ISHLT ACADEMY CORE COMPETENCIES COURSE
MECHANICAL CIRCULATORY SUPPORT

Tuesday, April 26, 2016
Marriott Wardman Park Hotel, Thurgood Marshall Ballroom East
Washington DC, USA

Scientific Program Committee
Chair: Jennifer Cowger, MD, MS, St. Vincent Heart Center of Indiana, Indianapolis, IN, USA
Co-Chair: Daniel Zimpfer, MD, Medical University of Vienna, Vienna, Austria
Co-Chair: Jennifer Beckman, MSN-FNP, RN, CHFN, University of Washington, Seattle, WA, USA

Educational Goals
The educational goals of this activity are to provide a concise review of clinical knowledge and essential professional skills to facilitate best practice of surgical and medical aspects involved in the care of patients during assessment as candidates and as recipients of mechanical circulatory support.

Target Audience
While all members are invited to enroll, this course is primarily designed to be of benefit for clinicians and allied professionals who are in the early stages of their careers or who are in training and/or are part of a new program or desire an update on the current state of the field. The information presented covers core competencies and is intended to provide a strong foundation of the overarching principles of mechanical support, rather than as a detailed update for those who are already proficient experts in the field.

Accreditation Statement
The International Society for Heart and Lung Transplantation (ISHLT) is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians.

Credit Designation Statement
ISHLT designates this live activity for a maximum of 8.00 AMA PRA Category 1 Credits.™ Physicians should claim only the credit commensurate with the extent of their participation in the activity.

ACPE Credit
This activity may be eligible for ACPE credit, see final CPE activity announcement for specific details.

Disclosure
Current guidelines state that participants in CME activities must be made aware of any affiliation or financial interest that may affect the program content or a speaker’s presentation. Planners, Faculty and Chairs participating in this meeting are required to disclose to the program audience any real or
apparent conflict(s) of interest related to the content of their presentations or service as Chair/Planner. These disclosures will be distributed at the meeting. Additionally, all speakers have been asked to verbally disclose at the start of their presentation if a product they are discussing is not labeled for the use under discussion or is still investigational.

Learning Objectives
At the conclusion of this meeting, participants will have improved competence and professional performance in their ability to:

1. Understand how to risk stratify patient with advanced heart failure in order to assess MCS surgical risk and optimally time mechanical circulatory support (MCS) implantation.
2. Recognize the medical and social factors which impact patient outcomes during short- and long-term MCS.
3. Recognize the various types of MCS support available for patients with advanced single or biventricular heart failure and the technological differences that may impact pump selection and patient/device management.
4. Optimize MCS implantation techniques and patient/pump management during the index admission intensive care unit and inpatient general care periods.
5. Manage patients and the MCS during outpatient long-term support with an understanding of interventions that can reduce patient- and device-related adverse events during MCS.
6. Diagnose and manage common clinical dilemmas and adverse encountered after MCS.

SCIENTIFIC PROGRAM SCHEDULE

7:15 AM – 8:00 AM
REGISTRATION AND MORNING COFFEE

8:00 AM - 9:15 AM
SESSION 1: REVIEW OF THE CURRENT STATE OF MCS
Chair: Stephan Schueler, MD, PhD, FRCS

8:00 AM Welcome and Overview
Jennifer Cowger, MD, MS, St. Vincent Heart Center of Indiana, Indianapolis, IN, USA

8:15 AM MCS Technology 101
Scott Silvestry, MD, Florida Hospital Transplant Institute, Orlando, FL, USA
Review of current technologies available, pump behaviors with different loading conditions, and the TAH.

8:30 AM BTT and DT Outcome
Andreas O. Zuckermann, MD, PhD, University of Vienna, Vienna, Austria
Review state of outcomes and adverse events with current technologies

8:45 AM Short-term Support and Shock
Jonathan Haft, MD, University of Michigan, Ann Arbor, MI, USA
Overview of percutaneous technologies, biventricular support considerations, and ECMO.

9:00 AM Q&A
9:15 AM – 10:30 AM
SESSION 2: PATIENT SELECTION
Chair: Scott Silvestry, MD

9:15 AM When Should Patients be Referred: Warning Signs
Douglas Horstmanshof, MD, Integris Baptist Medical Center, Oklahoma City, OK, USA
Risk factors which presage patient decline (renal function, intolerance of medications, hospitalizations, etc, helping to risk stratify patients based on HF severity and MCS operative risk.

9:30 AM Assessing and Optimizing RV Function Preoperatively
Anna Meyer, MD, University of Leipzig, Leipzig, Germany
Impact of RV failure, pre-operative assessment and management of the RV including imaging and risk prediction.

9:45 AM Quality of Life After VAD and the Impact of Frailty and Social Behaviors on VAD Success
Susan Joseph, MD, Washington University School of Medicine, St. Louis, MO, USA
Other factors that can have a significant impact on success after VAD and some screening tools available for risk assessment.

10:00 AM Other Medical Co-Morbidities that May Impact VAD Success
Douglas Horstmanshof, MD, Integris Baptist Medical Center, Oklahoma City, OK, USA
Impact of peripheral vascular disease, end-stage renal failure, and other chronic medical illnesses on short and long term VAD success.

10:15 AM Q&A

10:30 AM – 10:45 AM
COFFEE BREAK

10:45 AM – NOON
SESSION 3: SURGICAL CONSIDERATIONS
Chair: Vivek Rao, MD, PhD

10:45 AM Key Surgical Aspects of Implantation
Nader Moazami, MD, Cleveland Clinic, Cleveland, OH, USA
Overview of the most crucial surgical considerations: inflow cannula/pump placement, driveline, etc.

11:05 AM How Much Else is Too Much?
Daniel Zimpfer, MD, Medical University of Vienna, Vienna, Austria
Concomitant operative procedures: TV, Aortic valve, prior Dor, congenitals

11:25 AM Tailoring Pumps to Patients
Christian Schlensak, MD, University Tuebingen, Tuebingen, Germany
Case based discussion of considerations for pump-patient matching

11:45 AM Q&A

NOON – 1:00 PM
LUNCH BREAK (a box lunch is included in the registration fee)

1:00 PM – 2:15 PM
SESSION 4: POSTOPERATIVE CARE
Chair: Andreas Zuckermann, MD

1:00 PM  Managing the RV Postop
Stephan Schueler, MD, PhD, Freeman Hospital, Newcastle upon Tyne, United Kingdom
Considerations for impact of LVAD pump speed on RV function and use of inotropes and pulmonary vasodilators

1:20 PM  Anticoagulation and Antiplatelet Therapy
Vivek Rao, MD, PhD, Toronto General Hospital, Toronto, Canada
Current MCS recommendation on when to start anticoagulation, antiplatelet therapy regimens, as well as data on platelet function testing and heparin level monitoring.

1:40 PM  Pump Speed Optimization: The Role of Imaging and Hemodynamics
Nir Uriel, MD, University of Chicago, Chicago, IL, USA
Overview of how to meld imaging and hemodynamics to optimize pump settings

2:00 PM Q&A

2:15-3:15 PM
SESSION 5: TRANSITION TO HOME
Chair: Nir Uriel, MD

2:15 PM  VAD Education: Patient/Caregiver Assessments and Strategies for Successful VAD Self-Care
Thomas Schloeglhofer, BSc, Medical University of Vienna, Vienna, Austria
Approaches to education of the patient and caregiver prior to discharge, and strategies for educating the local medical community

2:30 PM  Starting New: How to Start and Succeed in MCS
Michael Dickinson, MD, Spectrum Health, Grand Rapids, MI
Challenges to starting a VAD program and key elements of success.

2:45 PM  The Outpatient Clinic: Laboratory, Blood pressure, and Echo Monitoring
Jennifer Beckman, MSN-FNP, RN, CHFN, University of Washington, Seattle, WA, USA
Lab, blood pressure and echo monitoring of VAD patients in the outpatient setting.

3:00 PM Q&A

3:15 PM - 3:30 PM
COFFEE BREAK

3:30 PM - 5:20 PM
SESSION 6: LONG TERM MANAGEMENT OF PATIENTS AND COMPLICATIONS
Chair: Nadir Moazami, MD, Cleveland Clinic, Cleveland, OH, USA
3:30 PM  **LVAD Infections: Prevention, Diagnosis, and Management**  
Margaret Hannan, MD, Mater Misericordiae University Hospital, Dublin, Ireland  
**VAD infections, radiology studies important for diagnosis, and therapeutic recommendations**

3:50 PM  **Stroke: Risk factors for Hemorrhagic and Embolic CNS Complications and Management Strategies**  
Samer Najjar MD, MedStar Heart institute, Washington, DC, USA  
**Discuss diagnosis, risk factors, and management strategies for CNS events in MCS patients.**

4:10 PM  **Pump Thrombosis: Diagnostic Strategies and Management Algorithms**  
Simon Maltais, MD, PhD, Mayo Clinic, Rochester, MN, USA  
**Frequency, diagnosis, and management strategies for suspected pump thrombosis.**

4:30 PM  **Aortic Insufficiency in LVAD Recipients: Incidence, Screening, and Management**  
Jennifer Cowger, MD, MS, St Vincent Heart Center of Indiana, Indianapolis, IN, USA  
**Cumulative incidence, clinical consequences, and management of AI after LVAD.**

4:50 PM  **GI Bleeding**  
Keyur Shah, MD, Virginia Commonwealth University, Richmond, VA, USA  
**Frequency, diagnosis and management of GI bleeding after LVAD therapy, including new data on octreotide**

5:10 PM  **Q&A**

5:20 PM  **SUMMARY**

5:30 PM  **ADJORN**