

A new course: an essential step towards FAMUS accreditation and a first step towards RCR L1 Thoracic US accreditation

Thoracic Ultrasound

in the Assessment of the Acutely Unwell Patient

A practical course organised by Infomed Research & Training, on Wednesday 31 October and Thursday 1 November 2018 at the Holiday Inn Cambridge, Lakeview, Bridge Road, Cambridge CB24 9PH

[FAMUS](#)
approved
course

Approved by [RCP](#)
for 12 CPD credits
Code: **120107**

Course Director

Dr Pasupathy Sivasothy,
Consultant in Respiratory Medicine,
Addenbrooke's Hospital, Cambridge

Target Audience

- ☒ Respiratory and Chest Physicians
 - ☒ Acute Medicine and Emergency Medicine Physicians
 - ☒ Anaesthetists and Intensivists
 - ☒ Also suitable for ACCS trainees
- Numbers strictly limited**

Visiting Faculty



Prof Dr Daniel Lichtenstein,
Medical Intensivist and Visiting Professor,
University Hospital Ambroise-Paré, Paris
author of the BLUE Protocol,
and widely considered as
“the father of lung ultrasound”

About the Course

The course builds on the success of Infomed's RCP-approved *RCR Level 1 Thoracic Ultrasound* course, which has been running since 2010, with excellent delegate feedback, and which is here augmented to cover all FAMUS curriculum components ([pdf](#)), as well as basic Echo (fluid status).

☒ Offers a foundation in the ultrasound skills needed in the assessment of the acutely unwell patient (**no ultrasound knowledge or experience required**): an essential step towards **FAMUS accreditation**, and a first step towards **RCR Level 1 Thoracic Ultrasound accreditation**.

☒ Gain the basic knowledge and skills that will allow you to start supervised practice at work: **setting up the scanner** and **maximising image quality, basic scanning techniques**, recognising **normal anatomy** and **pathologies**.

☒ A **practical** course, designed to maximise opportunities for: **hands-on learning**, developing your **interpretation skills** and developing a **systematic approach** to ultrasound assessment (the **BLUE protocol**).

☒ If you attended Infomed's Thoracic Ultrasound course, and are looking for a refresher, or additional competencies, then you will find that this course is for you.

☒ Delegates attend hands-on ultrasound skills stations, scanning on normal models, mannequins and patients under Faculty supervision, as well as iMac workstations for additional opportunities for pathology recognition and clinical case scenarios.

☒ Pre-course online lectures, review lectures on the day, and skills stations under expert supervision.

The Course Faculty 2018 includes

- **Dr Martin Dachsel,**
Consultant in Acute Medicine,
Surrey and Sussex NHS Trust
- **Dr Pradeep Madhivathanan,**
Consultant in Critical Care Medicine and ECMO,
Royal Papworth Hospital, Cambridge
- **Dr Hesham Mohammad Ali,**
Consultant in Acute Medicine, Norfolk and
Norwich University Hospitals NHS Foundation Trust
- **Ms Lesley Bottoms,**
Echsonographer, Royal London Hospital
- **Dr Matyas Andorka,**
Consultant in Anaesthesia and
Intensive Care Medicine,
East Surrey Hospital, Redhill
- **Ms Fiona Greenfield,**
Advanced Pleural
Interventional Practitioner,
Peterborough City Hospital
- **Dr Devesh Sharma,**
Consultant in Emergency Medicine

COURSE EQUIPMENT AND TECHNICAL SUPPORT
IS KINDLY PROVIDED BY



ABOUT THE COURSE

- ✓ Pre-course online access to lectures (video and slides), **required pre-course viewing**, covering the physics of ultrasound, knobology, anatomy and training pathways
- ✓ Short review lectures and live demos each day, followed by **skills stations** under expert supervision for scanning learning and practice on **normal** models, **mannequins** and **patients**, as well as workstations for image interpretation practice

DAY 1: WEDNESDAY 31 OCTOBER 2018

08.50 – 09.40 **Registration**

09.40 – 09.50 **Welcome and introduction**

09.50 – 10.30

Review: Ultrasound in the Assessment of the Acutely Unwell Patient

Dr Pasupathy Sivasothy,
Consultant in Respiratory Medicine,
Addenbrooke's Hospital, Cambridge

10.30 – 11.15

PRACTICAL SESSION

Setting Up, Knobology and Scanning

Each delegate is shown how to set up the scanner and asked to maximise image quality of one anatomical structure, with a focus on:

- probe selection and orientation
- ways to hold the probe (comfort, control, stability)
- ways to move the probe (sliding, tilting, rocking)
- depth, focus, gain – and centring the image
- scanning the whole structure
- other functions, inc. freezing, measuring, Doppler

11.15 – 11.45 **Tea and coffee break**

11.45 – 12.00

Review: Thoracic Ultrasound and Basic Echocardiography

Dr Pasupathy Sivasothy

- Why thoracic ultrasound
- Normal thoracic anatomy under ultrasound
- Identifying appropriate site for pleural procedure
- Identifying abnormalities and pathologies correctly
- Identifying basic cardiac structures and views
- Live demo (dual screen): What delegates will need to do during the Practical Session

12.00 – 12.50

PRACTICAL SESSION

Thoracic/Cardiac Scanning

Delegates split into groups.

In **Thoracic Scanning**, each delegate is asked to:

- Identify and maximise the image quality of **normal** thoracic anatomy: pleura and diaphragm; heart, liver and spleen).
- Demonstrate 'batwing' appearance of ribs and pleura
- Identify pleural sliding in 2D and M mode with lung pulse
- Identify A lines and B lines
- Demonstrate diaphragmatic movement with respiration

In **Cardiac Scanning**, each delegate is asked to:

- Identify and maximise image quality of normal cardiac anatomy: PLAX, PSAX, A4C, SC views

12.50 – 13.30 **Lunch**

13.30 – 14.20

PRACTICAL SESSION

Thoracic/Cardiac Scanning CONTINUED

14.20 – 14.35

Review: Abdominal/Renal Ultrasound

Dr Pasupathy Sivasothy

- Why abdominal/renal ultrasound
- Normal abdominal/renal anatomy under ultrasound
- Scanning techniques
- Pathologies:
 - Assessment of presence of ascites
 - Basic assessment of the urinary tract
 - Looking for evidence of obstruction
- Live demo (dual screen): What delegates will need to do during the Practical Session

14.35 – 15.45

PRACTICAL SESSION

Abdominal/Renal Ultrasound

Each delegate is asked to identify and maximise the image quality of:

- the abdominal cavity
- the urinary tract

15.45 – 16.00 **Tea and coffee break**

16.00 – 17.30

Keynote Lecture and Demos

The BLUE Protocol and Reporting

Prof Dr Daniel Lichtenstein, Medical Intensivist and Visiting Professor, Medical Intensive Care Unit, University Hospital Ambroise-Paré, Paris

- The BLUE [Bedside Lung Ultrasound in Emergency] protocol
- Identifying the Upper and Lower BLUE points
- Key points to remember during the day ahead

including live demos (dual screen) on patients



17.30

Close

DAY 2: THURSDAY 1 NOVEMBER 2018

08.30 – 09.00 **Registration and introduction**

09.00 – 10.30

Scanning for Pathologies: Abdo/Renal

Delegates split into groups.

Delegates rotate through different skills stations, covering different pathologies.

Stations include scanner and patient. Some stations will also include iMacs with videos.

10.30 – 10.45 **Tea and coffee break**

10.45 – 12.15

Scanning for Pathologies: Thoracic and Cardiac

Delegates split into groups.

Delegates rotate through different skills stations, covering different pathologies.

Stations include scanner and patient. Some stations will also include iMacs with videos.

12.15 – 13.15 **Lunch**

13.15 – 14.45

Scanning for Pathologies: Thoracic and Cardiac

CONTINUED

14.45 – 15.00 **Tea and coffee break**

15.00 – 15.15

Review: Peripheral Vascular (inc. DVT) and Ultrasound-Guided Procedures

Dr Pasupathy Sivasothy

- Why peripheral vascular ultrasound
- Normal peripheral vascular anatomy/structures
- Assessment of deep venous thrombosis
- Using Doppler
- Using ultrasound to guide peripheral venous cannulation, pleural aspiration and ascitic drainage
- Live demo (dual screen): What delegates will need to do during the Practical Session

15.15 – 16.15

PRACTICAL SESSION

Peripheral Vascular (inc. DVT) and Ultrasound-Guided Procedures

Each delegate is asked to:

- Identify the 'Mickey Mouse' sign (common femoral artery, common femoral vein and saphenofemoral junction)
- Find the common femoral vein (CFV)
- Find the superficial femoral vein (SFV)
- Find the popliteal vein (PV) and point of trifurcation
- Use compression to distinguish normal v abnormal
- Demonstrate technique for peripheral venous access [on blue phantoms]

16.15 – 17.15

Clinical Scenarios

Case scenarios, with immediate feedback, to help you assess what you've learned.

Each scenario challenges delegates to use their medical knowledge and adopt a systematic approach.

17.15

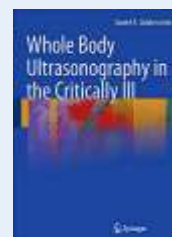
Completion of Feedback Forms and Certificates of Attendance

Visiting Faculty



Prof Dr Daniel Lichtenstein, Medical Intensivist and Visiting Professor, University Hospital Ambroise-Paré, Paris

Daniel is a Medical Intensivist and Visiting Professor who has worked at the Medical ICU, Ambroise Paré University Hospital, since 1989. In 1991, he defined critical ultrasound, a whole-body approach to the critically ill, mainly focused around lung ultrasound with extensions to acute respiratory failure (the BLUE-protocol), circulatory failure (the FALLS-protocol) and interventional ultrasound. He has published widely, including the textbook, *Whole Body Ultrasonography in the Critically Ill* (Springer) and dozens of articles on critical, venous and lung ultrasound.



Pre-course learning materials

Lectures (videos and slides) are made available online:

- allowing delegates to view lectures at their leisure before the course (and revision after the course); and
- allowing **much more time for 'hands-on' learning and practice** on the course days proper

Delegates are given password-protected access.

NB For those seeking FAMUS accreditation, the first steps are: (1) register with the FAMUS administrator; (2) identify a Supervisor to oversee your training; (3) complete the e-learning module covering basic theory, [ICE-BLU online e-learning module](#); and (4) Enrol on a FAMUS approved course. See the [FAMUS Curriculum Pack](#) (pdf).

Please note that the online lectures are a requirement for the course and complement but **do not** replace the requirement to complete the ICE-BLU module. Most trainees will probably find the module a bit more challenging than the online lectures.

The online lectures

Introduction including Training Pathways (10 mins).

Physics of Ultrasound and Knobology (13 mins).

Ultrasound Anatomy (29 mins).

Thoracic Pathologies under US (33 mins).

Abdo/Renal US (28 mins).

Cardiac US (32 mins).

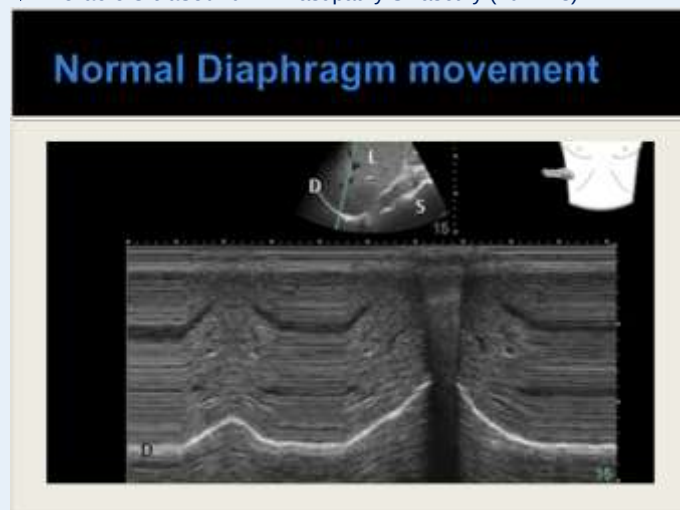
DVT/Vascular Peripheral (14 mins).

The online lectures are **required viewing** before the course:

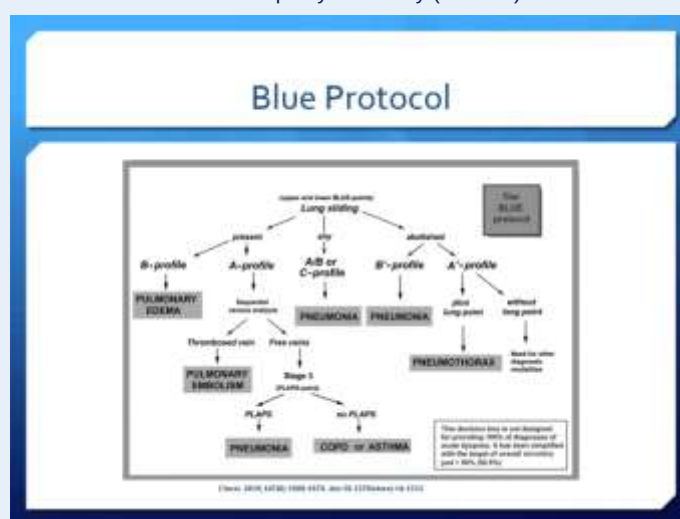
- After booking, the participant will receive a link, username and password, allowing immediate online access for up to six months after the course.
- After viewing, the participant can obtain an Online Learning Certificate.
- On the course days proper, participants will have opportunities to ask questions during the Review sessions before each practical session.



▼ **Thoracic Ultrasound:** Dr Pasupathy Sivasothy (20 mins).



▼ **BLUE Protocol:** Dr Pasupathy Sivasothy (20 mins).



References

Suggested resource:

- The Ohio State University ultrasound app, [POC Ultrasound Guide](#): a free guide to obtaining high quality ultrasounds of patients at the Point Of Care. For iPhones and iPad.

Suggested publications for further study:

- Echo Made Easy, 3rd Edition. Sam Kaddoura. Elsevier, 2016.
- Point of Care Ultrasound. Nilam J Soni, Pierre Kory, and Robert Arntfield. Elsevier, 2015.
- Practical Ultrasound: An Illustrated Guide, 2nd Edition. Jane Alty and Edward Hoey. CRC Press, 2014.

BOOKING FORM

Focused Acute Medicine Ultrasound **Thoracic Ultrasound in the Assessment of the Acutely Unwell Patient**

A practical course organised by Infomed Research & Training,
on **Wednesday 31 October** and **Thursday 1 November 2018**,
at the Holiday Inn Cambridge,
Lakeview, Bridge Road, Cambridge CB24 9PH

COURSE FEE

Early bookers rate

(booking and paying before Tue 31 Jul 18):

£495 (inc. VAT)

Standard rate

(booking and paying on or after Tue 31 Jul 18):

£545 (inc. VAT)

Course fee includes password protected web access to lecture slides (pdf), lunch and refreshments and attendance certificate.

How To Book

You can **BOOK ONLINE** at: www.infomedltd.co.uk
or **BOOK OVER THE PHONE** on **020 3236 0810**.

Alternatively, complete delegate and payment details,
below, and post to:

Infomed Research & Training Ltd,
2nd Floor, Northside House,
69 Tweedy Road, Bromley BR1 3WA

Confirmation, venue map and receipt will follow by email.

General queries: e-mail courses@infomedltd.co.uk.

For a copy of this programme: www.infomedltd.co.uk

For information on accommodation: www.infomedltd.co.uk

DELEGATE DETAILS

Title First Name

Surname

Job Title

Hospital

Address for correspondence ☐ Home ☐ Hospital

.....

.....

.....

Post Code Country

Tel

Email *

* Required for confirmation

Special needs and special dietary requirements

.....

PAYMENT DETAILS

☐ Please charge my credit/debit card with the sum of £

☐ MasterCard

☐ Visa

Card holder name (exactly as it appears on the card):

.....

Card Number

/ /

Expiry Date / CVV Number

(i.e. the last 3 digits on central signature strip on reverse side of the card)

☐ By BACS: Barclays Bank, Bromley Branch,
167 High Street, Bromley, Kent BR1 1NL,
Sort code: 20-12-26 Account: 43929159

TERMS AND CONDITIONS

1) The subscription fee includes password protected web access to lecture slides (pdf), lunch and refreshments. 2) The completed booking form together with full payment must be sent to Infomed Research and Training Limited to secure a booking. Submission of this booking constitutes a legally binding agreement. 3) Payment must be received in full prior to the event. Course details will be issued subject to receipt of payment. We cannot be held responsible for the non-arrival of registration information. If you have not heard from us within 7 days prior to the Course, please contact us. 4) Bookings can be made by telephone but payment must be made in full by credit card at time of booking. 5) Written cancellations received 6 weeks prior to the Course will be accepted and refunded minus an administration charge of £70. We regret that no refunds can be made for cancellations received after that date, for whatever reason, although substitutions will be accepted if notified in writing 5 days or more prior to the event. 6) The Company reserves the right to alter the date, content and timing of the programme or the identity of the speakers due to reasons beyond its control. Under these circumstances, The Company will not refund delegates any expenditure made on pre-booked accommodation or travelling. 7) The Company does not accept responsibility for loss/damage delegates' property/personal effects whilst at the Course.

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