

Ninth European Society of Human Genetics Training Course on Cardiac Genetics



March 15-18, 2025
Manchester

This course aims at delivering up-to-date knowledge on cardiac genetics to cardiologists, genetic counsellors, clinical and molecular geneticists in training or certified. It creates the best opportunity for interaction and discussion with experts from all over Europe. The faculty combines experts from many fields of cardiac genetics known for their teaching skills. Participants are encouraged to present a clinical or genetic case for on-site discussion.

Directors of the course:

Bill Newman (Manchester) and Bart Loeys, Johan Saenen (Antwerp)

PROGRAM

Day 1 program: Saturday, March 15, 2025

THEME: *BASICS IN CARIOGENETICS*

Soft drink/coffee + biscuit on arrival

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|---------------|--|
| 15:30 – 15:45 | Course Introduction Bill Newman & Bart Loeys |
| 15:45 – 16:15 | A clinical geneticist's approach to inherited cardiac disorders Bart Loeys |
| 16:15 – 16.45 | Psychological aspects of living with ICCs: babies to seniors Natalie Moreton (Manchester) |
| 16:45 – 17:15 | A patient perspective on cardiogenetics Becky Alexis Martin (Bradford) |
| 17:15 - 17.30 | Mystery Case Johan Saenen |
| 17:30 – 18:00 | <i>REFRESHMENT BREAK (juice/water)</i> |
| 18:00– 19:30 | Genetic basics for Cardiologists Clare Hopton (Manchester)
Cardiology concepts for Geneticists Johan Saenen |

Free time for evening meal in Manchester

Day 2 program: Sunday, March 16, 2025

THEME: *STRUCTURAL HEART and AORTIC DISORDERS*

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|---------------|--|
| 09:00 – 10:00 | Hypertrophic cardiomyopathy Rhys Beynon (Manchester) |
| 10:00 - 11:00 | Dilated cardiomyopathy Jacquelyn Hooper (Manchester) |
| 11:00 – 11:30 | <i>COFFEE BREAK (coffee/tea/water +biscuits)</i> |
| 11.30 – 12:00 | Arrhythmogenic Ventricular Cardiomyopathy Simon Ray (Manchester) |
| 12:00 – 13:00 | Aortopathies Bart Loeys |
| 13:00 – 14:00 | <i>LUNCH</i> |
| 14:00 – 15:00 | Pathology of inherited cardiac disorders Joe Westaby (London) |

- 15.00 - 15.30** **Molecular Autopsy** [Bill Newman](#)
- 15:30 – 17:00** **Imaging workshop – echocardiography/Cardiac MRI**
- [Andrew Crean \(Manchester\)](#) -> cardiologists
- [Nicole Sturkenboom \(Antwerp\)](#) -> geneticists
- 17:00 – 17:15** **COFFEE BREAK + water/juice**
- 17.15 - 18.00** **Mystery case** [Johan Saenen](#)
- 18:00 – 19:00** **Case Discussions** [Johan Saenen/Bart Loeys/Bill Newman](#)

Free time for evening meal in Manchester

Day 3 program: Monday, March 17, 2025

THEME: PRIMARY ELECTRICAL DISORDERS

- 09:00 – 09:30** **Basic concepts in Ion channel disease** [Johan Saenen](#)
- 09:30 – 10:00** **Long & Short QT Syndromes** [Johan Saenen](#)
- 10:00 – 10:30** **Catecholaminergic polymorphic ventricular tachycardia** [Luigi Venetucci \(Manchester\)](#)
- 10:30 – 11:00** **COFFEE BREAK**
- 11:00 – 11:30** **J-wave Syndromes, including Brugada syndrome** [Charlie Pearman \(Manchester\)](#)
- 11:30 – 13:00** **Electrophysiology workshop –**
- [Johan Saenen](#)-> geneticists
- [Luigi Venetucci](#) -> cardiologists
- 13:00 – 14:00** **LUNCH**
- 14:00-15:00** **Key Note Lecture: The future of ICC diagnosis and treatment**
- [James Ware \(Imperial College, London\)](#)
- 15:00 – 15:30** **Next generation sequencing – different approaches** [Bart Loeys & Bill Newman](#)
- 15:30 – 16:30** **Workshop/Quiz NGS interpretation**
- [Kate Thomson \(Oxford\)](#) > geneticists
- [James Eden \(Manchester\)](#)> cardiologists
- 16:30 – 17:00** **COFFEE BREAK**
- 17:00 – 17:30** **Mystery case discussion - conclusion** [Johan Saenen](#)
- 17.30 - 18.30** **Case presentations by Participants**
- [Bart Loeys/ Bill Newman/Johan Saenen](#)
- 19:00** **COURSE DINNER for all delegates and faculty in Manchester**

Day 4 program: Tuesday, March 18, 2025

THEME: CONGENITAL HEART DISEASE

08:00 – 09:00 Heart embryology [Marco De Ruiter \(Leiden\)](#)

09:00 – 09:30 Genetics of Congenital Heart Disease [Bernard Keavney \(Manchester\)](#)

09:30– 10:00 iPSC approaches to understand inherited cardiac disorders [Maaïke Alaerts](#)

10:00 – 10:30 COFFEE BREAK

10:30 – 11:00 Syndromic/metabolic inherited cardiac disorders [Claire Hopton \(Manchester\)](#)

11:00 – 11:30 Management of inherited cardiac disorders in competitive and leisure athletes [Aneil Malhotra \(Manchester\)](#)

11:30 – 12:00 Polygenic risk scores for inherited cardiac disease [Sean Zheng \(London\)](#)

12:00 – 13:30 Case presentations – [Bill Newman/Bart Loeys/Johan Saenen](#)

13:30 – 14:15 LUNCH

14:15 – 14:45 Cardiac Disorders in Pregnancy [Bernard Keavney \(Manchester\)](#)

14:45 - 15:00 END OF COURSE [Bart Loeys/Johan Saenen/Bill Newman](#)

