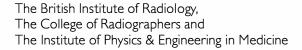




12-14 JUNE 2017 MANCHESTER CENTRAL



DELEGATE INFORMATION













12-14 JUNE 2017 MANCHESTER CENTRAL

President's Welcome





Welcome to the 2nd integrated UKRC and UKRO congress, the largest and only truly multidisciplinary congress that recognises the knowledge, skills and contribution of all professional groups and industry within diagnostic imaging and radiation oncology.

Over the last decade, we have been bombarded with new and advancing technologies in both our social and professional lives. Multi-media technologies and powerful computer interactions have transformed how we undertake everyday tasks. We readily adopt new technologies and app's to enhance our life experiences, monitor our compliance with exercise programmes and advise us on new books, meal ideas or products from websites that are able to learn our consumer preferences through our online activity. So how have these technological advancements been adopted within diagnostic imaging and radiation oncology? Have we embraced digital technologies and media to streamline our work practices and optimise the patient experience? Or are we trying to retain traditional diagnostic and therapeutic work patterns, battling against technology rather than engaging with it? Are we flexible and agile in our roles, work routines and practices to ensure we



don't undermine the positive potential of technology? Have we achieved service efficiencies because of, or despite, new technologies? Has computerisation become a barrier to personalised healthcare and patient centeredness, or is it a facilitator? Despite all these questions, new and advancing technologies have without doubt expanded the potential contribution of imaging to diagnostic and radiotherapy treatment pathways, but without changing our techniques, that is how we use these technologies, we are also at risk of service overload with demand far exceeding capacity.

We will be considering all of these aspects in the exciting scientific and education programme developed by both UKRC and UKRO organising committees. We also have the AXREM supported 'Dose Aware' day taking place on Tuesday 13th June with many opportunities for open learning both in the programme and in the exhibition hall. Check the education programme to identify activities that are open access – look for the open lock symbol.

We are delighted that, once again, presentations from International and UK experts are an integral part of the programme and this year we have continued to expand our portfolio of workshops using the OsiriX workstations to give delegates opportunity to apply learning and engage in clinical decision making and discussion of complex diagnostic imaging cases which will include elements of oncology. We also have a series of hands-on ultrasound workshops and demonstrations and are pleased to welcome back the interactive anatomical workstation to showcase the role of imaging data in education and learning. In addition, there will be opportunities within the exhibition demo zone for you to engage with emerging technologies. We would like to thank all those involved for their time and commitment in putting together such a diverse and inclusive programme which will make this congress without doubt, the UK Imaging and radiation oncology event of the year.

Of course, we could not provide these opportunities without the support of our industry partners and I am delighted to report once again increasing manufacturer and industry presence. Please do join us in the exhibition hall for a welcome reception, drinks and nibbles, on Monday evening to meet both delegates and exhibitors. It's free to all delegates and day visitors and a great opportunity to catch up with old friends, make new contacts and explore the future of imaging with our exhibitors.

This joint congress of UKRC and UKRO represents cohesion in diagnostic imaging and radiation oncology across professional disciplines and industry and our final words must be to thank everyone involved in developing, sponsoring, organising and supporting the event, both front of stage and behind the scenes. On behalf of everyone, we hope you have a wonderful congress!

Maryann Hardy, Congress President, UKRC 2017 Angela Baker, Congress President, UKRO 2017



Who should attend?

- Radiologists
- Radiographers
- Sonographers
- Radiotherapists
- Radiobiologists
- Oncologists
- Medical physicists
- Dosimetrists
- Clinical engineers
- Clinical scientists
- Clinical technologists
- Consultants
- Imaging nurses
- Commissioners
- PACS and IT managers
- Image service managers
- Procurement managers
- Industrialists
- Imaging academics
- Students
- Trainees





Clinical Phil Hughes, Nicholas Woznitza, Vikas Shah Vice Presidents, Clinical







The clinical stream has been designed to provide coverage of both fundamental and cutting edge aspects of radiology and oncology practice. With a dual emphasis on delivering key facts to enhance core knowledge, and an appraisal of new and emerging techniques, the stream will appeal to delegates at all levels. The complete breadth of radiology is covered, with 11 subspecialty areas organised into 25 lecture sessions, some which incorporate live voting technology. These are complemented by OsiriX-based sessions which will enable delegates to review cases and learn tips and tricks to enhance diagnostic confidence, and the popular musculoskeletal and head and neck hands-on ultrasound workshops are returning. We look forward to welcoming delegates to what promises to be an enjoyable and stimulating clinical stream at UKRC 2017.

Working party: Head and Neck - Rhian Rhys; Gl and hepatobiliary - Vikas Shah; Uroradiology - William Torreggiani; Neuroradiology

- Maneesh Patel; MSK - Andrew Carne; Gynaecology/Obstetrics

- Katherine van Ree; Emergency and trauma - Elizabeth Dick & Roland Watura; Breast - Tamara Suaris; Cardiac - Bobby Agrawal; Paediatrics - Amaka Offiah & Samantha Negus; Chest - Mary Roddie

Service innovation and optimisation

Bev Snaith

Vice President, Service innovation and optimisation

With the UKRC focus on technological developments the SI&O stream looks at relevant and wider topics affecting imaging currently. Key are the demands on services, and the sessions will give delegates the chance to hear innovative ideas and network with others looking to optimise delivery.

We are benchmarking and driving improvement in UK radiology by learning how we can use our own data and that from other services to improve from within. With unwaivering demands across imaging, the sessions continues by exploring what opportunities there may be to optimise CT through technology, pathways and staffing. The UK is well known for its team approach to delivering services but in 2016 reporting backlogs again hit the headlines, so we look at whether radiographers may have an increasing role to play in closing the gap.

This year's congress research session is arranged in conjunction with the NIHR Imaging Research Steering Group who are developing a roadmap and will be sharing the *Trends and Challenges - enabling Imaging Research to 2030*. Whether it's opportunities to increase multicentre research activity, hear about the latest developments in big data or look at the research workforce of the future, this session is for you.

In tune with the joint UKRC/UKRO congresses we look at how different partners are working ever closer in delivering care beyond competition: Collaboration between the NHS and the private sector. Finally, changing pathways -cancer and beyond gives us chance to examine how centres internationally are making fundamental changes the patient journey to improve efficiency and outcomes.

We look forward to welcoming you to Manchester and hope you enjoy the programme.

Working party: Nicholas Spencer

Imaging technologies and informatics

Alexander Peck and Sarah Allen Vice Presidents, Imaging technologies and Informatics

UKRC 2017 brings together the areas of technology and informatics



Imaging technologies and informatics has put together seven sessions for the 2017 programme. Sessions cover new imaging approaches in neurosurgery and neuro-oncology with emphasis on the need for multidisciplinary working, interactive sessions on Cloud Based PACS and reporting tools, PACS disaster recovery, cross-organisational working, sessions on novel tracers in molecular imaging and Computer Assisted Radiology and Surgery (CARS). Plus, a return of the interactive anatomy teaching sessions utilising the giant touchscreen MDT Table.

Once again, there are a series of masterclasses that this year concentrate on updating the attendees on the impending new ionising radiation regulations due for implementation in February 2018. Sessions include talks by James Taylor of the HSE and Steve Ebdon-Jackson from DoH / PHE, both experts in their field and able to give a clear view on the impact of the upcoming new regulation and answer queries and concerns from the audience. We would like to acknowledge Graham Hart for organising these sessions for the conference.

As Vice Presidents for Imaging Technologies and Informatics we would look forward welcoming you to Manchester and we thank colleagues on the working party for their hard work putting together the sessions.

Working party: Graham Hart, John Ridgway, Heather Williams, Kevin Tucker, Anant Patel, Liz Beckmann and Dewinder Bhacu

Education and research

Vivien Gibbs

Vice President, Education and research

This year's streams on education and research bring together all the professions for joint debate and discussion. We will hear from recognised

experts in the field plus those at the beginning of their careers. New innovative ideas will be shared, together with strategies and information to assist and challenge.

As the clinical landscape is changing, the professions needs to be ready to embrace the opportunities available. Speakers will share new models of education, and demonstrate the role of these exciting initiatives in developing the future workforce and promoting positive new developments in healthcare.

The role of research in helping to develop careers, both in the clinical setting and in the academic environment will be shared. Practical advice will be provided on how to successfully engage with research in order to maximize the benefits, both to individuals and to the profession.

To support these presentations there are practical workshops which will provide opportunities for interactive hands-on demonstrations of innovative new ideas.

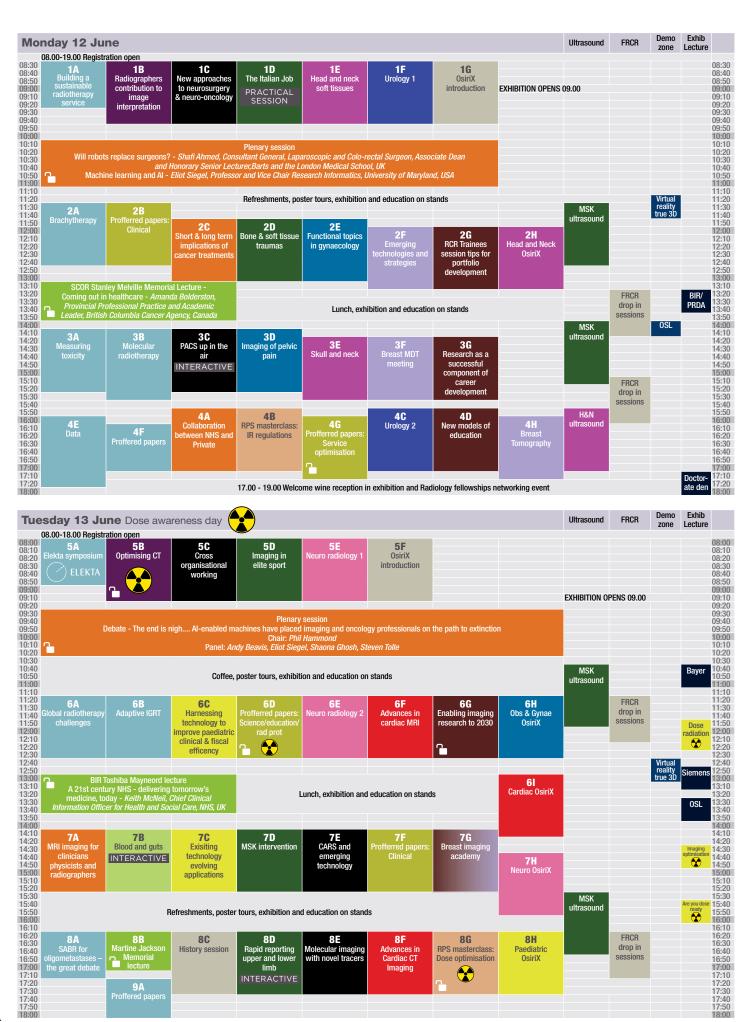
We look forward to welcoming you to Manchester and hope you enjoy the programme!

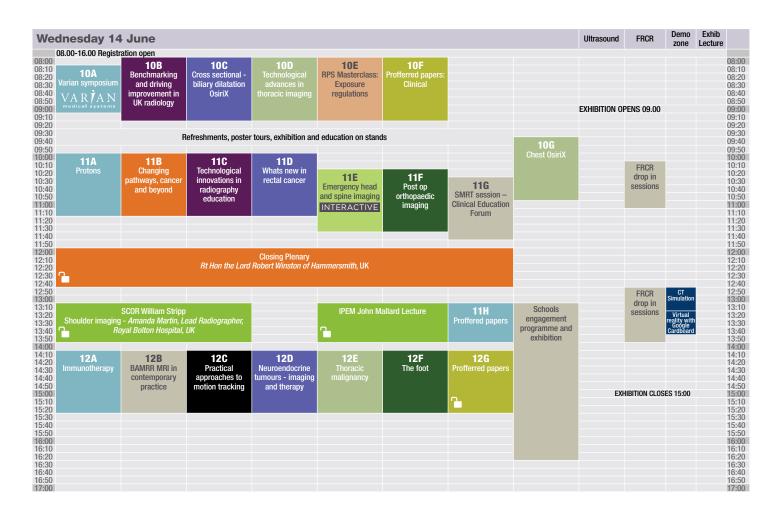
Working party: Caroline Parkin Poster cordinator: Kamna Mehta



Congress overview

• Sessions with the open padlock are opened to all including day visitors





Plenary and Keynote Lecture Programme

Monday 12 June

10.10 - 11.10

Will robots replace surgeons?

Shafi Ahmed, Consultant General, Laparoscopic and Colo-rectal Surgeon, Associate Dean and Honorary Senior Lecturer, Barts and the London Medical School



Machine learning and Al Eliot Siegel, Professor and Vice Chair Research Informatics, University of Maryland, USA



SCOR Stanley Melville Memorial Lecture - Coming out in healthcare

Amanda Bolderston, Provincial Professional Practice and Academic Leader, British Columbia Cancer Agency, Canada

Tuesday 13 June



The end is nigh.... Al-enabled machines have placed imaging and oncology professionals on the path to extinction



Chair: *Phil Hammond, GP* and *Presenter* Panel:

- Andy Beavis, Radiotherapy Physicist and Chief Scientific Officer, Vertual
- Eliot Siegel, Professor and Vice Chair Research Informatics, University of Maryland, USA
- Shaona Ghosh, Postdoctoral Researcher, University of Cambridge
- Steven Tolle, Global Vice President for Imaging, IBM Watson Health



BIR Toshiba Mayneord Lecture - A 21st century NHS - delivering tomorrow's medicine, today Keith McNeil, Chief Clinical Information Officer for Health and Social Care, NHS

<u>16.20 - 17.10</u>

SCOR Martine Jackson Memorial Lecture - Specialists posts, special radiographers and patient care Sairanne Wickers, Consultant Radiographer, University College London Hospital

Wednesday 14 June



Closing Plenary Rt Hon the Lord Robert Winston of Hammersmith



SCOR William Stripp -Shoulder imaging Amanda Martin, Lead Radiographer, Royal Bolton, Hospital

13.10 - 14.00

IPEM John Mallard Lecture Speaker tbc

Plenary and keynote speakers



Opening plenary

Will robots replace surgeons?



Shafi Ahmed, Consultant General, Laparoscopic and Colo-rectal Surgeon, Associate Dean and Honorary Senior Lecturer, Barts and the London Medical School

Shafi Ahmed is a surgeon, teacher, futurist, innovator, entrepreneur and an evangelist in Augmented and

Virtual Reality. He currently works as a laparoscopic colorectal surgeon at The Royal London and St Bartholomew's Hospitals. As a dedicated trainer, educator, and Associate Dean of Bart's Medical School, he was awarded the Silver Scalpel award in 2015 as the best national trainer in surgery by the Association of Surgeons in Training. He is currently serving as an elected member of council of the Royal College of Surgeons of England, sits on a number of advisory panels for government and also serves as a civilian advisor for the Royal Air Force.

Dr. Ahmed is always looking at ways of translating technology into clinical practice with a mission to provide affordable and accessible surgical training to anyone and everyone using the power of connectivity to allow equitable surgical care.

Shafi made world headline news in 2014 by streaming a live operation using Google Glass to 14,000 students and trainees across 132 countries. On April 14th, 2016 he performed the world's first virtual reality operation which was watched by 55,000 people in 140 countries, and reached 4.6 million on Twitter. In December 2016 he used the Snapchat spectacles to record and teach surgery across the globe which has had over 100 000 downloads and viewed by over 2 million people and reached 54 million people on twitter.

Machine learning and AI



Eliot Siegel, Professor and Vice Chair Research Informatics, University of Maryland, USA

Dr Siegel is Professor and Vice Chair Research Informatics at the University of Maryland School of Medicine, Department of Diagnostic Radiology, as well

as Chief of Radiology and Nuclear Medicine for the Veterans Affairs Maryland Healthcare System, both in Baltimore, MD. Dr. Siegel is also responsible for the NCI's National Cancer Image Archive and is Workspace Lead of the National Cancer Institute's caBIG In Vivo Imaging Workspace.

Under his guidance, the VA Maryland Healthcare System became the first filmless healthcare enterprise in the United States. He has written over 200 articles and book chapters about PACS (Picture Archiving and Communication Systems) and digital imaging, and has edited six books on the topic, including Filmless Radiology and Security Issues in the Digital Medical Enterprise. He has made more than 1,000 presentations throughout the world on a broad range of topics involving the use of computers in medicine. He has been named as Researcher of the Year, received multiple awards for innovation, including the Smithsonian award, and was selected as runner up Educator of the Year for Diagnostic Radiology. The readers and editorial board of Medical Imaging have selected Dr. Siegel as one of the top ten radiologists for the past two years. He was symposium chairman for the Society of Photo-optical and

Industrial Engineers (SPIE) Medical Imaging Meeting for three years, is currently chair of Publications for the Society of Computer Applications in Radiology (SIIM) and has been honored as a fellow in that organization. He is chairman of the RSNA's Medical Imaging Resource Committee. His areas of interest and responsibility at both the local and national levels include digital imaging and PACS, telemedicine, the electronic medical record, and informatics.

Joint UKRC/UKRO plenary debate

The end is nigh.... Al-enabled machines have placed imaging and oncology professionals on the path to extinction

This debate is not about arguing the need for AI, it's about arguing whether AI can deliver on its promises or not. We have exactly what machines need to learn from – binary data. You can use this right now, in your own home. With an online tutorial, you can train a programme to find patterns in plain films. Using convoluted neural networks it is possible to get a first read from a machine and an explanation of what it thinks is the diagnosis and why. Intelligent machines can also direct image acquisition and treatment sequences for defined disease pathways. So if machines have the capacity to do all this, will we need imaging and oncology professionals in the future? Or an army of computers operated by unqualified staff and supervised by specialist medical computer scientists?

Chair: Phil Hammond, GP and Presenter

Panel

- Andy Beavis, Radiotherapy Physicist and Chief Scientific Officer, Vertual
- Eliot Siegel, Professor and Vice Chair Research Informatics, University of Maryland, USA
- Shaona Ghosh, Postdoctoral Researcher, University of Cambridge
- Steven Tolle, Global Vice President for Imaging, IBM Watson Health

Closing Plenary



Rt Hon the Lord Robert Winston of Hammersmith

Truly a 'Renaissance Man', Lord (Robert) Winston is a doctor, scientist, politician and television presenter.

Widely regarded as our pre-eminent expert in reproductive medicine, Lord Winston is Professor of Science and Society and Emeritus Professor of Fertility Studies at Imperial College. He runs a gene transplant research programme in the Institute of Reproductive and Developmental Biology, where the team have achieved significant advances, particularly in endocrinology, IVF and genetics.

Lord Winston has been Chancellor of Sheffield Hallam University and Chairman of the Council of the Royal College of Music. In the field of politics, he sits on the Labour benches and speaks regularly in the House of Lords, particularly on science, education, medical ethics and the arts. He is chairman of the House of Lords Select Committee on Science and Technology. A seasoned and popular television presenter, Lord Winston wrote and presented Superhuman, The Secret Life of Twins, Child of Our Time and the BAFTA Award winning The Human Body. He presented five series of Your Life in Their Hands for the BBC. In addition to his science-based programmes, Lord Winston displayed his musical abilities in Play It Again, where he learned to play a saxophone, from scratch, in five months. He has even appeared in an episode of The Archers, as a fertility expert.

A regular contributor to Any Questions, Question Time and the Today programme, Lord Winston has also appeared on Have I Got News For You, Start The Week and Desert Island Discs. He has contributed articles to all the national newspapers and to journals ranging from The Spectator to Good Housekeeping. Much in demand as a conference speaker, Lord Winston explains how the human mind is expanding exponentially and advocates greater trust in scientists, in everything from food scares to climate prediction.

Society Keynote lectures

SCOR Stanley Melville Memorial Lecture Coming out in healthcare



Amanda Bolderston, Provincial Professional Practice and Academic Leader, British Columbia Cancer Agency, Canada

Amanda is the Provincial Professional Practice and Academic Leader for the British Columbia Cancer

Agency in Canada. She trained in the UK at the Oxford Regional School of Radiography in the 1980s, and subsequently has worked in the UK, Holland, Ontario and BC as a clinician, researcher, educator and leader. Amanda has authored numerous articles and presented extensively nationally and internationally. She is the Associate Editor for Qualitative Research for the Canadian Journal of Medical Imaging and Radiation Sciences and an editorial board member for Radiotherapy in Practice in the UK. She is a Fellow of the Canadian Association of Medical Radiation Technologists as well as a past president. She has been involved in the development of advanced practice in Canada for over 15 years, initially with the Canadian Specialist Radiation Therapist project and the subsequent national certification framework, and now in BC with the development of local roles. Recently she has taken to Twitter, and helped found the popular MedRad Journal Club which hosts monthly international research chats. She is currently a graduate student in the University of British Columbia's education doctorate program, studying educational leadership and policy. Her talk today reflects on her doctoral work, as well as her personal story as an out health care professional, to examine the experiences of lesbian, gay, bisexual, transgendered and queer (LGBTQ) patients in the health care system. She will discuss how sexual orientation and gender identity impacts healthcare - and how we can provide care to this stigmatised population in a culturally competent way.

BIR Toshiba Mayneord Lecture A 21st century NHS - delivering tomorrow's medicine, today



Keith McNeil, Chief Clinical Information Officer for Health and Social Care, NHS

An internationally recognised expert in the fields of lung transplantation and pulmonary vascular disease, Keith was appointed as the NHS's first CCIO In July

2016. He took up this role having previously served as CEO at Addenbrookes Hospital in Cambridge and prior to that as CEO of one of the largest health services in Australia - Metro North Health Service in Brisbane. In his new role, he is overseeing the implementation of the national digital agenda for health IT. He is committed to ensuring patients receive high quality, safe care in a sustainable system construct, through the digital transformation of the National Health Service. Keith spent two years as a senior transplant fellow at Papworth Hospital and a further five years working jointly at Papworth and CUH as a cardio-pulmonary transplant and respiratory physician and director of the pulmonary vascular disease unit. During this time, Keith was pivotal in establishing the UK's centre for pulmonary endarterectomy at Papworth and was an adviser to the Department of Health on



pulmonary hypertension. Keith began his chief executive career in 2007 in his native Australia at the Royal Brisbane and Women's Hospital, a 980-bed teaching hospital, one of the largest teaching hospitals in the southern hemisphere. In 2008 he was appointed Professor of Medicine at the University of Queensland. Keith also served in the Australian Special Forces where he was trained in survival techniques and as a weapons expert.

SCOR Martine Jackson Memorial Lecture Specialists posts, special radiographers and patient care

Sairanne Wickers, Consultant Radiographer, University College London Hospital

After qualifying as a therapeutic radiographer in 2002, Sairanne specialised in pre-treatment a few years later, and more specifically in breast and PET-CT planning in 2009. Sairanne became a consultant breast radiographer in January 2016. As well as managing her autonomous practice in the treatment of early breast cancer, Sairanne has a keen interest in radiographer-led research and driving forward best practice.

SCOR William Stripp Lecture Shoulder imaging



Amanda Martin, Lead Radiographer, Royal Bolton Hosptial Amanda qualified in 1986 and started her Radiography career at Bolton Royal Infirmary. Shortly afterwards, she took up employment as a senior radiographer at Booth Hall Children's Hospital where she was the

SoR Union Representative for a number of years. In 1995 Amanda was part of a pilot study to assess the ability of Radiographers to report musculoskeletal radiographic images. This developed into a postgraduate programme, and she achieved a MSc in Clinical Reporting of Trauma and Orthopaedics in 1999. Amanda then returned to her roots, and took a Clinical Tutor post at the Royal Bolton Hospital, combining this with a lecturers post at the University of Salford, where she was programme lead for the MSc Advanced Practice in Reporting. During her time as a lecturer practitioner, Amanda completed her PgC Teaching and Learning in Higher Education and commenced on the Professional Doctorate Health and Social Care programme. In 2007, she moved back into a full time post at Bolton when she was appointed as Clinical Manager. Completing her DProf in 2011 on the topic of service improvement methodologies within the NHS. Amanda opted to return into a clinical post rather than remain in management. She is now Lead Radiographer for the Trust, and audit lead and lead reporting radiographer within the department. She has a number of reporting sessions each week, where she reports musculoskeletal images from a wide range of sources and works closely with the ED in ensuring that patients requiring musculoskeletal imaging leave the department with the correct diagnosis and treatment at all times. Amanda also holds an annual contract with the University of Salford where she teaches image evaluation and interpretation to a wide range of professions. Her passion is in primary imaging of musculoskeletal conditions, and the impact that radiographers can have on supporting clinicians in achieving a good outcome for the patient.

IPEM John Mallard Lecture

The John Mallard Lecture is given annually at the UK Radiological Congress (UKRC) to recognise the outstanding contribution and leadership of Professor John Mallard in the field of Medical Imaging.

John Mallard's career spanned more than 40 years, during which advances in medical imaging facilitated huge improvements in the diagnosis and management of disease.

He pioneered many of the technologies which have become standard in health care throughout the world including Radionuclide Imaging, Magnetic Resonance Imaging and Positron Emission Tomography.

The speaker of 2017 is yet to be confirmed but in keeping with previous years, this will be a highly educational and scientific presentation delivered by an eminent professional.

08.30 - 09.50

1A UKRO

Building a world class UK radiotherapy service for the 21st century

Chairs: Angela Baker, President, UKRO & Andy Beavis, Past-president, UKRO, UK

Challenges and strategy for implementation of a sustainable radiotherapy service - Nick Slevin, Consultant Clinical Oncologist, The Christie NHS Foundation Trust, UK

Developing an internationally competitive radiotherapy research programme - Anthony Chalmers, Professor of Clinical Oncology, University of Glasgow, UK

08.30 - 09.50 1B

Innovation &

Closing the gap - radiographers contribution to image interpretation in 2017

Chair: Bev Snaith, Lead Consultant Radiographer, Mid Yorkshire Hospitals NHS Trust, UK

Reducing the potential for error and miscommunication in the emergency department - can Australian radiographers reach new heights? - Michael Neep, Metro South Health, Queensland, Australia

Radiographers and lung cancer: An opportunity for change? - Nick Woznitza, Clinical Academic Reporting Radiographer, Homerton NHS Trust & Canterbury Christ Church University, UK

The radiologists view - Nicholas Spencer, Consultant Radiologist, Mid Yorkshire Hospitals NHS Trust, UK

The managers view: A DGH journey from start to finish...why a consultant radiographer? - Mark Buckley, Professional Lead, Rotherham Foundation Trust, UK

08.30 - 09.50 **1C** Imaging

technologies

& informatics

New imaging approaches in neurosurgery & neuro-oncology

Chair: John Ridgway, Head of MR Physics, Leeds Teaching Hospitals NHS Trust, UK

Advanced MR imaging techniques for neurosurgical planning - a neurosurgeon's perspective - John Goodden, Consultant Neurosurgeon, Leeds Teaching Hospitals NHS Trust, UK

Advanced MR Imaging techniques for neurosurgical planning - a clinical scientist's perspective - Arshad Zaman, Clinical Scientist, Leeds Teaching Hospitals NHS Trust, UK

Dose verification for proton - a radiologist's/oncologist's perspective - Speaker tbc

08.30 - 09.50 **1D** MSK 1

PRACTICAL

SESSION

The Italian iob

Chair: Nicki Delves, Specialist MSK Sonographer, Royal Surrey County Hospital, UK

Median nerve - Sonia Airaldi, Resident Radiologist, University of Genoa, Italy Ulnar nerve - Federico Zaottini, Resident Radiologist, University of Genoa, Italy

Radial nerve - Carlo Martinoli, Professor of Radiology, University of Genoa, Italy

Group discussion and live demo

08.30 - 09.50 1E

Soft tissues

Chair: Rhian Rhys, Consultant Radiologist, Cwm Taf University Health Board, UK

Thyroid nodules - an epidemic! - Steve Colley, Consultant Radiologist, University Hospital Birmingham NHS Trust, UK Parathyroid imaging update - Polly Richards, Consultant Radiologist, Barts NHS Trust, UK

Salivary stones, baskets and balloons - Nick Drage, Consultant Dental and Maxillofacial Radiologist, University Hospital of Wales, UK Sialendoscopy and minimally invasive salivary surgery - Katherine George, Consultant Oral and Maxillofacial Surgeon, King's College Hospital, Guy's & St Thomas' NHS Foundation Trust, UK

08.30 - 09.50

Urology

1F

Chair: Alison Bradley, Consultant Radiologist, University Hospital of South Manchester, UK

Imaging of prostate cancer. Current status - Peter Beddy, St James Hospital, Dublin, Ireland

Staging of renal cancer - Grainne Govender, Consultant Radiologist, St James Hospital, Dublin Ireland

Scrotal tumours - Navin Ramachandran, Consultant Radiologist, University College Hospital, London, UK

08.30 - 09.50

1G

Introduction to OsiriX for beginners

Introductory workshop with MAC workstations loaded with OsiriX, to enable participants to look at case studies.

10.10-11.10

Opening plenary

Will robots replace surgeons? - Shafi Ahmed, Consultant General, Laparoscopic and Colorectal Surgeon, Associate Dean

Machine learning and AI - Eliot Siegel, Professor and Vice Chair Research Informatics, University of Maryland, USA

11.30 - 13.20

11.20-11.50 Interactive demo

Virtual reality True 3D

This session will give attendees the opportunity to view CT and MRI data sets in True 3D. Patient specific anatomy will be visible in the open 3D space on top of the monitor screen using the EchoPixel True 3D software. Participants will be able, in small groups, to interact with the full DICOM data set in real-time, enabling them to reach in, grasp, dissect and interact with the key clinical features in a truly 3D form, as if they were the real physical objects.

Advancing techniques and technologies in brachytherapy

Chair: Chris Lee, Consultant Clinical Scientist, Radiotherapy, Head of Brachytherapy Physics, The Clatterbridge Cancer Centre NHS Foundation Trust, UK and Peter Hoskin, Professor of Clinical Oncologist, East and North Hertfordshire NHS Trust, UK

Advancing techniques and technologies in modern brachytherapy - Bradley Pieters, Department of Radiation Oncology, Academic Medical Centre, University of Amsterdam, Netherlands

Physics & technology in brachytherapy: Is something new? - Dimos Baltas, Professor for Medical Physics in Radiation Oncology, Head Division of Medical Physics, Medical Center, University of Freiburg, Germany

Brachy HERO - Peter Hoskin, Professor of Clinical Oncologist, East and North Hertfordshire NHS Trust, UK **Proffered papers**

8

2A UKRO



11.30 - 12.50 2B Proffered

Proffered papers - clinical

Chair: Vikas Shah, Consultant Radiologist, University Hospitals of Leicester, UK

Interpretation of TMJ pathology - a jaw-dropping review - Gary Cross, London Deanery, UK

Assessing the appropriateness of requests for Lumbar spine radiography for low back pain in the community - Ken-win To, Kettering General Hospital NHS Foundation Trust, UK

Optimisation of adequate phase of contrast enhancement on CT - an audit report and literature review - Waqas Ahmad, Shaukat Khanum Memorial Cancer Hospital, Pakistan

Renal disease in Northern Territory, Australia - a matter of life choices? - Tu Anh Dao, Alice Springs Hospital, Northern Territory, Australia

 $\textbf{Mature and immature ovarian teratomas: a spectrum of features and multimodality problem solving - \textit{Kelsey Watt, Plymouth Hospitals NHS Trust, UK}$

MRI-TRUS fusion - guided prostate biopsy - initial clinical experience - Maeve O'Sullivan, AMNCH, Ireland

MRI characterisation of incidentalomas in the liver: Is intravenous contrast required? - Vincent Leung, University Hospitals of North Midlands. UK

Aunt Minnies of uroradiology - Jonathan Bevan, Salford Royal Foundation Trust, UK

11.30 - 12.50 MSK ultrasound

MSK ultrasound

Hands on demonstration sessions with live models in the exhibition hall.

11.50 - 13.10 2C Joint session 1

Short and long term implications of cancer treatments

Chair: Gerry Hanna, Senior Lecturer and Consultant in Clinical Oncology, Queen's University of Belfast, UK and Julian Kabala, Consultant Radiologist, University Hospital Bristol, UK

Cancer risk estimates from diagnostic medical radiation exposures in young people - Mark Pearce, Professor of Applied Epidemiology, Institute of Health & Society, Newcastle University, UK

Impact of target volumes on 2nd cancer risk from lymphoma radiotherapy - Robin Prestwich, Consultant Clinical Oncologist, Leeds Teaching Hospital, UK

Late GI side-effects following abdominal or pelvic radiotherapy - Clare Donnellan, Consultant Gastroenterologist, St. James's University Hospital, Leeds, UK

Late radiological changes following thoracic radiotherapy - Lynne Armstrong, Consultant Radiologist, University Hospital Bristol Clare Donnellan, Consultant Gastroenterologist, St. James's University Hospital, Leeds, UK

11.50 - 13.10 2D MSK

Bone and soft tissue tumours and their imaging

Chair: tbc

Bone tumours in the appendicular skeleton - Prudencia Tyrrell, Consultant Radiologist, Robert Jones and Agnes Hunt Orthopaedic Hospital, Oswestry, UK

Bone tumours in the axial skeleton - Bernhard Tins, Consultant Radiologist, Robert Jones and Agnes Hunt Orthopaedic Hospital, Oswestry, UK

Soft tissue tumours - Naomi Winn, Consultant Radiologist, Robert Jones and Agnes Hunt Orthopaedic Hospital, Oswestry, UK Tumour mimics - Jaspreet Singh, Consultant Radiologist, Robert Jones and Agnes Hunt Orthopaedic Hospital, Oswestry, UK

11.50 - 13.10 2E Obstetrics &

Functional topics in gynaecology

Chair: Katherine van Ree, Consultant Radiologist, Imperial College NHS Trust, UK

PET CT in gynaecological malignancies - Tara Barwick, Consultant Radiologist, Imperial College NHS Trust, UK Functional tumours of the ovary - Anju Sahdev, Consultant Radiologist, St Bartholomew's Hospital, UK

12.00 - 13.20 **2F** Breast

Emerging technologies and strategies

Chair: Tamara Suaris, Consultant Radiologist, St Bartholomew's Hospital, London, UK

Contrast spectral mammography - Sarah Tennant, Consultant Radiologist, Nottingham University Hospitals NHS Trust, UK Updates on digital breast tomosynthesis - Juliet Morel, Consultant Radiologist, King's College Hospital, London, UK Surgical updates - Andrew Baildham, Consultant Oncoplastic Surgeon, St Bartholomew's Hospital, London, UK

12.00 - 13.20 **2G** RCR

Tips for portfolio development and preparing for a consultant career

Chair: Janarthan Suntharanathan, Radiology Specialty Registrar, Health Education North West, UK and Caroline Parkin, Consultant Breast Radiologist, Nightingale Centre, University of South Manchester NHS Foundation Trust, UK

Thinking about consultancy - what's right for you? - Diana Rosof Williams, Consultant Radionuclide Radiologist, Lancashire Teaching Hospitals NHS Foundation Trust, UK

Designing and seizing your consultant post - how you do it? - *Kate Downey, Consultant Breast Radiologist and Cancer Imaging Specialist, The Royal Marsden NHS Foundation Trust, UK*

Transitioning from trainee to consultancy: Leadership and management - P Najran, Consultant Radiologist, The Christie NHS Foundation Trust, UK

Creating a successful CV - Alex Weller, Consultant Radiologist, Northwick Park NHS Foundation Trust, UK

Training LTFT: The best of both worlds - Tharsi Sarvananthan, Radiology Specialty Registrar, Frimley Health NHS Foundation Trust, Health Education Kent, Surrey and Sussex, UK

12.00 - 13.20 2 H Head & neck Osirix

Head and neck OsiriX

Workshop with MAC workstations loaded with OsiriX, to enable participants to look at head and neck case studies. Rhian Rhys, Consultant Radiologist, Cwm Taf University Health Board, UK

Steve Colley, Consultant Radiologist, University Hospital Birmingham NHS Trust, UK

13.10-13.55

SCoR Keynote: Stanley Melville Lecture

Coming out in healthcare

Amanda Bolderston, Provincial Professional Practice and Academic Leader, British Columbia Cancer Agency, Canada

13.20 - 14.20 FRCR drop in session

FRCR drop in session

FRCR VIVA teaching tutorla run by experienced FRCR tutors.

13.20 - 13.50 Exhibition Lecture BIR/PRDA Pelvic radiation disease a late effect of radiotherapy

14.00 - 15.40

14.00-14.20
DEMO ZONE
Oncology
Systems Ltd

IBA's Dolphin* - Advanced pre-treatment VMAT QA and online-ready treatment monitoring system

MSK ultrasound

MSK ultrasound

Hands on demonstration sessions with live models.

14.10-15.30 3A UKRO **Measuring toxicity**

Chair: Kevin Franks, Consultant Clinical Oncologist, St James' Institute of Oncology (SJIO), Leeds Cancer Centre & Honorary Clinical Associate Professor, University of Leeds, UK

Measuring toxicity in pelvic radiotherapy patients - Alexandra Gilbert, Clinical Research Fellow, University of Leeds, UK Assessment of Patient Reported Outcomes (PROs) in clinical trials of cancer therapy developing validated PROs - Professor Dame Lesley Fallowfield, Director of Sussex Health Outcomes Research & Education in Cancer, Brighton and Sussex Medical School, University of Sussex, UK

Patient reported outcomes, what's important to patients? - Margaret Grayson, Chair, Northern Ireland Cancer Research Consumer Forum. UK

14.10 - 15.40 3B UKRO Molecular radiotherapy

Chair: Glenn Flux, Head of Radioisotope Physics, Royal Marsden Hospital & Institute of Cancer Research, UK

The changing landscape of molecular radiotherapy - Glenn Flux, Head of Radioisotope Physics, Royal Marsden Hospital & Institute of Cancer Research, UK

Toward personalised treatment planning for molecular radiotherapy - Lidia Strigari, Medical Physicist, Laboratory of Medical Physics and Expert Systems, Regina Elena National Cancer Institute, Italy

Beyond volume delineation: Theragnostic PET imaging to predict response to radium-223 molecular radiotherapy - lain Murray, Principal PET Physicist, Joint Department of Physics, Royal Marsden NHS Foundation Trust, UK

14.10 - 15.30 3C Imaging

technologies

& informatics

INTERACTIVE

Clouds & bunkers: PACS up in the air, extreme collaboration and staying prepared

Chair: Anant Patel, IM+T Advisory Group, Society and College of Radiographers, UK

New collaborative cloud systems - Speaker tbc

Closer to home: The European cloud - Fredrik Gustavsson, Sectra

Best practice disaster recovery - Huw Shermer, CCIO Wales, Medical Director, NHS Wales Informatics Service, UK Business continuity in a 24/7 industry - Speaker tbc

14.10 - 15.30 3D Obstetrics & Imaging of pelvic pain

Chair: Katherine van Ree, Consultant Radiologist, Imperial College NHS Trust, UK

The diagnosis of chronic pelvic pain - how to triage patients with US - Susanne Johnson, Associate Specialist in Gynaecology, Princess Anne Hospital, Southampton, UK

Pelvic congestion syndrome - imaging and treatment - Kate Waters, Consultant Radiologist, University Hospitals of Leicester, UK

14.20 - 15.40 3EHead & neck

Skull and neck

Chair: Polly Richards, Consultant Radiologist, Barts NHS Trust, UK

Temporal bone - cholesteotoma - Ravi Lingham, Consultant Radiologist, Northwick Park & Central Middlesex Hospitals, UK
Temporal bone - if it's not cholesteotoma... - Matt Bull, Consultant Radiologist, NHS Frimley Park Foundation Trust, UK
Central skull base - pearls and pitfalls - Gitta Madhani, Consultant Radiologist, Imperial College Healthcare NHS Trust, UK
Intracranial complications of ENT disease - Gillian Potter, Consultant Neuroradiologist, Salford Royal NHS Foundation Trust, UK

14.20 - 15.40 **3F** **Multidisciplinary meeting**

Chair: Tamara Suaris, Consultant Radiologist, St Bartholomew's Hospital, London, UK Speakers

Juliet Morel, Consultant Radiologist, King's College Hospital, London, UK

Sarah Tennant, Consultant Radiologist, Nottingham University Hospitals NHS Trust, UK

Louise Jones, Consultant Histopathologist, St Bartholomew's Hospital, London, UK

Andrew Baildham, Consultant Oncoplastic Surgeon, St Bartholomew's Hospital/ Manchester, UK

14.20 - 15.40 3G Education & research Research as a successful component of radiographer career development

Chair: Rachel Harris, Professional and Educational Manager, SCoR, Steering Group Chair of CAHPR, UK

Dual registration improves image guidance in head and neck radiotherapy: An implementation study - Simon Goldsworthy, Senior Radiographer, Taunton and Somerset NHS Foundation Trust, UK

The only way is ethics! - Julie Woodley, Senior Lecturer, University of the West of England, UK

Inter-observer variation in quality assurance of sonographer performed non-obstetric ultrasound - Peter Cantin, Consultant Sonographer, Plymouth Hospitals NHS Trust, UK

Supporting allied health professional involvement in research - Jen Pearson, Chair, CAHPR (Council for Allied Health Professional Research), UK

15.10 - 16.10 FRCR drop in session FRCR drop in session

FRCR VIVA teaching tutorla run by experienced FRCR tutors.



15.50 - 17.20

4A UKRC/O

Beyond competition: Collaboration between the NHS and the private sector

Chair: Peter Sharpe, Chief Executive Officer, Cobalt Health

Community imaging provision: Experience from the Sussex MSK service - Ian Francis, Consultant Radiologist and Director, Medical Imaging Partnership, UK

Commissioning to enable pathway transformation in the NHS - TBC Sussex commissioner

Outsourced reporting service: Ensuring service continuity - Charles House, Consultant Radiologist, Divisional Director, University College London, UK

Integrating the independent sector provision in cancer treatment - TBC from Genesis, UK

15.50 - 17.10

RPS Masterclass

4B

Chair: Graham Hart, RPA/LPA, Your RPA

Revision of Ionising radiations regulations - James Taylor, Principal Specialist Inspector, Health & Safety Executive, UK

15.50 - 17.10

4C Urology

Chair: Navin Ramachandran, Consultant Radiologist, University College Hospital, UK

Developing diagnostic imaging strategies for investigating haematuria - Nigel Cowan, Consultant Uroradiologist, Queen Alexandra Hospital, Portsmouth, UK

Imaging the uroepithelium - Michael Maher, Professor of Radiology, Cork University Hospital and University College Cork, Ireland Benign renal lesions - Alison Bradley, Consultant Radiologist, University Hospital of South Manchester, UK

15.50 - 17.10

4D Education &

New models of education to promote positive developments in healthcare

Chair: Janice St John Matthews, Associate Head of Department, Allied Health Professions, University of the West of England, UK Utilising an adapted 'world café' method to teach integrated care concepts to postgraduate healthcare students -

Kerry Mills, Senior Lecturer - Diagnostic Imaging, The University of the West of England, UK How can education help to ensure radiographers are at the heart of the changing NHS - Ben Roe, Deputy Chief Operating

officer, Taunton & Somerset NHS Trust, UK Multi qualification radiographers at threshold - the Finnish multi qualification - Päivi Wood, CEO, Radiography Professional Body in Finland, Uk

A model for collaborative development of the workforce - Petra Jacobs, Deputy Radiotherapy Services Manager, University Hospital Bristol, UK

15.50 - 17.10

Head and neck ultrasound

Hands on demonstration sessions with live models in the exhibition hall Rhian Rhys, Consultant Radiologist, Cwm Taf University Health Board, UK

Steve Colley, Consultant Radiologist, University Hospital Birmingham NHS Trust, UK

Chair: Colin Baker, Head of Radiotherapy Physics, Royal Berksire NHS Foundation Trust

Possibilities and pitfalls of big data analysis in radiotherapy - Marcel van Herk, Professor, University of Manchester, Manchester Academic Health Science Centre and The Christie NHS Trust, UK

The VoxTox programme - recent outcomes, updates and implications - Neil Burnet, Professor of Radiation Oncology, Cambridge University Department of Oncology, Addenbrooke's Hospital, UK

SABR outcomes analysis: A prototype for a centralised UK registry of radiotherapy plan information and clinical outcomes - Gareth Webster, Operational Lead Physicist, Worcestershire Oncology Centre, UK

Governance issues concerning the sharing of data in radiotherapy - Andrew Reilly, Head of Radiotherapy Physics, North West Cancer Centre, UK

Proffered papers

4F

UKRO proffered papers

4G

Proffered papers - service optimisation and innovation

Chair: Nicholas Spencer, Consultant Radiologist, Mid Yorkshire Hospitals NHS Trust, UK

On call provisional CT reporting - are we getting it right? - Jaymini Patel, London North West Healthcare Trust, UK Automatically populated worklist enhances safety of on call CT scan checking systems - Rajiv Patel, London North West NHS Trust, UK An audit of waiting times for patients with known or suspected malignancy undergoing CT-guided percutaneous biopsy - Frances Sheehan, East and North Hertfordshire NHS Trust, UK

The consultant breast radiographer - a role innovation exemplar - Anne-Marie Culpan, University of Leeds, UK A five year longitudinal evaluation of the impact of a bespoke professional development programme for consultant radiographers - Julie Nightingale, University of Salford, UK

Is radiography ready for apprenticeships? A critical review of the evidence and reflection on its implications - Denise Baker, An audit on the impact of a regional collaborative out of hours service on trainee feedback - Christopher Keegan, Mersey School of Radiology, UK

Variations in reporting radiographer report structure - Anthony Manning-Stanley, University of Liverpool, UK

4H

Breast tomography workshop

Tamara Suaris, Consultant Radiologist, St Bartholomew's Hospital, London, UK

17.00-19.00 Exhibition welcome wine reception and posters

17.00 - 18.00 **Exhibition** hall

Radiology fellowships networking event

At this networking event trainees interested in doing fellowships can meet with representatives from units that offer fellowships. It will help trainees identify their current and future options, expand their network of contacts and gather information.

17.20 - 17.30 **Exhibition** Lecture

The doctorate den

Calling all radiography Doctorate students, perspective Doctorate students and newly completed Doctorate students. In 2016, the Society & College of Radiographers released the "Research Strategy 2016-2021" and pledged 1% of the profession would hold Doctorates by 2021. This is an informal networking opportunity for those who share this ambition. Be part of the growing community of "Radiographers' undertaking Doctorates" to advance the profession. Learn how you can stay connected over the duration of your studies through social media.

Tuesday 13 June UK Dose awareness day



08 00-09 20

5A

Elekta symposium

The new and exciting role of MR imaging in radiotherapy



08.00 - 09.20

5B Service innovation &

Chair: Bev Snaith, Lead Consultant Radiographer, Mid Yorkshire Hospitals NHS Trust, UK

Optimising access in stroke: STEMO - the CT ambulance - Speaker tbc

Optimising clinical pathways - Martine Harris, Research Radiographer, Mid Yorkshire Hospitals, UK

Optimising dose - implementing the COMARE 16 report - Paul Charnock, Scientific Officer, Integrated Radiological Services, UK Optimising staffing - generalist, specialist, neither or both? The modern CT radiographer - Janice St John Matthews,

6

optimisation

Associate Head of Department, Allied Health Professions, University of West of England, UK

08.00 - 09.20 5C Imaging technologies

& informatics

Cross organisational working in IT

Chair: Kevin Tucker, National Officer for Wales, Society and College of Radiographers, UK

Integration plans in Northern Ireland - Julie Moss, PACS Manager, Belfast Health & Social Care Trust, UK

Shared services for radiology in Scotland - Linda Kerr, Programme Manager for Radiology & Medical Physics, NHS Scotland Shared Services, UK

Welsh clinical portal - imaging in the valleys - Rob Jones, Head of Applications Design & Rhidian Hurle, Medical Director, NHS Wales Informatics Service, UK

Cross organisational working in practice - Andy Kinnear, Director of Digital Transformation, NHS South, Central and West CSU, UK

08.00 - 09.20 5D MSK

Imaging in elite sport

Chair: Gajan Rajeswaran, Consultant Musculoskeletal Radiologist, University College Hospital London, UK

MRI interpretation in elite sport - Sarath Bethapudi, Consultant Radiologist, County Durham and Darlington Hospitals, UK Pre-signing MRI: What it involves and what the radiologist's role is - Andrew Dunn, Consultant Musculoskeletal Radiologist,

Is grading muscle, tendon and ligament injury important? - Waqar Bhatti, Professor & Consultant MSK and Sport Radiologist, University Hospital of South Manchester, UK

Lower limb sports injuries: The good, the bad & the ugly - Steven James, Consultant Musculoskeletal Radiologist, The Royal Orthopaedic Hospital, UK

08.00 - 09.20 5E

Neuroradiology

Chair: Maneesh Patel, Consultant Neuroradiologist, Imperial College NHS Trust, UK

Brain tumour update - Adam Walman, Consultant Neuroradiologist, Edinburgh University, UK Update on stroke imaging - David Summers, Consultant Neuroradiologist, Edinburgh, UK

08.00 - 09.20 5F

Introduction to OsiriX for beginners

Royal Liverpool University Hospital, UK

Introductory workshop with MAC workstations loaded with OsiriX, to enable participants to look at case studies.

09.30-10.30

Plenary debate

Introduction - Angela Baker, President, UKRO, UK

The end is nigh...Al-enabled machines have placed imaging and oncology professionals on the path to extinction

Panel members

Against: Eliot Siegel, Professor and Vice Chair Research Informatics, University of Maryland, USA; Andy Beavis, Radiotherapy

10.20-11.10 Refreshments and exhibition, poster viewing, demo ssessions

10.40-12.40

10.40 - 11.10 **Exhibition** Lecture Bayer

Update on Gd presence in the brain after repetitive administration of GBCA

Bayer have funded an exhibition stand and symposium at this meeting.

10.40 - 12.00 MSK ultrasound

MSK ultrasound

Hands on demonstration sessions with live models in the exhibition hall.

6A UKRO

Global radiotherapy challenges

Chairs: Gerry Hanna, Senior Lecturer and Consultant in Clinical Oncology, Queen's University of Belfast, UK and Angela Baker, President, UKRO, UK

Key challenges on providing radiotherapy services in low to middle income countries - Elena Fidarova, Radiation Oncologist, Division of Human Health, International Atomic Energy Agency, Austria

Teaching and training of radiotherapy in low and middle income countries: a hands-on experience in Africa - Jeannette Parkes, Professor & Head of Department Radiation Oncology, Groote Schuur Hospital and University of Cape Town, South Africa Radiotherapy cost effectiveness - Clive Peedell, Consultant Clinical Oncologist, James Cook University Hospital, UK

6B

Adaptive IGRT

Chairs: Helen McNair, Research Lead Radiographer, The Royal Marsden NHS Foundation Trust, UK

The current status of adaptive therapy - Kevin Franks, Consultant Clinical Oncologist, St James' Institute of Oncology (SJIO), Leeds Cancer Centre & Honorary Clinical Associate Professor, University of Leeds, UK

Future developments in adaptive therapy - Uwe Oelfka, Professor, The Institute of Cancer Research, UK **Proffered papers**

12



11.20 - 12.40 6C

Harnessing technology to improve clinical and fiscal efficiency

Chair: Marina Easty, Consultant Paediatric Radiologist, Great Ormond Street Hospital, UK

More than PACS - Anant Patel, IM+T Advisory Group, Society and College of Radiographers, UK Clinical networks - Mark Griffiths, Consultant Radiologist, University Hospital Southampton, UK

Neonatal radiography - tackling persistent problems - Christina Pedersen, Radiographer, Aarhus University, Hospital, Denmark dREAMS - Amaka Offiah, Reader in Paediatric Musculoskeletal Imaging, University of Sheffield, UK

Group discussion

6D

Proffered papers - science, education and radiation protection

Chair: Sarah Allen, Head of Nuclear Medicine Physics, Guy's and St Thomas' NHS Foundation Trust, UK

Writing about radiation in your IRAS application - Andrea Shemilt, Nottingham University Hospitals NHS Trust, UK An audit into radiation awareness and a qualitative assessment into requesting and interpretation of common imaging modalities - a junior doctor and final year medical student survey - Sam Booth, University of Birmingham, UK Radiation safety culture initiatives in X-ray imaging optimisation - Hugh Wilkins, University of Exeter, UK

A review of MR labeling information related to IEC 62570 labeling requirements of commercially available MRI accessories - Gina Stateczny, MRI-Tec

Improving from an ir(me)r inspection - Toni Hall, Oxford University Hospitals NHS Foundation Trust, UK Image quality: Old vs new - Stephen Wolstenhulme, Leeds Teaching Hospitals, UK

A method to model the influence of beam quality on image noise in a digitally reconstructed radiograph (DRR) based computer simulation for optimisation of digital radiography - Craig Moore, Hull & East Yorkshire Hospitals NHS Trust, UK The efficacy of routine radiographer QA testing - Natalie Thring, Radiation Consultancy Services Ltd, UK

11.20 - 12.40 6E

Neuroradiology

Chair: Maneesh Patel, Consultant Neuroradiologist, Imperial College NHS Trust, UK

Encephalitis-infection and beyond - Bryn Jones, Consultant Neuroradiologist, Imperial College NHS Trust, UK Brain tumour mimics - some interesting cases and clues - Priya Bhatnagar, Consultant Neuroradiologist, Royal Victoria

Infirmary, Newcastle upon Tyne Hospitals NHS Foundation Trust, UK

11.20 - 12.40 6F Cardiac

Advances in cardiac Magnetic Resonance Imaging

Chair: Stephen Harden, Consultant Radiologist, Southampton University Hospital, UK

MRI with implantable electrical devices - Bobby Agrawal, Consultant Radiologist, Papworth Hospital, UK Advances in aortic imaging with MRI - Ben Holloway, Consultant Radiologist, University Hospitals Birmingham NHS

Hyperpolarised carbon in CMR - Ferdia Gallagher, Consultant Radiologist, University of Cambridge, UK **Group discussion**

11.20 - 12.40 6G ROC Research

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Trends and challenges - enabling imaging research to 2030

Setting the scene - how NIHR is channelling efforts in support of imaging research - Stephen Smye, Honorary Professor, University of Leeds & NIHR Specialty Cluster Lead, Uk

How the demands on Imaging capacity and capability will influenced by advances in research - Speaker the Big data and radiomics - Speaker tbc

Imaging research workforce - what all this means for our people - Speaker tbc

11.20 - 12.40 6H Obstetrics &

Obstetrics and gynaecology OsiriX

Facilitator: Victoria Stewart, Stream Lead, UK

11.20 - 12.20 FRCR drop in session

FRCR drop in session

FRCR VIVA teaching tutorial run by experienced FRCR tutors.

11.50 - 12.30 Dose awareness session

Radiation dose

An open access session promoting multidisciplinary knowledge of dose awareness.



12.40 - 13.10 Interactive demo

Virtual reality True 3D

This session will give attendees the opportunity to view CT and MRI data sets in True 3D. Patient specific anatomy will be visible in the open 3D space on top of the monitor screen using the EchoPixel True 3D software. Participants will be able, in small groups, to interact with the full DICOM data set in real-time, enabling them to reach in, grasp, dissect and interact with the key clinical features in a truly 3D form, as if they were the real physical objects.

12.50 - 13.20 Exhibition Lecture Siemens Healthineers Improving outcomes through partnership; The Radiology Performance Management Service (RPMS) - John Wilkinson, Healthcare Consultant, Enterprise Services & Solutions - GB&I

13.00 - 14.20 61

Cardiac OsiriX

Swamy Gedela, Consultant Radiologist, Basildon, UK Bobby Agrawal, Consultant Radiologist, Papworth Hospital, UK

12.30 - 14.00 Lunch and exhibition, poster viewing, demo sessions

Tuesday 13 June UK Dose awareness day



13.00 - 13.50

BIR/Toshiba Mayneord Memorial Lecture

A 21st century NHS - delivering tomorrow's medicine, today - Keith McNeil, Chief Clinical Information Officer for Health and Social Care NHS LIK

13.30 - 14.00 Demo zone Multi-parametric MR analysis for prostate cancer detection and treatment with Watson elementary - Susan Barley, Lead Clinical Scientist, Oncology Systems Limited, UK

14.10 - 16.50

14.10 - 15.30 **7A** UKRC/O

MR imaging for clinicians, physicists and radiographers

Chair: Helen McNair, Research Lead Radiographer, The Royal Marsden NHS Foundation Trust, UK and Julian Kabala, Consultant Radiologist, University Hospital Bristol, UK

Parameters and trade off - Robert Johnstone, King's College London, UK

MRI imaging: Image weighting and Pulse sequences with clinical application - Tamas Schiszler, Consultant Radiologist at the University Hospitals Bristol, UK

MRI imaging: Applied to radiotherapy planning - Speaker tbc

Artefacts and reduction - Jill McKenna, MR/CT Superintendent Radiographer, Freeman Hospital,

Newcastle Upon Tyne & Past President, British Association of Radiographers, UK

14.10 - 15.30 **7B** Emergency

INTERACTIVE

Case based 'Blood and guts'

Chair: Roland Watura, Radiology Consultant, North Bristol NHS Trust, UK

Find the bleeding point! - Elizabeth Dick, Lead for Emergency Radiology, Imperial College London, UK

The role of the interventionalist in trauma - Graham Collins, Radiology Consultant, North Bristol NHS Trust, UK

The acute abdomen - Christopher Schelvan, Consultant Radiologist, Imperial College London, UK

Postoperate acute abdomen - Priya Healy, Royal Liverpool and Broadgreen University Hospitals NHS Trust, UK

14.10 - 15.30 7C

Existing technology - evolving applications

Chair: Samantha Negus, Paediatric Radiologist, UK

CT dose reduction - how low is low? - Marcel Dijkshoorn, Research Radiographer, Erasmus MC, Rotterdam, Netherlands Functional MRI of the lungs in children - Jim Wild, Professor of Magnetic Resonance Physics, NIHR Research Professor in Pulmonary Imaging, University of Sheffield, UK

Advances in PET imaging in children - Marina Easty, Consultant Paediatric Radiologist, Great Ormond Street Hospital, UK

14.10 - 15.30

MSK intervention

Chair: Rajat Chowdhury, Consultant Musculoskeletal Radiologist, Nuffield Orthopaedic Centre, Oxford University Hospitals, UK Hydrodilatation for the frozen shoulder - what's the best approach? - Subhasis Basu, Consultant Musculoskeletal Radiologist, Wrightington Hospital, Lancashire, UK

MSK intervention in the hand - changing the surgical landscape - Benjamin J Roberton, Consultant Interventional and Musculoskeletal Radiologist, Chelsea and Westminster Hospital, UK

The perils of consent in MSK intervention - Rowena Johnson, Consultant Musculoskeletal Radiologist, Nuffield Orthopaedic Centre, Oxford University Hospitals, UK

Image guided intervention in the elite athlete - does it really work? - Justin Lee, Consultant Musculoskeletal Radiologist, Fortius Clinic, London, UK

14.10 - 15.30 **7E** Imaging

technologies

& informatics

Computer Assisted Radiology and Surgery (CARS) and emerging technology

Chair: Liz Beckmann, Regional Director, EchoPixel, UK

The future challenge for imaging - a challenge from surgery - Nicholas Haden, Neurosurgeon, Plymouth Hospitals NHS Trust
The evolution of the digital operating theatre for the next 5-10 years - Heinz Lemke, Director, CARS
Emerging technology - solutions for the future - Stefan Vilsmeier, President & CEO, Brainlab

14.10 - 15.30 **7F**

Proffered papers - clinical

Chair: Nick Woznitza, Clinical Academic Reporting Radiographer, Homerton NHS Trust & Canterbury Christ Church University, UK

A service evaluation of a V/Q SPECT service - Amit Parekh, Royal United Hospital, UK

Value of invasive angiography following negative CT angiogram in the haemodynamically unstable patient with pelvic trauma - Jen-Jou Wong, Aintree Hospital, UK

The current state of MRI in vascular access imaging - Conor MacDonald, University of Dundee, UK

MRI evaluation of epicardial adipose tissue in patients with cardio-metabolic disease: Potential pathophysiological links with inflammation and vascular dysfunction - Shaween Al-Talabany, University of Dundee, UK

Nebulised 18F-fluorodeoxyglucose (18F-FDG) assessment of pulmonary drug deposition: Proof of concept Shamsuddeen - Ahmad Aliyu, Hull York Medical Scholl, University of Hull, UK

Low-dose CT screening for lung cancer: Are we truly achieving a low-dose? - Carolyn Horst, University College London, UK Ipsilateral dual-site, same-sitting percutaneous lung biopsy: A feasibility study - Joseph Barnett, Royal Free NHS Trust, UK

14.10 - 15.30 7G Education &

The breast imaging academy: An innovative workforce solution

Chair: Caroline Parkin, Consultant Breast Radiologist, University Hospital of South Manchester, UK

Introduction - Paula Stavrinos, Project Manager, The Breast Imaging Academy, UK

Radiography training - Lyndsay Kinnear, Radiographer and Megan Bydder, Consultant Breast Radiologist, University Hospital of South Manchester, UK

Breast clinician training - Mary Wilson, Consultant Breast Radiologist, University Hospital of South Manchester, UK Breast radiology training - Soujanya Gadde, Consultant Breast Radiologist, University Hospital of South Manchester, UK

14.20 - 15.10 Dose awareness session

Joint sessior

How to run an imaging optimisation team

An open access session promoting multidisciplinary knowledge of dose awareness.



14.40 - 16.00 **7H**

Neuro

Farah Alobeidi, Consultant Neuroradiologist, Imperial College NHS Trust, UK

Tuesday 13 June UK Dose awareness day 🙀 📑 ቻ #UKRCO2017



15.20 - 16.10 Refreshments, exhibition, poster viewing and demo sessions

15.30 - 16.50 MSK ultrasound MSK ultrasound

Hands on demonstration sessions with live models in the exhibition hall.

15.40 - 16.10 Dose awareness Are you dose ready?

An open access session promoting multidisciplinary knowledge of dose awareness.



16.20 - 18.00

8A UKRO

SABR for oligometastases - the great debate

Chair: Kevin Franks, Consultant Clinical Oncologist, St James' Institute of Oncology (SJIO), Leeds Cancer Centre & Honorary Clinical Associate Professor, University of Leeds, UK

Motion: Level 1 randomised clinical trials evidence is needed before we implement SABR as a routine service in the NHS For: Stephen Harrow, National Research Scotland Fellow, Beatson West of Scotland Cancer Centre, UK

Against: Alison Tree, Consultant Clinical Oncologist, Royal Marsden Hospital, UK

16.20 - 17.10

SCoR Martine Jackson Memorial Lecture

Specialist posts, special radiographers and patient care Chair: Steve Herring, President, Society of Radiographers, UK

Sairanne Wickers, Consultant Radiographer, University College London Hospital, UK

16.20 - 17.40

8C History History Chair: Liz Beckmann, British Society for the History of Radiology, UK

Sebastian Gilbert Scott (1879-1941) and the treatment of ankylosing spondylitis - Adrian Thomas, Canterbury Christ Church University, UK

Neville Samuel Finzi (1881-1968) - a radiotherapy pioneer and radiology benefactor - Arpan Banerjee, British Society for the History of Radiology, UK

Philately and Tuberculosis - Adrian Thomas, Canterbury Christ Church University, UK

16.20 - 17.40 8D MSK INTERACTIVE Rapid reporting of the upper and lower limb: Plain films and beyond

Rapid reporting, upper limb: Test yourself - Chand Thorning, Consultant Radiologist, Epsom and St Helier University Hospitals NHS Trust, UK

Rapid reporting, lower limb: Test yourself - Kausik Mukherjee, Consultant Musculoskeletal Radiologist, University Hospital Wales, UK

16.20 - 17.40 8E Imaging technologies & informatics Molecular imaging with novel tracers

Chair: Heather Williams, Senior Medical Physicist, Central Manchester University Hospitals, UK

Hyperpolarised MRI - Ferdia Gallagher, CRUK Clinician Scientist Fellow, University of Cambridge, UK

Combined MR/PET tracers - Eric O Aboagye, Professor of Cancer Pharmacology and Molecular Imaging, Imperial College London, UK Bringing novel tracers into clinical use - a radiopharmacist's perspective - Eric O Aboagye, Professor of Cancer Pharmacology and Molecular Imaging, Imperial College London, UK

Group discussion

16.20 - 17.40 8F

Advances in cardiac Imaging

Chair: Bobby Agrawal, Consultant Radiologist, Papworth Hospital, UK

The impact of the new NICE guidelines of cardiac CT demand and provision - Swamy Gedela, Consultant Radiologist, Basildon and Thurrock University Hospitals NHS Foundation Trust, UK

Perfusion CT... the future? - Michelle Williams, The University of Edinburgh, UK

Advances in cardiac perfusion CMR - James Moon, Professor of Cardiac Imaging, Barts Heart Centre, UK Group discussion

16.20 - 17.40 8G

RPS Masterclass

Chair: Graham Hart, RPA/LPA, Your RPA, UK

Dose optimisation - Matthew Dunn, Head of Radiology Physics, Medical Physics and Clinical Engineering, Nottingham University Hospitals NHS Trust, UK



16.20 - 17.40 8H **Paediatrics**

Paediatrics OsiriX

Workshop with MAC workstations loaded with OsiriX, to enable participants to look at paediatric case studies.

11.20 - 12.20 FRCR

FRCR drop in session

FRCR VIVA teaching tutorla run by experienced FRCR tutors.

9A UKRC

UKRO proffered papers

19.30

AXREM Dinner

Science and Technology theme Principal Manchester Hotel

08.00 - 11.00

08.10 - 09.10 10A

Varian Medical Systems symposium - Innovation in radiotherapy



08.00 - 09.20

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Benchmarking and driving improvement in UK radiology

NHS benchmarking and its application in radiology - Stephen Watkins, Director, NHS Benchmarking, UK
Service review and radiology advisory services: An independent perspective - Peter Cavanagh, Radiologist, UK
Insights from another service specialty: A&E - Kevin Reynard, Clinical Director (North), Emergency Care Improvement
Programme, NHSI, UK

GIRFT principles, application to improve cancer pathways in the NHS - T Briggs, Royal National Orthopaedic Hospital, Stanmore and GIRFT Lead, NHS Improvement, UK

08.00 - 09.20

Cross-sectional evaluation of biliary dilatation

10C GI & Hep OsiriX Siobhan Whitley, Consultant Radiologist, Addenbrooke's Hospital, UK

James Tanner, Radiology Trainee, Addenbrooke's Hospital, UK

During this session we will review the differential diagnosis of biliary dilatation using cross-sectional imaging. Using case studies gleaned from a tertiary referral centre for hepatobiliary surgery we include stone disease, biliary tumours, congenital causes and some complications. We will review optimisation of surgical planning and the use of MR.

08.00 - 09.20 **10 D**

Technological advances in thoracic imaging

Chair: Mary Roddie, Imperial College Healthcare NHS Trust

Reduction in radiation dose - how low can we go? - Michelle Williams, Borders General Hospital, Scotland, UK What's new in chest radiography? - Nicolas Screaton, Consultant Radiologist, Addenbrooke's Hospital, UK Dual energy CT - ready for prime time? - Sarah Sheard, Radiology Registrar, St George's Hospital, UK Quantitative pulmonary CT - new horizons - Joe Jacob, Royal Free Hospital

08.00 - 09.20 **10E**

RPS Masterclass

Chair: Graham Hart, RPA/LPA, Your RPA, UK

Revision of medical exposure regulations - Steve Ebdon-Jackson, Public Health England, UK

08.00 - 09.20 **10F**

Proffered papers - clinical

Chair: Sam Negus, Paediatric Radiologist, UK

The hitchhiker's guide to childhood body tumours: 3 year experience of a tertiary referral centre for paediatric oncology - Linda Stephens, Royal Manchester Children's Hospital, UK

Diagnostic paediatric imaging out of hours: A quality improvement project - Sara Zafar, Chelsea & Westminster Hospital, UK Quantitative and qualitative values for the different T2W image sequences used for fetal MRI - Rodwan Tumi, University of Sheffield, UK

Development of an instrument to assess trauma radiograph interpretation performance - Michael Neep, Metro South Health, Australia

 $\textbf{3D CT based orthopaedic reconstructive software} \ - \textit{David Liston, Sectra Ltd, UK}$

High index of suspicion aided with musculoskeletal ultrasound can resolve complex midfoot and hindfoot problems, which can be otherwise sometimes labelled as - non-specific footpain: Review of literature with pictorial review of differential diagnosis - Saayija Kumarachandran, London Northwest Healthcare NHS Trust, UK

Do radiologists and radiographers need to know about osteoporosis? - Amit Gupta, Bradford Teaching Hospitals NHS Foundation Trust, UK

Gout imaging with dual energy CT: Imaging protocol, post-processing techniques and its limitations - Wei Ling Chuang, Singapore General Hospital, UK

09.40 - 11.00 **10G**

Chest OsiriX

Workshop with MAC workstations loaded with OsiriX, to enable participants to look at chest and lung case studies.



10.00 - 11.50

10.00 - 11.20 11A UKRO

Protons

Chair: Julia-Claire Handley, Radiotherapy Physics Group Leader, The Christie NHS Foundation Trust, UK

Overview of the national proton programme - Ed Smith, Consultant Clinical Oncologist, The Christie NHS Foundation Trust, UK Improving proton therapy through advanced imaging - Tracey Underwood, Research Fellow, Department of Medical Physics & Biomedical Engineering, University College London, UK

Where next for particle therapy in the UK - Stuart Green, Director of Medical Physics, University Hospitals Birmingham NHS Foundation Trust. UK

Operational aspects of Proton Beam Therapy: Challenges of planning for a new UK service - Hazel Pennington, Lead Radiographer, Proton Beam Therapy Project, The Christie NHS Foundation Trust, UK

10.00 - 11.20 11B

Changing pathways, cancer and beyond

Chair: Nicholas Spencer, Consultant Radiologist, Mid Yorkshire Hospitals NHS Trust, UK

Opinion leadership in healthcare: Ghanaian experience and its possible application in cancer care - Carole South-Winter, Assistant Professor, University of South Dakota, USA

Opportunities to translate the Danish Cancer pathway to enable NHS transformation - Sean Duffy, Programme Director West Yorkshire & Harrogate Cancer Alliance, UK

Improving effectiveness of cancer multidisciplinary teams - Rose Gray, Policy Advisor, Cancer Research UK, UK

10.00 - 11.20 11C Education &

Technological innovations in radiography education

Chair: Viv Gibbs, Head of Department, Allied Health Professions, The University of the West of England, UK

I'd say it's quite likely that we just didn't read it...: Developing an alternative to the standard programme handbook - Peter Walker Birch & Mark Widdowfield, Senior Lecturers, Teesside University, UK

Computer science for digital radiography - what should radiographers know? - Peter Phillips, Computer Scientist, University of Cumbria. UK

Enhancing radiographer threshold clinical competencies through CT simulation - Martine Harris, Research Radiographer, Mid Yorkshire Hospitals NHS Trust, UK

Experiences of using virtual reality to enable clinicians to experience the patient journey first hand - Nick Peres, Technologies R+D Specialist, Torbay, UK

10.00 - 11.20 11D Gastroenter-

What's new in rectal cancer?

Chair: Vikas Shah, Consultant Radiologist, University Hospitals of Leicester, UK

A revolution in rectal cancer surgery - Manish Chand, Consultant Surgeon, University College London Hospitals, UK Modern oncology options for rectal cancer - Tom Richards, Consultant Oncologist, University College London Hospitals, UK Colorectal controversies that regularly challenge the MDT - Gina Brown, Consultant Radiologist, Royal Marsden NHS Foundation Trust, UK



FRCR drop in session

FRCR VIVA teaching tutorla run by experienced FRCR tutors.

10.20 - 11.40 11E Emergency & trauma INTERACTIVE

Case-based: Emergency head and spine imaging

Chair: Elizabeth Dick, Lead for Emergency Radiology, Imperial College London, UK

The 'normal' CT head - or is it? - Alex Mortimer, Radiology Consultant, North Bristol NHS Trust, UK

Essentials of spine trauma from C1 to sacrum - Roland Watura, Radiology Consultant, North Bristol NHS Trust, UK

10.20 - 11.40 11F MSK

Post-op orthopaedic imaging

Chair: tbc

Particle disease following orthopaedic surgery - Michael Khoo, Consultant Radiologist, Royal National Orthopaedic Hospital, Stanmore, UK

Post-op shoulder arthroplasty and complications: What the surgeon wants to know - Ian Pressney, Consultant Radiologist, Royal National Orthopaedic Hospital, Stanmore, UK

Post-op spinal imaging including novel and complex orthopaedic techniques - Philippa Tyler, Consultant Radiologist, Royal National Orthopaedic Hospital, Stanmore, UK

Investigation of suspected arthroplasty infection: The evolving role of radiology - Rikin Hargunani, Consultant Radiologist, Royal National Orthopaedic Hospital, Stanmore, UK

10.30 - 11.50 11G SMRT

The Society for MR Radiographers & Technologists - Clinical Education Forum

Education forum delivered by European and National Radiography experts in their field - Lorraine Whyte, Practice Education Radiographer, Beatson Cancer Charity, UK

MR challenges in Europe, from a radiographic perceptive - Filip De Ridder, Chief Technologist, UZ Brussel, Belgium

12.50 - 13.50 FRCR drop in session

FRCR drop in session

FRCR VIVA teaching tutorla run by experienced FRCR tutors.

13.00 - 14.00 11H

UKRO proffered papers

12.00 – 12.50 Closing plenary – Can you teach an old dog new tricks?

17

Wednesday 14 June

12.50 - 13.10

CT simulation

Demo zone

This session will demonstrate CT simulation for undergraduate competency development.

13.10-14.00

SCoR William Stripp Memorial Lecture

Shoulder imaging - Amanda Martin, Lead Radiographer, Royal Bolton Hospital, UK

13.10-14.00 IPEM John Mallard Lecture

13.20 - 13.50 **Demo zone**

Virtual reality with Google Cardboard

Learn how cost effective, accessible virtual reality technology is helping transform the medical education classroom. In this workshop we look at its use in aiding humanities learning from the patient perspective.

14.10-15.30

12A UKRO

Immunotherapy

Chairs: Gerry Hanna, Senior Lecturer and Consultant in Clinical Oncology, Queen's University of Belfast, UK and Angela Baker, President, UKRO, UK

Radiotherapy and immunotherapy - mechanisms for synergy and potential applications - Louise Murray, Cancer Research UK Clinical Research Fellow, University of Leeds, St James's Institute of Oncology, UK

SABR/Immunotherapy combinations - Fiona McDonald, Consultant Thoracic Clinical Oncologist, The Royal Marsden NHS Foundation Trust, UK

Radiotherapy and immunotherapy combinations - the translational considerations - Alan Melcher, Professor of Translational Immunotherapy, Team Leader, Translational Immunotherapy Team, The Institute of Cancer Research, UK

14.10 - 15.30 12B

BAMRR - MRI in contemporary practice

Chair: Paola Griffiths, President, British Association of MRI Radiographers (BAMRR), UK

This session will cover current MRI issues and techniques. It will be aimed at all levels of radiographers with a special interest in MRI.

14.10 - 15.30 12C Imaging technologies & informatics

Practical approaches to motion tracking and correction

Chair: John Ridgway, Leeds Teaching Hospitals NHS Trust, UK

MRI-based motion tracking: Applications in lung and liver - Martin Fast, Postdoctoral Researcher, The Netherlands Cancer Institute, Amsterdam, Netherlands

Image-based motion tracking for PET - Harry Tsoumpas, Lecturer in Medical Imaging, University of Leeds, UK Use of gaming technology for motion tracking - Philip Noonan, Research Associate, Imperial College London, UK

14.10-15.30 12D

Neuroendocrine tumours: An update on imaging and therapy

Chair: Vikas Shah, Consultant Radiologist, University Hospitals of Leicester, UK

Neuroendocrine tumours: setting the multidisciplinary scene - Juan Valle, Consultant Oncologist, The Christie NHS Foundation Trust, UK CT, MRI and EUS of NETs - Edmund Godfrey, Consultant Radiologist, Addenbrooke's Hospital, UK

NETs: Molecular imaging update - Prakash Manoharan, Consultant Radiologist, The Christie NHS Foundation Trust, UK The role of interventional radiology in the management of NET - Dominic Yu, Consultant Radiologist, Royal Free Hospital, UK

12E Chest

Challenges in thoracic malignancy

Chair: Mary Roddie, Imperial College Healthcare NHS Trust, UK

Latest lung cancer staging update: What's new in the 8th edition? - Nick Watson, Consultant Radiologist, University Hospitals of North Midlands, UK

Differentiating lung metastases from lung cancer in patients with extra-thoracic malignancy - Sisa Grubnic, Consultant Radiologist, St George's Hospital, UK

Pulmonary complications of cancer therapies - Nina Tunariu, Consultant Radiologist, Royal Marsden Hospital, UK Thoracic lymphoproliferative disorders - Sam Hare, Consultant Thoracic Radiologist, Royal Free Hospital, UK

14.10 - 15.30

The foot

Heel pain - a one stop shop - Matthew Solan, Consultant Foot and Ankle Orthopaedic Surgeon, Royal Surrey County Hospital, UK Imaging of pes planus - Chintu Gademsetty, Consultant Musculoskeletal Radiologist, Royal Surrey County Hospital, UK Ultrasound of metatarsalgia - Nicki Delves, Senior Musculoskeletal Sonographer, Royal Surrey County Hospital, UK The diabetic foot - Susan Cross, Consultant Musculoskeletal Radiologist, Barts Health, UK

12G

Proffered papers

Chair: Viv Gibbs, Head of Department, Allied Health Professions, The University of the West of England, UK

The use of eye tracking technology to assess radiographer interpretation of X-ray images - Laura McLaughlin, Ulster University, UK Formulating and implementing a robust feasibility governance pathway for clinical research within the imaging department - Rachel Sutton, University Hospitals of North Midlands and David Wells, University Hospitals of North Midlands, UK

The views of radiology service managers concerning professionalism and the ability of newly qualified graduate radiographers to cope with working in contemporary clinical contexts - Charles Sloane, University of Cumbria, UK Evaluation of interprofessional learning workshop involving radiographers, vascular surgeons and theatre staff -Brooke Reeve, Royal Free London NHS Foundation Trust, UK

Pulmonary artery hypertension - making the diagnosis - Rose Panton, Portsmouth Hospitals NHS Trust, UK CT sinus and facial bones reporting by radiographers - Paul Lockwood, Canterbury Christ Church University, UK Constructing the "Ideal" first-post sonographer: Mapping the views of ultrasound department leads in the UK -Lorelei Waring, University of Cumbria, UK

Close of congress

EXHIBITION

The exhibition

With over 100 exhibition stands, including the top companies in the industry, this is the largest joint clinical imaging exhibition in the UK.



It provides a wealth of information for a multi-disciplinary audience, a great opportunity to network, learn of all the latest developments, source relevant product information and technical updates. The trade exhibition is complimented by a large poster display, consoles to view ePosters and access the internet and a programme of education on the stands.

A directory of exhibitors will be available within the congress handbook by product and/or service to help you identify organisations you wish to engage with. Delegates for both events are invited to visit all exhibition stands.

Demo zone

NEW FOR 2017!

This year we have demo pods within the exhibition showcasing product demonstrations, product launches, tips and techniques, research and other innovations.

Poster displays



There will be a display of nearly 300 posters from a variety of disciplines for both UKRC and UKRO. This vast source of latest information will demonstrate cutting edge research, service innovations, results of local intervention schemes and much more. Poster tours of award winning posters will be organised during the congress breaks.

ePosters

In addition to the paper posters there will be a large number of ePosters which can be accessed on site through a number of computer consoles, or viewed at leisure after the event through the website or even on your phone. Different ePosters will be featured daily.

Education on the stands

cpd now

This popular initiative provides delegates and exhibition visitors with an opportunity to gain an insight into the latest technologies and methods. Exhibition day visitors will be able to attend CPD Now accredited 'education on the stands' presentations from industry partners. The education on the stands programme will be released nearer to the event, so do check the website and app for up-to-date information.

Satellite symposia and eponymous lectures

The satellite symposia and eponymous lectures are open to all delegates including exhibition visitors, providing an opportunity to get updates. The symposia programme is subject to change with additional sessions to come – please check the website and congress app for up-to-date details.

Remember!

Access is free for exhibition day visitors to the plenary, satellite and eponymous lectures, with eminent speakers nominated by the SCOR, BIR and IPEM.



Radiopaedia case of the day



Radiopaedia and UKRC are collaborating for the first time to bring a Case of the Day competition to this year's conference. Everyone in the world will have an opportunity to a submit a radiology case for the UKRC 2017 Case of the Day competition, with prizes on offer for those whose case is selected as a Case of the Day. Each day during the conference, there will be 2 cases to review in the dedicated Radiopaedia zone and online. Each delegate winner will receive FREE entry passes to UKRC 2018 and 12 months online access to Radiopaedia's Adult Brain MRI review course and Neuroradiology Update 2016 course. Each non-delegate winner will receive 12 months of online access to Radiopaedia's Adult Brain MRI review course and Neuroradiology Update 2016 course.

Dose Awareness Day

On Tuesday 13 June AXREM is sponsoring a dedicated Dose awareness day at the congress.

Are You Dose Ready?

This will include dedicated sessions and workshops that will raise awareness of the issue of dose optimisation and dose awareness. Sessions will provide attendees with the knowledge and skills to manage and optimise their dose. It will support the implementation of the COMARE 16 report and

DH working party response along with discussing the implications of the forthcoming regulations.

Please check the programme for the symbol.

Giant touchscreen table

Full programme of interactive workshops using a giant touchscreen table – these sessions will focus on medical education using clinical case studies and demonstrate the role of the table in the Multi-Disciplinary Team setting. Come visit us in the Exhibition Hall to learn more about this technology and see it in action. Places are limited with a mixture of beginner and advanced sessions.



Facilitated by:

- James Chambers, Clinical Radiology Trainee, The Royal Liverpool and Broadgreen University Hospitals NHS Trust
- Jamie Beck, Lecturer in Radiography, University of Bradford
- Dina Hikmat, Clinical Radiology Trainee, Mersey School of Radiology
- · Radhika Prasad, Mersey School of Radiology







MOBILE APP

The new mobile app will have an interactive floor plan, integrated social media in addition to up-to-date programme information, speaker biographies, exhibitor and sponsor information, general information and poster abstracts, all easily navigable. Further information will be sent soon.

REGISTRATION FEES

What's included?

Registration fees include VAT at the prevailing rate, complimentary refreshments, lunch (on the days you are attending) and congress materials. If you are attending the exhibition only, they do not include lunch and congress materials.

Group booking discount:

If you have five or more delegates attending from the same department, a 10% discount on the same category fee is applicable. Please return all forms for the delegates and discount will be removed at point of registration. Only one invoice can be raised. **Please contact us for further details.**

NHS Flexi ticket:

We are pleased to continue, the cost-saving NHS Flexible Ticket. This full congress ticket allows up to three delegates from the same NHS department to register for UKRC and share the ticket. Only one person can attend at any one time but the other delegates can attend on different days or even for different sessions. This could save your department up to £850, whilst also ensuring no-one misses the sessions that are important to them.



BOOKING FORM

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How to book:

Online: www.ukrco.org.uk



Email: jointcongress@profileproductions.co.uk **Post:** UKRCO C/O Profile Productions Ltd,



Boston Manor House, Boston Manor Rd, London, Brentford, Middlesex, TW8 9JJ

Telephone: 020 3725 5840



Fax: 0844 507 0578

Delegate fee categories:

A:Consultants and senior managers

B: Other medical/scientific staff and medical trainees

C: Radiographers, nurses, AHP's support staff, radiology trainees & FY1/2 doctors

D: Full time students, retired delegates, and individuals on bursaries

E: *NHS Flexible Ticket

Registration fees (Please select the tick box)

All prices include VAT @20%

All prices	include VAI @20%			
Category	Duration	Earlybird Before 18 April	Standard 19 April - 09 June	Last minute 10 June onwards
Α	Full Congress	£420	£470	£490
Α	2 day - Monday & Tuesday	£355	£389	£409
Α	2 day - Tuesday & Wednesday	£355	£389	£409
Α	1 day - Monday	£190	£225	£245
Α	1 day - Tuesday	£190	£225	£245
Α	1 day - Wednesday	£190	£225	£245
В	Full Congress	£310	£342	£362
В	2 day - Monday & Tuesday	£270	£299	£319
В	2 day - Tuesday & Wednesday	£270	£299	£319
В	1 day - Monday	£145	£160	£180
В	1 day - Tuesday	£145	£160	£180
В	1 day - Wednesday	£145	£160	£180
С	Full Congress	£260	£285	£305
С	2 day - Monday & Tuesday	£199	£218	£238
С	2 day - Tuesday & Wednesday	£199	£218	£238
С	1 day - Monday	£123	£135	£155
С	1 day - Tuesday	£123	£135	£155
С	1 day - Wednesday	£123	£135	£155
D	Full Congress	£95	£97	£117
D	2 day - Monday & Tuesday	£80	£85	£105
D	2 day - Tuesday & Wednesday	£80	£85	£10
D	1 day - Monday	£52	£55	£75
D	1 day - Tuesday	£52	£55	£75
D	1 day - Wednesday	£52	£55	£75
E*	NHS Flexi ticket	£445	£495	

Exhibition only Monday Tuesday Wednesday

Congress Streams (delegates only)

1A	1B	1C	1D	1E	1F	1G		
2A	2B	2C	2D	2E	2F	2G	2H	
3A	3B	3C	3D	3E	3F	3G		
4A	4B	4C	4D	4E	4F	4G	4H	
5A	5B	5C	5D	5E	5F			
6A	6B	6C	6D	6E	6F	6G	6H	61
7A	7B	7C	7D	7E	7F	7G	7H	
A8	8B	8C	8D	8E	8F	8G	8H	9A
10A	10B	10C	10D	10E	10F	10G	10H	
11A	11B	11C	11D	11E	11F	11G	11H	
12A	12B	12C	12D	12E	12F	12G		

Social	and	Networking	events
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Bar and AXREM

3		OI LICKELS
music night, <i>Monday 12 June</i>	£15	
Congress Dinner, <i>Tuesday 13 June</i>	£35	

Number

Booking form

Personal details
Title Dr/Prof/Mr/Mrs/
Full name (as you would like it to appear on your badge)
Job title
Employing organisation
Address
Postcode
Telephone
Email (this is predominately our main method of contact)
Which organisation do you belong to? BIR IPEM SCOR RCR
Additional requirements
Dietary: Vegetarian Vegan Gluten free/Coeliac
Other (please state)
Wheelchair access Hearing loop Restricted mobility
Other (please state)
Please do not publish my details in the delegate list (name, job title, place of work).
Please do not contact me about other healthcare conferences.
Payment
I enclose a cheque made payable to ROC Events UKRC for the sum of £
Please send me an invoice for the sum of £
PO Number
(Please note no invoicing is permitted after the 14 April. Bookings after this date will only be accepted with a valid credit/debit card or cheque payment)
Please debit my credit/debit card for the sum of £
We accept all major cards except American Express Card no:////// Issue No: Expiry:/ Security No:
Name and address of cardholder if different to delegate attending
Name
Address
Postcode
By signing this form I have read and agreed to the terms and conditions below:
Signature
No

Terms and conditions for delegates:

- Registration fees include VAT at the prevailing rate, complimentary refreshments, lunch and congress materials (if attending as a delegate). They do not include accommodation. If you are attending the exhibition only, the do not include lunch and congress materials? I pardie for your pokyling to be.
- you are attending the exhibition only, they do not include lunch and congress materials.

 In order for your booking to be processed you must sign the terms and conditions. Your place is not guaranteed until you have received email confirmation and joining instructions from Profile Productions Ltd. If you do not receive confirmation within 24 hours of your booking being made, you should contact Profile Productions by email, at jointcongress@profileproductions co.uk.

 Without exception, all fees must be paid in full prior to the event. Any delegates arriving at the congress with their
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 Without exception, all fees must be paid
 in full prior to the event. Any delegates
 arriving at the congress with their
 payment outstanding will be asked to
 provide their credit card details as a
 guarantee. Any delegates registering
 within 28 days of the event MUST include
 a valid credit card for payment on the
 registration form. Bank transfer charges
 are the responsibility of the payer.
 Cancellations received prior to the
- are the responsibility of the payer.

 Cancellations received prior to the

 9 May 2017 will be refunded but will be
 subject to a £45 administration fee.
 If a cancellation is received within one
 month of the event we regret that no

- refund can be made. A substitute delegate is welcome at no extra charge but we require you to advise us of any substitutions 72 hours prior to the event. Any cancellations that still have payment outstanding will be liable for either the administration fee or the full registration fee, dependent on the time of the cancellation. Cancellations of the cancellation. Concept to jointcongress@profileproductions.couk. Changes to any asned the congress.
- need to be made in writing to jointcongress@profileproductions.co.uk 5. Changes to any aspect the congress (including speakers) may be necessary due to events outside the control of Profile Productions and ROC Events Ltd The organisers therefore reserve the right to make any necessary amendments to the programme or timings of the event.
- 6. The details of registered delegates (name, place of work and occupation) will be placed on the attendee list which will be given to sponsoring companies and exhibitors and made available to delegates. Delegates who do not wish to be included on this list should advise at the time of booking.
- There will be photography and/or video production taking place during the congress and the resulting images may be used for promotional purposes on-line and/or in printed materials.

- Delegates who do not wish their images to be included in this material should contact the organisers by email at jointcongress@profileproductions.co.uk
- Attendance fees will not be refunded in the event or threat of war, terrorism or other circumstances outside of the organisers' control.
- the exhibition and any educational sessions taking place in the exhibition hall **ONL**. A full delegate toket must be purchased if access to all congress sessions is required. Exhibition visitors must purchase refreshments and lunch separately. Exhibition visitors are not permitted to conduct any commercial activity such as promoting or selling products, distributing literature or information per taining to their business or attempting to obtain contact information of any other attendee. Any exhibition visitor caught carrying out these activities onsite will be asked to leave the event and may be prohibited from attending future events.
- 10. We may contact you via email in the future to tell you about upcoming events. If you do not wish to be contacted, please inform us by emailing jointcongress@profileproductions.co.uk



The British Institute of Radiology is the international membership organisation for everyone working in imaging, radiation oncology and the underlying sciences.

We aim to:

- Support the work of our members and their colleagues to achieve professional excellence
- Provide continuing professional development for our multidisciplinary community
- Publish cutting edge research for our authors and readers across the world
- Influence and connect with the wider professional sector.



The College of Radiographers is the charitable and educational subsidiary of the Society of Radiographers, the chosen membership body for over 27,000 radiographers and other professionals

in clinical imaging, radiation therapy and oncology. In addition he Society has over 2,000 student members. It provides, through monthly subscription, a full range of services, including professional indemnity insurance, professional and employment advice and support and workplace representation. The College of Radiographers exists for public benefit, with objects directed towards education, research and related activities. An important part of the College's strategy is engaging with and listening to patients.

A major initiative to support research in radiography is the College of Radiographers Industry Partnership Scheme (CoRIPS), which currently has 28 partners. The Society and College work towards raising standards across the spectrum of clinical imaging, radiotherapy, oncology practice and education, and the College provides a comprehensive approval and accreditation programme for all pre and post-registration education provision, as well the accreditation of individual practitioners. Technical and professional guidance, a comprehensive website, publications, journals (including the internationally acclaimed peer reviewed journal Radiography), seminars and conferences are examples of just some of the benefits available to our members.



The Institute of Physics and Engineering in Medicine (IPEM) is a professional association with around 4,300 members who are physicists, engineers and technologists working with applications of physics and engineering applied to medicine and biology. Our members work in

hospitals, academia and industry, and IPEM has a unique role in linking the three areas.

As a charity, IPEM's aim is to advance the application of physics and engineering to medicine for the public benefit and to advance public education in this field. We do so by supporting and publishing research, and supporting the dissemination of knowledge and innovation through project funding and scientific meetings; and by setting standards for education, training and continuing professional development for healthcare scientists and clinical engineers. We also produce information for the public about the role of physicists and engineers in their healthcare services. Benefits of membership include a free CPD scheme, discounts on journals, reports and conference fees, bursaries and prizes, access to job vacancies, and a wide support network at every stage of career progression.



VENUE

Manchester Central

Manchester Central is an award-winning venue in the heart of one of Europe's most vibrant cities.

Its vaulted arches and station clock have made Manchester Central an iconic city feature for over 130 years. With its historic architecture balanced with state-of-the-art facilities, it provides the perfect venue for large events such as UKRC 2017 – and one of the most professional and versatile event spaces in the UK.

For further information please visit www.manchestercentral.co.uk



Accommodation

Manchester offers a wide range of accommodation to suit all budgets and requirements. Several hotels are located very near to the MCC including the Jury's Inn, Radisson and Midland Hotels. Hotel reservations are being handled through Reservation Highway, who have negotiated special rates during the event. Please view: www.reservation-highway.co.uk/ukrc17 or call 01423 525577 for offers and to book accommodation.

Please note rooms are very limited due to other events taking place in Manchester, so please book in advance to avoid disappointment.

Getting to Manchester



By air

Manchester Airport is a major international hub just nine miles (14.5km) from the city centre. It serves more than 200 destinations worldwide including direct routes to nine US cities. From the

airport, the city is approximately 25 minutes away by taxi or just 20 minutes via the half-hourly express rail service (tickets £3.00-£4.00). Information on Manchester Airport can be found at: www.manchesterairport.co.uk



By rail

It takes a little over two hours to reach Manchester from London and Manchester also has direct connections to most major UK cities. Services arrive at Piccadilly or Victoria

stations where passengers can connect with Metrolink trams for easy access to the city centre. Manchester Central is a 20 minute walk from Piccadilly Station or just five minutes by taxi. Alternatively, catch a connecting train to Oxford Road Station - just five minutes from Manchester Central on foot.



By road

Manchester is at the heart of a comprehensive motorway network. Manchester's M60 orbital motorway provides easy access from north, south, east and west.

SOCIAL AND NETWORKING EVENTS

Monday 12 June

Welcome reception

The welcome reception will be held within the exhibion. Free for all to attend, deleagtes are encouraged to take this excellent opportunity to meet with exhibitors, society representatives and colleagues.

Time: 17.00-19.00 Free for all to attend

Bar and music night MILTON



Join colleagues for an informal social event including drinks and live music at the exclusive Milton Club. The venue is situated on Deansgate in the heart of the city, a short distance from Manchester Central.

Time: 20:30-01:00 Dress code: Smart/Casual

Tickets: Delegates £15 (Price includes VAT @ 20%)

Tuesday 13 June

AXREM Congress Dinner



SPONSORS



















The Congress Dinner will be held at Principal Manchester - a magnificent Grade II listed building. The hotel has a history dating back to 1890, when it first opened as The Refuge Assurance Company headquarters. The Congress Dinner is organised and hosted by AXREM and will provide a fantastic opportunity to network, relax and have fun with other delegates and industry partners. The theme this year is 'Science and Technology' - Manchester was the first global industrialised city and as such, has a long history of innovation and exploiting science and technology. Tickets include a drinks reception, three course dinner with wine and an exciting line up of entertainment. Early booking is advised to avoid disappointment.

Time: 19:30 - 00.00

Theme: Science and Technology

Dress code: Cocktail dresses and lounge suits Tickets: Delegates £35 (Price includes VAT @ 20%)

