

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

Day 1: Tuesday 4th March 2025

| | | |
|---------------|--|-----|
| 08.25 | Registration with coffee | |
| 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 & discussion | |
| 11.40 – 12.20 | Production of a Clinical Beam | TBA |
| 12.25 – 13.05 | Multileaf Collimators: Characteristics & Commissioning | TBA |
| 13.05 | Lunch break | |
| 14.05 – 15.05 | Radiotherapy Fractionation | TBA |
| 15.05 – 15.35 | Managing Gaps | TBA |
| 15.40 | Refreshment break | |
| 16.00 – 16.55 | Accuracy and Quality in Radiotherapy: An overview | TBA |
| 17.00 – 17.40 | IGRT Techniques | TBA |
| | Course Meal | |

Day 2: Wednesday 5th March 2025

| | | |
|---------------|--|-----|
| 09.00 - 09.40 | 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 Biology | TBA |
| 11.50– 12.45 | Tumour Cell Radiobiology | TBA |
| 12.50 | Lunch break | |
| 13.55 – 14.35 | Radiobiology of normal tissues: A clinical perspective | 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 | Tomotherapy | TBA |

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

Day 3: Thursday 6th March 2025

| | | |
|---------|--|-----|
| 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 – | Transperineal Prostate Brachytherapy | TBA |
| 12.45 | | |
| 12.50 | Lunch break | |
| 13.50 – | The Radiobiology of Brachytherapy | TBA |
| 14.35 | | |
| 14.40 – | 3D Image based Brachytherapy Planning | v |
| 15.40 | | |
| 15.45 | Refreshment break | |
| 16.00 – | Radiation Protection Issues in Brachytherapy | TBA |
| 16.40 | | |

Day 4: Friday 7th March 2025

| | | |
|---------|--|-----|
| 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 – | kV X-ray Units | TBA |
| 12.35 | | |
| 12.40 | 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 | |

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

**Day 5: Saturday 8th March 2025
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**