**Translational Research in Cardiovascular Diseases**

**9-11 December 2019**

Cardiovascular disease (CD) produces immense health and economic burdens worldwide. It is the leading cause of death in OECD countries. The prevalence and control of cardiovascular health factors and risks remain a major issue. During this course you will explore the environmental and genetic risk factors associated with myocardial infarction, valvular hear disease, aortic stenosis and other cardiovascular diseases. You’ll investigate current diagnostics, management and treatment strategies.

**Aims of the course:**

* To provide the participants with basic knowledge of cardiovascular diseases
* To highlight key milestones in translational research in cardiovascular diseases
* To teach participants about the current achievements in diagnostics and management of the cardiovascular diseases

**By the end of the course, the participants should be able to:**

* Name risk factors for development of cardiovascular diseases
* Describe pathophysiology of cardiovascular diseases
* Describe the genetics risk factors important for CD
* Discuss current strategies for CD diagnostics
* Describe the strategies for pharmacological treatment of CD

**Target group**:  PhD candidates (group limited to 15 participants)

**Prerequisites:** Working knowledge of English; Basic knowledge of cardiovascular system

**Duration of the course and workload**: 3 days, 24 hours

**Location:** GIGA B34, +5

**Educators:**

Cécile Oury and members of her team (GIGA-Cardiovascular Sciences). Julien Hanson (GIGA - Molecular Biology of Diseases); ULiege

**Course program:**

**Day 1. 9th December**

**9:00 – 12:00 –** CD burden - Basics in cardiovascular biology (C. Oury)

**12:00 - 13:00** – Lunch break

**13:00 – 17:00 –** Current management of valvular heart disease – Unmet medical needs (C. Oury)

**Day 2. 10th December**

**9:00 – 12:00 -** Innovative strategies for CD treatment (J. Hanson)

**12:00 - 13:00** – Lunch break

**13:00 – 17:00 -** Article Discussion (J. Hanson)

**Day 3. 11th December**

**9:00 – 12:00 –** Practical course: performance testing of valve prostheses (Laboratory of Cardiology)

**12:00 - 13:00** – Lunch break

**13:00 – 17:00 –** Diagnostic imaging in cardiovascular field (A. Nchimi)