

## Manitoba Neuroscience Network

2014/2015 Seminar & Visiting Speaker Series

## Friday, May 29th, 2015 | 9:00 am



Dr. Gilbert Kirouac B.A., M.Sc., Ph.D. Professor - Departments of Oral Biology and Psychiatry **Colleges of Dentistry and Medicine** Faculty of Health Sciences, University of Manitoba

## Topic: The paraventricular nucleus of the midline thalamus and emotions

Location: PX236/238 PsychHealth Bldg.

Brief Biosketch: Dr. Kirouac received a B.A. in Psychology and M.Sc. and Ph.D. (Anatomy) at the University of Manitoba. This was followed by postdoctoral training in the Departments of Physiology at the University of Western Ontario and the University of Calgary. Prior to joining the University of Manitoba in 2006, Dr. Kirouac was an Associate Professor at Memorial University of Newfoundland.

Our focus is in the area of behavioral neurosciences as it relates to emotions and motivation. The paraventricular nucleus of the midline thalamus (PVT) is of special interest because it is connected to areas of the brain which play a key role in the regulation of emotions. The PVT contains a high concentration of neuropeptides linked to arousal and stress. Consequently, we are interested in determining how these neuropeptides act at the PVT to influence emotional behavior. Our laboratory has established a role for the PVT in the regulation of fear and anxiety. For example, recent research in our laboratory showed that activation of the PVT with peptides called orexins produces negative emotions (fear and anxiety) in rats. We also showed that blocking of orexin receptors in the PVT attenuates the anxiety produced by previously exposing rats to an intense stressor (animal model of PTSD). Ongoing research is directed at providing more evidence for a PVT mediated emotional arousal system, discovery of the neural mechanism involved, and determining the role of the orexins and the PVT in conditions like generalized anxiety and PTSD.

> For more information, contact the MNN Office at (T) 235.3939 or email: mnn@sbrc.ca





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