



***Inhibitory mechanisms and circuits in the hippocampus***

**Dr. Simon Chamberland, NYU Neuroscience Institute**

**Monday January 16<sup>th</sup> 2023**

**2:30-3:30p**

**Room 3708 ECLA**

**Abstract:** Dr. Chamberland will present his findings on inhibitory circuits in health and disease. He will show that the firing of hippocampal fast-spiking interneurons is persistently interrupted by brief synaptic inhibition, resulting in a prolonged disinhibitory window. Combined genetic and functional dissection of the hippocampal GABAergic interneurons architecture revealed that the interruption of firing is mediated by a previously unknown subpopulation of interneurons. Finally, he will show how the anti-seizure molecule cannabidiol acts on these circuits to restore physiological activity.

Dr. Chamberland is a candidate for the tenure-track Neuroscience faculty position in Biomedical Sciences.