

ECMC Imaging Group Workshop

Measurement of Tumour Vascular Support in Early Phase Clinical Trials

Thursday 13th and Friday 14th May 2010

The Royal College of Physicians, London, NW1 4LE

DAY 1 - Thursday 13th May

AGENDA

09.30 - 10.00	Registration and Refreshments	
10.00 - 13.30	Session 1 - Status of Current Imaging Techniques in Support of Early Stage Trials Chaired by: Martin Leach in the Linacre and Sloane rooms	
10.00 - 10.10	Welcome and Introduction	Martin Leach
10.10 - 11.25	The Objectives and Challenges in Assessing Vascular Response to Novel Treatments Oncology Industry NCI perspective	Ian Judson John Waterton Larry Clarke
11.25 - 11.45	Discussion	
11.45 - 13.05	State of Art Across Modalities : Solutions and Challenges MRI PET / SPECT CT Ultrasound	Martin Leach Eric Aboagye Ken Miles Ed Leen
13.05 - 13.30	Discussion	
13.30 - 14.00	Networking Lunch	

Cont....Day 1 - Thursday 13th May

14.00 - 17.00 Session 2 - Specific Issues and Recommendations
Parallel Sessions

MRI, chaired by **Martin Leach** in the Sloane Room

Lead

14.00 - 15.00 What Must Equipment Provide?
Contrast Agents
MRI Collaboration and QA
Phantoms

Mark Horsfield
David Lomas, Wei Huang
David Collins, Mark Horsfield
Tom Chenevert, Paul Tofts

15.00 - 15.30 Discussion

15.30 - 15.45 Refreshment break

15.45 - 16.30 Role of AIF
Models Including Shutter Speed Imaging
Nomenclature

David Collins, Alan Jackson
David Buckley, Wei Huang
Paul Tofts

16.30 - 17.00 Discussion and close

PET / SPECT, chaired by **Eric Aboagye** and **Fiona Gilbert** in the Linacre room

14.00 - 15.00 Equipment
Measurement (general)
Calibration
Phantoms
Dosimetry

Lead

Paul Kinahan

Melvyn Myers

15.00 - 15.30 Discussion

15.30 - 15.45 Refreshment break

15.45 - 16.30

Tracers / Pharmaceuticals including IMP Certificate
PET Imaging Database including caBIG
Nomenclature

Tony Gee, Ambros Beer
Larry Clarke
Paul Marsden

16.30 - 17.00 Discussion and close

Cont....Day 1 - Thursday 13th May

CT, chaired and led by Ken Miles in the Lasdun room

14.00 - 15.00 Equipment
CT System Quality Assurance
Dosimetry
Nomenclature

15.00 - 15.30 Discussion

15.30 - 15.45 Refreshment break

15.45 - 16.30 Patient Preparation
Contrast Administration
Image Acquisition

16.30 - 17.00 Discussion and close

Ultrasound, chaired by Ed Leen in the Willan room

Lead

14.00 - 15.00 Administration of Contrast Agent
• Type and Dose of Contrast (SonoVue, Definity, Sonazoid, etc.)
• Contrast Agent Handling
• Administration Method : Bolus vs Infusion
• Injection Amount / Rates

Yuko Kono

Equipment Based Factors

Mike Averkiou

- Probe Selection Based on Clinical Application
- Imaging Parameters: MI, Gain, Dynamic Range, Focal Zone, Depth
- Non-Linear Modes (PI, PM, PMPI, etc)
- Tissue Collection Before Contrast Arrival
- Image Display (Side-by-Side, Contrast 2D, etc)
- Length of Image Loops to Collect
- 2D versus 3D Imaging

15.00 - 15.30 Discussion

15.30 - 15.45 Refreshment break

15.45 - 16.30 Clinical Factors

Olivier Lucidarme

- Organ Type: Liver Unique - Dual vs Single Supply
- Cardiovascular Condition - Stability of Haemodynamics
- Type of Pathologies and Co-Existing Pathologies
- Scanning Protocol

16.30 - 17.00 Discussion and close

19.00

Networking Dinner at the Melia Whitehouse Hotel

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DAY 2 - Friday 14th May

AGENDA

08.30 - 09.00

Registration and Refreshments

09.00 - 12.30

Session 3 - Specific Issues and Recommendations

Parallel sessions

MRI, chaired by [Martin Leach](#) in the Dorchester Library

09.00 - 10.15

Measurement Sequences
Motion and Registration

Lead

[Alan Jackson](#), [Brandon Whitcher](#)
[David Collins](#) and [Bruno Morgan](#)

10.15 - 10.30

Discussion

10.30 - 11.00

Refreshment break

11.00 - 12.15

Analysis (VOI, Pixel Wise, Reported Parameters)
Reporting Transparency of Approach

[David Buckley](#), [David Lomas](#)
[Brandon Whitcher](#), [Bruno Morgan](#)

12.15 - 12.30

Discussion

12.30 - 13.30

Networking Lunch

PET / SPECT, chaired by [Eric Aboagye](#) and [Fiona Gilbert](#) in the Linacre room

09.00 - 10.15

Modelling
Motion
Registration

Lead

[Vin Cunningham](#)

[Paul Marsden](#)

10.15 - 10.30

Discussion

10.30 - 11.00

Refreshment break

11.00 - 12.15

Analysis / Quantification
(SUV Type, VOI or Thresholding, Pixel Wise, Reported Parameters)
Computerised Detection
Reporting Transparency of Approach

[Andy Welch](#)

[Dimitris Visvikis](#)

[Gary Cook](#)

12.15 - 12.30

Discussion

12.30 - 13.30

Networking Lunch

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Cont....Day 2 - Friday 14th May

CT, chaired and led by Ken Miles in the Lasdun room

09.00 - 10.15	Models Image Processing Motion and Other Artefacts Organ Specific Requirements Assessing Response
10.15 - 10.30	Discussion
10.30 - 11.00	Refreshment break
11.00 - 12.15	Analysis (VOI, Pixel Wise, Reported Parameters) Reporting Transparency of Approach
12.15 - 12.30	Discussion
12.30 - 13.30	Networking Lunch

Ultrasound, chaired by Ed Leen in the Willan room

Lead

09.00 - 10.15	Method of Analysis <ul style="list-style-type: none"> • Use of Linearised vs Log Compressed Data for Analysis • Analysis Software : Commercial / Non-Commercial • Curve Fitting Models for Parameter Extraction • Variability of Important Haemodynamic Parameters • Region of Interest Selection • Motion and Respiratory Compensation 	Marcel Arditi
10.15 - 10.30	Discussion	
10.30 - 11.00	Refreshment break	
11.00 - 12.15	End Points <ul style="list-style-type: none"> • Tumour Vascular Volume / Vascularised Volume / Necrotic Volume • Tumour Flow Velocity • Tumour Volume Flow Rates • Tumour End-Bed Resistance Reproducibility <ul style="list-style-type: none"> • Bolus Technique • Infusion Technique 	Peter Burns
12.15 - 12.30	Discussion	
12.30 - 13.30	Networking Lunch	

Cont....Day 2 - Friday 14th May

13.30 - 17.00 Session 4 - Summary of Recommendations
(Report Back From Parallel Modality Sessions)

Chaired by [Martin Leach](#) in the Dorchester Library

13.35 - 14.00 MRI
[Martin Leach](#)

14.00 - 14.25 PET / SPECT
[Eric Aboagye](#)

14.25 - 14.50 CT
[Ken Miles](#)

14.50 - 15.15 Ultrasound
[Ed Leen](#)

15.15 - 15.45 Refreshment break

15.45 - 16.30 Discussion

16.30 - 16.45 Preparation of Report and Timetable
[Martin Leach](#)

16.45 - 17.00 Discussion and close

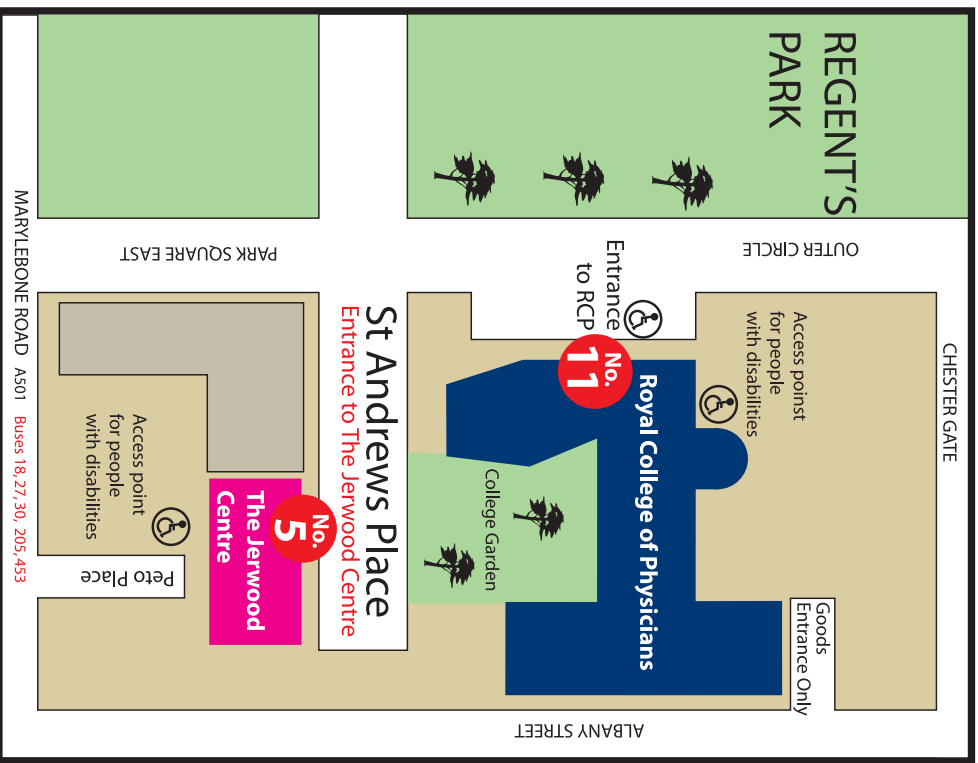
17.00 - 18.00 Networking Drinks Reception

ROYAL COLLEGE OF PHYSICIANS



ROYAL COLLEGE OF PHYSICIANS

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THE JERWOOD CENTRE

BY TRAIN

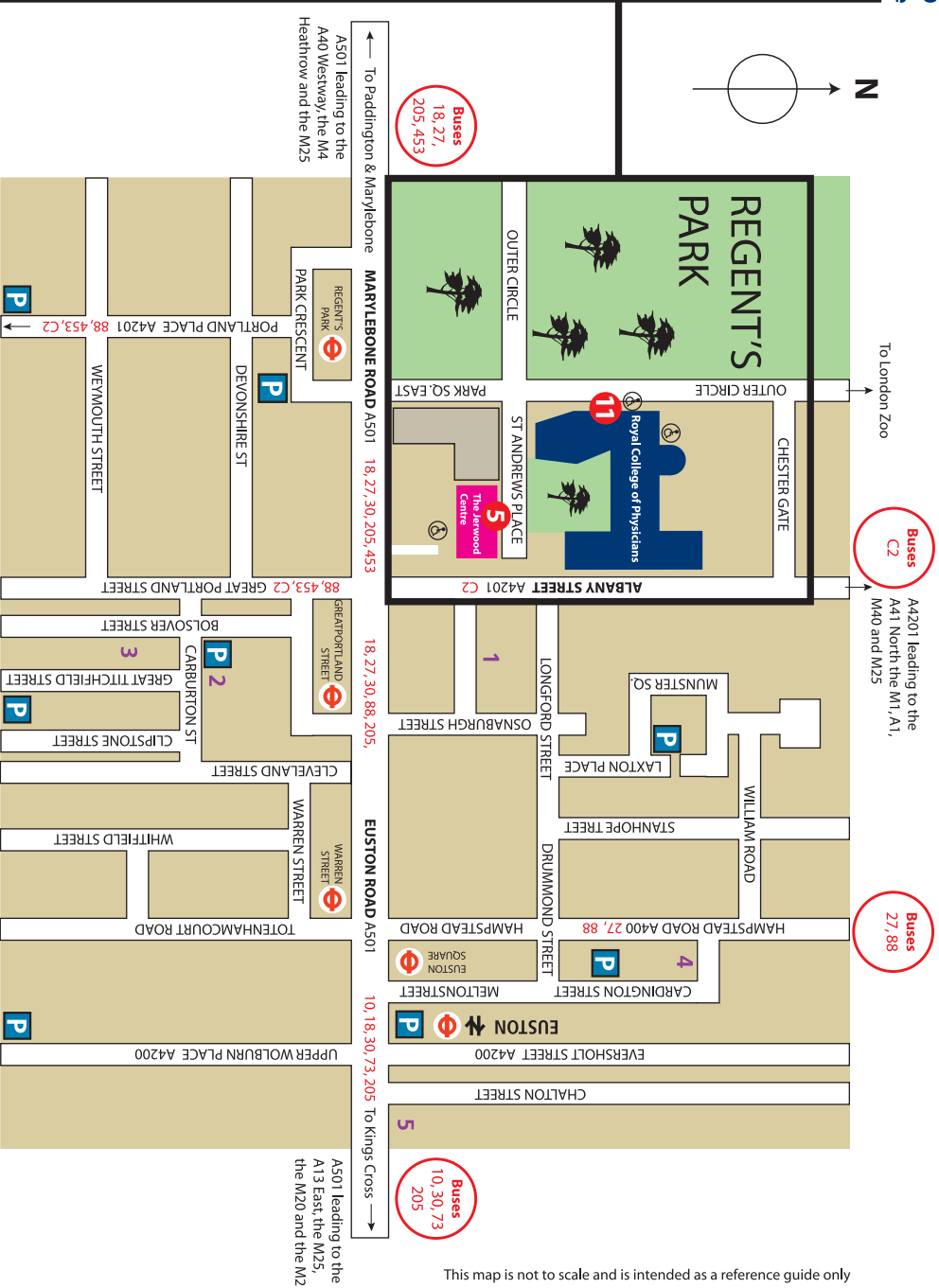
- Euston Station (15 minutes walk)
- King's Cross Station (5 minutes by taxi)
- St Pancras Station (5 minutes by taxi)
- Marylebone Station (5 minutes by taxi)

BY UNDERGROUND

- Regent's Park Station on the Bakerloo line (5 minutes walk)
- Great Portland Street Station on the Circle, Metropolitan and City lines (5 minutes walk)
- Warren Street Station on the Victoria and Northern lines (10 minutes walk)

BY BUS

- From Paddington & Marylebone 18, 27, 205, 453
- From Euston & King's Cross 18, 27, 30, 88, 205



This map is not to scale and is intended as a reference guide only

BY CAR

Easy access via M40 and M1
 Car Parking: The College offers free parking to guests with disabilities by prior arrangement and is situated outside the congestion charge zone. The nearest public car park is a few minutes walk away (refer to the map)

HOTELS

- 1 Sol Melia White House Hotel
- 2 Holiday Inn Regent's Park
- 3 Grange Fitzrovia Hotel
- 4 Thistle Euston Hotel
- 5 Novotel Euston