

## **Department of Anatomy and Cell Biology**

Hosted by the McGill Anatomy & Cell Biology Students' Society (MAGSS)

Understanding the molecular and cellular basis of upper motor neuron vulnerability in ALS



## **Dr. Pembe Hande Ozdinler**

Associate Professor of Neurology Feinberg School of Medicine Northwestern University

ALS is one of the most complex neurodegenerative diseases, with the involvement of both cortical and spinal components of the motor neuron circuitry. Corticospinal motor neurons located in layer V of the motor cortex play a significant role for the initiation and modulation of movement, and their degeneration is a hallmark for ALS pathology. Recent evidence reveal that they become vulnerable very early in the disease and that they offer to be a good cellular target for therapeutic interventions. Our lab has developed novel tools and model systems to investigate the cellular and molecular mechanisms responsible for their neuronal degeneration. In light of these findings, we are also developing drug discovery and gene delivery approaches to improve their health and enable long-term treatment strategies for ALS.

## Wednesday, October 11, 2017 11:30 am

## Strathcona Anatomy Building 3640 University Street Room 2/36

www.mcgill.ca/anatomy/seminars anatomysec.med@mcgill.ca