

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

Day 1: Tuesday 7th March 2023

08.25	Registration	
08.55 - 09:00	Welcome & Introduction	
09.05 - 09.55	Medical electron Linear Accelerators	TBA
10.00 – 10.55	Quality Control of Linacs	TBA
11.00	Refreshment break	
11.30 – 12.10	Production of a Clinical Beam	TBA
12.15 – 12.55	Multileaf Collimators: Characteristics & Commissioning	TBA
13.00	Lunch break	
14.00 – 15.00	Radiotherapy Fractionation	TBA
15.00 – 15.30	Managing Gaps	TBA
15.35	Refreshment break	
15.55 – 16.50	Accuracy and Quality in Radiotherapy: An overview	TBA
16.55 – 17.25	Extremes I: kV X-ray Units	TBA
18.00	Course meal	

Day 2: Wednesday 8th March 2023

09.00 - 09.40	Extremes II: Cyberknife	TBA
09.45 – 10.45	Practical use of Radiobiology in Treatment Planning	TBA
10.50	Refreshment break	
11.10 – 11.45	Introduction to Cell Radiobiology	TBA
11.50– 12.45	Tumour Cell Radiobiology	TBA
12.50	Lunch break	
13.55 – 14.35	Radiobiology of Normal Tissues	TBA
14.40 – 15.35	Modelling the probability of Tumour Control (TCP)	TBA
15.40	Refreshment break	
16.00 – 16.55	Modelling Normal Tissue Complication Probability	TBA
17.00 – 17.45	Extremes III: Tomotherapy	TBA

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Day 3: Thursday 9th March 2023

09.00 –	Clinical Indications for Brachytherapy	TBA
09.40		
09.45 –	Intracavitary Dosimetry	TBA
10.15		
10.20 –	Calibration and QA of Brachytherapy Sources	TBA
10.45		
10.50	Refreshment break	
11.15 –	Gynaecology Cancers	TBA
12.05		
12.10 –	3D Image based Brachytherapy Planning	TBA
13.10		
13.15	Lunch break	
14.15 –	Transperineal Prostate Brachytherapy	TBA
14.50		
14.55 –	The Radiobiology of Brachytherapy	TBA
15.40		
15.45	Refreshment break	
16.00 –	Radiation Protection Issues in Brachytherapy	TBA
16.40		

Day 4: Friday 10th March 2023

09.00 –	Radiation Protection in External Beam	TBA
09.40	Radiotherapy	
09.45 –	Image Handling in Radiotherapy	TBA
10.40		
10.45	Refreshment break	
11.05 –	Errors & Margins in Image Guided Radiation	TBA
12.00	Therapy & SBRT	
12.05 –	IGRT Techniques	TBA
12.45		
12.50	Lunch break	
13.55 –	IT Essentials for Radiotherapy	TBA
14.35		
14.40 –	Image Guidance in Radiotherapy: Accuracy,	TBA
15.35	Frequency & Dose & MPE Trials	
15.40	Refreshment break	
16.00 –	Quality Assurance In Clinical Trials	TBA
16.30		
16.35 –	MR Linacs	TBA
17.15		
17.20	Cheese & Wine	

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**Day 5: Saturday 11th March 2023
Workshop Sessions
Practical Workshop Sessions
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**