Introduction
This 3-day course is designed to help clinicians, physicists and radiographers develop and maintain for the clinical implementation of image guided radiotherapy. The course has been awarded 19 RCR Category I CPD credits under The Royal College of Radiologists CPD scheme. In 2017 it received 20 CPD credit-points from (EFOMP) The European Federation of Organisations for Medical Physics

The curriculum covers many practical aspects and includes hands-on practical sessions, image matching, QA and dosimetry. We recommend a team of oncologist, physicist and radiographer from the same centre attend together.

Included in the cost of the course are a set of lecture notes, access to the presentations, lunches, refreshments, cheese and wine, and a course dinner (sponsored by the manufacturers).

Day One
- **Future Developments in Advanced Radiotherapy including MR Linac**
- **Patient Preparation and immobilization**
- **MR Imaging for Radiotherapy**
- **MR Guided Radiotherapy (New)**
- **PET and PET_CT in Radiotherapy**
- **Ultrasound in RT**
- **CT, 4DCT, CBCT and Image Quality**
- **Imaging & Margins in Head and Neck (This Is Not An Apple)**
- **Selection & Delineation of Head and Neck Target Volumes**
- **KV + KV Imaging Clinical Examples, Several Delivery Platforms**
- **Intra Fraction Imaging (New)**
- **Adaptive Bladder Techniques, Treatment Planning, Dose & Imaging**
- **IGRT Process for Gynae**
- **Course Meal**

Day Two
- **Head and Neck: IMRT Clinical Trials & Functional Imaging**
- **Highly Conformal Radiotherapy and IGRT for Gynaecological Targets**
- **Breast Clinical Trials: CBCT Verification and Nodal Treatment**
- **Prostate Clinical Trials (Cyberknife), SABR, Prostate Bed**
- **Future Developments in Advanced Radiotherapy**
- **IMRT/VMAT Planning: Treatment Planning Robustness including Clinical Examples of Where Motion/Margins Affect Dosimetry**
- **FFF Small Field Dosimetry, And QA with SABR**
- **Image Verification for Prostate Patients**
- **Image Verification for Lung Tumours: with and without Fiducials**
- **Patient Specific QA, Streamlining the Process on Linacs including MR Linacs**
- **Plan of the Day: Adaptive Imaging**

Image Guided & Adaptive Radiotherapy in Clinical Practice
2022 Dates to Be Announced

Departments of Physics and Radiotherapy
The Royal Marsden NHS Foundation Trust and
The Institute of Cancer Research

**Includes:**
- Adaptive RT
- Target Monitoring Techniques
- 4D/ CBCT
- IMRT / VMAT
- Radiation Free Patient Verification

This course is accredited under The Royal College of Radiologists CPD scheme
Practical Demonstration & Discussion

Day Three

- Guidance on developing protocols for outlining, dose constraints, IMRT/VMAT planning and image verification for Head & Neck, Lung, Liver, Prostate, Bladder, Breast and Gynaecomastia by experienced users (oncologists, physicists) will be available.

- Practical sessions on QA and Imaging, covering Pre-Treatment and Patient Treatment Procedures - from the TPS to the Linac and Patient: including Patient to Phantom Dosimetry; Fluence Verification; Dosimetric Verification; Patient Setup and Verification using Cone Beam, KV; Linac, MLC and ExacTrac Device QA, Image Matching, Plan Choice, 4DCT, Data Analysis.

External speakers
Mrs Angela Baker, Oxford University Hospitals NHS Foundation Trust
Dr Vibeke Nordmark Hansen, Odense University Hospital, Denmark

Special Guest Speaker
Professor Vincent Gregoire
Centre Léon Bérard
Lyon, France
Honorary Physicist (ESTRO 2015)

RMH/ICR course faculty
Ms Sophie Alexander, Ms Margaret Bidmead, Mr David Bernstein, Dr Jenny Bertholet, Dr Elly Castellano, Dr Shaista Hafeez, Dr Emma Harris, Dr Maria Schmidt, Dr Susan Lalonde, Dr Steven Landeg, Dr Helen McNair, Dr Iain Murray, Dr Julia Murray, Mr Adam Mitchell, Dr Fiona McDonald, Dr Simeon Nil, Professor Chris Nutting, Professor Uwe Oelfke, Dr Alison Ranger, Dr Michael Thomas

Course organizers
Ms Margaret Bidmead, Dr Helen McNair, Dr Emma Harris

Venues: The lectures for days 1 & 2 are in The Royal Marsden Conference Centre, Steward's Grove, London SW3 6JJ. The physics, radiographer and oncologist practical sessions on Saturday will be carried out in the Radiotherapy department of The Royal Marsden Hospital until 1.15pm.
Please fax/email/post completed form, and forward your payment invoice info to: The Course Secretary, Physics Department, The Royal Marsden NHS Foundation Trust, Fulham Road, London SW3 6JJ
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