



## Yu Tian Wang

**Position:**

Professor  
Chair in Stroke Research, HSFBC & Yukon

**Division:**

Neurology

**Vision Statement:**

We hope that by studying the molecular mechanisms underlying brain functions and pathogenesis of psychiatric and neurodegenerative disorders, we can develop effective therapeutic strategies to stop or slow down the progression of these disorders

**Research Interests:**

GABA-A Receptor, electrophysiology, glutamate receptor, receptor trafficking, synaptic plasticity, Neurodegeneration

**Research Summary:**

The long-standing research interest in Dr. Yu Tian Wang's laboratory has been on understanding the fundamental mechanisms controlling synaptic transmission among neurons in the brain, and the dysfunction of these mechanisms in the pathogenesis of brain disorders such as epilepsy, stroke, and learning deficits. In particular, over the last year, Dr. Wang and colleagues have made significant progresses on elucidating molecular mechanisms underlying the formation of learning and memory (PNAS 2010; Nature Neurosci. 2010; NatureRev. Neurosci. 2010) and the pathophysiology of brain injuries following stroke (Nature Medicine, 2009; Nature Medicine 2010; Cell 2010; Nature Neuroscience 2014). These studies have led to the identification of a number of novel targets upon which new therapeutics may be developed for reducing brain injuries following stroke and preventing or slowing down the process of memory loss in brain disorders such as dementia and AD.