

## SCIENTIFIC PROGRAMME

**Course Director**

Catharine Clark

**Faculty**Catharine Clark  
Eduard Gershkevitch  
Victor Hernandez  
Mo Hussein  
Stephen Kry  
Sarah Misson-Yates**Guest lecturers**Russell Thomas  
Tony Palmer**Monday, 17<sup>th</sup> April 2023**

09:00-09:30	Registration	
09:30-09:45	Welcome and introductions. Background, why this course exists, aims of course, practicalities, expectations, general learning objectives	Catharine Clark
09:45-10:30	Are your RT doses correct? The need for dosimetry audit	Stephen Kry
10:30-11:00	<i>Coffee break</i>	
11:00-11:45	Clinical relevance of audit	Sarah Misson-Yates
11:45-12:30	Different types of audit	Catharine Clark
12:30-13:30	<i>Lunch</i>	
13:30-14:15	The right tools for auditing (detector and phantom choices)	Victor Hernandez
14:15-15:00	How to design a good audit	Sarah Misson-Yates
15:00-15:30	<i>Coffee</i>	
15:30 - 16:15	Uncertainty budget for audit	Eduard Gershkevitch
16:15 - 17:00	Setting audit tolerances	Mo Hussein

**Tuesday 18<sup>th</sup> April 2023**

09:00-09:45	Ion chambers, alanine and traceability	Russell Thomas
09:45-10:30	Solid state detectors: Microdiamond / Scintillation detectors	Mo Hussein
10:30-11:00	<i>Coffee break</i>	
11:00-11:45	Passive detectors OSLDs / TLDs	Stephen Kry
11:45-12:30	Film dosimetry	Eduard Gershkevitch
12:30-13:30	<i>Lunch</i>	
13:30-14:15	Auditing reference conditions + small fields	Sarah Misson-Yates
14:15-15:00	End-to-end auditing and using a TPS for dosimetry audit	Mo Hussein
15:00-15:30	<i>Coffee</i>	
15:30 - 16:15	Auditing SRS/SBRT	Catharine Clark
16:15 - 17:00	Auditing brachytherapy (online)	Tony Palmer

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Weds 19 <sup>th</sup> April 2023		
09:00-09:45	Proton dosimetry audit	Russell Thomas
09:45-10:30	Dosimetry audit with motion management	Stephen Kry
10:30-11:00	<i>Coffee break</i>	
11:00-11:45	Dosimetry audit in clinical trials	Catharine Clark
11:45-12.30	Auditing other techniques and in the clinical context (QUATRO)	Eduard Gershkevitch
12:30-13:30	<i>Lunch</i>	
13:30-15.00	Practical 1 / 2 / 3 / 4	All
15:00-15:30	<i>Coffee</i>	
15:30 - 17.00	Practical 1 / 2 / 3 / 4	All

Thurs 20 <sup>th</sup> April 2023		
09:00-09:45	Small regional experience of setting up an audit	Victor Hernandez
09:45-10:30	Using a pre-designed audit protocol (Shane)	Eduard Gershkevitch
10:30-11:00	<i>Coffee break</i>	
11:00-11:45	Setting up a national dosimetry audit network (top down or bottom up?)	Sarah Misson-Yates
11:45-12.30	Using a QMS system and databases in audit	Mo Hussein
12:30-13:30	<i>Lunch</i>	
13:30-15.00	Practical 1 / 2 / 3 / 4	All
15:00-15:30	<i>Coffee</i>	
15:30 - 17.00	Practical 1 / 2 / 3 / 4	All

Fri 21st April 2023		
09:00-09:45	Lessons learned from dosimetry audits and reporting results	Stephen Kry
09:45-10:30	Novel audit methodologies I (Seafarer/VESPA)	Catharine Clark
10:30-11:00	<i>Coffee break</i>	
11:00-11:45	Novel audit methodologies II (complexity metrics, MLC modelling and beam parameters)	Victor Hernandez
11:45-12.30	The future of audit discussion and close	All
12:30	<i>Close</i>	

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### Additional information

	<b>Practical</b>	<b>Faculty leads</b>	<b>Location</b>
1	Film dosimetry	Eduard Gershkevitch / Ilias Bilas	B54 MRI office
2	Reference and small field dosimetry	Sarah Misson-Yates / Russell Thomas	B54 meeting room
3	End-to-end auditing with anthropomorphic phantoms	Stephen Kry / Catharine Clark	B54 Linac B
4	TPS planning for audits	Mohammad Hussein / Victor Hernandez	Auditorium

All coffee breaks between practicals in the main foyer (to walk back accompanied)