



The 4th Christie Advanced Radiotherapy Summer School

Monday 1st - Thursday 4th July 2019

Education Centre (Dept. 17), The Christie, Manchester, M20 4BX

Discover, discuss and debate recent advances in radiotherapy

Course Organisers

Professor Ran Mackay
Director - CMPE, The Christie

Dr Ananya Choudhury
**Reader and Consultant in Clinical Oncology,
UoM**

Dr Julia Handley
Head of Radiotherapy Physics, The Christie

Alison Sanneh
Radiotherapy Education Lead, The Christie

Julie Webb
Radiotherapy Research Lead, The Christie

Prof Karen Kirkby
Chair in Proton Therapy Physics, UoM

A fantastic opportunity to learn and network at this interactive conference. The programme includes; tours of the Proton Centre and MR Linac, a wide variety of plenary sessions workshops, debates and social events.

08.45 Registration and coffee

- 09.15** Welcome - **Dr Julia Handley**, Head of Radiotherapy Physics, The Christie
- 09.30** Plenary lecture: National Programme for SABR and case based discussion - **Dr Fiona McDonald**, Consultant Thoracic Clinical Oncologist, The Royal Marsden
- 10.00** Extra cranial overview - **Dr Lubna Bhatt**, Consultant in Clinical Oncology, The Christie
- 10.20** T.B.C. - **Sean Brown**, Consultant in Clinical Oncology, The Christie
- 10.40** Planning challenges of oligometas - **Phil Whitehurst** - Head of Treatment Planning, The Christie

11.00 Coffee break

Technical focus

Chair: Prof Karen Kirkby Richard Rose Chair in Proton Therapy Physics, The Christie

- 11.15** Panel discussion
- 11.35** SRS in brain metastasis - **Dr Rovel Colaco**, Consultant in Clinical Oncology, The Christie
- 12.00** SRS/SABR and the linear accelerator **Dr Julia Handley** - Head of Radiotherapy Physics, The Christie

12.25 Lunch

Technical focus continued

Chair: Prof Karen Kirkby
Richard Rose Chair in Proton Therapy Physics, The Christie

- 13.35** Use of technology in stereotactic planning and dosimetric precision - **Dr Geoff Heyes** Principal CyberKnife Physicist, Queen Elizabeth Hospital Birmingham
- 13.55** Gamma knife radiosurgery techniques **Peter Bownes** - Deputy Head of Radiotherapy Physics and Head of Brachytherapy and Gamma Knife Physics at St James's University Hospital, Leeds

14.15 Panel discussion

14.40 Workshop (select 1 option)

A) Lung SABR based discussion
Seminar Rooms 4&5

Ahmed Salem

Catherine Harris - Clinical Scientist, The Christie

Clare Triffit - Superintendent Radiographer, The Christie

B) Cranial SRS case based discussion
Auditorium

Dr Catherine McBain - Consultant in Clinical Oncology, The Christie

Laura Allan - SRS Specialist Radiographer, The Christie

Kathy Kyllilis - SRS Specialist Radiographer, The Christie

Phillip Cooper - Radiotherapy Physics Satellite Team Leader, The Christie

C) Case Based Discussion: Technology Review - Linac vs CyberKnife SABR - **Dr Geoff Heyes**, Principal Clinical Scientist & **Helen Howard**

15.40 Coffee break

Future Directions

Chair: Dr Ananya Choudhury

Reader and Consultant in Clinical Oncology, University of Manchester

15.50 Debate: Is there a role for SRS in patients with multiple metastases or driver mutations?

16.50 Finish

17.00 Travel to social

18.00 To be confirmed
Location:

19.45 Food: To be confirmed

08.45 Registration & coffee

09:15 Welcome

MR guided radiotherapy focus

Chair: Prof Marcel van Herk

Chair in Radiotherapy Physics, University of Manchester

09.30 Plenary lecture: biologically adaptive radiotherapy - **Professor Peter Hoskin** - Professor in Clinical Oncology, University of Manchester

10.00 Adaptive radiotherapy workflow - **Cynthia Eccles** - Principal Radiographer, The Christie

10.20 The role of MR in Radiotherapy - **Lisa McDaid** - MR Radiographer, The Christie & **Michael Dubec** - MR Clinical Scientist, The Christie

11.00 Coffee break

Adaptive radiotherapy focus

Chair: Professor Corinne Faivre-Finn

Professor in Thoracic Radiation Oncology, University of Manchester

11.30 The role of MR in brachytherapy **Rachel Lea** - Principal Brachytherapy Physicist Scientist, The Christie

12.00 Adaptive radiotherapy in Treatment of Cervix - **Dr Anthea Cree** - Consultant in Clinical Oncology, The Christie

12.30 Lunch

13.30 **Workshop “Meet MR Linac” (select 1 option)**

A) Tour of MR Linac & explanation of workflow

Meet at the registration desk

Ryan Young - Radiotherapy Engineer, The Christie, **Lee Whiteside** - Research Radiographer, The Christie & **Rosie Hales**, Research Radiographer, The Christie

B) Adaptive Radiotherapy in a clinical setting
Seminar Rooms 4&5
Julie Webb

C) High dose rate brachytherapy for prostate cancer

Auditorium

Laura Lane - Team Leader (Radiographer) Brachytherapy & Planning, The Christie & **Will Gillespie** - Specialist Dosimetrist, The Christie

14.30 Coffee break

Future Directions

Chair: Dr Ananya Choudhury

Consultant in Clinical Oncology, The Christie

14.50 Balloon debate: Trials vs big data vs modelling

Professor Peter Hoskin - Professor in Clinical Oncology, University of Manchester, **Professor Marcel van Herk** - Chair in Radiotherapy Physics, University of Manchester & **Catharine West**

15.50 Finish

08.45 Registration & coffee

09:15 Welcome

Imaging focus

Chair: Steve Bolton

Deputy Head of Radiotherapy Physics, The Christie

09.30 The role of morphological and functional Imaging in radiotherapy - **Dr Prakash Manoharan** - Consultant in Radiology, The Christie

10.00 Adaptive radiotherapy in bladder and cervix - **Shaista Hafeez - Marsden**

10.20 New dosimetry with radioisotopes - **Anthea Cree**

10.40 Managing hypoxia - **Prof Catharine West** - Professor of Radiation Biology, University of Manchester

11.00 Extended breath hold and breathing on oxygen - **Dr Mike Parkes** - Senior Lecturer, University of Birmingham

11.20 Coffee break

Big data focus

Chair: Dr Marianne Aznar - Senior Lecturer at University of Manchester, The Christie

11.45 The theragnostics approach to predictive modelling - **Dr Gareth Price** - Principal Clinical Scientist, The Christie

12.25 Learning from every patient & Big data Revolution in radiotherapy - **Dr Alan McWilliam** - Principal Clinical Scientist, The Christie

13.10 Lunch

14.00 Workshop "Meet MR Linac" (select 1 option)

A) Tour of MR Linac & explanation of work flow **Ryan Young** - Radiotherapy Engineer, The Christie, **Lee Whiteside** - Research Radiographer, The Christie & **Rosie Hales** - Research Radiographer, The Christie

B) Carbon Ions - **Neil Burnett and Norman Kirkby**

C) Novel brachytherapy indications
Auditorium

Prof Peter Hoskin - Professor in Clinical Oncology, University of Manchester

15.00 Coffee break

The big debate

Chair: Professor Randal Mackay - Director of Physics and Technical Lead for Protons, The Christie

15.15 Novel agents in radiotherapy - **Dr Ananya Choudhury** - Reader and Consultant in Clinical Oncology, University of Manchester

15.45 **Debate: This house believes that all patients should be treated with particle therapy**

For the motion:

Prof Marcel van Herk - Chair in Radiotherapy Physics, University of Manchester

Against the motion:

Prof Neil Burnet - Professor in Radiation Oncology, University of Manchester

16.45 Finish

17.00 Travel to social

19:00 Meal to be served

Location: Course dinner, Sangam Restaurant, Wilmslow Road Didsbury

19:45 Tapas at La Vina

08.45 Registration & coffee

09.15 Welcome

Clinical focus

Chair: Prof Ranald Mackay

Director of Physics and Technical Lead for Protons,
The Christie

09.30 Update of UK PBT service - **Dr Catherine Coyle** - Consultant in Clinical Oncology,
The Christie

10.10 Model based selection of patients for
proton beam therapy - **Dr Thomas Mee** -
Research Associate, The Christie

10.40 Coffee break

11.10 Case mix experience of a European proton
centre - **Prof Tony Lomax** - Chief Medical
Physicist, Paul Scherrer Institut,
Switzerland

11.40 Clinical trials in PBT - **Prof Neil Burnet** -
Professor in Radiation Oncology,
University of Manchester

12.15 Lunch

Physics/technical focus

Chair: Dr Julia Handley

Head of Radiotherapy Physics, The Christie

13.00 PBT treatment planning - **Matt Lowe** -
Principal Research Scientist, The Christie

13.30 Basic physics and the related equipment
choices for a national service - **Dr Adam
Aitkenhead** - Research Scientist,
The Christie

13.50 Commissioning and QA of PBT equipment
Imran Patel - Team Leader, Oldham
Radiotherapy Physics

14.20 Adaptive Proton Therapy - **Prof Tony
Lomax** - Chief Medical Physicist, Paul
Scherrer Institut, Switzerland

15.00 Workshop (select 1 option)

A) Proton radiobiology

Dr Amy Chadwick - Research Associate,
The Christie

B) Tour of the Proton Therapy Centre (max 25)
Meet at the reception desk

15.45 Coffee break

Future Directions

Chair: Prof Ranald Mackay

Director of Physics and Technical Lead for Protons,
The Christie

16.00 Proton radiotherapy research
Prof Neil Burnet - Professor in Radiation
Oncology, University of Manchester &
Prof Karen Kirkby - Chair in Proton
Therapy Physics, University of Manchester

16:30 Debate - This house believes we should
plan treatments with variable RBE
Prof Karen Kirkby - Chair in Proton
Therapy Physics, University of Manchester
Prof Tony Lomax - Chief Medical
Physicist, Paul Scherrer Institut,
Switzerland

17.10 Finish

17.15 Travel to social for 18.30 start
Junkyard Golf Club

Location: Unit 1, First Street, Manchester, M15 4FN