

PK Course Program

PET Pharmacokinetic Course 2018			
Theme	Time	Topic	Tutor
Sat, July 7th			
	08:15 – 08:45	Check-in	
	08:45 – 09:00	Welcome / Introduction	Gunn
Primer 1	09:00 – 10:00	Physics – Primer	Koeppe
	09:00 – 10:00	Math – Primer	Boellaard
	09:00 – 10:00	Pharmacology – Primer	Slifstein
Primer 2	10:00 – 11:00	Physics – Primer	Normandin
	10:00 – 11:00	Math – Primer	Barret
	10:00 – 11:00	Pharmacology – Primer	Knudsen
	11:00 – 11:30	<i>Coffee + Software Installation</i>	
Introduction	11:30 – 11:55	Images, Image Processing, ROIs, Partial Volume	Boellaard
	11:55 – 12:20	Data Types, Input Functions, Time Activity Curves, Cross-calibration	Price
	12:20 – 13:20	<i>Lunch</i>	
Modeling Basics	13:20 – 13:50	One-Tissue and Two-Tissue Compartment Models	Gunn
	13:50 – 14:10	Extraction and Blood Flow	Price
	14:10 – 14:40	Computer Exercise 1 A–C: Exponentials Convolutions Extraction	
	14:40 – 14:55	FDG and Glucose Metabolism	Van den Hoff
	14:55 – 15:10	Computer Exercise 2: Models and Rate Constants	
	15:10 – 15:40	<i>Coffee</i>	
	15:40 – 16:10	Parameter Estimation and Model Selection	Carson
	16:10 – 16:40	Computer Exercise 3: Parameter Estimation	

	16:40 – 17:10	Oncology: Whole Body FDG PET & Response Monitoring	Van den Hoff	
	17:10 – 17:40	Cardiology: Quantitative PET in cardiology	Lubberink	
	17:40 – 18:00	Questions/Discussion	Slifstein Lammertsma	
	18:00	Day 1 – Close		
Social Event/Dinner	18:00	Departure to Heist Bank		
Sun, July 8th				
	09:00 – 09:30	Questions/Feedback	Koeppe Van den Hoff	
Receptors and Related Methods	09:30 – 10:30	In-Vitro/In-Vivo Receptor Binding	Innis	
	10:30 – 11:00	<i>Coffee</i>		
	11:00 – 11:30	Receptor Kinetics	Lammertsma	
	11:30 – 12:00	Linearizations (Patlak, Logan, others)	Lubberink	
	12:00 – 12:30	Guess the Model	Lammertsma	
	12:30 – 13:30	<i>Lunch</i>		
	13:30 – 14:00	Reference Tissue Approaches	Normandin	
	14:00 – 14:30	Computer Exercise 4: Reference Tissue Methods		
	14:30 – 15:00	Neuroscience: Dopamine Receptor Imaging	Slifstein	
	15:00 – 15:30	<i>Coffee</i>		
	15:30 – 16:00	Irreversible Kinetics	Koeppe	
	16:00 – 16:15	Computer Exercise 5: Linear Methods		
	16:15 – 16:45	Steady State Methods	Barret	
	16:45 – 17:00	Computer Exercise 6: Bolus/Infusion		
		17:00 – 17:30	Neuroscience: In Vivo Pharmacology	Knudsen
		17:30	Day 2 – Close	
Social Event/Dinner	18:00	Departure to The Yacht		

Mon, July 9th			
Breakout Session	09:00 – 10:00	Breakout Session with Tutors	All Tutors
	10:00 – 10:20	<i>Coffee</i>	
	10:20 – 10:45	Breakout Highlights	Lubberink
	10:45 – 11:15	Neuroscience: Amyloid Ligand Modeling	Price
	11:15 – 11:45	Neuroscience: Synaptic Density	Carson
	11:45 – 12:15	Neuroscience: NeuroInflammation	Innis
Review	12:15 – 12:45	Review: The Beautiful World	Gunn
	12:45 – 13:05	Review: The Real World	Carson
	13:05-13:10	Wrap Up	Gunn
	13:10	Lunch & Departure to NRM	