## Manitoba Neuroscience Network Seminar Series

## Friday, February 28th, 2014 | 9:00 am



## Dr. V. Wee Yong

Professor, Canada Research Chair in Nueroimmunology Hotchkiss Brain Institute and Department of Clinical Neurosciences and Oncology University of Calgary **Topic:** Overcoming inhibitors in the lesion microenvironment for CNS regeneration.

Location: PX236/238 PsychHealth Bldg.

**Biosketch:** Dr. V. Wee Yong is a Professor at the Hotchkiss Brain Institute and the Departments of Clinical Neurosciences and Oncology at The University of Calgary. He co-directs the Multiple Sclerosis (MS) Program of the Hotchkiss Brain Institute, providing the basic science leadership, and he holds the Canada Research Chair in Neuroimmunology. Dr. Yong received his Ph.D. from the University of British Columbia, Vancouver, and started his faculty appointment at the Montreal Neurological Institute, McGill University, in 1989. He located to Calgary in 1996. Dr. Yong's research interests lie in the area of neuroimmunology, neuroprotection and CNS regeneration, and his projects have been guided by MS, spinal cord injury and malignant gliomas. Dr. Yong has published 230 peer-reviewed manuscripts and his research has been translated into clinical trials in MS and spinal cord injury. His work has been cited over 12,000 times by other authors in scientific publications. In 2003, Dr. Yong was awarded the Queen's Golden Jubilee Year Medallion for volunteer activities on behalf of the MS Society of Canada. In 2010, Dr. Yong is the immediate past chair of the Medical Advisory Committee of the MS Society of Canada, he directs the Alberta endMS Regional Research and Training Center, and he is on the editorial board of 7 international journals. In 2012, Dr. Yong was elected by an international community to be the Vice President of the International Society of Neuroimmunology; he will become its President in 2014.

**Brief description of research interests:** Neuroimmunology is the study of inflammation in the nervous system. Virtually all neurological disorders have inflammatory components, and these include diseases traditionally associated with overt inflammation, such as multiple sclerosis (MS), and those previously thought to be purely degenerative, including Alzheimer's disease. Neuroinflammation originates from the trafficking of several leukocyte subsets into the nervous system and through the production of immune molecules by neural cells themselves. The interaction between leukocytes and neural cells further promotes neuroinflammation and injury. In recent years, reparative properties of neuroinflammation have been appreciated, so that the balance between beneficial and detrimental neuroinflammation is a crucial determinant of outcome. My research projects have been guided by 3 diseases of the central nervous system (CNS): MS, spinal cord injury (SCI) and brain tumors (malignant gliomas). MS and SCI provide my research program with diseases of chronic and acute neuroinflammation, respectively. In contrast, malignant gliomas present a disease of immunosuppression, whereby the cancer cells neutralize the activity of leukocytes that infiltrate into these tumors. My research has been translated into clinical trials in MS and in spinal cord injury. Collectively, my studies of neuroimmunology are aimed at understanding, controlling and tipping the balance of neuroinflammation towards one of neuroprotection and regeneration from CNS insults.

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

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