

The Liverpool Hands-on Cardiac Pacing Course

(14th edition)

Thursday and Friday 26-27/11/2026

Leonardo Hotel, Liverpool, L3 4FN

DIRECTOR

Prof. Khaled Albouaini
Consultant Cardiologist

ORGANISERS

www.cardiologycases.co.uk
Kinda Alameh & Dr George Abo Deb

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

To be confirmed
2025 course sponsors were

Boston
Scientific

Medtronic

BIOTRONIK KIMAL TauroPace™

FACULTY

Dr Khaled Albouaini	Consultant Cardiologist	Liverpool University Hospitals
Sandra Belchambers	Senior Cardiac Physiologist	Liverpool Heart and Chest Hospital
Laura Brodie	Senior Cardiac Physiologist	Liverpool Heart and Chest Hospital
Dr Shabanna Din	Consultant Cardiologist	Liverpool Heart and Chest Hospital
Dr Patrick Hayle	Consultant Cardiologist	Liverpool Heart and Chest Hospital
Dr Nikola Kozuharov	Consultant Cardiologist	Bern, Switzerland
Kirsty Little	Senior Cardiac Physiologist	Liverpool University Hospitals
Dr Jennifer Llewellyn	Consultant Cardiologist	Liverpool Heart and Chest Hospital
Chris Stanton	Senior Cardiac Physiologist	Liverpool University Hospitals
Mr Ahmed Torky	Cardiac Surgeon	Liverpool Heart and Chest Hospital
Mr Ragheb Traify	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 5/1/26. The course fee is £450 for doctors and £300 for non-doctors (hotel stay is not included). The 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 oversubscribed for the last few years, so book your place ASAP. Cancellations after 25/10/2026 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 unique course yearly since 2012. We received outstanding feedback from course delegates (see page 5-8). You can find more details on this course (and our other courses) on our website: www.cardiologycases.co.uk. Cardiology Cases - UK is the largest free educational page of its kind on Facebook with a reach of more than 250,000 members.

AGENDA

Day 1- Theory Day - Thursday 26/11/2026

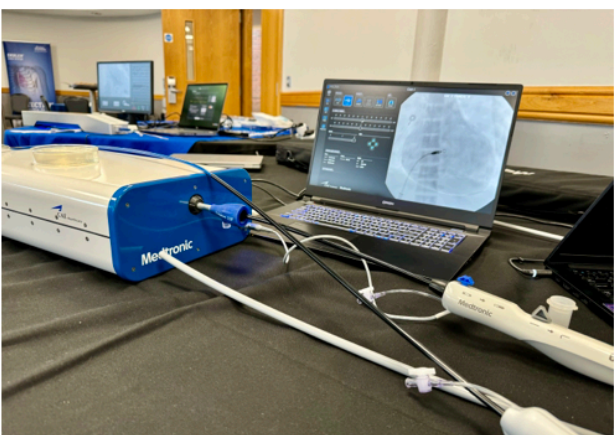
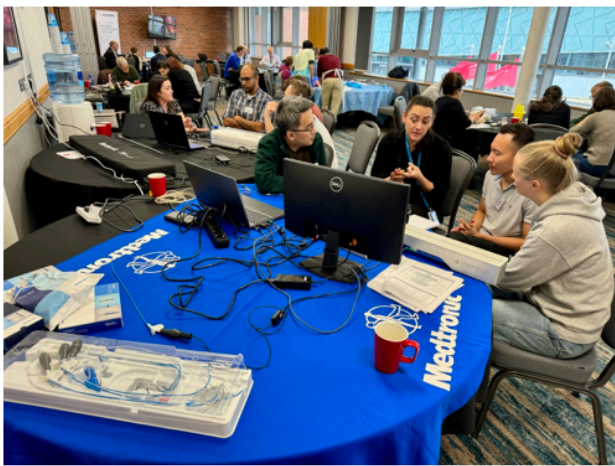
09.30 - 10:00	30 min	Registration	
10:00 - 10:10	10 min	Introduction	Dr Albouaini
10:10 - 10:55	45 min	Indications for device therapy / Pacing modes	Dr Din
10:55 - 11:40	45 min	Tachyarrhythmias, rhythm discrimination, zones....	Dr Din
11:40 - 12:30	50 min	How to implant a pacemaker from A-Z	Dr Albouaini
12:30 - 13:30	60 min	Lunch	
13:30 - 14:30	60 min	Cont. A-Z and Recorded Case 1 (RV RA leads)	Faculty
14:30 - 15:15	45 min	Recorded Case 2 (LV lead)	Faculty
15:15 - 15:30	15 min	Coffee break	
15:30 - 16:00	30 min	Conduction System Pacing	Dr Kozhuharov
16:00 - 16:30	30 min	Complications	Dr Llewellyn
16:30 - 17:00	30 min	Interactive Cases (time permitting)	Dr Albouaini

Day 2 - Hands-on Day - Friday 27/11/2026

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 clinicians.

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



DELEGATES FEEDBACK 2025

"Fantastic course all round. Worth every penny and great faculty. Thoroughly enjoyed it and has made me excited to get pacing under supervision and build upon these skills."

"Getting to practice on simulators was really useful. Learning about which views are useful to visualize different anatomy."

"The glass heart was very helpful for orientation and introduction into EGMs. The simulators were very helpful for wound closure technique. Glad that CSP and CRT were also covered."

"This was an outstanding and well-timed course for new cardiology ST4s, offering a practical introduction to cardiac pacing. The combination of a theory day followed by a hands-on practical day was highly effective. Expert-led lectures offered valuable everyday tips, and the practical stations, including sim-guided lead insertion, pig heart dissection, ILR implantation, TPW placement, troubleshooting, and device interrogation, were extremely informative and relevant. Personally, I found the course excellent value for money and gained skills that will greatly enhance my pacing sessions. It was two days of excellent teaching and practical experience. I believe this course should be mandatory for all ST4 cardiology trainees."

"The course is designed exceptionally well and the first day of lectures were actually crucial for the delegates to get the most out of the practical sessions on day 2 with many concepts being revisited in the simulated sessions."

"Very well organized. The timing on day 2 was optimal at each station. Overall the course has improved my confidence to approach cases."

"I was impressed with the real pig heart used for demonstration. Truly, a lot of thought went into the organisation of this course. Thank you for making such an impressive effort."

"Venue, facilities, comprehensive information on devices, inclusion of novel pacing modes and surgical techniques. Dissection station was outstanding."

"Absolutely fantastic course. I felt my knowledge significantly expanding following attending it. I felt the pace was good and it was appropriately over 2 days."

"This is the best cardiology training course that I have ever attended. The combination of didactic teaching and practical sessions is just perfect, and we were so lucky to have enthusiastic trainers for each practical session. Special shout to Dr. Din for her 2 opening lectures - she delivered hands-down the best cardiology lectures I have ever attended; they were clear, perfectly pitched, and a model of how to deliver complex subjects in a simple and systematic fashion."

"All topics are relevant and obvious that all faculties are willing to teach us like their family members."

DELEGATES FEEDBACK 2025 CONT.

"Good overall from implanting to basics of pacing, the lady on the Medtronic CS implanting station was very good at teaching and clearly explaining the process and obtaining capture."

"I found the station with the physiologists going through EGMs especially helpful. They were very kind and thorough. The best station in my opinion."

"Too much effort we can see in organising the course, expert faculty are very friendly and I am very thankful and enjoy both days!"

"Too much effort we can see from organising the special two days, and expert faculty and very friendly and engaging."

"Everything was fantastic. The content and the delivery of the lectures were brilliant, and the hands-on practice was a really good experience. I particularly enjoyed and learnt the most from the suturing station, the simulators, Boston station and the physiologist station."

"A really interesting and useful course. The first day helped to provide a good basis with interactive talks delivered eloquently. The second day built on this. I've had very little experience with pacing but this course is definitely making me consider it as a subspecialty."

"The pacing course was an excellent learning experience. One of the strongest aspects was the outstanding lecturers, each bringing exceptional knowledge and extensive practical experience. Having such a diverse group with senior clinicians and skilled physiologists created a rich learning environment. The combination of theoretical expertise and hands-on, real-world insight made the teaching clearer, more relevant, and highly engaging. It was extremely valuable to learn from people with extensive experience. This balance of knowledge and experience significantly improved my understanding of pacing and enhanced my confidence."

"The course was well organized from A to Z. I hope if there are more videos for pacemaker implantation as Dr. Albouaini demonstrated."

"All of the sessions were very good and fully deserved to be rated 5/5. This is an absolutely essential course for all new cardiology trainees. This is hands down the best cardiology/non-cardiology course I have ever attended and has made me enthusiastic to engage with the pacing side of cardiology."

DELEGATES FEEDBACK 2022-2024

"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!"

DELEGATES FEEDBACK 2022-2024: CONT.

"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!"