

Education and training

B.Sc	Université du Québec à Montréal (UQAM), Biology , speciality in biotechnology and molecular biology, 2003-2006
M.Sc	Université de Montréal, supervisor: Karim Maghni, Molecular Biology , Speciality in asthma and respiratory health, 2006-2008
Ph.D	Université de Sherbrooke, supervisor: Philippe Sarret, Physiology , speciality in pain neurophysiology, 2008-2013 Université de Sherbrooke, Ph.D enrichment research skill microprogram, 2008-2012
Postdoc	Northwestern University, supervisor: Vania Apkarian, Neurophysiology , Speciality in pain neuroimaging, 2013-

Research publications

- Demeule M., Beaudet N., Régina A., Besserer-Offroy E., Murza A., **Tétreault P.**, Belleville K., Ché C., Larocque A., Thiot C, Béliveau R, Longpré J-M., Marsault É., Leduc R., Lachowicz J.E., Gonias S.L., Castaigne J-P. and Sarret P. *Creation of a Brain-Penetrant Peptide-Neurotensin Conjugate with Antinociceptive Properties*, Journal of Clinical Investigation, 2014, accepted for publication.
- **Tétreault P.**, Beaudet N , Perron A , Belleville K , René A , Cavelier F , Martinez J , Stroh T , Jacobi AM , Rose SD , Behlke MA , Sarret P. *Spinal NTS2 receptor activation reverses signs of neuropathic pain*, FASEB journal, 2013, 27 (9), pp. 3741-3752
- **Tétreault P.**, Dansereau M-A., Doré-Savard L., Beaudet N., Sarret P. *Weight bearing evaluation in inflammatory, neuropathic and cancer chronic pain in freely moving rats*, Physiology and behavior. 2011, 104 (3), pp. 495-502.
- **Tétreault P.**, Beaudet N., Sarret P. *RNA interference: a new approach to treat pain* (short communication), Annals of the 1st French pain symposia, official satellite symposia of the 13th congress of the International Association for the Study of Pain (IASP). Douleur & Analgésie. 2011. 24:S30-S42
- Sarret P., Dore-Savard L., **Tétreault P.**, Begin-Lavallee V., Dansereau M-A., Beaudet N. (2011) *Using RNA interference to downregulate G protein-coupled receptors*. Chapter 19, Methods for the discovery and characterization of G protein-coupled receptors. Editors Wolfgang Walz and Craig W. Stevens. In neuromethods volumes published by Springer-Verlag. DOI:10.1007/978-1-61779-179-6_19.
- Sarret P., Dore-Savard L., **Tétreault P.**, Begin-Lavallee V., Beaudet N. (2010). *Application of Dicer-Substrate siRNA in pain research*. Chapter 7, RNA technologies and their applications. Editors Volker A. Erdmann and Jan Barciszewski. Springer-Verlag. 161-190, DOI: 10.1007/978-3-642-12168-5_7.

Extramural Funding

- September 2009 to August 2012, Ph.D. national scholarship, Natural Sciences and Engineering Research Council of Canada (NSERC), 63000\$.
- September 2008 to August 2011, Ph.D. provincial scholarship, Fond de la recherche en santé du Québec (FRSQ, Québec health research funds), 60000\$ (declined in 2009).
- August 2006 to July 2008, M.Sc. provincial scholarship, Fond de la recherche en santé du Québec (FRSQ, Québec health research funds), 45000\$.

Pascal Tétreault

- May 2005 to August 2005, undergraduate summer internship, Center for Asthma in the Workplace, 4500\$.

Recognition (Awards)

- December 2012, oral presentation award, Sherbrooke's Neuroscience Center
- August 2012, international travel award from the QPRN to assist to the Society For Neuroscience (SFN) meeting in New Orleans, USA
- April 2012, international travel award from the International Association for the Study of Pain (IASP) to assist to the IASP meeting in Milan, Italy
- April 2012, Dean's mention for best 10% of Medical faculty Ph.D students
- March 2012, international travel award of the Québec Pain Research Network (QPRN) to assist to the IASP meeting in Milan in august 2012
- November 2011, oral presentation award, Institute of Pharmacology of the Université de Sherbrooke
- November 2011, international travel award from the QPRN to assist to the Society For Neuroscience (SFN) meeting in Washington
- October 2011, QPRN training grant as a visiting fellow at the Integrated DNA Technologies research facility
- April 2011, Dean's mention for best 10% of Medical faculty Ph.D students
- November 2010, international travel award from the QPRN to assist to the SFN meeting in San Diego, USA
- November 2010, poster presentation award, Institute of Pharmacology of the Université de Sherbrooke
- October 2010, poster presentation award, Quebec Network for Junior Pain Investigators
- August 2010, international travel award from the IASP to assist the IASP meeting in Montreal
- March 2010, poster presentation award, research day of the Faculty of medicine and health sciences of the Université de Sherbrooke
- October 2009, international travel award of the QPRN to assist to the SFN meeting in Chicago
- October 2008, Ph.D scholarship, research advising committee, Université de Sherbrooke
- May 2008, best oral presentation award, University research group on drugs (URGD) (Université de Montréal)

Educational activities

Teaching

- Panelist for Integrated DNA Technology in vivo RNAi webinar (July 2012)
- Lecturer for a course in the physiotherapy and ergotherapy undergraduate program (RDP 120, biological sciences) (October 2012)
- Lecturer for a course in the pain management graduate microprogram (GDL 720, pain neurophysiology) (October 2011, October 2012)
- Workshop animator for the organism "Lets talk sciences"; scientific learning for elementary school kids (since march 2011)

- Judge for a national scientific competition «Expo-Science» for the development of scientific apprentices (march/april 2011)
- Mentor for the brain awareness week (pilot project in Sherbrooke) (april 2011)
- Workshop supervisor for Expo-science provincial finalists (april 2011)
- Internship supervisor for undergraduate students (summer 2011 and 2012, winter 2011, summer 2010)
- Workshop animator for multiple sclerosis patient's association (march 2010)

Other Professional accomplishments

- Co-organizer of the 2nd TEDxUdeS event, april 2012 (www.tedxudes.com)
- Co-organizer of the symposium “And if we were able to manage pain!”, official symposium of the 79th annual congress of the ACFAS (may 2011)
- Co-organizer of the CNS 2nd scientific day (December 2010)
- Co-organizer of the 1st French pain symposium, official satellite symposia of the 13th congress of the IASP (august 2010)
- Selected trainee for a strategic initiative in health research from the Canadian institutes of health research (CIHR). Strategic training program in pain: molecules to community (Pain M2C) (May 2010, Cornwall, Ontario, Canada)
- Co-organizer of the 1st TEDxUdeS event, may 2010 (pages.usherbrooke.ca/tedxudes/TEDxUdeS/TEDxUdeS_2010.html)
- Selected trainee for a strategic initiative in health research from the Canadian institutes of health research (CIHR). Strategic training program in pain: molecules to community (Pain M2C) (May 2009, Québec city, Québec, Canada)
- Communications vice-president for the Sherbrooke Faculty of Medicine graduate student association (RECMUS) (September 2008 to September 2010)
- Member of the graduate studies committee from Université de Sherbrooke faculty of medicine (September 2008 to September 2010)

Scientific activities

Selected poster presentation as first author

- November 2013, *Chronic neuropathic pain provokes adaptive changes in the response of endogenous pain inhibition in rats*. San Diego, California, USA. 43rd SFN annual meeting.
- October 2012, *Neurotensin receptor-based therapy: Achieving analgesia without opioid-related side effects*. New Orleans, Louisiana, USA. 42th SFN annual meeting.
- October 2012, *Spinal NTS2 agonists reverses signs of neuropathic pain*. New Orleans, Louisiana, USA. 42th SFN annual meeting.
- August 2012, *Pain relief devoid of opioid side effects following central action of a new neurotensin analog*. Milan, Italia. 14th International IASP congress.
- November 2010, *Reduced nerve injury-induced neuropathic pain in NTS2 agonist treated rats*. San Diego, California, USA. 40th SFN annual meeting.
- October 2010, *From rodent pain assessment to clinical reality: a gap that could be overpassed?* Montréal, Québec, Canada. 4th annual scientific day of the Quebec Network of Junior pain Investigator (QNJPI).

- August 2010, *Using three rodent chronic pain models to assess dynamic weight bearing efficacy*. Montréal, Québec, Canada. 13th International IASP congress.
- October 2009, *NTS2 receptor activation as an innovative target for the treatment of neuropathic pain*. Chicago, Illinois, USA. 39th SFN annual meeting.
- October 2009, *Functional inhibition of NTS2 receptors by Dicer-substrate siRNA modulates tonic pain perception*. Chicago, Illinois, USA. 39th SFN annual meeting.
- March 2009, *New RNA interference approach to demonstrate the antinociceptive role of NTS2 receptor*. Sherbrooke, Québec, Canada. 38th annual scientific day of the Faculty of medicine of the Université de Sherbrooke.
- January 2009, *Dicer substrate siRNA mediated selective knockdown of NTS2 receptors reverses Neurotensin-induced analgesia in rats*. Montréal, Québec, Canada, 13th annual McGill pain day.

Selected poster as co-author

- November 2013, *Deciphering the NTS1 receptor signalling pathways leading to analgesia and hypothermia*. San Diego, California, USA. 43rd SFN annual meeting
- October 2012, *Relationship between endogenous pain inhibition in patients with chronic pain and neuropeptide concentrations in cerebrospinal fluid and plasma*. New Orleans, Louisiana, USA. 42th SFN annual meeting
- August 2012, *Quantification of neuropeptides in rodent and human cerebrospinal fluid: Use of mass spectrometry to identify biomarkers in pain research*. Milan, Italia. 14th International IASP congress.
- November 2011, *Synthesis of neurotensin analogues as potent antinociceptive agents*. Barcelona, Spain. 3rd West Mediterranean Chemistry Meeting.

Selected oral presentation as first author

- June 2012. *Neurotensin receptor-based therapy: Achieving analgesia without opioid-related side effects*. Selected speaker, Sherbrooke's Neuroscience Center 4th scientific day, Sherbrooke, Quebec, Canada.
- November 2011. *Dynamic weight bearing : from characterization to drug screening*, Washington, DC, USA. Selected speaker, 41st annual meeting of the SFN.
- November 2011, *Dynamic weight bearing : from characterization to drug screening*, Sherbrooke, Québec, Canada. Selected speaker. Scientific day, Institute of Pharmacology of the Université de Sherbrooke.
- April 2011. *Pain research: From basic science to clinical application*, Coralville, Iowa, USA. Invited speaker at Integrated DNA Technologies Inc.
- December 2010. *Bridging the gap between animal pain assessment and clinical reality*. Sherbrooke, Québec, Canada. Selected speaker. Sherbrooke's Neuroscience Center (CNS) 2nd scientific day.
- October 2010. *Treating pain using RNA interference*. Sherbrooke, Québec, Canada. Selected speaker. Scientific university meeting between Montpellier and Sherbrooke Universities.
- October 2010. *Convolutional Networks Can Learn to Generate Affinity Graphs for Image Segmentation*. Sherbrooke, Québec, Canada. Selected speaker at the Neuroscience Center journal club.
- August 2010, *RNA interference: a new approach to treat pain*. Sherbrooke, Québec, Canada. Selected speaker. 1st French pain symposium, official symposium of the 13th congress of the IASP.

Pascal Tétreault

- June 2009. *Functional inhibition of NTS2 receptors by Dicer-substrate siRNA modulates tonic pain perception*. Bécancour, Québec, Canada. Selected speaker. Network for oral and bone health research scientific day.
- June 2009. *Functional inhibition of NTS2 receptors by Dicer-substrate siRNA modulates tonic pain perception*. Montréal, Québec Canada. Selected speaker. 3rd QNJPI annual conference.