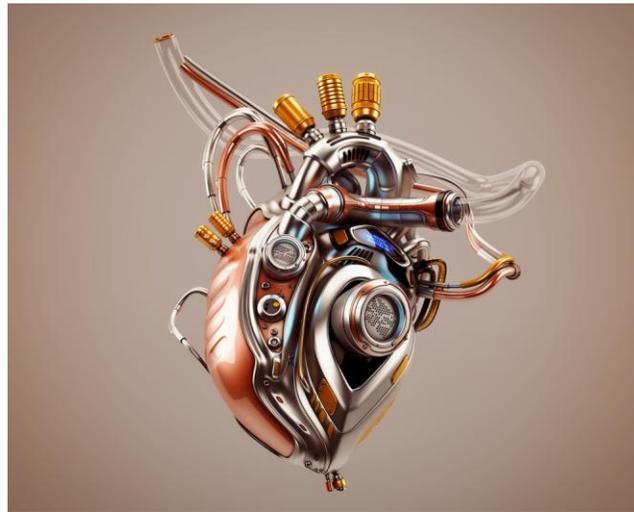




[AWARDS NIGHT] “Part Man Part Machine – The sum of its Dynamic Blood Pumps”



Dear Member:

You are invited to the Philadelphia Section Awards Banquet
6pm, April 17, 2018
Doubletree Suites, 640 Fountain Road, Plymouth Meeting, PA 19462

Annual dinner banquet, featuring local university student engineering projects, Section awards, and a presentation by Prof. J. Yasha Kresh on mechanical engineering contributions to human circulatory support devices.

Dinner costs with pre-registration: \$30 members and guests, \$10 students
Walk-ins \$40. Choice of Pan Seared Breast of Chicken, Dijon Crusted Salmon, or
Vegetarian

Register by April 13th with Dean Cave, dean.cave@lmco.com

Professor Kresh's presentation:
“Part Man, Part Machine: The Sum of Its Dynamic Blood Pumps”

Over our lifetime, the heart pulses and pumps many tens of times a minute. When it fails to deliver adequate blood supply, life as we know it, is no longer self-sustaining. The mechanical (machines) circulatory support and cardiac substitutes used today are effectively pulseless and are predominantly radial centrifugal (impeller) and axial continuous (propeller) subtypes -rotating many thousands of times a minute.

Multidisciplinary engineering ingenuity makes it possible to integrate biological and mechanical domains. This talk (show & tell) will present the state-of-art in Mechanical Circulatory Support (MCS) devices designed to: bridge heart-failure patients awaiting heart-transplantation, enable functional remodeling/recovery and provide long-term (destination therapy) cardiac pump replacement. The growing (ubiquitous) number of MCS implants and competing technologies has placed importance on the understanding man/heart – machine/pump interaction and the assembly of a highly interdisciplinary Cardiogenic Shock Team. These highly specialized ‘Pit Crew Shock Teams’ perform tasks far more mission/time - critical than changing the wheels / tires and refueling.

Yasha Kresh is Professor of Cardiovascular Surgery and Medicine (Cardiology), Research Director of Cardiothoracic Surgery, Director of Cardiovascular Biophysics and Computing at the Drexel University College of Medicine (Hahnemann University Hospital).