**Image Guided Radiotherapy In Clinical Practice**

**Thursday 23rd to Saturday 25th February 2017**

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

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**Fees, booking and registration form**

Thursday 23rd to Saturday 25th February 2017. The cost is £500 per person. A special offer of £1200 is available to cover a team of 3 participants from the same centre, in which case each team member should complete a registration form and the 3 forms should be sent together. (Please photocopy this form if necessary).

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**Specialty:** Physicist / Oncologist / Radiographer / Other

**Which linac would you use for IGRT and IMRT/VMAT?**  
Elekta / Siemens / Varian *(please circle)*

**Oncologists, which clinical site is your specialty?**

**Which device(s) do you use for IGRT *(please specify)*?**  
Cone beam / KV –KV / Exactrac / Tomo CK / Other

**Which TPS do you use for IMRT / VMAT *(please specify)*?**

**Do you use VMAT / Soft Tissue Matching / Fiducials / Gating / Breath Hold / 4D CBCT OTHER *(please specify)*?**

**Which clinical sites?**

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I would like to attend the IGRT Course. I enclose a cheque for the full amount of £.............. payable to: The Institute of Cancer Research  
Or please invoice *(please give the exact contact information to secure your booking)*

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**Venues:** The lectures for days 1 & 2 are in The Royal Marsden Conference Centre, Stewart's Grove, London SW3 6J]. The oncology sessions will be held in London on the Saturday. The physics and radiographer practical sessions on Saturday will be carried out in the Radiotherapy department of The Royal Marsden Hospital.

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 6J]

Tel: +44 (0)207 808 2501; Fax: +44(0)2078082522  
Email: sandra.poku@rmh.nhs.uk  
www.icr.ac.uk/igimrt
Introduction
This 3 day course is designed to help clinicians, physicists and radiographers develop programmes for the clinical implementation of image guided radiotherapy. In 2016 the course was awarded 20 RCR Category 1 CPD credits from The Royal College of Radiologists and 19 CPD credit-points from 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, a CD of the presentation, lunches, refreshments, cheese and wine, and a course dinner (sponsored by the manufacturers) on the evening of Thursday 23rd February.

Provisional Programme

Day One (Thursday 23rd February)
- Future Developments in Advanced Radiotherapy
- Biological Imaging for Radiotherapy
- MRI in Radiotherapy
- PET and PET-CT in Radiotherapy
- Implementation of IGRT and Adaptive RT
- Dose Constraints and Toxicity Modeling
- Forward and Inverse Planned IMRT
- FFF and small field dosimetry and QA
- VMAT Theory and Practice, Application to Lung
- RapidArc: can it replace IMRT? Clinical examples focused to Head & Neck
- KV + KV Imaging clinical examples, several delivery platforms
- 3D Verification – Conebeam CT+ Volumetric Matching Protocols and Development
- Marker Based Tracking and Gating: current and novel techniques
- Adaptive Bladder techniques, Treatment Planning, Dose & Imaging
- Course Meal

Day Two (Friday 24th February)
- ICRU Margins & Volumes
- Selection & Delineation of Head and Neck Target Volumes
- Head and Neck: IMRT Clinical Trials
- Breast Clinical Trials
- Deep Inspiration Breath Hold, Contouring , Delivery & Image Verification
- Prostate Clinical Trials
- Image Verification for Prostate Patients
- EPID Dosimetry and Streamlining the Imaging Acquisition and Review Process

Day Three (Saturday 25th February)
- Practical workshops to gain hands-on experience of volume and OAR localisation and definition, contouring, planning techniques, immobilization and patient set-up image verification.
- Guidance for developing protocols for outlining, dose constraints and image verification for Head & Neck, Lung, Liver, Prostate, Bladder, Breast and Gynae by experienced users (oncologists, physicists) will be available
- Practical sessions on QA and imaging, covering pre-treatment and on 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.

External speakers
Professor Roger Dale, Imperial College London (Retired)
Professor Phil Evans, University of Surrey, Guildford
Dr Kevin Franks, St James’s Institute of Oncology, Leeds Teaching Hospital Trust
Dr Maria Hawkins, Oxford University
Professor Mike Partridge, Oxford University
Professor Carl Rowbottom, Clatterbridge Cancer Centre

Special Guest Speaker:

Professor Vincent Gregoire St-Luc
University Hospital, Brussels, Belgium
Honorary Physicist (ESTRO 2015)

RMH/ICR course faculty
Dr James Bedford, Ms Margaret Bidmead, Professor David Dearnaley, Dr Sarah Gulliford, Dr Vibeke Nordmark Hansen, Dr Ian Hanson, Professor Robert Huddart, Mr Richard Keane, Dr Anna Kirby, Mr Steven Landeg, Dr Maria Schmidt, Dr Susan Lalondrelle, Dr Helen McNair, Dr Iain Murray, Professor Chris Nutting, Professor Uwe Oelfke, Dr Michael Thomas, Ms Emma Wells

Course organizers
Ms Margaret Bidmead, Dr Vibeke Hansen, Dr Helen McNair