

Quantitative Nuclear Medicine Imaging

Session I - Introduction		Faculty
09:30 - 09:45	Introduction of the Speaker and the Participants	
09:45 - 10:30	Evaluation Quiz/Assessment of Starting Knowledge*	
10:30 - 11:15	Lecture 1: General Principles of quantitative Nuclear Medicine	John Dickson
11:15 - 11:30	Coffee Break	
Session II		
11:30 - 12:10	Lecture 2: Image Reconstruction and Time of Flight PET	Stephan Nekolla
12:10 - 12:30	Practical 1a: familiarity with SPECT-demo	John Dickson
12:30 - 13:45	Lunch Break	
Session III		
13:40 - 14:20	Lecture 3: Issues in quantification: attenuation and scatter	Stephan Nekolla
14:20 - 15:00	Lecture 4: Issues in quantification: resolution and partial volume effects	Dimitris Visvikis
15:00-15:40	Practical 1b: SPECT exercise	Stephan Nekolla
15:40 - 16:10	Coffee Break	
Session IV		
16:10 - 16:50	Lecture 5: Issues in quantification: motion effects and management	Dimitris Visvikis
16:50-17:30	Lecture 6: Clinical considerations for quantitative imaging and harmonisation	John Dickson
17:30:18:00	Day 1: Discussion session I	
18:00	End of Day 1	
Day 2		
Session V		
09:00 - 09:40	Lecture 7: Quantitative PET imaging: dynamic imaging & kinetic modeling	Stephan Nekolla
09:40 - 10:20	Lecture 8: Radiomics and Digital Twins	Dimitris Visvikis
10:20 -11:00	Practical 2: Segmentation and partial volume effects	Dimitris Visvikis
11:00-11:20	Coffee Break	
Session VI		
11:20 - 12:00	Lecture 9: New technologies. What do they offer, and what are their limitations.	Stephan Nekolla
12:00 - 12:40	Lecture 10: AI perspectives for image quantification	Dimitris Visvikis
12:40 - 14:00	Lunch Break	
Session VII		
14:00 - 14:30	Lecture 11: Dosimetry	John Dickson
14:30 - 15:00	Lecture 12: Quantitative SPECT imaging: dosimetry and other applications	John Dickson
15:00 - 15:40	Practical 3: Examples of quantitative applications	John Dickson
15:40-16:00	Coffee Break	
16:00-16:40	Evaluation/Test of Gained Knowledge	
16:40 - 17:00	Debriefing of the Course/Discussion on Last Open Questions	
17:00	End of Day 2+A30:B85	

John Dickson	6
Stephan Nekolla	6
Dimitris Visvikis	6