



Training and Education in Advanced Cardiovascular Hemodynamics

Time: Tuesday, December 10, 2019 – 17:00-20:30

**Place: Main Auditorium, Sourasky building, Floor -2, agaf D
Tel Aviv Medical Center**

[sign up to secure your place through TEACH@CRF.ORG](mailto:TEACH@CRF.ORG)

FACULTY:

- **Daniel Burkhoff, MD, PhD - Cardiovascular Research Foundation, New York**
- **Nir Uriel, MD - University of Chicago Medicine, Chicago**
- **Jiri Maly, MD, PhD - Institute for Clinical and Experimental Medicine, Prague**
- **Eyal Ben-Assa, MD - Tel Aviv Sourasky Medical center, Tel Aviv**

AGENDA:

Lecture	Time	Duration	Title
1	17:00	0:15	Overview of course objectives and agenda - How to navigate the Harvi app
2	17:15	0:45	Pressure-Volume Relations and Analysis of: - Preload / Afterload / Contractility / Diastole/ Basics of Myocardial Metabolism (MVO₂-PVA)
	18:00	0:15	- On line tutorial with cardiovascular simulation (HARVI)
	18:15	0:15	BREAK
3	18:30	0:45	Device-based approaches to acute heart failure and cardiogenic shock. - ECMO vs LVAD for Cardiogenic Shock
	19:15	0:15	- On line tutorial with cardiovascular simulation (HARVI)
4	19:30	0:45	Advanced physiology of aortic stenosis: - Valvular and Vascular interaction / low gradient AS/ MCS assisted valvuloplasty
	20:15	0:15	- On line tutorial with cardiovascular simulation (HARVI)
	20:30		Adjourn

****Light dinner and beverages will be provided****

OBJECTIVES:

This course will provide an in-depth introduction to the fundamentals of cardiovascular physiology relevant to understanding the hemodynamics and therapeutics of cardiogenic shock and aortic stenosis.

A key feature of this course will be hands-on experience with "HARVI," which is a novel cardiovascular simulation and textbook that allows you to learn about clinically important aspects of the pathophysiology and therapeutics in an interactive, on-line environment that provides a "learn-by-doing" experience.

You will be provided access to HARVI and we will be using it extensively throughout the program as we work through exercises to explore and compare the hemodynamic and metabolic effects of different therapies. **Accordingly, we encourage each of you to bring your laptop computer to this program.** In addition, it is important to be present from the beginning of the program, since we will be reviewing background information and instructions on use of the simulation; we will build on this foundation throughout the rest of the program.

Finally, the HARVI web-app is optimized to run in the CHROME browser on laptop and desktop computers. If you do not already have CHROME on your laptop computer, please visit:

<https://www.google.com/chrome/browser/desktop/index.html>