

MRI biomarkers in amyotrophic lateral sclerosis

Sanjay Kalra, MD

**Associate Professor
Medicine (Neurology) and Biomedical Engineering
University of Alberta**

**Friday 24 February 2012
HSC O1500
13h30-14h30**

Amyotrophic lateral sclerosis (ALS) is classified as a motor neuron disease because of the relatively selective involvement of motor neurons, with degeneration of upper motor neurons in the motor cortex and of lower motor neurons in the brainstem and spinal cord. In the cortex, neuronal atrophy, loss and inclusions are accompanied by white matter tract degeneration and astrocytic gliosis. Degeneration is most severe in the motor cortex and is variably present to a lesser extent outside this region. This talk will review how these pathological features are amenable to quantitation by a number of advanced MR techniques.

