



**The Liverpool Hands-on Cardiac Pacing Course**  
(12th edition)

Wednesday and Thursday **13-14/11/2024**

Leonardo Hotel, Liverpool, L3 4FN

**DIRECTOR**

Prof. Khaled Albouaini



**ORGANISERS**

[www.cardiologycases.co.uk](http://www.cardiologycases.co.uk)

Dr Allam Harfoush

**AIMED AT**

Cardiology trainees (ST3-6), Clinical & Research Registrars, Cardiac Physiologists, Medical Trainees intending to train in cardiology

(30 is max capacity, 3 in each group on day 2)

**SPONSORS**

(In 2023 course, yet to be confirmed for 2024 course)

**Boston  
Scientific**



**Medtronic**



**BIOTRONIK**

APC Cardiovascular

# FACULTY

<b>Dr Khaled Albouaini</b>	Consultant Cardiologist	Liverpool University Hospitals, LHCH
<b>Sandra Belchambers</b>	Senior Cardiac Physiologist	Liverpool Heart and Chest Hospital
<b>Laura Brodie</b>	Senior Cardiac Physiologist	Liverpool Heart and Chest Hospital
<b>Dr Shabanna Din</b>	Consultant Cardiologist	Warrington Hospital, LHCH
<b>Dr Hani Essa</b>	Cardiology SpR EP/devices	Liverpool Heart and Chest Hospital
<b>Dr Dan Garner</b>	Consultant Cardiologist	Arrow Park Hospital, LHCH
<b>Dr Patrick Hayle</b>	Senior Cardiac Device Fellow	Liverpool Heart and Chest Hospital
<b>Dr Nikola Kozhuharov</b>	Consultant Cardiologist	Bern, Switzerland
<b>Dr Jennifer Llewellyn</b>	Consultant Cardiologist	Chester, LHCH
<b>Dr Mostafa Snosi</b>	Consultant Cardiac Surgeon	Liverpool Heart and Chest Hospital
<b>Mr Ragheb Traify</b>	Cardiac Surgeon	Wythenshawe Hospital

## Venue

Leonardo Hotel is situated near Albert Dock and other incredible Liverpool Landmarks. It is within walking distance of all the city's major attractions and of the train station.

## Registration

Registration will open on 1/4/24. The course fee is £450 for doctors and £300 for non-doctors (hotel stay is not included). Fee is payable to Cardiology Cases Ltd, Sort Code: **20-51-08**, Account No: **80516988** (with name as a reference). Once the fee is paid, please notify us by emailing **cardiologycasesinfo@gmail.com**. The course was over subscribed for the last few years so book your place ASAP. Cancellations after 13/10/2024 are non-refundable.

## Certificates and Presentations

Will be emailed to all delegates after filling the feedback form.

## Why Choose Us?

We have been running this very successful and unique course for 10 years with excellent feedback from courses delegates (see page 5). You can find more details on this course (and our other courses) on our website: [www.cardiologycases.co.uk](http://www.cardiologycases.co.uk). Cardiology Cases - UK is the largest free educational page of its kind on Facebook with a reach of more than 250000 members.

# AGENDA

## Day 1- Theory Day - Wednesday 13/11/2024

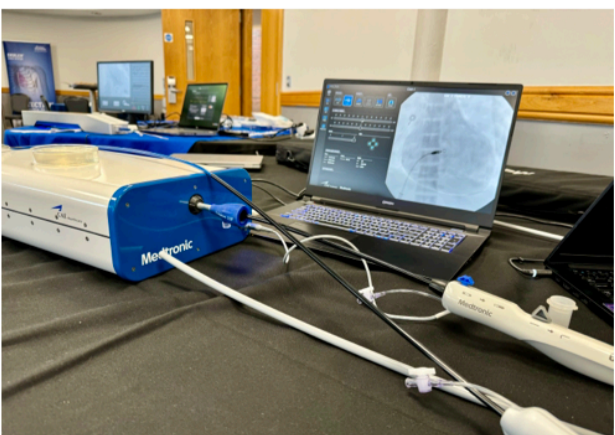
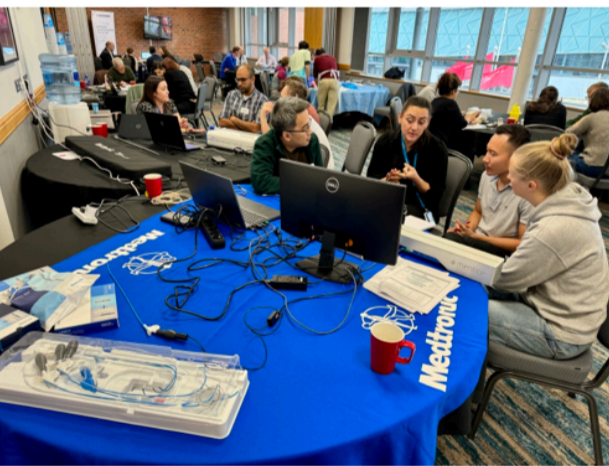
08.30 - 09:00	30 min	<b>Registration</b>	
09:00 - 09:10	10 min	<b>Introduction</b>	Dr Albouaini
09:10 - 10:00	50 min	<b>Indications for device therapy / Pacing modes</b>	Dr Din
10:00 - 10:45	45 min	<b>Tachyarrhythmias, rhythm discrimination, zones....</b>	Dr Din
10:45 - 11:00	15 min	<b>Coffee break</b>	
11:00 - 12:30	90 min	<b>How to implant a pacemaker - from A to Z</b>	Dr Albouaini
12:30 - 13:30	60 min	<b>Lunch</b>	
13:30 - 14:30	60 min	<b>Recorded Case 1 (dual chamber PPM)</b>	KA/SD/JL/SB
14:30 - 15:15	45 min	<b>Recorded Case 2 (LV lead)</b>	KA/SD/JL/SB
15:15 - 15:30	15 min	<b>Coffee break</b>	
15:30 - 16:30	60 min	<b>Complications</b>	Dr Llewellyn
16:30 - 17:00	30 min	<b>Interactive Cases/ Conduction System Pacing</b>	Faculty/ Dr Kozhuharov

## Day 2 - Hands-on Day - Thursday 14/11/2024

10:00 - 16:30

Due to overwhelming requests to increase the hands-on time, we have now dedicated a full day for the hands-on sessions. Delegates will be allocated to small groups of 3 to enable direct supervision in a friendly learning environment. Each clinical station will have two senior clinician.

These sessions will cover the practical aspects of cardiac pacing (**see the 10 stations on next page**). We use the latest simulators (TPW DOPS, brady pacing, LV, Conduction System pacing, Leadless PPM) and anatomical models. There will be surgical wound closure station and a wet lab station which involves dissection of pig hearts (supervised by cardiac surgeons).



## DELEGATES FEEDBACK

"As an IMT3 I found this course very helpful . Lectures were very interesting and informative. Not boring at all. Thoroughly enjoyed the simulation station. Lots of things to learn and everyone was accommodating to the level of skill and motivated to build up on it"

"Extremely useful course for new cardiology registrars. Very important to attend this course to set a good foundation for pacing, to then build on that in Cath lab and pacing clinics. Day 2 (with 10 practicals stations) was absolutely brilliant and should not be missed"

"Amazing course!! .. really helpful and very relevant to cardiology training. I have learnt a lot and really enjoyed every lecture and station. Also, very organised, I can't recall another course I attended that stuck to the schedule without compromising content". "As usual a really friendly Course with an atmosphere that encouraged Delegate's to feel they could participate and ask questions"

"This course covered everything I could ever have needed to know as an ST4 beginning my career in cardiology. From the basics of pacemaker modes to the steps for implantation and then hands on experience in putting in devices and troubleshooting has made me feel much more confident with pacing heading back to the clinical environment. The faculty were incredibly supportive and patient and made me feel so comfortable to ask anything I was unsure about. I would like to commend Dr Khalid and the team for their excellent organisation skills that made the course run so smoothly and the passion with which they all taught and engaged us in their work. I certainly left this course thinking that pacing could be for me long term and to be able to have so much exposure in such a short space of time was really appreciated. Thank you!!"

"Access to so many aspects of cardiology in one room was fabulous. The faculty and industry trainers were superb and I learned so much in one day from the work stations - it was like condensing a jam packed cardiology rotation into one day. Was fun and the most informative course I have ever attended". "Communication regarding course was excellent"

"I really enjoyed the simulators as I have not had any hands-on experience in the lab yet. The lectures were really relevant and engaging. The organisation and attitude of the team was really positive and friendly"

"The course was very helpful and in a comfortable and friendly atmosphere, especially at the beginning with Prof Khaled who was extremely nice and friendly, and Dr Allam who was really friendly and helpful"

"I am positive that this course gave me a push forward in my career". "Probably the best course I have ever attended". "Really enjoyed the problem solving cases. Really helped consolidate the knowledge we learnt. Day 2 was amazing! especially the Medtronic stations and the pig heart anatomy station"

"Really well planned and organised pacing course! It has really helped my understanding into pacing as a ST4 registrar and makes me more confident assisting in pacing theatre! All the stations on the second day were very educational and all the faculty were extremely accommodating and patient. I particularly enjoyed the EGM session, troubleshooting pacing checks, TPW and surgical skills station. The lab pig heart session was also a great touch in to understanding anatomy of the heart! I would highly recommend this course to colleagues!"

## CONT. DELEGATES FEEDBACK

"Hands-down, the best cardiology course I've ever attended! The practical sessions were brilliant, and content was delivered at the right level". "I feel more confident with device implantation and troubleshooting, and I highly recommend this course to all cardiology trainees"

"Excellent course, there was in-depth learning which is very helpful and especially the video showing step-by-step for pacemaker implantation is invaluable! The practical stations were also excellent giving hands on experience in device interrogation and pacemaker lead insertion through simulation setting"

"All of the stations on day 2 were very accommodating to myself as a physiologist and ensured that they tailored everything to make sure I still gained a lot from the stations"

"Come to London! It would be nice to have some device troubleshooting scenarios to take away as homework with the answers provided so that we can consolidate learning after the course. TPW station was great - please keep! The pigs heart dissection was so helpful - I finally understood where the sinus node and AVN actually are!"

"This course should be an integral part to cardiology training, and a part of sign off for the EP and pacing curriculum (similar to the ACHD course)"

"Thanks for the wonderful work you're doing. It's refreshing to see the work you're doing with colleagues who you trained at some point. It is admirable and a source of hope in a specialty otherwise notorious for its culture"

"I am an IMT3 and I have been to two other device programming course. There always seem way too complicated for me. However, this is the first course that I actually learn something about device programming. And I am considering to take this course again in the future. I sincerely hope that the faculty can considering allowing more standalone hands on day (day 2) for people who have attended the course before"

"Prof Khalid is very welcoming and elaborate on things very nicely. Video case for brady and LV lead were very good and the way of presenting it is very good. Wet lab - cardiac anatomy station is crucial - clap for surgeons to get all the attention of a physician for the first time. Give more time and may be 2 stations on surgical skills would be nice"

"The hands on day was especially excellent, taking into consideration the level that the trainees in a specific group were at. As IMT3 trainees we felt very accommodated and found the course very useful and I think it should be more widely advertised to IMT3s with interest in Cardiology"

"Prof Albouaini has always been very supportive. He always encourages and support trainees for any available opportunities". "Very organised Food is good nothing to blame. Prof Khalid lectures and teaching points were great"

"A great course. Venues, content, delivery, all extremely relevant. In particular the practical day. That is a must for new starters in Cardiology!"