Advanced Echo Symposiums & Workshops

4th Milton Keynes Advanced Echocardiography Course

3 days of interactive lectures, workshops & symposiums with respected speakers from the UK and abroad

Wednesday 20, Thursday 21 & Friday 22 May 2015

Venue: Kents Hill Park Congress Centre at Milton Keynes, Buckinghamshire MK7 6BZ

About the Course

Lectures:
- Basics of contrast echocardiography
- Clinical applications of contrast echocardiography
- How to perform contrast echo
- Tips, tricks and pitfalls of contrast echo
- Basics of 3D echocardiography
- Clinical applications of 3D echocardiography
- Tips, tricks and pitfalls of 3D Echo
- Basics of Deformation Imaging
- Clinical applications of Deformation Imaging
- Tips, tricks & pitfalls of Deformation Imaging

Workshops with hands on analysis:
- Perform and interpret contrast echocardiography: LVO, PFO, Cardiac Masses, Doppler signal enhancement, Stress echocardiography
- Acquire and analyse 3D echo dataset: (AVS, MVP, MR, LV volume, RV volume, LA volume)
- Acquire and analyse 2D, 3D echo dataset: TDI, speckle tracking, strain, strain rating, twist,

Who should attend: Experienced or non-experienced Sonographers, Junior Doctors and Consultants with an interest in Echocardiography

Course Organisers

Dr Attila Kardos
MD PhD FRCP FESC
Consultant Cardiologist
Milton Keynes University Hospital
NHS Foundation Trust, Hon Sen
Lecturer Univ. Department
Cardiovascular Medicine,
Oxford

Professor Harald Becher
MD PhD FRCP
Chair for Cardiovascular Research
Alberta Heart Institute, ABACUS
University of Alberta Hospital
Edmonton, Alberta, Canada

Faculty

Dr Attila Kardos
Consultant Cardiologist, Milton Keynes University Hospital

Professor Alan Fraser
Cardiff Heart Institute, Cardiff University

Dan Baines
Account Manager
Ultrasound & MRI
Bracco UK Ltd

Professor Sorin Pislaru
Mayo Clinic Rochester, Minnesota

Professor Harald Becher
University of Alberta Hospital
Edmonton, Alberta, Canada

Dr Jim Newton
Consultant Cardiologist, Oxford University Hospital

Accredited sonographers and Junior cardiologists

Total cost for 3 days including lunch & refreshments:

Cardiacphysiologists/radiographers: £300 inc VAT
Other medical professionals: £350 inc VAT

Methods of Payment:

Cheques should be made payable for the full amount to Milton Keynes Hospital NHS Foundation Trust – on reverse of the cheque please quote W71060 4741, surname/course name/date and sent to Lorraine Vermeulen, Postgraduate Medical Education Centre, Milton Keynes Foundation Trust, Standing Way, Eagleshale, Milton Keynes MK5 5LD

By BACS: Name: Milton Keynes Hospital NHS Foundation Trust
Bank: The Royal Bank of Scotland
Ref to be quoted: W71060 4741, surname/course name/date

For overseas: IBAN GB23 RB0S16252710020336 BIC/SWIFT CODE: RBOS GB2L

For more information about Milton Keynes, from booking accommodation to what's on in the city, visit www.destinationmiltonkeynes.co.uk or simply download the iPhone App or call +44 (0)1908 611010 or email: info@destinationmiltonkeynes.co.uk

To register please provide details below and return to Lorraine Vermeulen or alternatively please email details to Lorraine.Vermeulen@mkhospital.nhs.uk

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Title: 4th Milton Keynes Advanced Echo Symposiums & Workshops 20—22 May 2015

I enclose a cheque ☐ I have paid by BACS ☐

Cancellation Policy

Cancellations received within 6 weeks of the course will be refunded, minus £50 deposit. Regrettfully, any cancellations received within 10 working days of the course dates will not receive a refund
### Day 1  Wednesday 20 May 2015

**Contrast Echocardiography Symposium & Workshop**  
**Live and recorded cases**

**Venue:** Kents Hill Park Congress Centre & Lecture Theatre, Postgraduate Medical Education Centre, Milton Keynes Hospital Foundation Trust, Milton Keynes, MK6 5LD

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Speaker(s)</th>
<th>Duration</th>
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<tbody>
<tr>
<td>8:30 – 9:00</td>
<td>Registration—Tea &amp; Coffee</td>
<td></td>
<td>10mins</td>
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<tr>
<td>9:00- 9:10</td>
<td><strong>Welcome &amp; Introductions</strong></td>
<td>Dr Attila Kardos</td>
<td>10mins</td>
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<tr>
<td>9:10 - 9:35</td>
<td><strong>Introduction to Contrast in Echocardiography (the basics)</strong></td>
<td>Dan Baines</td>
<td>25mins</td>
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<tr>
<td>9:40 – 10:05</td>
<td><strong>Role of Contrast Echocardiography in the Clinical Practice (clinical evidence)</strong></td>
<td>Dr Jim Newton</td>
<td>25mins</td>
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<tr>
<td>10:10 – 10:35</td>
<td><strong>Role of Contrast in Stress Echocardiography</strong></td>
<td>Professor Harald Becher</td>
<td>25mins</td>
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<tr>
<td>10:40 – 11:00</td>
<td><strong>Tea &amp; Coffee break</strong></td>
<td></td>
<td>20mins</td>
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<tr>
<td>11:00 – 11:20</td>
<td><strong>How to Prepare the Contrast for Administration? Nurse perspectives.</strong></td>
<td>(sonovue, agitated saline)</td>
<td>TBA</td>
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<tr>
<td>11:25 – 11:50</td>
<td><strong>Tips, Tricks and Pitfalls of Contrast Echocardiography</strong></td>
<td>(ultrasonic and non-ultrasonic contrast agents)</td>
<td>25mins</td>
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<tr>
<td>11:55 – 12:15</td>
<td><strong>Case based Discussion - Contrast Echocardiography</strong></td>
<td>Faculty, Sonographers &amp; Registrars</td>
<td>20mins</td>
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<tr>
<td>12:15 – 12:30</td>
<td><strong>Questions &amp; Answers</strong></td>
<td></td>
<td>15mins</td>
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<tr>
<td>12:30 – 13:30</td>
<td><strong>Lunch</strong></td>
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<td>1 hour</td>
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| 13:30 – 15:40 | **Live / recorded Case Presentations**                                                            | Faculty: Dr Attila Kardos, Professor Harald Becher, Dr Jim Newton (with Phillips platform, iE33). Cases covering: a) normal LV with difficult window 2D & 3D contrast imaging & aortic arch imaging  
  b) LVSD with normal window (LVO, perfusion)  
  c) LVSD with abnormal window (LVO, doppler enhancement, colour, CW)  
  d) Cardiac source of embolization, intra-cardiac mass (stress echocardiography) |                                                   | 2hrs 10mins |
| 15:45 – 15:55 | **How to Prepare the Contrast for Administration (Sonovue, agitated saline) Recap**             | Dan Baines & Betsy Spearman                       | 10mins   |
| 15:55 – 16:00 | **Question & Answer Session with concluding remarks and feedback**                               |                                                   | 5mins    |
Day 2    Thursday 21 May 2015

3D Echocardiography Symposium & Workshop

with recorded cases

Venue: Kents Hill Park Congress Centre at Milton Keynes, Buckinghamshire MK7 6BZ

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Chair: Dr Attila Kardos

8:30 - 9:00  Registration / Tea & Coffee

9:00- 9:05  Welcome
            Dr Attila Kardos

9:05 -9:30  Basics of 3D Echocardiography  (live 3D, zoomed images, full volume, cropping)
            Professor Sorin Pislaru

9:35 – 10:00 3D Echocardiography in Daily Clinical Practice (recommendations, LV and RV volumetric analysis, mitral valve, aortic valve, post valve surgery, quantification of regurgitation and stenosis)
            Dr Jim Newton

10:05 – 10:25 3D Echocardiography in Structural Intervention (TAVI, mitra clip, LAA closure, PFO closure)
            Dr Jim Newton

10:30 – 10:50 The Role of 3D Imaging during Stress Echocardiography
            Professor Harald Becher

10:55 – 11:15 Tea/Coffee Break

11:15 – 11:50 Tips & Tricks of Acquiring and Analysis of 3D Dataset. Future Advances
            Professor Sorin Pislaru

11:55 - 12:55 Case Based Discussion
            Faculty, Sonographers & Registrars

13:00 – 14:00 Lunch

14:00 - 16:00 3D Echo Workshop. Hands on Workstation Based Analysis of 3D Dataset (AVS, MVP, MR, LV, RV, LA volume).

            workstation based workshop  (Qlab platform)
            Cases covering
            a) normal LV function
            b) LVSD
            c) mitral valve (normal, prolapse, stenosis)
            d) aortic valve area measurements normal & stenosis etc

            Faculty: Professor Sorin Pislaru, Professor Harald Becher, Dr Jim Newton,
            Dr Attila Kardos, (with Phillips Platform iE33)

16:00 – 16:05  Question & Answer Session with concluding remarks and feedback forms

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5mins
25mins
25mins
5mins
20mins
20mins
35mins
60mins
1 hour
2hrs
5mins
# Day 3  Friday 22 May 2015

## Deformation Imaging Symposium & Workshop with recorded cases

**Venue:** Kents Hill Park Congress Centre at Milton Keynes, Buckinghamshire MK7 6BZ

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<thead>
<tr>
<th>Time</th>
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<th>Speaker/Detail</th>
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<tr>
<td>8:30 - 9:00</td>
<td>Registration / Tea &amp; Coffee</td>
<td>5mins</td>
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<tr>
<td>9:00 - 9:05</td>
<td><strong>Welcome</strong></td>
<td>Dr Attila Kardos</td>
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<tr>
<td>9:05 - 9:35</td>
<td><strong>Understanding the principles of cardiac mechanics</strong></td>
<td>Professor Alan Fraser</td>
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<td>9:40 - 9:55</td>
<td><strong>The role of Echocardiography in investigating cardiac mechanics.</strong> (2D and 3D echocardiography derived parameters). Feasibility, artefacts and pitfalls.</td>
<td>Professor Alan Fraser</td>
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<td>10:00 - 10:20</td>
<td><strong>Clinical validation and normal values of 2D and 3D derived parameters of cardiac deformation.</strong> (recent results from clinical trials and comparison with LVEF)</td>
<td>Professor Sorin Pislaru</td>
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<tr>
<td>10:25 - 10:45</td>
<td><strong>Current clinical application of deformation imaging (recommendation by ASE and EACVI)</strong></td>
<td>Professor Sorin Pislaru</td>
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<tr>
<td>10:50 - 11:10</td>
<td><strong>Tea/Coffee Break</strong></td>
<td>20mins</td>
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<tr>
<td>11:10 - 11:25</td>
<td><strong>Future Advances of Deformation Imaging Echocardiology</strong></td>
<td>Professor Sorin Pislaru</td>
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<tr>
<td>11:30 - 12:30</td>
<td><strong>Case based discussion</strong></td>
<td>Faculty, Sonographers &amp; Registrars</td>
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<tr>
<td>12:35 - 13:40</td>
<td><strong>Lunch Break</strong></td>
<td>1 hour</td>
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<tr>
<td>13:40 - 15:40</td>
<td><strong>Workshop on deformation Imaging. Data Analysis LV, RV strain</strong></td>
<td>workstation based workshop (Qlab platform)</td>
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<tr>
<td></td>
<td>Cases covering</td>
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<tr>
<td></td>
<td>a) normal LV function</td>
<td></td>
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<td></td>
<td>b) LVSD</td>
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<td>c) Cardio-oncology, LV hypertrophy (HBP, HCM, AS, Myocarditis, effect of radiotherapy)</td>
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<td>Faculty: Professor Alan Fraser, Professor Sorin Pislaru, Professor Harald Becher, Dr Attila Kardos (using Philips Platform iE33)</td>
<td>2 hours</td>
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<tr>
<td>15:40 - 15:45</td>
<td><strong>Question &amp; Answer Session with concluding remarks &amp; feedback forms</strong></td>
<td>5 mins</td>
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4th Milton Keynes Advanced Echocardiography Course 20, 21 & 22 May 2015

Course Organisers: Dr Attila Kardos & Prof Harald Becher

Faculty:

Dr Attila Kardos
Consultant Cardiologist Milton Keynes NHS Hospital Foundation Trust

Professor Harald Becher
Chair of Cardiovascular Research, University Alberta

Professor Sorin Pislaru
Associate Professor of Medicine, Co-director Echolab, Mayo Clinic Rochester, Minnesota

Professor Alan Fraser
Institute of Molecular & Experimental Medicine, Cardiff Heart Institute

Dr Jim Newton
Consultant Cardiologist John Radcliffe Hospital NHS Trust, Oxford

Dan Baines
Account Manager Bracco UK

TBA
Senior Nurse, Milton Keynes NHS Hospital Foundation Trust

Registrars
SPR in cardiology, Milton Keynes University Hospital NHS Foundation Trust

Sonographers
Milton Keynes University Hospital NHS Foundation Trust