



Created in response to goals developed at the ISHLT 2006-2007 Strategic Planning Meeting, the **ishlt academy** draws on the wealth of experience and expertise within the society to deliver high quality educational experiences with the goal of enabling our members to improve and maintain the highest possible standards in the care of patients with advanced heart and lung disease and those undergoing heart or lung transplantation.

**The ishlt academy represents the ‘brand name’ that will be associated with the educational opportunities offered by the ISHLT to its members and interested non-members.**

The purpose of the **ishlt academy** is to develop an enduring resource of education in core competencies in the field of cardiopulmonary transplantation, mechanical and biological support of the failing heart, advanced lung disease (including pulmonary vascular disease) and cell replacement therapy. These educational endeavors will complement the ISHLT’s existing activities in the promulgation of new science, registry analyses, guideline statements and monograph series as a consolidated activity designed to train and educate young clinicians, trainees and those looking for a refresher course in clinical practice mandates in the field.

The opportunities provided by the **ishlt academy** will be multi-modality and multi-disciplinary and will be guided by the identified educational needs or ‘practice gaps’ of ISHLT members. When available, core curriculum and competency documents for different disciplines within the society will guide content of ishlt academy activities. The activities of the academy will run throughout the societies interface with its members with material provided in written format via articles in the Journal of Heart and Lung Transplantation, via the ISHLT Monograph series, and via educational meetings.

**On Tuesday, April 17, 2012, a day prior to the 2012 Annual Meeting, we are conducting the third ishlt academy: Core Competencies in Mechanical Circulatory Support.**

The **ishlt academy: Core Competencies in Mechanical Circulatory Support** will provide a concise review of clinical knowledge and essential professional skills to facilitate the surgical and medical management of patients with advanced heart failure who are being assessed for and who have received durable mechanical circulatory support. The course consists of focused presentations covering a broad array of topics for both inpatient and outpatient management with an emphasis on a practical approach to patient care, implementing best practices and clinical problem solving. All lectures will be delivered by internationally recognized experts in the field and include cardiologists, cardiac surgeons, critical care physicians and VAD coordinators.

Audience participation and interaction with the faculty will be actively encouraged throughout the Academy with Question and Answer sessions following each major topic and by limiting the enrollment to 200 participants.

The educational workforce of the Mechanical Circulatory Support Counsel of the ISHLT is confident this will be the most comprehensive and valuable summary for practitioners in the field of mechanical circulatory support.

## **ISHLT ACADEMY: Core Competencies In Mechanical Circulatory Support**



## **CONTINUING MEDICAL EDUCATION INFORMATION**

### **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 9.0 *AMA PRA Category 1 Credits*.™ Physicians should claim only the credit commensurate with the extent of their participation in the activity.

### **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 Objective

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

1. Recognize the various types of mechanical circulatory support, their outcomes, and rates of adverse events.
2. Identify the clinical signs and risk factors of advanced heart failure in order to optimally time implantation.
3. Recognize the medical and social factors which impact patient outcomes on MCS.
4. Optimize implantation techniques and pump selection.
5. Manage patients after MCS in the intensive care unit, as an inpatient and as an outpatient.
6. Diagnose and manage common clinical dilemmas and adverse events in patients after MCS.

## 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, are part of a new program or desire an update on the current state of the field.

**TUESDAY, APRIL 17, 2012**

## ISHLT ACADEMY: Core Competencies In Mechanical Circulatory Support (MEETING HALL 1)

**CHAIRS:** Jeffrey J. Teuteberg, MD, University of Pittsburgh, Pittsburgh, PA, USA, Andreas Zuckermann, MD, University of Vienna, Austria, and David S. Feldman, MD, PhD, FAHA, FACC, Minneapolis Heart Institute, Minneapolis, MN, USA

### Introduction

**7:30 AM-7:45 AM**

*Welcome and Brief Overview*, Jeffrey Teuteberg, MD, University of Pittsburgh, USA

### SECTION 1: Review of the Current State of MCS

**7:45 AM -8:00 AM**

*Technology 101: Review of Current Technologies, Types of Flow, Pump Parameters*, Francis D. Pagani, MD, PhD, University of Michigan, Ann Arbor, MI, USA

**8:00 AM – 8:15 AM**

*BTT/Long-Term Support/Recovery: Review State of Outcomes and Adverse Events with Current Technologies*, Andreas Zuckermann, MD, University of Vienna, Austria

**8:15 AM – 8:30 AM**

*Shock – Role of Biventricular Support, TAH, and ECMO*, Alain Pavie, MD, La Pitié Hospital, Paris, France

**8:30 AM – 8:45 AM**

Q & A

### SECTION 2: Patient Selection

**8:45 AM – 9:00 AM**

*Worrisome Signals – Risk Factors which Presage Patient Decline: Renal Function, Intolerance of Medications, Hospitalizations*, Nicholas Banner, FRCP, Royal Brompton and Harefield Hospitals NHS Trust, London, United Kingdom

### 9:00 AM – 9:15 AM

*Risk Prediction Models – Review of Risk Prediction, What They Can and Can't Tell Us: MV02, SHRM, etc.*, Keith D. Aaronson, MD, University of Michigan, Ann Arbor, MI, USA

### 9:15 AM – 9:30 AM

*Timing of Implantation – When is the Patient “Sick Enough” to Implant MCS; Andrew J. Boyle, MD, Aurora St. Luke’s Medical Center of Aurora Health Care Metro, Inc, Milwaukee, WI, USA*

### 9:30 AM – 9:45 AM

Q & A

### 9:45 AM – 10:00 AM

BREAK

## SECTION 3: Medical Considerations

### 10:00 AM – 10:15 AM

*RV Assessment and Prediction – Brief Overview of Impact of RV Failure, Pre-Operative Assessment and Management of the RV, Risk Prediction; Case Examples*, David S. Feldman, MD, PhD, FAHA, FACC, Minneapolis Heart Institute, Minneapolis, MN, USA

### 10:15 AM – 10:30 AM

*End-Organ Assessment – Review of Organ Recoverability: Renal, Hepatic, Vascular, Overall Medical Candidacy*, Lee R. Goldberg, MD, MPH, Hospital of University of Pennsylvania, Philadelphia, PA, USA

### 10:30 AM – 10:45 AM

*Infection: ISHLT Consensus – Overview of the ISHLT Consensus Guideline Definition of Infections*, Margaret Hannan, MD, Mater Hospital, Dublin, Ireland

### 10:45 AM – 11:00 AM

Q & A

## SECTION 4: Surgical Considerations

### 11:00 AM – 11:15 AM

*Implantation 101 – Overview of the Most Crucial Surgical Considerations: Inflow Cannula/Pump Placement, Driveline, etc.*, Nader Moazami, MD, Minneapolis Heart Institute, Minneapolis, USA

### 11:15 AM – 11:30 AM

*How Much Else is Too Much? – Concomitant Operative Procedures: TV, Aortic Valve, Prior Dor, Congenitals*, Roland Hetzer, MD, PhD, Berlin Heart Institute, Germany

### 11:30 AM – 11:45 AM

*Matching Pumps to Patients – Considerations for Device Type, Type of Flow Based Upon Patient Factors*, Mark S. Slaughter, MD, University of Louisville, Louisville, KY, USA

### 11:45 AM – NOON

Q & A

### NOON – 1:15 PM

LUNCH This time is meant to provide an opportunity for participants and speakers to interact.

## SECTION 5: Pediatric Considerations

### 1:15 PM – 1:30 PM

*Pediatric Perspective – On Current State of Technology, Patient/Device Selection, Medicals/Surgical Considerations*, David L.S. Morales, MD, Texas Children’s Hospital, Houston, TX, USA

## SECTION 6: Post-Op

### 1:30 PM – 1:45 PM

*Post-Op Pearls in the ICU – Managing the Patient in the Immediate Post-Operative Period*, Angela Rajek, MD, University of Vienna, Austria

### 1:45 PM – 2:00 PM

*Managing the RV – Post-Operative Approach to the RV: Surgical Considerations, Pump Speed, INO, Inotropes, etc.*, Martin Strueber, MD, Hannover Medical School, Hannover, Germany

### 2:00 PM – 2:15 PM

*Anticoagulation – Overview of the Timing and Type of Anticoagulation, Means to Monitor State of Anticoagulation, Anticoagulation Management for Elective Procedures*, Vivek Rao, MD, PhD, Toronto General Hospital, Toronto, Canada

### 2:15 PM – 2:30 PM

Q & A

## SECTION 7: Transition of Home

### 2:30 PM – 2:45 PM

*Teaching/Patient Assessment – Outline of Approach to Teaching Patient and Their Family Community*, Michael G. Petty, PhD, RN, CCNS, CNS, University of Minnesota Medical Center-Fairview, Minneapolis, MN, USA

### 2:45 PM – 3:00 PM

*Keeping Patients at Home – Community Support, Restrictions, Role of Local Providers*, Karl E. Nelson, RN, MBA, Integris Baptist Medical Center, Oklahoma City, OK, USA

### 3:00 PM – 3:15 PM

*Quality of Life and Functionality Capacity – The Need For, Timing Of and Measures To Assess*, Kathleen L. Grady, PhD, APN, Northwestern University, Chicago, IL

### 3:15 PM – 3:30 PM

Q & A

### 3:30 PM – 3:45 PM

BREAK

## SECTION 8: Long-Term Management

### 3:45 PM – 4:00 PM

*GI Bleeding – Review of Pathophysiology, Incidence and Diagnostic/Therapeutic Approach*, Daniel J. Goldstein, MD, Montefiore-Einstein Medical Center, Bronx, NY

### 4:00 PM – 4:15 PM

*Driveline Infections – Definition (ISHLT Consensus Statement), Prevention, Treatment*, Evgenij Potapov, MD, PhD, Berlin Heart Institute, Berlin, Germany

### 4:15 PM – 4:30 PM

*Outpatient Management – Clinic Structure, Typical Items Addressed, Focused Medical Management (BP, Rhythms, Etc), Rehab*, Joseph G. Rogers, MD, Duke University Medical Center, Durham, NC, USA

### 4:30 PM – 4:45 PM

*Role of Imaging – Echo: Basic Views, How to Assess Functionality, Set Speed, How Often, Case Presentation; CT: When it is Useful, What can Really be Assessed, Case Presentations*, Shashank S. Desai, Inova Fairfax Hospital, Falls Church, VA, USA

### 4:45 PM – 5:00 PM

*End of Life Considerations – Cause of Death on MCS, Establishing Goals, End-of-Life Care*, Salpy V. Pamboukian, MD, MSPH, University of Alabama at Birmingham, AL, USA

### 5:00 PM – 5:15 PM

Q & A

## SECTION 9: Trouble Shooting – Case Presentations

### 5:15 PM – 5:25 PM

*RV Function*, Michele Pilato, MD, ISMETT, Palermo, Italy

### 5:25 PM – 5:35 PM

*Driveline*, Chris Salerno, MD, St. Vincent Medical Center, Indianapolis, IN

### 5:35 PM – 5:45 PM

*Hemolysis/Bleeding*, Sean P. Pinney, MD, Mount Sinai Medical Center, New York, NY, USA

### 5:45 PM – 5:55 PM

*Thrombus*, George M. Wieselthaler, MD, University of California San Francisco, CA, USA

## SECTION 10: Review

### 6:00 PM – 6:15 PM

*ISHLT MCS Guidelines*, Jeffrey J. Teuteberg, MD, University of Pittsburgh, Pittsburgh, PA, USA, Andreas Zuckermann, MD, University of Vienna, Austria, and David S. Feldman, MD, PhD, FAHA, FACC, Minneapolis Heart Institute, Minneapolis, MN, USA

### 6:15 PM – 6:45 PM

RECEPTION