

Accelerator Design, Radiobiology & Quality Assurance, Brachytherapy & Radiotherapy Verification Imaging

Day 1: Tuesday 2 March 2027 - ICR

08.25	Registration	
08.55 - 09:00	Welcome & Introduction	
09.05 – 10.00	Medical electron Linear Accelerators	Professor Stephen Gibson
10.00 – 10.55	Quality Control of Linacs	Rollo Moore
11.00	Refreshment break & discussion	
11.30 – 12.10	Production of a Clinical Beam	Professor Philip Mayles
12.15 – 12.50	Multileaf Collimators: Characteristics & Commissioning	David King
12.55	Lunch break	
14.00 – 15.05	Radiotherapy Fractionation	Dr Navita Somaiah
15.05 – 15.35	Managing Gaps	Dr Navita Somaiah
15.40	Refreshment break	
16.00 – 16.35	Quality Assurance In Clinical Trials	Olivia Naismith
16.40 – 17.35	Accuracy and Quality in Radiotherapy: An overview	Professor Philip Mayles
18.30	Course meal	

Day 2: Wednesday 3 March 2027 - RMH

09.00 – 09.30	Re-irradiation	Dr Alex Backshall
09.35 – 10.10	Introduction to Cell Biology	Dr Alex Backshall
10.15	Refreshment break	
10.35 – 11.35	Practical use of Radiobiology in Treatment	Professor Philip Mayles
11.40 – 12.35	Tumour Cell Radiobiology	?
12.35	Lunch break	
13.35 – 14.15	Radiobiology of normal tissues: A clinical perspective	Dr Rita Simões
14.20 – 15.15	Modelling the probability of Tumour Control (TCP)	?
15.20	Refreshment break	
15.40 – 16.35	Modelling Normal Tissue Complication Probability	Dr Colin Baker
16.40 – 17.20	Tomotherapy	Dr Andrew Dumbill

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Day 3: Thursday 4 March 2027 - ICR

09.00 – 09.40	Clinical Indications for Brachytherapy	Dr Caroline Chapman
09.45 – 10.15	Intracavitary Dosimetry	Margaret Bidmead
10.20 – 10.45	Calibration and QA of Brachytherapy Sources	Dr Kate Roberts
10.50	Refreshment break	
11.15 – 12.05	Gynaecology Cancers	Dr Arvind Sathyamurthy
12.10 – 12.45	Transperineal Prostate Brachytherapy	Peter Bownes
12.50	Lunch break	
13.55 – 14.50	The Radiobiology of Brachytherapy	Professor Roger Dale
14.55 – 15.55	3D Image based Brachytherapy Planning	Professor Christian Kirisits
16.00	Refreshment break	
16.20 – 17.00	Radiation Protection Issues in Brachytherapy	Margaret Bidmead

Day 4: Friday 5 March 2027 - RMH

09.00 – 09.40	Radiation Protection in External Beam Radiotherapy	Dr Michael Thomas
09.45 – 10.40	Image Handling in Radiotherapy	Professor Marcel van Herk
10.45	Refreshment break	
11.05 – 12.00	Errors & Margins in Image Guided Radiation Therapy & SBRT	Professor Marcel van Herk
12.05 – 12.45	IT Essentials for Radiotherapy	Richard Trouncer
12.50	Lunch break & Discussion	
13.55 – 14.25	Image guidance in RT	?
14.30 – 15.10	IGRT Techniques	Dr David Bernstein
15.15	Refreshment break	
15.30 – 16.10	Cyberknife	Philippa Hackett
16.15 – 16.55	MR Linacs	Dr Simeon Nill
17.00 – 18.15	Cheese & Wine	

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**Day 5: Saturday 6 March 2027
Demonstrations & Discussions
Assembly Point: Radiotherapy Basement at 9.00 am**

	09.15	10.05	10.50	11.15	12.05
Basic QA Franklin	1	2		3	4
Brachytherapy Treatment Planning – CT and MRI image based Master Plan	2	3		4	1
Iodine seeds & ultrasound for Prostate and examples Beige Planning	3	4		1	2
HDR, QA & Source Calibration HDR Treatment Suite	4	1		2	3

**Evaluation forms will be collected at the end of the course
Thank you**