

39th Annual Scientific Meeting

On-Site
Program

2018

May 22 -
May 25
Montréal,
Quebec

Hotel Bonaventure
Montréal



the CANADIAN PAIN SOCIETY
la SOCIÉTÉ CANADIENNE de la DOULEUR

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#CanadianPain18

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SIG Meetings

Interventional Pain SIG

Harsha Shanthanna
Tuesday, May 22
5:00 PM - 6:30 PM
Côte-St-Luc

Education SIG

Timothy Wideman & Ruth E. Dubin
Tuesday, May 22
5:00 PM - 6:30 PM
Mont-Royal + Hampstead

Neuropathic Pain SIG

Anuj Bhatia
Wednesday, May 23
6:00 PM - 7:30 PM
Côte-St-Luc

Nursing Issues SIG

Jennifer Tyrrell & Jacqueline Follis
Wednesday, May 23
6:00 PM - 7:30 PM
Lasalle

MEETING SCHEDULE AT A GLANCE

Pre-Meeting Tuesday, May 22

4:00 PM - 6:30 PM
Registration Open

5:00 PM - 6:30 PM
Interventional Pain SIG Meeting

5:00 PM - 6:30 PM
Pain Education SIG Meeting

7:00 PM - 8:00 PM
Welcome Reception

Day 1 - Wednesday, May 23

7:00 AM - 9:00 AM Breakfast & Poster Set up
7:30 AM - 8:45 AM Annual General Meeting
8:45 AM - 9:00 AM Opening Remarks
9:00 AM - 9:45 AM Mary Ellen Jeans Keynote
9:45 AM - 10:00 AM Poster Pitches
10:00 AM - 11:00 AM Coffee/Posters/Tradeshow
11:00 AM - 12:30 PM Sessions
12:30 PM - 1:30 PM Lunch/Posters/Tradeshow
12:30 PM - 1:30 PM Annual Family Physician Luncheon
1:30 PM - 3:00 PM Sessions
3:00 PM - 4:00 PM Coffee/Posters/Tradeshow -
Poster Competition Final Judging
3:55 PM - 5:30 PM Poster Tear Down
4:00 PM - 5:30 PM Sessions
6:00 PM - 7:30 PM Neuropathic Pain SIG Meeting
6:00 PM - 7:30 PM Nursing Issues SIG Meeting
5:45 PM - 7:15 PM Trainee Session
7:15 PM - 10:00 PM Trainee Social

Day 2 - Thursday, May 24

7:00 AM - 8:15 AM Breakfast & Poster Set up
8:15 AM - 8:30 AM Opening Remarks
8:30 AM - 9:15 AM Plenary Session
9:15 AM - 10:00 AM Plenary Session
10:00 AM - 11:00 AM Coffee/Posters/Tradeshow
11:00 AM - 12:30 PM Sessions
12:30 PM - 1:30 PM Lunch/Posters/Tradeshow
1:30 PM - 3:00 PM Sessions
3:00 PM - 4:00 PM Coffee/Posters/Tradeshow
3:55 PM - 5:30 PM Poster Tear Down
4:00 PM - 5:30 PM Sessions
6:30 PM - 11:00 PM Awards Gala Reception &
Dinner

Day 3 - Friday, May 25

8:00 AM - 9:15 AM Breakfast
9:15 AM - 9:30 AM Opening Remarks
9:30 AM - 10:00 AM Distinguished Career
Award Keynote
10:00 AM - 10:30 AM Early Career Award Keynote
10:30 AM - 11:00 AM Coffee
11:00 AM - 12:30 PM Sessions

General Information

Annual Awards Gala Reception & Dinner

Celebrate your colleagues at the 2018 Awards Gala Reception and Dinner. Make sure you have purchased your ticket for this event. If you need a ticket, a limited number are available for purchase at the registration desk until 4:00 pm on Wednesday, May 23. Seating is first come first served. The 2018 Awards Program recipients will be announced during dinner with entertainment to follow.

#CanadianPain18

Follow the Scientific Meeting on Twitter! Follow the hashtag #CanadianPain18.

Poster Competition

Judging of the 6 finalists for the 1st Place Clinical, 1st Place Basic and 3rd Place Overall posters will take place on Wednesday, May 23, during the 3:00 pm - 4:00 pm time slot. Award recipients will be announced at the Awards Gala on Thursday May, 24, 2018.

Certificates of Attendance

Certificates of attendance will be accessible to attendees on the CPS website by July 1, 2018. An email will be distributed to all attendees after the Scientific Meeting with full instructions.

Canadian Journal of Pain

The Canadian Pain Society's (CPS) journal, *The Canadian Journal of Pain / Revue canadienne de la douleur*, is an Open Access, international, peer-reviewed journal publishing high-quality, original research. Please visit the CPS website at <http://www.canadianpainsociety.ca/page/CanJournalofPain> for more information about opting into journal communications, article publishing charges, aims and scope about its focus and peer-review policy and more.

Save the Date

2019 Toronto, Ontario (April 2-5) - Sheraton Centre Toronto Hotel

2020 Calgary, Alberta (May 19-22) - Hyatt Regency Calgary

Learning Objectives

After participating in this event, attendees will:

- Understand recent developments in pain research and management
- Be aware of current Canadian pain research and management
- Recognize areas of need for pain research and management
- Apply knowledge and skills in pain research and management

Based on the content of the poster sessions, participants will be able to:

- Discuss the latest research findings in pain.
- Use methodologies presented in the sessions in their own pain research and/or practice.
- Apply findings from the sessions in their own pain research and/or practice.

Scientific Meeting Evaluations

All session evaluations will be distributed electronically at the end of each day. Kindly take 2 - 3 minutes to complete the evaluations, as they are an accreditation requirement. Thank you for helping us go green!

Connect to Wi-Fi

Network: **CPS2018**

Password: **CPSASM2018**

CPD Credits

This program meets the accreditation criteria as defined by the Maintenance of Certification program of the Royal College of Physicians and Surgeons of Canada and has been accredited by the Office of Continuing Professional Development, Faculty of Medicine, McGill University for up to 17.5 Section 1 credits/hours.

Through an agreement between the Royal College of Physicians and Surgeons of Canada and the American Medical Association, physicians may convert Royal College MOC credits to AMA PRA Category 1 Credits™. Information on the process to convert Royal College MOC credit to AMA credit can be found at www.ama-assn.org/go/internationalcme.

This Group Learning program meets the certification criteria of the College of Family Physicians of Canada and has been certified by the Office of Continuing Professional Development, Faculty of Medicine, McGill University for up to 17.5 Mainpro+ credits/hours.

Members of the American Academy of Family Physicians are eligible to receive up to 17.5 Prescribed credit hours for attendance at this meeting/event due to a reciprocal agreement with the College of Family Physicians of Canada.

Wednesday = 7.5 credit hours

Thursday = 7.5 credit hours

Friday = 2.5 credit hours

Scientific Program Committee (SPC) members' Conflict of Interest disclosures are available for viewing at <http://www.canadianpainsociety.ca/?page=2018Accreditation>

Patients Included

The 39th Annual Scientific Meeting (ASM) of the Canadian Pain Society (CPS) is a Patients Included meeting.

The Patients Included conference charter provides organizations like CPS with a means of demonstrating that their events are committed to incorporating the experience of patients as experts in living with their condition.

More information about Patients Included can be found on their website at:

<https://patientsincluded.org/>



Scientific Meeting Program

PRE-MEETING - Tuesday, May 22, 2018

4:00 PM - 6:30 PM **Registration Opens** / Room: Registration Desk

5:00 PM - 6:30 PM **Interventional Pain SIG Meeting** / Room: Côte-St-Luc
Chair: Harsha Shanthanna, MBBS MD DNB FIPP, McMaster University
Role of Intraarticular Injections in Managing Shoulder and Knee pain in Elderly
Simple techniques for shoulder and knee/role of guidance/ and decision making: evidence/controversies/what to inject/cost and other considerations
Gaurav Gupta MD FRCPC CSCN Diplomate, Canadian Forces Health Services Centre, McGill University Health Centre
Interventional Pain Modalities for Pain of Spinal Stenosis.
Roshanak Charghi MD, FRCPC, McGill University, Jewish General Hospital

5:00 PM - 6:30 PM **Education SIG Meeting** / Room: Mont-Royal + Hampstead
Co-Chair: Timothy Wideman, BSc (PT) PhD, McGill University, Johns Hopkins University
Co-Chair: Ruth E. Dubin, MD PhD CCFP FCFP D.A.A.P.M. D.C.A.P.M, Queens University and Northern Ontario School of Medicine

7:00 PM - 8:00 PM **Welcome Reception** / Room: Fontaine Exhibit Hall

DAY 1 - Wednesday, May 23, 2018

7:00 AM - 9:00 AM **Registration & Breakfast & Poster Set Up (Group 1)** / Room: Registration Desk & Fontaine Exhibit Hall

7:30 AM - 8:45 AM **Annual General Meeting** / Room: Westmount + Outremont

8:45 AM - 9:00 AM **Opening Remarks** / Room: Westmount + Outremont

9:00 AM - 9:45 AM **Mary Ellen Jeans Keynote** / Room: Westmount + Outremont

WHAT DOES THE OPIOID EPIDEMIC MEAN TO PAIN MANAGEMENT

Keynote Speaker: **Jane C. Ballantyne, MD FRCA, University of Washington**

If we understand opioids only as drugs, it is easy to consider their chief role is to provide pain relief, albeit at the risk of addiction. But since the discovery of the endogenous opioid system in the 1970's, basic science has revealed a complicated role for opioids in human survival that upends our beliefs about therapeutic opioids. This knowledge, together with the clinical data arising from decades of unprecedented levels of continuous opioid use in pursuit of pain relief, points to two important insights: 1) people who do not easily find relief from anything other than opioid drugs, make up the population at highest risk for opioid harm, and 2) the endogenous opioid system, if recruited, is a more enduring adversary of pain than long-term opioid therapy. It seems that high risk people are the most likely to get relief from opioid drugs, which presents a real dilemma for prescribers. In my plenary, I will explore new insights into the multifaceted role of

endogenous opioids that help us understand the devastating social harms of long-term opioid medications, and suggest a pathway towards better preservation of highly complex survival mechanisms.

9:45 AM – 10:00 AM **Poster Pitches** / Room: Westmount + Outremont

10:00AM - 11:00 AM **Coffee / Posters / Tradeshow** / Room: Fontaine Exhibit Hall

11:00 AM – 12:30 PM **Session 101** / Room: Verdun + Lachine

MOVING THE PAIN EDUCATION AGENDA FORWARD: STRATEGIES FOR CREATING LEADERS, IDENTIFYING KNOWLEDGE GAPS, AND DESIGNING INNOVATIVE CURRICULA

Chair: **Judy Watt-Watson, RN MSc PhD, University of Toronto**

Speakers:

- **Michael McGillion, RN PhD, McMaster University**
- **Bonnie Stevens, RN PhD FAAN FCAHS, Lawrence S. Bloomberg Faculty of Nursing and Faculties of Medicine and Dentistry, University of Toronto Centre for the Study of Pain**
- **Judy Watt-Watson, RN MSc PhD, University of Toronto**

Symposium Abstract

Pain education continues to be a low priority in health professional curricula despite decades of research documenting unmet global needs in pain management. The 2016 Global Burden of Disease Study shows that persistent pain is an increasing cause of morbidity and disability worldwide; pain is a common reason that patients seek out a healthcare professional and our graduates need pain knowledge and skills for real world competence. For this reason, the International Association for the Study of Pain has designated 2018 as the Global Year for Excellence in Pain Education. Several key challenges that limit the development and implementation of adequate pain curricula have been identified as: a) a paucity of qualified and confident faculty, b) traditional curriculum models and priorities that do not include pain management, and c) few resources that support curriculum development and interprofessional learning opportunities. Strategies for addressing these and moving the pain agenda forward will be discussed in this symposium. Although faculty have not felt competent in teaching pain content, they have been described as the “ultimate resources of all educational institutions” and mentorship will be discussed as a way to encourage leadership in pain education. Curriculum mapping, including opioid content, has been used successfully to clarify gaps in pain content across professions that need to be addressed. A model of curriculum design and implementation, with strategies based on extensive experience, will be discussed. This symposium will be interactive to stimulate discussion for application to participants’ own context.

Developing leaders in pain education

Michael McGillion, RN PhD, McMaster University

Mapping pain content gaps in current curricula

Bonnie Stevens, RN PhD FAAN FCAHS, Lawrence S. Bloomberg Faculty of Nursing and Faculties of Medicine and Dentistry, University of Toronto Centre for the Study of Pain

Innovative model for designing and implementing pain content

Judy Watt-Watson, RN MSc PhD, University of Toronto

Learning Objectives

1. Participants will examine the use of personal pain stories, involvement of a local pain champion, and a mentorship model in encouraging future pain education leaders.
2. Participants will discuss strategies to map pain content across professions to support interprofessional patient-centred pain curriculum.
3. Participants will discuss the relevance of a model for designing and implementing pain education in their context.

11:00 AM - 12:30 PM **Session 102** / Room: Mont-Royal + Hampstead

WHAT IS PAIN?: ARGUMENTS FOR AND AGAINST A NEW DEFINITION

Chair: **Joel Katz, PhD, York University**

Speakers:

- **Jeffrey Mogil, PhD, McGill University**
- **Michael Sullivan, PhD, McGill University**
- **Kenneth Craig, OC, PhD, University of British Columbia**

Symposium Abstract

Pain is known to all through personal experience, but efforts to understand and control pain require a common understanding and effective communication. A widely endorsed and used definition was published by IASP in 1979, with its origins dating to the 1960s. It has been proposed that burgeoning evidence on the nature of pain and its clinical management necessitates revision (Williams & Craig, 2016) and debate has ensued. Strengths of the IASP definition include its attempt to accommodate all types of pain, an emphasis on a complex subjective experience, including sensory and affective features, avoidance of a requirement for tissue damage, and its usefulness across scientific and clinical settings. Criticisms include use of the weak descriptor “unpleasant”, which trivializes most clinical pain, an emphasis on self-report, limiting application to those who are nonverbal and/or nonhuman species, and failure to acknowledge the important cognitive and social components of painful experience, evident in both human and nonhuman species. Notes accompanying the published definition also are incompatible with current understanding. In this symposium, strengths and limitations of the IASP definition will be examined, along with proposals addressing potential revisions.

Pain, and its Definition, in Non-Human Animals

Jeffrey Mogil, PhD, McGill University

Cognitive Contributions to Pain Experience: Implications for the Definition of Pain

Michael Sullivan, PhD, McGill University

Is Pain a Social Experience?

Kenneth Craig, OC, PhD, University of British Columbia

Learning Objectives:

1. To understand how decades of research and evolving practice have left the IASP definition of pain outdated.
2. To consider inclusion of cognitive and social components as features of pain, as well as established sensory and affective components.
3. To foster consideration of revised versions of the definition.

11:00 AM - 12:30 PM

Session 103 / Room: Côte-St-Luc

USING NEUROIMAGING TO PREDICT PAIN AND ITS RELIEF: CLINICAL UTILITY AND NEUROETHICS

Chair: Karen Davis, PhD, Krembil Research Institute, University Health Network

Speakers:

- Karen Davis, PhD, Krembil Research Institute, University Health Network
- Mojgan Hodaie, MD FRCS(C), University of Toronto and Krembil Research Institute, Toronto Western Hospital
- Javeria Hashmi, Bpharm MSc PhD, Dalhousie University

Symposium Abstract

Treatment of chronic pain can have varying degrees of success, likely due to individual factors that are not well understood. For example, both biological and psychosocial factors can impact the development of chronic pain and the efficacy of treatment on patients with chronic pain. The ability to predict pain relief prior to treatment represents an important advance to create personalized pain management. In this symposium, we explore the neural mechanisms underlying chronic pain and the potential to predict pain relief based on individual pre-treatment metrics of brain and peripheral nerve structure and function and the impact of behavioural and environment factors (e.g., context and expectation). We will also consider the neuroethics of such an approach as per the recent recommendations of the IASP task force on the use of brain imaging to diagnosis pain.

Moving forward from the recommendations of the IASP "task force on the use of brain imaging to diagnose pain" towards ethical applications to predict treatment outcomes

Karen Davis, PhD, Krembil Research Institute, University Health Network

Utility of Trigeminal Nerve DTI Metrics in Predicting Outcome of Trigeminal Neuralgia Surgery: A neurosurgical perspective

Mojgan Hodaie, MD FRCS(C), University of Toronto and Krembil Research Institute, Toronto Western Hospital

Role of expectation and context in predicting pain relief

Javeria Hashmi, Bpharm MSc PhD, Dalhousie University

Learning Objectives:

1. To understand the IASP fMRI task force recommendations on the use of brain imaging to evaluate pain, and to appreciate the utility of brain imaging to prognosticate pain
2. To understand the utility of using diffusion tensor imaging to identify structural features of the trigeminal nerve that relate to trigeminal neuralgia and that can be predictive of long term pain relief following radiosurgery.
3. Share new information on how brain mechanisms of pain modulation and placebo research offer new directions for improving chronic pain diagnosis and treatment.

11:00 AM - 12:30 PM

Session 104 / Room: Lasalle

USING ANIMAL MODELS TO UNDERSTAND PAIN IN NEURODEGENERATIVE AND NEURODEVELOPMENTAL DISEASES

Chair: Magali Millecamps, PhD, McGill University

Speakers:

- **Bradley Kerr, PhD, University of Alberta**
- **Reza Sharif-Naeini, PhD, McGill University**
- **Magali Millecamps, PhD, McGill University**

Symposium Abstract

Neurodegenerative diseases are defined as hereditary and sporadic conditions which are characterized by progressive nervous system dysfunction. These disorders are incurable, debilitating conditions and their management mainly targets motor and cognitive impairments. However, a number of neurodevelopmental and neurodegenerative disease may specifically involve the somatosensory system, thus making pain a clinical concern for these patients. In many of these diseases, identification and assessment of sensory-disturbances may be hampered by concomitant impairments of cognitive and motor performance that leads to mismanagement (like rise of spontaneous neuropathic pain associated with Multiple Sclerosis, or the dangerous decrease in pain perception or expression in Christianson syndrome and Alzheimer's disease). Animal models of neurodegenerative diseases can be of particular interest to mechanistically investigate sensory-disturbances associated with specific pathologies. In the present symposium, 3 speakers will bring new perspectives on 3 different animal models of neurodevelopmental and neurodegenerative disease. Dr Bradley Kerr will present the pathophysiology of neuropathic pain that develops in a rodent model of Multiple Sclerosis. Dr. Reza Sharif-Naeini will discuss the sensory-disturbances that occur in a rodent model of Christianson syndrome and present data on the potential underlying mechanisms. Dr Magali Millecamps will present work examining changes in acute and chronic pain perception/expression in a rodent model of Alzheimer Disease.

Using the mouse model experimental autoimmune encephalomyelitis (EAE) to understand the pathophysiology of neuropathic pain in Multiple Sclerosis

Bradley Kerr, PhD, University of Alberta

Progressive degeneration of nociceptors in a mouse model of Christianson syndrome

Reza Sharif-Naeini, PhD, McGill University

Investigating the acute and chronic pain experience during the development of Alzheimer's disease: a behavioural approach in a triple-transgenic mouse model

Magali Millecamps, PhD, McGill University

Learning Objectives:

1. *To familiarize participants with the panoply of sensory disturbances that may be associated with neurodegenerative diseases.*
2. *To provide evidence of clinically-relevant changes in the pain experience in animal models of Neurodegenerative diseases and discuss possible underlying mechanisms.*
3. *To bring awareness of the concept that deficits in pain perception, pain neglect and decreases in the expression of pain are equally deleterious for patients with these disorders.*

12:30 PM – 1:30 PM **Annual Family Physicians Luncheon** / Room: Net Café

1:30 PM – 3:00 PM **Session 105** / Room: Verdun + Lachine

CANCER PAIN VERSUS CHRONIC NONCANCER PAIN. ARE THEY THE SAME? A FOR AND AGAINST DEBATE.

Chair: **Jordi Perez, MD, PhD, Alan Edwards Pain Management Unit, McGill University Health Centre**

Speakers:

- **Dwight Moulin, MD, FRCP, University of Western Ontario**
- **Charles E. Argoff, MD, Albany Medical College, Albany Medical Center**
- **Jordi Perez, MD, PhD, Alan Edwards Pain Management Unit, McGill University Health Centre**

Symposium Abstract

All chronic pains are “malignant” but some do not have an oncological origin. Regardless of its origin, pain is best assessed and managed with individualized approaches. Some may argue that depending on the etiology of the disease causing the pain, the different approaches need to be adapted to best accommodate the particularities of the underlying disease, the treating team and the patients’ characteristics including their caregivers. This symposium will focus on identifying if those particular differences should be taken into account when assessing and treating pain in patients with an active cancer versus those of chronic noncancer origin.

Dr. Moulin is a Canadian pain physician with extensive experience in chronic cancer and noncancer pain states. He is a founding member of the Royal College subspecialty in Pain Medicine and lead the Canadian Consensus Guidelines in the Management of Neuropathic Pain. Dr. Moulin will serve as moderator for the debate between the other 2 speakers.

Dr. Charles Argoff specializes in chronic headaches and neuropathic pain. He is Neuropathic Pain Section co-editor for Pain Medicine, editor of multiple pain management textbooks and is particularly active in the media with educational presentations about chronic pain assessment and management.

Dr. Argoff will defend that cancer pain and noncancer pain should be evaluated and treated in a broadly similar fashion.

Dr. Perez shares his practice between a cancer pain and a chronic non cancer pain clinic. He is board member of IASP SIG in Cancer Pain and directs one of the few Cancer Pain Fellowships in the world. Dr. Perez will defend that cancer pain should be seen as a different entity than noncancer pain.

Introduction to the debate. Is cancer pain and chronic noncancer pain the same entity?

Dwight Moulin, MD, FRCP, University of Western Ontario

Cancer and noncancer pain should not be regarded as a different condition.

Charles E. Argoff, MD, Albany Medical College, Albany Medical Center

Cancer pain is not the same as chronic noncancer pain.

Jordi Perez, MD, PhD, Alan Edwards Pain Management Unit, McGill University Health Centre

Learning Objectives:

1. *To appraise the possible differences between cancer and noncancer pain and judge if they should be taken into consideration when assessing and treating a pain patient.*

2. To review the evidences (or lack of) supporting the dichotomy between cancer and noncancer pain and focus on the particular management of each individual rather than categories.
3. To review the differential assessment and management recommended in cancer and noncancer pain populations including diagnosis and treatment modalities.

1:30 PM – 3:00 PM **Session 106** / Room: Mont-Royal + Hampstead

SEX DIFFERENCES IN PAIN ACROSS THE LIFESPAN

Chair: **Katelynn Boerner, PhD, BC Children's Hospital**

Speakers:

- **Theodore Price, PhD, University of Texas at Dallas**
- **Katelynn Boerner, PhD, BC Children's Hospital**
- **Roger Fillingim, PhD, University of Florida**

Symposium Abstract

Chronic pain affects 1 in 5 children and adults and is a serious and growing health issue that represents an enormous social and economic burden on society. The growing body of evidence that has accumulated in the past 20 years in the area of pain research indicates substantial sex differences in clinical and experimental pain responses (with women being much more likely to experience pain than men), and some evidence that pain treatment responses may differ for women vs. men. This symposium will review the latest research on the role of sex and gender in pain across the lifespan, integrating work from both basic and clinical science. Dr. Price will provide a summary of his work on sex differences in hyperalgesic priming. Dr. Boerner will present her work on the role of sex and gender differences in children's pain experience and on the efficacy of psychological therapies for pediatric chronic pain. Dr. Fillingim will summarize his work examining the role of psychosocial factors (e.g., mood) and physiological variables (e.g., hormone levels) in explaining sex differences in both experimental and clinical pain responses in younger and older adults. The symposium will discuss sex-based methods of assessment in pain research and the challenges associated with the study of gender as it relates to pain. The symposium will stimulate discussion regarding the importance of a translational, developmental perspective to studying and understanding sex differences in pain across the lifespan.

Mechanistic sex differences in hyperalgesic priming models and their implication for chronic pain treatment

Theodore Price, PhD, University of Texas at Dallas

The role of sex differences and gender influences in pediatric pain

Katelynn Boerner, PhD, BC Children's Hospital

The role of sex and gender differences in adult pain

Roger Fillingim, PhD, University of Florida

Learning Objectives:

1. Describe the relevance of a sex- and gender-based perspective in pain research.
2. Understand the prevalence of sex differences in experimental and clinical contexts across the lifespan.
3. Consider developmental factors that may be implicated in understanding sex differences in pain.

MECHANISM-INFORMED MANAGEMENT FOR COMPLEX REGIONAL PAIN SYNDROME

Chair: **Francois Gobeil, MD FRCP, CSSS Pierre Boucher**

Speakers:

- **Francois Gobeil, MD FRCP, CSSS Pierre Boucher**
- **Janet Holly, MSc PT, The Ottawa Hospital Rehabilitation Centre**
- **Tara Packham, OTReg(Ont), McMaster University, Michael G. DeGrootte Institute for Pain Research and Care**

Symposium Abstract

There are a number of potential pathophysiological mechanisms proposed to play a role in the development and perpetuation of complex regional pain syndrome (CRPS). This contributes to the variability seen in clinical presentation in this population. Given this variability, clinicians may be unsure what treatments would be most effective for individual clients. This symposium will present a critical synthesis of the literature, and propose a both a medical and rehabilitation version of a mechanism-specific management algorithm to guide personalized treatment of CRPS. Levels of evidence for the proposed treatments will be identified. The symposium will also discuss areas where the evidence is minimal and opportunities exist for further research to advance treatments around specific mechanisms. To further guide treatment decisions and support client satisfaction with care, clinicians also need to be able to link assessment findings to potential mechanisms, and measure the effectiveness of tailored treatment. We will therefore also discuss optimal outcome measures to measure treatment effectiveness from a mechanistic approach. Finally, we will discuss how this links to the newly proposed core outcome measurement set proposed by the CRPS special interest group of the International Association for the Study of Pain.

Mechanisms and Management

Francois Gobeil, MD FRCP, CSSS Pierre Boucher

Evidence-based rehabilitation strategies for CRPS

Janet Holly, MSc PT, The Ottawa Hospital Rehabilitation Centre

Measuring Up: CRPS mechanisms and measures

Tara Packham, OTReg(Ont), McMaster University, Michael G. DeGrootte Institute for Pain Research and Care

Learning Objectives:

1. *Attendees will be able to link medical treatment approaches for the treatment of CRPS to current understandings of the proposed disease mechanisms.*
2. *Attendees will understand the potential links between rehabilitation interventions and disease mechanisms, and will be able to apply this knowledge for selecting interventions for individual patients.*
3. *Attendees will be introduced to COMPACT, a proposed core measurement set for CRPS clinical research, and gain insights into selecting and using evaluation findings to inform tailored approaches to management based on a mechanistic approach.*

IN AND OUT: THE ROLE OF SPINAL CORD CIRCUITS IN THE PROCESSING OF SENSORY INFORMATION AND ITS RELAY TO THE BRAIN

Chair: **Reza Sharif-Naeini, PhD, McGill University**

Speakers:

- **Stephanie C. Koch, PhD, Molecular Neurobiology Laboratory, The Salk Institute for Biological Studies**
- **Steven A. Prescott, MD PhD, The Hospital for Sick Children, University of Toronto**
- **Reza Sharif-Naeini, PhD, McGill University**

Symposium Abstract

The dorsal horn of the spinal cord is the first relay in the transmission of sensory information from the periphery to the brain. This region is comprised of a complex network of excitatory and inhibitory interneurons, as well as projection neurons that relay the information to supraspinal centers. The complex nature of this circuitry has hampered research efforts aimed at understanding how changes in the function of these networks can lead to chronic pain. However, recent developments of genetic tools to manipulate neuronal activity have significantly helped these research efforts. In the present symposium, 4 speakers will present recent findings based on genetic manipulations, anatomical tracing, behavioral analyses and electrophysiology, and bring new perspectives on the importance of inhibitory neurotransmission in the dorsal horn and the relay of spinal sensory information to the brain. Dr. Koch will present data on a subset of dorsal horn inhibitory neurons which is an essential part of the inhibitory feedback circuit necessary for walking gait. Dr. Prescott will report on latest findings on how dysregulation in chloride homeostasis impact circuit-level pain processing. And finally, Dr. Kania will present recent findings on the central role of projection neurons in the establishment of somatotopy in nociceptive topognosis and the relationship between the sensory and effective components of pain.

Genetic dissection of a sensory-evoked motor reflex

Stephanie C. Koch, PhD, Molecular Neurobiology Laboratory, The Salk Institute for Biological Studies

Disruption of circuit-level pain processing by chloride dysregulation in the spinal dorsal horn

Steven A. Prescott, MD PhD, The Hospital for Sick Children, University of Toronto

DCC is required for the development of nociceptive somatotopy and topognosis in mice and humans

Reza Sharif-Naeini, PhD, McGill University

Learning Objectives:

1. *To familiarize participants with the novel approaches that enable the dissection of dorsal horn circuits.*
2. *To present participants with the latest findings on the changes that dorsal horn circuits undergo after peripheral nerve injury.*
3. *To highlight the importance of inhibitory neurotransmission in the dorsal horn of the spinal cord, and how its perturbation can lead to the precipitation of chronic pain.*

3:00 PM – 4:00 PM **Coffee / Posters / Tradeshow & Poster Competition Final Judging** / Room: Fontaine Exhibit Hall

3:55 PM – 5:30 PM **Poster Tear Down (Group 1)** / Room: Fontaine Exhibit Hall

4:00 PM – 5:30 PM **Session 109** / Room: Verdun + Lachine

MEDICAL CANNABIS IN CHRONIC PAIN: FROM EVIDENCE (LACK OF?) TO CLINICAL PRACTICE.

Chair: Antonio Vigano, MD MSc, McGill University Health Centre (MUHC), Alan Edwards Pain Management Unit MUHC, McGill University

Speakers:

- Michael A. Dworkind, MDCM CCFP FCFP, McGill University
- Maria-Fernanda Arboleda, MD, McGill University
- Daphnée Elisma, Patient, Law student, Canadian for Fair Access to Medical Marijuana (CFAMM)

Symposium Abstract

The negative physical, emotional and social consequences and the high health-care costs related to chronic pain are well known. Unfortunately, there are still patients with poor pain control even after optimal pharmacologic and non-pharmacologic interventions, who may also suffer from opioids and other analgesics side effects.

Few review articles and meta-analyses, suggest that cannabinoids may benefit patients with neuropathic and/or cancer pain. However, the scattered base of evidence in addition to the report of neuro-behavioural side effects from synthetic or natural forms of Tetrahydrocannabinol (THC) leave clinicians still perplexed about recommending or using cannabis medicine as a complementary tool for pain management. Starting from the available evidence, pain clinicians, through this symposium, will be provided with practical information on: a) the pharmacology of cannabinoids, b) initiation of treatment, including choice of THC: Cannabidiol (CBD) ratios and plant provenance (i.e. indica vs. sativa), c) titration and monitoring of cannabinoids treatments along with adjustment of concurrent analgesics. The description of a Canadian cannabis clinic, will provide an example where patient care is integrated with research and education, via an interdisciplinary approach. The review of two “first-in-class” clinical trials looking at the safety and efficacy of either cannabis oil capsules or inhaled cannabis on chronic pain, will highlight the efforts to overcome shortcomings of previous studies. Finally a patient’s testimonial will describe how cannabis-based interventions initiated and monitored through the above clinic can make significant differences in the lives of chronic pain patients.

Best practices in medical cannabis: The Santé Cannabis model

Michael A. Dworkind, MDCM CCFP FCFP, McGill University

Research on medical cannabis for chronic pain: current challenges and future directions

Maria-Fernanda Arboleda, MD, McGill University

How medical cannabis changed my life?

Daphnée Elisma, Patient, Law student, Canadian for Fair Access to Medical Marijuana (CFAMM)

Learning Objectives:

1. Provide pain clinicians with key practical information on initiation and titration of cannabinoids for the management of chronic pain.
2. Provide pain clinicians with a Canadian model of a specialized medical clinic, where excellence in cannabis-related research, training of health professionals and patient care is achieved by an interdisciplinary team approach.
3. Describe current and future examples of research on medical cannabis for chronic pain. Particular emphasis will be given on showing the efforts made to overcome the methodological limitations of previous studies, which may have hindered the clinical benefits of cannabis in chronic pain (as they will be reported in the patient's testimonial).

4:00 PM – 5:30 PM **Session 110** / Room: Côte-St-Luc

FROM BIRTH TO DEATH: NOVEL AND EVIDENCE-BASED MULTI-METHOD ASSESSMENT OF PAIN ACROSS THE LIFESPAN

Chair: **Kathryn A. Birnie, PhD CPsych, University of Toronto & The Hospital for Sick Children**

Speakers:

- **Britney Benoit, MScN RN, PhD (c), Dalhousie University School of Nursing**
- **Kathryn A. Birnie, PhD CPsych, University of Toronto & The Hospital for Sick Children**
- **Lucia Gagliese, PhD, York University & University Health Network**

Symposium Abstract

Pain is, by its very nature, a subjective experience. Despite many years of empirical inquiry and debate, effort to improve the assessment of pain remains an ongoing endeavour for researchers and clinicians alike. The relevance of this work continues given contemporary emphasis on patient-reported outcomes in medical care. The challenge of pain assessment is perhaps most notable amongst populations who are unable to verbally report on their pain experience, such as infants, young children, some elderly, and at the end of life. Here in lies the need for multi-method assessment of pain using observational and, more recently, neurophysiological methods. Valid, reliable, and interpretable assessment of pain remains at the crux of pain management for determining the need for and adequacy of interventions. This symposium will showcase new empirical research and rigorous systematic reviews to guide best clinical and research practice in the assessment of pain from infancy through childhood, adolescence, adulthood, and older people at the end-of-life. It presents examples of the assessment of pain using novel neurophysiological methods, as well as self- and observer-report. This symposium will be of interest to multidisciplinary clinicians and researchers in their selection and application of novel and evidence-based pain assessment methods across the lifespan.

The use of novel neurophysiological methods to assess pain in non-verbal infants

Britney Benoit, MScN RN, PhD (c), Dalhousie University School of Nursing

Updated recommendations for the selection of self-report of pain intensity measures in children and adolescents

Kathryn A. Birnie, PhD CPsych, University of Toronto & The Hospital for Sick Children

The assessment of cancer pain in older people across the disease trajectory

Lucia Gagliese, PhD, York University & University Health Network

Learning Objectives:

1. To discuss the methodological application, strengths, and limitations of neurophysiological methods to assess acute pain in infants, and highlight utilization in ongoing neonatal pain intervention trials.
2. To select recommended self-report measures of pain in children aged 3-18 years based on availability and quality of psychometric evidence, child age, and type of pain (acute, postoperative, chronic).
3. To explore assessment of pain intensity and qualities in older people with advanced cancer and at the end of life, including both self-report and observational measures.

4:00 PM – 5:30 PM **Session 111** / Room: Lasalle

DOING WHAT NEEDS TO BE DONE: MOVING RESEARCH INTO NON-TRADITIONAL AREAS IN ORDER TO ACHIEVE EFFECTIVE, WIDE SPREAD AND IRREVERSIBLE CHANGE IN PAIN CARE

Chair: **Thomas Hadjistavropoulos, PhD FCAHS, University of Regina**

Speakers:

- **Mary Brachaniec, BScPT MAHSR, Canadian Pain Network**
- **Thomas Hadjistavropoulos, PhD FCAHS, University of Regina**
- **Jennifer Stinson, RN-EC PhD CPNP FAAN, Research Institute, SickKids and Lawrence S. Bloomberg faculty of Nursing, University of Toronto**

Symposium Abstract

There is little question that health research is undergoing a paradigmatic shift with an increasing emphasis on stakeholder involvement, knowledge translation and knowledge mobilization. Entry into non-traditional research areas is often a necessity for widespread knowledge mobilization and represents uncharted territory, often with expertise developing by trial and error. The goals of this symposium are to: a) shed a new light on the role of partnerships with patients and other stakeholders in patient oriented research (not only for the purposes of knowledge translation and knowledge mobilization) as this role is often misunderstood; b) demonstrate how diversification of research expertise can become a necessity in the quest for implementation of widespread and permanent clinical change. Ways of effectively working with patient/stakeholder partners and of diversifying one's research expertise (mid-career or later) in order to address obstacles to implementation of evidence-based practices will be presented.

Nothing about us without us: Adding the patient voice to Canadian chronic pain research to optimize health practices and patient outcomes.

Mary Brachaniec, BScPT MAHSR, Canadian Pain Network

The necessity of mid- to late-career research expertise diversification for achieving widespread clinical change: An example from the study of pain in dementia

Thomas Hadjistavropoulos, PhD FCAHS, University of Regina

Digital health technologies to improve pain in young people: Opportunities and challenges for implementation

Jennifer Stinson, RN-EC PhD CPNP FAAN, Research Institute, SickKids and Lawrence S. Bloomberg faculty of Nursing, University of Toronto

Learning Objectives:

1. To familiarize participants with a vast array of expertise and partnerships that are often needed as part of efforts to implement new evidence-based approaches

2. To illustrate an approach toward meaningful engagement with patients as research partners
3. To illustrate, through specific examples from research with older adults and with children, how the necessity of expertise diversification was met and addressed by successful research groups.

4:00 PM – 5:30 PM **Session 112** / Room: Mont-Royal + Hampstead

EMOTIONAL MODULATION OF PAIN: MECHANISMS OF RISK AND RESILIENCE ACROSS THE LIFE SPAN

Chair: **Joel Katz, PhD, York University**

Speakers:

- **Melanie Noel, PhD RPsych, University of Calgary and Alberta Children's Hospital Research Institute**
- **Tim V. Salomons, PhD, University of Reading, School of Psychology and Clinical Language Sciences**
- **Fadel Zeidan, PhD, Wake Forest School of Medicine**

Symposium Abstract

Pain can be inhibited or facilitated based on the emotional context in which it occurs. Better understanding of factors that make some individuals vulnerable to emotional facilitation of pain while others remain resilient can help us to design better interventions for individuals with pain and comorbid psychopathology. This symposium will take a multidisciplinary, multimethod, approach to understanding emotional risk and resilience across the lifespan. We will examine psychopathological co-morbidity in pediatric pain and the various cognitive, behavioral, social and physiological mechanisms that contribute to this maladaptive overlap, or alternatively, buffer outcomes. We will also examine neural mechanisms associated with both adaptive and maladaptive emotional coping in adults, with a particular emphasis on individual differences in both vulnerability and resilience to emotional facilitation of pain. Mechanisms underlying response to psychological interventions (cognitive-behavior therapy, mindfulness meditation), and their potential role in early intervention for vulnerable children and adults will also be discussed.

The co-occurrence, impact, and mechanisms of internalizing mental health symptoms in pediatric chronic pain

Melanie Noel, PhD RPsych, University of Calgary and Alberta Children's Hospital Research Institute

Examining mechanisms for the interaction of pain and negative affect

Tim V. Salomons, PhD, University of Reading, School of Psychology and Clinical Language Sciences

Neural correlates supporting inter-individual dispositional differences in the subjective experience of pain

Fadel Zeidan, PhD, Wake Forest School of Medicine

Learning Objectives:

1. To understand the role of disordered affect in adolescent chronic pain and underlying mechanisms that maintains these comorbidities
2. To elucidate neural mechanisms through which emotional states interact with pain
3. To better understand individual differences in vulnerability to emotionally-mediated facilitation of pain

6:00 PM – 7:30 PM **Neuropathic Pain SIG Meeting** / Room: Côte-St-Luc
Chair: Anuj Bhatia

Pathological changes in sensory neuron excitability - Why are they so difficult to reverse?

Steven A Prescott MD PhD, Associate Professor and Senior Scientist, Neurosciences & Mental Health, The Hospital for Sick Children, University of Toronto

Lidocaine the “Magic” medicine- IV Lidocaine infusions in the management of chronic neuropathic pain

Zameer Pirani Mb BCH BAO (MD), Resident in Anesthesia and Pain Medicine, Western University

6:00 PM – 7:30 PM **Nursing Issues SIG Meeting** / Room: Lasalle
Co-Chair: Jennifer Tyrrell, RN MN Cneph (c), The Hospital for Sick Children
Co-Chair: Jacqueline Follis, RN MSN CDE, Women’s College Hospital

Difficult Conversations in Every Day Practice.

Interactive discussion lead by interdisciplinary panelists from across Canada speaking about their challenges and experiences having difficult conversations with patients and families around opioids and medicinal marijuana.

5:45 PM – 7:15 PM **Trainee Session** / Room: Mont-Royal + Hampstead
EMERGING ETHICAL CONSIDERATIONS IN PAIN RESEARCH AND PRACTICE: WHAT EVERY TRAINEE SHOULD KNOW

Co-Chair: Carley Ouellette, RN MSc (c), Hamilton Health Sciences

Co-Chair: Perri Tutelman, BHSc (Hons), Dalhousie University

Speakers:

- Karen Davis, PhD, Krembil Research Institute, University Health Network
- Christopher DeBow, Patient Representative
- Dolly Menna-Dack, Pediatric Rehabilitation Bioethicist and Patient Representative

Session Abstract

Advancements in field of pain have been met with the emergence of new ethical challenges for clinicians and scientists. It is critical for trainees to be aware of this changing landscape and to consider the implications for their work. This interactive workshop will provide an overview of ethical issues relevant to trainees in pain research and practice on topics ranging from ethical considerations in basic science pain research, to ethical issues in clinical pain science and practice, and the ethics surrounding meaningful patient engagement. A diverse panel of speakers will share their perspectives and lived experience with ethical challenges in these domains and provide practical suggestions for trainees to consider as part of their work. First, Dr. Karen Davis will discuss the neuroethical issues of adopting brain imaging to diagnose and treat pain. Next, Ms. Dolly Menna-Dack will speak about unique ethical considerations that trainees should be aware of when designing research and working clinically with the pediatric population. Finally Mr. Christopher DeBow will cover ethical issues that should be considered by trainees in pain research and patients to help ensure meaningful patient engagement and effective collaboration in pain research.

7:15 PM – 10:00 PM **Trainee Social (Offsite)**

DAY 2 - Thursday, May 24, 2018

7:00 AM - 8:15 AM **Registration & Breakfast & Poster Set Up (Group 2)** / Room: Registration Desk & Fontaine Exhibit Hall

8:15 AM - 8:30 AM **Opening Remarks** / Room: Westmount + Outremont

8:30 AM - 9:15 AM **Plenary Session** / Room: Westmount + Outremont
THE PSYCHOLOGY OF PHYSICAL EXPERIENCE: EXPLORING THE TEN NEGLECTED SENSES'

Keynote Speaker: **Christopher Eccleston, PhD, The University of Bath**

We were taught, and we teach our children, that there are five senses. This unusual perspective on sensation and experience extends into adulthood and into professional education. The psychology of perception, for example, focusses almost exclusively on vision. I present here an invitation to explore the ten neglected senses, of balance, motion, pressure, itch, pain, fatigue, breathing, temperature, appetite, and expulsion (the experience of matter leaving the body). Clinically, the experiences of the body, the physical senses are what are most often at stake, they form the content of the patient reported outcomes argued to be central to chronic healthcare.

A functional and phenomenological account of embodied (interoceptive and proprioceptive) experience is presented, focusing on what the function of a specific experience is, what consequences it leads to, and how it feels. Bringing a formal psychological frame to this experience, using scientific method, can bring into focus opportunities for clinical intervention and improvements in patient experience.

Using the three examples of pain, itch, and respiration, embodied perception is explored. First, non-clinical limit (extreme) experience are explored, second, what we know from experimental research is reviewed, and finally, the clinical consequences of each sense is developed and exemplified. In particular the learnings for the next generation of self-management, psychological and rehabilitative treatments will be outlined.

9:15 AM - 10:00 AM **Plenary Session** / Room: Westmount + Outremont
SHINING LIGHT ON PAIN MECHANISMS THROUGH OPTOGENETICS

Keynote Speaker: **Cheryl Stucky, PhD, Medical College of Wisconsin**

Optogenetics is a cutting-edge technique that can be used to dissect the roles of specific cell types in acute and chronic pain in awake behaving animals, ex vivo tissues and isolated cells. Advantages of optogenetics are that 1) neuronal populations and circuits remain anatomically intact and therefore, are more clinically relevant than ablation models, and 2) neuronal subtypes can be excited or inhibited repeatedly in a temporally controlled, non-invasive manner in naïve animals, or in models of injury and disease.

The goal of this plenary talk is to illuminate ways in which inhibitory optogenetic approaches can be used to dissect the functions of specific cell types and their circuitry in acute and chronic pain models. This session will focus on the differential roles of sensory neurons that express Calcitonin- Gene-Related Peptide alpha (CGRP α) in baseline tactile and thermal sensation, and in two disease states (neuropathic pain and post-surgical pain) across a longitudinal time course. This symposium will also highlight differences in the role of CGRP α afferents versus peripheral

CGRP α peptide-receptor signaling in neuropathic and inflammatory pain. CGRP α peptide signaling has a documented role in migraine and headache, which has resulted in the novel therapeutics for migraine and headache disorders that are in clinical trials. Future studies that harness optogenetic inhibition or excitation of CGRP α neurons could reveal new insights for these peptidergic neurons in migraine, headache and other pain models.

Learning Objectives

1. To appreciate the value of optogenetic approaches and understand how these tools can be used to dissect the functional roles of cell types *in vivo* and *in vitro*.
2. To understand the roles of CGRP α -expressing sensory neurons in persistent pain with diverse etiologies.
3. To consider differences between the roles of CGRP α -neurons and peripheral CGRP α peptide signaling in different pain states.

10:00 AM - 11:00 AM **Coffee / Posters / Tradeshow** / Room: Fontaine Exhibit Hall

11:00 AM - 12:30 PM **Session 201** / Room: Côte-St-Luc

THE EFFECT OF A MINDFULNESS-BASED STRESS REDUCTION PROGRAM ON PSYCHOSOCIAL FUNCTIONING, COGNITIVE IMPAIRMENT, AND BRAIN ACTIVITY IN BREAST CANCER SURVIVORS WITH CHRONIC

Chair: **Patricia Poulin, PhD, The Ottawa Hospital**

Speakers:

- **Samantha Kenny, BA, The Ottawa Hospital Research Institute**
- **Alicia Duval, BA, University of Carleton**
- **Eve-Ling Khoo, BSc, The Ottawa Hospital Research Institute**

Symposium Abstract

It is estimated that 26,300 women will be diagnosed with breast cancer in 2017 where 20-50% will develop chronic neuropathic pain (CNP) following treatments. CNP is notoriously difficult to treat and it is often associated with other disorders such as depression, anxiety, and insomnia. Previous mindfulness studies have shown improvement in psychological distress and physical functioning among cancer survivors. The objective of this symposium is to improve understanding of the evidence supporting the use of mindfulness in chronic neuropathic pain, as well as to improve understanding of the impact of mindfulness training on cognition and brain function. We present the results of a randomized controlled trial with breast cancer survivors who were one year post-treatment experiencing neuropathic pain for at least 6 months ($n = 118$, mean age = 53.27, SD = 10.58), with attention to effects on pain intensity, pain interference, cognition, and patient global impression of change. We also present results of our functional neuroimaging study demonstrating changes in activity in areas of the brain involved in the regulation of attention and emotion as well as bodily perception.

The Effects of Mindfulness-based Stress Reduction on Pain, Intensity, Global Impression of Change and Daily Functioning

Samantha Kenny, BA, The Ottawa Hospital Research Institute

Mindfulness-based Stress Reduction: A Potential Treatment for Cancer-related Cognitive Impairment

Alicia Duval, BA, University of Carleton

Neurological Changes in Breast Cancer Survivors with Chronic Neuropathic Pain Post Mindfulness-based Stress Reduction

Eve-Ling Khoo, BSc, The Ottawa Hospital Research Institute

Learning Objectives:

1. *Understand the evidence for the use of mindfulness in chronic neuropathic pain.*
2. *Understand the impact of mindfulness training on cognitive function among patients with chronic neuropathic pain following cancer treatment.*
3. *Understand the impact of mindfulness training on brain function during pain related cognitive task.*

11:00 AM – 12:30 PM **Session 202** / Room: Verdun + Lachine

THE NORTH AMERICAN OPIOID CRISIS; HISTORY, IMPACT, INITIATIVES

Chair: **Fiona Campbell, MD FRCA, President Elect Canadian Pain Society, SickKids, University of Toronto**

Speakers:

- **Jane C Ballantyne, MD FRCA, University of Washington**
- **Jason Busse, BSc MSc DC (CMCC) PhD, McMaster University**
- **Hance Clarke, MD PhD FRCPC, Toronto General Hospital, University Health Network, University of Toronto**

Symposium Abstract

North America faces a crisis with escalating, overdose and death caused by opioids. There are many contributory causes to this crisis including but not limited to illegally imported fentanyl, opioid overprescribing, lack of pharmacosurveillance, limited access to comprehensive addiction treatment programs, and poor pain management due in part to insufficient pain education, inadequate funding for pain research, and limited access to other treatment options for pain (physiotherapy, psychotherapy, specialized interprofessional pain programs). While opioid prescribing is cited as an important risk factor for the crisis, it is important to note that while death rates from opioids are increasing, that rates of opioid prescribing are declining. In response to government pressure to curb opioid prescribing there are disturbing trends emerging; physicians refusing to prescribe opioids fearing reprisal from professional bodies, suicides by pain patients for whom opioids were cut off, patients suffering from acute opioid withdrawal in Emergency Departments, and patients seeking illicit opioids to treat their pain. There is a need to inform Canadians about the risks of opioid use, support better prescribing practices, reduce easy access to unnecessary opioids, support alternative treatment options for pain, and improve evidence to inform policy and reduce availability of street drugs.

An epidemic that's not easy to reverse: the U.S. opioid epidemic

Jane C Ballantyne, MD FRCA, University of Washington

Quality Standards (Health Quality Ontario 2018); Opioid Prescribing for Acute and Chronic Pain

Jason Busse, BSc MSc DC (CMCC) PhD, McMaster University

Opioid Crisis; National and Provincial strategies

Hance Clarke, MD PhD FRCPC, Toronto General Hospital, University Health Network, University of Toronto

Learning Objectives:

1. After this symposium; participants will be able to describe contributory causes to the opioid crisis, and why this crisis is hard to reverse.
2. After this symposium; participants will be able to describe new quality standards that may improve the safety and effectiveness of opioid prescribing for pain.
3. After this symposium; participants will be able to describe national and provincial initiatives currently underway to tackle the "opioid crisis" while maintaining the interests of people living with chronic pain.

11:00 AM - 12:30 PM **Session 203** / Room: Mont-Royal + Hampstead

BUGGED BY PAIN - IS GUT MICROBIOME INVOLVED IN THE PATHOGENESIS OF CHRONIC PAIN?

Chair: **Yoram Shir, MD, Allan Edwards Pain Management Unit, McGill University Health Centre**

Speakers:

- **Ken Dewar, PhD, McGill University / Genome Quebec Innovation Centre**
- **Shiqian Shen, MD, Massachusetts General Hospital for Children**
- **Amir Minerbi, MD PhD, Alan Edward Pain Management Unit, McGill University Health Centre**

Symposium Abstract

Gut microbiome is being recognized as a key player affecting the host health in multiple mechanisms. In recent years, evidence is mounting on the critical role of the gut microbiota in a variety of pathologies including, but not limited to, metabolic, cardiovascular, oncologic, neurologic and even psychiatric and developmental disorders. The scientific literature is rich in studies on different aspects of the interactions between the host and the microbiome; however data on the possible role of the gut microbiota in pathophysiology of chronic pain is still scant. Our increasing understanding of the interactions between the gut microbiota and the central nervous system, also known as the 'gut-brain axis', makes reasonable the hypothesis that it may also affect pain. Indeed, some animal studies have shown that gut microbiota play an important role in the development of visceral pain and of neuropathic pain induced by chemotherapeutic agents. Human studies have thus far focused on the interaction of the gut microbiota with gastrointestinal pain, mainly in the context of irritable bowel syndrome.

In this symposium, we explore the interactions between the microbiota and its host, looking into the critical role of gut microbiota in the development of chemotherapy induced neuropathic pain and finally, describing an ongoing research on the possible correlation of fibromyalgia and the microbiota in humans.

We believe that this rapidly expanding field of research has the potential to open new horizons in the study of chronic pain.

Lessons from microbiome genome sequencing

Ken Dewar, PhD, McGill University / Genome Quebec Innovation Centre

Gut microbiota and pain

Shiqian Shen, MD, Massachusetts General Hospital for Children

Gut microbiota composition and function in fibromyalgia patients vs. healthy controls

Amir Minerbi, MD PhD, Alan Edward Pain Management Unit, McGill University Health Centre

Learning Objectives:

1. *An introduction to the world of gut microbiome and its effects on human health and diseases.*
2. *Learn of the role of the gut microbiome in the development of neuropathic pain in an animal model.*
3. *Discuss the possible association of the gut microbiome composition and function and chronic pain in humans.*

11:00 AM – 12:30 PM **Session 204** / Room: Lasalle

CADILLAC CARE WITH A HYUNDAI BUDGET

Chair: **Tania Di Renna, BSc MD FRCPC, Women's College Hospital, Toronto Academic Pain Medicine Institute**

Speakers:

- **Jaqueline Follis, RN BSN MSN, Women's College Hospital, Toronto Academic Pain Medicine Institute**
- **Sheldon Laporte, Patient Representative**
- **Laura Pus, BSc MBA, Women's College Hospital, Toronto Academic Pain Medicine Institute**

Symposium Abstract

It is estimated that 1 in 5 Canadians experiences chronic pain, yet many studies show that pain is poorly managed despite its prevalence. In Toronto, patients can spend up to 20 months waiting to receive specialized chronic pain care. To offer people living with pain streamlined and accelerated access to specialized care, Women's College Hospital has partnered with the Centre for Addiction and Mental Health, Sinai Health System, St. Michael's Hospital and the University Health Network to create the Toronto Academic Pain Medicine Institute (TAPMI).

The hub of services for the TAPMI network is the ambulatory multi-disciplinary centre at Women's College Hospital. Healthcare providers at the hub assess and triage pain patients to one of the partner hospitals or to the multidisciplinary team at the hub depending on the care they require. Each partner hospital offers distinct specialization in one aspect of pain management that together make TAPMI a comprehensive chronic pain service.

TAPMI has developed a comprehensive program that addresses challenges and barriers to care and builds on the strengths of the partner programs. TAPMI services are designed around the patient's journey, supporting the patients and their primary care providers at home and in the community through to intake, treatment, and discharge.

This symposium will discuss our process for 1) establishing a central intake and triage for 5 large academic pain programs, 2) engaging patients in program development and oversight and, 3) developing economically sustainable programs that meet the needs of our patients.

Highways to Help: Setting up the right infrastructure to get patients to the right providers the first time

Jaqueline Follis, RN BSN MSN, Women's College Hospital, Toronto Academic Pain Medicine Institute

The Pontiac Aztec Fallacy: Engaging patients in the design of care

Sheldon Laporte, Patient Representative

The Tesla Model 3: Investing in technologies and innovation to create a sustainable and responsive model of care

Laura Pus, BSc MBA, Women's College Hospital, Toronto Academic Pain Medicine Institute

Learning Objectives:

1. Evaluate the benefits and barriers to access in establishing a centralized triage process
2. Discuss the importance of incorporating the patient in program design and oversight.
3. Explore ways of developing economically sustainable programs within the Canadian health care system

12:30 PM – 1:30 PM **Lunch / Posters / Tradeshow** / Room: Fontaine Exhibit Hall

1:30 PM – 3:00 PM **Session 205** / Room: Côte-St-Luc

TAPMI TRANSITIONAL PAIN: THE DEVELOPMENT AND OUTCOMES FROM THE TRANSITIONAL PAIN SERVICE OPIOID WEANING PROGRAM

Chair: Tania Di Renna, BSc MD FRCPC, Women's College Hospital, Toronto Academic Pain Medicine Institute

Speakers:

- Hance Clarke, MD PhD, Toronto General Hospital, University Health Network, University of Toronto
- Aliza Weinrib, PhD, Transitional Pain Service, University Health Network
- Karen Ng, BScPhm PharmD ACPR, Toronto Academic Pain Medicine Institute (TAPMI), Women's College Hospital
- Paul Ross, Patient Representative
- Michael Satok Wolman, Patient Representative

Symposium Abstract

The McMaster 2017 Opioid Guidelines strongly recommends that patients with chronic non-cancer pain who are experiencing serious challenges in tapering from high dose opioids be referred to a formal multidisciplinary opioid reduction program. As the authors of this document acknowledge, there is a marked shortage of multidisciplinary pain clinics for each person living with chronic pain in Canada. This is a crucial systematic problem that needs to be addressed in order to improve our response to the current opioid crisis in order to make these recommendations feasible -- as it is, there is one such multidisciplinary pain treatment center for every 258,000 Canadians. In addition, there is a lack of evidence or guidance for physicians trying to safely wean patients on high dose opioids or convert them to opioid agonist strategies. The fact is that we are entering a dangerous time for these patients as many will struggle with withdrawal without having the needed coping strategies. We aim to outline some of the tools that we have put into place to help patients wean from their opioid medications and present our opioid weaning data from the Toronto Transitional Pain Clinic.

An Opioid Weaning Template and Outcomes over the past 3 years.

Hance Clarke, MD PhD, Toronto General Hospital, University Health Network, University of Toronto

Psychological Approaches to Opioid Weaning

Aliza Weinrib, PhD, Transitional Pain Service, University Health Network

Pharmacist's Role in Opioid Stewardship and Weaning: Primary Care Outreach

Karen Ng, BScPhm PharmD ACPR, Toronto Academic Pain Medicine Institute (TAPMI), Women's College Hospital

The Journey down from high dose opioids

Paul Ross, Patient Representative

Michael Satok Wolman, Patient Representative

Learning Objectives:

1. To provide details regarding the pathway being used to wean patients from high dose opioids
2. To describe specific psychological techniques associated with opioid weaning
3. To describe the role of the pharmacist within this inter-disciplinary team.

1:30 PM – 3:00 PM **Session 206** / Room: Verdun + Lachine

SHORT-TERM AND LONG-TERM CONSEQUENCES OF OPIOID USE FOR THE TREATMENT OF ACUTE PAIN: APPROPRIATE PRACTICES TO IMPROVE SAFETY AND CLINICAL OUTCOMES

Chair: Céline Gélinas, N PhD, McGill University, Ingram School of Nursing

Speakers:

- Céline Gélinas, N PhD, McGill University, Ingram School of Nursing
- Judy Morris, MD FRCPC MSc, Hôpital du Sacré-Coeur de Montréal, Université de Montréal
- Catherine Ferland, PhD, McGill University, Shriners Hospital for Children

Symposium Abstract

Opioids are commonly used for the treatment of acute pain. Their use can lead to adverse events and consequences, and patient safety is a major concern. This symposium will examine current data on the latest acute pain research and address potential implications for opioid use and monitoring in clinical practice. Research findings will come from different acute care settings (emergency department, medical and surgical care units), and address specific challenges in the adult and the pediatric populations.

Predictive factors of opioid-related respiratory depression in acute care settings

Céline Gélinas, N PhD, McGill University, Ingram School of Nursing

Optimal opioid prescription for acute pain relief while limiting misuse and dependence.

Judy Morris, MD FRCPC MSc, Hôpital du Sacré-Coeur de Montréal, Université de Montréal

The effects of morphine intake on the endogenous pain control during the acute post-operative period

Catherine Ferland, PhD, McGill University, Shriners Hospital for Children

Learning Objectives:

1. Describe predictive factors of opioid-related respiratory depression
2. Describe optimal use of opioid to treat acute pain
3. Describe risk factors of opioid long-term use

1:30 PM – 3:00 PM **Session 207** / Room: Mont-Royal + Hampstead
LEARNING TO FEAR PAIN: BRAIN IMAGING AND PSYCHOPHYSIOLOGICAL STUDIES OF THE IMPACT OF ANTICIPATED PAIN ON PAIN SENSITIVITY AND DECISION-MAKING.

Chair: **Mathieu Roy, PhD, McGill University**

Speakers:

- **Pierre Rainville, PhD, Université de Montréal**
- **Michael L. Meier, PhD, University Hospital Balgrist**
- **Mathieu Roy, PhD, McGill University**

Symposium Abstract

Pain has an important learning function: we learn to fear cues that are predictive of pain and will try to avoid pain whenever possible. However, avoidance often comes at a cost, in which case we need to decide whether or not we are willing to pay the price for avoiding pain. This symposium will examine the impact of learned fear of pain on pain sensitivity, how fear of pain is represented in the brain, and how fear of pain influences our decisions. Altogether, these three presentations will provide a better understanding of the neural and psychological mechanisms underlying the important influence of pain anticipation on behavior.

Learned expectations and uncertainty facilitate pain during classical conditioning.

Pierre Rainville, PhD, Université de Montréal

Exploring the validity of pain-related fear questionnaires – a probabilistic fMRI machine learning approach

Michael L. Meier, PhD, University Hospital Balgrist

No pain no gain: cerebral mechanisms underlying decision-making about pain.

Mathieu Roy, PhD, McGill University

Learning Objectives:

1. *To provide a better understanding of the neural and psychological mechanisms underlying the important influence of pain anticipation on behavior.*
2. *To explore the cerebral underpinning of inter-individual differences in pain-related anticipatory fear.*
3. *To examine how people make decisions between anticipated pain and potential rewards.*

1:30 PM – 3:00 PM **Session 208** / Room: Lasalle
PAIN IN SPORT: LESSONS FROM THE ELITE ATHLETE

Chair: **Mark A. Ware, MBBS MSc, McGill University**

Speakers:

- **Amy Barrette, MSc CAT(C) CSCS FMSC Athletic Therapist, Drakkar de Baie-Comeau**
- **Alan Vernec, MD Dip. Sport Med, World Anti-Doping Agency**
- **Mark A. Ware, MBBS MSc, McGill University**

Symposium Abstract

To be successful, the elite athlete must learn to have a relationship to pain through their intense training and competition, and possibly through injury and recovery. This symposium explores this relationship to a unique aspect of pain: pain as a necessary part of functional outcome. With a

practicing athletic therapist, we will explore what physical and psychological approaches the elite athlete takes to working and training through pain. We will explore the guidelines for pain management in elite athletes, recently developed and published by the International Olympic Committee, and we will explore the inherent tension between pain pharmacotherapy and performance enhancement.

Athletes play through pain - what does that mean for rehabilitation specialists?

Amy Barrette, MSc CAT(C) CSCS FMSC Athletic Therapist, Drakkar de Baie-Comeau

Analgesics, Sport and Anti-Doping

Alan Vernec, MD Dip. Sport Med, World Anti-Doping Agency

Cannabis in sport: enhancement, impairment or enjoyment?

Mark A. Ware, MBBS MSc, McGill University

Learning Objectives:

1. Understand the importance and impact of pain in sports medicine
2. Appreciate the rationale for controlling analgesic use in training and competition
3. Discuss the lessons that can be learned about interdisciplinary pain management from the elite athlete

3:00 PM - 4:00 PM **Coffee / Posters / Tradeshow** / Room: Fontaine Exhibit Hall

3:55 PM - 5:30 PM **Poster Tear Down** / Room: Fontaine Exhibit Hall

4:00 PM - 5:30 PM **Session 209** / Room: Mont-Royal + Hampstead

NEW HORIZONS IN FIBROMYALGIA

Chair: Mary-Ann Fitzcharles, MB ChB, Alan Edwards Pain Management Unit, McGill University

Speakers:

- Lynn Cooper, BES, Patient
- Amir Minerbi, MD PhD, Alan Edward Pain Management Unit, McGill University Health Centre
- Mary-Ann Fitzcharles, MB ChB, Alan Edwards Pain Management Unit, McGill University

Symposium Abstract

Although fully accepted as a valid illness for more than two decades, fibromyalgia (FM) still presents many challenges for both patients and the health care community. This symposium will address a number of new concepts pertinent to FM. In the first instance we will describe a new approach to directing a research agenda for FM that involved the collaboration of patients and health care professionals. Taking into account the lived experience of persons with FM, a study was conducted to identify priorities regarding management of FM that require further study. Amongst the top ten priorities identified was the question of the effect of lifestyle interventions, including dietary manipulation, as a strategy to improve symptoms of FM. This will provide a segue into the second part of this symposium which will address the effect of diet as well as possible manipulation of the microbiome in FM and painful conditions. Finally, the very new concept that FM is a condition that spans many medical illnesses will be described. Although mostly recognized to occur as a comorbid

condition with rheumatic conditions, the presence of comorbid FM in other medical conditions such as neurological, gastrointestinal, endocrine and other medical conditions will be discussed. We believe that these new insights will be important in the clinical care of persons with FM and will contribute to overall well-being of patients.

Listen to the patient when embarking on research

Lynn Cooper, BES, Patient

Does what I eat affect my pain?

Amir Minerbi, MD PhD, Alan Edward Pain Management Unit, McGill University Health Centre

Fibromyalgia permeates all of medicine

Mary-Ann Fitzcharles, MB ChB, Alan Edwards Pain Management Unit, McGill University

Learning Objectives:

1. To be informed of a collaborative process between patients and health care professionals that has identified prioritized gaps in the management of fibromyalgia that may direct clinically relevant research.
2. To understand the current and up to date scope of scientific evidence for dietary manipulation in management of chronic pain and fibromyalgia.
3. To be knowledgeable of the co association of fibromyalgia with other medical illnesses with implications for clinical care

4:00 PM – 5:30 PM **Session 210** / Room: Côte-St-Luc

IMPROVING CANCER PAIN MANAGEMENT ACROSS THE LIFESPAN: LOOKING BACK TO MOVE FORWARD

Chair: Lynn Gauthier, PhD, Université Laval

Speakers:

- Lucia Gagliese, PhD, York University and University Health Network
- Lynn Gauthier, PhD, Université Laval
- Perri Tutelman, BHSc (Hons), Dalhousie University

Symposium Abstract

Thirty years have passed since Dr. Ronald Melzack's IASP Presidential Address, "The Tragedy of Needless Pain: A Call for Social Action" (Proceedings of the 5th World Congress on Pain, 1-11 [1988]), in which he expressed the urgent need to improve pain management for people across the lifespan. Unfortunately, cancer pain remains undertreated, especially in some of the most vulnerable populations, including children, older people, and those in the very last days of life. The objective of this symposium is to trace the history of cancer pain management over the past 30 years, and to describe the persistence of cancer pain undertreatment in these vulnerable populations, and across different phases of the cancer trajectory. Lucia Gagliese will discuss the historical context of cancer pain undertreatment and present recent data describing continuing pain undertreatment in older people with advanced cancer and among those with cognitive impairment at the very end of life. She will also explore some of the underlying causes of this undertreatment. Next, Lynn Gauthier will trace the history of pain management indices, discuss their limitations, and describe their validity, sensitivity, and specificity, and the development of a new, multidimensional index. Finally, Perri Tutelman will review the historical context of pediatric cancer pain undertreatment, present the current state of cancer pain

management in this population, and describe findings from a novel social media campaign to address knowledge-to-action gaps in pediatric cancer pain management. Commonalities and differences across the lifespan will be highlighted and directions for future research will be proposed.

The Unrelenting Tragedy of Needless Cancer Pain

Lucia Gagliese, PhD, York University and University Health Network

Steps Toward Validation and Refinement of the Pain Management Index

Lynn Gauthier, PhD, Université Laval

Using Social Media to Address Knowledge to Action Gaps in Pediatric Cancer Pain

Perri Tutelman, BHSc (Hons), Dalhousie University

Learning Objectives:

1. To understand the historical context of cancer pain undertreatment across the lifespan.
2. To describe the current state of cancer pain management and its assessment across the cancer continuum.
3. To summarize recent advances in assessment techniques and knowledge translation strategies to address the persistent problem of cancer pain undertreatment across the lifespan.

4:00 PM – 5:30 PM **Session 211** / Room: Lasalle

NATIONAL PAIN STRATEGY DEVELOPMENT- RATIONALE AND PROCESS, EXEMPLARS FROM OTHER FIELDS

Chair: Norm Buckley, MD FRCPC, Chronic Pain Network, McMaster University

Speakers:

- Billie Jo Bogden, Patient Representative
- Mary Lynch, MD FRCPC, Dalhousie University
- Owen Williamson, MBBS FFPANZCA, Monash University

Symposium Abstract

Chronic pain is extremely common (15-20% of Canadian population) at levels sufficient to affect function. Societal cost is greater than cardiovascular disease and cancer combined. There is agreement about what constitutes best practice care, but this is not available through the provincially funded health care systems for most Canadians, with some specific exceptions. Available treatments may have limited effect, and the impact of pain on individuals, families and society may be best described in a complex bio-psycho-social model which is only amenable to intervention with complex care processes directed specifically at improving lifestyle, etc. Reliance on medical model thinking has led in part to the current prescription opioid crisis through over-prescribing. Research dollars are not allocated to pain topics in proportion to the importance of the problem, with less than one percent of CIHR dollars identifiable as directed at pain.

Notwithstanding, there have been significant efforts over the past 5 years to establish a National Pain Strategy to advise policy makers on the type, magnitude and direction of resource allocation. The creation of the Chronic Pain Network (CPN), a 5-year project under the CIHR SPOR initiative, has allowed the establishment of several elements identified as critical in other strategies such as cancer care, and the KT process within the CPN is aimed at improving dissemination of best practice care and public

awareness. This workshop will describe these initiatives and others including a Canadian Pain Care Forum, and McMaster Health Policy Forum deliberations towards a National Pain Strategy proposal.

From the perspective of a person living with pain- what is missing, what is threatening, what looks like hope on the horizon?

Billie Jo Bogden, Patient Representative

National Pain Strategy 2012- what we did right, what we did wrong, what was missing, what was accomplished

Mary Lynch, MD FRCPC, Dalhousie University

Towards a Canadian National Pain Strategy - what can we learn from the Aussies!

Owen Williamson, MBBS FFPANZCA, Monash University

Learning Objectives:

1. To bring a patient perspective onto the issues around a national pain strategy
2. To chronicle the current Canadian state of development of a National Pain Strategy, from the perspective of one of the leaders of that process.
3. To discuss how the lessons learned in the development and implementation of the Australian National Pain Strategy might inform the development and implementation of a Canadian National Pain Strategy.

4:00 PM – 5:30 PM **Session 212** / Room: Verdun + Lachine

HOT TOPICS

Chair: Melanie Noel, PhD Rpsych, University of Calgary and Alberta Children's Hospital Research Institute

Progression of Spinal Cord Plasticity over 12 months following Lumbar Intervertebral Disc Injury and Attenuation by Voluntary Running Activity

Daniel Z. Foster BSc, McGill University

Pain Training Program

Ian Beauprie, MD FRCPC, Dalhousie University

Mechanisms of spinal hyperexcitability in rat and human models of pathological pain

Annemarie Dedek, BSc. Hon., Carleton University

Parent-Child Reminiscing about Painful and Sad Events: A Comparative Analysis

Maria Pavlova, MSc, University of Calgary

From bedside to bench: IL-8 over-expression (back pain patients, mouse model) and inhibition (mice) contribute to chronic low back pain

Seon Ho Jang, McGill University

Characterization of the nociceptive properties and cellular mechanism of Lionfish venom

Stephanie Mouchbahani-Constance, BSc, McGill University

6:30 PM – 11:00 PM **Awards Gala Reception & Dinner** / Room: Westmount + Outremont

DAY 3 - Friday, May 25, 2018

8:00 AM - 9:15 AM **Registration & Breakfast** / Room: Registration Desk, Westmount + Outremont Foyer

9:15 AM - 9:30 AM **Opening Remarks** / Room: Westmount + Outremont

9:30 AM - 10:00 AM **Distinguished Career Award**
NAVIGATING THE INTERSECTION OF PAIN, FEAR, AND TRAUMATIC STRESS: FROM WHENCE WE CAME AND WHERE WE ARE HEADED
Keynote Speaker: **Gordon JG Asmundson, BA (Hons) MA PhD, University of Regina**

Session Abstract:

It is now well established that chronic pain and various anxiety-related disorders (e.g., posttraumatic stress disorder, generalized anxiety disorder, social anxiety disorder) frequently co-occur. Co-occurrence of clinically significant anxiety other than that specific to pain (i.e., pain-related anxiety, kinesiophobia) is often unrecognized and untreated in pain treatment settings; yet, when unaddressed, a comorbid anxiety-related disorder can complicate treatment, reduce treatment effectiveness, and exacerbate functional limitations and suffering for patients with chronic pain. For over two decades our empirical and theoretical work has been focused on better understanding the intersection of pain, fear and the anxiety-disorders (with a primary focus on posttraumatic stress) so that the most effective, efficient, and accessible evidence-based treatments can be made available to those who have comorbid chronic pain and clinically significant anxiety. This address will provide a broad overview of our initial foray into this line of investigation, our general findings, relevant heuristic models and associated mechanisms posited to account for co-occurrence, as well as an update on our current empirical foci and findings.

10:00 AM - 10:30 AM **Early Career Award** / Room: Westmount + Outremont
GENITO-PELVIC PAIN FROM A COUPLES' PERSPECTIVE
Keynote Speaker: **Natalie Rosen, PhD Rpsych, Dalhousie University**

Session Abstract

Vulvodynia is a genito-pelvic pain condition that is characterized by recurrent vulvo-vaginal pain that does not have an identifiable cause. With a prevalence of 8% to 12% in the general population, this pain adversely affects women's and their partners' psychological, relationship, and sexual well-being. The pain interferes with both sexuality and one's romantic relationship, making interpersonal variables especially relevant to this condition. In this presentation, Dr. Rosen will review her CIHR-funded research focusing on novel interpersonal predictors of adjustment to vulvodynia. Using daily diaries and observational study designs, she will first present her findings on the role of partner responses to the pain, intimacy, and sexual goals (i.e., the reasons for having sex) in the pain and psychosexual impairments of vulvodynia. Results from these studies were used to co-develop a novel, cognitive-behavioural couple therapy (CBCT) for women with vulvodynia and their partners. Dr. Rosen will next provide an overview of this intervention and the results of a pilot study, which found significant pre- to post-treatment improvements in the primary outcome (pain during intercourse), as well as several psychosexual outcomes for both women and partners, including sexual function, sexual satisfaction, and

pain catastrophizing. She is currently conducting a two-centre randomized clinical trial to evaluate the efficacy of CBCT by testing it against a standard medical treatment – lidocaine. Overall, this program of research contributes to providing much needed empirically validated psychological interventions for genito-pelvic pain from a couples' perspective.

10:30 AM – 11:00 AM **Coffee** / Room: Westmount + Outremont Foyer

11:00 AM – 12:30 PM **Session 301** / Room: Côte-St-Luc

PARENTAL PSYCHOPATHOLOGY AND PAIN: BIOLOGICAL, BEHAVIOURAL, AND SOCIAL INFLUENCES ON OFFSPRING

Chair: Bonnie Stevens, RN PhD FAAN FCAHS, Lawrence S. Bloomberg Faculty of Nursing and Faculties of Medicine and Dentistry, University of Toronto Centre for the Study of Pain

Speakers:

- Tim F. Oberlander, MD FRCPC, University of British Columbia
- Hannah Gennis, MA, York University
- Kathryn A. Birnie, PhD CPsych, University of Toronto & The Hospital for Sick Children

Symposium Abstract

Listening to the first cries at birth, the primacy of the social context in human distress responding is clearly demonstrated by the innate predisposition to signal another when upset. Moreover, the importance of biological influences before a child is even born is also critical because the cortical and nervous system foundations for physiological and cognitive distress processing is laid before a child emerges from the womb.

Parents play a critical role in shaping pain experiences and pain responses in children of all ages. Research is beginning to show an interaction of developmental stage and parent influence on pediatric pain responses. An important component of parenting the pained child is the parent's emotional well-being. It is well-known in developmental literatures outside the pain context that parents with mental health challenges can struggle to meet the demands of child rearing. This symposium explores this relationship specifically within the pediatric pain context. Drawing from new research across childhood (newborn, young child, adolescent), presenters will discuss biological, behavioural, and social influences on the child in pain, when a parent has mental health challenges.

Prenatal exposure to antidepressants, maternal mood disturbances and neonatal cardiac autonomic reactivity to an acute noxious event.

Tim F. Oberlander, MD FRCPC, University of British Columbia

Understanding How Parental Mental Health Impacts The Efficacy of Parental Management Interventions for Pediatric Pain

Hannah Gennis, MA, York University

The Largely Neglected Role of Parental Physical and Mental Health in Pediatric Chronic Pain

Kathryn A. Birnie, PhD CPsych, University of Toronto & The Hospital for Sick Children

Learning Objectives:

1. To better understand the role of biological impact of SSRI's during prenatal development on newborn pain responding.

2. To stimulate discussion on the importance of understanding parental psychopathology when designing parent-led pain interventions for young children.
3. To present evidence for proposed mechanisms underlying relations between parent physical and mental health symptoms and child chronic pain and disability in children and youth.

11:00 AM - 12:30 PM **Session 302** / Room: Verdun + Lachine

COGNITIVE BIASES IN PAIN: CURRENT CHALLENGES, FUTURE DIRECTIONS AND TREATMENT OPPORTUNITIES

Chair: **Dimitri ML Van Ryckeghem, PhD, University of Luxembourg, Institute for Health and Behaviour**

Speakers:

- **Dimitri ML Van Ryckeghem, PhD, University of Luxembourg, Institute for Health and Behaviour**
- **Melanie Noel, PhD RPsych, University of Calgary and Alberta Children's Hospital Research Institute**
- **Gordon JG Asmundson, BA (Hons) MA PhD, University of Regina**

Symposium Abstract

Cognitive biases are a core component of contemporary cognitive-affective models that try to explain pain experience, distress and disability in children and adults experiencing pain. The idea that children and adults with pain show cognitive biases for pain-related information, i.e. they selectively attend to pain-related information at the cost of other information (attentional bias), interpret ambiguous stimuli as pain-related (interpretation bias) or have biased memories for painful events (memory bias), has been particularly influential in this context. Notwithstanding the considerable progress made in the understanding of cognitive biases related to pain and threat, a number of questions remains unanswered and future challenges linger. A first challenge is to further delineate the characteristics of cognitive biases, including their content specificity and dynamics. A second challenge relates to the understanding of how cognitive biases interrelate with each other and possibly reinforce one another. A third challenge relates to the translation of findings on cognitive biases for pain into clear strategies and recommendations to optimize and evaluate pain treatment programs. Presenters in this symposium will address each of the above-mentioned lingering challenges by both critically reviewing the available evidence on cognitive biases in children and/or adults experiencing pain and presenting novel research using innovative study set-ups and unique methods for assessing and modifying cognitive biases in children and adults experiencing pain.

Attention bias for pain: A dynamic perspective.

Dimitri ML Van Ryckeghem, PhD, University of Luxembourg, Institute for Health and Behaviour

Cognitive Biases for Pain in the Pediatric Period

Melanie Noel, PhD RPsych, University of Calgary and Alberta Children's Hospital Research Institute

Does ABM Training Improve Outcomes in Patients with Chronic Musculoskeletal Pain? An Overview of the Area and First Look at a Large ABM RCT with Fibromyalgia

Gordon JG Asmundson, BA (Hons) MA PhD, University of Regina

Learning Objectives:

1. *Understand the current state-of-the-science on attention bias for pain and address the malleability and dynamic nature of attention bias for pain. Provide an insight in factors influencing attention bias for pain.*
2. *To understand the role of cognitive biases in children's acute and chronic pain experiences and the efficacy of a novel, parent-led memory reframing intervention for children's post-surgical pain.*
3. *To get an understanding of the available evidence for the use of attention bias modification to reduce pain experience and disability, and its applicability in chronic pain patients.*

11:00 AM - 12:30 PM **Session 303** / Room: Lasalle

DEVELOPMENT OF NATIONAL GUIDELINES FOR OLDER ADULTS: PREVENTION, ASSESSMENT AND TREATMENT OF CANNABIS AND OPIOID USE DISORDERS – CONSULTATION ON DRAFT MATERIAL

Chair: **Jonathan Bertram, MD CCFP, CAMH, Bowmanville Family Health Organization, Reconnect Mental Health Services**

Speakers:

- **Jonathan Bertram, MD CCFP, CAMH, Bowmanville Family Health Organization, Reconnect Mental Health Services**
- **Kiran Rabheru, MD CCFP FRCP DABP, University of Ottawa, The Ottawa Hospital**
- **Andrea D. Furlan, MD PhD, Toronto Rehab – University Health Network, ECHO Ontario, University of Toronto, Cochrane Back and Neck Group**

Symposium Abstract

Health Canada has funded the Canadian Coalition for Seniors' Mental Health (CCSMH) to develop national guidelines for substance use disorders among older adults. This session will present and seek feedback on preliminary drafts of evidence-based clinical guidelines focused on the prevention, screening, assessment and treatment of Cannabis and Opioid Use Disorders among older adults. The presentation and facilitated discussion will discuss the unique physiological, psychological, social and pharmacological circumstances of older adults which make them more vulnerable to the effects of substances.

As clinicians and community based individuals, we encounter problematic substance use as well as Substance Use Disorder among seniors in our daily work. Problematic substance use occurs frequently among seniors often unintentionally through over prescription of substances, polypharmacy, and substance misuse. Misuse, dependency and addiction of substances among seniors is often associated with other mental illnesses including depression, anxiety disorders and dementia and can be effected by psychosocial issues often experienced by older adults such as loneliness, bereavement and the existence of chronic illness and/or disability.

Session Speakers will focus their presentations on areas of controversy and challenges that have arisen in our work thus far in an effort to elicit guidance and feedback from conference attendees.

Cannabis Use Disorder Among Older Adults – Supporting Clinicians in the new era of Legalization

Jonathan Bertram, MD CCFP, CAMH, Bowmanville Family Health Organization, Reconnect Mental Health Services

Opioid Use Disorder Among Older Adults – Balancing Pain Alleviation with Concerns of Dependency

Kiran Rabheru, MD CCFP FRCP DABP, University of Ottawa, The Ottawa Hospital

Pain Management for Older People

Andrea D. Furlan, MD PhD, Toronto Rehab – University Health Network, ECHO Ontario, University of Toronto, Cochrane Back and Neck Group

Learning Objectives:

1. Describe the unique risks and other considerations associated with cannabis and opioid use among older adults.
2. Identify the barriers in the assessment and treatment of substance use disorders in older adults.
3. Describe the unique physiological, psychological, social and pharmacological circumstances of older adults which make them more vulnerable to the effects of substances.

11:00 AM – 12:30 PM **Session 304** / Room: Mont-Royal + Hampstead

STOP NEW OPIOID PRESCRIPTIONS FOR CHRONIC PAIN: A DEBATE

Chair: John Xavier Pereira, MD CCFP CIME CEDIR VI, President, Pain Society of Alberta, NMSK Program Lead, Calgary Chronic Pain Centre

Speakers:

- John Xavier Pereira, MD CCFP CIME CEDIR VI, President, Pain Society of Alberta, NMSK Program Lead, Calgary Chronic Pain Centre
- Robert Tanguay, MD, FRCPC ISAM(c) CSAM (c), Alberta Health Services, Canadian Society of Addictions Medicine, Pain Medicine, Caleo Health, President-Elect, Pain Society of Alberta
- Robert Hauptman, MD, MCFP, Vermillion Pain Clinic, Fort McMurray Pain Clinic, Body Restoration, Past President, Alberta Medical Association Section of Chronic Pain, Past President, Pain Society of Alberta

Symposium Abstract

Opioid prescribing standards have tightened in Canada and many countries. The recent and highly cited US Veterans Affairs / Department of Defense clinical practice guidelines now recommend against opioids for chronic pain. Has the time come to stop physicians from prescribing opioids for chronic non-cancer pain entirely? This symposium will be a true debate format.

Opioid Guidelines: Vastly Differing Recommendations

John Xavier Pereira, MD CCFP CIME CEDIR VI, President, Pain Society of Alberta, NMSK Program Lead, Calgary Chronic Pain Centre

We should stop new prescribing of opioids for chronic pain.

Robert Tanguay, MD, FRCPC ISAM(c) CSAM (c), Alberta Health Services, Canadian Society of Addictions Medicine, Pain Medicine, Caleo Health, President-Elect, Pain Society of Alberta

We should continue judiciously prescribing opioids for chronic pain.

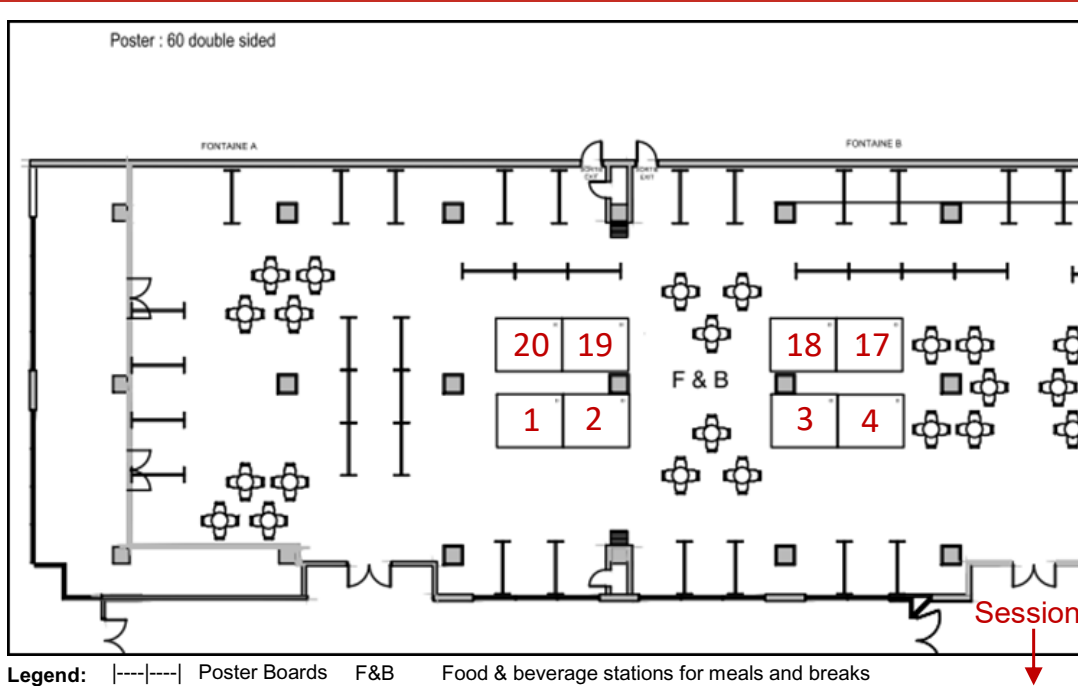
Robert Hauptman, MD, MCFP, Vermillion Pain Clinic, Fort McMurray Pain Clinic, Body Restoration, Past President, Alberta Medical Association Section of Chronic Pain, Past President, Pain Society of Alberta

Learning Objectives:

1. Compare the new VA/DoD Guidelines with the Canadian Opioid Guidelines.
2. Review the latest literature on the risks and benefits of opioid therapy in chronic, non-cancer pain.
3. Contrast the impact of opioids at individual and societal levels.

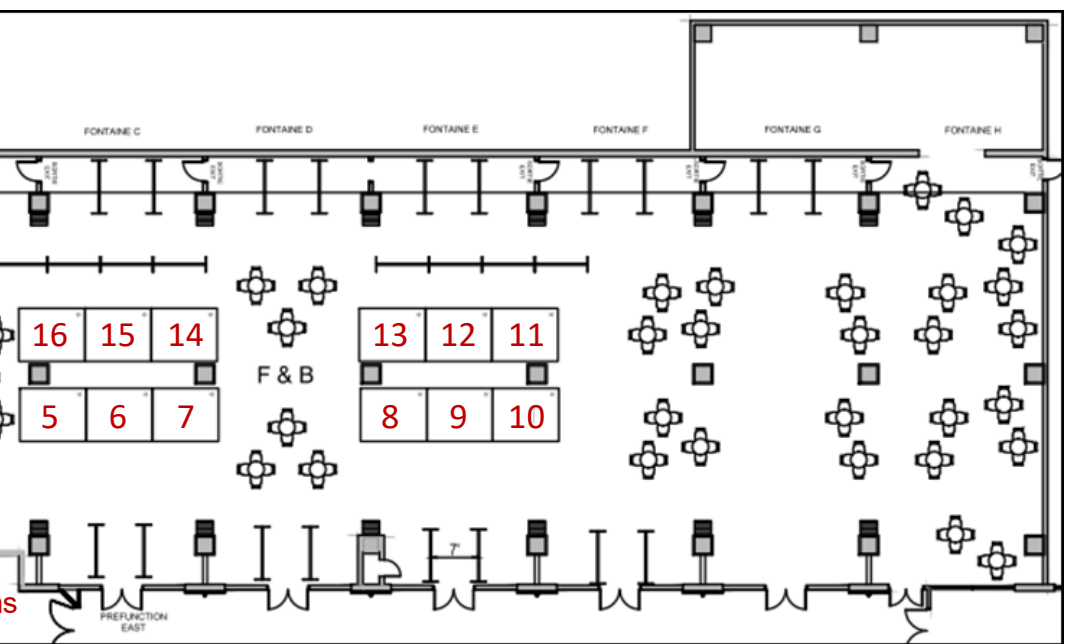
Exhibit Area

Canadian Pain Society Exhibit Hall



Booth Organization

- 1 GSK
- 2 CanniMedTherapeutics Inc.
- 3 Sail Cannabis
- 4 MaricannGroup Inc
- 5 DirosTechnology Inc.
- 6 Medisca
- 7 Michael G. DeGrootte Institute for Pain Research and Care
- 8 Purdue Pharma
- 9&10 Medreleaf



*Information correct as at May 4th.
Layout is subject to change.*

Booth Organization

- 11 Quebec Pain Research Network
- 12 Alan Edwards Centre for Research on Pain
- 13 Knight Therapeutics
- 14 Tetra Bio-Pharma
- 15 IASP
- 16 Paladin Labs
- 17&18 Spectrum Cannabis
- 19 Taylor and Francis
- 20 Pajunk-Dyna Medical

BOOTH 1

GSK

Contact: Juan C. Vargas

E: juan.c.vargas@gsk.com

GSK is a science-led global healthcare company with a special purpose: to help people do more, feel better, live longer. We have 3 global businesses that research, develop and manufacture innovative pharmaceutical medicines, vaccines and consumer healthcare products. We aim to bring differentiated, high-quality and needed healthcare products to as many people as possible, with our 3 global businesses, scientific and technical know-how and talented people.

BOOTH 2

CanniMed Ltd.

Contact: Caitlin Gill

E: cmg@prairieplant.com

CanniMed is a Canadian-based, international plant biopharmaceutical company and a leader in the Canadian medical cannabis industry, with 16 years of pharmaceutical cannabis cultivation experience, state-of-the-art, GMP-compliant production processes and world class research and development platforms with a wide range of pharmaceutical-grade cannabis products.

BOOTH 3

Sail Cannabis (MVC Technologies Inc.)

Contact: Kash Qureshi

E: Kash.qureshi@mvctech.ca

Sail's mission is to simplify the medical cannabis journey through a suite of healthcare technology products and solutions such as its Clinical Decision Support platform, fully managed service business, patient engagement tools and clinical research group. Sail's solutions work to close the knowledge gap between physicians, patents, distributors and other key stakeholders within the medical cannabis ecosystem.

BOOTH 4

Maricann Group Inc

Contact: Amber Dow

E: adow@maricann.ca

Maricann Group Inc (C.MARI) is a publicly traded medical cannabis company which was founded in 2013 in Langton, Ontario. We are a federally licensed cannabis producer serving thousands of patients.

We are currently expanding our cultivation, extraction, analytics and production facilities to elevate offerings and prepare for growth into the adult-use cannabis market in Canada, and ultimately into mature and developing cannabis markets worldwide.

BOOTH 5

Diros Technology Inc.

Contact: Sanaz Taskini

E: staskini@dirostech.com

Manufacturer of the renowned OWL® Radiofrequency Products.

At our booth you will find a unique combination of products that together have the longest experience and continued success in the RF Pain Management market. With the most innovative DIROS OWL® URF-3AP Lesion Generator & MLA-4, TRIDENT™ RF Cannulae, RF probes, RF Cannulae, and GD-pads - all of your RF needs are met here.

BOOTH 6

Medisca

Contact: Lyn Cosico

E: lcosico@medisca.com

With over 25 years of experience, MEDISCA has developed a solid reputation as an innovative company in the pharmaceutical compounding industry. We are a leading FDA-registered supplier of quality pharmacy compounding products, such as Active Pharmaceutical Ingredients (APIs), Fine Chemicals, Bases, Equipment & Devices, Excipients, and Compounding Kits.

BOOTH 7

Michael G. DeGroote Institute for Pain Research and Care

Contact: Dale Tomlinson

E: dtomlins@mcmaster.ca

Our missions: improve the management of pain through dissemination of best practice information; use persistent post-surgical pain to explore chronic pain, and provide unique learning opportunities. Our Institute is also home to the Chronic Pain Network funded under the CIHR SPOR initiative.

BOOTH 8

Purdue Pharma

Contact: Barb Boffey

E: Barb.Boffey@purdue.ca

Purdue Pharma (Canada) is a research-based pharmaceutical and consumer healthcare company with a broad portfolio including: prescription treatments for pain, ADHD, chemotherapy-induced nausea and vomiting (CINV) & ophthalmic conditions. The company supports evidence-based education for the safe use of its products. It includes integrated research & development, formulation and manufacturing.

BOOTH 9 & 10

Medreleaf

Contact: Alex Revich / Rebecca Siegal

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rsiegal@medreleaf.com

MedReleaf is an R&D-driven company dedicated to innovation, operational excellence & production of top-quality cannabis. Carefully cultivated in one of two state of the art ICH-GMP & ISO 90001 certified facilities in Ontario, MedReleaf delivers a variety of premium medical products and is committed to serving our patients therapeutic needs.

BOOTH 11

Quebec Pain Research Network

Contact: Alexandre Parent

E: alexandre.parent@qprn.ca

The Quebec Pain Research Network (QPRN), a FRQS-funded Health Research Network, aims to enhance the competitiveness of pain research teams in the province of Quebec, and through this, to maximize the impact of Canadian pain research. QPRN is the largest hub of pain researchers in North America and supports research initiatives and platforms presenting strong potential for improving basic knowledge on pain mechanisms, new protocols for assessing pain, patient-oriented programs to improve healthcare trajectories, and knowledge transfer initiatives to inform health care professionals, decision makers, patients, and members of the community.

BOOTH 12

Alan Edwards Centre for Research on Pain

Contact: Sid Parkinson

E: sid.parkinson@mail.mcgill.ca

The AECRP brings together basic and clinical researchers from McGill University to promote research that will result in cures for chronic pain. Education and clinical translation are of particular interest. Stop by our booth and see what the McGill Online Graduate Certificate in Chronic Pain Management is all about!

BOOTH 13

Knight Therapeutics

Contact: Josh Laxer

E: jlaxer@gud-knight.com

Knight Therapeutics Inc. (TSX: GUD) is a publicly-traded, specialty pharmaceutical company focused on acquiring, in-licensing, selling and marketing innovative prescription and over-the-counter pharmaceutical products.

BOOTH 14

Tetra Bio-Pharma

Contact: Vincent Jourdan

E: vincent.jourdain@tetrabiopharma.com

Tetra Bio-Pharma is a Canadian biopharmaceutical company specialized in developing cannabis-derived prescription drugs. Our products target chronic pain, from cancerous and non-cancerous origins, neuropathic pain, as well as chemotherapy-induced nausea and vomiting. We partner with licensed producers compliant to GMP standard, providing pharmaceutical grade cannabis. We are currently running the world first phase 3 randomized controlled trial for smoked dried cannabis for chronic cancer pain.

BOOTH 15

IASP

Contact: Jill Treby

E: Jill.Treby@iasp-pain.org

IASP is the leading professional forum worldwide for science, practice, and education in the field of pain. Membership is open to trainees and professionals worldwide involved in research, diagnosis, prevention, and treatment of pain. Join us for the 17th World Congress on Pain, September 12-16, in Boston, MA.

BOOTH 16

Paladin Labs

Contact: Guillaume Thomas

E: GThomas@paladinlabs.com

Paladin Labs Inc., headquartered in Montréal, Canada, is a specialty pharmaceutical company focused on acquiring or in-licensing innovative pharmaceutical products for the Canadian market. Paladin has a focused marketing and sales organization that has helped it evolve into one of Canada's leading specialty pharmaceutical companies.

BOOTH 17 & 18

Spectrum Cannabis

Contact: Grant Koehler

E: grant.koehler@canopygrowth.com

Spectrum Cannabis is an international company that provides safe, consistent, and effective medical cannabis products, and unbiased education for healthcare professionals. We are confident in our reliable supply of standardized cannabis products and in our expertise in support of healthcare professionals and patients.

BOOTH 19

Taylor & Francis

Contact: Marie Horace

E: Marie.Horace@taylorandfrancis.com

Taylor & Francis boasts a high calibre journals portfolio in medicine to answer your need for fast, convenient access to high-quality, high-impact scientific research. The Canadian Pain Society and Taylor & Francis work in partnership to publish the Canadian Journal of Pain. Connect with us: [Twitter.com/tandfmedicine](https://twitter.com/tandfmedicine)

BOOTH 20

Pajunk-Dyna Medical

Contact: Jennifer Krische

E: jendynamedical@gmail.com

We specialize in echogenic needles for spinal, epidural, plexus block and Botox applications. All the accessories to make your procedures easier, UltraSound Probe covers with integrated gel and catheter fixation devices for long term application.

**THANK YOU TO OUR EVENT PARTNERS AND EXHIBITORS FOR THEIR
CONTINUED SUPPORT OF THE ANNUAL SCIENTIFIC MEETINGS!**

Alan Edwards Centre for Research on Pain

CanniMed Ltd.

Chronic Pain Network

Diros Technology Inc.

GSK

IASP

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Please note: Per CQDPCM code of ethics, for both CPD accredited and non-accredited events, funding organizations must be listed together in one location at the same time in the activity materials without logos; the names must all be the same size; the names must all be the same font.

WEDNESDAY, MAY 23, 2018

Poster #	Presenting Author	Poster Title
1 (Finalist)	Annemarie Dedek	Mechanisms of spinal hyperexcitability in rat and human models of pathological pain
2 (Finalist)	Catherine Paré	Level of Catastrophizing and Depression Co-Morbidity Following Whiplash Injury
3 (Finalist)	Michael Mousseau	P2X7R mediated IL-1B release from microglia is a spinal determinant of arthritis joint pain
4 (Finalist)	Seunghwan Lee	Progression of pathological disc degeneration, innervation and macrophage infiltration over 12 months following single lumbar disc puncture in mice.
5 (Finalist)	Jason Busse	Perioperative pregabalin and intraoperative lidocaine infusion to reduce persistent neuropathic pain after breast cancer surgery: a multicenter, factorial, randomized controlled pilot trial
6 (Finalist)	Brittany N. Rosenbloom	Postoperative chronic pain and opioid use after major pediatric orthopedic surgery
7	Brittany N. Rosenbloom	Understanding the relationship between pre-surgical pain and functioning with acute post-surgical activity: a prospective actigraphy trajectory analysis after pediatric orthopedic surgery
8	Jason Busse	Attitudes and Practices Regarding Disability Certification: A Survey of Canadian Family Physicians
9	Jason Busse	The fragility and reliability of conclusions of anesthesia and critical care randomized trials with statistically significant findings: A systematic review
10	Jason Busse	Researching What Matters to Improve Chronic Pain Care in Canada: A Priority Setting Process to Support Patient-Oriented Research
11	Jason Busse	Patient Values and Preferences Regarding Opioids for Chronic non-Cancer Pain: A Systematic Review
12	Jason Busse	Clinical Implications of Opioid-Induced Hyperalgesia in Chronic Pain Patients
13	Jason Busse	Factors associated with pain resolution following surgical fixation of tibia fractures
14	Jason Busse	Sparing of the Intercostobrachial Nerve During Breast Cancer Surgery Involving Axillary Lymph Node Dissection: A Systematic Review
15	Abi Muere	Pain Phenotypes in Rheumatoid Arthritis: Differences in Patient Outcome and Functioning
16	Alexandra Neville	Diagnostic uncertainty in youth with chronic pain and their parents: A dyadic examination
17	Alina Carter	Integrating Psychological, Physical and Pharmacological Interventions for Youth with Chronic Pain and their Caregivers

Poster #	Presenting Author	Poster Title
18	Alireza Zandifar	The role of vitamin D level and vitamin D receptor polymorphisms on migraine in an Iranian population
19	Alison Crawford	Components of emotion regulation related to pain, depression, and disability in women with interstitial cystitis/bladder pain syndrome
20	Alix Cagnin	Self-management perceived ability and quality of life in adults with early to late stage knee osteoarthritis
21	Alix Cagnin	Mental health-related quality of life and work performance in adults with knee osteoarthritis
22	Alix Cagnin	Does the radiographic severity of knee osteoarthritis correlate with the duration of symptoms, pain intensity and medication use?
24	Andrea Aternali	The role of resilience, optimism, and self-compassion in the treatment of patients with acute back pain
25	Andrea Furlan	Exploring the impact of ECHO in Ontario on primary health care provider's knowledge sharing about chronic pain: a qualitative study
26	Angela Mailis	Demographics and Outcomes of chronic pain patients treated by a publically funded interdisciplinary community pain program in Ontario
27	Ariane Ballard	What factors are predictive of pain intensity during chest tube removal after cardiac surgery?
28	Ariane Ballard	Buzzy Device for Pain Management in Children during Needle-Related Procedures: A Systematic Review.
29	Arthur Woznowski-Vu	Brief physical tasks evoke changes in pain intensity and pain threshold for people with low back pain
30	Bart Witjes	A magnetoencephalography (MEG) signal marker of chronic pain
31	Bonnie Stevens	The Chronic Pain Network and Training & Mentoring
32	Brian Cairns	Expression of somatostatin (SST) and STTR 2 by masseter muscle ganglion neurons and their associated satellite glial cells.
33	Carley Ouellette	High-fidelity usability testing of novel systems to support pain management and recovery following cardiac surgery in Canada and the United Kingdom
34	Chitra Laloo	Paediatric Project ECHO: Assessing the Educational Needs of Healthcare Providers Related to Management of Paediatric Pain
35	Claire Arbitre	Evaluation of Vaso-occlusive Crisis management with Patient Controlled Analgesia in Children with Sickle Cell Disease Requiring Admission
36	Brenda Lau	Characteristics and social demographics of chronic pain patients referred to a multidisciplinary chronic pain clinic in BC
37	Billie Jo Bogden	The Patient Oriented Research of the Chronic Pain Network

Poster #	Presenting Author	Poster Title
38	Daniel Z. Foster	Progression of Spinal Cord Plasticity over 12 months following Lumbar Intervertebral Disc Injury and Attenuation by Voluntary Running Activity
39	Diana-Luk Ye	Reduced Physical Performance Assessed with Objective Measurements Detects Kinesiophobia After Spine Surgery in Adolescents
40	Dinesh Kumbhare	Quantitative Ultrasound Using Texture Analysis of Myofascial Pain Syndrome in the Trapezius
41	Don Daniel Ocaj	Adolescent Idiopathic Scoliosis: Same Diagnosis but Different Pain Characteristics
42	Esther Yakobov	Perceived injustice and self-efficacy mediate the relation between post-traumatic stress symptoms and adverse outcomes in individuals with whiplash injuries
43	Etienne J. Bisson	Characteristics and global impression of change of patients admitted to a chronic pain clinic in southeastern Ontario: an observational study
44	Geoffrey S. Rachor	Comparing Health Anxious Beliefs in Individuals With and Without Chronic or Recurring Pain.
45	Guillaume Martel	CRPS prognosis : a tertiary care pain clinic cohort 2 years after end of active treatment
46	Hannah Gennis	The Effect of the ABCD's of Pain Management on Parent Pain Ratings: Is Parent Psychopathology Symptomology a Moderator?
47	Harsha Shanthanna	A systematic survey of the Reporting Quality of Pilot Studies in high impact Anesthesia Journals
48	Hocine Slimani	The Price of Pain.
49	Evelyne D Trottier	Evaluation of a Clinical Pathway using Intranasal Fentanyl for Treatment of Vaso-Occlusive Crisis in Sickle Cell Patients in the Emergency Department
50	Hugues Petitjean	Recruitment of dorsal horn ascending pathways by calretinin neurons
51	Ian Gilron	The Chronic Pain Network's (CPN) Clinical Research Network (CRN)
52	Iana Ianakieva	A Structural Equation Modeling Analysis of the Diathesis-Stress Model of Chronic Pain and Disability 6 Months or More After Cardiac Bypass Surgery
53	Irina Kudrina	Chronic opioid toxicity as a clinically important concept. A narrative literature review
54	Jaclyn Millar	Improving efficiency of consultations in a chronic pain setting: the role of the physician assistant
55	Jacqueline Hanley	Learning through safety stories: Incorporating principles of safe opioid practice into PCA education for nurses
56	Jacqueline Hanley	Bridging the Gap - The Sick Kids Transitional Pain Service: Optimizing Paediatric Pain Management from Hospital to Home/Rehabilitation Care
57	Jaimie Beveridge	Parental chronic pain status related to higher posttraumatic stress symptoms and lower quality of life in youth with chronic pain

Poster #	Presenting Author	Poster Title
58	Janice Mann	Non-Opioid Options for Managing Pain: What Does the Evidence Say?
59	Jean-Luc Kaboré	Chronic non-cancer pain among people who use illicit drugs: prevalence, characteristics, and access to treatment
60	Jean-Luc Kaboré	Patients' opinions and concerns about the opioid crisis in Quebec: preliminary findings.
61	Jennifer Stinson	"Achy Penguin": Usability Testing of a Smartphone-based Tool to Improve Pain Assessment and Management in Children Aged 4-7 Years
62	Jennifer Stinson	Developing a Screening Measure for Pediatric Neuropathic Pain
63	Jiale (Gary) Hu	Using WeChat to Disseminate Effective Pain Treatments for Newborn Blood Sampling in China
64	Jill Campbell	Road to Recovery: Empowering and Educating Staff and Patients by Positioning Pain Management as Foundational to Recovery
65	Jordana Waxman	Caregivers' Knowledge of Secure Base Scripts is Related to Children's Behavioural and Physiological Responses to Pain: An Exploratory Analysis
66	Jordana Waxman	Associations between infant pain behaviours and heart rate measures during vaccination across the second year of life
67	Jordi Perez	Interventional cancer pain, not the 4th step but the hand-rail to the WHO analgesic ladder
68	Jordi Perez	Analysis of non-scheduled telephone calls received by a specialized cancer pain nurse. Descriptive analysis of calls and actions taken.
69	Jordi Perez	Prospective analysis of chronic non-cancer pain patients receiving chronic methadone as analgesic. A five-years methadone registry.
70	Josiane Mapplebeck	Neuropathic pain caused by CI- dysregulation in both sexes; overcoming degenerate regulation by targeting KCC2
71	Joyce Lee	The development of a buprenorphine/naloxone induction clinic in a tertiary pain clinic
72	Jennifer Tyrrell	Moving from Pediatric to Adult Chronic Pain Care in Ontario: A Period of Transition
73	Karim Mukhida	The effects of fibromyalgia on the working experience
74	Katelyn Wilkinson	Science of Pain: An Innovative Model for Pain Neuroscience Education in Pediatrics
75	Katelynn Boerner	The relationship between pain and somatization in pediatric populations: A systematic review of the current state of the research literature
76	Katerina Zorina-Lichtenwalter	The effects of MC1R genetic variants on red hair and pain
77	Katherine Fretz	Examining the role of healthcare utilization in the relationship between pain and disability among IBD patients

Poster #	Presenting Author	Poster Title
78	Kathryn Birnie	Building Sustainable Partnerships with Patients and Families to Guide Pediatric Chronic Pain Research and Practice in Canada
79	Kim Prud'Homme	Assessing usage, satisfaction, and effectiveness of a peer group for youth with chronic pain
80	Kristen S. Higgins	Availability of E-Health Tools for Pediatric Pain Assessment and Management: Barriers, Facilitators, Costs, and Design
81	Kristin Good	From insight to action: Changing the way ACC supports patients with pain
82	Kyle Vader	Optimizing patient flow from referral to initial assessment at an academic hospital-based interdisciplinary chronic pain clinic
83	Kyle Vader	Implementing a 12-session interdisciplinary chronic pain self-management program at Kingston Health Sciences Centre-Hotel Dieu Hospital site in Kingston, Ontario
84	Laura Katz	Predictors of Readiness for Change in an Interdisciplinary Chronic Pain Program
85	LeAnne Revell	Child, parent, and provider perspectives of using a humanoid robot to reduce pain and distress in a blood collection lab
86	Lisa Carlesso	Preliminary Results of Pain Phenotypes in People with Knee Osteoarthritis (KOA): Application of IMMPACT recommendations.
87	Lise Dassieu	Chronic pain management among people who use illicit drugs in the context of the "opioid crisis": A qualitative study
88	Lizabeth Ayoub	A meta-analysis of chronic pain studies investigating grey matter alterations in the medial temporal lobe
89	Ljiljana Nikolajev	Circulating levels of monoamines in pediatric patients undergoing orthopedic surgery
90	Luca Posa	Selective melatonin MT2 receptor ligands relieve neuropathic pain through modulation of brainstem descending antinociceptive pathways and opioid interactions
91	Luca Posa	Tetrahydrocannabinol (THC) Alleviates Pain in Neuro-pathic Morphine-Tolerant Rats
92	Lucas Topham	DNA methylation and functional pathway analysis in the mouse prefrontal cortex in acute, sub-chronic and chronic neuropathic pain
93	Lynn Gauthier	The impact of inflammatory cytokines and biopsychosocial factors on acute pain after breast cancer surgery
94	M. Gabrielle Pagé	In-hospital opioid trajectories, but not pain intensity trajectories, are associated with pain disability 6 months following hepatic resection
95	Madalina Boitor	Effects of Massage in Reducing the Pain and Anxiety of the Cardiac Surgery Critically Ill- A Randomized Controlled Trial

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96	Madelaine Gierc	Psychosocial Predictors of Sexual Satisfaction in Patients with Inflammatory Bowel Disease: Results of a One-Year Prospective Study
97	Perri Tutelman	The reach of the #KidsCancerPain Campaign: A partnership to improve parent awareness and use of evidence-based pain management in children with cancer.
98	Adele Orovce	Reporting of pain assessment and management throughout the entire neonatal intensive care unit (NICU) stay
99	Adria Fransson	Changes in self-efficacy, fear of moving, specific goals and physical performance of patients attending an Interdisciplinary Chronic Pain Program
100	Adria Fransson	Predictors of response of persons participating in an intensive interdisciplinary program for treatment of chronic pain
101	Adrijana Krsmanovic	Online self-management treatment program for women diagnosed with Interstitial Cystitis / Bladder Pain Syndrome (IC/BPS)
102	Ali Khatibi	Modulation of Pain in Human Thoracolumbar Spinal Cord: an fMRI Investigation
103	Alishia Poccia	Ehlers-Danlos syndrome patients' needs assessment: how to treat or manage their pain is one of their greatest needs.
104	Anaïs Lacasse	The importance of integrating pain awareness and knowledge into the training of future health and safety at work professionals
105	Anne Marie Pinard	Development of an interprofessional clinical placement in a teaching-hospital pain clinic
106	Behrang Sharif	Pain quantification: behavioral correlates in mice
107	Bianca Chabot	The effects of cognitive fatigue on pain regulation
108	Boram Ham	Cytotoxic T cells may induce pain hypersensitivity in female but not male mice after nerve injury in an interferon- γ -receptor-dependent manner
109	Calvin Wong	The role of mTORC2 in the development of chronic pain
110	Carolina Beraldo Meloto	Stabilizing mast cells to treat pain: evidences from pre-clinical and clinical studies
111	Denise Harrison	Barriers and facilitators to using pain treatment during newborn screening blood tests at a mother-baby unit.
112	Daniel Flegg	Determining the Predictive Value of Sensitivity to Physical Activity in Objectively Measured Activity Levels in Adults with Chronic Musculoskeletal Pain
113	Gwenaëlle De Clifford-Faugère	A systematic review of olfactive stimulation interventions to manage procedural pain in preterm and full-term neonates.
114	Gwenaëlle De Clifford-Faugère	Olfactive stimulation intervention with breast milk for managing procedural pain in preterm neonates: Acceptability and feasibility
115	Heather Leduc-Pessah	Site-specific phosphorylation of microglial P2X7R contributes to altered nociception in opioid tolerance and in neuropathic pain.

Poster #	Presenting Author	Poster Title
116	Janie Damien	Sex differences in analgesia induced by conditioned pain modulation, hypnosis and placebo treatments
117	John Pereira	FibroFOCUS: An Interdisciplinary Fibromyalgia Treatment Program
118	John Pereira	Opioid Risks & Benefits - A Guide for Patients with Chronic Pain: Video and Slide Deck

THURSDAY, MAY 24, 2018

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1 (Finalist)	Annemarie Dedek	Mechanisms of spinal hyperexcitability in rat and human models of pathological pain
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6 (Finalist)	Brittany N. Rosenbloom	Postoperative chronic pain and opioid use after major pediatric orthopedic surgery
119	Helene Bertrand	A New Way to Diagnose and Treat Low Back Pain
120	Magali Millecamps	Behavioural, Radiologic and Morphologic Long-Term Consequences of an Acute Single Lumbar Intervertebral Disc Injury in Mice
121	Manon Choinière	Chronic Pain Network - Registry Working Group
122	Margot Latimer	The Chronic Pain Network and Indigenous Health Research
123	Maria Fernanda Arboleda	Safety and efficacy of medical cannabis in cancer pain: a retrospective analysis
124	Maria Hudspith	The Chronic Pain Network and Patient Engagement
125	Maria Pavlova	Parent-Child Reminiscing about Painful and Sad Events: A Comparative Analysis
126	Maria Zamfir	Using transgenic lines to investigate mu opioid receptors in the anterior cingulate cortex
127	Mariana Bueno	Quality evaluation of a web-based neonatal pain assessment learning tool in Portuguese (Brazil): the Neonatal Pain Assessment Program (PAD-Neo)
128	Mariana Bueno	Usability testing of a web-based resource to improve infant pain practices: the Implementation of Pain Practice Change (ImPaC) Resource
129	Mariana Bueno	Demographic and clinical factors related to pain and analgesia in newborns: prospective study in neonatal intensive care units in Brazil

Poster #	Presenting Author	Poster Title
130	Mariana Bueno	Neonatal pain management practices: mothers' evaluation of parent targeted educational tools
131	Mariana Bueno	Prevalence of pain and analgesic adequacy in hospitalized adults in a University affiliated hospital in Sao Paulo, Brazil
132	Marie-Philippe Harvey	Activating the motor system with therapeutic exercises and transcranial direct current stimulation to relieve pain in elderly
133	Marine Christin	Mechanosensitive ion channels in articular nociceptors contribute to osteoarthritis pain
134	Martha López-Canul	Characterization of the 24 hour sleep-awake cycle in neuropathic pain rats
135	Mary Loka	The Efficacy of Oral Versus Injectable Analgesics for the Treatment of Pain in Rodents
136	Matilda E. Nowakowski	Development and Implementation of an Interdisciplinary Self-Management for Chronic Pain Program: Patient Evaluation and Feedback
137	Matthew Foss	Patient-Controlled Analgesia versus Continuous Opioid Infusion for the Treatment of Mucositis Pain Following Hematopoietic Stem Cell Transplantation: A Retrospective Review
138	Matthew Sheppard	A Case Report of Serotonin Toxicity Diagnosed by Inpatient Chronic Pain Consultation
139	Meghan Rossi	Differential Predictors of the Presence and Intensity of Dyspareunia and Genito-Pelvic Pain in Pregnancy
140	Mélanie Bérubé	Feasibility and acceptability of a web-based and in-person self-management intervention aimed at preventing chronic pain after major lower extremity trauma (iPACT-E-Trauma)
141	Mélanie Racine	Pain-related activity management patterns as predictors of treatment outcomes in patients with fibromyalgia syndrome
142	Melissa Richard-Lalonde	Pain intensity and satisfaction with pain management of patients in a newly built single-patient room intensive care unit
143	Michael Vaculik	Altered Hippocampal Subfield Volume in Patients with Idiopathic Trigeminal Neuralgia
144	Michelle Flynn	The Effect of Intranasal Oxytocin on Pain and Function among Women with Chronic Pelvic Pain: A Feasibility Trial
145	Michelle Gagnon	Do you understand what I am experiencing?: The role of partner empathy on pain expression in couples during experimental pain
146	Miranda DiLorenzo	Core Behavioural Cues in Infant Clinical Pain Assessment
147	Miranda DiLorenzo	The Second Year of Life: Parent and Young Child Physiological Convergence During Vaccination
148	Muhammad Abid Azam	Breath awareness in people with chronic pain during a smartphone-based mindfulness task
149	Nabiha Benyamina Douma	Quebec serve and protect low back pain study: what about mental quality of life?

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150	Navid Manouchehri	Effect of pain severity on quality of life based on demographic features among patients with migraine
151	Neha Thakur	Association between Parafunctional oral habits and Painful Temporomandibular Disorders: a case-control study
152	Nehme El-Hachem	Molecular pathophysiology of low back pain chronicity.
153	Nez Elik	The role of parental minimizing and monitoring responses in pediatric chronic pain outcomes in youth
154	Nicole E. Burma	Microglial pannexin-1 critically underlies opioid withdrawal, but not opioid-induced hyperalgesia or analgesic tolerance
155	Nicole George	Sex differences in the contribution of spinal atypical PKCs in the maintenance of centrally-mediated persistent pain
156	Nitasha Gill	Assessment of the role of spinal mGluR5 and anchoring proteins in nociception
157	Norm Buckley	The Chronic Pain Network and Knowledge Translation
158	Norm Buckley	The Chronic Pain Network
159	Ólöf Kristjánsdóttir	Does culture influence pain-related parent-behaviors?
160	Omid Shafaat	Gender differences in relation between Headache-Related Disability and Anxiety/Depression based on MIDAS and HADS questionnaires among migraine patients
161	Pamela L. Holens	Predictors of Completion of an Online Chronic Pain Management Program for Military and Police
162	Patricia Poulin	Rapid Access to Interprofessional Pain Management using a Stepped Care Model
163	Paula Piraino	Analgesia of inhaled methoxyflurane in adults with acute pain due to fractures, dislocations, contusions and lacerations: a sub-analysis of STOP!
164	Poupak Rahimzadeh	The Effects of Injecting Intra-articular Platelet-Rich Plasma or Prolotherapy on Pain Score and Function in Knee Osteoarthritis
165	Poupak Rahimzadeh	Comparing effects of Percutaneous Intra-discal Ozone Injection with Intra-discal Laser Decompression in Radicular Back Pain
166	Robert Ungard	System xC- Knockdown in Cancer Cells Reduces Glutamate Release and Cancer Pain
167	Robert W. Johnson	Impact of the Herpes Zoster Adjuvanted Subunit Vaccine on pain and use of pain medication in Adults Aged ≥50 Years
168	S. Fatima Lakha	Cannabis use among chronic non-cancer pain patients (CNCP) in a community based academic pain clinic: Demographics and Pain Characterization
169	S. Fatima Lakha	Differences Between Cannabis Users and Abstainers among Chronic Non-Cancer Patients Referred to a Community-based Pain Clinic in Ontario
170	S. Fatima Lakha	MyHealthMyRecord: A case study in registering the private perspective of learning to live with chronic pain of undefined origins

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171	Sabine Soltani	Associations between Self-Reported Chronic Pain, Substance Use, and Workplace Safety among Canadian Oil and Gas Employees
172	Sabrina Bouferguene	Underlying risk factors for chronic post-traumatic headache: A preliminary study
173	Salima S. J. Ladak	Surgical Nurses' and Nurse Practitioners' Knowledge & Attitudes of Post-Operative Pain Management: Current Landscape and Future Educational Opportunities
174	Salima S. J. Ladak	Using Technology to help Clinicians and Patients Manage Pain
175	Samantha Kim	Piloting a Transitional Pain Program in Kingston for Post-surgical Patients: Implementation of RNAO Best Practice Guidelines for Pain
176	Sandy Smeenk	A Community of Practice in Action: Development of E-Toolkits for Minimizing Pain for All Children
177	Dinesh Kumbhare	Effectiveness of Local Analgesic versus Botulinum Toxin Injections for Myofascial Pain: A Systematic Review and Meta-analysis
178	Dinesh Kumbhare	A Survey of Healthcare Practitioners' Knowledge of Myofascial Pain Syndrome Criteria
179	Sarah Mohand-Said	Family members' perceptions of the Critical-Care Pain Observation Tool use in their loved one in the intensive care unit
180	Sean Sutton	Rivermead Post-Concussion Symptom Questionnaire (RPQ) scores, concussion diagnosis, and psychological symptoms in a chronic pain population
181	Seon Ho Jang	From bedside to bench: IL-8 over-expression (back pain patients, mouse model) and inhibition (mice) contribute to chronic low back pain
182	Seyed Hamid Reza Faiz	USG obturator or femoral nerve block for elective arthroscopic ACL reconstruction of knee?
183	Seyed Hamid Reza Faiz	Evaluation of the impact of ultrasound-guided serratus anterior plane block on post-mastectomy pain: a clinical trial
184	Shajenth Premachandran	Salivary Alpha-Amylase assessment as a proxy of pre-operative anxiety in pediatric patients
185	Shanaya Fischer	The role of parents in young children's memories for postsurgical pain
186	Shaylea Badovinac	Investigating links between distress-promoting parent behaviours and infant pain-related distress during 12-month vaccinations.
187	Laura Katz	Identifying effective coping strategies and associated personality characteristics for chronic pain through a retrospective data analysis
188	Sherif Elsaraj	Association between fatigue and painful Temporomandibular Disorders (TMD); a case-control study
189	Evelyne D. Trottier	Pain free laceration repairs using intra-nasal ketamine: DosINK1 - A dose escalation clinical trial

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190	Kristen S. Higgins	Parental pain and children's health and functional problems: The role of difficulty in performing parenting activities and partner parental support
191	Stacey Salagubang	Causes and characteristics of inappropriate referrals to a community pain clinic
192	Stephanie Gregoire	Effect of prenatal maternal stress on nerve injury-induced sensory and affective behaviours: an epigenetic mechanism?
193	Stephanie Mouchbahani-Constance	Characterization of the nociceptive properties and cellular mechanism of Lionfish venom
194	Tanya Miladinovic	Functional effects of TrkA inhibition on system xC ⁻ -mediated glutamate release and cancer-induced bone pain
195	Tara McGrath	Correlates and predictors of persisting pain in children with Juvenile Idiopathic Arthritis: a nested case-control study
196	Tara Packham	What happens to intimacy when it hurts to be touched? A mixed methods study of allodynia in persons with CRPS
197	Tatiana Lund	Grappling with Uncertainty: A Quantitative Examination of Diagnostic Uncertainty In Youth with Chronic Pain and their Parents
198	Tess Elaine Helen Debelle	Mannitol (30%) Cream in the Treatment of Post-Herpetic Neuralgia
199	Tokiko Hamasaki	Efficacy of conservative interventions for pain associated with trapeziometacarpal (thumb base) osteoarthritis: A systematic review
200	Valentina Mihajlovic	Gender Differences in Subjective Pain Experience and Coping Strategies in Patients with Inflammatory Bowel Disease
201	Muhammad Abid Azam	A Smartphone-Based Mindfulness Intervention for Chronic Pain
202	Vikas Parihar	Changes in the Opinion and Potential Use of Medicinal Cannabis Amongst Chronic Pain Patients After Receiving Education by a Pharmacist
203	Weina Jin	Automatic Pain Level Classification with Physiological Signals using Machine Learning
204	Yalinie Kulandaivelu	Usability and Safety of a Virtual Reality Distraction Intervention to Reduce Procedural Pain in Children With Cancer
205	Yasir Rehman	Predictors of Persistent Post Surgical Pain, Functional Disability and Return to Work Following the Surgical Lumbar Microdiscectomy: A Systematic Review
206	Yesmine Krid	Can acetaminophen increase conditioned pain modulation effectiveness?
207	Zakir Uddin	Determining whether pain sensitivity contributes to the fear-avoidance model
208	Zameer Pirani	The Role of Intravenous Lidocaine in the Management of Chronic Neuropathic Pain of Peripheral Nerve Origin.

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209	Zoey Walden	Learned expectations on the perception of pain using a classical conditioning paradigm
210	Junie Carriere	Pain expectancies are associated with altered pain sensitivity in chronic low back pain patients
211	Karen Hurtubise	Logic Analysis: A standardized method of reporting treatment components and testing program theory plausibility in specialized paediatric pain rehabilitation programs
212	Kathryn Deshaies	Development of the Chronic Pain Integration Questionnaire
213	Kevin Kordbacheh	Low Dose Naltrexone (LDN) in the Treatment of Neuropathic Pain Secondary to Chronic Lyme Disease
214	Kevin Lancon	HCN channel-mediated dopaminergic modulation of pyramidal cells in the anterior cingulate cortex
215	Mark Ware	Psilocybin and Cluster Headache: Case Report and Literature Review
216	Nicol Tugarinov	Genetic association studies of temporomandibular disorder: a comprehensive review
217	Nicole Racine	Distress Responses during Vaccination as an Indicators Of Early Childhood Mental Health
218	Andrea Furlan	Addressing beneath the surface of pain issues in rare genetic disorders The Ehlers-Danlos Syndrome pain service- A novel initiative
219	Noosha Yousefpour	Structural plasticity of spinal dorsal horn touch circuitry in neuropathic pain
220	Pamela Holens	Preliminary Analyses of a Randomized Controlled Trial of an Online Chronic Pain Treatment for Military and Police
221	Ariane Ballard	Effects of therapeutic clown distraction on children pain and anxiety during vaccination: A pilot study
222	Samantha Locke	Spinal disinhibition during forced walking in a rat model of inflammatory arthritis
223	Sarah Rosen	Increased Pain Sensitivity and Decreased Opioid Analgesia in T Cell-Deficient Mice and Implications for Sex Differences
224	Scott J Thompson	Effects of an Exercise Intervention on Low Back Pain and Cortico-Limbic Connectivity: Preliminary Results
225	Shannon Tansley	Do people and mice approach or avoid others in pain?
226	Shannon Tansley	Extracellular matrix-mediated plasticity in neuropathic pain
227	Sonali Uttam	Translational profiling of dorsal root ganglion and spinal cord in a mouse model of neuropathic pain
228	Sophie Desjardins	Examining the effect of prior pain on subsequent task performance and pain perception.
229	Tania Di Renna	Engaging Young Adults in Healthcare: The Development of a Young Adult Pain Clinic
230	Todd Vogel	Influence of Reward on Pain Perception and Task Performance.
231	Zoha Deldar	Improving working memory and pain inhibition in healthy older persons using neuromodulation of left dorsolateral prefrontal cortex.



the CANADIAN PAIN SOCIETY
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