## Statistical Parametric Mapping Short Course 2011 Covering SPM8 for fMRI, MRI/VBM and PET

Presented by the Wellcome Trust Centre for Neuroimaging

Thursday 12<sup>th</sup> May – Saturday 14<sup>th</sup> May 2011, Queen Square

The course will present instruction on the analysis and characterisation of neuroimaging data. This includes Magnetic Resonance Imaging (MRI), functional MRI (fMRI), and Positron Emission Tomography (PET). The three-day course will be divided into theoretical sessions covering experimental design and statistical inference and practical sessions in which SPM will be used to analyse exemplar data sets. The course is suitable for both beginners and more advanced users. We advise students to gain at least some familiarity with the methodology, for example, from reading introductory articles available from the SPM web page:

http://www.fil.ion.ucl.ac.uk/spm/doc/intro/.

## Thursday 12<sup>th</sup> May THEORETICAL SESSIONS 33 Queen Square **Basement Lect Th** Ged Ridgway 09:15 - 09:30Welcome 09:30 - 10:15Introduction and Overview Karl Friston 10:15 - 11:15 Spatial Preprocessing Ged Ridgway Coffee 11:30 - 12:15The General Linear Model **Christophe Phillips** 12:15 - 13:00**Contrasts and Classical Inference** Jean-Baptiste Poline Lunch 14:00 - 14:30 Group Analysis Will Penny 14:30 - 15:15 Random Field Theory & Alternatives **Tom Nichols** Tea PRACTICAL DEMONSTRATIONS 33 Queen Square 15:30 - 16:15 Preprocessing for fMRI John Ashburner Christophe Phillips

16:15 – 17:00	Introduction to fMRI Analysis	Christophe Phillip
17:00 – 18:00	"Questions and Answers" Clinic	Karl Friston

Friday 13 <sup>th</sup> May	THEORY & PRACTICALS	33 Queen Square
09:30 – 10:15	Experimental Design	Sara Bengtsson
10:15 – 11:15	Event-related fMRI – Theory	Christian Ruff
Coffee		
11:30 – 12:15	Event-related fMRI – Practical	Steve Fleming
12:15 – 13:00	Bayesian Inference	Jean Daunizeau
Lunch		
14:00 – 14:45	Voxel Based Morphometry	John Ashburner
14:45 – 15:30	Dynamic Causal Modelling for fMRI	Klaas Enno Stephan
Tea		
16:00 – 16:45	DCM for fMRI – Practical	Andre Marreiros
16:45 – 17:15	DCM for fMRI – Advanced Topics	Klaas Enno Stephan
17:15 – 18:00	"Questions and Answers" Clinic	Karl Friston
Social Event		

Saturday 14 <sup>th</sup> May	PRACTICAL WORKSHOPS	12 Queen Square
		4 <sup>th</sup> Floor Sem Rm
10:00 - 10:30	Introduction; Allocation of Groups	Ged Ridgway
10:30 – 15:30	One of the following parallel sessions:	
	1. PET Data Analysis	Christophe Phillips
	2. Voxel Based Morphometry	John A. & Chris Lambert
	3. Basic Analysis of fMRI	Guillaume F. & Sara B.
	4. Intermediate Analysis of fMRI	Jean-Baptiste Poline
	5. Intermediate Analysis with Batches	Volkmar Glauche
	6. Advanced Analysis of fMRI	Christian Ruff
	7. Advanced Analysis with PPMs	Will Penny
	8. Group Analysis of fMRI	Jean D. & Irma Kurniawan
	9. Dynamic Causal Modelling for fMRI	Andre M. & Yen Yu
Coffee		
16:00 – 17:00	Feedback presentations (1 slide only)	Volunteer participants