ESTRO

IN-ROOM MRI GUIDED RADIOTHERAPY
6 October to 8 November 2022
BLENDED COURSE

SCIENTIFIC PROGRAMME

Course Directors:
Luca Boldrini
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Faculty:
Cihan Gani
Sebastian Klüter
Faisal Mahmood
Helen McNair
Stella Mook
Vincenzo Valentini

PRE-RECORDED LECTURES

On 6 October from 11:00 to 12:00 CET the course will start with an online kick-off webinar.

As from 6 October pre-recorded lectures will be available for participants to study at their own pace **prior** to the live Q&A sessions in Amsterdam. The pre-recorded lectures will be available from ESTRO Moodle.

Track legend: MP (Medical physicists), RO (Radiation oncologists), RTT (RTTs)

LIST OF PRE-RECORDINGS

- Introduction: From IGRT to in-room MRI-Guided Radiotherapy, the technology perspective *by U. van der Heide – 25'19"*
- Introduction: From IGRT to in-room MRI-Guided Radiotherapy, the medical perspective *by V. Valentini – 13'*
- Introduction: From IGRT to in-room MRI-Guided Radiotherapy, the RTT perspective *by H. McNair – 17'45"*
- MR-simulation and MR-guided Radiotherapy: common aspects and differences *by F. Mahmood – 42'52"*
- Clinical workflow of an in-room MRI-Guided Radiotherapy treatment *by L. Boldrini – 42'11"*
- Hybrid MR-guided RT machines: Low field vs. high field *by S. Klüter – 51'09"*
- Patient-specific QA in online adaptive MRgRT *by S. Klüter* – 55'50"
- Quality Control for MR in Radiotherapy *by U. van der Heide – 26'04"*
- Motion management with MRI gating *by F. Mahmood – 53'38"*
- MR Physics: Basic Introduction by U. van der Heide – 27'03"
- Artifacts in MRI: clinical point of view *by F. Mahmood – 49'26"*
- Clinical Experience in MR-guided Radiotherapy *by L. Boldrini and C. Gani – 34'08"+36'08"*
- Clinical Indications for MR-guided Radiotherapy treatment *by C. Gani – 28'54"*
- Management of breathing motion in MR-guided RT *by S. Klüter – 44'39"*
- Patient Positioning: Brain, Head and Neck, Thorax, Upper Abdomen and Pelvis *by H. McNair – 27'*
- Dosimetry in the presence of magnetic fields *by S. Klüter – 33'26"*
- Quantitative and functional imaging during MRI-guided Radiotherapy (MP) *by U. van der Heide – 44'29"*
- Artifacts in MRI: physical point of view *by F. Mahmood – 49'12"*
- Immobilization devices and MR simulation in MR-guided RT *by H. McNair – 18'*
- Decision Making: when do adapt a treatment fraction? *by S. Mook – 35'*
- Patient selection criteria and compliance assessment *by S. Mook – 28'*
- Quantitative and functional imaging during MRI-guided Radiotherapy (RO/RTT) *by U. van der Heide – 41'*
- Practicalities for patient management and workflow *by H. McNair – 31'08"*
- Basic principles of OARs contouring on MR *by L. Boldrini – 27'55"*
- Online adaptive radiotherapy: workflow and criticalities *by S. Mook – 33'*
- RT and MR safety *by F. Mahmood – 41'12"*
- In-room MR image processing and planning *by U. van der Heide – 32'03"*

LIVE COURSE IN AMSTERDAM FROM 6 TO 8 November 2022

Before coming to Amsterdam the students will have to prepare an assignment. During the course they will briefly present their topic (5 minutes)

During the live course in Amsterdam, only very brief summary lectures will be given, followed by Q&A sessions and discussions. Further we will also focus on workshops and presentations by the participants.

SUNDAY 6 NOVEMBER

Time CET	Track	Topic	Faculty
09:00-10:30		Summaries plenary lectures and Q&A session	
10:30-11:00		***Coffee break***	
11:00-12:30		Multidisciplinary workshop case discussions: Thorax and Upper Abdomen	
12:30-13:30		***Lunch break***	
13:30-15:00		Summaries plenary lectures and Q&A session	
15:00-15:30		***Tea Break***	
15:30-17:00		Break-out sessions – 5 min presentations of assignments by students (multidisciplinary groups)	

MONDAY 7 NOVEMBER

Time CET	Track	Topic	Faculty
09:00-10:30		Summaries plenary lectures and Q&A session about the following topics/pre-recorded lectures:	
10:30-11:00		***Coffee break***	
11:00-12:30		Multidisciplinary workshop case discussions: H&N and Pelvis	
12:30-13:30		***Lunch break***	
13:30-15:00		Summaries plenary lectures and Q&A session about the following topics/pre-recorded lectures:	
15:00-15:30		***Tea Break***	
15:30-17:00		Break-out sessions – 5 min presentations of assignments by students (separate disciplines)	

TUESDAY 8 NOVEMBER

Time CET	Track	Topic	Faculty
09:00-10:30		Summaries plenary lectures and Q&A	
10:30-11:00		***Coffee break***	
11:00-12:30		MCQ exam and discussion	
12:30-13:00		Official closing	