



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

Centre de Neurosciences Psychiatriques

CNP SEMINAR

ANNOUNCEMENT

Thursday, August 20, 2015, 1:00 p.m.

"A NMNAT2 :HSP90 Complex Mediates Proteostasis in Proteinopathies"

Prof. Hui-Chen Lu

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Invited by Kim Do Cuénod
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Site de Cery, CH-1008 Prilly-Lausanne**

"Proper brain function requires an active maintenance program to sustain neuronal health. Environmental stressors detrimentally impact the nervous system, predisposing it to neuronal dysfunction and degeneration if neuroprotective mechanisms are weakened. Recent studies by others and us revealed that NMNAT2 (nicotinamide mononucleotide adenylyl transferase 2) is a neuroprotective protein that is central to maintain neuronal integrity and facilitate proper neural function throughout life. NMNAT2 abundance is significantly reduced in Alzheimer's Disease (AD) brains. Increasing *Nmnat2* expression in neurodegenerative animal models reduced neurodegeneration. We hope to elucidate the mechanisms underlying NMNAT2's neuroprotection and how NMNAT2 expression is down-regulated in pathological conditions. In addition, we hope to develop NMNAT2-specific therapies to prevent or reduce neurodegeneration." (<http://psych.indiana.edu/faculty/hclu.php>)

Selected Publications:

1. Cecilia Ljungberg, et al. CREB-activity and *nmnat2* transcription are down-regulated prior to neurodegeneration, while NMNAT2 over-expression is neuroprotective, in a mouse model of human tauopathy. *Human Molecular Genetics*, 2012, Vol. 21, No. 2 251–267
2. Yousuf O. Ali et al. NMNATs, evolutionarily conserved neuronal maintenance factors. *Trends in Neurosciences*, November 2013, Vol. 36, No. 11