



Département de psychiatrie  
Centre de neurosciences psychiatriques  
Site de Cery  
CH-1008 Prilly - Lausanne

## Centre de Neurosciences Psychiatriques

# CNP SEMINAR

## ANNOUNCEMENT

**Friday, March 1, 2013, 11:15**

### **“Stress Programming: How Experience Shapes Brain Function and Disease”**

#### **Prof. Dr. Gerlinde A. Metz**

Canadian Centre for Behavioural Neuroscience  
University of Lethbridge  
Alberta, Canada

*Invited by Fulvio Magara  
(Fulvio.Magara@chuv.ch)*

**Salle Hirondelle, Hôpital Psychiatrique de Cery  
Site de Cery, CH-1008 Prilly-Lausanne**

Stress and stress hormones are significant influences on 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 may accumulate across the lifespan and exaggerate neurological disability in older age. We will also discuss new data suggesting that the risk of neurological disease may be programmed by experience of previous generations. Thus, stressful experiences may induce potentially heritable changes to influence the risk of neurological and psychiatric disorders in future generations.

Dr Metz will give a second talk, at 14:00, entitled **Neurological Testing in Rodent Models**, in the framework of the course “Measuring Behavior” for the Lemanic Neuroscience Doctoral School.

#### **Recent publications:**

1. Zucchi FCR, Yao Y, Ward ID, Ilnytskyy Y, Olson DM, Benzies K, Kovalchuk I, Kovalchuk O, **Metz GA** (in press) Maternal stress induces epigenetic signatures of psychiatric and neurological diseases in the offspring. PLoS ONE
2. Zucchi FCR, Yao Y, **Metz GA** (2012) The secret language of destiny: stress imprinting and transgenerational origins of disease. *Frontiers in Genetics* 3:96. doi: 10.3389/fgene.2012.00096.