

NETWORK NEWSLETTER

A CHRONIC PAIN NETWORK UPDATE



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SPOR

Putting Patients First 



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A message from the Scientific Director

Network updates from Dr. Norman Buckley



On October 28, 2004, at the instigation of the Honourable Senator Yves Morin, Senate approved the motion that the first week of November, in each and every year, throughout Canada be known as National Pain Awareness Week (NPAW). With the disbanding of the Canadian Pain Coalition in 2018, Pain BC took the lead on NPAW 2018 with its #LivingWithPain social media campaign.

The Chronic Pain Network supported NPAW 2018 with our social media campaign, featuring facts and figures about pain and pain research in Canada, including a piece (featured later in this article) about a day in the life of a person living with chronic pain.

The 2018 SPOR Summit was held in Ottawa November 13-15. This consisted of a half day pre-meeting of SPOR participants- network and SPOR SUPPORT unit leads- with CIHR leaders to update on the experience to date with SPOR. Chaired by Norm Rosenblum and Brian Rowe, there was a CIHR analysis of experience with Phase I of SPOR and discussion of how Phase II would roll out. The meeting concluded with a brief presentation on the plans for Summit 2020 to be an international event- with representatives from the INVOLVE program the UK and PCORI in the US.

The Summit itself began on Tuesday evening with the Marketplace during

which the new president of CIHR, Michael Strong, visited each and every booth and poster, challenging all of the participants to demonstrate the value of their work- very stimulating. This sense of challenge combined with commitment to the program continued into his opening remarks Wednesday- we must show impact upon not only the process of research but also the end goals of best care delivery, policy and health outcomes.

The meeting opening plenary by the creators of 'Sickboy podcast' was a compelling relation of the stories of real life individuals. CPN Indigenous Health Research Advisory Committee featuring Elder Margaret Lavallee and organized by Margot Latimer and John Sylliboy presented the Indigenous 'Two Eyed Seeing' perspective.

Takeaway from the meeting is that we must be sure to identify the ways in which we have had/will have impact upon care delivery and health outcomes.

The Role of Biomarkers in Pain Research

By: Dr. Jennifer Fazzari, PhD

The subjective nature of pain continues to make it a difficult clinical presentation to address. The equally subjective measures of pain status adds to the complexity of teasing out the contributing biological factors that can direct treatment strategies. From a clinical perspective, patient quality of life defines their pain burden and treatment experience and dictates whether a therapeutic intervention can be deemed a success. The ongoing effort to improve on the treatment strategy for pain is a coordinated effort, linking the clinical expertise of physicians, patient concerns and expectations with a robust scientific investigation into its underlying biological mechanisms. Using the basic sciences to explain clinical phenomena will hopefully lead to better

diagnosis and the development of novel therapeutics based on quantifiable factors that classify various pain states. From a basic scientific perspective, pain is a physiological process marked by characteristic molecular changes in response to harmful stimuli intended to evade potential injury. But when and how does this normal physiological process go awry and lead to the pathological presentations seen in the pain clinic? Identifying the factors associated with nociception and correlating these factors to pain experiences may help to answer this question.

The IASP definition of pain as both a sensory and emotional experience differentiates it from the nociceptive processes that catalyze the perception

of pain. However, identifying the factors promoting nociception and correlating changes in such factors with clinical presentations would be a valuable diagnostic tool. It can be used not only to identify the differences between acute and chronic pain, but also account for patient heterogeneity and identify patient subgroups and matching treatments based on quantifiable changes in the biological factors that classify these patient populations. With reproducibility in the success of these factors predicting various clinical presentations they can be qualified as biological markers (biomarker) of a specific pain state. A biomarker is a quantifiable factor that is indicative of a biological process and can predict clinical outcomes. Often used to characterize pathological changes, biomarkers have

Network Profile: Meet Delane Linkiewich

A Day in the Life of a University Student and Patient Perspective Partner



Patient Perspective Partner Delane Linkiewich has lived with chronic pain since the age of 12, following a car accident.

What is it like to live with chronic pain? While many of us may experience the occasional strained muscle or pinched nerve, chronic pain is a reality for 20% of Canadians.

Delane Linkiewich is one of those Canadians. Though she is only 22 years old, Delane has lived with chronic pain for the last ten years as the result of a car accident on New Year's Eve in 2008. A car ran a red light and t-boned the car Delane and her family were travelling in. Because of the accident, her whole family now lives with chronic pain.

Delane's chronic pain primarily affects her neck, back and shoulders. At this point in her life, she describes her pain as manageable, but manageable in the sense that, though it is present every day and in all of her actions, she has learned how to adapt her lifestyle so that her pain does not flare up. In spite of her chronic illness, Delane is pursuing a degree in psychology at the University of Alberta. She's dreamed of being a clinical psychologist since high school and would like to specialize in pediatric chronic pain.

So what is it like to live with chronic pain? To help create awareness for National

Pain Awareness Week, we asked Delane to walk us through a typical day in her life.

6 a.m.: Delane wakes up for class at 6 am and does a daily body scan and stretches. Sometimes sleeping the wrong way can cause her pain to flare up, so she stretches and does a body scan to see where her problem areas for the day are. Sometimes her back will hurt more than her shoulders, and sometimes her shoulders will hurt more than her back.

9:30 a.m.: Delane starts class and normally sits at the back of the class so that if she has to get up and stretch she can do so without interrupting her classmates. The duration of class is full of fidgeting and moving as sitting in a chair for more than 30 minutes can start to take a toll on her back.

12 p.m.: Lunch time! Delane will try her best to find somewhere comfortable to sit and eat lunch. By this time of day, the "normal" pain usually starts to get worse, as sitting in desks or lecture seats all morning doesn't help her pain. After lunch it's either off to the research lab or off to class, depending on the day.

4 p.m.: End of the school day for Delane! Shoulders and back are pretty sore from carrying around her school bag, but there is not much she can do about it. She will usually sit and watch TV before dinner, which for most people isn't a struggle. However, for Delane, watching TV for more than 30 minutes can cause her neck pain to flare up. There is a lot of readjusting so that her pain does not get worse. Helping out around the house also proves to be difficult, as things like vacuuming, washing dishes and doing laundry can cause her pain to flare up.

6 p.m.: After dinner, Delane usually focuses on homework assignments or studying. This always proves to be difficult as it requires looking down at notes or her computer for extended periods of time. She has learned to take frequent breaks to stretch or walk around, but it still usually

causes pretty bad neck pain from looking down for so long, as well as pretty bad back pain from sitting.

A side note: Exam season is the worst time of the year for Delane because her pain flares up causing extreme pain. Exam season is usually accompanied by multiple heating pads; multiple physiotherapy, acupuncture and massage appointments; pain medication and a lack of focus. Pain flare-ups make it extremely difficult to focus, as the pain can become excruciating. There are times when her neck hurts so badly that it is difficult to support the weight of her head. There are a lot of adaptations that she has to make during this time. For instance, she is unable to study at school as there are no standing desks or adjustable tables. At home, she uses a standing desk and a hospital table that she is able to adjust to tilt back and forth so that it can be at eye-level. This reduces the strain on her neck. Days spent studying are accompanied by multiple breaks which take away from the time she could be studying, but without these breaks, she would not be able to study at all.

10 p.m.: Getting ready for bed is the best and worst time of the day. It's the best because after a long day, Delane can finally relax and rest. It is the worst, because she never knows what she will wake up feeling like the next day. Maybe something she did during the day will cause her pain to flare up the next day. Should she have lifted that box of groceries out of the car? Should she have taken more breaks when she studied? Should she have done something a little bit differently during the day that may cause her to have to take the next day off? Only tomorrow morning will tell, but that is what it is like living with chronic pain. Not knowing how bad the pain will be the next day.

Thank you, Delane, for sharing your story.

Continued: The Role of Biomarkers in Pain Research



The Chronic Pain Network will host the first Canadian Consensus Conference on Biomarkers in Pain Research in the new year.

been widely used to monitor disease progression and direct treatment strategies for many medical conditions. Pain, however, does not have a robust set of markers that can quantify the patient pain experience. Endeavours are underway to investigate potential markers associated with various pain states, however they have yet to result in the development of novel, targeted treatments, stressing the need for more collaborative research efforts that include the input of the pain patient, pain physician and pain scientist.

In addition to a diagnostic tool, biomarkers for pain may also prove to be helpful for patients that cannot adequately express their pain and predict a patient's response to pharmacological interventions. Biomarker analysis may also aid in early diagnosis, allowing for early intervention that may limit the progression of chronic pain. It must be stressed that these potential markers of pain are not intended to replace the patient's description of their pain experience, nor would they be required to justify this experience. However, they can

be used to enhance diagnosis and hone treatment strategies.

Coordinating the efforts of the Chronic Pain Network to establish a collaborative cohort of biological samples amongst the various research groups is a step forward in our contribution to improving our strategy to treat pain while preserving the integrity of the patient and reducing redundancy in patient sampling.

In February, the Chronic Pain Network will host the first Canadian Consensus Conference on Biomarkers in Pain Research, to work towards a Canadian consensus on the most important biomarkers to pursue in pain research and to give consideration for planning a pain research biobank.

The conference will help further the vision of the chronic pain network, to change the way pain is managed in Canada through improved assessment, prevention and provision of timely and optimal pain management.

Coming Events

Who: Norwegian Pain Society
What: 2019 National Pain Conference
When: January 3 - 4, 2019
Where: Oslo, Norway

This is the annual Norwegian pain conference to promote evidence based pain treatment and pain research.

www.norsksmerteforening.no/

Who: London Pain Forum
What: Advances in Pain Medicine Winter Symposium
When: January 20 - 25, 2019
Where: Tignes Le Lac, France

The "Advances in Pain Medicine" International Winter Symposium will be returning for the seventh time to the Hotel Village Montana, Tignes Le Lac on 20-25 January 2019 with a six day programme of lectures and expert discussions in a breath-taking location.

www.winterpainsymposium.com/

Who: Chronic Pain Network
What: 2019 Annual Meeting
When: April 2, 2019
Where: Toronto, Ontario
Details to come.

Who: Canadian Pain Society
What: 2019 Annual Scientific Meeting
When: April 2-5, 2019
Where: Toronto, Ontario

Visit <http://canadianpainsociety.ca> for additional details.

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