



# Neuroscience Lecture Series

## Spring 2013



## Stress Programming: How Experience Shapes Brain Function and Disease

**Dr. Gerlinde Metz**

Department of Neuroscience  
University of Lethbridge



**Abstract:** Stress and stress hormones can significantly influence movement and motor recovery following brain injury. Our recent findings suggest that perinatal programming by maternal stress may influence the capacity to recover from brain injury in adulthood. Furthermore, the effects of stress can accumulate across the lifespan and exaggerate neurological disability in older subjects. More generally, new data suggest that the risk of neurological disease may be programmed by experience of previous generations. Thus, stressful experiences may induce potentially heritable changes that influence the risk of neurological and psychiatric disorders in future generations.

**Monday, April 15<sup>th</sup> at 3 p.m.**  
**Morris Library Auditorium**

**Refreshments served following the lecture**  
**Open to the Public**