Flow Physiology Course

Theoretical and practical training on flow physiology during extra corporeal bypass

A typical training session includes:

- Introduction to basic flow physiology and to the laws of physics
- Discussion and application of the various flow characteristics on blood-handling
- Demonstration in a wet lab
- Hands-on training on various applications with the centrifugal pump
- Trouble-shooting and practical training on a flow station (an artificial patient).
Dear Colleagues,

In order to improve patient’s survival following Extra Corporeal Circulation (ECC) in Heart Surgery, various methods have been implemented in the past. Both membrane and pump technology have been improved dramatically to treat flowing blood in a more gentle way. However, because of the multifactorial character of blood damage and inflammatory response during extra corporeal bypass, and to achieve the desired goal of improved patient management, the focus has shifted to a more multi-disciplinary approach.

Understanding the basic flow and physiologic rules, and being able to apply that knowledge during daily practice, will contribute to a better understanding of the causes of blood activation and will facilitate the clinician in facing the challenges of ECC. Improvements in component design and the need for a systematic approach will be highlighted and discussed during this two-day course.

You will leave with a better understanding of practical implementation of various techniques and technologies leading to better patient management. You will also gain insight into the clinical consequences of shear stress when it comes to building a system for ECC treatment from the venous cannula until the arterial cannula.

The use of a wet lab will facilitate your understanding of the critical issues and mechanical forces the blood is exposed to.

I look forward to welcoming you to The Netherlands and I am sure that besides learning and teaching, we will have fruitful discussions and you will enjoy your visit to Kerkrade.

Yours sincerely,

Christiaan Matheve
Senior Therapy Specialist
ECT Western Europe

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**GENERAL INFORMATION:**

**Venue:**
Medtronic Cardiac Surgery
Valkenhuizerlaan 16
6466 ND Kerkrade
The Netherlands

**TRAVEL INFORMATION:**

Fly into Brussels (110 km away from the venue) or Dusseldorf (75 km away from the venue); FYI, there is more traffic from Dusseldorf than from Brussels.

Transport and hotel needs will be arranged by Desiree van Tol in Kerkrade:
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