

Jeudi 6 mars à 10h

## ***Serotonin, genetics, and cognitive control.***

Pr. Nils Inge Landro (University of Oslo, Norvège)

Invitants : Joël Billieux et le laboratoire de psychopathologie expérimentale (LEP)

Serotonin neurotransmission is related to both mood and cognitive control. Temporary perturbations can change how much serotonin is available and thus have transient effects on behavior. Acute tryptophan depletion is one such procedure by which level of serotonin is lowered experimentally. Another approach is to study the effects on behavior of naturally occurring variations in serotonin function based on genetics. The gene that codes for the serotonin transporter is particularly relevant. A relatively common polymorphism (5-HTTLPR) in the promoter region of the human 5-HTT gene (SLCA4) results in 2 common alleles or variants. The short allele is associated with a nearly 50% reduction in 5-HTT availability, as compared to the long variant. The main topic of the talk is to give an overview of a series of studies on how experimentally induced and naturally occurring variations in serotonin neurotransmission influences cognitive control in healthy subjects.