

## SCIENTIFIC PROGRAMME

Course Director		Faculty	
Tufve Nyholm	(SE)	Rob Tijssen	(NL)
		Gary Liney	(AU)
		Eirik Malinen	(NO)
		Cihan Gani	(DE)
		Cynthia Ménard	(CA)
		Christian Richter	(DE)

Day 1 - Sunday 29 September		
Time	Lecture	Speaker
08.00 – 09.00	Registration	
09.00 – 09.40	Welcome and introduction	Tufve Nyholm, SE
09.40 – 10.30	Basic Principles of PET	Eirik Malinen, NO
10.30 – 10.50	Coffee break	
10.50 – 11.40	MRI physics: basic principles	Rob Tijssen, NL
11.40 – 12.30	PET image reconstruction and quantification	Eirik Malinen, NO
12.30 - 13.30	Lunch	
13.30 – 14.20	MRI physics: contrast formation	Tufve Nyholm, SE
14.20 – 15.10	MRI physics: space encoding	Gary Liney, AU
15.10 – 15.40	Questions and Answers (plenary) (MR physics)	Tufve Nyholm, SE
15.40 – 16.10	Coffee break	
16.10 – 18.00	CASE / ASSIGNMENT	All

Day 2 - Monday 30 September		
Time	Lecture	Speaker
08.30 – 09.20	PET tracers and applications	Eirik Malinen, NO
09.20 – 10.10	MRI physics: equipment and safety	Gary Liney, AU
10.10 – 10.30	Coffee break	
10.30 – 11.20	Recommendations for use of PET in radiotherapy	Eirik Malinen, NO
11.20 – 12.10	MRI geometrical artifacts	Tufve Nyholm, SE
12.10 – 12.40	Questions and Answers (plenary) (PET)	Eirik Malinen, NO
12.40 – 13.40	Lunch	
13.40 – 14.30	CT for radiotherapy planning (including basics on CT)	Christian Richter, DE
14.30 – 15.10	Questions and Answers (plenary) (MR physics)	Tufve Nyholm, SE

### SCIENTIFIC PROGRAMME

15.10 – 15.40	Coffee break	
15.40 – 17.00	CASE / ASSIGNMENT	All

Day 3 - Tuesday 1 October		
Time	Lecture	Speaker
08.30 – 09.20	MRI physics: Speed-up	Rob Tijssen, NL
09.20 – 10.10	Clinical lecture: How to go from technical innovation to clinical impact	Cynthia Ménard, CA
10.10 – 10.30	Coffee break	
10.30 – 11.20	CT-based in-room imaging	Christian Richter, DE
11.20 – 12.10	Clinical lecture: MR and PET – What is going on? Where are we going?	Cihan Gani, DE
<i>Free afternoon</i>		

Day 4 - Wednesday 2 October		
Time	Lecture	Speaker
08.30 – 09.20	MRI physics: Specialised sequences	Gary Liney, AU
09.20 – 10.10	MR guided treatment	Rob Tijssen, NL
10.10 – 10.30	Coffee break	
10.30 – 11.20	EPI/Diffusion	Rob Tijssen, NL
11.20 – 12.10	Clinical Lecture - Current use of advanced imaging. Which are the success stories?	Cynthia Ménard, CA
12.10 – 13.00	MR for treatment planning, registrations	Gary Liney, AU
13.00 – 14.00	Lunch	
14.00 – 14.50	Clinical Lecture: Treating with the MR-Linac	Cihan Gani, DE
14.50 – 15.20	Clinical: Tumor board	Cynthia Ménard, Cihan Gani
15.20 – 15.50	Coffee break	
15.50 – 16.30	PRESENTATIONS: CASE / ASSIGNMENT	All
16.30 – 16.40	Break	
16.40 – 17.30	PRESENTATIONS: CASE / ASSIGNMENT <i>(2x3 presentations, break 10 minutes)</i>	All

## SCIENTIFIC PROGRAMME

Day 5 - Thursday 3 October		
Time	Lecture	Speaker
09.00 – 09.50	Dual-Energy CT for particle therapy planning and beyond	Christian Richter, DE
09.50 – 10.40	QUIZZ	Rob Tijssen, NL
10.40 - 11.00	Coffee break	
11.00 – 12.40	PRESENTATIONS: CASE / ASSIGNMENTS <i>4 presentations</i>	All
12.40 – 13.00	Short evaluation of the course and closing	Faculty