

## **CTRad Proton Beam Therapy research town meeting** The Christie NHS Foundation Trust, 15 April 2015

### **Executive summary: about the town meeting and its aims**

A meeting was held at The Christie NHS Foundation Trust on 15 April 2015 to discuss the Proton Beam Therapy (PBT) Treating Centre's research plans and the important ongoing proton projects at supporting UK research centres.

The introduction of PBT poses important research questions for the development and availability of this new technology. The aim of this meeting was to bring the UK PBT research community together to stimulate discussion and to consider the key research areas to help develop a national research agenda. Considering the current phase of the service development, there is great motivation to progress this agenda to provide an evidence base of the best possible treatment approaches for the first patients in 2018.

The UK has an excellent environment for the evaluation of PBT. The NHS is well placed to research and improve PBT and to consider its most appropriate applications. At the heart of this robust programme is the commitment to improving outcomes for patients. Sharing ideas on technical and clinical PBT research and collaborative projects is proposed the best approach to tackle the major challenges in this agenda. CTRad provides a platform for bringing together different parties involved in the development of evidence based research for PBT and engaging the wider research community.

This meeting was attended by 84 delegates (including clinical oncologists, paediatric oncologists, medical physicists, radiographers, scientists, engineers and patient representatives) from 36 different institutions (see Appendix 1 for delegate list). This meeting was the fourth CTRad PBT workshop which intended to continue the dialogue, and identify the next steps for PBT research nationally.

The first part of this meeting consisted of a series of presentations from the PBT community covering the breadth of activity in PBT research (see Appendix 2 for meeting agenda). The second part was a breakout group session designed to stimulate discussion to help develop a research strategy and progress the research agenda.

The aims of the breakout group were to consider the developing national research strategy and to consider:

- What are the PBT research priorities in the short term (next 5-7 years) and longer term (next 7-15 years)?
- What are the tools and facilities that the research community need to achieve these priorities?
- Is the necessary existing infrastructure at Clatterbridge, Birmingham, Surrey or in the new facilities at Christie, UCLH, Oxford to allow them to achieve these objectives?

The goal of the national PBT service is acceleration and realization of patient benefit from research. Proposals and ideas were developed in expert groups: Radiotherapy physics; Clinical trials and Clinical methodologies and outcomes and the Biology group. A summary of each group's discussion was presented by the group facilitators.

### **Summary: a way forward**

The day produced lively and far reaching discussions and underlined the desire of the community to work together in this rapidly developing multidisciplinary field. The input of the patient representatives was particularly valuable and ensured that the discussions were grounded on achieving better patient outputs and quality of life. The meeting provided an impetus to develop a

national research strategy under the auspices of CTRad and to work with funders and NHS England on achieving this. It was agreed that future meetings should be held to further develop the strategy and to keep the community working together. It was also important to engage with the wider international community through the CERN ENLIGHT initiative and to look at opportunities for training the next generation of leaders in this field.

## Appendix 1 Attendee list of town meeting

### Speakers, facilitators and chairs of the town meeting

<b>Name</b>	<b>Organisation</b>
Adrian Crellin	Leeds Teaching Hospitals NHS Trust
Manjit Dosanjh	CERN
Phil Evans	University of Surrey
Mark Gaze	UCLH NHS Foundation Trust
Stuart Green	UHB NHS Foundation Trust
Maria Hawkins	The University of Oxford
Tim Illidge	The Christie NHS Foundation Trust
Andrzej Kacperek	The Clatterbridge Cancer Centre
Karen Kirkby	University of Manchester / Christie
Ran Mackay	The Christie NHS Foundation Trust
Guy Makin	University of Manchester
Uwe Oelfke	The Institute of Cancer Research
Mike Partridge	The University of Oxford
Kevin Prise	Queen's University Belfast
Gary Royle	University College London
Giuseppe Schettino	National Physical Laboratory
Beatrice Seddon	UCLH NHS Foundation Trust
Ed Smith	The Christie NHS Foundation Trust
Frank Van den Heuvel	The University of Oxford

### Delegates of the town meeting

<b>Name</b>	<b>Organisation</b>
Adam Aitkenson	The Christie NHS Foundation Trust
Phil Allport	The University of Birmingham
Richard Amos	UCLH NHS Foundation Trust
Robert Apsimon	Lancaster University
Adam Babbs	Medical Research Council
Lara Barazzuol	University of Sussex
Roger Barlow	University of Huddersfield
Lubna Bhatt	The Christie NHS Foundation Trust
Helen Bulbeck	CTRad and Brainstrust
Graeme Burt	Lancaster University
Sue Campbell	CTRad
Jason Cashmore	University Hospitals Birmingham NHS FT
Carolyn Chan	CTRad
Frances Charlwood	The Christie NHS Foundation Trust
Abbasi Chittalia	The Christie NHS Foundation Trust
Ananya Choudhury	The Christie NHS Foundation Trust
Matthew Clark	The Christie NHS Foundation Trust
Vivian Cosgrove	Leeds Teaching Hospitals NHS Trust
Richard Cowan	The Christie NHS Foundation Trust
Catherine Coyle	The Christie NHS Foundation Trust
Reena Davda	UCLH NHS Foundation Trust
Lisa Douet	National Institute for Health Research

Francesca Fiorini	The University of Oxford
Daniel Ford	University Hospitals Birmingham NHS FT
Jenny Gains	UCLH NHS Foundation Trust
Teresa Guerrero-Urbano	Guy's and St Thomas' Hospitals
Bruce Hamilton	The University of Manchester
Katherine Hollinshead	Science & Technology Facilities Council
Alan Hounsell	Belfast Health and Social Care Trust
Anthony Huggins	Varian Medical Systems
Richard Hugtenburg	Swansea University
Penny Jeggo	University of Sussex
Bleddyn Jones	University of Oxford
Melanie Kay	NHS England
Norman Kirkby	The University of Manchester
Fiona Lewis	The Christie NHS Foundation Trust
Henry Mandeville	The Royal Marsden NHS Foundation Trust
Spyros Manolipoulos	University Hospital Coventry and Warwickshire
Ronan McGarth	University of Liverpool
Fiona McKirdy	CTRad
Mike Merchant	The University of Manchester
Syed Moinuddin	UCLH NHS Foundation Trust
Christopher Moore	The Christie NHS Foundation Trust
Tony Murphy	RCR Lay Representative
Alf Oliver	CTRad
Hywel Owen	The University of Manchester
Jason Parsons	The University of Liverpool
Imran Patel	The Christie NHS Foundation Trust
Piero Antonio Posocco	Imperial College London
Jenny Richardson	The Christie NHS Foundation Trust
Paul Sanghera	University Hospitals Birmingham NHS FT
Mark Saunders	The Christie NHS Foundation Trust
Jenny Scott	The Christie NHS Foundation Trust
John Simpson	Science & Technology Facilities Council
Nick Slevin	The Christie NHS Foundation Trust
Michael Taylor	The University of Manchester
Russell Thomas	National Physical Laboratory
Michael Trainer	The Christie NHS Foundation Trust
Marcel van Herk	The University of Manchester
Ian Walker	Cancer Research UK
Samantha Warren	The University of Oxford
Stephen Watts	The University of Manchester
Jim Weightman	The Christie NHS Foundation Trust
Gillian Whitfield	The Christie NHS Foundation Trust
James Wylie	The Christie NHS Foundation Trust

## Appendix 2 Agenda for PBT research town meeting

### National Cancer Research Institute Clinical and Translational Radiotherapy Research Working Group Proton Beam Therapy Town meeting - Research for PBT

Wednesday 15 April 2015 10:00 – 16:00

Education Centre, The Christie NHS Foundation Trust, Wilmslow Road, Manchester M20 4BX

#### AGENDA

09:30	<i>Registration and refreshments</i>	
	<i>Chair: Stuart Green</i>	
10:00	Protons – National context	Adrian Crellin
10:20	The role of CTRad in shaping national research strategy	Neil Burnet / Tim Illidge
10:30	National perspective on paediatric cancer	Guy Makin
10:45	Research plans at Clatterbridge	Andrzej Kacperek
11:05	Research plans at UCLH	Gary Royle
11:25	<i>Tea and coffee</i>	
	<i>Chair: Phil Evans</i>	
11:40	Research plans at Oxford	Frank Van den Heuvel
12:00	Metrology and NPL national strategy	Giuseppe Schettino
12:20	Research plans at Manchester / Christie	Karen Kirkby / Ran MacKay
12:40	International Perspective from CERN	Manjit Dosanjh
13:00	<i>Lunch</i>	
	<i>Chair: Ran MacKay</i>	
13:45	PRAVDA – exemplar of a multidisciplinary project	Phil Evans
14:10	Developing a national strategy and roadmap for research (brainstorming in breakout groups) <b>Breakout groups</b> <b>A. Radiotherapy physics</b> <i>Facilitators: Uwe Oelfke &amp; Mike Partridge</i> <b>B. Clinical trials + Clinical methodologies and Outcomes</b> <i>Facilitators : Adrian Crellin &amp; Maria Hawkins</i> <b>C. Biology</b> <i>Facilitators: Stuart Green &amp; Kevin Prise</i>	
15:30	Discussion of ideas	All
16:00	<i>Close</i>	