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CURRENT TREATMENT TECHNIQUES FOR BRAIN METASTASES

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CURRENT TREATMENT TECHNIQUES FOR BRAIN METASTASES

CPD: 3 CREDITS

15 January 2021

This half-day virtual event will bring together leaders in the treatment of brain metastases. It will inform best practice and provide practical approaches to overcoming clinical challenges. The latest solutions from industry leaders will also be available to delegates, helping them to remain informed on the latest technological advances.

This virtual event will be suitable for radiographers; in particular to those with SRS and specialist imaging interests, physicists, clinical oncologists, neurosurgeons and neuroradiologists – both registrar and consultant levels.

Educational aims:

- To provide information on the best practice from leaders in the treatment of brain metastases
- To create opportunities for discussion with leading experts
- To provide an interactive debate on the question “Is SRS always the preferred treatment option over whole brain radiotherapy?”

Programme Organisers

Dr Scott Hanvey, Head of Dosimetry and Lead SRS Physicist, University Hospitals Plymouth NHS Trust

Professor Christopher Nutting, Consultant Clinical Oncologist, The Royal Marsden NHS Foundation Trust

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Safety information: Radiation may cause side effects and may not be appropriate for all cancers.

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*PTW-UK Ltd.
Unit 8 Chandlers Yard
Greyfriars
Grantham
Lincolnshire
NG31 6PG*

*Tel: 01476 577503
Email: sales@ptw-uk.com*



13:00	Welcome and introduction Dr Scott Hanvey, Head of Dosimetry and Lead SRS Physicist, University Hospitals Plymouth NHS Trust; and Professor Christopher Nutting, Consultant Clinical Oncologist, The Royal Marsden NHS Foundation Trust
13:05	The role of Gamma Knife in the treatment of brain metastases Mr Ian Paddick, Chief Physicist, Queen Square Radiosurgery Centre; and Past-President of the International Stereotactic Radiosurgery Society
13:30	Q&A
13:35	An analysis of diagnostic and treatment imaging in patients with intracranial metastatic disease Mr Julian Cahill, Neurosurgeon with specialist interest in Gamma Knife Stereotactic Radiosurgery, The National Centre for Stereotactic Radiosurgery, Royal Hallamshire Hospital
13:50	Q&A
13:55	Sponsored break - Elekta
14:00	Challenges and innovations in Linac-based SRS for brain metastases Dr Scott Hanvey, Senior Principal Clinical Scientist, University Hospitals Plymouth NHS Trust
14:30	Q&A
14:35	Sponsored break - PTW
14:40	Clinical and technical challenges still to be overcome in the treatment of brain metastases Professor Dheerendra Prasad, Medical Director, Department of Radiation Medicine, Roswell Park Comprehensive Cancer Center
15:05	Q&A
15:10	Uncertainties in delineation of brain metastases for SRS treatments Dr David Eaton, Head of Radiotherapy Dosimetry, Guy's and St Thomas' NHS Foundation Trust
15:25	Q&A
15:30	Sponsored break - Varian
15:35	The role of CyberKnife in the treatment of multiple brain metastases Miss Philippa Sturt, Principal Physicist – Stereotactic/CtE, The Royal Marsden NHS Foundation Trust
16:05	Q&A
16:10	Close of event

Biographies



Professor Christopher Nutting

Consultant Clinical Oncologist, The Royal Marsden NHS Foundation Trust

Professor Christopher Martin Nutting qualified from Portsmouth Grammar School in 1986 and from University College and Middlesex Hospital School of Medicine (University of London) in 1992.

He was awarded 1st Class BSc Honours (Medicine and Cell Pathology, University of London) in 1989 and MBBS (University of London) in 1992. He became a Member of the Royal College of Physicians (UK) in 1995 and Fellow of the Royal College of Radiologists (UK) in 1998. He was awarded Certification of European Society of Medical Oncology in 1999.

He undertook a period of study at Imperial College Business School and was awarded the Advanced Certificate in Health Care Management (University of London) in 2000. He studied for a Medical Doctorate (MD) at The Institute of Cancer Research, London, between 1998 and 2001 and was awarded MD in 2001.

He was appointed Consultant Clinical Oncologist at The Royal Marsden NHS Foundation Trust and Honorary Senior Lecturer in Clinical Oncology at The Institute of Cancer Research in 2001. He was appointed Teacher at the University of London and Head of the Head and Neck Unit at The Royal Marsden in 2002.

He was appointed National Clinical Lead in Head and Neck Cancer by the Department of Health (UK) and the Cancer Services Collaborative in 2003. Since 2003 he has been a member of the National Cancer Research Institute Committee (NCRI) for head and neck cancer research and became Chairman of this group in 2006. He was appointed as National Clinical Oncology advisor to the Data for Head and Neck Oncology (DAHNO) project in 2005. In 2007 he became President of the British Oncological Association, and was elected an Honorary Faculty member at The Institute for Cancer Research. He is Principal Investigator for a number of research trials including the Cancer Research UK sponsored PARSPORT, COSTAR ARTDECO and DARS Trials. He is principle or co-investigator on an additional 15 trials in head and neck cancer sponsored by The Royal Marsden or by the pharmaceutical industry.

He is Chairman of the National Advisory Board on Head and Neck Cancer to the Cancer Services Collaborative (DoH).

Professor Nutting is holder of research grants for advancement of radiotherapy and chemotherapy research totalling approximately £1.5 million. He is a regular contributor to international medical publications and meetings, and has published over 300 articles in his areas of expertise.

Biographies



Dr Scott Hanvey

Head of Dosimetry and Lead SRS Physicist, University Hospitals Plymouth NHS Trust

Dr Scott Hanvey began his medical physics career in 2005 in Glasgow. While completing his Clinical Scientist training he began a part time PhD specialising in improving structural localisation in radiotherapy with MRI. He went on to lead the treatment planning section in Hampshire. He currently works as Head of Dosimetry and Lead SRS Physicist in Plymouth. Around 100 patients undergo stereotactic radiotherapy in Plymouth per year. As well as ensuring safe and accurate delivery of radiotherapy Scott is leading research to improve the outcome and efficacy of linear accelerator (linac) based stereotactic radiosurgery.



Mr Ian Paddick

Chief Physicist, Queen Square Radiosurgery Centre; and Past-President of the International Stereotactic Radiosurgery Society

Mr Ian began his career as a Medical Physicist in 1989, working at the Hammersmith Hospital, London.

Since 1998 he has worked almost exclusively with the Gamma Knife, being responsible for over 5,000 patient treatments using the B, 4C, Perfexion and Icon Gamma Knife models. He has helped start up over 60 Gamma Knife centres worldwide. He is considered an authority on treatment plan metrics, having formulated the Paddick Conformity Index and the Gradient Index.

In 2003, Ian became a freelance physicist and set up Medical Physics Limited; leading a team providing expert radiosurgery physics services to SRS centres in the UK, Europe and the USA.

Ian is currently on the faculty of five SRS centres; Queen Square, London, Cromwell Hospital, London, Barts and the Royal London, Thornbury Radiosurgery Centre, Sheffield and St. Elisabeth Hospital, Tilburg, Netherlands.

He was the first physicist to be elected as President of the International Stereotactic Radiosurgery Society (ISRS).

Biographies



Professor Dheerendra Prasad

Medical Director, Department of Radiation Medicine, Roswell Park Comprehensive Cancer Center

Professor Dheerendra Prasad is a radiation oncologist in Buffalo, NY and is affiliated with multiple hospitals in the area, including KALEIDA Health, Sisters of Charity Hospital of Buffalo, Cayuga Medical Center at Ithaca, and Roswell Park Comprehensive Cancer Center. He received his medical degree from All India Institute of Medical Sciences and has been in practice 30 years. He also speaks multiple languages, including Hindi, Punjabi, Urdu, and French. He specializes in benign diseases, central nervous system cancer, and pediatric radiation oncology and is experienced in vestibular schwannoma, trigeminal schwannoma, neuroblastoma, optic nerve sheath meningioma, and general radiation oncology.

Roswell Park Comprehensive Cancer Center

- Medical Director, Department of Radiation Medicine
- Director, Central Nervous System & Pediatric Radiation Medicine
- Director, Gamma Knife Center
- Professor of Radiation Medicine & Neurosurgery

Jacobs School of Medicine and Biomedical Sciences, University at Buffalo

- Clinical Associate Professor
- Professor of Clinical Neurosurgery & Radiation Oncology

Background

Education and Training:

- MBBS - All India Institute of Medical Sciences, New Delhi, India
- MCh Neurosurgery - All India Institute of Medical Sciences, New Delhi, India

Residency:

- Radiation Oncology, University of Virginia, Charlottesville, VA
- Neurosurgery, All India Institute of Medical Sciences, New Delhi, India

Fellowship:

- Lars Leksell Fellow in Radiosurgery and Neurosurgery, University of Virginia, Charlottesville, VA

Board Certification:

- Radiation Oncology, American Board of Radiology
- Neurosurgery, International Certification

Honors & Awards:

- 2012-2019 - Best Doctors of America, Radiation Oncology
- 2012-2019 - Top Doctors of America (Castle Connolly) Radiation Oncology
- 2012 - Fellow American College of Radiation Oncology
- RCP Accredited Educator, Royal College of Physicians of London.

Biographies



Mr Julian Cahill

Neurosurgeon with specialist interest in Gamma Knife Stereotactic Radiosurgery, The National Centre for Stereotactic Radiosurgery, Royal Hallamshire Hospital

Mr Julian Cahill, MB BCH BAO (Hons), MD, FRCS (SN) graduated from University College Cork, Ireland. He completed his Specialist Neurosurgery training in the West Midlands, UK followed by further sub-specialisation in the fields of Neuro-Oncology with the completion of the RCS accredited Neuro-Oncology Fellowship and a Stereotactic Radiosurgery Fellowship.

He attained his jointly awarded MD degree at University College Cork and Loma Linda University Medical Centre, LA, USA. His current research interests include the treatment of intracranial metastatic disease. His research track record includes over 30 peer reviewed publications, 8 book chapters, he is a peer reviewer for multiple high impact journals and has been consistently awarded platform presentations at both, national and international level.

He is a member of the Leksell Gamma Knife Society, The Royal College of Surgeons of Ireland, The British Neuro Oncology Society and The Society of British Neurological Surgeons. He enjoys competitive swimming and windsurfing.



Dr David Eaton

Head of Radiotherapy Dosimetry, Guy's and St Thomas' NHS Foundation Trust

David Eaton is a clinical physicist at Guy's and St Thomas's Hospital in London. He studied initially at the University of Cambridge, where he also received his PhD for work in intraoperative radiotherapy. He has worked in a number of clinical radiotherapy departments around the UK, and was also the lead physicist for the national radiotherapy trials quality assurance group (RTTQA). In this role he led a national credentialing programme for stereotactic radiosurgery (SRS), as well as the dosimetry audit programme for the group. Research interests leading to about 50 publications and 6 book chapters have included intraoperative radiotherapy, practical radiation dosimetry, radiation protection, and clinical trials QA. He is a fellow of the Institute of Physics and Engineering in Medicine (IPEM).



Miss Philippa Sturt

Principal Physicist – Stereotactic/CtE, The Royal Marsden NHS Foundation Trust

Philippa has been working in radiotherapy since 2011, and state registered as a clinical scientist since 2013. She has worked in three of the UK's seven CyberKnife centres and recently co-ordinated a national CyberKnife dosimetry audit. Her work on the dosimetric advantages of hydrogel spacers used in prostate SABR was presented at the UK SABR Consortium annual meeting in November 2019. Philippa is currently working on a collaborative project with University Hospitals Plymouth NHS Trust and University Hospitals Bristol NHS Trust comparing plan quality for multiple brain metastases between Accuray Precision, Brainlab Elements Multiple Brain Mets (using models for two different linacs) and GammaPlan.

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