



## Neuroimaging and Neurophysiology of Movement Disorders

### Day 1 – Neuroimaging of Movement Disorders

Thursday, November 7, 2019

#### Session 1: Prodromal Parkinson's Disease

08:50 – 09:00	Welcome from Course Director
09:00 – 09:30	Concept of prodromal Parkinson's disease
09:30 – 10:00	Dopaminergic imaging for diagnosis of prodromal Parkinson's disease and dementia with Lewy bodies
10:00 – 10:30	Transcranial sonography for diagnosis of prodromal Parkinson's disease
10:30 – 11:00	Iron sensitive and neuromelanin sensitive MRI sequences for diagnosis of prodromal Parkinson's disease
11:00 – 11:30	Coffee Break

#### Session 2: Interactive Workshop I : Clinical Imaging and EEG for Differential Diagnosis of Degenerative Dementia with Parkinsonism

11:30 – 12:00	EEG for differential diagnosis of dementia syndromes (introduction to workshop)
12:00 – 13:00	Imaging and EEG for degenerative dementia with parkinsonism: case reports (dementia with Lewy bodies vs. Alzheimer's disease, frontotemporal dementia, prion diseases, etc.)
13:00 – 14:00	Lunch

#### Session 3: Underlying mechanisms of motor and non-motor symptoms of parkinsonism

14:00 – 14:30	Structural MRI
14:30 – 15:00	Resting state functional MRI
15:00 – 15:30	Metabolic PET, dopaminergic PET
15:30 – 16:00	Novel tau PET ligands for diagnosis of PSP and other tauopathies
16:00 – 16:30	Coffee Break

#### Session 4: Interactive Workshop with videocases II : Clinical Imaging for Differential Diagnosis of Hyperkinetic Movement Disorders and Parkinsonism: videocases

16:30 – 17:30	Imaging hyperkinetic movement disorders (PKAN, Wilson's disease, Huntington's disease, FXTAS, hemichorea, etc.)
17:30 – 18:30	Imaging parkinsonism (Parkinson's disease, Parkinson plus syndromes, vascular parkinsonism, normal pressure hydrocephalus, etc.)

### Day 2 – Neurophysiology of Movement Disorders

Friday, November 8, 2019

09:00 – 09:30	Electrophysiological and kinematic analysis of tremor
09:30 – 10:00	Electrophysiology of dystonia
10:00 – 10:30	Electrophysiology of parkinsonism
10:30 – 11:00	Coffee Break
11:00 – 11:30	Electrophysiology for evaluation of myoclonus
11:30 – 12:00	Neurophysiology of functional movement disorders
12:00 – 13:00	Lunch
13:00 – 13:30	Deep brain stimulation for dystonia and gait disorders
13:30 – 14:00	Electrophysiological aspects of deep brain stimulation for Parkinson's disease
14:00 – 14:30	NIBS (non-invasive brain stimulation) for modulating dystonia and hyperkinetic movement disorders
14:30 – 15:00	NIBS for modulating motor and non-motor symptoms of Parkinson's disease
15:00	End of the course