IOS 2000 - Imaging, Oncology, Science

International Convention Centre and National Indoor Arena, Birmingham 22 - 24 May 2000

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ORGANIZING BODIES

IOS 2000 is a joint meeting held by the British Institute of Radiology, the College of Radiographers and the Institute of Physics & Engineering in Medicine. The Congress is held in association with the British Medical Ultrasound Society, the British Nuclear Medicine Society, British Oncological Association, Computer Assisted Radiology and Surgery (CARS), the Institute of Healthcare Management, the Institute of Physics, the Institution of Electrical Engineers - Science, Education and Technology Division, the International Society of Radiographers & Radiological Technologists, the Irish Institute of Radiography, the Royal Society of Medicine - Radiology Section, the Scottish Radiological Society and the Society for Radiological Protection.

ORGANIZING COMMITTEES

Congress Group

Secretariat

Dr S J Golding President Mrs E Beckmann Dr P Cavanagh Mrs J Henderson Prof J Husband Dr J Olliff Mrs A Paterson Dr D Sutton Dr D Tait Miss S E Nicholls Ms V Whitehead Miss N C Taylor Ms K Kottasz

BIR Congress Co-ordinator BIR Conference and Events Manager BIR Events Assistant BIR Exhibitions Co-ordinator

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BIR Congress Co-ordinator
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COR Finance Director

*info*RAD[™]Exhibition

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Mr R Cannon
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Mrs A Finch
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Dr A Grundy

Dr H C Irving Dr B Jones Ms E Moore Dr S Padley Dr G R Plant Mr A Workman

ACKNOWLEDGMENTS

The President and Members of the Congress Committee for IOS 2000 would like to thank the following organizations for their generous support of the Congress:

ATL UK Ltd Clinical MRI IGE Medical Systems Ltd Kodak Health Imaging Ltd McKesson HBOC Merck Pharmaceuticals - Imaging Division / Bracco Marconi Medical Systems MediOL.com Nycomed Amersham Plc Philips Medical Systems RAD Magazine Siemens Medical Engineering Plc Schering AG Toshiba Medical Systems Ltd

IOS 2000 would like to thank particularly the representatives of industry who have served in the **Sponsors Group**

Mrs E Beckmann Mr A Budge Mr M Head Ms A Littlechild Mr C Medley Mr D Piper Mr A Quinn Mr D Roberts Mrs M Squires Mr J Stoddart Mr P Taylor Mr D Waldron Mr S Weeden

ACCREDITATION

The Royal College of Radiologists has awarded a maximum of 21 Continuing Medical Education (CME) credits.

The Institute of Physics & Engineering in Medicine has awarded 7 Continuing Professional Development (CPD) credits per day.

WELCOME FROM THE CONGRESS PRESIDENT

Dear Colleagues,

Once again I have the pleasant duty and privilege, on behalf of the partner societies, of welcoming you to this year's Congress of Radiology and its associated sciences.

As always, those of us involved in planning this meeting have tried to offer the best of past successes, combined with new initiatives. This year I am especially pleased to welcome our first Luminary Lecturer, Dr Nestor Muller, and I particularly draw your attention to our recognition of the increasing importance of informatics in all our specialities, in our first integrated programme in this area.



No meeting of this complexity happens without sustained effort from a

large number of people; the committees, the secretariat, the officers of the three societies, our colleagues in industry and our speakers and chairmen. Of course everyone plays their part, from those who come in and assemble the show for us, to those who clear up after we have gone home, many of them invisible to the rest of us. I can only express profound gratitude on behalf of you, the delegate, to everyone who has worked to make this meeting a success.

As you may know, next year the Congress moves to a new venue with a new partnership. This is, I believe, a healthy sign of development; our specialities grow and mature, and the Congress must do so too. So I think we can look to the future confident of the Congress keeping pace as our work faces the innovations and challenges of the 21st century.

Today, as I look back over a decade's involvement, in one role or another, in this meeting, I am struck by the enormous development which has taken place in this time. Principally, though, I think mostly of people; of the warmth of collaborating positively with colleagues in the professions and in industry, of consolidating existing friendships and making new ones, and of admiring the scientific achievements of so many in our respective fields. This has strengthened my feeling that it is the human activity of a Congress which matters most; ultimately meetings are about meeting people.

I sincerely hope that you enjoy this year's Congress and find it valuable. If you do, those who have worked hard and long to prepare it will be well thanked.

Stephen Golding Congress President

Programme 4

GENERAL INFORMATION

Congress Site

IOS 2000 takes place at the International Convention Centre (ICC) in Birmingham. The IOS 2000 Exhibition is situated a five minute walk away in the National Indoor Arena (NIA). The two sites are linked by a covered walkway. Signage throughout the NIA & ICC is supported by Toshiba Medical Systems.

Sessions will take place as shown on the timetable grid (see Programme pages 12 - 17). This year the Congress is occupying Halls 5, 6, 8, 11a, 11b in the ICC and the Olympian Suite in the NIA. A layout map of the ICC can be found on the inside back cover of this publication.

Registration

The Registration Area will be situated at the quayside entrance to the ICC mall, and will include a delegate seating area, literature point and delegate message boards. The Congress Secretariat office will be situated in this area. The Registration Area will be open at the following times:

IOS 2000 Opening	g Times
Sunday 21 May	1500 - 1800
Monday 22 May	0730 - 1700
Tuesday 23 May	0730 - 1700
Wednesday 24 May	0730 - 1500

Upon registering you will be issued with a delegate badge, tickets for any social events booked and any relevant accreditation certificates. You will also receive a delegate bag, supported by *Philips Medical Systems*, containing important meeting information. This will include the Scientific Poster, *info*RADTM and IOS 2000 exhibition guides.

Congress Badge

Your badge will be printed with your name and hospital/ institution/company name and **must be worn at all times** when attending the Congress. This badge entitles you to admission on the days on which you are registered to all lectures at the IOS 2000 conference, informatics programme, scientific poster exhibition and entry to the IOS 2000 technical exhibition. Access to conference workshops will be by ticket only. Congress badges are not transferable.

Those badges that have ribbons attached indicate the following groups of people: Congress President, Invited Speakers, Chairpersons, Presidents of Sponsoring Organizations, Secretariat and AV Stewards.

Accreditation

Delegates who have indicated when registering that they are members of the RCR or the IPEM will be issued with accreditation certificates.

Certificate of Attendance

Certificates of attendance will be issued by the Congress Secretariat on request.

Messages

Messages for delegates will be posted on message display boards located in the Registration Area. The telephone number at the ICC registration area is 0121 335 8401. The main Convention Centre telephone number is 0121 200 2000.

Telephones

Pay telephones are available throughout the ICC and NIA.

Informatics and infoRAD™

For the first time the informatics activities at the Congress are fully integrated. In collaboration with CARS 2000 and MIUA, the invited lecturers, workshops, and exhibits will supplement the main themes to provide a broad coverage of informatics and computing. This year as a new venture we are able to offer the informatics programme as a daily package at the introductory price of £25.00 per day for exhibition visitors.

The Congress aims to bring developing technologies within the healthcare environment to the attention of the radiological community, in particular information technology applied to diagnosis, therapy and research. Technological reviews at IOS 2000 will cover PACS, digital radiography, image analysis and 3D Imaging.

The *info*RAD[™] exhibition will demonstrate the practice of Healthcare Informatics - the use of computers to help in the management, application and analysis of health related information. Topics include Internet applications, computer aided diagnosis, radiological information systems and telemedicine.

The network, launched at *info*RADTM 1998, will again demonstrate DICOM inter-vendor communication in practice. Visitors this year can make use of Internet access in the Cybercafé, a new feature, which is part of the technical exhibition in the NIA and is supported by *MediOL.com*.

Please see programme page 18 for a list of exhibits.

infoRADTM is a trade name used by kind permission of the RSNA.

Scientific Poster Exhibition

Posters, forming a major part of the scientific programme, will be displayed in the NIA around the concourse area, with access via the lifts to the first floor or through the balcony refreshments area in the IOS 2000 exhibition. For a list of posters please see programme page. The Scientific Poster Exhibition Guide is in your delegate bag. The exhibition is supported by *IGE Medical Systems*.

> IOS 2000 Exhibition *info*RADTM Scientific Poster Exhibition Opening Times

Monday 22 May	0900 - 1730
Tuesday 23 May	0900 - 1730
Wednesday 24 May	0900 - 1600

IOS 2000 Exhibition Incorporating Radiology and MED X RAY®

All you need to know about medical imaging under one roof

IOS exhibition is the UK's leading exhibition covering all aspects of medical imaging and oncology. Informed decision making for the purchase of radiological equipment is becoming increasingly important.

This, the foremost annual exhibition of its field in western Europe continues to present a comprehensive range of products and services to practitioners and managers involved in our technology driven sector of health care. Find out about the latest applications within radiology and healthcare informatics - the use of computers to help in the management, application and analysis of health related information.

For 2000 a Cybercafé will provide free internet access to all visitors.

Your congress badge will provide you with free access to visit the IOS exhibition. For further information regarding the IOS exhibition, please refer to the exhibition guide in your delegate bag.

Radiology in Developing Countries

The Radiology in Developing Countries Exhibition organised by the Röntgen-Museum in Remscheid, Germany will be situated in the Congress registration area.We are grateful to Toshiba Medical Systems for supporting the exhibition. This fascinating exhibition offers interesting insights in to the use of radiology in developing countries and explores the role of industry, education and private relief organisations.

Catering

Points dispensing **complimentary** tea and coffee will be open throughout the day in the IOS exhibition at the NIA. Lunch will be available on a cash basis within the balcony area of the NIA. There is also a coffee terrace in the ICC Mall.

Cloakrooms

Cloakrooms are available in the Mall at the ICC and in the foyer of the NIA.

Photography

A photographer has been contracted to take photographs during the Congress. Proofs will be displayed in the NIA on the exhibition floor during Congress hours where orders may be placed.

First Aid

A Medical Centre is located in the ICC and NIA and staffed during congress opening hours. The Medical Centre can be contacted by using the NIA or ICC house telephones and dialling 5155. In an emergency, dial 2222.

Facilities on Site

The Mall at the ICC offers the following facilities:

- Box Office for booking tickets for events in Symphony Hall, NIA and NEC
- ICC Shop and Post Box
- Forthcoming events information
- National Westminster Bank and Halifax (cash dispensing facilities)
- Freephone service for taxis (Taxi Owner'Association)
- Visitors' Services Centre providing fax, photocopying, stamps and other business services as well as a local information and booking facility from the Birmingham Convention and Visitor Bureau
- Florist

Car Parking

There are 2600 car parking spaces available at the NIA which are available on a pay and display basis. Delegates for the Congress should go to the north car park.

Orientation

Please see the back of this publication for layout maps of the ICC.

Spouses/Partners

Accompanying spouses/partners of registered delegates will be entitled to visit, on production of a badge available at registration, the technical exhibition and the Eponymous lectures. Excursions and tours are available from Flights Conference Services Ltd, Birmingham, tel: +44 (0)121 322 2722.

Accommodation

A representative from *In Business Reservations* will be on-site (Congress Office) to assist with any accommodation requirements or queries or call direct on+44(0)1332 285521.

PRIZES

The following prestigious prizes and awards will be awarded at IOS 2000 - Imaging, Oncology, Science:

BIR Nycomed Amersham Prize

This prize is open to all proffered papers on nuclear medicine. £100 is awarded through a generous donation by Nycomed Amersham plc.

BIR Clinical MRI Prize

A cheque for £50 and a commemorative statuette are awarded to the presenter (a BIR Member) of the best proffered paper on MRI. There is no age limit, but preference will be given to members early in their career. This prize is generously donated by Clinical Press Ltd.

BIR Leonard Levy Memorial Prize

This prize was established in 1992 by Mr Bennett-Levy and Levy Hill Laboratories in memory of the late Dr Leonard Levy. The prize takes the form of a book token or cheque up to the value of £125 and is open to members of the BIR under 40 years of age presenting the best paper at the Congress.

COR Beth Whittaker Memorial Poster Prize

A prize of £50 is awarded to the best poster presented at the Congress by a radiographer or a team of presenters headed by a radiographer.

COR Alan Nicholls Award

This award of £100 is awarded to the best proffered paper presented by a radiographer.

COR Forder Memorial Award (Students)

A prize of £50 is awarded to the best proffered paper by a student at the COR Annual Students' Conference.

RAD Magazine Best Poster Prize

This prize was established in 1992 by Kingsmoor Publications Ltd, publishers of RAD Magazine, to encourage and maintain a high standard of visual presentation for scientific posters. All posters will automatically be considered and prizes for 1st, 2nd and 3rd place are awarded.

IPEM President's Prize

This prize is awarded for the best oral presentation by a member of the IPEM aged under 35 years.

IPEM Physics Poster Prize

This prize is awarded to the best poster exhibit on a medical physics topic.

McKesson HBOC infoRAD™ Prize

A prize of £150 will be awarded to the best exhibit on the use of information technology within the health care environment. A highly commended award (certificate only) will also be presented.

IOS 2000 / Merck Imaging **Annual Poster Quiz**

A poster quiz will be held in the National Indoor Arena as part of the Scientific Poster Exhibition. There will be four cases each day, using cases from The Royal London Hospital and The London Radiology Club. The overall winner will receive a cash prize towards a visit to RSNA 2000. In addition there will be daily prizes of book tokens. The IOS 2000 Poster Quiz is being co-ordinated by Dr O Chan from the Royal London Hospital and supported by Merck Imaging.

RADIOLOGY 1999 PRIZE WINNER DETAILS

Prizes awarded at Radiology 1999 - Imaging, Science & Oncology 17 - 19 May:

BIR Amersham Prize

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Joint Winners	J Dyer, City Hospital NHS Trust, Birmingham
	J M McAllister, Royal Hospitals Trust, Belfast
BIR Leonard Levy	V W K Ng, Institute of Psychiatry, London
BIR Clinical MRI Prize	E H Whitby, University of Sheffield, Sheffield
COR Beth Whittaker	E A Storey, University of Bradford, Bradford
Memorial Poster Prize	
COR Alan Nichols Award	G C Weatherburn, Brunel University, Uxbridge
COR Forder Memorial Award	D Walls, University of Ulster at Jordanstown
IPEM President's Prize	A Montgomery, Western Infirmary, Glasgow
IPEM Physics Poster Prize	L Richley, University Hospital Birmingham, Birmingham
RAD Magazine Poster Prize	
WINNER	W A Bhatti, University Hospital Aintree, Liverpool
Joint 2nd Prize	A J P Goddard, Leeds General Infirmary, Leeds
	I Vilas, Hospital de la Marina Baixa Villajoyosa, Benidorm, Spain
HBO & Co. <i>info</i> RAD™ Prize	P Torrie, Royal Berkshire Hospital, Reading
Radiology 1999/Merck Imagin	Ig
Annual Poster Quiz	
Monday's Joint Winners	A Yong, Dr J Harris, St Mary's Hospital, London
Tuesday's Winner	C Roche, Royal Liverpool Hospital, Liverpool
Wednesday's Winner	J Miller, Western General Hospital, Edinburgh
Overall Joint Winners	A Yong, Dr J Harris, St Mary's Hospital, London
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SOCIAL ACTIVITIES

An exciting and varied social programme has been arranged to give delegates the chance to meet with old friends and new. The following programme of events, which includes the popular golf and fishing competitions, will ensure delegates have plenty of opportunity for enjoyment and relaxation.

Monday 22 May 2000

Evening at the Jam House

1930 - 0000 hrs

Delegates are invited to Birmingham's unique rhythm and blues experience in a stylish but informal atmosphere. The Jam House provides two lively bars and a mix of imaginative international food. There is also a live band and dancing until midnight.

Cost: £20.00 to include two course evening meal, live band and VAT.

Disco at Bobby Brown's

 $2100\text{-}0100\,hrs$

Now a regular event at the Congress, delegates will have the exclusive use of Bobby Brown's. A former canal side warehouse, it has been converted into the most original nightclub in town.

Cost $\pounds 7.50$ to include admission and VAT only.

Tuesday 23 May 2000

Congress Dinner and Dance The Birmingham Botanical Gardens 1930 - 0100 hrs

Set amongst 15 acres of manicured gardens and impressive glasshouses, this Victorian paradise creates a unique and enchanting setting for a dinner dance. Guests will have access to the magnificent Tropical House and Terrace Glasshouses. Drinks reception on arrival followed by formal dinner and dancing. (Black Tie/dark suit)

Cost £39.50 to include coach transport, dinner, dance, wine and VAT.

SPORTING COMPETITIONS

Sunday 21 May 2000

IOS 2000 - Fishing Outing

A fly-fishing outing will take place on Sunday 21 May 2000, on the Derbyshire Wye near Bakewell. This event is likely to coincide with the start of the Mayfly hatch. A limited number of rods are permitted on this famous beat, which offers dry fly fishing in idyllic surroundings.

If you are intrested in taking part, please contact Dr N Cozens, Derbyshire Royal Infirmary, London Road, Derby DE1 2QY. Telephone +44 (0)1332 347 141 ext. 2351 or Fax No. +44 (0)1332 254 750.

Monday 22 May 2000

IOS 2000 Golf Competition

The competition is organized on behalf of the Radiology Golfing Society by Dr David Rickards. The competition will be held at Little Aston Golf Club in Birmingham. It is an all day event with a snack lunch and dinner with prize-giving in the evening. The cost is about £55 per person which includes all golf, lunch and a dinner and VAT.

For further details and to book, contact Dr David Rickards, 136 Harley Street, London W1N 1AH, telephone: +44 (0)207580 1772.

Admission for the Social Events is by ticket only It may be possible to obtain tickets for some of these events from the IOS Secretariat Office in the Congress registration area.

ACCOMPANYING PERSONS

The Birmingham Convention & Visitor Bureau (BCVB) can provide delegates with a host of information to make your visit to the area more enjoyable. They have details of events happening during your stay, on places to visit, night spots, theatre information and different places to eat. Contact them at their office in the ICC Mall or call on 0121 780 4321.

IOS LUMINARY LECTURES

Dr N Müller of The University of British Columbia, one of the world's foremost specialists in thoracic imaging, gives a series of advanced presentations. All of the presentations will be held in Hall 5.

Monday 22 May 2000	
Luminary Lecture 1: High resolution CT in the immunocompromised host:	
differential diagnosis at high resolution CT	1245 - 1330
Luminary Lecture 2: Acute pulmonary embolism: state-of-the-art imaging	1700 - 1745
Tuesday 23 May 2000	
Luminary Lecture 3: High resolution CT in the differential diagnosis of chronic	
infiltrative lung disease	1215 - 1300
Luminary Lecture 4: High resolution CT in the assessment of obstructive lung disease	1430 - 1515
Wednesday 24 May 2000	
Luminary Lecture 5: CT and MRI in the diagnosis and staging of lung cancer	0830 - 0915



Dr Müller did his initial medical training at the Federal University of Rio Grande do Sul in Brazil. His initial Residency was in paediatrics with speciality work experience in respiratory physiology following. He followed this with a PhD in Medical Sciences at the University of Toronto and obtained his FRCPC in Radiology from the University of British Columbia in 1984. He has been Professor of Radiology at the University of British Columbia since 1992.

Dr Müller has over 250 refereed publications and has authored four leading text books on chest imaging.

EPONYMOUS LECTURERS

FINZI LECTURE

Dr J D Howell: A century of radiology in the US and the UK

Monday 22 May 2000 1100 - 1145



Dr Joel Howell obtained his MD from the University of Chicago and his PhD in the History and Sociology of Science from the University of Pennsylvania. He is currently at the University of Michigan, where he is a Professor in the Departments of Internal Medicine, History and Health Management and Policy.

Dr Howell is a practising internist whose primary research interest is in the history of medical technology. He has published widely on the topic in both the clinical and the historical literature; his most recent book is Technology in the Hospital: Transforming Patient Care in the Early Twentieth Century.

KODAK MAYNEORD MEMORIAL LECTURE

Monday 22 May 2000 1345 - 1430

Professor W R Lees: Is there any science in radiology?



Whilst working as a clinical physiologist, in 1974 Professor Lees founded the Ultrasound Department at the Middlesex Hospital, and in 1977 commenced training in radiology, transforming the Ultrasound Department into the Radiology Department. He was appointed Consultant Radiologist to the Middlesex Hospital in 1981 with his main clinical interests in the areas of body imaging and intervention, and has since expanded his work into body MRI and interventional MRI with the installation of the dedicated .2 Tesla Open Interventional MRI system.

Professor Lees also has a strong interest in the physics and mathematics of radiology and

has for many years worked with an imaging physics group developing 3-D and image analysis techniques in ultrasound, CT and MRI.

In the last 10 years his major research activity has been developing methods of tumour ablation using laser, radiofrequency and photodynamic therapy techniques, treating over 500 patients with liver, breast, lung, pancreas and prostate and bone tumours.

DOUGLAS LEA LECTURE

Tuesday 23 May 2000 1200 - 1245

Professor D Goodhead: On the track to DNA damage and effects of low-level ionization radiation

Professor Goodhead is Director of the MRC Radiation and Genome Stability Unit.



He gained his D Phil at the University of Oxford in 1965 in particle physics and then went on to academic positions at the Universities of California, London (St Bartholomew's) and Natal. He joined the MRC Radiobiology Unit at Harwell in 1974.

Professor Goodhead has served on a variety of national and international committees on evaluation of radiation risks. These have included the Committee on Medical Aspects of Radiation in the Environment (COMARE) in the UK, the BEIR VI radon-risk assessment in the USA and consultancies to UNSCEAR and IAEA.

His own research has been mainly on the biophysics of radiation effects with particular emphasis on microscopic features of radiation track structure.

SILVANUS THOMPSON MEMORIAL LECTURE Tuesday 23 May 2000 1315 - 1400 Dr G ter Haar: Cancer treatment for a new century - non-invasive focused ultrasound ablation of tumours



Gail ter Haar received an MA in Physics at Oxford University. She then did an MSc in Medical Physics at Aberdeen University, followed by a PhD in Physics from the University of London in 1979. Her research for this degree was on the biological effects of ultrasound, which she undertook in the Physics Department of Guy's Hospital Medical School. In 1998, the University of Oxford awarded Gail a DSc in Clinical Medicine for her work on the safety of ultrasonic imaging and her research into the therapeutic applications of ultrasound.

Gail ter Haar is currently Head of Therapeutic Ultrasound at the Institute of Cancer Research, Sutton. Her interests are mainly in the development of therapeutic applications of ultrasound for use in the treatment of cancer, investigation of the potential of ultrasound for creating vascular occlusion for therapeutic benefit and the safety of diagnostic ultrasound techniques.

She has published 105 papers and written 18 book chapters. She is a member of the safety committee of the World Federation for Ultrasound in Medicine and Biology and of the Radiation Protection Committee of the British Institute of Radiology. Until recently she was Chairman of the European Committee for Ultrasound Radiation Safety. She is an Honorary Fellow of the American Institute for Ultrasound in Medicine. She is also on the Editorial Boards of Ultrasound in Medicine and Biology and the European Journal of Ultrasound.

WILLIAM STRIPP MEMORIAL LECTURE

Ms L Batty-Smith: You've been framed - The Ilizarov way



Lindsay qualified in diagnostic radiography in St. George's Hospital, Hyde Park Corner in 1978. She progressed professionally in several London hospitals before gaining a senior position at The London Clinic. Having a passion for music and performance she took a career break. Recession in the early nineties brought her back to dental radiography at King's after which she moved to main X-Ray.

She has a certificate of mammography, specialises in accident and emergency radiography and paediatrics, and she is a member of the Trauma Imaging Group. She enjoys teaching and is studying for a master's degree. When not being a radiographer she composes music for film and media.

MACKENZIE DAVIDSON MEMORIAL LECTURE

Wednesday 24 May 2000 1300 - 1345

Professor R F Dondelinger: Radiological management of abdominal trauma



Professor R F Dondelinger is a full Professor of Radiology at the University of Liège and Chief of the Medical Imaging department. His main field of interest is interventional radiology, vascular and visceral applications.

He was Founding President of ESTI (European Society of Gastrointestinal and Abdominal Radiology) and a founding member and Secretary General of CIRSE (Cardiovascular and Interventional Radiological Society of Europe). He is currently President of the Royal Belgian Society of Radiology and was President of the Royal Belgian Society of Gastroenterology in 1999

He has co-authored and co-edited six books, 46 book chapters and 199 papers, mainly on interventional radiology and he is also an Editorial Consultant Board Member of 14 Scientific Journals.

WELBECK MEMORIAL LECTURE

Wednesday 24 May 2000 1345 - 1430

Miss P Kimber: Imaging that "dark continent"



Pamela Kimber commenced her career in Oxford at the Radcliffe Infirmary and after a year's secondment to Minneapolis she began her work in the field of neuroradiography, which in 1956 was a very different speciality from that of today. Over the span of her career she has been involved in many unique changes: from wet film processing of ventriculograms and handpull-changing angiography to CT and functional MRI. Neuroradiographers and neuroradiologists during the last four decades have had to accept, adapt and learn the application of these new investigations.

The majority of Pamela's career was spent as Superintendent Neuroradiographer at the Wessex Neurological Centre, Southampton. She also has been involved with the College of Radiographers, the International Society of Radiographers and Radiological Technicians and at the British Institute of Radiology. She was a member of the Radiographer's Board for eight years and its Chairman for four years. She has also been fortunate enough to have been invited to teach and lecture at many radiographer meetings in the UK and in many parts of the world.

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PERSONAL PLANNER

MONDAY 22 MAY

Morning	Afternoon	Evening
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	- <u>-</u>	

Hall	Morning		Afternoon
Hall 5	Techniques in the Chest The Issue of Colon Cancer Screen Luminary Lecture 1	ning	<i>Eponymous Lecture:</i> BIR Kodak Mayneord Memorial Paediatric Radiology - Clinical Practice Tips Luminary Lecture 2
Hall 6	<i>WIP</i> : Radiography Education Studies in Paediatric Imaging Studies in Gastrointestinal MRI		Studies in Chest Imaging Studies in Musculoskeletal Imaging
Hall 8	Quality Management The NHS Breast Screening Progra Planning for the Future AGM: Society of Radiographers	mme -	The Barium Enema Revisited The Role of Imaging in Cancer Diagnosis
Hall 11a	<i>WIP:</i> New Studies in Neuroimagir <i>WIP:</i> Advances in High Technolo Body Imaging Chernobyl update for the 21st Ce	gy &	How to Cope with IR(ME)R 2000 Ultrasound Safety Radiation Protection
Hall 11b	Radiological History in Motion <i>Eponymous Lecture</i> :RSM Finzi L Studies in Management & Audit	ecture	MR Angiography - Is it worth it? <i>WIP:</i> Role & Career Development in Radiography
Olympian Suite	Web Publishing How To - Beginn Image Analysis	er	Studies in Image Analysis
		WORK	SHOPS
Executive Room 2	Time Management	1000 - 1200)
Executive Room 1	Understanding the Patient	1000 - 1200)

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Executive Room 7	Creating Computer Presentations	1000 - 1230	Creating Computer Presentations	1400 - 1630
Executive Room 8	Ultrasound (Small Parts, Breast & Vascular Ima		Ultrasound (Small Parts, Breast & Vascular Ima	1400 - 1600 aging)

SOCIAL EVENTS

Evening at the Jam House 1930 - 0000 Disco at Bobby Brown's - The Club 2100 - 0100

TUESDAY 23 MAY	Hall 5	Hall 6	Hall 8	Hall 11a	Hall 11b	Olympian Suite
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PERSONAL PLANNER

TUESDAY 23 MAY

	Morning A	ftemoon	Evening
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	Morning	Afternoon	
Hall Hall 5	Advanced Imaging of the Lumbar Spine Understanding & Recognising Artefacts in MR Imaging Luminary Lecture 3	<i>Eponymous Lecture:</i> BIR Silva Luminary Lecture 4 Update on Head & Neck for th	-
Hall 6	Studies in Interventional Techniques Studies in Vascular Radiology	Studies in MRI Studies in MR Technology	

Studies in GI Imaging COR Presidential Address Hall 8 Calman-Hine in Cancer Care - How far College of Radiographers: Student Radiographer have we got? Moving to the 24-hour Department Conference Radiographic Reporting How to Shield an X-Ray Room Multislice CT - on to the new plateau? Hall 11a What you should be doing about Clinical Governance The Challenge of Communicating Radiation Risk to the Patient Eponymous Lecture: IPEM Douglas Lea Lecture Hall 11b New Approaches to Imaging in GI WIP: Studies in Oncology Malignancy: Staging New Approaches to Imaging in GI Malignancy: **BIR Presidential Address** Tumour & Normal Tissue Effects Studies in Radiotherapy Physics

Olympian Web Publishing How To - Intermediate Suite 3D Imaging 1 3D Imaging 2 CR/DR Digitisation

		WORKS	SHOPS	
Executive Room 2	Time Management	1000 - 1200	Time Management	1400 - 1600
Executive Room 1	Understanding the Patient	1000 - 1200		
Executive Room 7	Creating Computer Presentations	1000 - 1230	Creating Computer Presentations	1400 - 1630
Executive Room 8	Ultrasound (General Abdominal & Lower Limb		Ultrasound (General Abdominal & Lower Limi	1400-1600 bs)

SOCIAL EVENTS

Congress Dinner & Dance at the Birmingham Botanical Gardens 1930 - 0100

WEDNESDAY 24 MAY	0 0 0 0 0 8 8 8 8 9 0 1 3 4 0 5 0 5 0	0 0 0 1 1 9 9 9 0 0 1 3 4 0 1 5 0 5 0 5	1 1 0 0 3 4 0 5	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 2 2 2 2 2 1 3 0 5 0 5 0	1 1 1 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 4 4 5 3 4 0 0 5 0	1 1 1 1 1 1 1 1 1 5 5 5 6 1 3 4 0 5 0 5 0	1 1 6 6 1 3 5 0	1 1 1 1 6 7 7 6 7 7 7 5 0 1 1 1	1 1 1 7 7 8 3 4 0 0 5 0
Hall 5	Luminary Lecture 5	Embolotherapy	apy	Venous & C	Venous & GI Intervention	Eponymous Lecture MacKenzie Davidson Memorial BIR	us etc. Tie Il	Magne	Magnetic Resonance			
Hall 6	Studies in Im	Studies in Oncological Imaging		Studies in Breast Imaging	61	dies nevra dies in MR Tr R Presidential	Studies in t & C	Studies in the Face, Neck & Cranium	Studies in C Radi	Studies in Genitourinary Radiology	Å	a Sector de sector de se
Hall 8	<i>N'O R & S &</i> 1090-1200 T 1090-1200	Imaging in Orthopaedic Surgery	Epo. Lee Wi St C	Eponymous Lecture William Stripp COR	Imaging the Lumbar Spine	umbar Spine	Eponymous Lecture Welbeck Memorial Lecture COR		Radiographic Professional Development in Practice		Congress Awards Ceremony	
Hall 11a	AGM British Institue of Radiology	Spiral CT	li Valer eine	CT Physics	Mamm Phys Techr	Mammography Physics & Technology	In	Interventional Radiology	diology	Controversies in Interventional Radiology	sies in tional ogy	
Hall 11b	Role De Role De	Role Developments in Radiotherapy	prozenesko (n nevo Stávino	Thoracic Irradiation 1	gol? to the 24-bour sphie Reportin	E I Imenitance	Thoracic Irradiation 2	noren harin zen anderen andere Z	Intensity Modulated Radiotherapy	urersaun administrative en uner tri Aleria 1		
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PERSONAL PLANNER

WEDNESDAY 24 MAY

	Morning	Afternoo	ftemoon Evening	
 Hall	Morning			Afternoon
Hall 5	Luminary Lecture 5 Embolotherapy Venous & GI Intervention	1	<i>Eponymous Lec</i> Lecture Magnetic Reso	ture:BIR MacKenzie Davidson Memorial
Hall 6	Studies in Oncological Im Studies in Breast Imaging			ace, Neck & Cranium ourinary Radiology
Hall 8	Imaging in Orthopaedic Surgery <i>Eponymous Lecture</i> : COR William Stripp Memorial Lecture Imaging the Lumbar Spine			<i>ture</i> :COR Welbeck Memorial Lecture rofessional Development in Practice ds Ceremony
Hall 11a	AGM: British Institute of Spiral CT CT Physics Mammography Physics &		Interventional F Controversies in	Radiology n Interventional Radiology
Hall 11b	Role Developments in Ra Thoracic Irridation 1	diotherapy	Thoracic Irridat Intensity Modu	ion 2 lated Radiotherapy
Olympian Suite	Web Publishing How To EURORAD PACS I	- Advanced	PACS 2	

$\left(\right)$		WORKSHOPS
Executive Room 2	Time Management	1000 - 1200
Executive Room 7	Creating computer presentations	1000 - 1230
Executive Room 8	Ultrasound (Musculoskeletal & Sports injury i	1000 - 1200 maging)

LIST OF EXHIBITORS FOR IOS 2000

The following companies are exhibiting at the IOS 2000 exhibition. A visit to this technical exhibition provides the ideal opportunity to view the very latest in equipment and services to the whole industry and to meet the leading manufacturers. Please see your IOS exhibition Guide (distributed at the Congress) for further information. (*For opening times please see programme page 5*).

Company name

A.L.I. Europe B.V Acuson Ltd Adac Labororatories Advanced Technology Laboratories UK Ltd Agfa-Gevaert Ltd Alliance Medical Amber Diagnostics Europe Amersham Medical Systems Ltd Aura Ltd British Institute of Radiology BT Health Calumet Coach Company Ltd Champion Photochemistry International Ltd College of Radiographers Computerized Medical Systems Cook (UK) Ltd Corinth Medical Services Ltd CSC (Specialised Vehicles) Ltd Data General Ltd Defence Evaluation Research Agency - DERA **Diagnostic Sonar** Duncan Hynd Associates E-Z-EM Ltd E.C. De Witt & Company EMD Services Ltd Esaote Biomedica UK Ltd European Congress of Radiology Eurosite Human Resources Ltd Fergusson Wild & Co. Ltd Fuji Photo Film (UK) Ltd Gammex RMI Ltd GE Ultrasound Europe Glosrad Grahame Gardner Ltd Granta Book Exhibitions Graytech Ltd GXR Systems Ltd Health South (UK) plc Helax UK Ltd Helix Recruitment Hospital Engineering Ltd **ICN Biomedicals** IGC - Medical Advances Inc. **IGE Medical Systems** ImageStore Impex Imaging Systems Ltd Institute of Physics in Medicine and Engineering Integrated Radiological Services Ltd International Medical Multimedia (IMM) Ltd ISRRT Jennie Reeves Radiographers Agency Keymed Kimal Plc Programme 18

Kodak Ltd Konica (UK) Ltd Landauer Inc Lanmark Laser Lines Ltd Lister Bestcare Ltd Lodestone Patient Care Ltd Mallinckrodt (UK) Ltd Mangar International Ltd Marconi Medical MAS Medical Ltd Medical Connections Medical Devices Agency Medical Imaging Systems Ltd Metafix UK Ltd Mining & Chemical Products Ltd Mobile Medical Technologies Mobile Osteoporosis Services Ltd MXD Ltd National Radiological Protection Board Northern Physics Services Nucletron UK Ltd Nycomed Amersham Philips Medical Systems Photosol Ltd Planmed Primal Pictures Ltd Qados RAD TEC Products Ltd **Radiation Consultancy Services** Radiological History & Heritage Charitable Trust Radiological Protection Centre Radiological Research Trust Radiological Society of North America Richardson Electronics (Europe) Ltd Royal College of Radiologists Schering Health Care Shimadzu UK Siel Imaging Ltd Siemens Medical Engineering Sigmacon (UK) Ltd Southern Scientific/Knight Imaging Sunquest Information Systems Tetenal Limited Toshiba Medical Systems Ltd Tricorder Technology Plc Varian Medical Systems UK Ltd Vertec Scientific Ltd Wardray Premise Ltd Wolverson X-Ray Ltd X-Ograph Imaging Systems Ltd X-Rite Ltd Zenith Medical Systems List of exhibitors correct as of 13.3.00

SCIENTIFIC POSTER EXHIBITION

Supported by IGE Medical Systems Ltd

Scientific posters will be displayed on the concourse area of the National Indoor Arena within the IOS 2000 exhibition.

For opening times please see Programme page 5.

Topic	Poster Nos.	Page Nos.
Audit	0101 - 0102	63
Breast	0201 - 0217	63 - 66
Cardiovascular & Interventional radiology	0301 - 0311	66 - 68
Chest	0401 - 0406	68 - 69
Gastrointestinal	0501 - 0509	69 - 70
Genitourinary	0601 - 0608	70 - 72
Head & Neck	0701 - 0703	72
Hepatobiliary	0801 - 0806	72 - 73
Multisystem	0901 - 0905	73 - 74
Management	1001 - 1002	74 - 75
Musculoskeletal	1101 - 1116	75 - 77
Neuroradiology	1201 - 1210	77 - 79
Obstetrics	1301 - 1303	79
Paediatrics	1401 - 1403	79 - 80
Physics	1501 - 1503	80
Radiation Protection	1601 - 1609	80 - 82
Radiotherapy & Oncology	1701 - 1703	82 - 83
Miscellaneous	1801	83
Work in Progress Posters		
Audit	0103	94
Breast	0218 - 0219	94
Gastrointestinal	0510	94
Head & Neck	0704	94 - 95
Multisystem	0906	95
Musculoskeletal	1117	95
Neuroradiology	1211 - 1212	95 - 96
Paediatrics	1404 - 1405	96
Physics	1504 - 1505	96
Radiation Protection	1610	96
Radiotherapy & Oncology	1704 - 1705	97
Miscellaneous	1802 - 1803	97
Student Posters	1901 - 1905	102 - 103

infoRAD[™] - NATIONAL INDOOR ARENA

The *info*RADTM event demonstrates the use of Healthcare Informatics—the use of computers to help in the management, application and analysis of health related information. This year *info*RADTM is held in association with Computer Assisted Radiology & Surgery and is situated within the IOS technical exhibition in the National Indoor Arena. A significant element of *info*RADTM is a network demonstrating DICOM interconnectivity between exhibits, which will be extended into the IOS exhibition.

Exhibits cover topics such as computer aided education and training, computer aided diagnosis and therapy, radiological information systems, telemedicine and literature searching. Authors will be on hand each day between 1200 - 1400 to assist with demonstrations and answer your questions. A separate *info*RADTM exhibition guide is included in the delegate bags.

infoRADTM is a trade name used by kind permission of the RSNA

Booth Number

- 01 EMERALD image database and multimedia for medical physics training **S D Tabakov, King's College, London**
- 02 The double contrast barium enema: an interactive guide for radiographers
 A H Chapman, St James's Hospital, Leeds
- 03 Use of handheld technologies to support students in the clinical workplace **M P Tatlow, South Bank University, London**
- 04 Quantitative medical imaging: some applications A Todd-Pokropek, University College London, London

Booth Number

- 05 tbc D Hawkes, Guy's Hospital, London
- 06 Mammographic image processing **R P Highnam, OXIVA, Oxford**
- 07 Computer-aided detection for mammography A Hessen, R2 Technology Inc, Boxtel, THE NETHERLANDS
- Lung volume estimation from chest radiographs
 F N Hatfield, University of Nottingham & Queens Medical Centre, Nottingham

DATES FOR YOUR DIARY UKRC 2001

The UK Radiological Congress and Medical Technical Exhibition Joint Congress between BIR, COR, IPEM & RCR 21-23 May 2001

at Wembley Conference and Exhibition Centre, London

ABSTRACT DEADLINES

Proffered Papers: Work in Progress Papers: Student Work Papers: 20 November 2000 19 February 2001 19 February 2001

Contact: UKRC Secretariat, PO Box 2895, London, W1A 5RS Email:ukrc@dial.pipex.com website:www.ukrc.org.uk

BRITISH INSTITUTE OF RADIOLOGY SILVANUS THOMPSON MEMORIAL LECTURE Hall 5 1315-1400 Chairman: Dr P Griffiths 1315 Cancer treatment for a new century-noninvasive focused ultrasound ablation of tumours Dr G ter Haar, Royal Marsden Hospital, Sutton Wednesday 24 May 2000 **COLLEGE OF RADIOGRAPHERS WILLIAM** STRIPP MEMORIAL LECTURE Hall 8 1045-1130 Chairman: Miss J Reid 1045 You've been framed—the Ilizarov way Ms L Batty-Smith, King's College Hospital, London BRITISH INSTITUTE OF RADIOLOGY MACKENZIE DAVIDSON MEMORIAL LECTURE Hall 5 1300-1345 Chairman: Dr P Griffiths 1300 Radiological management of abdominal trauma Prof R F Dondelinger, Centre Hospitalier Universitaire de Liège, Liège, BELGIUM **COLLEGE OF RADIOGRAPHERS WELBECK MEMORIAL LECTURE** Hall 8 1345-1430 Chairman: Miss J Reid Imaging that "dark continent" Miss P M 1345 Kimber, Southampton **RADIOLOGY CPD** Monday 22 May 2000 **TECHNIQUES IN THE CHEST** Hall 5 0900-1030 Chairman: Dr F Gleeson Thoracic intervention (non-vascular) Dr S P G 0900 Padley, Chelsea & Westminster Hospital, London 0925 Thoracic ultrasound Dr F Gleeson, The **Churchill Hospital**, Oxford 0950 The radiology of pleural malignancy Dr S R Desai, King's College Hospital, London 1015 Discussion THE ISSUE OF COLON CANCER SCREENING Hall 5 1045-1230 Chairman: Dr A Grundy 1045 Genetics and colorectal cancer screening Dr V A Murday, St George's Hospital, London 1115 Colorectal cancer screening Mr D G Morton, **Oueen Elizabeth Hospital**, Birmingham 1145 Overview of the UK pilot centre Prof C Bartram, St Mark's Hospital, Harrow 1215 Discussion PAEDIATRIC RADIOLOGY-CLINICAL PRACTICE TIPS Hall 5 1445-1645 Chairman: Dr A Sprigg 1445 Imaging of childhood epilepsy Dr W K Chong, Great Ormond St Hospital for Children, London

EPONYMOUS LECTURES

RADIOLOGY CPD

IOS LUMINARY LECTURES

Dr Nestor Müller of the University of British Columbia, one of the world's foremost specialists in thoracic imaging, gives a series of advanced presentations.

Monday 22 May 2000

LUMINARY LECTURE 1 Hall 5 1245–1330

Chairman: Dr F Gleeson

1245 High resolution CT in the immunocompromised host: differential diagnosis at high resolution CT

LUMINARY LECTURE 2

Hall 5 1700-1745

Chairman: Dr S Padley

1700 Acute pulmonary embolism: state-of-the-art imaging

Tuesday 23 May 2000

LUMINARY LECTURE 3 Hall 5 1215–1300

Chairman: Prof I McCall

1215 High resolution CT in the differential diagnosis of chronic infiltrative lung disease

LUMINARY LECTURE 4

Hall 5 1430–1515

Chairman: Dr J Reynolds 1430 High resolution CT of obstructive lung disease

Wednesday 24 May 2000

LUMINARY LECTURE 5

Hall 5 0830-0915

 Chairman: Prof P Armstrong
 0830 CT and MRI in the diagnosis and staging of lung cancer

EPONYMOUS LECTURES

Monday 22 May 2000

ROYAL SOCIETY OF MEDICINE FINZI LECTURE Hall 11b 1100–1145

Chairman: Dr A Thomas

1100 A century of radiology in the US and the UK Dr J D Howell, University of Michigan, Ann Arbor, USA

BRITISH INSTITUTE OF RADIOLOGY KODAK MAYNEORD MEMORIAL LECTURE Hall 5 1345–1430

Chairman: Dr P Griffiths
1345 Is there any science in radiology? Prof W R Lees, The Middlesex Hospital, London

Tuesday 23 May 2000

INSTITUTE OF PHYSICS AND ENGINEERING IN MEDICINE DOUGLAS LEA LECTURE Hall 11a 1200–1245

Chairman: Prof A Beddoe

1200 On the track to DNA damage and effects of low level ionizing radiation Prof D T Goodhead,
 Medical Research Council, Didcot

1510	Postnatal management of antenatal hydronephrosis Dr J J Fairhurst , Southampton
	General Hospital, Southampton
1535	Ultrasound in diagnosis and management of
	developmental dysplasia of the infant hip
	(DDH, formerly CDH) Dr S T Scott, Dorset County Hospital, Dorchester
1600	Secrets of a paediatric radiologist—tips on how
1000	to make a difficult examination easy! Dr A
	Sprigg, Sheffield Children's Hospital, Sheffield
1625	Discussion
	Tuesday 23 May 2000
ADV	ANCED IMAGING OF THE LUMBAR SPINE Hall 5 0830–1030
Chairr	nan: Dr A M Davies
0830	Spinal stenosis Prof I McCall, RJAH
	Orthopaedic Hospital, Oswestry
0855	Disc disease Dr J P R Jenkins, Manchester
0020	
0920	Spondylolysis and spondylolisthesis Dr B J Preston, Queens Medical Centre, Nottingham
0945	Spinal dysraphism Dr N Evans, Royal
0745	Orthopaedic Hospital, Birmingham
1010	Discussion
	UNDERSTANDING & RECOGNIZING
	ARTEFACTS IN MR IMAGING
	Hall 5 1045–1200
Chairr	nan: Dr S Keevil
1045	Why do we get them and where do they come
	from? Mr A P Jones, Christie Hospital, Manchester
1120	Artefact or pathology: clinical pitfalls of MR
	image artefacts Dr J P R Jenkins, Manchester
1100	Royal Infirmary, Manchester
1155	Discussion
U	PDATE ON THE HEAD & NECK FOR THE
	GENERAL RADIOLOGIST
	Hall 5 1530–1730
	nan: Dr T Beale
1530	Sinonasal tumours and their staging Dr J E
1555	Kabala, Bristol Royal Infirmary, Bristol Inflammatory sinus disease Dr P Anslow,
1555	Radcliffe Infirmary, Oxford
1620	The larynx and hypopharynx Dr J F C Olliff ,
	Queen Elizabeth Hospital, Birmingham
1645	A modern approach to salivary disease Dr S J
	Golding, University of Oxford, Oxford
1710	Discussion
	Wednesday 24 May 2000
	EMBOLOTHERAPY
	Hall 5 0930–1100
	man: Prof T Buckenham
0930	Uterine artery embolization for fibroid disease
1000	Dr J F Reidy, Guy's Hospital, London
1000	Varicocoele embolization Dr N Hacking , Southampton General Hospital , Southampton
1030	Treatment of gastrointestinal bleeding Dr A A
1050	Nicholson, Hull Royal Infirmary, Hull
	a start and a start

	Hall 5 1115–1245
Chairr	nan: Dr G Plant
1115	Gastrointestinal stents Dr A Watkinson, Royal
	Free Hospital, London
1145	IVC filters Dr G Plant, The North Hampshire
	Hospital, Basingstoke
1215	Biliary strictures Dr D F Martin, Withington
	Hospital, Manchester
	MAGNETIC RESONANCE
	Hall 5 1400–1700
Chairr	nan: Dr P Goddard
1400	Imaging of oropharyngeal and oral cavity
	cancer Prof R Sigal, Institut Gustave Roussy,
	Villejuif Cedex, FRANCE
1430	MRI of pelvic cancer Dr N M deSouza, Imperia
	College School of Medicine, London
1450	Spinal MRI Dr R W Kerslake, Queens Medical
	Centre, Nottingham
1510	Discussion
1530	Introductory body MR angiography Dr C N
	Ludman, University Hospital, Nottingham
1550	MRI in the district general hospital Dr A
	Troughton, Princess Margaret Hospital, Swindor
1610	MRI of the knee Dr C Wakeley, Bristol Royal
	Infirmary, Bristol
1630	MRI of the shoulder Dr S C P Blease, Med-Tel
	UK, London
1650	Discussion

ENOLIO & CLINITEDUENTEION

NEW DEVELOPMENTS

Monday 22 May 2000

CHERNOBYL UPDATE FOR THE 21ST CENTURY Hall 11a 1230–1315

Chairman: Mr B Wall

1230 Chernobyl accident update for the 21st century Dr R F Mould, Croydon

HOW TO COPE WITH IR(ME)R 2000 Hall 11a 1330–1530

Chairman: Mr R Cannon

- 1330 IR(ME) Regulations 2000—a view from the department **Mr S Ebdon-Jackson**, **Department of Health**, **London**
- 1355 The 4 roles and who does what in imaging departments **Mr A J Scally**, **University of Bradford**, **Bradford**
- 1420 IRMER—the medical directorates role Dr P Cavanagh, Taunton & Somerset NHS Trust, Taunton
- 1445 Issues from a radiographic manager's perspective Mr A S Whitley, Victoria Hospital Blackpool, Blackpool
- 1510 Discussion

MR ANGIOGRAPHY—IS IT WORTH IT? Hall 11b 1430–1600

Chairman: Prof I R Young

1430 MR angiography of the peripheral arteries: is it worth it? **Dr J F M Meaney**, **Leeds General Infirmary**, **Leeds**

1500	MR angiography of the abdomen Dr G	1010 Communicating radiation risk: a radiographer's
	Bongartz, Kantonsspital Basel, Basel,	perspective Mrs J A Shrimpton, Radcliffe
	SWITZERLAND	Infirmary, Oxford
1530	MR angiography in the chest Dr M J Lipton,	1030 Communicating risk: a view from the social
	The University of Chicago, Chicago, USA	sciences Prof A Irwin, Brunel University,
	ULTRASOUND SAFETY	Uxbridge
	Hall 11a 1545–1615	1055 A leaflet for patients on diagnostic X-rays Mr B
Chairn	nan: Dr A Evans	F Wall, National Radiological Protection Board,
1545	Safety issues in diagnostic and therapeutic	Didcot
1010	ultrasound Dr G ter Haar, Royal Marsden	1120 Discussion
	Hospital, Sutton	MULTISLICE CT-ON TO THE NEW PLATEAU?
		Hall 11a 1300–1430
	RADIATION PROTECTION	Chairman: Prof A Dixon
\mathcal{O}	Hall 11a 1630–1745	1300 Principles and applications of multislice CT Dr
	nan: Dr R Corbett	T Flohr, Siemens Medical Engineering,
1630	Experimental simulation of A-bomb electron/	Forcherime, GERMANY
	gamma spectra in the hospital laboratory for radiobiological benchmarking <i>Prof A H Beddoe</i> ,	1320 Multirow CT in the chest: is the hype justified?
		Dr R A Coulden, Papworth Hospital, Cambridge
1640	Queen Elizabeth Hospital, Birmingham	1340 Abdominal multislice CT Dr N R Moore, The
1640	Scatter fraction and quality in diagnostic radiology: variation with angle <i>Dr D G Sutton</i> ,	John Radcliffe, Oxford
	-	1400 Increasing repertoire? Pros and cons Prof A K
1650	Ninewells Hospital, Dundee The impact of local reference dose levels at	Dixon, University of Cambridge, Cambridge
1030	Nottingham City Hospital Mr A T Rogers,	1415 Discussion
	Nottingham City Hospital, Nottingham	WHAT YOU SHOULD BE DOING ABOUT
1700	Dose improvements by optimization and	CLINICAL GOVERNANCE
1700	automatic exposure control harmonization in	Hall 11a 1445–1700
	computed radiography and film/screen	Chairman: Mr S Ebdon-Jackson
	radiography Mrs J J Poveda, Nottingham City	1445 What is clinical governance? Dr R A Nakielny,
	Hospital, Nottingham	Royal Hallamshire Hospital, Sheffield
1710	The use of ionizing radiation in paediatric	1505 Clinical governance: the RCR view Prof P
1710	intensive care and neonatal units Ms C Proctor,	Armstrong, St Bartholomew's Hospital, London
	St Georges Hospital, London	1525 Clinical governance Ms A Hackett, Department
1720	Patient dose optimization in CT scanography	of Health, London
1720	Mr K O'Neil, North Tyneside General Hospital,	1545 A medical director's perspective Dr B Ayers ,
	North Shields	St Thomas's Hospital, London
1730	Extremity doses in nuclear medicine:	1605 Clinical governance: a clinical director's view
	demonstrating compliance with the skin dose	Dr G J de Lacey, Northwick Park & St Mark's
	limit? Dr C J Martin, North Glasgow Hospitals	Hospitals, Harrow
	University NHS Trust, Glasgow	1625 Clinical governance —the patient's perspective
1740	Discussion	Mr D Videlo, Farnham
	Tuesday 22 May 2000	1645 Discussion
	Tuesday 23 May 2000	Wednesday 24 May 2000
	HOW TO SHIELD AN X-RAY ROOM	SPIRAL CT
	Hall 11a 0830–0930	Hall 11a 0915-1045
Chair	man: Dr D Sutton	Chairman: Prof I Isherwood
0830	Concepts and methods for shielding design Dr D	0915 The use of spiral CT for major cardiovascular
	Concepts and methods for shielding design Dr D G Sutton, Ninewells Hospital and Medical	0915 The use of spiral CT for major cardiovascular problems Dr M J Lipton , The University of
0830	Concepts and methods for shielding design Dr D G Sutton, Ninewells Hospital and Medical School, Dundee	0915 The use of spiral CT for major cardiovascular problems Dr M J Lipton , The University of Chicago , Chicago , USA
	Concepts and methods for shielding design Dr D G Sutton, Ninewells Hospital and Medical School, Dundee How to shield an X-ray room: materials,	 0915 The use of spiral CT for major cardiovascular problems Dr M J Lipton, The University of Chicago, Chicago, USA 0940 Spiral CT: applications and techniques in the
0830	Concepts and methods for shielding design Dr D G Sutton, Ninewells Hospital and Medical School, Dundee How to shield an X-ray room: materials, transmission and assessment Dr C J Martin,	 0915 The use of spiral CT for major cardiovascular problems Dr M J Lipton, The University of Chicago, Chicago, USA 0940 Spiral CT: applications and techniques in the abdomen Prof A K Dixon, University of
0830 0845	Concepts and methods for shielding design Dr D G Sutton, Ninewells Hospital and Medical School, Dundee How to shield an X-ray room: materials, transmission and assessment Dr C J Martin, Health Physics, Glasgow	 0915 The use of spiral CT for major cardiovascular problems Dr M J Lipton, The University of Chicago, Chicago, USA 0940 Spiral CT: applications and techniques in the abdomen Prof A K Dixon, University of Cambridge, Cambridge
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0830 0845 0900 0915 T <i>Chair</i>	Concepts and methods for shielding design Dr D G Sutton, Ninewells Hospital and Medical School, Dundee How to shield an X-ray room: materials, transmission and assessment Dr C J Martin, Health Physics, Glasgow X-ray shielding—putting methods into practice Mr J R Williams, Western General Hospital, Edinburgh Discussion THE CHALLENGE OF COMMUNICATING RADIATION RISK TO THE PATIENT Hall 11a 0945–1145 man: Mr D Rawlings	 0915 The use of spiral CT for major cardiovascular problems Dr M J Lipton, The University of Chicago, Chicago, USA 0940 Spiral CT: applications and techniques in the abdomen Prof A K Dixon, University of Cambridge, Cambridge 1005 Multiphasic helical CT for detection and characterization of hepatocellular carcinoma Prof J H Lim, Samsung Medical Centre, Kangnam-Ku, KOREA 1030 Discussion CT PHYSICS Hall 11a 1100–1200 Chairman: Dr D Sutton

1110	Development of new phantoms for the physical assessment of multislice CT scanners Dr S A Sassi, St George's Hospital, London	
1120	Can multislice helical CT achieve a better noise- dose relationship than single slice? Ms J F Carden, ImPACT Group, St George's Hospital, London	
1130	Biopsy time and operator dose using CT fluoroscopic guidance Dr S J Higgins, Charing Cross Hospital, London	
1140	A comparison of methods for measuring the limiting spatial resolution of a CT scanner Mr B Warr, St George's Hospital, London	
1150	Discussion	
MAN	MMOGRAPHY PHYSICS & TECHNOLOGY	
	Hall 11a 1215–1315	
Chairn	nan: Mr A Workman	
1215	Breast cancer diagnosis using scattered X-rays.	
	A non-invasive biopsy tool? Dr R A Lewis,	
	Daresbury Laboratory, Warrington	
1225	Full-field digital mammography—a phantom	
	(RMI) study before clinical use Dr R Schulz-	
	Wendtland, Institut für Diagnostische Radiologie, Erlangen GERMANY	
1235	Erlangen, GERMANY Objective imaging characteristics of small field	
1235	digital mammography systems Mr D Evans,	
	King's College Hospital, London	
1245	Full field 3D digital mammography using an	
	amorphous silicon array Dr J A Horrocks, St	
	Bartholomews Hospital, London	
1255	Generating realistic spiculated lesions in digital	
	mammograms Mr S J Caulkin, University of	
	Manchester, Manchester	
1305	Discussion	
	INTERVENTIONAL RADIOLOGY Hall 11a 1400–1600	
Chairn	nan: Dr G Plant	
1400	Non-vascular interventional radiological	
	procedures of the thorax Prof R F Dondelinger ,	
	Centre Hospitalier Universitaire de Liège, Liège, BELGIUM	
1430	Interventional magnetic resonance Dr W W	
1100	Gedroyc, St Mary's Hospital, London	
1500	Carotid angioplasty and stenting Prof T	
	Buckenham, Royal Infirmary of Edinburgh,	
	Edinburgh	
1530	Aortic stenting Dr A M Belli, St George's	
	Hospital, London	
С	CONTROVERSIES IN INTERVENTIONAL	
	RADIOLOGY-PANEL DISCUSSION	
	Hall 11a 1615–1715	
	s: Dr A Watkinson & Dr G Plant	
	M Belli, St George's Hospital, London	
	Reidy, Guy's Hospital, London	
	A Nicholson, Hull Royal Infirmary, Hull	
Prof 1 Edinb	Buckenham, Royal Infirmary of Edinburgh,	
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RADIOGRAPHY: NEW DEVELOPMENTS AND CONTINUING EDUCATION

Monday 22 May 2000

QUALITY MANAGEMENT Hall 8 0830-0915

Chairman: Ms V Gregory

- 0830 Achieving recognition of the title and role of the radiographer in Irish legislation *Mr L Murray*, *Irish Institute of Radiography*, *Dublin*, *IRELAND*
- 0840 Quality management in diagnostic imaging and radiotherapy Mr K R Batty, University of Portsmouth, Portsmouth

0850 Effect of a "rolling audit" on radiographic standards of plain radiograph examinations *Dr E A O'Grady*, *University Aintree*, *Liverpool*

- 0900 How do you check yours? Mrs D Anderson,
 - University of Portsmouth, Portsmouth
- 0910 Discussion

WORK IN PROGRESS RADIOGRAPHY EDUCATION Hall 6 0900-1030

Chairman: Prof A Moore

- 0900 Supporting supervising radiographers: improving the student learning experience Ms S Ward, Sheffield Hallam University, Sheffield
- 0910 Changes in the learning styles of radiography students: a longitudinal study Miss P S Fowler, South Bank University, London
- 0920 An ongoing evaluation of interprofessional education: 5 years experience of shared learning Ms K Booth, Sheffield Hallam University, Sheffield
- 0930 Managing the challenges of diversity in interprofessional education Ms H A Best, Sheffield Hallam University, Sheffield
- 0940 Education and training experiences of health care students from Black and minority ethnic communities *Ms R Klem*, *University of Central England*, *Birmingham*
- 0950 Development of a clinical assessment scheme to demonstrate progression commensurate with successive levels of learning for diagnostic radiography students *Ms J Tonks*, *University of the West of England*, *Bristol*
- 1000 Development of a clinical assessment scheme to demonstrate progression commensurate with successive levels of learning for radiotherapy students *Ms J Chianese*, *University of the West* of England
- 1010 Interactive assessment of diagnostic student radiographers on the World Wide Web Mrs R Chester, University of Derby, Derby
- 1020 Discussion

THE NHS BREAST SCREENING PROGRAMME— PLANNING FOR THE FUTURE Hall 8 0945–1130

Chairman: Ms M Lovegrove

0945 Clinical and service considerations Dr C Rogers, Breast Test Wales, Cardiff



1330	
1330	The accurracy of the red dot' will it improve
	The accuracy of the red dot: will it improve training? <i>Mrs J S Hargreaves</i> , <i>Macclesfield</i>
	District General Hospital, Macclesfield
1340	Has radiography outgrown the red dot? <i>Ms B A</i>
1340	Snaith, Doncaster Royal Infirmary, Doncaster
1350	The role of preliminary interpretation of
1330	
	surgical chest radiographs by radiographers in a cardiothoracic centre Dr A D Tasker, Papworth
1400	Hospital, Cambridge
1400	Bone age estimation—another application for
	radiographer skill mix? Dr J Ramessar, Princess
1410	Margaret Hospital, Swindon
1410	Evaluation of a technical reporting course for
	technologists Mr K G Holmes, University of the
1420	West of England
1420	Plain radiograph reporting: is performance
	improved when radiologists are shown their
	errors? Dr G R Tudor, Leicester Royal Infirmary
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1	
-	COLLEGE OF RADIOGRAPHERS
	PRESIDENTIAL ADDRESS
	Hall 8 1445–1515
Chair	nan: Ms C Beardmore
1445	Interesting times Miss J Reid, Ysbyty Gwynned
1445	Hospital, Bangor
	Trophan, Dangor
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	COLLEGE OF RADIOGRAPHERS
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	UDENT RADIOGRAPHER CONFERENCE
	UDENT RADIOGRAPHER CONFERENCE Hall 8 1515-1800
Chair	Hall 8 1515-1800
	Hall 8 1515–1800 nan: Mr R Cannon
Chairr 1515	Hall 8 1515–1800 nan: Mr R Cannon Chairman's Address Mr R Cannon, Kings
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1640	A comparison between CT angiography and conventional cerebral angiography in diagnosis of intercranial aneurysms <i>Ms S Finnerty</i> , <i>University of Derby</i> , <i>Derby</i>
1650	Imaging of mechanodegenerative pathology of the lumbar spine: comparison of MRI and plain radiography <i>Ms E J Jackson, Canterbury Christ</i> <i>Church University College, Canterbury</i>
1700	The use of self-expanding metallic stents to relieve acute bowel obstruction <i>Miss C</i> <i>Humberstone, Canterbury Christ Church</i> <i>University College, Canterbury</i>
1710	The establishment of diagnostic reference levels for barium enemas and barium meals <i>Miss E</i> <i>Carroll, University College Dublin, Dublin,</i> <i>IRELAND</i>
1720	From the horse's mouth? Communication with horses and its application to the human environment <i>Miss H Gatenby</i> , <i>University of</i> <i>Derby</i> , <i>Derby</i>
1730 1740	Presidential Address Miss J Reid, Ysbyty Gwynned Hospital, Bangor Debate with the President
1/10	Wednesday 24 May 2000
1	MAGING IN ORTHOPAEDIC SURGERY Hall 8 0930–1030
	nan: Mr R Cannon
0930	Satisfying the surgeon, protecting the patient, respecting the radiographer Mr C D Jeffery , Canterbury Christ Church University College , Canterbury
1000	Orthopaedic surgery: challenges to practice Mr M J Woodford, Salisbury District Hospital, Salisbury
	IMAGING THE LUMBAR SPINE Hall 8 1145–1330
The second s	man: Mr M Woodford
1145	Imaging of the lumbar spine. Is there a role for the plain film examination today? Dr M J Warren, Luton and Dunstable Hospital, Luton
1205	CT scanning of the lumbar spine Ms R Steele, Guy's Hospital NHS Trust, London
1225	MRI—the technique of choice Mrs K L Gillmore, Queen Elizabeth the Queen Mother Hospital, Whitstable
1245	Imaging of the lumbar spine: ultrasound—a useful modality? Dr D Chapman-Jones ,
	Canterbury Christ Church University College, Canterbury
1305	Discussion
	RADIOGRAPHIC PROFESSIONAL DEVELOPMENT IN PRACTICE
Chain	Hall 8 1445–1615 man: Ms J Boardman
1445	Find and deliver: research and practice in therapeutic radiography Mrs R L Harris, The
	Plymouth Oncology Centre, Plymouth
1455	An investigation of radiographers' attitudes towards evidence-based practice, and their knowledge of the research process <i>Ms C Gee</i> ,
	Chesterfield & North Derbyshire Royal Hospital, Chesterfield

BRITISH INSTITUTE OF RADIOLOGY 1505 Role change, identity and CPD in radiography: dialogues, discourses, directions Dr C R Boyes, PRESIDENTIAL ADDRESS St James's Hospital, Leeds Hall 11b 1200-1230 1515 The impact of high technology radiology Chairman: Prof M Maisey equipment on patients and radiographers Mr F1200 The growing impact of nuclear medicine on J Murphy, University of Wales, Bangor clinical oncology Dr P A Griffiths, County 1525 Implementation of a programme of continuing Hospital, Lincoln professional development using action research to enable local management of the change Ms N Wilson, Queen Margaret University College, Edinburgh WORK IN PROGRESS 1535 Personal and professional development: a survey STUDIES IN ONCOLOGY of radiographers employed in the Southwest Hall 11b 1245-1345 region Mr T W Palarm, University of the West Chairman: Dr A McKenzie of England, Bristol 1245 Improving efficiency of intensity modulated Continuing professional development and 1545 radiotherapy: an algorithm for optimization of clinical reporting Dr A M Thomas, Bromley beam orientation Dr C Nutting, Royal Marsden Hospital, Bromley NHS Trust, London Maximizing staff potential: practical staff 1555 1255 A unidimensional dose measurement probe development strategies to enhance practice Ms S based on plastic scintillating fibres Prof A Ikhlef, M Henwood, City University, London University of Moncton, Moncton, CANADA 1605 Image interpretation skills for undergraduate 1305 An evaluation of the availability of dietetic diagnostic radiographers Mr P C Milburn, services for cancer patients undergoing Canterbury Christ Church University College, radiotherapy Ms L Ward, University of Canterbury Hertfordshire, Hatfield 1315 Cervix brachytherapy-placement under ultrasound guidance: a useful new technique Dr M R Buckley, Belvoir Park Hospital, Belfast 1325 Simulator verification in treatment planning: an **CONGRESS AWARDS CEREMONY** important step in delivering high quality radiotherapy Miss J S Harpham, Addenbrooke's Wednesday 24 May 2000 Hospital, Cambridge Hall 8 1630-1730 1335 Prizes of the BIR, COR and IPEM will be awarded Discussion along with infoRADTM and poster prizes. NEW APPROACHES TO IMAGING IN GI **MALIGNANCY: TUMOUR & NORMAL TISSUE EFFECTS** Hall 11b 1400-1600 Chairman: Prof P Robinson 1400 Imaging the pelvis and abdomen following ONCOLOGY treatment of cancer Dr R J Johnson. The Christie Hospital, Manchester Tuesday 23 May 2000 1425 Late effects of radiotherapy on bowel: the clinical picture Dr D M Tait, The Royal Marsden NEW APPROACHES TO IMAGING IN GI NHS Trust, Sutton **MALIGNANCY: STAGING** 1450 he role of MR in functional studies of cancer Dr Hall 11b 0900-1100 A S K Dzik-Jurasz, The Royal Marsden Chairman: the Hospital, Sutton The role of MRI in the local staging of rectal 0900 1515 The role of CT in the acute complications of cancer Dr G Brown, The Royal Marsden gastrointestinal malignancy Dr J A Spencer, St Hospital, Sutton James's University Hospital, Leeds 0920 The role of oesophagogastric endoscopic 1540 Discussion ultrasound Dr A M McLean, St Bartholomew's STUDIES IN RADIOTHERAPY PHYSICS Hospital, London Hall 11b 1615-1745 0940 The assessment of liver metastases Dr J B Chairman: Dr P Williams Karani, Kings College Hospital, London 1615 The widths of error margins in radiotherapy 1000 Pancreatic cancer: imaging-surgical correlation treatment planning depend on beam Dr Z Amin, Chelsea & Westminster Hospital, configuration Dr A L McKenzie, Bristol London Oncology Centre, Bristol 1020 PET in gastrointestinal malignancy Dr G J R 1625 Radiotherapy for oesophageal cancer: a Cook, Guy's & St Thomas' Hospital Trust, comparison of 3D conformal and intensity London modulated techniques Dr C M Nutting, Royal 1040 Discussion Marsden NHS Trust, Sutton

INFORMATICS	1635 1645 1655 1705 1715 1725	Production of moulded Cerrobend Ellis-type compensating filters for IMRT Miss C M Coldham, Princess Royal Hospital, Hull Practical intensity modulated radiotherapy for improving dose homogeneity in tangent breast irradiation Dr K A Langmack, Addenbrooke's NHS Trust, Cambridge Limitations of intensity modulation for radiotherapy of the prostate Mr J Meyer, Coventry University, Coventry Reduction of pelvic small bowel irradiation using an optimized intensity modulated pelvic radiotherapy technique Dr C M Nutting, Royal Marsden NHS Trust, Sutton Radiation therapy to inhibit coronary artery restenosis at the Cleveland Clinic Dr D A Wilkinson, Cleveland Clinic, Cleveland, USA Interdisciplinary collaboration to develop a multimodal verification system and its subsequent implications to clinical practice Ms
		B Thompson & Mrs J Stratford, Christie
	1	Hospital, Manchester
	1735	Discussion
	RO	Wednesday 24 May 2000 LE DEVELOPMENTS IN RADIOTHERAPY
		Hall 11b 0830–1030
		nan: Ms B Cassidy
	0830	Radiographer-led treatment review clinics Mrs
HISTORY	0855	L M Thorpe, Royal Cornwall Hospitals (Treliske), Truro Update on START breast trial Ms E A Winfield, Mount Vernon Hospital, Northwood
HIS	0920	Information provision for radiotherapy patients Mr S Edwards, Leeds
	0945	Extending the role of the radiographer Ms H McNair, Royal Marsden Hospital, London
	1010	Discussion
	1	THORACIC IRRADIATION 1
	Chair	Hall 11b 1100–1200 nan: Dr D Tait
	1100	The new generation of radiosensitizers in non-
		small cell lung cancer Prof A Price, Western General Hospital, Edinburgh
	1130	Thoracic radiotherapy—do we worry too much about myelitis? Dr F Macbeth , Velindre NHS Trust , Cardiff
		THORACIC IRRADIATION 2
	Chains	Hall 11b 1300–1430
	1300	nan: Dr R Stout The role of stenting for palliation of SVCO Dr R
ONCOLOGY	1330	A Morgan, St George's Hospital, London Mesothelioma: is radiotherapy effective? Dr N P
DLO		Rowell, The Royal Marsden NHS Trust, Sutton
ICC	1400	Pulmonary radiation toxicity: radiation pneumonitis and changes in lung function Dr J
20		Lebesque, The Netherlands Cancer Institute,
		Amsterdam, THE NETHERLANDS
	IN	TENSITY MODULATED RADIOTHERAPY Hall 11b 1515–1615
		man: Prof A Beddoe
	1515	Intensity modulated radiotherapy—the physics view Dr P C Williams, Christie Hospital NHS
		Trust, Manchester

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-(ANNUAL GENERAL MEETING
	Wednesday 24 May 2000 Hall 11a 0800–0900
	BRITISH INSTITUTE OF RADIOLOGY
	RADIOLOGICAL HISTORY
	Monday 22 May 2000
	RADIOLOGICAL HISTORY IN MOTION Hall 11b 0915–1100
	rman: Miss M Frank
0915	Radiology in developing countries Mr U Bus Deutsches Röntgen-Museum , Remscheid , GERMANY
0945	
0,715	CMG, MD, FRCP, FRCR Prof H Baddeley Northwood
1015	Greek and military radiology Mr G Livadas,
1045	A & L Medical Supplies Ltd, Athens, GREEC
1045	, , , , , , , , , , , , , , , , , , , ,
	British radiologist Dr J M Guy, West Suffolk Hospital, Bury St Edmunds
1055	
IN	FORMATICS AND COMPUTING IN
IN	FORMATICS AND COMPUTING IN HEALTH
	HEALTH Monday 22 May 2000
	HEALTH Monday 22 May 2000 EB PUBLISHING HOW TO—BEGINNER
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w	HEALTH <u>Monday 22 May 2000</u> EB PUBLISHING HOW TO—BEGINNER Olympian Suite 0930–1030
W Chairn	HEALTH <u>Monday 22 May 2000</u> EB PUBLISHING HOW TO—BEGINNER Olympian Suite 0930–1030 man: Mr M Tatlow
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W Chairm 930	HEALTH <u>Monday 22 May 2000</u> EB PUBLISHING HOW TO—BEGINNER Olympian Suite 0930–1030 man: Mr M Tatlow Mr M Tatlow, South Bank University, London IMAGE ANALYSIS Olympian Suite 1045–1245 man: Dr E Berry Medical image registration Prof D Hawkes,
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W Chairn 930 Chairn 045 115	HEALTH <u>Monday 22 May 2000</u> EB PUBLISHING HOW TO—BEGINNER Olympian Suite 0930–1030 man: Mr M Tatlow Mr M Tatlow, South Bank University, London IMAGE ANALYSIS Olympian Suite 1045–1245 man: Dr E Berry Medical image registration Prof D Hawkes, Guy's Hospital, London Quantification of medical images Prof A Todd Pokropek, University College, London
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W Chairm 930 Chairm 045 115 145 215	HEALTH Monday 22 May 2000 EB PUBLISHING HOW TO—BEGINNER Olympian Suite 0930–1030 man: Mr M Tatlow Mr M Tatlow, South Bank University, London IMAGE ANALYSIS Olympian Suite 1045–1245 man: Dr E Berry Medical image registration Prof D Hawkes, Guy's Hospital, London Quantification of medical images Prof A Todd Pokropek, University College, London Breast imaging: a principled approach to image processing Prof M Brady, Oxford University, Oxford Virtual reality and surgery Dr A Linney, University College, London
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W <i>Chairm</i> 930 <i>Chairm</i> 045 115 145 215 215 <i>Chairr</i> 400	HEALTH <u>Monday 22 May 2000</u> EB PUBLISHING HOW TO—BEGINNER Olympian Suite 0930–1030 man: Mr M Tatlow Mr M Tatlow, South Bank University, London IMAGE ANALYSIS Olympian Suite 1045–1245 man: Dr E Berry Medical image registration Prof D Hawkes, Guy's Hospital, London Quantification of medical images Prof A Todd Pokropek, University College, London Breast imaging: a principled approach to imag processing Prof M Brady, Oxford University, Oxford Virtual reality and surgery Dr A Linney, University College, London STUDIES IN IMAGE ANALYSIS Olympian Suite 1400–1515 man: Dr D Harvey Improved osteoporotic fracture risk analysis from plain radiographic films Dr J N Ridyard, Lanmark, Beaconsfield

1420	3D CT volumetric assessment of lung volume	
	and emphysema in silicosis Dr G C Ooi, Queen	
	Mary Hospital, HONG KONG	
1430	CT virtual cystoscopy Dr L Bartella, St Bartholomew's Hospital, London	
1440	Correlative imaging of renal neoplasms using	
1110	ultrasound including colour Doppler flow	
	imaging and CT Dr A Kapoor, All India Institute	
	of Medical Sciences, New Delhi, INDIA	
1450	An automated method for measuring the volume of extraocular muscles from MR images	
	Dr M J Firbank, Royal Victoria Infirmary,	
	Newcastle upon Tyne	
1500	Rapid estimation of intracranial CSF volume	
	with single shot half-Fourier RARE Dr R R	
1510	Sood, Addenbrookes Hospital, Cambridge Discussion	
1510	Discussion	
	Tuesday 23 May 2000	
WEI	3 PUBLISHING HOW TO—INTERMEDIATE	
<i></i>	Olympian Suite 0900–1000	
-	nan: Mr M Tatlow Mr M Tatlow, South Bank University, London	
0900	wit wit ratiow, South Datik University, London	
	3D IMAGING 1	
Chair	Olympian Suite 1030–1230 man: Prof D Hawkes	
1030	New ideas in 3D ultrasound Prof W R Lees , The	
	Middlesex Hospital, London	
1055	Critical issues facing post-processing in the era	
	of high performance MRI and multislice CT Dr	
1120	S J Golding, University of Oxford, Oxford Discussion	
1120 1130	Virtual endoscopy of aortic stenting: a pictorial	
	review Dr Z H Sun, University of Ulster, Belfast	
1140	The evaluation of a prototype MR compatible	
	flexible bronchoscope for diagnostic and	
	therapeutic use Dr M A Ederies, Bristol Royal Infirmary, Bristol	
1150	MR-guided laser thermoablation of inoperable	
	renal tumours in an interventional MR scanner	
	Dr R Joarder, St Mary's Hospital, London	
1200	A performance intercomparison of 5 surgical	
	gamma probe systems Mr A Maxwell, Bradford Royal Infirmary, Bradford	
1210	Application of parallel processing in three-	
WIP	dimensional reconstruction of CT images $Mr C$	
	K Tong, Pamela Youde Nethersole Eastern	
1220	Hospital, HONG KONG	ſ
1220	Discussion	
	3D IMAGING 2	l
Chain	Olympian Suite 1400–1500	1
<i>Chair</i> 1400	man: Prof W Lees Clinical applications of 3D CT in relation to	
1400	surgical support Mr S Watt-Smith, The John	1
	Radcliffe Hospital, Oxford	l
1425	Post-processing and 3D models in staging	1
	pancreatic carcinoma with CT and MRI.	
	Presentation of research, clinical work and technology Dr J T Geitung , Ullevaal University	ĺ
	Hospital, Oslo, NORWAY	
1450	Discussion	

CR/DR DIGITIZATION

Olympian Suite 1515–1630

Chairman: Mr C Bull

- 1515 What benefits can we expect from a hospitalwide PACS? Mrs G C Weatherburn, Brunel University, Uxbridge
- 1540 Digital imaging technology. Promises unfulfilled? Mr P Ryan, London Council, Didcot
- 1605 Phantom based clinical evaluation of multiple
- WIP networked Computed Radiography systems Mr N Tomlinson, NHS Estates, Tunbridge Wells
- 1615 Discussion

Wednesday 24 May 2000

WEB PUBLISHING HOW TO—ADVANCED Olympian Suite 0900–1000

Chairman: Mr M Tatlow

- 0900 Computer assisted learning in nuclear medicine technology Mr K G Holmes, University of the West of England, Bristol
- 0915 PRISM 21 Dr A Waldman & Dr N Hollings, National Hospital for Neurology and Neurosurgery & University College Hospital, London
- 0925 Multimedia radiology school transplanted on site by Intranet: Intra-X Mr S Ginocchio, Franconville, FRANCE
- 0935 Mr M Tatlow, South Bank University, London

EURORAD

Olympian Suite 1015–1115

Chairman: Dr D Harvey

 1015 EuroRAD: the imaging database of the European Association of Radiology Prof R
 Sigal, Institut Gustave Roussy, Villejuif Cedex, FRANCE

PACS 1

Olympian Suite 1130-1230

Chairman: Mrs E Beckmann

1130 Integrating DICOM into the healthcare environment **Mr C Parisot, GE Medical Systems, Buc, FRANCE**

PACS 2

Olympian Suite 1400-1530

Chairman: Dr B Bury

- 1400 The request for proposal for PACS and evaluation **Prof H U Lemke**, **CARS 2000**, **Berlin**, **GERMANY**
- 1430 The impact of PACS on workflow: experience at Hammersmith Hospital Dr N Strickland, Hammersmith Hospital, London
- 1500 A DICOM-based regional teleradiology service Dr T K Blanchard, Addenbrookes Hospital, Cambridge
- 1510 Teleradiology in a DGH setting: pleasures, pitfalls and practical pointers Dr J Ramessar, Princess Margaret Hospital, Swindon
- 1520 Discussion

	NEW STUDIES	1140	The use of significan
	Monday 22 May 2000		replaceme Centre, A
	WORK IN PROGRESS NEW STUDIES IN NEUROIMAGING	1150	Discussion STUDIE
	Hall 11a 0900-1000		
Chairn	nan: tba	Chair	man: Mr S
0900	Assessment of aortic arch and carotid	1045	Imaging i
	bifurcation using a neurovascular coil Dr N	Constant of the second	F C Rodg
0010	Hoggard, Royal Hallamshire Hospital, Sheffield	1117	Children,
0910	Short-term cerebral haemodynamic effects of	1115	MRI in the
	carotid artery stenting monitored by MR	A State	abnorma Birmingh
	perfusion Dr I D Wilkinson, University of Sheffield, Sheffield	1125	National
0920	Multimodality MR in subarachnoid	1125	prophyla
0720	haemorrhage Prof P D Griffiths, University of	Arts of	procedure
	Sheffield, Sheffield	1. T. S. 1. S. 1.	Wales, Co
0930	Rapid acquisition projectional MR angiography	1135	Should as
	for the assessment of cerebral arteriovenous		murmurs
	malformation Mr D J Warren, University of	1115	Southam
	Sheffield, Sheffield	1145	Unenhan
0940	Cerebral proton MR spectroscopy in children		abdomen benefit D
	with neurofibromatosis type-1 Dr I D Wilkinson,		Hospital)
	University of Sheffield, Sheffield	1155	The role
0950	MR spectroscopic features of cortical tubers in	and a second	ureteric ji
	adults with tuberous sclerosis <i>Dr W</i>	20.4	Ramacha
	Mukonoweshuro, Royal Hallamshire Hospital,		Hospital,
	Sheffield	1205	Routine I
	WORK IN PROGRESS		post-oper
AD	VANCES IN HIGH TECHNOLOGY & BODY		transplan
	IMAGING		Children'.
	Hall 11a 1030–1200	16531	STUDIES
	nan: Dr C Wakeley	old)	Nomeo Xik
1030	Functional imaging of neuroendocrine tumours:	1200	man: Dr J l Clinical c
	which agent? Dr K S El-Haddad, Royal Free	1200	equipmer
1040	Hospital, London Patterns of spread of nasopharyngeal carcinoma	1 Sugar	College H
1040	Dr R Padmanabhan, Peter MacCallum Cancer	1210	Factors in
	Institute, Melbourne, AUSTRALIA		A K Dixo
1050	CT measurement of perfusion within lung		Universit
	masses: correlation with tumour stage and	1220	An audit
	FDG-PET Prof K A Miles, Wesley Research		radiograj
	Institute and Southern X-Ray Clinics, Brisbane,	1000	Newport
	AUSTRALIA	1230	Emergen
1100	Washout characteristics of adrenal masses on		radiology interpreta
	contrast enhanced CT: definitive lesion		R Bhatt,
	characterization Dr G W Boland, Massachusetts	1240	Reductio
de el las	General Hospital, Boston, USA		investigat
1110	Dose reduction to the testes during CT scanning		initiative
	of the abdomen using a gonad shield $Dr C R$		Hospital
	Peebles, Southampton General Hospital,	1250	Repeat p
1120	Southampton	E.	practition
1120	Diagnostic management of suspected colon obstruction: spiral CT vs water soluble enema	1000	Leicester
	Dr L Twohig, Royal Hallamshire Hospital,	1300	Audit of
	Sheffield	WIP 1310	Dick, Wh NHS Est
1130	Carpal tunnel syndrome: ultrasound	WIP	design an
	observations in patients and normal volunteers	WIL	facilities
	I THE		inomities .
	Dr S Chhaya, UCL Hospitals, London		Wells

1140	The use of bone scintigraphy in the detection of significant complications after total knee joint replacement <i>Dr S L Smith</i> , <i>Queens Medical</i>
1150	Centre, Nottingham Discussion
1150	STUDIES IN PAEDIATRIC IMAGING
Chain	Hall 6 1045–1215
1045	nan: Mr S Clapperton Imaging in neonatal intensive therapy units Ms
1045	F C Rodger, Great Ormond St Hospital for Children, London
1115	MRI in the management of growth plate
	abnormalities in children Dr M Balogun,
	Birmingham Children's Hospital, Birmingham
1125	National survey of the use of steroid
	prophylaxis for intravenous paediatric contrast
	procedures Dr A Evans, University Hospital of
	Wales, Cardiff
1135	Should asymptomatic neonates with heart
	murmurs be irradiated? Dr R S Oeppen,
	Southampton General Hospital, Southampton
1145	Unenhanced CT scans of the paediatric
	abdomen: radiation exposure vs diagnostic
	benefit Dr C G Taylor, Great Ormond Street
1100	Hospital for Sick Children, London
1155	The role of the nephrostogram following pelvi-
	ureteric junction surgery in children Dr S
	Ramachandran, Royal Manchester Children's
1205	Hospital, Manchester Bouting Doppler ultracound in the immediate
1205	Routine Doppler ultrasound in the immediate post-operative period following liver
	transplantation Miss L Pearson, Birmingham
	Children's Hospital, Birmingham
	SALE STITUTES TRANSMERS SALES AND THE SALES
	STUDIES IN MANAGEMENT & AUDIT
Chain	Hall 11b 1200–1400 nan: Dr J P Owen
1200	Clinical commissioning of diagnostic X-ray
1200	equipment? Mr N S Wells, KCARE Kings
	College Hospital, Dulwich
1210	Factors influencing access to MRI services Prof
	A K Dixon, Addenbrooke's Hospital and the
	University of Cambridge
1220	An audit of medical emergency admission chest
	radiographs Dr R Bagree, St Woolos Hospital,
	Newport
1230	Emergency cranial CT: discrepancies of
	radiology trainee reports and final
	interpretations, and management relevance Dr
	R Bhatt, Leicester Royal Infirmary NHS Trust
1240	Reduction in inappropriate use of radiographic
	investigations amongst GPs by an education
	initiative Dr J Makowska-Webb, Aintree
1050	Hospital NHS Trust, Liverpool
1250	Repeat plain film requests by general
	practitioners—are they indicated? Dr A T Lee,
1200	Leicester Royal Infirmary, Leicester
1300	Audit of in-patient ultrasound requests Dr E A
WIP	Dick, Whittington Hospital, London
1310 WIP	NHS Estates (DoH) new contribution to the
WIP	design and planning of diagnostic imaging facilities <i>Mr J Britton</i> , <i>NHS Estates</i> , <i>Tunbridge</i>
	Wells

1320 WIP 1330 WIP 1340	Determination of the potential for the development of occupational standards in imaging and oncology Miss F Mellor, University of Hertfordshire, Hatfield Minerva revisited Dr E A Dick, Royal Free Hospital, London Discussion	1510 1520	CT appearances in acute respiratory distress syndrome: comparison of direct and indirect pulmonary injury Dr S R Desai, Royal Brompton Hospital, London Non-specific interstitial pneumonitis vs usual interstitial pneumonitis: structural-functional relationships Dr S R Desai, Royal Brompton
	STUDIES IN GASTROINTESTINAL MRI		Hospital, London
	Hall 6 1230–1330		
	nan: tbc		with the second of the second states and the
1230	MR colography with carbon dioxide Dr D J Lomas, Addenbrookes Hospital, Cambridge	and the second	UDIES IN MUSCULOSKELETAL IMAGING Hall 6 1545–1800
1240	Review of MR cholangiopancreatography techniques Mrs H Wilson, University of Cambridge, Cambridge	Chairn 1545	<i>nan: Dr J P R Jenkins</i> Diagnostic contribution of the frontal lumbar view in community referred low back pain—
1250	Detection of choledocholithiasis: diagnostic accuracy of ultrasonography, CT, magnetic resonance cholangiopancreatography and	1555	1000 patients Dr L A Khoo, St George's Hospital, London Lumbosacral MRI signs in low back pain: a
	endoscopic retrograde cholangiopancreatography Dr D Pickuth, Martin-Luther-Universität, Halle,		review of asymptomatic subjects Dr J H Henson, Princess Margaret Hospital, Swindon
1300	GERMANY Prospective comparison of breath-hold MRCP and ERCP Dr D J Lomas, Addenbrookes Hospital, Cambridge	1605	The discrepancy between MRI and CT myelography in the investigation of cervical degenerative disease Dr R J Bartlett, Hull Royal
1310	MR small bowel follow through—choice of bowel contrast agent using HASTE sequence Dr A K Lim, Charing Cross Hospital, London	1615	Infirmary, Hull The importance of 24 h follow-up in discography Dr P S Rajan, Hinchingbrooke
1320	MR small bowel enteroclysis with a combined half-Fourier RARE technique <i>Dr R R Sood</i> ,	1625	Health Care NHS Trust, Huntingdon Incidence of degenerative hip disease in patients referred with "chronic groin strain" Dr R K
	Addenbrookes Hospital, Cambridge STUDIES IN CHEST IMAGING Hall 6 1400–1530	1635	Verma, Leicester Royal Infirmary NHS Trust, Leicester In vivo quantification of response to therapy in
Chairr	nan: Dr F Gleeson		active synovitis using dynamic MRI $Dr \ R \ G$
1400	Clinical validity of normal angiography in suspected pulmonary embolism—a meta- analysis Dr E J R van Beek, Royal Hallamshire	1645	Lambert, University of Alberta Hospital, Alberta, CANADA Activity of ischaemic necrosis of hip, perfusion
1410	Hospital, Sheffield A comparative analysis of gadolinium enhanced		studies by dynamic enhanced MRI and bone scan Mr C F Tan, Chang Gung Memorial Hospital, Taoyuan, TAIWAN
	magnetic resonance angiography with pulmonary angiography for diagnosis of pulmonary embolism <i>Dr E J R van Beek</i> , <i>Royal</i>	1655	MR arthrography in glenohumeral instability Dr J P R Jenkins, Manchester Royal Infirmary, Manchester
1420	Hallamshire Hospital, Sheffield Ultrafine needle aspiration in suspected thoracic malignancy Dr A M Beale, Princess Margaret	1705	MRI of knee in children with osteochondral lesions—stable or unstable? Dr M Palaniappan,
	Hospital, Swindon	1715	Royal Liverpool Children's Hospital, Liverpool CT scanning in spinal trauma—no need to
1430	Success of image-guided pleural cutting needle biopsy in the presence of a suspected malignant effusion Dr R F Adams, Churchill Hospital,	1715	remove patients from a scoop stretcher prior to imaging Dr P Fielding, University Hospital of Wales, Cardiff
1440	Oxford Lung volume reduction surgery for pulmonary emphysema: imaging assessment and clinical outcome Dr A Rajesh, Glenfield Hospital NHS	1725	Scaphoid radiography for injury—is a routine second radiograph always necessary? Dr K Chatoor, Kidderminster General Hospital,
1450	Trust, Leicester The relationships between the extents of CT abnormalities and pulmonary function	1735	Kidderminster When is tenderness in the anatomical snuff box not a scaphoid fracture? Dr A Page, Birmingham
1500	impairment in asbestos-exposed subjects Dr S J Copley, Royal Brompton Hospital, London The discriminatory value of high resolution CT	1745	Children's Hospital, Birmingham MRI in the management of scaphoid injuries in skeletally immature patients Dr K Johnson,
	in obstructive lung disease Dr S J Copley, Royal Brompton Hospital, London	1755	Birmingham Children's Hospital, Birmingham Discussion

NEW STUDIES

STU	DIES IN INTERVENTIONAL TECHNIQUES
	Hall 6 0830-0945
	man: Prof T Buckenham
0830	Survey of the use of sedation and analgesia
	during percutaneous nephrostomy insertion Dr L M Freeman, South Manchester University
	Hospitals NHS Trust, Manchester
0840	Percutaneous fluoroscopic gastrojejunostomy
0010	with single puncture and single anchor
	gastropexy Dr K Choji, Southampton General
	Hospital, Southampton
0850	Tumour seeding—an inevitable or avoidable
	legacy of biopsy of colorectal liver metastases?
	Dr G R Plant, North Hampshire Hospital,
	Basingstoke
0900	Radiology day case ultrasound-guided liver
	biopsy unit—an initial experience Dr R T
0010	Dhawan, King's College Hospital, London
0910	Improving glandular coverage in prostate
	biopsy—results of a 33 mm core length needle Dr G N Ubhayakar, St George's Hospital,
	London
0920	Ultrasound-guided cutting needle biopsy in
0720	thyroid nodules: complementary to fine needle
	aspiration cytology Dr N J Screaton,
	Addenbrooke's Hospital, Cambridge
0930	Direct puncture ethanol embolization in the
	management of superficial vascular
	malformations Dr J J Bhattacharya, Southern
	General Hospital, Glasgow
0940	Discussion
	STUDIES IN VASCULAR RADIOLOGY
	Hall 6 1000–1200
	man: Dr A K Banerjee
1000	Translumbar aortography—a 10 year review Dr G J Robinson, St Michael's Hospital, Toronto,
	CANADA
1010	Transradial arteriography—a case for its routine
1010	use Dr R A Carver, Bromley Hospitals NHS
	Trust, Bromley
1020	Toxic erythema following administration of
N.S.	iodixanol (Visipaque) for arteriography Dr A A
	McCafferty, Victoria Infirmary, Glasgow
1030	Treatment of iatrogenic pseudoaneurysm with
	percutaneous ultrasound-guided thrombin
	injection Dr T Sabharwal, Hammersmith
	Hospital, London
1040	Endovascular stent-graft management of
	complex thoracic aortic disease Dr T Sabharwal,
	Guy's Hospital, London
1050	"Push and park": an alternative strategy for
	management of arterial embolism Dr A P
1100	Higginson, Leicester Royal Infirmary, Leicester
1100	Experience and follow-up of aortic side branch
	embolization in abdominal aortic aneurysm
	endovascular repair Dr A Anbarasu, Royal
1110	Liverpool University Hospital, Liverpool The role of chest radiography following
1110	subclavian vein catheter insertion for
	ambulatory chemotherapy Dr P R Burn Chelsea

Tuesday 23 May 2000

	A Munro, Eastbourne District General Hospital Eastbourne
1140	Single-scan instant access DVT imaging with
1140	ultrasound Dr T Hall, St Georges Hospital,
	London
1150	Discussion
STU	UDIES IN GASTROINTESTINAL IMAGING Hall 6 1215–1345
Chairn	nan: Dr A Grundy
1215	Optimization of scanning parameter for spiral
	CT pneumocolon Dr N Power, The Royal
	London Hospital, London
1225	The therapeutic impact of abdominal
	ultrasound in patients with acute abdominal
	symptoms Dr S Dhillon, Northwick Park & St
	Mark's Hospitals, Harrow
1235	Small intestine blood flow in man: the effects of
	age and caloric loading Dr P A Spencer,
	Rotherham District General Hospital, Rotherha
1245	The therapeutic impact of CT in patients with
	acute abdominal symptoms Dr V J Goh,
	Northwick Park & St Marks NHS Trust, Harr
1255	lleoscopy marches on! Is it time the barium
	radiologist found something better to do? Dr
	T Rottenberg, St Thomas's Hospital, London
1305	A new technique for diagnosing upper
	gastrointestinal anastomotic leaks Dr J Cox,
	Royal Victoria Infirmary, Newcastle Upon Tyn
1315	How reliable are measurements taken during
	defaecating proctography? Dr S H Lee,
1005	Manchester Royal Infirmary, Manchester
1325	Contrast media for radiological evaluation of
WIP	perforation from the gastrointestinal tract: an
	experimental and clinical study Dr A Z Ginai,
	University Hospital Dijkzigt and Erasmus
1335	University, Rotterdam, THE NETHERLAND Discussion
1555	Discussion
	STUDIES IN MRI
<i>a</i> .	Hall 6 1400–1500
	man: Dr S C P Blease
1400	Calculating diagnostic performance from
	categorical data: observations from a systema
	review of MR angiography Dr M E Westwood University of Leeds, Leeds
1410	
1410	A prospective study of CT angiography and M
	angiography vs DSA in the detection of
	intracranial aneurysms Dr P M White, Wester
1420	General Hospital, Edinburgh
1420	High resolution <i>in vivo</i> MRI of carotid
	atheroma Mr M J Graves, Addenbrookes
1420	Hospital, Cambridge
1430	Evaluation of the safety and efficacy of
	gadobenate dimeglumine in MRI of CNS
	metastatic disease Prof G Cherryman, Universit

of Leicester at Leicester Royal Infirmary,

Leicester

1120

1130

Tunnelled central venous catheters: correlation between line tip position and complications *Dr A E Mills, The Royal Bolton Hospital, Bolton*

investigation of deep venous thrombosis Dr W

An audit of the D-Dimer test in the

& Westminister Hospital, London

1440	Observations on the interaction between paramagnetic contrast media and the	0940	The role of MRI in the follow-up of brachial
			plexopathy in patients with malignancy $Dr P L$
	myometrium Mr A van Tulleken, University of		Scott-Mackie, The Royal Marsden NHS Trust
1450	Oxford, Oxford Breath-hold MRI diagnosis of arrhythmogenic	00.50	Hospital, Sutton
1450		0950	MRI of malignant mesothelioma: preliminary
	right ventricular dysplasia Miss I Joubert,		results Dr F Alaeddin, Glenfield Hospital,
	Addenbrookes Hospital, Cambridge		Leicester
	STUDIES IN MR TECHNOLOGY	1000	Effect of osteosarcoma on systemic blood flow
	Hall 6 1515–1645		Dr J F Griffith, Prince of Wales Hospital, Shatin,
Chairn	nan: Prof I R Young		HONG KONG
1515	Development of a combined functional MRI	1010	Discussion
	and optical imaging system Dr M N Paley,		
	University of Sheffield, Sheffield		STUDIES IN BREAST IMAGING
1525	An MR compatible endoscope with	a server	Hall 6 1030–1245
	interchangeable inductively coupled receiver coil	A REAL PROPERTY OF A REAL PROPER	nan: Dr C Boggis
	and tip tracking facility Dr D J Gilderdale,	1030	The contribution played by imaging in the
	Robert Steiner Resonance Unit, London	Ster in	diagnosis of breast cancer Ms J Patton, North
1535	An array that exploits phase for SENSE	a desta	Tees General Hospital, Stockton-on-Tees
	imaging Prof J V Hajnal, Robert Steiner	1040	Digital, computer-assisted stereotacic biopsy, a
	Resonance Unit, London		newly developed holder for vacuum biopsy
1545	Increasing temporal resolution in dynamic	14-14-14-14	(Mammotome) at the Mammomat 3000 Dr U
	gadolinium enhanced breast imaging using		Aichinger, Institut fur Diagnostische Radiologie,
	SENSE Dr D J Larkman, Robert Steiner		Erlangen, GERMANY
	Resonance Unit, London	1050	Can radiographer film readers contribute
1555	A prototype open breast coil and intervention	and the second	effectively in double reading screening
	device for MRI Dr G P Liney, Hull Royal	a satisfied	mammograms? Mrs S M Naylor, Nottingham
	Infirmary, Hull	1.50	City Hospital, Nottingham
1605	Development of an RF model for evaluating	1100	Observer variability in detecting cancers with 1
	hazards during interventional MRI Prof I R	1100	and 2 views during incident screening $Dr R M$
	Young, Robert Steiner Resonance Unit, London	1112	
1615	The use of echo planar imaging to obtain	A Contract	Given-Wilson, South West London Breast
1010	apparent diffusion coefficients for different	1110	Screening Service, London
	tissues within the prostate Mr D J Tozer,	1110	UK survey of 4th and 5th year specialist
	University of Hull at Hull Royal Infirmary, Hull		registrars' attitudes to careers in breast
1625	Inner volume 2D blood-suppressed cardiac MRI		radiology Dr P J Cantrell, Taunton & Somerset
1025	Mr MJ Graves, University of Cambridge, Cambridge		NHS Trust, Taunton
1635	Discussion	1120	Evaluation of mammography in males by BI-
1055	Wednesday 24 May 2000		RADS Dr K Bock, Philipps-University,
		and the second second	Marburg, GERMANY
	STUDIES IN ONCOLOGICAL IMAGING	1130	The role of ultrasound-guided core biopsy in the
	Hall 6 0830–1015		cytology-led one-stop breast clinic Dr V J Goh,
	nan: Dr B M Carrington		Northwick Park & St Marks NHS Trust, Harrow
0830	Setting standards of oncological radiology in the	1140	Beware of sensitive articles. An audit of popular
	North West of England Dr B M Carrington,	5153	magazines in the Breast Care Unit waiting room
	Christie Hospital NHS Trust, Manchester		Dr N T Ridley, Princess Margaret Hospital,
0840	CT and oncology—a cause for concern? Mrs L		Swindon
	M Clarkson, St James University Hospital, Leeds	1150	Radioguided occult lesion localization
0850	FDG PET in the evaluation of treatment	WIP	(ROLL)—a new method for locating
	response of oesophageal cancer Dr A Hassan,	W11	(ROLL)—a new method for locating impalpable breast lesions at surgery $Dr M J C$
	Harefield Hospital, Uxbridge		
0900	Experience with laparoscopic ultrasound for	1000	Bagnall, Nottingham City Hospital, Nottingham
	defining resectability of pancreatic head and	1200	Combined use of isotope and methylene blue
	periampullary carcinoma Dr A M Taylor,	WIP	dye in sentinal lymph node mapping Dr A
	University Hospital Wales, Cardiff		Connors, Cork University Hospital, Wilton,
0910	Reduced dose SPIO for the detection of		Ireland
	colorectal liver metastases Mrs J Ward, St James	1210	Upright digital stereotactic vacuum-assisted
	University Hospital, Leeds	WIP	mammotomy using the lateral approach Dr A R
0920	The detection of small focal liver lesions using		Wilson, Breast Unit, Nottingham City Hospital,
0720	helical CT: the value of overlapping slices $Mr P$	and the second	Nottingham
	M Arnold, St James University Hospital, Leeds	1220	Excision of breast fibroadenomas using
0020	M Arnola, St James University Hospital, Leeds MRI in advanced cervical carcinoma:	WIP	ultrasound-guided vacuum-assisted
0930			mammotomy—initial experience Dr A R Wilson
	correlation of stage, tumour size and lymph		Breast Unit, Nottingham City Hospital,
		and the second se	Dicust Onth, Hollingham City Hospital,
	node distribution Dr M B Taylor, Christie Hospital NHS Trust, Manchester	the second second	Nottingham

WORKSHOPS

NEW STUDIES

1230 WIP	Comparative technical evaluation and its influence on the purchase of ultrasound equipment for breast screening centres Ms A J
	Watson, Ultrasound Equipment Evaluation Project, Glasgow
1240	Discussion
ST	UDIES IN THE FACE, NECK & CRANIUM Hall 6 1345–1515
	nan: Dr J Olliff
1345	MRI as a first line investigation of salivary disease in primary care Dr S J Golding, University of Oxford, Oxford
1355	High resolution CT in patients with vertigo following stapes surgery Dr D Pickuth, Martin- Luther-Universität, Halle, GERMANY
1405	Parathyroid adenomas: ⁹⁹ Tc ^m sestamibi dual
	phase SPECT imaging concordance with
	ultrasound Dr I S Francis, Royal Free Hospital, London
1415	Spiral CT prior to and after cricothyroid
	approximation Dr D Pickuth, Martin-Luther-
1425	Universität, Halle, GERMANY Cavernous sinus thrombosis—which
1423	radiological test should we choose? Dr V K
	Jayakrishnan, Southern General Hospital, Glasgow
1435	Endovascular treatment of indirect carotico-
	cavernous fistulae Dr D J Annesley-Williams,
1.4.4.5	Newcastle General Hospital, Newcastle upon Tyne
1445	Coil vs clip: does this influence delayed ischaemic neurological deficit following
	subarachnoid haemorrhage? Dr P P Raju,
	Newcastle General Hospital, Newcastle
1455	Cerebral perfusion studies in cerebral venous
	sinus thrombosis Dr S C Jenkins, Institute of
	Neurological Sciences, Glasgow
1505	Ultrafast MRI of the fetal central nervous
	system Dr E H Whitby, Royal Hallamshire Hospital, Sheffield
ST	UDIES IN GENITOURINARY RADIOLOGY
	Hall 6 1530–1700
<i>Chairi</i> 1530	man: Dr M Kellett
1550	Diagnosing renal artery stenosis by use of MRI—a meta-analysis Dr K T Tan, Royal
1540	Hallamshire Hospital, Sheffield Prospective comparative assessment of non-
1340	invasive screening modalities for renal artery
	stenosis Dr C S Boyd, Royal Victoria Hospital, Belfast
1550	Investigation of live renal transplant donors: a
	comparison of gadolinium enhanced
	MRA/MRU with DSA/IVU Dr S A Cooper,
1.000	The Royal Orthopaedic Hospital, Birmingham
1600	Comparison of unenhanced low dose helical CT
	and intravenous urography in suspected renal colic <i>Dr D J Connolly</i> , <i>Stoke Mandeville</i>
	Hospital, Aylesbury
1610	Hysterosalpingography in infertility: an analysis
	of 1056 consecutive cases Prof A P Hemingway,
	Hammersmith Hospitals NHS Trust, London
1620	Uterine arterial embolization for leiomyomas:
	monitoring immediate and late volume and
	perfusion changes with MRI Dr N M deSouza, Robert Steiner Magnetic Resonance Unit, London
CONTRACTOR OF	Lastri Stenier magnette resonance onn, Lonaon

1630	Embolization of residual uterine vascular
	malformations in patients with gestational
S Parts	trophoblastic disease Dr A K Lim, Charing
	Cross Hospital, London
1640	MR assessment of dynamic contrast uptake
and a strength	characteristics of normal ovaries using a 2-
	compartment pharmacokinetic model Dr G H
	Hall, Hull Royal Infirmary, Hull

1650 Giant adnexal tumours: CT features, correlation with surgical pathology and patient outcome Dr J Foster, St James University Hospital, Leeds

WORKSHOPS

UNDERSTANDING THE CANCER PATIENT: HOW THE PATIENT PERCEIVES YOU AND THE DEPARTMENT Ms S Crowe, Oxon Ms M Griffiths and Ms G Woods, Cancer Support Monday 22 May 2000 1000-1200 Tuesday 23 May 2000 1000 - 1200TIME MANAGEMENT—HOW TO SURVIVE THE **INCREASE IN PRESSURE** Mr J McIlree, Merck Monday 22 May 2000 1000-1200 Tuesday 23 May 2000 1000-1200/1400-1600 Wednesday 24 May 2000 1000-1200 ATL HANDS ON ULTRASOUND ESSENTIAL SKILLS WORKSHOP Monday 22 May 2000 Small Parts, Breast & Vascular Imaging Dr K Dewbury, Southampton General Infirmary, Southampton 1000-1200/1400-1600 Tuesday 23 May 2000 General Abdominal & Lower Limbs Dr G Baxter, Western Infirmary, Glasgow 1000-1200/1400-1600 Wednesday 24 May 2000 Musculoskeletal & Sports Injury Imaging Prof W Gibbon, Leeds General Infirmary, Leeds 1000-1200 **CREATING COMPUTER PRESENTATIONS** Mrs C Westbrook, Health South (UK) plc., Witney Mr J Talbot, Oxford MRI Centre, Oxford Dr R Whitehouse, Manchester Royal Infirmary, Manchester Mr M Tatlow, South Bank University, London Monday 22 May 2000 1000-1230/1400-1630 Tuesday 23 May 2000 1000-1230/1400-1630 Wednesday 24 May 2000 1000-1230 Separate registration is obligatory. Admission to these workshops is by ticket only. It may be possible to obtain tickets for some of these workshops from the IOS Secretariat Office in the Congress registration area.