10th Vail
Cardiothoracic Transplantation:
20 Years of Updates and the Transition
to Personalized Transplant Care
Saturday, February 21st – Wednesday, February 25th, 2015

Presented by
The Division of Cardiothoracic Surgery
Department of Surgery
University of Colorado
School of Medicine

Sponsored by
Office of Continuing Medical Education
University of Colorado
School of Medicine

Vail Marriott
Mountain Resort and Spa
Vail, Colorado
About the Program

This three and one-half day conference has been described by previous attendees as “the best cardiothoracic” conference they attend. This year there will be updates in multiple areas of heart and lung transplantation including recipient and donor evaluation and risk assessment, post-transplant issues including chronic rejection, patient management, alternate treatments to transplant such as LVADs and ECMO.

The target audience for this renowned program includes: cardiothoracic surgeons, pulmonologists, cardiologists, internists, primary care physicians, nurse specialists and transplant coordinators.

Learning Objectives

Upon completion of this program, participants should be able to:

1. Determine which treatment options should be tried for patients with advanced heart or lung failure prior to transplantation.
2. Determine when to intervene with mechanical circulatory support and how to recognize and manage common and not-so-common complications of such therapy.
3. Understand how ex-vivo organ perfusion and the use of donation after cardiac death donors can expand the lung and heart donor pools.

Accreditation

The University of Colorado School of Medicine is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.

The University of Colorado School of Medicine designates this live activity for a maximum of 18.5 AMA PRA Category 1 Credits™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

Category 1 Continuing Education Points for Transplant Coordinators (CEPTCs) have been applied for through the American Board for Transplant Certification.

Registration Fees

- Please register online at www.medschool.ucdenver.edu/cme or by completing the registration form in this brochure and mailing it to the Office of CME as detailed on the form.
- Fees include continental breakfasts, refreshments, syllabus material, Sunday’s dinner banquet and a non refundable administration charge of $100.
- Spouses, children and guests are invited to attend the Sunday evening dinner for an additional per person charge. Please indicate additional guests on the registration form or when registering online. Breakfasts are for the conference registrant only.

All fees are due in advance by credit card or check.

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<th>Payment received before January 12, 2015</th>
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<td>Wednesday all attendees- EX-VIVO LUNG PERFUSION DEMONSTRATION FEE</td>
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(registration for this demonstration is required)

Cancellation Policy

The full course tuition is refundable less $100 processing fee if you cancel prior to January 20, 2015. Refunds will not be given for cancellations after January 20, 2015 or for no shows. The conference committee reserves the right to cancel this conference in the event of an unforeseen circumstance or if the minimum acceptable registration is not attained. In the event of cancellation the Office of CME is obligated to refund the registration fee only.
Travel & Accommodations

MAKE YOUR RESERVATIONS EARLY!
To receive group rates on lodging at the Vail Marriott Mountain Resort and Spa, reservations must be made by Tuesday, January 20, 2015. Reservations must be made directly with the Vail Marriott Mountain Resort and Spa at the following link: https://resweb.passkey.com/go/2015cardiothoracic. Group room rates are as follows:

- Standard or lodge hotel room - $349/night (plus tax)
- Deluxe king room - $369/night (plus tax)
- Studio king room - $389/night (plus tax)

The room block will sell out quickly so you are encouraged to make your hotel reservations early. Rooms and rates revert to a space-available basis after the room block has been sold out or after the cut-off date. All reservation requests will require a credit card guarantee. Full, non-refundable amount of the anticipated revenue (room and tax) for the entire stay will be billed to the individual credit card on Tuesday, January 20, 2015. If a reservation is cancelled after Tuesday, January 20, 2015, individuals will forfeit the deposit for all nights reserved. Please note that parking is a separate daily charge.

Ground Transportation
Shuttle service to Vail may be arranged through Colorado Mountain Express. Reservations are required. You can make reservations on-line at www.coloradomountainexpress.com or you can contact Colorado Mountain Express by phone (toll free) at 1-800-525-6363. Please reference “CT” to receive the group discount.

Equipment Rental
Charter Sports is conveniently located within the Vail Marriott Mountain Resort and Spa, lobby level, just past the concierges desk, adjacent to the outdoor pool. Offering onsite ski, snowboard and snowshoe rentals, complimentary boot, ski and snowboard storage, and a complete line of winter clothing and accessories.

Conference attendees will receive a group discount of 35+% with or without reservations, but reservations are strongly recommended. Reservations can be made on line at www.chartersports.com or call toll free 888-295-9797. Reference “Cardiothoracic Transplantation” when making your rental arrangements. When making reservations on-line, navigate to the Charter Sports web site and select the “Group Reservations” tab on the home page, our conference is listed alphabetically under “Groups A – F”.

Vail Marriott Mountain Resort & Spa
The Resort & Spa located at 715 Lionshead Circle, Vail, CO 81657, offers modern guestrooms, a health club, European spa and a restaurant 150 yards from the gondola.

About Vail Mountain
120 miles from Denver International Airport and 28 miles from Eagle Airport Vail Mountain has 193 named trails and offers a total of 5,289 acres of skiable terrain. With 32 lifts including a gondola and 16 high-speed express quads, 1 fixed-grip quad, 2 triple chairs, 3 double chairs, 3 surface lifts, and 6 “magic carpets” you will be whisked up the mountain for a great day of fun. The lift system can move 56,138 skiers uphill each hour.

Vail Mountain has 4 Terrain Parks that include small, medium and large features. For those that wish to participate in other activities Vail offers:

- Sleigh rides
- Snowmobiling
- Adventure Ridge
- Cross-country skiing
- Snowshoeing
- Ski biking
- Dog sledding
- Shopping
Program Schedule

Saturday February 21st

**Moderators:** Martin Zamora and Frederick Grover

2:45 – 4:15 Registration

4:15 **Introduction and Welcome**

  *Martin Zamora MD*

4:25 **Milestones in Cardiothoracic Transplantation and the History of the Vail Conference**

  *Frederick Grover, MD*

4:50 **Temporal Response of the Human Virome to Immunosuppression and Antiviral Therapy**

  *Iwijn de Vlaminck, PhD*

5:30 Discussion

5:45 Adjourn

6:15 – 8:00 Welcome Reception

Sunday February 22nd

AM  **Donor/Recipient Issues I — Pretransplant Issues/Risk Estimation**

**Moderators:** John Mitchell/JoAnn Lindenfeld and Ron Gill

7:00 **20 Years of Extended Lung Donor Management: Lungs Are Tough**

  *Greg Snell, MD*

7:25 **Lung Donor Talk**

  *TBD*

7:45 **Use of the Organ Care System for Heart and Lung Transplantation**

  *Andre Simon, MD*

8:10 **Medicines, a Device, or Transplant for Advanced Heart Failure**

  *Amrut Ambardekar, MD*

8:35 **Autoimmunity Post-Transplant: Is this Simply an Immune Memory Response?**

  *David Wilkes, MD*

9:00 **Inflammation in Pulmonary Arterial Hypertension: The Role of LTB4**

  *Mark Nicolls, MD*

9:25 Discussion

9:30 Adjourn

PM  **Donor/Recipient Issues II — LVADs and Lung Mechanical Support**

**Moderators:** Joseph Cleveland/Andreas Brieke and Ashok Babu/Michael Weyant

3:30 **Mechanical Device Technology: Past, Present, and Future**

  *Robert Kormos, MD*

4:00 **Predicting Myocardial Recovery**

  *Craig Selzman M.D*

4:25 **LVAD Thrombosis: Causes and Some Solutions**

  *JoAnn Lindenfeld, MD*

4:45 **Ventricular Assist Devices I – a Practical Update on Difficult Case Management**

**Panel Discussion:** Drs. Kormos, Selzman, Maltais and Aaronson

5:30 Right Ventricular Support as a Bridge to Lung Transplant

  *Andre Simon, MD*

5:55 **ECMO: Where Did My Drugs Go?**

  *Kelly Schoeppler, PharmD*

6:15 Adjourn

6:45 Dinner Banquet

Monday February 23rd

AM  **Donor/Recipient Issues III — LVADs/Immunity**

**Moderators:** Joseph Cleveland/Amrut Ambardekar and Sue Dunn

7:00 **Monitoring of Rejection After Heart and Lung Transplantation Using a Novel Cell-Free DNA Test**

  *Iwijn de Vlaminck, PhD*

7:25 **VADS II – a Practical Update on Difficult Case Management**

**Panel Discussion:** Drs. Kormos, Selzman, Maltais and Aaronson

8:10 **20 Years On: The Rise and Rise of DCD Lungs**

  *Bronwyn Levvey, RN*

8:35 **Update on the Spanish NHBD Experience**

  *TBD*

8:55 **Lung or Heart Recipient Talk**

  *TBD*

9:15 Discussion

9:25 Adjourn
## Program Schedule

### Tuesday February 24th

**PM** Postoperative Issues/Ischemia Reperfusion Injury

**Moderators:** Michael Weyant

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<tr>
<th>Time</th>
<th>Topic</th>
<th>Presenter</th>
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<tr>
<td>3:30</td>
<td>The PGD Phenotype: Revisions to the Definitions</td>
<td>Jason Christie, MD</td>
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<td>3:55</td>
<td>Mitochondrial DNA: a Sentinel Molecule in Oxygen Radical Disorders</td>
<td>Mark Gillespie, PhD</td>
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<td>4:30</td>
<td>Therapeutic Gases to Treat Donor Lungs</td>
<td>Shaf Keshavjee, MD</td>
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<td>4:55</td>
<td>Preventing, Predicting, and Treating PGD Based on Lessons from Translational Studies</td>
<td>Jason Christie, MD</td>
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<td>5:20</td>
<td>20 Years of CMV and CARVs</td>
<td>Martin Zamora, MD</td>
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<td>5:45</td>
<td>EVLP Talk</td>
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<td>6:10</td>
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### Wednesday February 25th

**PM** Chronic Rejection

**Moderators:** Ron Gill and Robert Meguid

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<th>Time</th>
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<tr>
<td>3:30</td>
<td>20 Years of Lung Transplant Chronic Rejection - Who’s the BOS Now?</td>
<td>Greg Snell, MD</td>
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<tr>
<td>3:50</td>
<td>Emerging Concepts in Innate and Adaptive Immunity in Airway Fibrogensis Post-Lung Transplantation</td>
<td>David Wilkes, MD</td>
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<td>4:15</td>
<td>A Critical Role for the Microvasculature in Lung Transplantation</td>
<td>Mark Nicolls, MD</td>
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<td>4:35</td>
<td>In Situ Reprogramming - A Novel Approach to Chronic Rejection</td>
<td>Tom Waddell, MD</td>
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<td>5:20</td>
<td>Discussion</td>
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**Wednesday February 25th**

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<th>Time</th>
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<tr>
<td>7:00</td>
<td>Breakfast</td>
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<td>8:00</td>
<td>EX-VIVO Lung Perfusion Demonstration</td>
<td>Shaf Keshavjee, MD/Michael Weyant MD</td>
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<tr>
<td>9:00</td>
<td>EVLP: Research and Clinical Applications</td>
<td>Shaf Keshavjee, MD/Michael Weyant MD</td>
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<td>11:00</td>
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Planning Committee

Joseph Cleveland Jr., MD
Professor of Surgery
University of Colorado School of Medicine
Surgical Director
Adult Heart Transplant and Mechanical Support Devices
University of Colorado Hospital

Frederick Grover, MD
Professor of Surgery
University of Colorado School of Medicine

JoAnn Lindenfeld, MD
Director of Heart Failure and Transplantation
Vanderbilt University

Michael Weyant, MD
Associate Professor of Surgery
University of Colorado School of Medicine

Martin Zamora, MD
Professor of Medicine
Pulmonary Sciences/Critical Care Medicine
University of Colorado School of Medicine

Distinguished Faculty

Keith Aaronson, MD
Professor of Internal Medicine
Division of Cardiovascular Medicine
Medical Director
Heart Transplant Program and
Center for Circulatory Support
University of Michigan

Jason D. Christie, MD, MS
Associate Professor of Medicine and Epidemiology
Director, Center for Translational Lung Biology
Pulmonary, Allergy, and Critical Care Medicine
University of Pennsylvania Perelman School of Medicine

Shaf Keshavjee MD
Director, Toronto Lung Transplant Program
Surgeon-in-Chief, UHN
James Wallace McCutcheon Chair in Surgery
Professor, Division of Thoracic Surgery
University of Toronto

Robert L Kormos MD, FRCS(C), FACS, FAHA
Professor of Cardiothoracic Surgery
Brack G. Hattler Chair of Cardiothoracic Transplantation
University of Pittsburgh
Director Artificial Heart Program

Simon Maltais, MD
Assistant Professor and Director
Heart Transplant & Ventricular Support Program
Vanderbilt University Medical Center

Mark Nicolls, MD
Division Head, Pulmonary and Critical Care
Associate Professor of Medicine
Stanford University School of Medicine

Craig Selzman, MD, FACS
Associate Professor of Surgery
Division of Cardiothoracic Surgery
Surgical Director
Cardiac Mechanical Support and Heart Transplantation
University of Utah School of Medicine

Andre Simon, MD
Director of Heart and Lung Transplantation &
Ventricular Assist Devices
Royal Brompton & Harefield NHS Foundation Trust

Greg Snell, MD, MBBS, FRACP
Medical Head, Lung Transplant Service
Alfred Hospital & Monash University
Associate Professor, Monash University

Iwijn de Vlaminck, PhD
Assistant professor
Department of Biomedical Engineering
School of Engineering
Cornell University

Thomas Waddell, MD
Professor and Chair
Division of Thoracic Surgery
University of Toronto

David S. Wilkes, MD
Executive Associate Dean for Research Affairs
August M. Watanabe Professor for Medical Research
Indiana University School of Medicine
Registration

10th Vail Cardiothoracic Transplantation • February 21-25, 2015

Register on-line at: www.medschool.ucdenver.edu/cme or complete this form and mail with payment to the CME.

Last Name ______________________ First Name ______________________ M.I. ______________________
(Indicate name as you would like it to appear on your CME certificate)

Degree  □ MD  □ DO  □ RN  □ PA  □ NP  □ Other ______________________

Specialty ______________________ Company ______________________________

Address __________________________________________________________________________

Zip ________________ City __________________State ________________________

Office Phone No. __________________________________________________________________

Fax No. __________________________ E-Mail _________________________________
(We will not provide your email address to anyone outside the Office of CME.)

Registration Fees

Early Registration runs through January 12, 2015

Payment received before January 12, 2015 Payment received after January 12, 2015

Physicians $580  $680
Nurses $430  $480
Allied Health Professionals $430  $480
House staff w/letter from $355  $405
Program Director

Additional Dinner Guest
Adult $ 20  $ 20
Child (ages 7-12) $ 10  $ 10

Wednesday all attendees-
EX-VIVO LUNG PERFUSION $0  $0

DEMONSTRATION (registration for this demonstration is required)

Payment Information

_____ Enclosed is my check made payable to: University of Colorado School of Medicine

_____ Visa  _____ MasterCard  Security Code _____________ Expiration Date _____________

Credit Card Number ______________________________________________________________

Name on Credit Card _____________________________________________________________

Cardholder Signature ___________________________________________________________ Date __________

Mail registration form with payment to:
UC-CME-CT Conference
Mail Stop C295
13001 East 17th Place
Aurora, CO 80045

or fax to: 303-724-3557
or register online
www.medschool.ucdenver.edu/cme

Please indicate if you have any need for auxiliary aids or special assistance services

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