Faculty of Dentistry, McGill University  
CERC 2 – Clinical Pain Research Position

Research Presentation - Friday, February 9, 2018  
9:45 in James P. Lund Lecture Room, Rm 547

“Brain models for predictions and identification of biotypes in chronic pain patients”

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Bio sketch: Dr. Vachon-Presseau completed his PhD under the supervision of Pierre Rainville (Université de Montréal, Montréal, Canada) where he studied how stress hormones impact the brain of chronic pain patients. Etienne then conducted a post-doctoral fellowship under the supervision of Vania Apkarian (Northwestern University, Chicago, US) where he studied the brain properties predisposing the development of chronic pain and the brain and psychological determinants of placebo pills response in randomized controlled trial.

Presentation summary: Dr. Vachon-Presseau’s primary research goals have been to obtain a better understanding of the brain mechanisms involved in chronic pain patients using multimodal neuroimaging. Recently, Etienne’s expertise has been oriented towards using prospective longitudinal brain imaging studies to identify the determinants of chronic pain. Today, Dr. Vachon-Presseau will discuss the promises and pitfalls of applying machine learning to brain features in the perspective of developing predictive models. Moreover, Dr. Vachon-Presseau will discuss the importance of large data sets combining brain imaging, genetic, psychological, and environmental factors to develop new therapies and prevention strategies.