



Jewish General Hospital  
Lady Davis Institute for Medical Research



***"Exploring human brain and spinal cord microstructure  
with quantitative MRI and histology"***

**Cornelia Laule, PhD**

Vice Chair, Research / Radiology &  
Associate Director, Education / ICORD  
University of British Columbia  
Vancouver, BC

**Abstract**

Advanced magnetic resonance imaging (MRI) techniques in combination with histological staining can provide information about central nervous system tissue microstructure that is not available through conventional MRI methods. This presentation will provide an overview of MRI-histological validation work in human spinal cord injury, as well as a summary of in vivo myelin water imaging findings in a variety of neurological applications including multiple sclerosis, stroke, concussion, reading ability and schizophrenia.