

ISHLT ACADEMY  
**CORE COMPETENCIES  
IN HEART FAILURE AND  
CARDIAC TRANSPLANTATION**

**TUESDAY, APRIL 10, 2018**  
**MEDITERRANEE ABC**

**7:55 AM – 5:30 PM**



## **SCIENTIFIC PROGRAM COMMITTEE**

- CHAIR:** Shelley Hall, MD, Baylor University Medical Center, Dallas, TX, USA  
**CO-CHAIR:** Lavanya Bellumkonda, MD, Yale University of Medicine, New Haven, CT, USA  
**CO-CHAIR:** Eric Epailly, MD, Les Hopitaux University, Strasbourg, France

## **FACULTY**

- David Baran, MD**, Newark Beth Israel Medical Center, Newark, NJ, USA  
**Lavanya Bellumkonda, MD**, Yale University School of Medicine, New Haven, CT, USA  
**Rebecca Cogswell, MD**, University of Minnesota, Minneapolis, MN, USA  
**Eugene C. DePasquale, MD**, David Geffen School of Medicine, Los Angeles, CA, USA  
**Eric Epailly, MD**, Les Hopitaux University, Strasbourg, France  
**Marta Farrero Torres, MD, PhD**, Hospital Clinic de Barcelona, Barcelona, Spain  
**Maria Frigerio, MD**, A.O. Niguarda-Ca'Granda, Milan, Italy  
**Shelley Hall, MD**, Baylor University Medical Center, Dallas, TX, USA  
**Ranjit John, MD**, University of Minnesota, Minneapolis, MN, USA  
**Susan Joseph, MD**, Baylor University Medical Center, Dallas, TX, USA  
**Luciano Potena, MD, PhD**, University of Bologna, Bologna, Italy  
**Daniel Reichart, MD**, University Heart Center Hamburg, Hamburg, Germany  
**Scott Silvestry, MD**, Florida Hospital Transplant Institute, Orlando, FL, USA  
**Jean-Luc Vachier, MD**, Erasme University Hospital, Brussels, Belgium  
**Andre Vincentelli, MD, PhD**, CHU Regional de Lille Hospital Cardiologique, Lille, France

**COURSE SUMMARY**

This course is designed for early career professionals with an interest in congestive heart failure, cardiac transplantation, and mechanical circulatory support. Each section is designed with focused, didactic lectures followed by Q&A. The first section will cover the general topics of heart failure – definitions, epidemiology, pathophysiology, and etiology. It will then move to signs and symptoms, diagnostic process and management, and treatment modalities, followed by a focus on the acute decompensated heart – challenges in recognition and treatment, as well as new developments. The second section will review updates in the understanding and treatment of heart failure with preserved ejection fraction HFpEF, and pulmonary hypertension with an emphasis on its relationship with heart failure. The third section will encompass the cardiac transplant patient, from evaluation of the recipient candidate and donor to perioperative management principles, immunology, immunosuppression, rejection and common long-term challenges. The final section will review the history and development of mechanical circulatory support and management of common complications.

**PRACTICE GAPS**

Heart failure is a leading cause of morbidity and mortality world-wide, and while significant advances have occurred, they are still not consistently implemented in every day practice. Clinicians need to understand the principles of acute and chronic heart failure disease management, including advanced treatment options, in order to deliver optimal care to these complex patients.

**TARGET AUDIENCE**

While all members are invited to enroll, this course is primarily designed to benefit health care professionals who are in the early stages of their careers, are in training, are part of a new program, or who desire an update on the current state of the field. The information presented is intended to provide a strong foundation of the core competencies of heart failure, cardiac transplantation and mechanical circulatory support, rather than as a detailed update for those who are already proficient in the field.

**EDUCATIONAL NEED**

This course is designed to meeting the practitioner's education need for a targeted review of clinical knowledge and essential professional skills to facilitate best practice of surgical and medical aspects involved in the care of patients with heart failure, cardiac transplantation, and mechanical circulatory support devices.

## LEARNING OBJECTIVES

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

1. Understand the general concepts, definitions and management principles of patients with heart failure.
2. Understand the general concepts, indications, contraindications and management principles of patients who are evaluated for and receive cardiac transplant.
3. Understand the general concepts, indications, contraindications and management principles of patients who are evaluated for, and receive mechanical circulatory support devices.

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

## ANCC CREDIT

AMEDCO is accredited as a provider of continuing nursing education by the American Nurses Credentialing Center's Commission on Accreditation.

This course is co-provided by AMEDCO and ISHLT. Maximum of 7.50 contact hours.

## 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/Faculty/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.

# SCIENTIFIC PROGRAM SCHEDULE

## 7:00 AM – 7:55 AM

REGISTRATION & MORNING COFFEE

## 7:55 AM – 8:00 AM

### WELCOME AND OVERVIEW

**Shelley Hall, MD**, Baylor University Medical Center, Dallas, TX, USA

## 8:00 AM – 9:00 AM

### SESSION 1: HEART FAILURE: OVERVIEW AND EVALUATION

Chair: **Shelley Hall, MD**

## 8:00 AM *Heart Failure: General Overview and Concepts*

**Rebecca Cogswell, MD**, University of Minnesota, Minneapolis, MN, USA

#### Teaching/Discussion Points

1. Epidemiology of heart failure
2. Classification of heart failure (Stages, NYHA)
3. Pathophysiology: hemodynamic alterations
4. Pathophysiology: neurohormonal activation
5. Pathophysiology: cellular changes
6. Causes of heart failure

## 8:15 AM *Evaluation of Patients with Heart Failure*

**Marta Farrero Torres, MD, PhD**, Hospital Clinic de Barcelona, Barcelona, Spain

#### Teaching/Discussion Points

1. Signs and symptoms
2. Biomarkers
3. Screening guidelines
4. Risk stratification
5. Indicators for advance therapy referral

## 8:30 AM *Heart Failure Tests*

**Eugene C. DePasquale, MD**, David Geffen School of Medicine, Los Angeles, CA, USA

#### Teaching/Discussion Points

1. Role of right heart catheterization and hemodynamic monitoring
2. Cardiopulmonary exercise testing interpretation
3. When to perform endomyocardial biopsy
4. Ischemia evaluation

## 8:45 AM *Q&A with Panel*

## 9:00 AM – 10:00 AM

### SESSION 2: MANAGEMENT OF PATIENTS WITH CHRONIC HF/EF

Chair: **Eric Epailly, MD**

## 9:00 AM *Non-Pharmacologic and Pharmacologic Management*

**Lavanya Bellumkonda, MD**, Yale University School of Medicine, New Haven, CT, USA

#### Teaching/Discussion Points

1. Sodium and fluid management
2. Risk factor modification (obesity, inactivity, sleep apnea, HTN, DM, smoking)
3. Diuretics
4. Neurohormonal therapies (including new agents)
5. Anticoagulation, statins
6. Palliative care

## 9:15 AM *Principles for Arrhythmia Management and Electrical Devices*

**Maria Frigerio, MD, A.O.** Niguarda-Ca'Granda, Milan, Italy

#### Teaching/Discussion Points

1. Atrial fibrillation management
2. Ventricular arrhythmias
3. ICDs
4. CRT

## 9:30 AM *Surgical Management of Heart Failure*

**Daniel Reichart, MD**, University Heart Center Hamburg, Hamburg, Germany

#### Teaching/Discussion Points

1. High risk PCI
2. Surgical revascularization
3. Surgical valve surgery
4. TAVR and Mitraclip

## 9:45 AM *Q&A with Panel*

## 10:00 AM – 10:30 AM

COFFEE BREAK

## 10:30 AM – 11:30 AM

### SESSION 3: ACUTE DECOMPENSATED HEART FAILURE

Chair: **Lavanya Bellumkonda, MD**

## 10:30 AM *Epidemiology and Pharmacologic Management*

**David Baran, MD**, Newark Beth Israel Medical Center, Newark, NJ, USA

#### Teaching/Discussion Points

1. Definition and epidemiology
2. Etiologies and pathophysiology
3. Pharmacologic management
4. Cardiorenal syndrome
5. RV failure

**10:45 AM *Cardiogenic Shock***  
**Shelley Hall, MD**, Baylor University  
 Medical Center, Dallas, TX, USA

**Teaching/Discussion Points**

1. Recognition of shock
2. Inotrope usage
3. IABP
4. Tandem and Impella
5. ECMO

**11:00 AM *Transitions of Care***  
**Rebecca Cogswell, MD**, University  
 of Minnesota, Minneapolis, MN, USA

**Teaching/Discussion Points**

1. Home inotropes
2. Referral for transplant or VAD
3. Palliative care
4. Preventing readmissions

**11:15 AM *Q&A with Panel***

**11:30 AM – 1:00 PM**

LUNCH BREAK  
*(a box lunch is included in the  
 registration fee)*

**1:00 PM – 2:00 PM**  
**SESSION 4: HFpEF AND  
 PULMONARY HYPERTENSION**  
**Chair: Shelley Hall, MD**

**1:00 PM *HFpEF***  
**Susan Joseph, MD**, Baylor University  
 Medical Center, Dallas, TX, USA

**Teaching/Discussion Points**

1. Definition
2. Etiology and triggers
3. Epidemiology
4. Diagnosis
5. Evaluation
6. Management

**1:20 PM *Pulmonary Hypertension:  
 PAH in Heart Failure***

**Jean-Luc Vachieri, MD**, Erasme  
 University Hospital, Brussels, Belgium

**Teaching/Discussion Points**

1. Definition
2. WHO classification
3. Etiologies
4. RHC interpretation
5. Medical therapies
6. Procedural therapies

**1:40 PM *Q&A with Panel***

**2:00 PM – 3:00 PM**  
**SESSION 5: HEART  
 TRANSPLANTATION 101**  
**Chair: Lavanya Bellumkonda, MD**

**2:00 PM *Evaluation of the  
 Transplant Candidate***

**Luciano Potena, MD, PhD**, University  
 of Bologna, Bologna, Italy

**Teaching/Discussion Points**

1. Indications for transplant
2. Contraindications for transplant
3. Evaluation process
4. Special groups – highly sensitized, retx, congenital
5. Allocation systems

**2:15 PM *Perioperative  
 Management***

**Ranjit John, MD**, University of  
 Minnesota, Minneapolis, MN, USA

**Teaching/Discussion Points**

1. Donor evaluation
2. Perioperative drips and monitoring
3. Perioperative infectious prophylaxis
4. Immunosuppression
5. Common complications (RV dysfunction, PGD, Renal dysfunction)

**2:30 PM *Chronic Care of the  
 Transplant Recipient***

**Eric Epailly, MD**, Les Hopitaux  
 University, Strasbourg, France

**Teaching/Discussion Points**

1. Rejection surveillance and treatment
2. Immunosuppression strategies
3. Common infectious considerations
4. Common medical complications

**2:45 PM *Q&A with Panel***

**3:00 PM – 3:30 PM**  
 COFFEE BREAK

**3:30 PM – 4:30 PM**  
**SESSION 6: MECHANICAL  
 CIRCULATORY SUPPORT**  
**Chair: Eric Epailly, MD**

**3:30 PM *Current Devices  
 and Outcomes***

**Scott Silvestry, MD**, Florida Hospital  
 Transplant Institute, Orlando, FL, USA

**Teaching/Discussion Points**

1. History of device development
2. Continuous vs Pulsatile devices
3. Axial vs Centrifugal flow
4. Evaluation scales
5. Candidate selection

**3:50 PM *Chronic Complications  
 in MCS***

**Andre Vincentelli MD, PhD**,  
 CHU Regional de Lille Hospital  
 Cardiologique, Lille, France

**Teaching/Discussion Points**

1. GI bleeding
2. CVA
3. Driveline infections
4. Aortic insufficiency
5. Pump thrombosis
6. Late RV failure

**4:10 PM** *Q&A with panel*

**4:30 PM – 5:30 PM**

**SESSION 7: CASE PRESENTATIONS**

**Chairs:** Shelley Hall, MD;  
Lavanya Bellumkonda, MD;  
Eric Epailly, MD

**4:30 PM** *Cardiogenic Shock Case*

**David Baran MD**, Newark Beth Israel  
Medical Center, Newark, NJ, USA

**Teaching/Discussion Points**

1. Emphasize evaluation process
2. Discuss treatment options
3. Review triggers for transplant/  
VAD consideration
4. Mention criteria for  
palliative care

**4:45 PM** *Transplant vs VAD Case*

**Susan Joseph, MD**, Baylor University  
Medical Center, Dallas, TX, USA

**Teaching/Discussion Points**

1. Standard patient profile
2. Data that supports transplant  
vs VAD
3. How to decide
4. When is it too late?

**5:00 PM** *Q&A with Panel*

**5:15 PM** *COURSE SUMMARY  
AND EVALUATION*

**Shelley Hall MD**, Baylor University  
Medical Center, Dallas, TX, USA

**5:30 PM** *ADJOURN*