Institution of Mechanical Engineers

Central Canada Branch



2012/13 PROGRAMME: Christmas Dinner and Lecture

SPEAKER: Vivek Rao, MD, PhD, FRCS (C), Chief of Cardiovascular Surgery, Munk Professor in Advanced Cardiac

Therapeutics, Peter Munk Cardiac Centre, Toronto General Hospital, University of Toronto

DATE: Friday November 23, 2012

TIMING: Bar opens at 6:00 pm; Dinner will be served at 6:30 pm; Lecture starts at 8:00 pm.

WHERE: Novotel Hotel, 3 Park Home Avenue, North York, Ontario, M2N 6L3.

COST: \$25 for members/guests. Cash or cheque only.

DIRECTIONS: See map below. Parking vouchers will be given at the event.

REGISTRATION: Contact Tony Hamilton at tony.hamilton@kinectrics.com or (647) 938-2431 before Nov. 9, 2012.

OUR SPEAKER:

Dr. Vivek Rao is currently Chief of Cardiovascular Surgery and the Surgical Director of Heart Transplantation and Mechanical Circulatory Assistance at the Toronto General Hospital and holds the Munk Chair in Advanced Cardiac Therapeutics at the University of Toronto. Dr. Rao completed his medical and surgical training at the University of Toronto prior to completing a fellowship in cardiac transplantation and mechanical circulatory support at New York's Columbia-Presbyterian Hospital. Dr. Rao was promoted to Full Professor of Surgery at the University of Toronto in 2010.



Dr. Rao has a clinical interest in the surgical treatment of end-stage heart disease. Dr. Rao's research lab is currently investigating novel techniques of myocardial protection for cardiac transplantation and new therapeutic strategies to prevent transplant coronary artery disease. The heart transplant/LVAD research group at the Toronto General Hospital is part of the largest heart failure program in the country and is actively involved in several international trials in heart transplantation and mechanical circulatory support. Dr. Rao has won numerous awards during his surgical training. Dr. Rao is married to Shawna, a critical care nurse, and they have 3 daughters (Grace, Madison and Maya). The family enjoys travelling, playing golf and relaxing at their lake house.

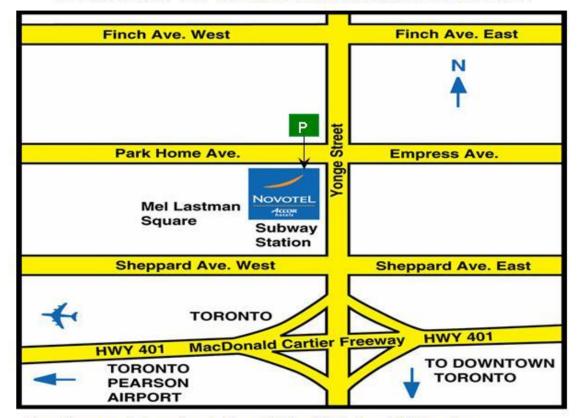
David Burke, a design engineer with Thoratec Corp., will be co-presenting with Dr. Rao. Thoratec Corp., provides the broadest range of mechanical circulatory support devices to treat the widest range of clinical and patient needs for advanced heart failure. David will be joining Dr. Rao

"The Mechanical Heart: Clinical Reality or Science-Fiction?"

Despite improvements in almost every facet of cardiovascular disease, the prevalence of congestive heart failure continues to rise. Traditionally, the only option for the management of end-stage heart disease was cardiac transplantation. In order to support potential candidates until a suitable donor organ can be found, various technologies have been introduced and the field of "mechanical circulatory support" has blossomed. The early versions of the "mechanical heart" were designed to support patients for days to weeks and necessitated large, morbid operations.

Advances in engineering, biocompatible interfaces and battery technology has resulted in the widespread use of a variety of approved devices both as a bridge to cardiac transplantation as well as "destination" or permanent therapy for non-transplant candidates. The number of Canadian medical centers providing long term mechanical circulatory support has significantly increased in the past 5 years. The introduction of "next generation" devices brings the promise of smaller surgery, better outcomes and longer durability. We anticipate that these devices will offer upwards of 5 years of good quality life in end-stage heart failure patients, many of whom face a median survival measured in months. In Canada, mechanical circulatory support has blossomed in the past 5 years. We anticipate that newer technology, increased experience and importantly, sustainable funding, will allow this therapy to be offered to all Canadians in need.

Directions to the Novotel Toronto North York Hotel



From Pearson International Airport/Detroit/Windsor US Boarder:

Follow Hwy 401 (Toronto) East, exit Yonge Street North, and follow Yonge St. to Park Home Avenue, (6 traffic lights north of Hwy 401) turn left on Park Home Ave., Hotel entrance located on left.

From Eastern Ontario/Ottawa/Kingston & Quebec:

Follow Hwy 401 (Toronto) West exit Yonge St. North, follow Yonge St. to Park Home Ave., (6 traffic lights north of the Hwy 401) turn left on Park Home Ave., Hotel entrance located on left.

From Niagara Falls/ Buffalo/Rochester US Border:

Follow QEW (Toronto East (Queen Elizabeth Way) to Hwy 427 North exit Hwy 401 East,, follow Hwy 401 East exit Yonge St. North, follow Yonge St. to Park Home Ave., (6 traffic lights north of Hwy 401) turn left on Pak Home Ave., Hotel entrance located on left

From Downtown Toronto via Highway:

Follow any street southbound to Lakeshore Blvd. East, enter Gardener Expressway East to Don Valley Parkway North (also called Hwy 404 North), exit Hwy 401 West Collectors to Yonge St. North, follow Yonge St. to Park Home Ave.(6 traffic lights north of the Hwy 401), turn left on Park Home Ave., Hotel entrance located on left.

From Downtown via City Streets, Most Direct Route:

Follow Yonge St. North to Park Home Ave. (3 lights north of Sheppard Ave.) turn left on Park Home Ave., Hotel entrance located on left.

From Barrie/North Ontario:

Follow Hwy 400 South to Hwy 401 East, exit Yonge St. North, and follow Yonge St. to Park Home Ave., (6 traffic lights north of Hwy 401) turn left on Park Home Ave., Hotel entrance located on left.

3 Park Home Avenue, North York, Ontario M2N 6L3 Tel#: (416) 733-229 Fax#: (416) 733-3403

Note: Novotel is accessible by TTC subway. The subway station is NORTH YORK on Yonge Line.