Turn Image & Signal into Clinical Intelligence: From Prodromal Markers to Parkinson's Disease Cognition

TIME	TYPE	CONTENT	SPEAKER	MODERATOR
08:50 – 09:00	**Opening Remark and Welcome Address**			
	Opening Remark and Welcome Address		**Rou-Shayn Chen** 陳柔賢 醫師 AOC-IFCN President	
09:00 – 10:20	**Session 1 — Foundations of fMRI Processing with SPM**			
	Overview: From raw functional images to analyzable brain maps			
09:00 – 09:30	✓ Introduction to fMRI preprocessing ✓ Motion correction, normalization, smoothing ✓ Understanding outputs for analysis		**Chia-Feng Lu** 盧家鋒 教授	**Jiann-Shing Jeng** 鄭建興 醫師
09:30 – 10:20	Hand-on Practice ✓ Processing with real fMRI dataset using SPM ✓ Key output for downstream analysis			
10:40 – 12:00	**Session 2 — From fMRI Matrix to Machine Learning in Parkinson's Disease**			
	Overview: Transforming imaging features into clinical prediction			
10:40 – 11:10	▸ Introduction to supervised machine learning ▸ Feature extraction from fMRI matrices		**Chung-Yao Chien** 簡崇曜 醫師	**Rou-Shayn Chen** 陳柔賢 醫師
11:10 – 12:00	Hand-on Practice ▸ Building simple machine-learning models ▸ Application: detection of cognitive impairment in PD			
12:00 – 13:20	**Lunch Symposium — Meet with Experts and Interactive Discussion**			
12:00 – 13:20	Clinical Practice in Dopamine Agonist Prescription: Challenge and Solution		**Rou-Shayn Chen** 陳柔賢 醫師	
13:30 – 14:50	**Session 3 — From PSG Signals to Deep Learning: An AI-Assisted Hands-on Approach**			
	Overview: Using time-series neurophysiological signals to build and interpret deep learning models			
13:30 – 14:00	◆ From PSG signals to RBD clinical labels: challenges and opportunities ◆ Introduction to deep learning for biomedical time-series		**Po-Yu Lin** 林伯昱 醫師	**Jui-Cheng Chen** 陳睿正 醫師
14:00 – 14:50	Hand-on Practice ◆ AI-assisted coding: building deep learning pipeline interactively ◆ Application: dentification of RBD as a prodromal marker of PD			