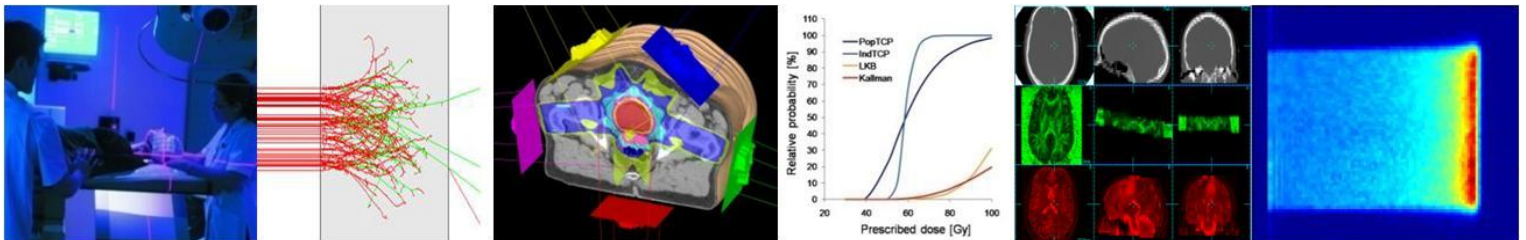


Mayneord-Phillips Summer School 2009

St Edmund Hall, University of Oxford

21st Century Radiotherapy: State-of-the-art and predicting the future



Programme

Monday 6th July

Venue: Doctorow Hall, St Edmund Hall

Chair: Colin Baker

9.15 Welcome & School Overview (Colin Baker)

9.30 [Historical perspective on IMRT](#) (Steve Webb)

10.30 Coffee

11.00 3&4D x-ray CT: Physics & application (Dan Low)

11.45 [MRI Physics for radiotherapy applications](#) (Uulke van der Heide)

12.30 Lunch

Chair: John Ridgeway

13.30 [Clinical Applications of MRI](#) (Alan Jackson)

14.15 [PET Physics](#) (Dimitra Darambara)

15.00 Coffee

15.30 [Clinical applications of PET](#) (Pat Price)

16.15 [Image delineation, registration & fusion](#) (Marcel van Herk)

17.00 Discussion / Tutorial session

MARS CT - Spectroscopic X-ray Imaging (Nanette Schleich)

The Effects of Target Motion in kV-CBCT Imaging (Sriram Padmanaban)

18.30 Drinks reception

19.30 Dinner, Wolfson Dining Hall

Tuesday 7th July

Venue: Doctorow Hall, St Edmund Hall

Chair: John Fenwick

9.00 [Classical radiobiology: An overview](#) (John Fenwick)

9.45 [Neutron, proton and light ion radiobiology](#) (Bleddyn Jones)

10.30 Coffee

11.00 [Inter-patient variability: Predictive assays & gene expression profiles](#) (Catharine West)

11.45 [Cost-benefit, QALYs and VOSL](#) (Alan McKenzie)

12.30 Lunch

Chair: Alan McKenzie

13.30 [TCP: Individual & population, RIBE](#) (Marco Carlone)

14.15 [Spatial conformality and volume-effect modelling: Emerging knowledge](#) (John Fenwick)

15.00 Coffee

15.30 [Developments in radiobiology and clinical application](#) (Catharine West)

16.15 Discussion / Tutorial session

X-ray diffraction/optical imaging for tumour hypoxia (Kate Ricketts)

Impact of tumour motion on VMAT (Raghavendiran Boopathy)

FSU-based radiobiological modelling (Eva Rutkowska)

19.30 Dinner, Wolfson Dining Hall

Wednesday 8th July

Venue: Doctorow Hall, St Edmund Hall

Chair: Dan Low

9.00 [Status review: Linac, in-room imaging](#) (Marcel van Herk)

9.45 [Applications of modern photon radiotherapy systems](#) (Rock Mackie)

10.30 Coffee

11.00 [Proton and light ion beam generation](#) (Tony Lomax)

11.45 [Boron neutron capture therapy](#) (Stuart Green)

12.30 Lunch

13.30 Depart for Diamond Synchrotron visit, return 17.30

19.00 Depart for the Beetle & Wedge Boathouse, return 23.00

Thursday 9th July

Venue: Doctorow Hall, St Edmund Hall

Chair: Stuart Green

9.00 [Accelerator developments](#) (Rock Mackie)

9.45 [Non-scaling FFAg synchrotron](#) (Rob Edgecock)

10.30 Coffee

11.00 [Laser-plasma based ion accelerators](#) (David Neely)

11.45 [Radiation dosimetry review: 1D & 2D](#) (Alun Beddoe)

12.30 Lunch

Chair: Alun Beddoe

13.30 [3D dosimetry](#) (Simon Doran)

14.15 [External beam dose algorithms](#) (Rock Mackie)

15.00 Coffee

15.30 [Target volumes, margins & verification](#) (Marcel van Herk)

16.15 Discussion / Tutorial session

Radiochromic film spectroscopy of a laser-proton source (Dan Kirby)

Secondary radiation around clinical accelerators (Kinga Polaczek-Greluk)

19.30 Dinner, Wolfson Dining Hall

Friday 10th July

Venue: Doctorow Hall, St Edmund Hall

Chair: Colin Baker

9.00 [Radionuclide therapy](#) (Glenn Flux)

9.45 [Physical dose & biological optimisation](#) (Markus Alber)

10.30 Coffee

11.00 [Temporal conformality, sequential imaging and tumour dynamics](#) (John Fenwick)

11.45 [Crystal ball gazing to the future](#) (Steve Webb)

12.45 School review and close (Colin Baker)

13.00 Lunch
