International Conference on the Use of Computers in Radiation Therapy
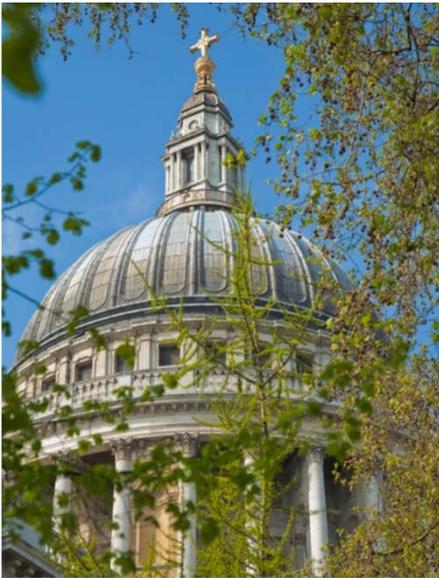
50th
anniversary

International Conference on the Use of Computers in Radiation Therapy

Abstract submission:
22nd January 2016

Early registration:
4th March 2016

ICCR 2016

27-30 June - London UK - iccr2016.org

Dear Colleagues,

It is a great pleasure to invite you to the 18th International Conference on the use of Computers in Radiation Therapy (ICCR), which will take place in London from the 27th to 30th June 2016.

We are delighted to be able to celebrate the 50th Anniversary of ICCR, remembering that radiotherapy was one of the first areas in medicine to benefit from the application of computing, and continues to benefit from cutting-edge computer technology today. The conference will highlight the latest developments in radiotherapy; focusing on the role of informatics, imaging, treatment simulation and decision support in driving forward clinical practise.

It is also our great privilege to join the Institute of Physics to mark the 60th Anniversary of the journal Physics in Medicine and Biology, or "PMB", in a special Symposium running in parallel with ICCR.

We will be offering an exciting educational programme, a range of invited talks from world experts on a state-of-the-art range of subjects and an industrial exhibition of the latest products available on the radiation oncology market.

Please help to make this a high-quality and stimulating meeting by contributing to scientific sessions in the following areas:

Informatics
- Big data collection and analysis
- Data management, workflow and storage
- Data visualisation and decision support
- Machine learning

Treatment Planning
- Automated/rapid treatment planning
- Robust treatment planning and optimisation
- Fast dose calculation
- Radiobiological modelling

Imaging & Motion
- 4D motion management
- 4D dose accumulation
- Deformable image registration
- Automatic image segmentation

New directions
- Novel treatment strategies & particle therapy
- Adaptive therapy strategies and workflow
- Pre-clinical radiotherapy implementation
- Image-guided treatment & adaptation (e.g. MRI/linac, ^{60}Co/MRI, functional imaging)

Two page abstracts will be published as part of our conference proceedings. We will also be inviting the authors of our most highly rated abstracts to submit a full paper to a special "anniversary section" of PMB.

Please keep an eye on our web site www.iccr2016.org for updates to the scientific programme over the next few months. We look forward to welcoming you all to London.
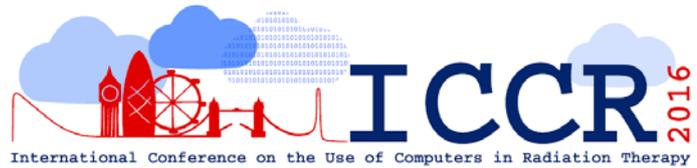
With kind regards,

Uwe Oelfke

Mike Partridge

	MONDAY 27th June	
0930 - 0945	Official Opening	
0945 - 1030	*Radiomics*	
1100 - 1230	Big data analysis (models and structures)	Fast dose calculation (photons / particles)
1330 - 1500	Normal tissue: Segmentation and modelling	Simulation of radiobiological effects
1530 - 1700	Understanding the target volume	In-house software development
1700 - 1900	Poster Reception (with Drinks)	

	TUESDAY 28th June	
0800 - 0850	*Introduction to GPU/CPU programming*	*Machine Learning Primer Part I*
0900 - 1030	Automated big data collection	Treatment planning for combined therapies
1100 - 1145	*Clinical utopia derived from information guided RT*	
1145 - 1230	Oral poster session I	
1330 - 1430	*Keynote lecture*	
1430 - 1600	4D motion management	Focus on patient safety
1630 - 1800	Deformable image registration and dose accumulation	Patient driven data collection, analysis and visualization

	WEDNESDAY 29th June	
0800 - 0850	Overview/Teaching: *Databases*	*Machine Learning Primer Part II*
0900 - 1030	Symposium on Oncology Information Systems	4D patient models
1100 - 1145	Anniversary Lecture – 50 year overview	
1145 - 1230	Oral poster session II	
1330 - 1500	Automated / Interactive planning	Implementation of pre-clinical radiation therapy
1530 - 1700	Probabilistic/robust planning optimization	Novel treatment strategies and dynamic dose reconstruction
1800 - 2330	Evening Event (Thames River Cruise - The Sturgeon)	

	THURSDAY 30th June	
0900 - 1030	Physics in Medicine and Biology	Databases and data storage
1100 - 1230	60th anniversary symposium	Workflow optimisation
1230 - 1300	Award presentation / Bids to host ICCR 2019	

Scientific committees

Co-Chairs:

Prof. Mike Partridge (Oxford), Prof. Uwe Oelfke (ICR / RMH)

Local program committee:

Bissan Al-Lazikani (London), Colin Baker (Berkshire), Viv Cosgrove (Leeds), Phil Evans (Surrey), John Fenwick (Liverpool), Sebastian Galer (London), Sarah Gulliford (London), Emma Harris (London), David Hawkes (London), Frank van den Heuvel (Oxford), Alan Hounsell (Belfast), Andrew Hoole (Cambridge), Brendan McClean (Dublin), Simeon Nill (London), Uwe Oelfke (London) & Mike Partridge (Oxford) - Joint Chairs, Carl Rowbottom (Clatterbridge), Stephen Tozer-Loft (Sheffield).

International program committee:

Thomas Bortfeld (US), Kristy Brock (US), Jo Deasy (US), Andre Dekker (NL), Marcel van Herk (UK), David Jaffray (CA), Steve Jiang (US), Paul Keall (AU), Marc Kessler (US), Jan Lagendijk (NL), Dan Low (US), Ludvig Muren (DK), Gavin Poludniowski (SWE), Frank Verhaegen (NL)

Confirmed Speakers:

Anniversary Speakers

Dr. Roy Bentley and Dr. Jo Milan

Keynote Speakers

Prof. Hugo Aerts (DFCI/BWH)

Prof. Philippe Lambin (MAASTRO)

Invited Speakers

Dr. Bissan Al-Lazikani (ICR)

Prof. Thomas Bortfeld (MGH)

Prof. Joe Deasy (MSKCC)

Dr. Andre Dekker (MAASTRO)

Prof. Benedick Fraass (Cedars-Sinai)
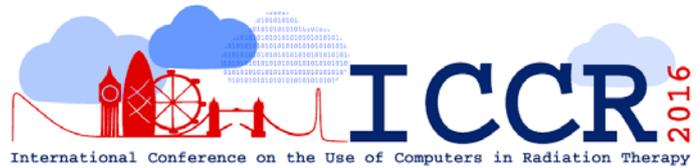
Prof. David Jaffray (PMH)

Prof. Xun Jia (UTSMC)

Prof. Paul Keall (USYD)

Prof. Todd McNutt (JHU)

Dr. Dimitris Visvikis (INSERM)

Dr. Peter Ziegenhein (ICR)

Awards:

Poster awards:

ICCR sponsors a poster award.

Young investigator award:

ICCR sponsors a young scientists award. Candidates should be younger than 35. Exceptions will be made for female applicants who had to interrupt their research for pregnancy/maternity reasons; for them the maximum age is fixed at 40.

General information:

Updated Information:

Please visit the ICCR website (www.iccr2016.org) on a regular basis for updated information. Updates are also announced on Twitter and Facebook.

Venue:

The meeting will take place at the Imperial College London (SW7 2AZ) in the heart of central London.

Social event:

The ICCR 2016 social event will be a party aboard a luxury river yacht, The Silver Sturgeon, giving guests a unique opportunity to see some of London's famous historic and modern buildings, monuments and bridges from the River Thames.