

### **Day 1 (half day): Fundamentals of fMRI**

13:00	13:30	The BOLD effect, and beyond
13:30	14:00	fMRI data acquisition
14:00	14:30	Essentials of fMRI data pre-processing
14:30	15:15	Introduction to fMRI data analysis
15:15	15:45	<i>break</i>
15:45	16:30	Pitfalls and artefacts in fMRI
16:30	17:00	Neurovascular uncoupling: what now?

### **Day 2: Task-based fMRI (notably for presurgical planning)**

09:00	09:30	Setting up task-based fMRI in clinical practice
09:30	10:15	The motor system: task design and functional anatomy
10:15	10:45	The language system: functional anatomy
10:45	11:15	Mapping the language system with task-based fMRI
11:15	11:45	<i>break</i>
11:45	12:15	Special consideration in paediatric populations
12:15	12:45	The visual system: task design and functional anatomy
12:45	13:15	Task-based fMRI interpretation and presentation for clinical routine
13:15	13:45	Presurgical planning with fMRI: the Neurosurgeon's perspective
13:45	14:45	<i>lunch</i>
		workshop 1: task-based fMRI data acquisition and analysis - ask the physicist!
		workshop 2: pitfalls and artefacts (case based)
14:45	18:15	workshop 3: reading clinical cases with the Neurosurgeon and Neuroradiologist
		workshop 4: how to set up your task/prepare your patient

### **Day 3: Resting-state fMRI (notably for neurodegenerative/psychiatric disease)**

09:00	09:45	Resting-state versus task-based fMRI
09:45	10:15	Seed based analysis versus ICA for resting state fMRI
10:15	10:45	Resting-state fMRI: atlas based analysis
10:45	11:15	<i>break</i>
11:15	11:45	fMRI in epilepsy
11:45	12:30	Static and dynamic functional connectivity
12:30	13:00	fMRI for psychiatric disease
13:00	13:30	fMRI in neurodegenerative disease
13:30	14:30	<i>lunch</i>
		workshop 1: resting state fMRI data acquisition and analysis - ask the expert!
14:30	18:00	workshop 2: name that network - reading resting state fMRI with experts
		workshop 3: demonstration by vendors
		workshop 4: demonstration by vendors