques can be done for low back, pelvis, hip and leg pain in a busy "doctor has very little patient time " practice. Define how these techniques fit with other treatment techniques and diagnostic paradigms. Review how quickly these treatment techniques take to perform, and I do I use them with utmost caution in this difficult litigious environment
1500h	Nutrition Break Exhibitor Booths are open
Breakout Se	ssion - Three
1530h	A Layered Approach to the Patient with Chronic MSK Pain.
	This will be a panel discussion and we are hoping for lots of engagement from our audience.
Spirit Room	Case One - Chronic Knee Area Pain Dr. Pam Squire, Dr. Erik Ouellette, Dr. David Bowler
	 At the conclusion of this activity, participants will be able to: Discuss diagnostic tests for knee pain. Identify at least 4 different mechanisms for knee pain in an older athlete.

• Review multimodal treatment options and timing of the options for knee pain based on the patients' current goals.

Merino	Case Two - Chronic Hip Area Pain Dr. Lynn MacKean, Dr. Francois Louw
	 At the end of this discussion attendees will be able to: Discuss diagnostic tests for hip area pain. Identify at least 4 different mechanisms for hip area pain. Review multimodal treatment options and timing of the options for hip area pain based on the patients' current goals.
1630h	Conference Concludes Return your conference evaluation and gather your certificate of attendance
1830h 1900h	CAOM Celebratory Dinner Terrace Ballroom Cocktails – cash bar available Dinner Conference Passport Winner announced.

Meet Our Presenters



Dr. Nico Basson MBChB, CCFP President, CAOM

Dr. Basson graduated from Stellenbosch University in South Africa and moved to Canada where he has worked as Emergency Physician for 10 years. He started doing full time regenerative medicine in 2017 and currently works on Vancouver Island at the Interventional Plus Pain Clinic.



Dr. David Bowler MBChB MRCP(UK) FCFP CAFCI PgCPain

David graduated from the University of Cape Town medical school in 1981, completed an internship at Groote Schuur Hospital, residency in the United Kingdom, and practiced as a family physician in Canada from 1986 until 2014. He holds a postgraduate certificate in pain management from the department of rehabilitation medicine at the University of Alberta. Having travelled

extensively to study regenerative medicine procedures, in 2014 he and Dr. Jannice Bowler moved to Victoria where David has a focused practice in pain rehabilitation and clinical hypnosis. He teaches Dr Lyftogt's Perineural Injection Treatment (PIT) and is vice-president of the Canadian Society of Clinical Hypnosis (BC Division).



Dr. Jannice Bowler MB, ChB, DRCOG, FCFP, CAFCI, IROM(C), PgCPain Past President, CAOM

Dr. Jannice Bowler is a family physician who has always enjoyed treating pain. Since 2014 she left family medicine to work exclusively treating musculoskeletal pain patients in her practice which she shares with her

husband, David Bowler, in beautiful Victoria BC.

Her interests include perineural hydrodissection for nerve entrapments, prolotherapy, platelet-rich plasma injections and point of care ultrasound. When not working she enjoys hiking or trail running with her dog, gardening, music and good food.



Dr. Robert Burnham MSc, MD, FRCPC

Dr. Burnham is a specialist in Physical Medicine and Rehabilitation (Physiatrist). He was born and educated in Edmonton and currently practices as a member of multidisciplinary pain management teams both in Lacombe and Calgary Alberta. At this point in his career, his practice primarily involves performing fluoroscopically guided interventional musculoskeletal pain

management procedures. He is also an active researcher. Outside of medicine, he greatly values nature, his family and his faith.



Dr. Paul Etheridge, MBChB, DA(SA), CCFP

Dr. Etheridge is the Medical Director at the Bill Nelems Pain & Research Centre in Kelowna, British Columbia. He specializes in fluoroscopy and ultrasound-guided pain procedures, and continues to do research in this field of interventional pain management.



Dr. Adrian R. Gretton, MD, CCFP, FCFP, CIME, IROM-C

Dr. Gretton developed a particular interest in chronic pain and injury management early in his medical career. He enjoyed practicing communitybased family medicine for many years, while also developing expertise in pain and injury management. He is a consulting physician and the AHS Calgary Chronic Pain Centre, and his main practice is at Evidence Sport and Spinal Clinic in Calgary.

He is a Clinical Assistant Professor in the Faculty of Medicine at the University of Calgary and continues in an active practice and enjoys teaching peers and community based health professionals. Outside of work, he enjoys skiing, cycling, hiking, travel, and photography.





Dr. Frank Johnson, MD, CCFP, Dip. Sport Med, RMSK (Ultrasound) Sport Medicine Ultrasound Canada

Dr. Johnson is proud to be a family physician who now specialized in USguided injections and teaching those injections in workshops across Canada.



Eric Lavoie, Nurse Practitioner (NP), MN, FAA Specialist in Musculoskeletal Pain & Rehabilitation Adjunct Clinical Professor, Faculty of Nursing University of Calgary

Eric is a Nurse Practitioner who has specialized training in ultrasound-guided interventional pain procedures. He was fortunate to have trained with a team of physicians and high-level physiotherapists at Calgary's Advanced Spinal

Care Center in 2011 and 2012. He is one of only a few medically trained practitioners in the province to offer ultrasound-guided prolotherapy or PRP injections to the spine. He has a particular interest in musculoskeletal injuries and pain that originates from joints, muscles, ligaments, and tendons.



Dr. Marc Lourens MBChB, DA(SA), CCFP (FPA), PgCPain

Dr. Lourens did his family practice and anaesthesia training at the University of Cape Town, South Africa before coming to Canada in 1998. After an interesting career in both family practice and anaesthesia, he decided to focus on chronic pain management and joined the Bill Nelems Pain and Research Clinic in Kelowna. He has advanced training in ultrasound-guided

interventional procedures and is also actively involved in helping to facilitate the clinic's pain management and education groups. He has a particular interest in spinal procedures and regenerative medicine including PRP and prolotherapy. In his free time, you can find him mountain biking the trails or fly fishing in a mountain stream or lake.



Dr. W Francois Louw CCFP(EM), FCFP, MBChB (Pret), DA(SA), ECFMG, Adv. Dipl Pain Mgt CAPM (Interventional Pain Management)

Dr. Louw is a co-founder and treating physician at the Bill Nelems Pain and Research Centre, the biggest comprehensive pain clinic in Canada. Dr. Louw is triple certified in GP Anaesthesia, ER medicine and Pain Medicine with multiple research interests in these fields. He serves as Clinical Associate

Professor, UBC Dept. of Family and is a Past President of the Canadian Association of Orthopaedic Medicine. He also serves as the Chief Medical Officer of EntheoTech, a bioscience company. Dr. Louw is passionate about improving both physical and mental health, exploring new paradigms, always with deep compassion and putting the patient at the centre.





Dr. David Mann MD FCFP(EM) Dipl Sport Med

Sports Med and MSK physician for over 35 years in private practice in Powell River BC.



Dr. Grant M Pagdin, MD, FCFP, ABAARM

Dr. Grant Pagdin graduated from UBC medical school in 1988. His primary interest is in Anti-Aging and Regenerative Medicine Services. Dr. Pagdin was awarded a fellowship in Family Medicine (FCFP) in 2010. He is board certified with the American Academy of Anti-Aging and Regenerative Medicine (ABAARM) and has completed a fellowship in Stem Cell Medicine with the

University of South Florida in 2015. He is also a fellow with the Interventional Orthobiologic Foundation. He received a No Objection Letter from Health Canada to conduct clinic research on the use of stem cells for osteoarthritis in January, 2020. He is also an avid triathlete and musician.



Dr. Sarah Pankratz MD, CCFP

"Every patient you see is a lesson in much more than the malady from which he suffers." — William Osler

Dr. Sarah Pankratz is a family physician trained through the University of British Columbia. She began her medical career commuting from Pemberton

to Delta to gain expertise in treating chronic pain. She offers prolotherapy, trigger point injection therapy, and perineural injection therapy to her patients.



Dr. Anita Sanan MD, FRCPC Anesthesiologist, Kelowna General Hospital Clinical Instructor University of British Columbia Medical Director EntheoTech Biosciences

Dr. Anita Sanan is a board-certified Anesthesiologist practicing since 2010. She has taken on many administrative and leadership roles within her

department at the Kelowna General Hospital. She is actively involved in academics as a clinical faculty member at the University of British Columbia, teaching both medical students and residents. She is a founding member of Entheotech Biosciences, starting the first ketamine assisted therapy clinic in the Okanagan, and has been instrumental in bringing safe, medically guided psychedelic therapy to the forefront of mental health treatment.



Dr. Brian A Shamess MD Dip Sport Medicine



Dr Shamess has taught widely on injection techniques, myofascial dysfunction, proper myofascial recruitment patterns, pain referral patterns and manual diagnostic techniques. These can assist busy musculoskeletal physicians to better diagnose and treat pain. He was a core curriculum teacher for the American Association of Orthopedic Medicine from about

1990 to 2004. He has been a consultant to professional North American sports teams (ie Toronto Maple Leafs). He has been the Chief Medical Officer at World Events (ie 1994 Berlin, Germany World Track & Field Paralympic Championships, Canadian World Junior Hockey Championships 2000) and Team Physician for the National and Olympic Canadian Cross Country Ski Team 1984 to 1993. His research interests have included myofascial imbalance, anabolic steroid and illicit drug use in athletes.



Dr. Sheena Sikora MD, FRCSC Plastic & Reconstructive Surgery

Dr. Sikora completed her Plastic Surgery training in Vancouver in 2015. Her specialization includes hand, wrist and upper limb trauma and reconstruction, post-traumatic and post-cancer reconstruction and aesthetic surgery. Dr. Sikora is active in teaching medical students and residents at

Kelowna General Hospital as a clinical professor with the University of British Columbia. Her continued research is devoted to advancing wrist surgery and she has presented at many regional, national and international conferences.



Dr. Sian Spacey, MBBS, FRCPC Clinical Associate Professor UBC Director, UBC Headache Clinic

Dr. Spacey is a Neurologist and Clinical Associate Professor in the Division of Neurology at the University of British Columbia in Vancouver, Canada. She completed a residency in Neurology at the University of British Columbia and a fellowship in Neurogenetics at the National Hospital for Neurology and

Neurosurgery, Queens Square, London, England. She is Director of the UBC Headache Clinic and the UBC Clinician Investigator Program. She is a past president of the Canadian Headache Society. She is actively involved in teaching medical students, residents, and fellows through the university, and she lectures nationally and internationally.



Dr. Ashley Smith, PT, PhD

Ashley is a clinical research professor at University of Calgary in the Department of Clinical Neurosciences and practices clinically within a multidisciplinary team at Vivo Cura Health in Calgary. His research pursuits investigate pain modulation in chronic whiplash-associated disorders, with particular focus on orthobiologics and endogenous analgesia. Ashley's



clinical practice focusses on diagnostic accuracy to assist the right person getting the right treatment at the right time.



Dr. Pam Squire MD CCFP DCAPM ISAM CPE Associate Clinical Professor UBC Life Again Musculoskeletal Pain Clinic

Dr. Squire is a Clinical Associate Professor in the Department of Family Medicine at the University of British Columbia. She was a member of the guidelines committee (2010-2012) for Pain Medicine, the national group mandated to write the curriculum for the new Royal College of Physicians

and Surgeons specialty of Pain Medicine. She currently practices in Vancouver where she has a consultative practice in musculoskeletal, spine and neuropathic pain, providing assessments, medical, manual and interventional treatment.

Since 2020, Dr. Squire has trained in advanced techniques using the Stecco Fascial Manipulation framework. This treatment is a global treatment that addresses fascial causes of myofascial pain. It is emerging as the most scientifically validated treatment for the fascia.



Dr. Zuzana Triska MD, CCFP, BScPT, MPT

Dr. Zuzana Triska is a family physician, and former physiotherapist, with a special interest in musculoskeletal medicine. She was a manual physiotherapist for 10 years prior to attending medical school. As part of her physiotherapy training she completed a Clinical Masters in Manual and Manipulative Therapy in Perth, Australia (the highest standard of physiotherapy MSK training). Currently she practices family medicine,

prolotherapy and other types of regenerative medicine in Banff and Canmore, AB.



Dr. Heather Underwood FRCPC (Physical Medicine & Rehabilitation); MSc (Anatomy); Clinical Assistant Professor University of British Columbia

Dr. Underwood graduated from Kinesiology at the University of Waterloo and completed a Masters in Anatomy at Queens University. She obtained her MD at McMasters University and completed her Fellowship training in Physical Medicine & Rehabilitation at the University of British Columbia where she is an Assistant Clinical Professor. She has a special interest in

hypermobility spectrum disorders and hypermobile Ehlers Danlos. She is a member of the Ehlers Danlos Society. She has a diverse practice including prosthetics and orthotics and remote medicine.





Dr. Xiao Yuan MD CCFP D-CAPM

Dr. Yuan is the Medical Director of White Oak Pain Clinic, located in Burnaby, BC. She has a special interest in treating fascia adhesions with hydrodissection and fascia tears with regenerative injections. It is a fascinating topic with much yet to explore!



The Canadian Association of Orthopaedic Medicine has received an educational grant or in-kind support from the following exhibitors:





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