This course aims at delivering up-to-date knowledge on cardiogenetics to cardiologists, genetic counselors, 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 cardiogenetics known for their didactic skills. Participants are encouraged to present a clinical or genetic case in a Poster format for on-site discussion.

**Directors of the course:**
Bill Newman (United Kingdom) and Bart Loeys, Johan Saenen (Belgium)

**PROGRAM**

**Day 0 program: Saturday, October 2nd, 2021**

**THEME: BASICS IN CARDIOGENETICS**

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
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<tbody>
<tr>
<td>15:30 – 15:45</td>
<td>Course Introduction</td>
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<tr>
<td>15:45 – 16:15</td>
<td>A clinical geneticists’ approach to inherited cardiac disorders</td>
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<tr>
<td>16:15 – 16:45</td>
<td>Counselling considerations in inherited cardiac disorders</td>
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<td>16:45 – 17:15</td>
<td>A patient perspective on cardiogenetics</td>
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<td>17:15 – 17:45</td>
<td>REFRESHMENT BREAK</td>
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<td>17:45 – 19:30</td>
<td>Genetic basics for Cardiologists</td>
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<td>Cardiology concepts for Geneticists</td>
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**Day 1 program: Sunday, October 3rd, 2021**

**THEME: STRUCTURAL HEART and AORTIC DISORDERS**

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
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<tbody>
<tr>
<td>09:00 – 10.00</td>
<td>Hypertrophic cardiomyopathy</td>
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<tr>
<td>10.00 – 11.00</td>
<td>Dilated Cardiomyopathy</td>
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</table>
11:00 – 11:30 **COFFEE BREAK**

11:30 - 12.00 Arrhythmogenic Right Ventricular Cardiomyopathy
11:30 – 12.30 Aortopathies

13:00 – 14:00 **LUNCH**

14:00 – 15:00 Key Note Lecture:
15:00 – 16:30 Pathology of inherited cardiac disorders with application of artificial intelligence

16:30 – 17:00 **COFFEE BREAK**

17:00 – 18:30 Imaging workshop – echocardiography/Cardiac MRI
18:30 – 19:30 Case Discussion

20:00 **WALKING DINNER in UZA**

**DAY 2 program: Monday, October 4th, 2021**

**THEME: PRIMARY ELECTRICAL DISORDERS**

08:30 – 09:00 Developing an inherited cardiac service
09:00 – 09:30 Basic concepts in Ion channel disease
09:30 – 10:15 Long & Short QT Syndromes
10:15 – 10:45 Catecholaminergic polymorphic ventricular tachycardia

10:30 – 11:00 **COFFEE BREAK**

11:15 – 11:45 J-wave Syndromes
11:45 – 13:00 Electrophysiology workshop – ECG/Ex ECG/Ajmalin/Adrenalin testing

13:00 – 14:00 **LUNCH**

14:00 – 14:30 Next generation sequencing – different approaches
14:30 – 15:00 Molecular autopsy
15:00 – 16:30 Workshop/Quiz NGS interpretation

16:30 – 17:00 **COFFEE BREAK**

17:00 – 18:15 Case presentations by Participants

18:15 Bus transfer to Hof Van Liere

19:00 **COURSE DINNER AT Hof Van Liere (faculteitsclub)**
DAY 3 program: Tuesday, October 5th, 2021

THEME: CONGENITAL HEART DISEASE

08:30 – 09:30     Heart embryology
09:30 – 10:00     Genetics of Congenital Heart Disease
10:00 – 10:30     iPSC approaches to understand inherited cardiac disorders

10:30 – 11:00    COFFEE BREAK

11:00 – 11:45    Syndromic/metabolic inherited cardiac disorders
11:45 – 12:15    Neuromuscular cardiomyopathy
12:15 – 13:00    Management of inherited cardiac disorders in competitive and leisure athletes

13:00 – 14:00    LUNCH

14:00 – 15:00    Case presentation –
15:00            END OF COURSE