

SCIENTIFIC PROGRAMME

Course Directors:

Eduard Gershkevitch

Faculty:

Marion Essers

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Louise Murray

Kenneth Poels

Michael Gubanski

Milan Tomsej

Stephanie Peeters

DAY 1 – MONDAY 10 JUNE

Chair morning: S. Peeters, M. Tomsej / Chair afternoon E. Gershkevitch, M.Gubanski

Time	Lecture	Speaker
09.00 - 09.15	Welcome address & Introduction to the course	All teachers
09.15 - 10.00	Volumes in EBRT and introduction to GTV definition	L. Murray/S. Hafeez
10.00 - 10.30	Imaging for GTV definition	M. Gubanski/S. Hafeez
10.30 - 11.00	Coffee break	
11.00 - 11.30	Imaging for treatment preparation and planning	M. Gubanski
11.30 - 12.15	IGRT – equipment for in-room imaging	L. Murray
12.15 - 13.30	Lunch	
13.30 – 15.00	Group 1: Discussions on HN case	
	Group 2: Discussions on HN case	
	Group 3: Discussions on HN case	
15.00 - 15.30	Coffee break	
15:30 - 16.00	Clinical case discussion (HN case)	All teachers
16.00 - 16.45	Radiobiology in the clinic	L. Murray
16.45 – 17.30	Commissioning and QA/QC of equipment and software	M. Tomsej
18.00 - 20.00	<i>Welcome reception</i>	

DAY 2 – TUESDAY 11 JUNE

Chair morning: L. Murray, M. Essers/ Chair afternoon: S. Peeters, K. Poels

Time	Lecture	Speaker
09.00 – 09.45	IMRT - Physics aspects	K. Poels
09.45 – 10.30	IMRT - Clinical application and impact	M. Gubanski
10.30 – 11.00	Coffee break	
11.00 – 11.45	Clinicians: Basics of radiation physics for clinicians	M. Essers
	Physicists: Modern dose calculation algorithms	M. Tomsej
11.45 – 12.30	Clinicians: Principles of Radiotherapy Equipment	E. Gershkevitch
	Physicists: Oncological Concepts	S. Peeters
12.30 – 13.30	Lunch	
13.30 – 14.15	IGRT strategies correction strategies and PTV margin calculations	M. Essers
14.15 – 15.00	Simultaneously integrated boost and fractionation	L. Murray
15.00 – 15.30	Coffee break	
15.30 – 16.15	WORKSHOP - PTV margin and BED calculations	M. Essers & L Murray
16.15 – 16.45	Brachytherapy – physics aspects	E. Gershkevitch
16.45 – 17.15	Brachytherapy – clinical applications	M. Gubanski

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DAY 3 – WEDNESDAY 12 JUNE

Chair morning: L. Murray, E. Gershkevitch / Chair afternoon: K. Poels, S. Peeters

Time	Lecture	Speaker
09.00 - 09.45	Rotational therapy and flattening filter free dose delivery	M. Essers
09.45 - 10.30	Stereotactic radiotherapy - physics aspects	M. Tomsej
10.30 - 11.00	Coffee break	
11.00 - 11.45	Stereotactic radiotherapy - radiobiology, clinical application and impact	S. Peeters
11.45 - 12.30	Challenges in dose prescription and plan evaluation	L. Murray
12.30 - 13.30	Lunch	
13.30 - 15.00	Group 1: Discussions on lung case	
	Group 2: Discussions on lung case	
	Group 3: Discussions on lung case	
15.00 - 15.30	Coffee break	
15.30 - 16.00	Clinical case discussion (Lung case)	All teachers
16.00 - 16.30	Re-irradiation	M. Gubanski
16.30 - 17.15	AI and automation in Radiotherapy (application, validation, QA)	E. Gershkevitch

DAY 4 – THURSDAY 13 JUNE

Chair morning: L. Murray, M. Tomsej / Chair afternoon: M. Essers, M. Gubanski

Time	Lecture	Speaker
09.00 - 09.45	Clinicians: Physical principles of advanced Radiotherapy	M. Essers
	Physicists: QA for advanced delivery techniques	M. Tomsej
09.45 - 10.30	Clinicians: Dose calculation principles	K. Poels
	Physicists: Reference Dosimetry	E. Gershkevitch
10.30 - 11.00	Coffee break	
11.00 - 11.45	Radiotherapy dose and induction of secondary tumours	M. Gubanski
11.45 - 12.30	Radiation Protection and risk analysis	E. Gershkevitch
12.30 - 13.00	Lunch	
13.30 - 15.00	Group 1: Discussions on breast case	
	Group 2: Discussions on breast case	
	Group 3: Discussions on breast case	
15.00 - 15.30	Coffee break	
15.30 - 16.00	Clinical case discussion (Breast case)	All teachers
16.00 - 16.45	Implementing patient-specific QA	K. Poels
16.45 - 17.30	Clinicians: Calculation of dose in the TPS	K. Poels
	Physicists: Non-reference dosimetry	E. Gershkevitch

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DAY 5 – FRIDAY 14 JUNE

Chair morning: M. Essers, E. Gershkevitch

Time	Lecture	Speaker
09.00 - 09.30	Adaptive Radiotherapy – offline approach	S. Peeters/S. Hafeez
09.30 - 10.00	Adaptive Radiotherapy – online approach	S. Peeters/S. Hafeez
10.00 - 10:30	Physics aspects of electron beam therapy	K. Poels
10.30 - 11.00	Coffee break	
11.00 - 11.45	Physics aspects of proton- and ion beam therapy	K. Poels
11.45 - 12.30	Clinical aspects and evidence for particle therapy and other novel technology	S. Peeters
12.30 - 13.00	Q&A and Informal closure of the course	All teachers