

NEUROIMAGING-GENETICS DATA ANALYSIS WORKSHOP

Amphithéâtre Institut Cerveau Moelle

Mercredi 30 novembre 2011

9:00 **Welcome**

Session 1 : Examples and on-going Studies

9:20 The IMAGEN study: reinforcement-related behaviour in normal brain function and psychopathology – **G. Schuhmann**

10:00 Use of neuroimaging to investigate the genetic basis of human diseases – **G.Tan**

10:40 Coffee break

Session 2 : Network models for the statistical analysis of neuroimaging-genetic data

11:00 Deciphering network structure via stochastic block model – **S. Robin**

11:30 Inference of Sparse Gaussian graphical models with latent structure – **C. Charbonnier**

12:00 **Lunch Break**

Session 3 : Current developments on genetics, neuroimaging and methods

13:20 Overview of NeuroImaging phenotypes – **Roberto Toro,**

14:00 Modelling networks involved in tumor progression – **Emmanuel Barillot**

14:40 **Coffee break**

Session 4 : Methods for the statistical analysis of neuroimaging-genetic data

15:00 Sparse regression models to detect gene effects in GWA studies of brain images – **G. Montana**

15:30 Multivariate modeling in neuroimaging genetics - **C. Beckmann**

16:00 Bridging the gap between imaging and genetics : A multivariate approach based on feature selection and sparse Partial Least Squares - **E Duchesnay**

Round table:

16 :30 Identification of the modeling and computational bottlenecks for sensitive neuroimaging/genetics data analysis – **All speakers, animated by H. Benali** –

17 :30 Concluding remarks by **A. Brice**

17:45 Cocktail