

## SCIENTIFIC PROGRAMME

### Course Directors

Matthias Guckenberger  
Dirk Verellen

### Faculty

Sarah Barrett  
Karin Dieckmann  
Maria Hawkins  
Mischa S. Hoogeman

Coen Hurkmans  
Piet Ost  
Suresh Senan  
Stephanie Tanadini Lang

### Course Pre-Requste Recorded Lectures

#### Module 1: Introduction and basic principles of SBRT

- 1.1 What defines SBRT in 2023?
- 1.2 Biology of high dose per fraction SBRT
- 1.3 Margin calculations for image-guided stereotactic treatments
- 1.4 ICRU91 report on prescribing, recording and reporting of stereotactic treatments

#### Module 2: SBRT for primary prostate cancer

- 2.1 Clinical best practice of SBRT for localized prostate cancer
- 2.2 Uncertainties in prostate SBRT
- 2.3 Margin calculations for prostate SBRT

#### Module 3: SBRT for early-stage NSCLC

- 3.1 Indication and patient selection of SBRT for early-stage NSCLC
- 3.2 Clinical best practice of SBRT for early-stage NSCLC
- 3.3 Breathing motion assessment in lung SBRT
- 3.4 Breathing motion management for lung SBRT

#### Module 4: Stereotactic radiotherapy and Radiosurgery for brain metastases

- 4.1 Overview of multidisciplinary management of brain metastases
- 4.2 Clinical best practice of radiosurgery for brain metastases
- 4.3 QA and QA equipment of cranial radiosurgery
- 4.4 End to end accuracy and patient QA of cranial radiosurgery

#### Module 5: SBRT for oligometastatic disease

- 5.1 Definition and characterization of oligometastatic disease
- 5.2 Efficacy of SBRT as locally ablative Tx modality for oligometastatic disease
- 5.3 Errors and safety
- 5.4 EQ2Gy dose calculation in clinical practice

#### Module 6: SBRT for vertebral metastases

- 6.1 Overview multidisciplinary management of vertebral metastases
- 6.2 Step by Step practice of SBRT for vertebral metastases

## SCIENTIFIC PROGRAMME

### **Module 7: SBRT for upper gastrointestinal tumours**

- 7.1 Overview of multidisciplinary management of primary liver cancer (MH)
- 7.2 Overview of multidisciplinary management of pancreatic cancer (MH)
- 7.3 Treatment planning in liver and pancreatic cancer
- 7.4 Motion uncertainties in the treatment of liver and pancreatic cancer

### SCIENTIFIC PROGRAMME

Day 1		
Time	Topic	Lecturer
13:00 - 13:15	Summary of Modules 1.1 and 1.2 QA Session	M Guckenberger
13:15 - 13:30	Summary of Modules 1.3 and 1.4 QA Session	D Verellen
13:30 - 14:00	Evidence-based indications for SBRT in current international guidelines QA Session	M Guckenberger
14:00 - 14:25	Technology for stereotactic treatments QA Session	C Hurkmans
14:25 - 14:50	Most recent recommendations on QA and treatment planning QA Session	D Verellen
14:50 - 15:20	<i>Coffee Break</i>	
15:20 - 16:00	Clinical Journal Club: Top 3 ground- breaking publications from 2023 QA Session	M Guckenberger M Hawkins
16:00 - 16:40	Physics Journal Club: Top 3 ground- breaking publications from 2023 QA Session	D Verellen M Hoogeman
16:40 - 16:50	Hot Topic: FLASH	D Verellen
16:50 - 17:00	Hot Topic: AI in SBRT	C Hurkmans
17:00 - 17:10	Hot Topic: Advanced surgical techniques vs SBRT	S Senan
17:10 - 17:20	Hot Topic: SBRT for animal patients	Guest speaker Carla Rohrer Bley
17:20 - 17:40	QA Session about hot topics	All

### SCIENTIFIC PROGRAMME

Day 2		
Time	Topic	Lecturer
09:00 - 09:15	Summary of Module 2.1 QA Session	P Ost
09:15 - 09:45	Practical case studies in SBRT for prostate cancer QA Session	P Ost
09:45 - 10:00	Summary of Modules 2.2 and 2.3 QA Session	S Tanadini-Lang M Hoogeman
10:00 - 10:30	Online adaptive SBRT QA Session	C Hurkmans
10:30 - 11:00	<i>Coffee Break</i>	
11:00 - 11:15	Summary of Module 3.1 and 3.2 QA Session	S Senan
11:15 - 11:45	Practical case studies in SBRT for NSCLC QA Session	S Senan
11:45 - 12:00	Summary of Module 3.3 and 3.4 QA Session	M Hoogeman
12:00 - 12:30	Single-isocenter SBRT for multiple lesions and other new developments in lung SBRT QA Session	M Hoogeman
12:30 - 13:30	<i>Lunch</i>	
13:30 - 13:45	Summary of Module 4.1 and 4.2 QA Session	K Dieckmann
13:45 - 14:15	Practical case studies in SRS of brain metastases QA Session	K Dieckmann
14:15 - 14:30	Summary of Module 4.3 and 4.4 QA Session	C Hurkmans D Verellen
14:40 - 15:00	Surface guidance in SRS and SBRT QA Session	S Barrett
15:00 - 15:30	<i>Coffee Break</i>	
15:30 - 15:45	Summary of Module 5.1 and 5.2 QA Session	M Guckenberger
15:45 - 16:15	Practical case studies in SBRT for oligometastatic disease QA Session	M Guckenberger

### SCIENTIFIC PROGRAMME

Day 3		
Time	Topic	Lecturer
09:00 - 09:15	Summary of Module 5.3 and 5.4 QA Session	D Verellen
09:15 - 09:45	Practical case studies in reirradiation using EQD2 QA Session	S Tanadini-Lang
09:45 - 10:00	Summary of Modules 6.1 and 6.2 QA Session	M Guckenberger
10:00 - 10:30	Practical case studies in SBRT for vertebral & non-spine bone metastases QA Session	M Guckenberger S Senan
10:30 - 11:00	<i>Coffee Break</i>	
11:00 - 11:15	Summary of Module 7.1 and 7.2 QA Session	M Hawkins
11:15 - 11:40	Practical case studies in SBRT for primary liver cancer QA Session	M Hawkins
11:40 - 12:05	Practical case studies in SBRT for pancreatic cancer QA Session	M Hawkins
12:05 - 13:05	<i>Lunch</i>	
13:05 - 13:20	Summary of Module 7.3 and 7.4 QA Session	M Hawkins
13:20 - 13:45	In-room MR guided SBRT QA Session	S Tanadini-Lang
13:45 - 14:15	<i>Coffee Break</i>	
14:15 - 15:15	Discipline-specific split-up Sessions: - Clinicians - Medical Physics - RTT	ALL
15:15 - 15:30	Wrap-up and final Q & A	M Guckenberger D Verellen