ISHLT Thoracic Recovery Course 26 April 2025 | 8:00AM – 5:30 PM EST Boston Bioskills Lab

ACADEMY CHAIRS

Aleem Siddique, MD, University of Nebraska, Omaha, NE, USA Marcelo Cypel, MD, University of Toronto, Toronto, Ontario, Canada Goran Dellgren, MD, PhD, Sahlgrenska University Hospital, Sweden

FACULTY

• TBD

COURSE DESCRIPTION

This comprehensive, hands-on training course is designed for Cardiothoracic Surgery trainees/fellows interested in a unique training experience. The program offers a unique blend of didactic education and hands-on practical training to enhance participants' proficiency in donor organ recovery, ex-situ preservation, and transplantation decision-making. *Scrubs and instruments will be provided.*

Didactic Sessions: Expert-led lectures covering standard and extended criteria donor hearts and lungs, DBD and DCD procurement techniques, and ex-situ preservation strategies, including the latest advancements in temperature-controlled static preservation and normothermic perfusion.

Hands-On Practical Training: Under the guidance of experienced Cardiothoracic Surgeons, participants will work in pairs to perform cadaver-based thoracic organ retrieval from both DBD and DCD models. The training will include rapid recovery techniques and cannulation for thoraco-abdominal normothermic regional perfusion (TA-NRP), providing realistic, hands-on experience in donor management and organ preparation.

TARGET AUDIENCE

Cardiothoracic Surgery trainees/fellows.

No CME will be offered for the course

PROGRAM SCHEDULE

8:00 AM – 8:05AM Welcome and Introductions/ Overview

8:05AM – 9:25 AM DIDACTIC SESSION 1

8:05AM – 8:20AM Heart Assessment and Recovery Technique 101 Teaching/Discussion Points

- Explain the rationale for critical aspects of the standard heart retrieval
- Identify pitfalls during retrieval

8:20AM – 8:35 AM Lung Assessment and Recovery Technique 101 Teaching/Discussion Points

- Explain the rationale for critical aspects of the standard lung retrieval
- Identify pitfalls during retrieval

8:35AM - 8:50AM

Ex situ Preservation of the Heart Teaching/Discussion Points

- Describe available alternatives to standard cold preservation (temperature controlled static preservation, ex situ perfusion hypothermic and normothermic
- Discuss advantages and disadvantages of these techniques including logistics and cost
- Discuss current data and their limitations

8:50AM - 9:05AM

Ex situ preservation of the lungs Teaching/Discussion Points

- Describe available alternatives to standard cold preservation (temperature controlled static preservation with and without airway pressure regulation, ex situ perfusion- static and mobile)
- Discuss advantage and disadvantages of these techniques including logistics and cost
- Discuss current data and their limitations

9:05 AM – 9:25 AM Panel Discussion/Audience Q&A

9:25 AM – 9:40 AM Break Time will be used to change into scrubs

9:40AM – 10:40AM Practical (Hands On) Session I Participants work in pairs on a cadaver with a cardiothoracic surgeon

9:40 AM - 10:40 AM:

Thoracic Organ Recovery from a DBD Model

Teaching Points

- Demonstration of the technique for standard heart/lung recovery
- Back table technique for preparation for ex situ preservation

10:40 AM – 11:10 AM Break

11:10AM – 12:30 PM DIDACTIC SESSION II

11:10AM - 11:30AM DCD heart

Teaching/Discussion Points

- Describe protocols for DCD heart procurement and their rationale
- Surgical tricks/pitfalls of DCD heart procurement
- Discuss outcomes related to DCD heart transplantation

11:30AM - 11:50AM

DCD Lungs

Teaching/Discussion Points

- Describe a protocol for DCD lung procurement and its rationale
- Surgical tricks/pitfalls of DCD lung procurement
- Discuss outcomes related to DCD lung transplantation

11:50AM – 12:05PM The Abdominal perspective

Teaching/Discussion Points

- Understanding key components of abdominal organ procurement and their rationale
- Identifying critical aspects of the abdominal procurement that require cooperation between teams including DCD

12:05 PM – 12:30 PM Panel Discussion/Audience Q&A

12:30PM – 1:15PM Lunch

1:15PM – 2:15PM

Practical Session II:

Teaching Points

Thoracic Organ Rapid Recovery from a DCD Model

- Simulation of cannulation for thoraco-abdominal NRP
- Demonstration of the technique for DCD heart/lung rapid recovery
- Technique for rapid cannulation for TA-NRP in a model

2:15PM – 2:30PM Break

2:30PM – 4:00 PM DIDACTIC SESSION III Case Based Interactive Discussions

2:30PM – 3:15PM Extended Criteria Heart- Which, When and How? Discussion and Teaching Points

- Define the marginal heartDescribe data about their use
- Discuss a practical approach to their assessment and utilization

3:15PM – 4:00PM Extended Criteria Lungs- How Do I Decide Which Lungs to Accept Discussion and Teaching Points

- Define marginal lungs
- Describe data about their use
- Discuss a practical approach to their assessment and utilization

4:00PM - 4:15PM Break

4:15PM – 5:15PM Practical session: Industry Perspective

Teaching Points

Interactive session with industry representatives demonstrating equipment/preservation of organs for ex situ preservation

5:15PM – 5:30PM Wrap Up