



Canadian Pain Society Annual Scientific Meeting May 1 - 4, 2025

Victoria College
University of Toronto

Event Agenda

Event Venues

Thursday: Chelsea Hotel → 33 Gerrard Street West

Friday: Convocation Hall and MyHal → 31 King's College Circle

Saturday and Sunday: Victoria College → 73 Queen's Park Crescent East

Sunday: Hart House → 7 Hart House Circle

Breaks and Networking Time

Based on resounding feedback from 2024, we have incorporated time for networking and exploring local venues over the lunch hour at your own cost. Meals will be included for sponsored events for those who specifically register to attend. Please refer to the agenda for more information.

Take Five Rooms → these are specifically designated quiet spaces to take a brief break.

Assigned locations will be shared in the coming weeks.

Registration Desk Hours

Thursday May 1st from 1400-2000h: Chelsea Hotel, Churchill Ballroom Foyer, 2nd floor.

Friday May 2nd from 0700-1600h at Convocation Hall

Saturday May 3rd from 0700-1600h at Victoria College, Main Entrance, Old Vic Foyer

Sunday May 4th from 0900 – 1400h at Victoria College, Main Entrance, Old Vic Foyer

Wayfinding maps will be added closer to the date along with easy access QR codes.

Exact locations of our venues can also be resourced directly from our 2025 ASM webpage [here](#).

Learning Objectives

At the end of this conference, participants will be able to:

- Leverage collaborative relationships and knowledge exchange between research scientists, health care professionals, trainees, and persons with lived experience, to improve pain care for children and adults;
- Describe and critically analyze recent research on the mechanisms and management of pain with our diverse, multidisciplinary membership; and
- Use new knowledge to improve access to high quality pain care, including preventing and treating pain more effectively. Concurrent sessions have been coordinated to encompass mechanisms of pain, biopsychosocial factors of pain, pain treatments, and pain programs, education, policy, and advocacy.

A minimum of 25% of each session will be dedicated to participant interaction.

Scientific Program Tracks

Track 1: Mechanisms of Pain

Track 2: Biopsychosocial Factors of Pain

Track 3: Pain Treatments and Interventions

Track 4: Pain Programs, Education, Policy, and Advocacy

Agenda: Table of Contents

Thursday: Page 2	Saturday: Page 4	Sunday: Page 18
Friday: Page 3	Concurrent Session One: Page 5	Concurrent Session Four: Page 19
	Concurrent Session Two: Page 9	Concurrent Session Five: Page 23
	Concurrent Session Three: Page 15	Concurrent Session Six: Page 28

Thursday May 1

- 1400h **Registration and Check in opens**
Chelsea Hotel, Churchill Ballroom Foyer, 2nd Floor
- 1700h **Welcome and Opening Remarks**
Churchill Ballroom – 2nd Floor
- Dr. Hance Clarke and Dr. Tania Di Renna
Dr. Gabrielle Pagé and Dr. Bradley Kerr
Virginia McIntyre and Jennifer Daly-Cyr
- 1715h **Hot Topics Trainee Presentations**
- 1815h **Early Career Award Recipient and Presentation**
Introduced by Dr. Anna Taylor and Dr. Nader Ghasemlou
- 1845h **Acknowledging our Award Recipients**
Dr. Anna Taylor and Dr. Nader Ghasemlou
Person with Lived Experience Leadership Award
Trainee Travel Awards
Art Awards
- 1900h **CPS ASM Welcome Reception**
Churchill Ballroom and Foyer
Alcohol is not included. Cash bar is available.
- 2200h **Event Concludes**



Friday May 2

This day is dedicated to reinforcing the Canadian Pain Society mission and vision by bringing together the largest group of individuals dedicated to improving the lives of people living with chronic pain.

- 0730h **Registration and Check In**
 Convocation Hall
 *no food or beverage is allowed in the auditorium
- 0900h Opening Remarks
 Dr. Hance Clarke and Dr. Tania Di Renna
- 0915-1135h Presentations to be announced in the coming weeks.
- 1135h Break/Networking Time
 Take this time to network and explore local eateries within the area
- 1330h Welcome back
- 1350-1550h Presentations to be announced in the coming weeks
- 1550h **Day concludes**
- 1600h **CPS Parade**
 All CPS attendees are welcome to partake!
- 1700h **CPS Family BBQ**
 Victoria College Quad
 You must be registered for the conference/pre-purchased a guest ticket.
 All participants will require identifiable CPS ID. Soft drinks are included.
 Cash bar available.



Saturday May 3

0730h **Registration and Check In**
Victoria College, Main Entrance, Old Vic Foyer

0830h **Opening Remarks**
Victoria College. Location TBD
Dr. Hance Clarke and Dr. Tania Di Renna
Dr. Gabrielle Pagé and Dr. Bradley Kerr

Acknowledging our Award Recipients
Dr. Anna Taylor and Dr. Nader Ghasemlou

0845h **Distinguished Career Recipient and Presentation**
Dr. Anna Taylor and Dr. Nader Ghasemlou

0915h **Mary Ellen Jeans Plenary**
A Social Justice Informed Approach to Paediatric Pain
Professor Anna Hood

This plenary session will address the persistent racialized inequities in pediatric pain care, with a particular focus on children and young people living with sickle cell. We will explore barriers to equitable healthcare and research, emphasizing systemic racism as a fundamental determinant of health and the impact of racism-based traumatic stress (RBTS) on chronic pain inequities. Through the RESTORATIVE model, the session will examine RBTS as an adverse childhood experience that perpetuates pain disparities and will emphasize the role of healthcare providers' empathy and validation in mitigating these inequities. By advocating for culturally responsive research and care practices, this plenary will contribute to advancing health equity in pediatric pain management, aligning with the broader theme of moving forward with hope in pediatric pain through science, practice, and advocacy.

At the end of this session, participants will be able to:

- Identify key barriers to equitable pediatric pain care and research participation among racialized families of children and young people (CYP) with chronic pain, including systemic racism, institutional mistrust, and the need for culturally inclusive practices.
- Analyze the impact of racism-based traumatic stress (RBTS) as an adverse childhood experience (ACE) that perpetuates chronic pain inequities in racialized youth, using findings from the RESTORATIVE model and longitudinal research data.
- Apply culturally responsive healthcare and research strategies to improve pain management and healthcare transitions for CYP with sickle cell disease and other chronic pain conditions, advocating for provider empathy, validation, and systemic change.



- 1015h **Poster/Presentation Pitch One**
- 1020h **Refreshment Break**
Exhibitor Hall is open
- 1050h **Poster Session One and Judging**
- 1150h Transition to Concurrent Sessions at Victoria College
- 1200-1315h **Concurrent Session – One: Scientific Program**

Track 1 New insights into the role of the claustrum in acute and chronic pain.

Chair: A. Taylor

Speakers: N. Calarco, D. Seminowicz, A. Taylor

Location:

The processing of nociceptive information into the percept of pain is mediated by a network of brain regions across cortical and subcortical areas. One region within this network that has been systematically overlooked in the pain field is the claustrum. The claustrum is formed of a thin sheet of cells layered between the neocortex and striatum. Because of its small structure and lack of clear anatomical boundaries, it has been difficult to parse the function of the claustrum from neighbouring regions, such as the insula. However, unlike the insula, the claustrum is the most connected structure in the human brain per unit volume. Not surprisingly, the claustrum is densely connected to central nodes of this distributed pain network, and disruptions in claustrum activity seem to influence aspects of sensory saliency. As such, it is poised to be a critical modulator of pain perception, although its role in pain is just beginning to be understood. This symposium will bring together Canadian scientists working at the forefront of this problem who are leveraging advances in human imaging and system neuroscience approaches in rodent models to provide new insight into the function of the claustrum in pain.

At the end of this session, participants will be able to:

- Describe the function of the claustrum in acute and chronic pain
- Describe techniques used to measure claustrum activity and function
- Reflect on ways to manipulate claustrum activity as novel pain therapy

Track 2 Innovations in Social Support Across the Lifespan

Chair: M. MacDonald

Speakers: M. MacDonald, J. Stinson, C. Harrison

Location:

Social support is a critical determinant of health. The symposium will focus on innovations in social support across the lifespan highlighting the iPeer2Peer (iP2P) Program from The Hospital for Sick Children in Ontario and the Coaching for Health program from Pain BC. The symposium will focus on the benefits, opportunities, and challenges of delivering social support to youth and adults living with pain in research, hospital, and community-based non-profit settings.



The iP2P program is an evidence-based virtual peer support program that provides an opportunity for adolescents with painful chronic illnesses to connect with young adults with the same illness through Skype or zoom-based video calls. Mentors are nominated by their healthcare teams and undergo 2.5 days of mentor training. The program has demonstrated improvements in disease self-management and coping in various clinical populations (chronic pain, inflammatory bowel disease, sickle cell disease, and juvenile idiopathic arthritis) and has been adopted by several not-for-profit organizations.

The Coaching for Health Program at Pain BC is a telephone and virtual coaching program delivered in a community-based setting, designed to help adults living with pain learn self-management skills, and improve their well-being and social connection. Evaluation of the program suggests that participation helps people with pain to improve their quality of life, confidence in managing pain, and mental health. The panel will highlight the perspective of a volunteer coach who is also a person living with pain to discuss the importance of social support, and their experience as a coach including personal reflections, challenges, and impacts.

At the end of this session, participants will be able to:

- Recognize the benefits and opportunities for providing social support as an intervention to people with pain.
- Familiarize themselves with two innovations in peer support across the lifespan, the iP2P and the Coaching for Health programs.
- Explore the experiences of a Pain BC coach with lived experience of pain and to highlight impacts, challenges, and opportunities.

Track 3

The Ketamine Connection: Infusing A Multidisciplinary Approach at the Ketamine Infusion Pain Program.

Chair: N. Soneji

Speakers: N. Soneji, K. Curtis, A Muere, E. Robertson

Location:

Ketamine infusions can be used to treat certain chronic pain conditions that have not responded to other therapies. More recently, Ketamine is being considered as part of a cutting-edge mental health therapy. The uniquely designed Ketamine Infusion Pain Program (KIPP) provides high-dose Ketamine infusion (HDKI) using a new multidisciplinary approach. The KIPP team is composed of pain physicians, nurses, psychologists, physiotherapists and anesthesia team members who provide seamless patient-centered care for patients with chronic pain undergoing HDKI. The KIPP has serviced approximately 170 patients between 2023-2024. Data from our clinic on pain, functional outcomes, psychological variables, and patient preparedness will be presented. Results from our clinic indicate that patients are well prepared for HDKI and approximately one third of patients obtain clinically meaningful pain relief. Future directions regarding the evolution and expansion of Ketamine therapy for chronic pain are discussed.



At the end of this session, participants will be able to:

- Discuss pharmacological rational and clinical evidence for use of high-dose Ketamine infusions for chronic pain.
- Outline the role of a psychologist and nurse as part of a multidisciplinary team for high-dose Ketamine infusion.
- Describe key aspects of the lived experience of receiving Ketamine infusion for chronic pain, including how patients cope with the infusion, their hopes for treatment outcomes, and any challenges faced during the process.

Track 4

Unraveling Medico-Legal Complexities in Adjudicating “Invisible” Pain

Chair: M. Fitzcharles

Speakers: N. Mittal, R. Deamo Assis, D. Bertschi

Location:

Medico-legal jurisprudence involves the application of scientific and medical expertise to legal issues, requiring healthcare professionals to offer objective information and an unbiased opinion to assist the trier of fact in making informed decisions.

Nociplastic pain, an 'invisible' pain, is widely accepted by pain medicine health professionals as a valid condition causing significant suffering. In contrast, medico-legal adjudication presents substantial challenges, particularly when assessing severity, functional impairment, and disability. Subjective symptoms associated with chronic nociplastic pain—such as fatigue, sleep disturbances, cognitive difficulties, and hypervigilance—further complicate adjudication due to absence of precise measurement techniques and objective pathology.

Those suffering from nociplastic pain can only present a personal report to justify their condition, raising concerns about reliability, symptom amplification, or even simulation.

This symposium will explore and juxtapose the distinct roles of the healthcare provider with the independent medical evaluator, highlighting key insights and potential challenges. Causation, severity and impairment related to chronic pain will be discussed.

The adjudication of nociplastic pain will be addressed from the legal perspective by defence counsel familiar with such cases and recent jurisprudence. By examining the nuances of the legal system, as it operates parallel to, but differently from traditional medical practice—healthcare professionals will be better equipped to provide critical and material information that contributes to a fair and just resolution for individuals genuinely suffering from chronic pain.

At the end of this session, participants will be able to:

- Describe the challenges in the medico-legal adjudication of nociplastic pain from the perspective of the treating healthcare professional, the independent expert, and the lawyer.
- Summarize salient points in the medico-legal evaluation of a person with nociplastic pain.
- Discuss the interaction between the medical and legal profession in the adjudication of chronic pain conditions.



Wellness and Resilience in Pain and Substance Use Disorders

Chair: K. Nicholson

Speakers: S. Fishman, K. Nicholson, E. Nadelmann

Location:

Wellness and resilience are hot topics in chronic illness management, yet they rarely figure into the clinical care of pain and substance use disorders. Chronic pain is the most pervasive chronic illness and the most costly. Substance use disorders and overdose deaths are crisis-level public health concerns. This session seeks to close the gap by exploring how evidence-based wellness and resilience interventions can be applied to the treatment of pain and substance use disorders.

Resilience is the capacity to resist, adapt to, recover from, or grow from a stressor.

Research suggests that resilience can be developed, enabling people to respond to health stressors in ways that may pre-empt or mitigate pain or addiction. Wellness is an essential tool in building resilience.

We can't just look at wellness and resilience from an individual perspective; we must also examine the social contexts and systems in which individuals live. Food, movement, physical strength, and emotional stress affect resilience, but so do social factors such as community, connectivity, justice, equity, safety, and environmental conditions. Even how we design and deploy our laws and policies significantly impacts the resilience of individuals and communities.

This panel takes a big-picture approach, examining wellness and resilience from four unique perspectives: a pain and wellness expert, a person with lived experience of pain who has expertise in social policy, a drug policy pioneer, and an Indigenous Community Speaker from Grand Council Treaty 3.

At the end of this session, participants will be able to:

- Recite the current state of research about preventable chronic illness and how it applies to pain and substance use disorders.
- Explain why equity and social factors are key to resilience and devise strategies for building resilient communities and systems.
- Describe how drug policy shapes the resilience of individuals and communities.

Movement as Medicine: Prehab, Rehab, and the Sociobehavioural Aspects of Exercise and Pain

Chair: D. Santa Mina

Speakers: I. Randall, D. Kumbhare, C. Sabiston

Location:

This symposium will describe the role of prehabilitation (pre-treatment interventions) and rehabilitation in the role of pain management, while exploring the complex interplay between pain and health behaviours as well as social factors and impacts. Key topics will include: i) the role of prehabilitation in pre- and postoperative pain management; ii) the role of rehabilitation to alleviate pain and improve function; iii) the relationship



between pain and exercise behaviours; and iv) the lived experience of pain in the context of physical activity, sport, and exercise.

At the end of this session, participants will be able to:

- Be familiar with the use of prehabilitation and rehabilitation interventions in managing pre- and postoperative pain and improving patient outcomes.
- Understand the complex relationship between pain and exercise behaviours, with perspectives on supporting adherence to physical activity in individuals experiencing chronic pain.
- Appreciate the social factors and lived experiences that influence pain perception and management in the context of physical activity, sport, and exercise.

1315h **Break/Networking Time**
Exhibitor Booths are open

1445-1600h **Concurrent Session – Two: Scientific Program**

Track 1 Spinal and peripheral neuro-immune interactions in chronic pain
Chair: M. Salter
Speakers: H. Shuster-Hyman, M. Salter, R. Ji
Location:

Neuro-immune interactions are increasingly recognized to drive pain hypersensitivity. In this symposium we will present recent work on macrophage-neuron signalling that highlights the concept that immune cells may suppress as well as exacerbate pain. Ms. Shuster-Hyman will describe the latest mechanistic insights into a model of microglia-independent pain hypersensitivity, that is driven by peripheral macrophages. Dr. Salter will present evidence that in a sex-dependent manner a specific subtype of macrophage - expressing CD206+ - in the lumbar meninges suppresses pain after a minor injury. Dr. Ji will present exciting findings that the pro-resolving mediator, protectin DX, reduces postoperative pain by activating the receptor GPR37, and subsequent signalling in macrophages and neurons.

At the end of this session, participants will be able to:

- Describe spinal neuro-immune signalling pathways that mediate and modulate pain hypersensitivity in rodent models of chronic pain.
- Identify peripheral neuro-immune signalling that drives neuropathic pain hypersensitivity.
- Discuss the latest evidence for pro-resolving neuro-immune interactions in the dorsal root ganglia.

Track 2 Pain, Selfhood and Suffering: Scientific, Clinical and First-Person Perspectives
Chair: V. McIntyre
Speakers: T. Wideman, P. Stilwell, Lance McCracken
Location:

Despite advances in pain research and practice, signs of suffering associated with pain, such as isolation, addiction, and suicidality, are at historically high levels and continue to rise. Innovative approaches are urgently needed to better understand, recognize and



address suffering associated with chronic pain. This symposium session will provide a timely review and presentation of novel research and clinical strategies for addressing pain-related suffering. Disruption to one's sense of self is a key attribute that distinguishes experiences of pain and suffering and will be a common theme across the presentations in this session. The first presentation will advance a new framework for pain-related suffering that aims to expand historical conceptualizations by introducing different modes by which pain can lead to self-disruption and suffering. The second presentation will introduce innovative phenomenological research methods as a means of studying self-disruption and suffering. The third presentation will focus on exploring how Acceptance and Commitment Therapy (ACT) can be an effective tool to address self-disruption and alleviate pain-related suffering. The session will be moderated by a person living with pain, who will integrate reflections on their first-person experiences with suffering and collaboration on research in this area. This session will thus provide participants with a new foundation for advancing research and practice that aims to better understand and alleviate suffering associated with chronic pain.

At the end of this session, participants will be able to:

- Delineate the modes by which pain can lead to self-disruption and pain-related suffering.
- Evaluate the robustness of methodological tools for assessing pain-related suffering.
- Outline how Acceptance and Commitment Therapy interventions can be used to address self-disruption and mitigate pain-related suffering.

Track 3

Enhancing the efficacy of chronic pain treatment by targeting trauma

Chair: J. Katz

Speakers: R. Aaron, B. Rosenbloom, P. Poulin

Location:

Over the last 30 years, traumatic experiences (i.e., stress response to life threatening situations, neglect, sexual, physical or emotional abuse, including the development of posttraumatic stress disorder (PTSD) and acute stress disorder) have emerged as a central predisposing and perpetuating factor for chronic pain. Trauma is nearly ubiquitous among individuals seeking treatment for chronic pain in tertiary care. Despite understanding the relationship between trauma and pain, few studies have been conducted to specifically address both of these conditions. This symposium discusses state-of-the-art treatments as well as barriers to care. Dr. Joel Katz (Distinguished Professor, York University), expert in chronic pain and trauma, will chair the symposium. Dr. Brittany Rosenbloom (Associate Scientist and Psychologist, Women's College Hospital) will present results from two studies that look at the prevalence of trauma in a chronic pain population as well as current evidence for the psychological treatment of these co-occurring conditions. Dr. Rachel Aaron (Assistant Professor of Physical Medicine and Rehabilitation, Johns Hopkins School of Medicine Faculty) will present results from a systematic review and meta-analysis on the treatment of pain after major injuries. She will also present pilot data on a trial for a novel psychological treatment for pain after major musculoskeletal injury and surgery. Dr. Patricia Poulin (Psychologist at the Ottawa Hospital Pain Clinic, Associate Scientist at The Ottawa Hospital Research Institute and Person with Lived Experience) will speak about the development and evaluation of integrated stepped care intervention for complex trauma and pain.



At the end of this session, participants will be able to:

- Explain the relationship between trauma and chronic pain.
- Describe the current state of psychological treatments for pain following musculoskeletal injury.
- Identify different strategies on a stepped care continuum to alleviate trauma-related problems among people living with chronic pain.

Track 4

Contemporary ethical challenges in pain research and management

Chair: T. Hadjistavropoulos

Speakers: N. Alberts, D. Williams, N. Buckley

Location:

Over the last three decades, we have seen dramatic technological and scientific advances that have impacted our pain research and clinical direction. Coupled with strong and increasing demands for transparency and public accountability, these advances have brought to the forefront ethical issues that were not prominent in the past (e.g., possible threats to privacy when using vision technologies to monitor pain behaviour in people living with dementia; questions around consent and possible exploitation with open data sharing; increased sensitivity to possible conflicts of interest when working with the pharmaceutical industry; risks associated with the use of apps and related technologies for assessment and intervention; ethical dilemmas when working with research partners who have lived experience). Four experienced symposium participants will cover pertinent ethical concerns that are likely to preoccupy our disciplines over the next decade and will offer guidance for ethical dilemma resolutions while focusing on a wide variety of pain populations including pediatric, geriatric and younger adult. In sum, this symposium will provide comprehensive insights, real-world examples, and some guidance for pain experts to navigate these evolving ethical challenges while upholding the highest research and clinical standards and fostering valuable discussions with knowledge users.

At the end of this session, participants will be able to:

- Interpret ways in which technological advances and paradigmatic changes in the way that pain research and practice are conducted have given rise to novel ethical dilemmas.
- Describe changes in practices (e.g., when working with industry or special populations) over time and the rationale underlying these changes.
- Develop strategies to better include the voice of patients in their personal care plans and in the approach to more ethical research.

1445-1600h

Concurrent Session – Two: Practicum Program

Transforming Nociceptive Pain Treatment: New Approaches and Pioneering Research

Chair: A. Steverman

Speakers: A. Steverman, H. Schubiner

Location:

In our attempts to provide optimal care in the face of chronic pain, we recognize that strategies will vary in part depending on whether the origin of the pain is thought to be nociceptive, neurogenic, nociceptive, or a mixed presentation. When symptoms are primarily nociceptive, many pain sufferers will only experience mild improvements with



many of our pain management tools, including medications, injections, physical therapy, psychotherapy as well as the many other therapies that many pain sufferers will turn to.

Our understanding of pain mechanisms and in particular pain neuroscience has significantly evolved, including the importance of central sensitization in many pain conditions as well as the multitude of biopsychosocial factors that are central factors.

With this understanding, we can look towards Mind-Body approaches to pain management.

Newer approaches including Pain Reprocessing Therapy (PRT) and Emotional Awareness and Expression Therapy (EAET) are examples of novel mind-body approaches to pain.

During this session, we will briefly discuss the history and some of the current practices in mind-body approaches to pain in Canada. The underlying neuroplastic mechanisms of primary pain will also be reviewed.

We will describe some of the novel approaches to pain including pain reprocessing therapy (PRT) and emotional awareness and expression therapy (EAET).

Finally, we will discuss some of the recent research showing the effectiveness of these approaches in primary pain conditions.

At the end of this session, participants will be able to:

- Recognize some of the mind-body approaches to chronic pain provided in Canada and the role of the brain in chronic painful disorders.
- Determine which patients have neuroplastic disorders and be able to discuss neuroplastic disorders in a clear and compassionate manner.
- Describe research using Pain Reprocessing Therapy and Emotional Awareness and Expression Therapy for chronic pain.

Current Global Pain Practices: What's new in pain?

Speaker and Learning Objectives forthcoming

1600-1630h

Refreshment Break

Exhibitor Hall is open

1630-1745

Concurrent Session – Three: Scientific Program

Track 1

Shedding light on pain using novel preclinical methods

Chair: C. Dedek

Speakers: N. Ghasemlou, C. Dedek, A. Dedek

Location:

Preclinical models are fundamental to better understanding the mechanisms underlying acute and chronic pain states. Functional outcomes, such as sensitivity to mechanical and thermal stimuli, changes in facial expressions, altered gait and activity, are critical



measures used to phenotype pain outcomes. Identifying new tools to assess such behaviours, in particular those that are observer-independent, can only serve to improve to these assays and provide more reliable and robust data. Here, we outline several new tools to assess pain in animal models including advanced dynamic weight bearing, which determines changes in weight placement of freely-moving animals and the RAMalgo robot, which allows for remote testing of mechanical, thermal, and optogenetic responses. A canine translational pain model that uses a multimodal evaluation of pain is also introduced to the audience, bridging gaps in preclinical work through introduction of a canine model. Following presentation of these tools, the speakers will hold an open conversation with the audience on best practices for preclinical behaviour.

At the end of this session, participants will be able to:

- Assess the potential of dynamic weight bearing as a tool to measure acute and chronic pain.
- Become familiar automated stimulation in mice and measurement of ensuing behaviours.
- Evaluate the benefits of pairing rodent preclinical models with work in higher-order mammals.

Track 2

Unequal Pain: Exploring the Impact of Social Disadvantage on Chronic Pain Experiences and Treatment

Chair: C. Bellei-Rodriguez

Speakers: F. Rassu, N. Raghuraman, M. Morris

Location:

As health disparities grow, understanding how social factors shape chronic pain becomes increasingly urgent. This symposium presents research on the complex interplay between social context, psychological mechanisms, and pain management across diverse populations.

Dr. Bellei-Rodriguez will chair the session, setting the stage by framing the significance of social determinants in chronic pain research and practice. She will provide an overview of key concepts, ensuring the audience has a shared foundation before introducing the speakers.

Dr. Fenan Rassu examines the association between neighborhood disadvantage and pain-related experiences in a pain psychology clinic, with a focus on the mediating roles of pain catastrophizing and fear. His findings reveal how social environments influence psychological responses, exacerbating pain outcomes in disadvantaged communities.

Dr. Nandini Raghuraman investigates the role of socioeconomic position (SEP) in placebo analgesia among individuals with temporomandibular disorders. Her research explores how socioeconomic factors may influence placebo responses, with findings suggesting weaker responses among disadvantaged individuals.

Dr. Matthew Morris applies advanced machine learning techniques to a national dataset, identifying key socioeconomic predictors of high-impact chronic pain. His findings highlight how SEP dimensions influence pain outcomes differently across demographic groups, underscoring the need for personalized pain management



strategies.

Together, these presentations illustrate the profound influence of social disadvantage on chronic pain experiences. The symposium offers valuable insights into how disparities emerge and persist by integrating psychological, experimental, and data-driven approaches. An interactive discussion will engage the audience in exploring practical implications and future research directions.

At the end of this session, participants will be able to:

- Identify how socioeconomic factors can affect chronic pain experiences across diverse demographic groups.
- Evaluate the role of psychological mechanisms, such as pain catastrophizing and pain-related fear, in mediating the relationship between social disadvantage and pain outcomes.
- Apply insights from the session to propose equitable pain management strategies and explore approaches to addressing disparities.

Track 3

Parental influences on pain across childhood

Chair: J. Vinall Miller

Speakers: J. Jessa, R. Pillai Riddell, M. Gagnon

Location:

Pain can profoundly impact both parents and their offspring. Models of intergenerational transmission of pain indicate that pain can impact children through genetic and psychosocial factors. The fetal programming hypothesis outlines that events or stressors occurring during the prenatal period may lead to changes in metabolic, physiological and structural fetal alterations. Stress in the form of pain during gestation may thus influence fetal neurodevelopment. Interpersonal models of stress transmission indicate that parental stress can spillover onto early parent-child interactions through parenting, reactivity, and maladaptive behavior modelling. Thus, both genetic and psychosocial interactions may cumulatively influence developmental outcomes over time. Jenna Jessa (MD/PhD Student in Medical Sciences, University of Calgary) will present findings from her PhD Thesis, examining pain in a maternal cohort throughout the perinatal period and into the postpartum, and implications for infant neurodevelopment. Dr. Rebecca Pillai Riddell (Professor, York University) will present on parental responses to toddler pain-related distress and associations with parents' physiological and psychological responses. Dr. Michelle Gagnon (Associate Professor, University of Saskatchewan) will present on the relationship between parent-adolescent interactions and adolescent pain experiences. Throughout all three studies, the role of parental responses to pain will be explored across the lifespan - in infants, toddlers and adolescents. Clinical insight into parental influences on the optimization of child and adolescent outcomes will be presented.

At the end of this session, participants will be able to:

- Identify the influence of maternal pain in the perinatal and postpartum on infant neurodevelopmental outcomes.
- Describe the spectrum of parent responses to toddler pain-related distress and their associations with parents' physiological and psychological responses in a naturalistic high distress context.



- Explain challenges in parent-adolescent interactions that may occur in the context of adolescent chronic pain.

Track 4

Challenges and opportunities in conducting clinical trials for virtual reality (VR) in people with acute and chronic pain

Chair: G. Mesaroli

Speakers: C. Hess, S. Le May, N. Poonai

Location:

Clinical trials for virtual reality (VR) to manage pain date back nearly 30 years with significant acceleration in the past 10 years. VR is an attractive non-pharmacological pain intervention with several theorized mechanisms of action (e.g., cognitive, emotional, physical/behavioral targets), but these are not fully understood. The existing literature has largely focused on adult populations demonstrating the effect of VR in reducing pain intensity in acute and procedural pain populations. Emerging research on VR for pain are evaluating the effects of VR on pain-related outcomes beyond pain intensity (e.g., anxiety, function) and are additionally testing VR as a treatment for recurrent and chronic pain conditions. Current research efforts are fraught with challenges including inability to blind participants to the intervention, technological advances that outpace research, navigating industry partnerships, ensuring clinical adoption, Equity, Diversity & Inclusion (EDI) issues in recruitment and sustainability. This workshop will provide an overview of the current state of the evidence of VR for pain (acute and chronic), highlight emerging research efforts to test VR for pain in understudied populations with novel outcomes, and critically discuss challenges and opportunities to enhance methodological rigor in this field.

At the end of this session, participants will be able to:

- Discuss methodological challenges in VR clinical trials for pain and examine methods to enhance rigor and mitigate bias
- Identify challenges and opportunities to include neurodivergent population in VR pain research
- Compare novel approaches to measure safety, feasibility and effectiveness of VR for acute and chronic pain that extend beyond measuring pain intensity

1630-1745h

Concurrent Session – Three: Practicum Program

Intersection of Pain and Substance Use: Highlighting the Need for Integrated Care

Chair: H. Clarke

Speakers: C. Williams, H. Clarke, A. Smith

Location:

Pain and substance use frequently co-occur and operate in a positive feedback loop that maintains and exacerbates both conditions over time. In this symposium, led by a multidisciplinary panel of speakers (i.e., physicians, psychologist, patient with lived experience), we will explore theoretical models of pain-substance use relationships, present evidence across substances (e.g., alcohol, opioids, cannabis) and populations, and present clinical implications and recommendations for integrated care. First, Dr. Callon Williams will provide an overview of the leading pain and substance use theoretical models, using empirical evidence among emerging adults to highlight how these relationships may first emerge. Next, Dr. Hance Clarke will share considerations



for and challenges of treating co-occurring opioid use disorder and chronic pain through research and clinical data, while highlighting the need for integrated treatment approaches and care. Third, Dr. Andrew Smith will describe the Interprofessional Pain and Addiction Recovery Clinic (IPARC) at CAMH, a gold-standard for integrated pain and substance use care. He will also provide clinical recommendations for assessing and treating co-occurring pain and substance use conditions (e.g., alcohol use disorder). Finally, a person with lived experience (PWLE) will share their journey through the IPARC.

At the end of this session, participants will be able to:

- Identify key theoretical models explaining the relationship chronic pain and substance use, with a focus on developmental and transdiagnostic factors that contribute to the onset and maintenance of these conditions.
- Recognize the unique clinical needs and challenges in treating co-occurring chronic pain and substance use disorders, particularly in individuals receiving opioid agonist therapy.
- Describe the need for integrated approaches in pain and addiction care, incorporating insights from a PWLE, and how integrated care can improve treatment outcomes.

Understanding Chronic Pain, Fatigue, and Interplay of Autonomic Neurological Symptoms in Ehlers-Danlos Syndromes

Chair: N. Mittal

Speakers: D. Knight, S. Raj, N. Mittal

Location:

Chronic pain, fatigue, and neurological symptoms are common and debilitating in Ehlers-Danlos Syndromes (EDS) and generalized hypermobility spectrum disorder (G-HSD). While joint hypermobility contributes to abnormal muscle biomechanics, and nociceptive pain, many patients report widespread chronic pain and transient neurological symptoms that extend beyond traditional musculoskeletal pain pathways. These symptoms, often referred to as Cervicomedullary Syndrome (CMS), include headache, dizziness, brain fog, numbness, tingling, autonomic instability, and exercise intolerance. Two primary pathophysiological mechanisms are described to explain CMS in EDS/G-HSD. One suggests that upper cervical instability and ligamentous laxity at the craniocervical junction (CCJ) lead to dynamic brainstem compression, resulting in pain and neurological manifestations. The second mechanism attributes these symptoms to cerebrovascular dysautonomia, where altered cerebral perfusion pressures with neck posture changes contribute to pain, fatigue, and autonomic dysfunction. This symposium will provide an in-depth discussion on these pathophysiological mechanisms, chronic pain management, and the co-morbid role of Postural Orthostatic Tachycardia Syndrome (POTS) in EDS. Three experienced faculty members will discuss the biomechanical and neurological contributors to chronic pain and neurological symptoms in EDS including craniocervical instability and dysautonomia, and review evidence-based approaches to chronic pain management and autonomic dysfunction secondary to postural orthostatic tachycardia syndrome in hypermobility disorders. This session will enhance clinicians' understanding of complex pain syndromes in hypermobility disorders, offering practical insights into diagnosis and treatment approaches.



At the end of this session, participants will be able to:

- Describe the role and mechanisms of cervical instability related brainstem dysfunction and autonomic dysregulation in the development of chronic pain and neurological symptoms in EDS/G-HSD.
- Apply evidence-based strategies to assess and manage chronic pain and cerebrovascular dysautonomia due to POTS in patients with EDS.

1745h

Day Two Concludes

Free evening for all attendees.



Sunday May 4

0730h **Information Desk Open**
Victoria College, Main Entrance, Old Vic Foyer

0815h **Opening Remarks**
Victoria College. Location TBD
Dr. Hance Clarke and Dr. Tania Di Renna
Dr. Gabrielle Pagé and Dr. Bradley Kerr

Acknowledging our Award Recipients
Dr. Anna Taylor and Dr. Nader Ghasemlou

0830h **Plenary: The neuroscience of pain: A key to treatment development**
Professor Tor Wager

Understanding and measuring pathophysiology, and how treatments alter it, is a key to translational success. This concept is widely understood and accepted in many branches of medicine, but it has been notoriously difficult to apply to complex disorders, including mental health disorders, substance misuse, and chronic pain. These three categories of disorders share a substantial brain component, with core symptoms related to brain processes that have defied measurement and characterization in humans. I will describe efforts to create neuromarkers from human fMRI for neural processes underlying these complex disorders. These neuromarkers have revealed novel mechanisms underlying psychological effects on fear, pain, and drug craving. They have the potential to serve as pathophysiology-linked treatment targets, allowing pharmacological, behavioral, and neuromodulatory treatments to be compared and integrated, accelerating treatment development.

At the end of this session, participants will be able to:

- Investigate why developing measures of pathophysiology, the biological features that cause a disorder, has been challenging in chronic pain.
- Explore the value of neuromarkers for understanding acute and chronic pain, and how to evaluate the scientific evidence base for such neuromarkers.
- Recognize how emerging psychological and neuromodulatory treatments engage brain systems to alter threat and pain.

0930h **Poster/Presentation Pitch Two**

0945h **Refreshment Break**
Exhibitor Hall is open

1000h **Poster Session Two**
Poster Awards
Conference Passport Winner Announced



Track 1 The Hippocampus, and implicit and explicit memories of stress and pain.

Chair: B. Rosenbloom

Speakers: T. Oberlander, K. Cobbs, M. Moayed

Location:

Chronic pain affects 1 in 5 individuals in Canada. Stress and pain memories contribute to the development of chronic pain. Both chronic pain and chronic stress follow a similar behavioral pattern, both marked by the inability to extinguish negative memories. The hippocampus is a brain region central to memory formation. Stress disrupts performance on hippocampal-dependent memory. Therefore, the investigation of the hippocampus, stress, and negative memories can provide valuable insights into our understanding of the brain mechanisms involved in both chronic pain and stress. Dr. Brittany Rosenbloom (Associate Scientist, Women's College Hospital), expert in pain across the lifespan will chair the symposium. Dr. Tim Oberlander (Professor, University of British Columbia) will present on findings from a longitudinal study that illustrates a lasting 'fetal serotonergic programming' effect on HPA stress regulation across childhood. Karen Cobos (PhD student in Neuroscience, University of Calgary) will present findings from her PhD work, investigating the role that the hippocampus and negative memories of pain play in the development of chronic post-surgical pain in youth. Dr. Massieh Moayed (Associate Professor, University of Toronto) will present findings from two meta-analyses investigating hippocampal activation in both acute and chronic pain, highlighting the role of the hippocampus in pain processing, as well as a study in the UKBiobank linking chronic widespread pain, stress and adversity. These three studies will explore the factors that contribute to the development of chronic pain and stress - from intrauterine exposures to neurobiological and life experiences.

At the end of this session, participants will be able to:

- Describe the impact of prenatal maternal depressed mood and SSRI antidepressant exposure on hypothalamic pituitary adrenal (HPA) (stress/diurnal) regulation across childhood.
- Recognize how hippocampal brain efficiency prior to surgery is important to the development of chronic post-surgical pain in youth.
- Explore how the hippocampus plays an important role in the transition from acute to chronic pain.

Track 2 Moving beyond risk: Multiple approaches to understanding resilience to pain

Chair: M. Slepian

Speakers: M. Slepian, A. Waisman, L. McGill

Location:

Resilience in the context of pain is a complex and multidimensional construct. Pain resilience can be defined as the ability to effectively recover from pain, to maintain positive physical and emotional functioning despite pain, and to experience positive growth despite pain. With increasing recognition that the study of resilience is critical to understanding and treating pain, varied approaches have been taken to characterize pain resilience. This symposium will introduce approaches to the study of resilience at three different levels of analysis: intrapersonal, mechanistic, and interpersonal. Dr. Max



Slepian will critically review the concept of intrapersonal resilience, describe a program of research featuring the Pain Resilience Scale, a self-report measure of dispositional resilience, and present a resilience-vulnerability framework for incorporating pain resilience alongside other commonly studied pain-related psychosocial measures. Anna Waisman will outline a neurocognitive model of memory as a mechanism of resilience in adults and will identify promising treatment targets to prevent the development of chronic pain. Dr. Lakeya McGill will situate resilience in a social-ecological framework. She will describe research on the impact of discrimination on pain outcomes and qualitative descriptions of resilience mechanisms for individuals with sickle cell disease. Including a focus on resilience, in addition to risk and vulnerability, is critical to moving forward the field of pain research and management. This symposium will enable audience members to develop a broad understanding of resilience-focused pain research and consider applications for strengths-based approaches for future research and novel pain management strategies.

At the end of this session, participants will be able to:

- Critically evaluate the concept of pain resilience and measurement of resilience.
- Identify cognitive and neural processes underlying autobiographical memory as a mechanism of resilience to chronic pain.
- Explain how resilience is shaped by the interaction between individuals and broader social systems, including families, communities, and institutions, within the context of acute and chronic pain.

Track 3

Innovative Approaches to Deliver Chronic Pain Care to the Right Person, at the Right Time, in the Right Place

Chair: V. Mohabir

Speakers: A. Tawiah, Y. Shergill, G. Mesaroli

Location:

Chronic pain is incredibly common in Canadians and poses a significant burden to the healthcare system. Chronic pain is not a uniform disease - there are over 100 chronic pain diagnoses with a constellation of biopsychosocial factors that contribute to an individual's pain experience. Managing chronic pain cannot use a one-size-fits-all approach. There is evidence to support multiple treatment modalities but delivering treatment in a timely and equitable manner to high volumes of patients is challenging and requires coordination from primary to tertiary care. Our panel will present innovations to deliver care across the spectrum of the health care system in pediatric and adult populations.

At the end of this session, participants will be able to:

- Describe the role and importance of physiotherapists in interprofessional team-based care in primary care, specialist care and emergency departments to manage patients with chronic pain.
- Discuss the development and implementation of a digital platform (Power Over Pain Portal) to provide access to evidence-based chronic pain resources to people living with pain across the lifespan and levels of care.
- Describe the development and testing of a novel screening tool (Pediatric PainSCAN) to identify patients with neuropathic pain and complex regional pain syndrome to expedite access to tertiary-level pediatric chronic pain care.



Track 4

Finding our NICHE: Lessons Learned from the Pediatric Pain Pilot in Northwestern Ontario

Chair: V. McEwen

Speakers: V. McEwen, T. Kydd, J. Cano

Location:

This session will highlight how this pilot program not only met the demand for local, specialized care, but also had a positive impact on the lives of children living with pain in the Northwestern Ontario.

This project demonstrates the feasibility of localized pediatric pain care in an underserved region and the findings from the pilot will inform future programming and advocacy efforts, with a goal of obtaining permanent funding. The session will discuss both the successes, and the challenges encountered, such as the spirit of rural generalism and capacity to provide care across the lifespan discovered as strengths. By sharing these insights, the session will contribute to ongoing efforts to improve equitable access to pain care for children across Canada, and as a possible model for care outside of larger tertiary health centres.

At the end of this session, participants will be able to:

- Review a model of providing pediatric chronic pain care that could be applied to other communities.
- Apply a strengths-based approach to maximize existing resources, building resilience, and positive problem-solving to improve quality of pain care for children by reflecting on the experience of the Northwestern Ontario pediatric pain pilot program.
- Consider elements of the pilot program that could inform improving equitable access to pediatric pain care in any part of Canada, while learning from the challenges experienced by the pilot.

1115-1230h

Concurrent Session – Four: Practicum Program

Pain, Power, Pressure: Women's Leadership in the Pain Field

Chair: T. Di Renna

Speakers: A. Barreveld, J. Nicholls, M. Hudspith, K. Davis, R. Pillai Riddell

Summary and learning objectives forthcoming

This symposium will highlight the historical and current contributions to pain made by female scientists, clinicians and advocates. The symposia will be done in a talk show style and feature questions from the audience and from its host. Questions will include the leadership journey, barriers and facilitators to female leadership.

At the end of this session, participants will be able to:

- Explore the historical contributions of women to advancements in the field of pain research and management.
- Analyze the challenges and opportunities that influence women's pathways to leadership roles.
- Examine strategies and processes necessary to enhance female representation in STEM fields.



Advances in non-invasive neuromodulation: an emerging therapy for managing pain

Chair: J. Khan

Speakers: J. Khan, J. Hah, M. Moayed

Location:

Neuromodulation represents an innovative therapeutic modality that uses targeted physical energy to interact with neuronal targets, enabling controlled excitation, inhibition, or modulation of nerve function. Electrical neuromodulation, including spinal cord stimulators, deep brain stimulation, and peripheral nerve stimulators, has demonstrated efficacy in managing neuropathic pain. However, these techniques are often constrained by their high costs, invasiveness, and limited accessibility. In recent years, research has increasingly focused on the development of non-invasive neuromodulation devices, such as transcranial magnetic stimulation (TMS) and peripheral magnetic stimulation, as potential alternatives. These therapies hold promise due to their potential accessibility compared to interventional procedures and may present fewer side effects than pharmacological pain management options, which often carry risks of dependency and systemic adverse effects. Understanding the utility and effectiveness of these non-invasive, non-pharmacological treatments could represent a pivotal shift in pain management. This symposium will feature three expert speakers exploring the latest advancements in non-invasive neuromodulation. Dr. James Khan will discuss emerging research on peripheral magnetic stimulation as a promising approach for treating peripheral neuropathic pain. Dr. Jennifer Hah will review current non-invasive treatment options, including TMS and Transcutaneous Electrical Nerve Stimulation (TENS). Dr. Massieh Moayed will examine the mechanisms underlying these techniques, shedding light on their potential role in reshaping pain management strategies. This session aims to equip clinicians and researchers with insights into the evolving landscape of non-invasive neuromodulation and its applications for pain management.

At the end of this session, participants will be able to:

- Understand the mechanisms behind non-invasive neuromodulation.
- Explore the emerging applications of peripheral magnetic stimulation.
- Recognize practical and accessible options of non-invasive neuromodulation.

Breaking the Cycle of Chronic Pain: The role of IV Bisphosphonates in CRPS management

Chair: C. Lamontagne

Speakers: L. Ward, N. Fakhory, W. Dagg

Location:

The management of Complex Regional Pain Syndrome (CRPS) remains a significant challenge due to its complex pathophysiology and resistance to conventional therapies. Recent evidence suggests that intravenous (IV) bisphosphonates, known for their role in bone metabolism, may provide effective pain relief in CRPS patients. This workshop will explore the rationale, evidence, and clinical application of IV bisphosphonates for CRPS treatment.

The session will begin with an overview of CRPS, focusing on the underlying mechanisms of pain and bone pathology that support the use of bisphosphonates.



Following this, the pharmacology and mechanism of action of IV bisphosphonates will be reviewed, emphasizing their role in modulating bone resorption and alleviating pain.

A comprehensive review of current clinical evidence will be provided, highlighting key studies and the outcomes of IV bisphosphonate therapy in CRPS patients. Attendees will gain insights into patient selection, treatment protocols, and managing side effects in clinical practice.

Participants will also engage in a case study presented by a patient partner with lived experience allowing for discussion on practical implementation and challenges in using IV bisphosphonates. The workshop will conclude with a focus on future directions for research, addressing gaps in the current literature and encouraging further investigation.

This workshop aims to equip clinicians with the knowledge and tools to effectively integrate IV bisphosphonate therapy into the management of CRPS, offering a potential new approach to improving patient outcomes.

At the end of this session, participants will be able to:

- Review of Current Evidence and present the clinical studies and evidence supporting the use of IV bisphosphonates in the management of CRPS. Discuss the strengths and limitations of current studies, and any gaps in knowledge or ongoing research.
- Provide guidelines for the appropriate patient selection for IV bisphosphonate therapy. Discuss protocols for administration, including dosing, monitoring, and managing potential side effects.
- Engage participants in a case study to apply the knowledge gained during the session. Facilitate discussions on the challenges of implementing IV bisphosphonate therapy in real-world practice

1230h **Break/Networking Time**
Exhibitor Booths are open

1230h **Trainee and Person with Lived Experience Lunch: Hart House**
Registration is required. More details to come.

1400-1515h **Concurrent Session – Five: Scientific Program**

Track 1 Changing the Paradigm of Chronic Pain through Storytelling
Chair: J. Zhao
Speakers: J. Zhao, S. Tupper, S. Langlois
Location:

In this interactive symposium, we explore the art and science of storytelling through three innovative methods: narrative medicine, graphic medicine, and reader's theatre. Narrative medicine is an interdisciplinary field that emphasizes the importance of patient narratives in healthcare, applying aspects of literature and storytelling to clinical practice. Graphic medicine is the use of comics, image, and text in the discourse of healthcare, including stories of healthcare delivery, illness experiences, caregiving and care receiving. Reader's theatre is a style of theatre where participants collaborate in



dramatic readings of narrative material without costume or stage (props, scenery, or special lighting). Here, narrative material refers to verbatim scripts of clinician-patient interactions. Speakers will share regarding the process of developing structured stories and the outcomes of implementing storytelling in different environments. Attendees of this session will participate in a facilitated narrative medicine-based exercise to experience the transformational effect of stories. Facilitated discussion will also encourage researchers, clinicians, educators, and policymakers to share how they have used stories to disrupt the current narratives and paradigms about pain.

At the end of this session, participants will be able to:

- Recognize the role of stories and storytelling in chronic pain research, clinical practice, advocacy, and education.
- Discuss the role of storytelling and different methods of storytelling in order to facilitate transformational learning in health professions education.
- Demonstrate the power of storytelling in chronic pain research and education through an interactive narrative medicine-based exercise of close reading and prompted writing.

Track 2

When the body tells the story: Reciprocal associations between chronic pain and trauma across the lifespan

Chair: M. Tory

Speakers: J. Miller, N. Tsur, M. Pavlova

Location:

Trauma, including adverse childhood experiences (ACEs) and childhood maltreatment, triggers a host of neurobiological (e.g., altered central nervous system circuitry) and psychosocial changes (e.g., posttraumatic symptoms) that create vulnerability for chronic pain onset. Shared factors that maintain both posttraumatic stress symptoms and chronic pain have been examined predominantly in adult and youth samples presenting with chronic pain at tertiary pain clinics. Little is known about chronic pain, its prevalence, characteristics, and associated factors in people who experienced ACEs and live with pain, but do not necessarily present at specialized clinics. Further, existing treatments for chronic pain rarely assess or address past ACEs and associated symptoms. Maddison Tory, international motivational speaker, founder and CEO of HUGS Social enterprise, and author of *Your Secret Superpower: Ignite your Spark*, will chair this symposium. Dr. Pavlova will present key findings of a recent systematic review and meta-analysis of chronic pain prevalence in youth exposed to ACEs, as well as associations between ACEs and pediatric chronic pain. Dr. Tsur will discuss pain as an inherent part of ACEs (with a focus on childhood maltreatment) and report on potential mechanisms that explain how ACEs create vulnerability for later-onset chronic pain. Dr. Miller will discuss the impact of trauma on treatment of pediatric chronic pain, and the effects of trauma on placebo and nocebo responses. The panel includes an interdisciplinary group of clinical researchers applying a developmentally informed lens to examine reciprocal associations between chronic pain and trauma and new avenues in treatment of co-occurring pain and trauma.

At the end of this session, participants will be able to:

- Examine how trauma influences treatment responses in youth.



- Investigate the prevalence and characteristics of acute pain during child maltreatment, as well as intrusive posttraumatic pain symptoms.
- Describe the prevalence of pediatric chronic pain in youth exposed to adverse childhood experiences (ACEs), as well as associations between ACEs and pediatric chronic pain.

Track 3 Invasive procedures for low back pain - nerve blocks, surgery, neuromodulation - who, when and why to offer?

Chair: A. Bhatia

Speakers: P. Szarko, A. Alomari, R. Rampersaud

Location:

The treatment of low back pain (LBP) remains a public health concern with a growing cohort plagued by medically refractory, unrelenting pain and disability that ruins their quality of life and productivity. A holistic biopsychosocial approach (medications, physical therapy and mental health treatments) can help many patients with LBP. Interventional treatments for low back pain including nerve blocks, surgery, and neuromodulation implants are often offered to patients who do not respond to conservative measures. It is vital to be aware of the indications for these invasive treatments and to understand the potential for benefit and harms from these treatments. Nerve blocks include epidural and intra-articular (facet and sacroiliac joints) steroid injections and radiofrequency ablation of innervation to spinal joints. Surgical options include discectomy and decompression with or without spinal fusion. Neuromodulation is defined as the alteration of nerve activity through targeted delivery of a stimulus through implants such as spinal cord stimulators. These invasive therapies share some key features linked to positive outcomes - appropriate selection of individuals likely to benefit, appropriate pre-procedure diagnostic tests, procedural considerations, and the importance of periodic long-term follow-up to assess efficacy and harms. The analgesic impact of these therapies including magnitude and persistence of benefit will be presented at the symposium along with implications for cost and adverse effects. The four speakers including a person with lived experience of pain and these treatments will address different aspects of this topic including domains that need more research.

At the end of this session, participants will be able to:

- Describe the types of nerve block procedures and their application in relieving low back pain.
- Recognize and appraise the role of surgical procedures for low back pain including their indications and limitations.
- Identify the indications for neuromodulation for treating common refractory LBP syndromes and the evidence-base supporting these.

Track 4 Critical approaches to pain research: What is it and how might it be useful to understand issues of equity?

Chair: D. Williams

Speakers: F. Webster, L. Connoy, G. Teachman

Location:

There is growing interest in issues of equity and social justice in chronic pain research, in part based on the growing awareness that rising social inequities impact both the prevalence of this condition and its management. However, we have fewer critical



sociologists, and critical social scientists more broadly, represented among researchers in the chronic pain field. Yet there is a significant and growing body of work from these scholars that offers new insights and provides direction for alternative approaches to research that begin with the experiences of those living with chronic pain and marginalization. In this panel, the presenters will be speaking about 1) what “critical” means and how we can apply critical approaches to chronic pain research; 2) what a critical lens can offer when it comes to understanding chronic pain and marginalization and, 3) the findings of a specific study on pain that is grounded in critical disability studies. The speakers and Chair are all members of PEPR, a national SSHRC funded Partnership concerned with promoting equity, diversity, and inclusion (EDI) in patient engagement and building capacity for critical social science approaches to pain scholarship

At the end of this session, participants will be able to:

- Evaluate key underpinnings of critical social science research and their relevance to issues of equity in pain research.
- Formulate approaches that have been applied in research focusing on marginalization with recommendations for future use.
- Outline how a specific critical social science approach, namely critical disability studies, have been applied.

1400-1515h

Concurrent Session – Five: Practicum Program

Trainee Workshop – more details to come.

Advancing Integrated Person-Centred Care with Digital Health Innovation for Chronic Pain Management: Insights from Co-design, Implementation and Evaluation

Chair: R. Visca

Speakers: R. Visca, M. Bleau, M. Spenard, F. Laliberte

Location:

Quebec’s Digitally-Enabled Integrated Care Program aims to enhance equitable access, patient engagement, care coordination, and continuity of care through digital solutions. While in the long run, digitally-enabled integrated care should be equitably beneficial for all members of society, evaluation efforts focused on understanding the impact of implementing digital health solutions on health outcomes, patient and provider experience and health system performance have not been a central component of deployment efforts. Understanding digital health’s role in chronic pain care requires rigorous evaluation across all transformation phases—planning, implementation, and health system impact—to support comprehensive system change.

The session will feature panellists addressing three key transformation areas: (1) co-designing digitally-enabled care trajectories to align with user needs; (2) identifying opportunities and challenges in integrating digital health into routine practice; and (3) assessing the health system impact of digitally-enabled models. Each of these areas is critically important when considering how technology can help accelerate wider health system transformation efforts toward more integrated health care delivery.

The moderator will weave in concepts from implementation science and knowledge mobilization, prompting panellists to discuss challenges and opportunities related to



technology adoption across micro, meso, and macro dimensions of integrated care. The discussion will conclude with reflections on critical considerations and strategies necessary to ensure that patients remain central in the integration of technology into care models.

At the end of this session, participants will be able to:

- Develop a better understanding of how digital solutions and data can support access to integrated patient-centric chronic pain trajectories, improve coordination and continuity of care (informational, relational, management) and align with the Quintuple Aim for Health Care Improvement by advancing health equity, improving population health, enhancing the care experience, reducing costs, and supporting care team well-being.
- Share novel and innovative approaches to co-design, implementation, evaluation of a digitally-enabled integrated trajectory including unique opportunities and challenges for supporting scale and spread.
- Propose strategies related to telehealth, policy, governance and partnership building to further the broader adoption of effective telehealth solutions in Quebec's healthcare system.

Recentering Wellness in Chronic Pain: Land, Bodies, and all our Relations

Chair: L. Richardson

Speaker: Elder A. Dumont

Location:

Recentering Wellness in Chronic Pain: Land, Bodies, and all our Relations explores the complex intersections of chronic pain, healing, and place-based thought traditions to reconsider the question: What does it mean to be well when living with chronic pain? Moving beyond conceptions of pain as merely a sensation or affliction embodied in an isolated or individualized state, this inquiry evaluates pain as a relational disruption and reframes wellness as an ongoing negotiation rooted in land, place, memory, and relational practices of care. We aim to promote conversation about healing spaces grounded in place-based traditions and relations, to recognize pain as a socio-material force tied to historical and ongoing colonial practices, environmental degradation, and systemic inequalities. Pain, as conceptualized here, interrupts but also invokes and draws attention to fractures in relationships—between parts of the self and selves, bodies, Peoples, lands, and histories—and invites critical reimaginations of wellness as a relational, reciprocal, wholistic, place-anchored process. Engaging with Indigenous traditions of care, this symposium emphasizes that spaces of healing follow relationships embedded within ecosystems, knowledge systems, and ethical practices. These spaces are not only sites of recovery, but also terrains of resistance, where pain and wellness coexist and are co-constituted. [Recentering Wellness in Chronic Pain: Land, Bodies, and all our Relations] opens a dialogue for understanding relational, historical, intergenerational, and place-based conceptions of pain; recognizing the collective entanglements of human and environment. It honours pain as both a teacher and a disruptor, and, most critically, as a site of transformation.

At the end of this session, participants will be able to:

- Describe how relationships to the land, our bodies, and others affect our individual and collective experience of wellness and pain.



- Recognize practices that enable wellness through reconnection and healing, where pain is a guide and teacher.

1515-1545h **Refreshment Break**
Exhibitor Hall is open

1545-1700h **Concurrent Session – Six: Scientific Program**

Track 1 **Should disease explanations of chronic pain guide anti-stigma interventions?**

Chair: K. Davis

Speakers: D. Buchman, B. Magel, E. Burke

Location:

Chronic pain continues to be under researched, underfunded, and poorly understood. The combination of these factors contributes substantially to chronic pain stigma which has immeasurable impact on the everyday lives of people with chronic pain. In recent decades, advocates have argued that many chronic pain conditions should be considered a disease or even a brain disease in its own right to help legitimize chronic pain and reduce stigma. However, whether disease framings will reduce pain stigma is unknown. This has implications for public anti-stigma campaigns as the evidence of what works best to reduce stigma is mixed. Our symposia adopts a multidisciplinary approach to explore ethical strengths and limitations of disease framings on chronic pain for potential pain anti-stigma efforts. Each speaker provides a diverse perspective to the topic beginning with 1) reporting on a qualitative study of adults with chronic pain in Canada on their perspective on disease models and its relationship to stigma, 2) discussion of the findings from a critical disability studies perspective, and 3) perspectives on the learned and lived experience in chronic pain from a researcher and person experiencing chronic pain. Through our collective lived experience and learned expertise, we hope to illuminate the complexities of disease framings of chronic pain and explore potential avenues for improving chronic pain care to reduce stigma.

At the end of this session, participants will be able to:

- Identify ethical strengths and limitations for framing chronic pain as a disease or brain disease from empirical bioethics, critical disability studies, and lived experience perspectives.
- Describe historical examples of disease framings of conditions such as the brain disease model of addiction or genetic explanations of mental illness and the influence these framings have had on stigma.
- Provide evidence-informed recommendations to guide anti-stigma efforts in pain management.

Track 2 **Struggling to manage chronic pain? A workshop to support your clinical practice and enhance patient experiences.**

Chair: J. Burton

Speakers: A. Furlan, J. Burton, C. Beland

Location:

Chronic pain is a common, yet complex condition managed mainly in busy primary care settings. The complex issues that may surround an individual with chronic pain include



dynamic physical pains, progressing disability, mental health challenges, sleep disturbances and complications of long-term opioid therapy. Managing these problems in a family practice can be a daunting task for primary care providers in underserved communities, lacking support and resources which further compounds the suffering of patients. While national chronic pain guidelines advocate for multidisciplinary approaches, such programs remain largely confined to urban areas.

This symposium brings together three diverse speakers to discuss how chronic pain programs have the potential to significantly impact patient care when informed by patients with lived experience and a strong evidence base. First, Dr Andrea Furlan will present on ECHO Ontario Chronic Pain and Opioid Stewardship, a virtual education platform designed to build clinician capacity in managing chronic pain through the delivery of evidence-based didactics and real-life case presentations. Second, Jennifer Burton, Nurse Practitioner, will describe the biopsychosocial model of the VON Chronic Pain Program and how ECHO Chronic Pain informed program growth, leading to collaboration with primary care and improved patient experiences. Lastly, Cheryl Beland, a patient with lived experience of chronic pain, will tell her story. You will hear how Cheryl was supported by the VON Chronic Pain Program to identify her values and goals in order to mobilize an individualized pain management plan to improve pain and quality of life.

At the end of this session, participants will be able to:

- Recognize the benefits of adopting evidence from ECHO Chronic Pain and Opioid Stewardship into chronic pain management.
- Advocate for biopsychosocial chronic pain programs to support patients and primary care providers in managing chronic pain within community settings.
- Reflect on the experience of the patient with chronic pain and how comprehensive chronic pain programs can improve pain and quality of life.

Track 3

From Evidence to Practice: Nurse-Led Research on Acute Pain Management

Chair: M. Sawhney

Speakers: M. Sawhney, D. Dunwoody, J. Farwaha

Location:

This symposium includes insightful presentations from nurse researchers that address acute pain management from diverse perspectives, highlighting the importance of understanding pain in various surgical contexts.

The first presentation focuses on the issue of pain as the primary reason patients return to the emergency department or have a hospital admission after ambulatory surgery. The presentation will provide information on which patients are most at risk of emergency department visit or hospital admission. It also discusses strategies to enhance post-operative care and education, ultimately aiming to reduce unnecessary emergency visits.

The second presentation explores the complex relationship between pain and sedation following surgery. It examines how sedation protocols impact patient outcomes, including pain levels and recovery times, emphasizing the need for tailored approaches that balance pain relief with sedation to optimize patient care.



The final presentation specifically addresses pain following breast surgery in South Asian women, an equity-deserving group. This research highlights unique cultural and social factors that influence pain perception and management in this population. By shedding light on the disparities faced by these patients, the presentation advocates for more inclusive pain management strategies that consider cultural contexts.

Together, these presentations underscore the necessity of a comprehensive understanding of acute pain management that incorporates diverse experiences and backgrounds. Attendees will gain valuable insights into improving patient care, enhancing recovery, and promoting equity in pain management practices.

At the end of this session, participants will be able to:

- Gain insight into practice and policy changes that can improve post-operative pain management and optimize patient recovery.
- Critically evaluate research findings on post-surgical pain management, focusing on disparities and differences in pain experiences across various demographics.
- Describe actionable strategies that can be implemented into acute pain management practices, enhancing care for all patients.

Track 4

Embracing Diversity in Partnership: Engaging Equity-Deserving People with Lived Experience in Pain Research

Chair: R. Pillai Riddell

Speakers: V. Mohabir, A. Hood, J. Swidrovich

Location:

Researchers are becoming more aware of their ethical responsibility to engage people with lived experience (PWLE) or patient partners in pain research. Many funding bodies worldwide have developed national strategies and programs to promote partnerships with PWLE in research. Although this is a positive change, many patient partners remain largely homogenous with limited diversity in terms of race, ethnicity, gender, age, and geography. Global events in the 2020s, particularly the murder of George Floyd in the US and Joyce Echaquan in Canada, highlight the oppression racialized, Indigenous, gender-diverse, and Disabled people experience, creating an increased need for Equity, Diversity, and Inclusion (EDI) within health and research institutions. Often, with the best intentions, researchers have aimed to diversify the PWLE engaged in their work. Unfortunately, many PWLE have reported feeling tokenized and unsafe during engagement activities. There is a need to engage marginalized communities in pain research and practice, but a lack of guidance on how to ethically engage diverse communities. Our panel discussion will share our experience and practical advice for engaging diverse communities in research. Vina Mohabir (she/her), SickKids, will discuss her work engaging diverse youth with pain across Canada in digital health research. She also has lived experience with pain since adolescence and has been a patient partner in research since 2010. Dr. Anna Hood (she/her), University of Manchester, will share her work applying an anti-racism lens when engaging children and youth with sickle cell disease. Dr. Jaris Swidrovich (they/he), University of Toronto, will share their work engaging Queer and Indigenous Peoples in research and applying a decolonial perspective to engagement. The panel will be chaired by Dr. Rebecca Pillai-Ridell (she/her), York University, who brings a wealth of insight from her many roles



in health systems and years of experience engaging diverse communities in pain research.

At the end of this session, participants will be able to:

- Identify ethical strengths and limitations for framing chronic pain as a disease or brain disease from empirical bioethics, critical disability studies, and lived experience perspectives.
- Describe historical examples of disease framings of conditions such as the brain disease model of addiction or genetic explanations of mental illness and the influence these framings have had on stigma.
- Provide evidence-informed recommendations to guide anti-stigma efforts in pain management.

1545-1700h **Concurrent Session – Six: Practicum Program**

Chronic Pain Trials: Challenges, Controversies, and Cutting-Edge Solutions for the Future

Chair: K Ladha

Speakers: K. Ladha, B. Rosenbloom, K. Boerner

Location:

Clinical trials in chronic pain have been plagued by numerous shortcomings including heterogenous cohorts, small sample sizes and significant methodologic flaws which have limited their impact towards advancing the field. This has led some to question the value of evidence generation in chronic pain and whether clinical trials are simply just a waste of time and money. At the same time, there are several emerging therapies such as cannabis, psychedelics, pain reprocessing therapy and virtual reality which have generated excitement but arguably lack evidence for widespread adoption. This symposium at the Canadian Pain Society will delve into the complexities and challenges of clinical trials in chronic pain research, highlighting both pitfalls and innovative opportunities to advance the field specifically related to novel therapeutics, psychological interventions and virtual reality. Together, these presentations aim to provide a comprehensive overview of current issues and future directions in chronic pain research.

At the end of this session, participants will be able to:

- Recognize the common pitfalls in clinical trials related to chronic pain and their impact on evidence generation.
- Explore innovative clinical trial methodologies, including adaptive platform trials, and their potential to improve research outcomes.
- Discuss the application and challenges of psychological and technological interventions in chronic pain trials.

1700h **The Canadian Pain Society 2025 ASM Concludes**



The Canadian Pain Society has received an educational grant or in-kind support from the following exhibitors:

Sapphire

Chronic Pain
Centre of Excellence
for Canadian Veterans



Bronze



Institut de l'appareil
locomoteur et de l'arthrite
Institute of Musculoskeletal
Health and Arthritis



Not For Profit or In-Kind



Toronto Academic Pain Medicine Institute
Institut Universitaire de Médecine
de la Douleur de Toronto



All efforts will be in place to avoid any adjustments to our agenda, however due to circumstances out of our control, adjustments to timing, topics and presenters may occur without advance notice.
All timing for this event is Eastern Daylight Time

