33rd ANNUAL MEETING
PRELIMINARY SCIENTIFIC PROGRAM

All meetings and activities will take place at the Palais des congrès de Montréal unless otherwise specified. All papers will be presented in English. Please check the ISHLT web site (www.isHLT.org) for updates. The Final Program, which is distributed onsite, will reflect the latest session schedule and room assignments.
Molecular Pathways of Cardiac Mechanical Unloading (517CD)

CHAIRS: Lee R Goldberg, MD, MPH and Craig H. Selzman, MD

SESSION SUMMARY: This session highlights the molecular pathways associated with mechanical unloading of the failing myocardium. Topics include the myocardial response affecting cardiac contractility, fibrosis and metabolism as well as the vasculature. Further, we will discuss molecular patterns associated with a favorable response of the myocardium to mechanical unloading and the potential impact on myocardial recovery after mechanical unloading.

8:00 AM Impact of Mechanical Circulatory Support on Myocardial Contractility and Calcium Handling, Daniel Burkhoff, MD, PhD, CircuLite, Inc., Saddle Brook, New Jersey, USA

8:18 AM Discussion

8:24 AM Myocardial Fibrosis in Heart Failure and Its Response to Mechanical Unloading, Hendrik Milting, PhD, Heart and Diabetes Center NRW, Ruhr-University, E & H Klessmann-Institute, Bad Oeynhausen, NRW, Germany

8:42 AM Discussion

8:48 AM Impaired Cardiac Metabolism in Heart Failure and the Impact of Left Ventricular Assist Device Support, P. Christian Schulze, MD, PhD, Columbia University, New York, NY, USA

9:06 AM Discussion

9:12 AM Vascular Changes in Patients Supported by Ventricular Assist Devices, Stavros G. Drakos, MD, PhD, University of Utah & UTAH Cardiac Transplant Program, Salt Lake City, Utah, USA

9:30 AM Discussion

9:36 AM The Molecular Signature of Myocardial Recovery Following Ventricular Assist Device Support, Kenneth B. Margulies, MD, University of Pennsylvania, Philadelphia, PA, USA

9:54 AM Discussion
**Symposium 2**

**The Changing Landscape in Heart Transplantation: Surviving in the New Age**  
*(511)*

**CHAIRS:** Alan H. Menkis, MD, FRCS(C) and Marisa Crespo-Leiro, MD

**SESSION SUMMARY:** A dramatic epidemiological shift in the heart transplant donor and recipient characteristic in recent years has led to a need to review our current allocation and matching systems. In this symposium, we shall review the changing landscape, evaluate the different allocation systems world-wide across diverse continents and debate whether an international consensus is timely for developing clinical algorithms that facilitate optimal donor and recipient matching. How shall we allocate donors for those with durable LVAD’s? Is it time to develop a universal classification for the “marginal” donor? Are “sensitized” patients a unique group for a targeted allocation system? These and other burning issues will be addressed by a panel of international experts in the field.

8:00 AM  **Changing Epidemiology of the Heart Transplant Candidate**, Josef Stehlik, MD, MPH, University of Utah School of Medicine, Salt Lake City, UT, USA

8:10 AM  **Changing Epidemiology of the Optimal Heart Donor**, Guy A. MacGowan, Freeman Hospital, Newcastle upon Tyne, UK

**Donor Allocation Systems Around the World: Current Approaches, Advantages, Challenges**

8:20 AM  **USA** — Joseph G. Rogers, MD, Duke University, Durham, NC, USA

8:25 AM  **Canada** — Debra L. Isaac, University of Calgary, Calgary, Alberta, Canada

8:30 AM  **Eurotransplant** — Andreas Zuckermann MD, Medical University of Vienna, Vienna, Austria

8:35 AM  **Spain** — Juan F. Delgado, MD, Hospital Doce de Octubre, Madrid, Spain

8:40 AM  **Italy** — Maria Frigerio MD, Niguarda-Ca’ Granda Hospital, Milan, Italy

8:45 AM  **Australia** — Angelina S. Leet, MD, Alfred Hospital, Melbourne, Victoria, Australia

**Expanding and Maximizing the Donor Pool**

8:50 AM  a) **Expanding the Donor Pool: UK Experience**, Stephen C. Clark, FRCS, Freeman Hospital, Newcastle upon Tyne, UK

9:05 AM  b) **Pushing the Limits for Organ Acceptability**, Ashish S. Shah, MD, Johns Hopkins Hospital, Baltimore, MD, USA

**DEBATE: It Is Time For An International Consensus For A Recipient Scoring System**

9:20 AM  **PRO:** Keith D Aaronson, MD, University of Michigan, Ann Arbor, Michigan, USA

9:30 AM  **CON:** Lynne Warner Stevenson, Brigham and Women’s Hospital, Boston, MA, USA

9:40 AM  Panel Discussion and Audience Q and A

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**Symposium 3**

**BOS: Back to the Drawing Board**  
*(510)*

**CHAIRS:** Denis Hadjiliadis, MD, MHS and Robin Vos, MD, PhD

**SESSION SUMMARY:** Phenotyping and adding new terminology to chronic rejection have been a major issues in the last few years. This session will clarify some well defined phenotypes and put them into perspective of the “old BOS” where everything was pulled together with fewer diagnostic tools.

8:00 AM  **Basic Science and Mechanisms**, Laurie D. Snyder, MD, Duke University, Durham, NC, USA

8:20 AM  Discussion

8:30 AM  **Phenotypes of BOS**, Geert M. Verleden, MD, PhD, University Hospital Gasthuisberg, Leuven, Belgium

8:50 AM  Discussion

9:00 AM  **Variability in Assessing Pulmonary Function Tests**, Sangeeta M. Bhorade, MD, University of Chicago Medicine, Chicago IL, USA

9:20 AM  **Management of BOS**, Martin Iversen, MD, PhD, Rigshospitalet, Copenhagen University Hospital, Copenhagen, Denmark

9:40 AM  Panel Discussion and Audience Q and A
Symposium 4

Clarifying Chronic Thromboembolic Pulmonary Hypertension (CTEPH) (S12A-G)

CHAIRS: Reda E. Girgis, MD and Marc De Perrot, MD, MSc

SESSION SUMMARY: CTEPH remains the only potentially curable form of PH to date underlying the huge importance of making an accurate diagnosis and thoroughly assessing suitability for thromboendarterectomy in any patient presenting with PH. This symposium covers the basics of diagnosis and surgical decision making, then moves to consider the current evidence base for using medical therapy for those patients who are not cured or curable by thromboendarterectomy. Finally the role of extracorporeal support in patients with acute adverse responses to thromboendarterectomy will be discussed to enable practical lessons to be learned.

8:00 AM Making the Diagnosis of CTEPH, Irene M. Lang MD, Medical University of Vienna, Vienna, Austria

8:20 AM What are the Contraindications to Pulmonary Endarterectomy in CTEPH?, Michael M. Madani, MD, University of California San Diego, San Diego, CA, USA

8:40 AM Medical Approaches in Non-Surgical CTEPH, Hossein A. Ghofrani, MD, University Hospital Giessen and Marburg, Justus-Liebig-University Giessen, Giessen, Germany

9:00 AM Managing Right Ventricular Failure and Reperfusion Injury Following Pulmonary Endarterectomy, Marc de Perrot, MD, MSc, Toronto General Hospital, Toronto, ON, Canada

9:15 AM Role of ECLS for Failed/Suboptimal Pulmonary Endarterectomy: The Paris Experience, Prof. Philippe G. Dartevelle, Marie Lannelongue Hospital Paris sud University, Le Plessis Robinson, France

9:30 AM Role of ECLS for Complicated Pulmonary Endarterectomy: The Cambridge Experience, David P. Jenkins, BSc, MS, FRCS(CTH), Papworth Hospital, Cambridge, UK

9:45 AM Panel Discussion

Symposium 5

Nightmare Syndromes (S13ABC)

CHAIRS: Annette Boehler, MD and David Weill, MD

SESSION SUMMARY: This session will cover unique and challenging clinical syndromes that are difficult to diagnose and manage.

8:00 AM Thrombotic Microangiopathy, Ramsey R. Hachem, MD, Washington University School of Medicine, St. Louis, MO, USA

8:15 AM Discussion

8:20 AM Rash and Fever, Martha L. Mooney, MD, FACP, Sentara Norfolk Transplant Center, Eastern Virginia Medical School, Norfolk, VA, USA

8:35 AM Discussion

8:40 AM Central Nervous System Infection, Me-Linh Luong, University of Montréal, Montréal, Quebec, Canada

8:55 AM Discussion

9:00 AM Hemophagocytic Syndrome, Erik A. M. Verschueren, MD, PhD, University Medical Centre Groningen, Groningen, The Netherlands

9:15 AM Discussion

9:20 AM Tuberculosis After Transplant, Deborah J. E. Marriott, St. Vincent’s Hospital, Sydney, NSW, Australia

9:35 AM Discussion

9:40 AM Parasites Gone Bad: The Monster Inside Your Transplant Patient, Camille Nelson Kotton, MD, MS, Vanderbilt University, Nashville, TN, USA

9:55 AM Discussion

Symposium 6

“Pediatric Heart Transplantation: Art, Science, or Voodoo?” (S13DEF)

CHAIRS: Elizabeth D. Blume, MD and Jonathan N. Johnson, MD

SESSION SUMMARY: Management of pediatric heart transplant recipients differs across institutions with limited scientific data to guide best practice. Pro/Con discussions will address common controversies followed by audience questions to the speakers.

8:00 AM Management of Sensitized Candidates Using Desensitization and Virtual/Prospective Cross-Match: Patience is a Virtue!, Richard Kirk MA FRCP FRCPCH, Institute of Transplantation, Freeman Hospital, Newcastle upon Tyne, UK

8:15 AM Heart Transplantation with a Positive Cross-Match: Just Do It!, Steven A. Webber, MBChB, Vanderbilt University, Nashville, TN, USA

8:30 AM Discussion

8:40 AM Antibody Mediated Rejection Diagnosis is Made by Histopathology Findings, Which are Necessary and Sufficient for Treatment, Charles C. Marboe, MD, Columbia University, New York, NY, USA

8:55 AM Antibody Mediated Rejection Diagnosis and Treatment Should be Based on USA, Immunofluorescence and Graft Function in Children, E. Rene Rodriguez, MD, Children, E. Rene Rodriguez, MD, Cleveland Clinic, Cleveland, OH, USA

9:10 AM Discussion

9:20 AM Invasive Surveillance in Pediatric Heart Transplantation – A Necessary Evil, Charles E. Canter, MD, Washington University / St. Louis Children’s Hospital, St. Louis, MO, USA

9:35 AM Routine Biopsies and Coronary Angiography are Over-rated in Children, Francesco Parisi, MD, Bambino Gesù Children’s Hospital, IRCCS, Rome, Italy

9:50 AM Discussion
### Symposium 7

**LVAD Support: Ensuring Long-term Success** *(S17CD)*

**CHAIRS:** Jaap R. Lahpor, MD and Stephan Schueler, MD, PhD, FRCS

**SESSION SUMMARY:** The field of mechanical circulatory assistance has been expanding quickly and many patients are now benefiting from long-term VAD support. With this expanding experience, new challenges to the long-term success of VAD support have also been identified. This session will discuss several of the key adverse events that clinicians face while caring for VAD recipients on chronic support. The speakers will discuss proven and novel approaches to the management of these problems.

**10:15 AM** Aortic Insufficiency – Pre-implant Management, Post-op Surveillance, Post-op Management, Evgenij V. Potapov, MD, PhD, Deutsches Herzzentrum Berlin, Berlin, Germany

**10:35 AM** Gastrointestinal Bleeding – Management, Including Endoscopy, Anticoagulation/Antiplatelet Management, Pump Settings, Salpy V. Pamboukian MD, MSPH, University of Alabama at Birmingham, Birmingham, AL, USA

**10:55 AM** Thrombosis/Power Spikes/Hemolysis – Diagnosis, Management of Anticoagulation/Antiplatelets, Lytic Therapy, and Replacement, Ulrich P. Jorde, MD, Columbia University/New York Presbyterian Hospital, New York, NY, USA

**11:15 AM** VAD Infection Prevention Strategies, Shimon Kusne, MD, Mayo Clinic in Arizona, Phoenix, AZ, USA

**11:35 AM** The Emotional and Psychosocial Selection Criteria and Needs of Patients on VADs, Kathleen L. Grady, PhD, APN, Northwestern University, Chicago, IL, USA

**11:55 AM** Panel Discussion

### Symposium 8

**“How to Face Antibodies”: A Practicum for the Cardiac Transplantation Clinician** *(S51)*

**CHAIRS:** Nicola E. Hiemann, MD, FACC and D. Brad Dyke, MD

**SESSION SUMMARY:** In this session, we have attempted to use a bench-top to bedside approach to explain the relevant science as it relates to sensitization, recognition and treatment of antibody mediated rejection (AMR) in cardiac transplantation. In this fast moving field, the science is distilled to provide an increased working knowledge of the translational science, in order to better understand and treat patients with AMR. This session, led entirely by transplant clinicians, is targeted to clinicians to enhance their knowledge base and positively alter patient care strategies.

**10:15 AM** How to Detect and Manage Sensitization Pre-Transplant, Kathryn J. Tinckam, MD MMSc FRCPC, University of Toronto, Toronto, ON, Canada

**10:35 AM** Discussion

**10:45 AM** How to Choose and Match the Organ for the Sensitized Patient, Lori J. West, MD, Dphil, University of Alberta, Edmonton, Alberta, Canada

**11:05 AM** Discussion

**11:15 AM** How to Monitor, Diagnose and Treat AMR After Cardiac Transplantation, Eulalia Roig, MD, Hospital Santa Creu i Sant Pau, Barcelona, Spain

**11:35 AM** Discussion

**11:45 AM** How to Evaluate, Diagnose and Treat Chronic Allograft Dysfunction, Jignesh K. Patel, MD PhD, Cedars-Sinai Heart Institute, Los Angeles, CA, USA

**12:05 PM** Discussion

### Symposium 9

**Bridging to Lung Transplantation: Who, When and With What** *(S10)*

**CHAIRS:** Marc De Perrot, MD, MSc and Stephen C. Clark, FRCS

**SESSION SUMMARY:** This symposium will provide a review of the current status of mechanical bridging to lung transplantation. It will provide an overview of available techniques and outcomes.

**10:15 AM** Selection and Timing, Jasleen Kukreja, MD, UCSF, San Francisco, CA, USA

**10:35 AM** Device Development and Choice, Martin Stueber, MD, Heart Center Leipzig, University Leipzig, Leipzig, Germany

**10:55 AM** Managing the Wait, Jens Gottlieb MD, Hannover Medical School, Hannover, Germany

**11:15 AM** Transplant Surgical Strategies, Walter Klepetko MD, Medical University of Vienna, Vienna, Austria

**11:35 AM** Outcomes of Bridging to Transplantation, R. Duane Davis MD, MBA, Duke University, Durham, NC, USA

**11:55 AM** Panel Discussion
### Symposium 10

**New Pathways and Controversies in PAH (512A-G)**

**CHAIRS:** Robert P. Frantz, MD and Myung H. Park, MD

**SESSION SUMMARY:** The field of PH is moving rapidly in both clinical and translational science and in this session our speakers will cover new evidence supporting firstly the respective value of monitoring right ventricular function and secondly combined clinical endpoints in the clinical management of patients. The second half of the symposium will discuss the potential link between insulin resistance and vascular inflammation, also describing the effect of targeted therapy on this axis. Finally the role of inflammation as a therapeutic target will be discussed.

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<th>Time</th>
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<tr>
<td>10:15 AM</td>
<td><strong>Is RVEF the Best Endpoint When Following Up a Patient with Pulmonary Arterial Hypertension?</strong></td>
<td>Anton Vonk Noordegraaf, MD, VU Medical Center, Amsterdam, The Netherlands</td>
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<td>10:45 AM</td>
<td><strong>Is Combined Clinical Endpoint the Best Way to Assess a Patient’s Progress?</strong></td>
<td>Robert P. Frantz, Mayo Clinic, Rochester, MN, USA</td>
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<td>11:05 AM</td>
<td>Discussion</td>
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<tr>
<td>11:15 AM</td>
<td><strong>Insulin Resistance and Pulmonary Hypertension – Shedding New Light?</strong></td>
<td>Roham T. Zamanian, MD, FCCP, Stanford University School of Medicine, Stanford, CA, USA</td>
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<td>11:35 AM</td>
<td>Discussion</td>
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<td>11:45 AM</td>
<td><strong>Inflammation – Playing a Central Role in Pulmonary Arterial Hypertension?</strong></td>
<td>Aaron B. Waxman, MD, PhD, Brigham and Women’s Hospital, Harvard Medical School, Boston, MA, USA</td>
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<td>12:05 PM</td>
<td>Discussion</td>
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### Symposium 11

**T cell 101 in Lung Transplantation (513ABC)**

**CHAIRS:** Daniel C. Chambers, MBBS MRCP FRACP MD and Annette Boehler, MD

**SESSION SUMMARY:** This session will bring basic scientists and clinicians together to jointly review sets of basic knowledge slides, slides addressing the current knowledge in animal models, slides addressing human data in the field and slides pulling the whole topic into clinical context.

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<tr>
<td>10:15 AM</td>
<td><strong>Overview of T cell Differentiation</strong></td>
<td>Tereza Martinu, MD, Duke University, Durham, NC, USA</td>
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<td>10:30 AM</td>
<td>Discussion / Q &amp; A</td>
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<td>10:35 AM</td>
<td><strong>Th1 and Lung Rejection</strong></td>
<td>John F. McDyer, MD, University of Pittsburgh, Pittsburgh, PA, USA</td>
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<td>Discussion / Q &amp; A</td>
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<td>10:55 AM</td>
<td><strong>Th2 and Lung Rejection</strong></td>
<td>John A. Belperio, MD, UCLA Pulmonary &amp; Critical Care Medicine, Los Angeles, CA, USA</td>
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<td>11:10 AM</td>
<td>Discussion / Q &amp; A</td>
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<td>11:15 AM</td>
<td><strong>Th17 and Lung Rejection</strong></td>
<td>Bart M. Vanaudenaerde, Katholieke Universiteit Leuven, Leuven, Belgium</td>
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<td>11:30 AM</td>
<td>Discussion / Q &amp; A</td>
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<td>11:35 AM</td>
<td><strong>Tregs and Lung Transplantation</strong></td>
<td>Gregor Warnecke, MD, Hannover Medical School, Hannover, Germany</td>
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<td>11:50 AM</td>
<td>Discussion / Q &amp; A</td>
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<td>11:55 AM</td>
<td><strong>Gamma Delta T cells and Lung Transplantation</strong></td>
<td>Rebecca A. Shilling, MD, Indiana University School of Medicine, Indianapolis, IN, USA</td>
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<td>Discussion / Q &amp; A</td>
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### Symposium 12

**Psychosocial Issues in Pediatric Cardiopulmonary Transplantation – Joint ISHLT / IPTA Session (513DEF)**

**CHAIRS:** Christian Benden, MD, Alison Amegatcher, RN and Thomas Frischer, MD

**SESSION SUMMARY:** The session will discuss psychosocial aspects of pediatric cardio-thoracic transplantation, both in heart and lung transplant recipients, using a multidisciplinary team approach. In addition, the intersection between transplant and palliative care will be discussed.

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<tr>
<td>10:15 AM</td>
<td><strong>The Psychosocial Transplant Evaluation – What Works?</strong></td>
<td>Jo Wray, PhD, Great Ormond Street Hospital for Children, NHS Foundation Trust, London, UK</td>
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<td>10:30 AM</td>
<td>Discussion / Q &amp; A</td>
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<td>10:35 AM</td>
<td><strong>Transplanting the Adolescent Patient – Can We Do It Successfully?</strong></td>
<td>Diana A. Shellmer, PhD, University of Pittsburgh and the Children’s Hospital Pittsburgh of UPMC, Pittsburgh, PA, USA</td>
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<td>11:00 AM</td>
<td>Discussion / Q &amp; A</td>
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<td>11:05 AM</td>
<td><strong>Socioeconomic Status in Pediatric Cardiopulmonary Transplantation – Does It Impact On Outcomes?</strong></td>
<td>Tajinder P. Singh, MD, MSc, Boston Children’s Hospital, Boston, MA, USA</td>
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<td>11:25 AM</td>
<td>Discussion / Q &amp; A</td>
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<td>11:30 AM</td>
<td><strong>Intersection of Transplant Medicine and Palliative Care – Can We Work Together?</strong></td>
<td>Elisabeth P. Dellon, MD, MPH, University of North Carolina, Chapel Hill, NC, USA</td>
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<td>Discussion / Q &amp; A</td>
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<td>11:55 AM</td>
<td><strong>Oral Presentation of Highly Scored Abstract (PED or NHSAH)</strong></td>
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<td>Discussion / Q &amp; A</td>
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Machines vs. Medications for Biventricular Failure (S17CD)

CHAIRS: Robert L. Kormos MD, FRCS(C), FACS, FAHA and Jan. F. Gummert, MD

SESSION SUMMARY: Biventricular failure represents significant challenges. Both medical and mechanical approaches have considerable limitations and risks. This session will provide an interactive forum for discussing a patient with biventricular failure, and exploring the potential benefits and risks of various therapeutic approaches available in our clinical armamentarium today.

2:15 PM  Case Presentation, Jose Nativi-Nicolau, MD, University of Utah, Salt Lake City, Utah, USA

2:25 PM  Why Right Ventricular Failure Prediction Scores Do Not Work, Bart Meyns, MD, PhD, Uz. KU Leuven, Leuven, Belgium

2:45 PM  Medical Management – LVAD and Support Right Ventricle Medically, Steven SL Tsui, MD FRCS, Papworth Hospital, Cambridge, UK

3:05 PM  Implantable BiVAD, Thomas Krabatsch, MD, PhD, Deutsches Herzzentrum Berlin, Berlin, Germany

3:25 PM  Total Artificial Heart, Francisco A. Arabia, MD, Mayo Clinic, Phoenix, Arizona, USA

3:45 PM  Back to the Case, Jose Nativi-Nicolau, MD, University of Utah, Salt Lake City, Utah, USA

3:55 PM  Panel Discussion

Common Debates After Cardiac Transplantation (S11

CHAIRS: David S Feldman, MD, PhD FACC, FAHA and Mandeep R. Mehra, MD

SESSION SUMMARY: To biopsy or not to biopsy? How to manage long-term immunosuppression? How often to flush coronary lumens and watch plaques? Does this young patient with a failing graft deserve a second transplant option? These are just a few of the unanswered questions that we have to face with emotional-based decisions in heart transplant care. Four sparkling debates, comprised of short presentations with panel moderated discussions, will shape up the audience’s opinion towards critical issues in transplant management, providing some solid ground to help decision making in everyday practice.

Debate 1: Protocol Endomyocardial Biopsy Is Not Necessary After the First Post-transplant Tear

2:15 PM  PRO: Hannah A. Valantine, MD, Stanford University School of Medicine, Stanford, CA, USA

2:25 PM  CON: Ingo Kaczmarek, MD, Transplantation Center, Munich, Germany

2:35 PM  Panel Discussion with audience

Debate 2: An Annual Coronary Angiogram Is Necessary for Improving Late Outcomes

2:45 PM  PRO: Randall C. Starling, MD, MPH, Cleveland Clinic, Cleveland, OH, USA

2:55 PM  CON: Hans Lehmkuhl, MD, PhD, Deutsches Herzzentrum Berlin, Berlin, Germany

3:05 PM  Panel Discussion with audience

Debate 3: An mTOR Inhibitor Is the Standard of Care to Improve Late Post-transplant Outcomes

3:15 PM  PRO: Sudhir S. Kushwaha, MD, Mayo Clinic, Rochester, MN, USA

3:25 PM  CON: Luciano Potena MD, PhD, University of Bologna, Bologna, Italy

3:35 PM  Panel Discussion with audience

Debate 4: Retransplant Is Obsolete and Unethical for Chronic Allograft Dysfunction

3:45 PM  PRO: Heather Ross, MD, MHSc (Bioethics), FRCP, Toronto General Hospital, Toronto, ON, Canada

3:55 PM  CON: Maryl Johnson, MD, University of Wisconsin, Madison, WI, USA

4:05 PM  Panel Discussion with audience
Symposium 15

AMR in Lung Transplantation: Definitions and Current State (S10)

CHAIRS: Gerald J. Berry, MD and Roberto Barrios, MD

SESSION SUMMARY: The current status of the pathologic working formulation for the evaluation for Antibody Mediated Rejection (AMR) in lung transplants will be presented. This symposium is organized in tandem with a clinical correlation symposium on evaluation of AMR in Lung Transplants.

2:15 PM Overview of AMR in Lung Transplantation at Banff, W Dean Wallace, MD, David Geffen School of Medicine at UCLA, Los Angeles, CA, USA

2:35 PM Discussion

2:45 PM Pathology of AMR, Martin J. Goddard, BA MB ChB FRCS FRCPath, Papworth Hospital NHS Trust, Cambridge, UK

3:05 PM Discussion

3:15 PM Histocompatibility Assessment for AMR in Lung Transplants, Dolly B. Tyan, PhD, Stanford University, Palo Alto, CA, USA

3:35 PM Discussion

3:45 PM Pediatric Lung Transplantation, Carol Farver, MD, Cleveland Clinic, Cleveland, Ohio

4:05 PM Discussion

Symposium 16

Mapping the Management of the Right Ventricle in Lung Transplantation (S12A-G)

CHAIRS: Paul A. Corris, FRCP and John Granton, MD

SESSION SUMMARY: The peri-operative management of the right ventricle during isolated lung transplantation for pulmonary arterial hypertension remains most challenging. This symposium will first cover recent developments in the non-invasive assessment of the right ventricle. Practical approach to the intra-operative management of patients with a failing right ventricle will then be reviewed. Finally, perspectives on potential recovery of the right ventricle after lung transplantation will be debated.

2:15 PM Pre Op Non-Invasive Assessment of the Right Ventricle, Francois Haddad, Stanford University, Palo Alto, CA, USA

2:35 PM Discussion

2:39 PM Donor Derived Mesenchymal Stem Cell Trafficking in Lung Transplantation, Vibha N. Lama, MD, MS, University of Michigan, Ann Arbor, MI, USA

2:59 PM Discussion

3:03 PM Vivo Imaging of Cell Trafficking into Heart Allografts, Daniel Kreisel, Washington University in St. Louis, St. Louis, MO, USA

3:23 PM Discussion

3:27 PM Regulation of Chemokines in Lung Transplantation, John A. Belperio, MD, UCLA Pulmonary & Critical Care Medicine, Los Angeles, CA, USA

3:47 PM Discussion

3:51 PM Mechanisms of B cell Migration, João P. Pereira, Yale University, New Haven, CT, USA

4:11 PM Discussion

Symposium 17

Cell Migration and Trafficking in Lung and Heart Transplantation (S13ABC)

CHAIRS: Stephan M. Ensminger, MD, DPhil and Andrew E. Gelman, PhD

SESSION SUMMARY: This session will serve as an opportunity for basic and clinical scientists, pathologists, immunologists and clinicians to get an update on cellular migration and homing of different cell subsets in heart and lung transplantation and their visualization. There will be an update on new techniques in cell trafficking, about potential new interesting homing receptors in transplantation and a summary of what is currently known about the relevance of chemokine receptors in transplantation.

2:15 PM Intravital Immunology: Visualizing T cell Migration and Activation by Multiphoton Microscopy, Thorsten R. Mempel, MD, PhD, Harvard Medical School, Boston, MA, USA

2:35 PM Discussion

2:39 PM Donor Derived Mesenchymal Stem Cell Trafficking in Lung Transplantation, Vibha N. Lama, MD, MS, University of Michigan, Ann Arbor, MI, USA

2:59 PM Discussion

3:03 PM Vivo Imaging of Cell Trafficking into Heart Allografts, Daniel Kreisel, Washington University in St. Louis, St. Louis, MO, USA

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3:47 PM Discussion

3:51 PM Mechanisms of B cell Migration, João P. Pereira, Yale University, New Haven, CT, USA

4:11 PM Discussion
The Spectrum of CMV: Young or Old, Heart or Lung (513DEF)

**CHAIRS:** Fernanda P. Silveira, MD, MS and Erik A. M. Verschuuren, MD, PhD

**SESSION SUMMARY:** Although CMV has become quite effectively handled with the current arsenal, the new strategies have led to new problems. This session will use a bench to bedside approach to cover the current state of the art for CMV in heart and lung transplant recipients and will highlight the newly emerging pitfalls in the currently used prevention strategies. Pharmacokinetics (including adult and pediatric studies), monitoring strategies and treatment options including CMV resistance will be discussed.

**2:15 PM** CMV: Prevention Strategies: All Are Not Created Equal, Luciano Potena MD, PhD, University of Bologna, Bologna, Italy

**2:40 PM** Antiviral Pharmacokinetics: Are All Recipients Equal?, Patricia Uber, PharmD, University of Maryland, Baltimore, MD, USA

**3:05 PM** CMV: Monitoring for Risk and Recurrence, Laurie D. Snyder, MD, Duke University, Durham, NC, USA

**3:30 PM** CMV: Resistance Emerging, Robin K. Avery, MD, FIDSA, Johns Hopkins, Baltimore, MD, USA

**3:55 PM** Panel Discussion of Challenging CMV Cases

Great Debates in MCS (517CD)

**CHAIRS:** Valluvan Jeevanandam, MD and Josef Stehlik, MD, MPH

**SESSION SUMMARY:** This session will address four important topics in a debate format. At the end of the session, the attendees will be able to discuss the controversies in organ allocation in patients with mechanical assist and in patients with allosensitization, discuss the importance of psychosocial support in LVAD candidates and identify the pitfalls of advanced renal failure in patients requiring VADs.

**DEBATE 1: Should Stable LVAD Patients Receive Organ Allocation Advantage?**

**4:30 PM** PRO: Hermann C. Reichenspurner, MD, PhD, University Heart Center Hamburg, Hamburg, Germany

**4:40 PM** CON: Joseph G. Rogers, MD, Duke University, Durham, NC, USA

**4:50 PM** Audience Participation

**DEBATE 2: Should Sensitization Warrant Higher Priority on the Waiting List?**

**5:00 PM** PRO: Bruno Meiser, MD, Transplant Center Munich, University of Munich, Munich, Germany

**5:10 PM** CON: A.G. Kfoury, MD, FACC, Intermountain Heart Institute (UTAH Cardiac Transplant Program), Salt Lake City, Utah, USA

**5:20 PM** Audience Participation

**DEBATE 3: Does Mechanical Support Work for Those With Poor Social Support?**

**5:30 PM** PRO: Stephan Schueler, MD, PhD, FRCS, Freeman Hospital, Newcastle upon Tyne, UK

**5:40 PM** CON: Tonya I. Elliott, MSN RN CCTC CHFN Inova Fairfax, Falls Church, VA, USA

**5:50 PM** Audience Participation

**DEBATE 4: Are VAD Destination Therapy and Hemodialysis Compatible?**

**6:00 PM** PRO: Andrew J. Boyle, MD, Cleveland Clinic Florida, Weston, FL, USA

**6:10 PM** CON: John B. O’Connell MD, Medical Center of Central Georgia, Macon, GA, USA

**6:20 PM** Audience Participation

The Cardio-Renal Syndrome: End of a Happy Marriage (511)

**CHAIRS:** Michael G. Givertz, MD and Finn Gustafsson, MD, PhD, DMSci

**SESSION SUMMARY:** Heart and kidney functions are linked in an elegantly harmonized physiology. However, when one of the two starts failing, the function of the other is impaired and often the therapeutic strategy to recover the function for one organ may be dangerous for the other. In this session, speakers will discuss pathophysiological mechanisms and provide clinical hints to save the marriage of the two organs, before and after transplant.

**4:30 PM** The Cardio-Renal Syndrome Explained: Bench to Bedside Perspective, Jeffrey M. Testani, MD, MTR, Yale University, New Haven, CT, USA

**4:50 PM** Predicting and Facilitating Renal Recovery After Heart Transplantation, Marcelo Cantarovich, MD, FRCP, McGill University Health Center, Montréal, Quebec, Canada

**5:10 PM** Pharmacological Management of Heart Transplant Recipients with Kidney Insufficiency, Lars Gullesstad, MD, Oslo University Hospital, Oslo, Norway

**5:30 PM** Combined or Staged Heart – Kidney Transplantation for Refractory Renal Dysfunction, Markus J. Barten, MD, PhD, University Leipzig, Heart Center, Leipzig, Saxonia, Germany

**5:50 PM** Case Presentation and Panel Discussion, Kiran K. Khush, MD, MAS, Stanford University School of Medicine, Palo Alto, CA, USA

**6:20 PM** Panel Discussion
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| **Lung AMR: “How I Do It” A Multidisciplinary Case Based Discussion**<br>**(S10)**<br><br>**CHAIRS:** Allan R. Glanville, MBBS, MD, FRACP and Deborah J. Levine, MD<br><br>**SESSION SUMMARY:** Even with increased recognition and a progressively increasing literature base on single and multi-center experience, there is still a lack of consensus on our collective approach, diagnosis and treatment of pulmonary AMR. This will be a “How I do it” symposium which will include pulmonology, immunology and pathology. This will be an audience participation symposium: case presentations with audience participation and input from Pulmonary, Pathology and Immunology who will all comment on each case.<br><br>**CASE PRESENTATION 1: The Presensitized Patient**<br><br>**4:30 PM** **Presenter:** Glen Westall, MD, Alfred Hospital, Melbourne, Victoria, Australia<br><br>**4:40 PM** **Immunologist Discussant:** Adriana Zeevi, PhD, University of Pittsburgh Medical Center (UPMC), Pittsburgh, PA, USA<br><br>**5:00 PM** **Panel Discussion**<br><br>**CASE PRESENTATION 2: Lung Transplant Recipient With Lung Dysfunction and +DSA**<br><br>**5:10 PM** **Presenter:** Deborah J. Levine, MD, UT Health Science Center, San Antonio, TX, USA<br><br>**5:20 PM** **Immunologist Discussant:** Adriana Zeevi, PhD, UPMC, Pittsburgh, PA, USA<br><br>**5:30 PM** **Pathologist Discussant:** Desley A. H. Neil, FRCPath, Queen Elizabeth Hospital Birmingham (QEHB), Birmingham, UK<br><br>**5:40 PM** **Panel Discussion**<br><br>**CASE PRESENTATION 3: Stable Lung Transplant Recipient With DSA**<br><br>**5:50 PM** **Presenter:** Ramsey R. Hachem, MD, Washington University School of Medicine, St. Louis, MO, USA<br><br>**6:00 PM** **Immunologist Discussant:** Adriana Zeevi, PhD, UPMC, Pittsburgh, PA, USA<br><br>**6:10 PM** **Pathologist Discussant:** Desley A. H. Neil, FRCPath, QEHB, Birmingham, UK<br><br>**6:20 PM** **Panel Discussion**<br><br>**Motivational Interviewing: An Approach to Improving Outcomes in Transplantation**<br><br>**SESSION SUMMARY:** Motivational interviewing (MI) is a goal-directed, client-centered intervention to help patients increase intrinsic motivation and strengthen commitment for change. Despite many discussions about the causes and detection of non-adherence in patients undergoing heart or lung transplantation or mechanical circulatory support, clinicians continue to report limited success in impacting the cooperation of non-adherent patients. This session is designed to introduce the concept of MI as a potential approach to such situations. Presenters will describe the concept, the fundamental changes to our language with patients and case studies demonstrating the effectiveness of this treatment.<br><br>**4:30 PM** **Following the Rules Seems So Obvious: Understanding Patients’ Motivation to Follow Post-Transplant / MCS Regimens**, Fabienne Dobbels, PhD, University of Leuven, Belgium<br><br>**4:50 PM** **Introduction to Motivational Interviewing: Talking “The Change” Means “Changing The Talk,”** Nikole J. Cronk, PhD, University of Missouri School of Medicine, Columbia, MO, USA<br><br>**5:10 PM** **Case Studies: Putting Motivational Interviewing Into Practice**, Hilde Bollen, RN, UH Leuven, Leuven, Belgium<br><br>**5:30 PM** **Preparing the Team for this New Communication Style: TRANSIT as an Exemplar**, Nathalie Duerinckx, MSN, KU Leuven; University Hospitals of Leuven, Belgium<br><br>**5:50 PM** **Motivational Interviewing: An Empirically Supported Intervention**, Mary Amanda Dew, PhD, University of Pittsburgh School of Medicine & Medical Center, Pittsburgh, PA, USA<br><br>**6:10 PM** **Panel Discussion**<br><br>**Natural Immunity, Adaptive Response Infection and Immunosuppression: The Piñata Cocktail**<br><br>**SESSION SUMMARY:** This session will bring bench to bedside by focusing on the responses to infections and microbial colonization in transplant recipients. The focus will be on innate immune function, their responses to microbes and their effects on graft function.<br><br>**4:30 PM** **Natural and Adaptive Immunity**, Javier Carbone, MD, PhD, Gregorio Marañon Hospital, Madrid, Spain<br><br>**5:14 PM** **Discussion**<br><br>**4:54 PM** **Immune Reconstitution Inflammatory Response Syndrome**, Martha L. Mooney, MD, FACP, Sentara Norfolk Transplant and Advanced Heart Failure Center, Eastern Virginia Medical School, Norfolk, Virginia, USA<br><br>**5:18 PM** **The Role of Fungal and Viral Infection and Colonization on Chronic Lung Allograft Dysfunction**, Shahid Husain MD, MS, University Health Network, University of Toronto, Toronto, ON, Canada<br><br>**5:38 PM** **Discussion**<br><br>**5:42 PM** **The Role of Bacterial Infection and Colonization on Chronic Lung Allograft Dysfunction**, Aric L. Gregson, MD, David Geffen School of Medicine at UCLA, Los Angeles, CA, USA<br><br>**6:02 PM** **Discussion**<br><br>**6:06 PM** **The Role of Infections on Heart Allograft Chronic Dysfunction**, Nicolas Manito, MD, Hospital Bellvitge, Barcelona, Spain<br><br>**6:26 PM** **Discussion**
Unique Aspects of Heart Failure in Children: Physiology and Management (513DEF)

CHAIRS: Yuk M. Law, MD and Beth D. Kaufman, MD

SESSION SUMMARY: The pathophysiology and management of heart failure in children resemble those in adult heart failure patients. This symposium will discuss these similarities and highlight the unique aspects of heart failure in children.

4:30 PM  Neurohormonal Changes, Ventricular Remodeling and Clinical Presentation: Similarities and Differences with Adults, Ulrich Schweigmann, MD, Medical University Hospital, Innsbruck, Austria

4:50 PM  Medical Management: Are Children Small Adults?, Robert E. Shaddy, MD, The Children’s Hospital of Philadelphia, Philadelphia, PA, USA

5:10 PM  Medical Management of Children with Failed Fontan Physiology, Elfriede Pahl Schuette, MD, Lurie Children’s Hospital, Northwestern Feinberg School of Medicine, Chicago, IL, USA

5:30 PM  Biomarkers in Pediatric Heart Failure, Robert G. Weintraub, MB BS FRACP FACC, Royal Children’s Hospital, Parkville, Victoria, Australia

5:50 PM  Cardiorenal Syndrome in Pediatric Heart Failure, Jack F. Price, MD, Baylor College of Medicine/Texas Children’s Hospital, Houston, TX, USA

6:10 PM  Panel Discussion
### Are the Pathology Working Formulations the Gold Standard for Diagnosing AMR in Heart and Lung in 2013? (S13DEF)

**CHAIRS:** Jonathan B. Orens, MD and Randall C. Starling, MD, MPH

**SESSION SUMMARY:** The pathology working formulations for heart and lung transplants will be reviewed and discussed by clinicians (addressing adult and pediatric patients) to assess their current state and usefulness. This will provide the Pathology Council with further targets for improvement of the formulations.

- **7:00 AM** The Working Formulation for AMR Adult Heart, Lawrence S.C. Czer, MD, Cedars-Sinai Heart Institute, Los Angeles, CA, USA
- **7:15 AM** The Working Formulation for AMR in Pediatric Heart, Janet N. Scheel, MD, Johns Hopkins University, Baltimore, Maryland, USA
- **7:30 AM** How Do We Diagnose AMR in Adult Lung Transplant?, Marie M. Budev, DO, MPH, The Cleveland Clinic, Cleveland, OH, USA
- **7:45 AM** How Do We Diagnose AMR in Pediatric Lung Transplant?, Stuart C. Sweet, MD, PhD, Washington University, St. Louis, MO, USA

### Beyond Survival: Evaluating Lung Transplant Success Through Patient Oriented Outcomes (S14B)

**CHAIRS:** Daniel F. Dilling, MD and Annette DeVito Dabbs PhD, RN

**SESSION SUMMARY:** Lung transplantation primarily aims to extend survival and improve quality of life (QOL). Despite its clinical primacy, however, QOL remains a poorly understood area of research hindering its integration into clinical care and counseling. This session will address QOL research in lung transplantation from the “bench to the bedside.” Content will include a primer on QOL instrument design and data interpretation, followed by a comprehensive review of state-of-the art research in QOL, utility measures and interventions that can improve clinically relevant QOL outcomes in patients undergoing lung transplantation.

- **7:00 AM** What is Quality of Life, Really? Understanding QOL Research Instruments and Outcomes, Jonathan P. Singer, MD, UCSF Medical Center, San Francisco, CA, USA
- **7:10 AM** Does Lung Transplantation Actually Improve Quality of Life?, Lianne G. Singer, MD, FRCPC, University Health Network, University of Toronto, Toronto, ON, Canada
- **7:20 AM** Utilities in Lung Transplant – Moving Beyond Survival to Calculate “Net-Transplant Benefit,” Roger D. Yusen, MD, MPH, Washington University School of Medicine, St. Louis, MO, USA
- **7:30 AM** Quality of Life in Pediatric Lung Transplantation, Samantha J. Anthony, PhD MSW, The Hospital for Sick Children / McMaster University, Toronto, ON, Canada
- **7:40 AM** Determinants of QOL in Lung Transplantation: Pulmonary and Extrapulmonary Factors, Christiane Kugler, University Witten and Hannover Medical School, Hannover, Germany
- **7:50 AM** Panel Discussion
THURSDAY, APRIL 25, 2013
8:00 am – 10:00 am

Opening Plenary Session

**Opening Plenary Session (517CD)**

**CHAIRS:** Allan R. Glanville, MBBS, MD, FRACP and David O. Taylor, MD

- **8:00 AM** Welcome/Program Chair Report, Allan R. Glanville, MBBS, MD, FRACP, St. Vincent’s Hospital, Sydney, NSW, Australia
- **8:05 AM** President’s Report, David O. Taylor, MD, Cleveland Clinic, Cleveland, OH, USA
- **8:15 AM** Thoracic Registry Report, Josef Stehlik, MD, MPH, University of Utah School of Medicine, Salt Lake City, UT, USA
- **8:30 AM** MCSD Registry Report, James K Kirklin, MD, University of Alabama at Birmingham, Birmingham, AL, USA
- **8:40 AM** FEATURED ABSTRACT
- **8:55 AM** INVITED LECTURE: The Human Microbiome: What Is It, How Do We Measure It, What Does It Mean For Thoracic Transplantation?, Ronald G. Collman, MD, University of Pennsylvania School of Medicine, Philadelphia, PA, USA
- **9:20 AM** FEATURED ABSTRACT
- **9:35 AM** Pioneer Lecture

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**10:30 AM – NOON**
**CONCURRENT ABSTRACT SESSIONS**

**2:00 PM – 3:30 PM**
**CONCURRENT ABSTRACT SESSIONS**

**4:00 PM – 5:30 PM**
**CONCURRENT ABSTRACT SESSIONS**

**5:30 PM – 6:30 PM**
**MINI ORAL POSTER ABSTRACT SESSIONS**
VAD Optimization – Pump It Up

CHAIRS: Michael Dandel MD, PhD and David S. Feldman, MD, PhD FACC, FAHA

SESSION SUMMARY: Use of echo, right heart catheterization and device setting to optimize VAD function. Case based discussion using graphics and echo to illustrate how to optimize speed, settings and role of clinical parameters including echo, RHC to optimize VAD function and patient stating.

7:00 AM  What’s the Spin on the Echo?, Phyllis Billia, MD PhD FRCP, University Health Network, Toronto, ON, Canada

7:15 AM  Settings – Ramp It Up or Back It Off, When and How?, J. Eduardo Rame, MD MPhil, University of Pennsylvania, Philadelphia, PA, USA

7:30 AM  Right Heart Catheterization Role in Optimizing Patients, Jennifer Cowger, MD, MS, University of Michigan Cardiovascular Center, Ann Arbor, MI, USA

7:45 AM  Discussion
The “Omics” of Cardiac Transplantation (S11)

CHAIRS: Howard J. Eisen, MD and David A. Baran, MD

SESSION SUMMARY: To understand the mechanisms of rejection and immune system regulation after heart transplantation, molecular biology techniques have been used for a long time. Where do we stand now with respect to clinical practice? In this session speakers will provide an update of the current clinical applicability of gene-based and protein-based techniques.

7:00 AM Gene Expression Profiling and Circulating DNA: Ready for Clinical Practice?, Michael Pham, MD, MPH, Stanford University and VA Palo Alto Health Care System, Palo Alto, CA, USA

7:15 AM Clinical Translation of Proteomic Studies in Cardiac Transplantation, Bruce McManus, MD, PhD, FRSC, FCAHS, NCE CECR Centre of Excellence for Prevention of Organ Failure, Vancouver, BC, Canada

7:30 AM Using Omics to Modify Immune Suppression After Cardiac Transplantation, Mario C. Deng, MD, UCLA, Los Angeles, CA, USA

7:45 AM Discussion

Bronchoscopic Battles and Anastomotic Atrocities (S10)

CHAIRS: Stephen C. Clark, FRCS and Lorrriana E. Leard, MD

SESSION SUMMARY: This sunrise session will focus on controversies regarding surveillance bronchoscopy, airway anastomotic complications and surgical techniques. The session will focus on causation, management and outcomes from both a surgical and medical perspective in a ‘quick fire debate’ format.

7:00 AM Current Status of Surveillance Bronchoscopy, Maria M. Crespo, MD, University of Pittsburgh Medical Center, Pittsburgh, PA, USA

7:10 AM DEBATE: Airway Complications

This is a quick-fire debate with the following topics:

1) Risk factors
2) Technique
3) Dehiscence
4) Stenosis
5) Air Leaks and Endobronchial Valve

SPEAKERS:

7:10 AM Speaker 1: Dirk EM Van Ramdonck MD, PhD, University Hospitals Leuven, Leuven, Belgium

7:15 AM Speaker 2: Lonny Yarmus, DO, FCCP, Johns Hopkins University School of Medicine, Baltimore, MD, USA

7:30 AM Speaker 1 Discussion

7:45 AM Speaker 2 Discussion

Role of Micro RNAs in the Pathogenesis of Pulmonary Hypertension, Sebastien Bonnet PhD, Laval University, Quebec City, QC, Canada

Proteomics and Metabolomics in Pulmonary Hypertension, Ioana R. Preston, MD, Tufts Medical Center, Boston, MA, USA

Abnormal Oestrogen Pathways in Pulmonary Hypertension, James D. West, PhD, Vanderbilt University, Nashville, TN, USA
**Sunrise Symposium 8**

**Avatars and Advanced Care Planning (S13ABC)**

**CHAIRS:** Michael G. Petty, PhD, RN, CCNS, ACNS-BC and Fabienne Dobbels, PhD

**SESSION SUMMARY:** At the end of this session, the attendees will be able to discuss the challenges associated with managing patients who live at large distances from the implanting centers, determine the best approaches to engage VAD patients in their care and review the approaches to palliation in patients with the most advanced forms of disease.

7:00 AM  Managing Patients from a Distance – Alternatives to Laying on Our Own Hands, Annemarie Kaan, RN MCN, St. Paul’s Hospital, Vancouver, BC, Canada

7:15 AM  The Responsibility Handoff: Empowering Patients, Michelle L. Harkess, RN, MCN, St. Vincent’s Hospital, Sydney, NSW, Australia

7:30 AM  Palliative Care Considerations, Sally J. Brush, MSN, FNP, Intermountain Medical Center, Salt Lake City, UT, USA

7:45 AM  Discussion

**Sunrise Symposium 9**

**What’s New in Xenotransplantation? (S14B)**

**CHAIRS:** David K. C. Cooper, MD, PhD, FRCS and Jeffrey Teuteberg, MD

**SESSION SUMMARY:** This sunrise symposium will go over the latest advances of xenotransplantation and how they apply to heart and lung transplantation

7:00 AM  Immunobiology of Xenotransplantation, Richard N. Pierson III, MD, University of Maryland, Baltimore, MD, USA

7:15 AM  Discussion

7:18 AM  Current Status of Cardiac Xenotransplantation, Christopher G. A. McGregor, UCL, London, UK and Mayo Clinic, Rochester, MN, USA

7:33 AM  Discussion

7:36 AM  Lung Xenotransplantation, Agnes M. Azimzadeh, PhD, University of Maryland, Baltimore, MD, USA

7:51 AM  Discussion

7:54 AM  Panel Discussion

**Symposium 25**

**“The Year in a Capsule:” JHLT at ISHLT (S13DE)**

**CHAIRS:** Patricia Uber, PhD and Jayan Parameshwar, MD

**SESSION SUMMARY:** The Junior Faculty Trainee Council and the Journal of Heart and Lung Transplantation are sponsoring a novel session this year to bring the JHLT to the ISHLT. This session will highlight the most exciting publications in the JHLT over the past year, followed by a discussion by one of the senior editorial consultants of the journal to relate the presented articles to the greater body of published literature and to suggest how they advance our understanding in the field.

8:00 AM  Highlights of Heart Transplantation and Mechanical Circulatory Support, Keyur B. Shah, MD, Virginia Commonwealth University, Richmond, VA, USA

8:15 AM  Discussant: Mark S. Slaughter, MD, University Cardiothoracic Surgical Assoc, Louisville, KY, USA

8:20 AM  Highlights of Lung Transplantation, Hanneke Kwakkel-van Erp, MD, PhD, University Medical Center Utrecht, Utrecht, The Netherlands

8:35 AM  Discussant: Allan R. Glanville, FRACP, Sydney, Australia

8:40 AM  Highlight of Pulmonary Hypertension, Christina Migliore, MD, Newark Beth Israel Medical Center, Newark, NJ, USA

8:55 AM  Discussant: Paul A. Corris, MB FRCP, Freeman Hospital, Newcastle, UK

9:00 AM  Highlights of Issues Related to Children, Yishay Orr, FRACS, PhD, Children’s Hospital at Westmead, Lane Cove, Australia

9:15 AM  Discussant: Lori J. West, MD, DPhil, University of Alberta, Edmonton, Canada

9:20 AM  General Q & A
How to Succeed When the Right Ventricle Fails

CHAIRS: Paul A. Corris, FRCP and Sharon A. Hunt, MD

SESSION SUMMARY: The right ventricle is often held accountable for morbidity and mortality in patients with advanced heart and/or lung disease. Moreover, the right ventricle is frequently blamed for poor outcomes seen in patients receiving left ventricular assist device or heart transplantation. This session will provide the participant with a better understanding of right ventricular structure, function, and physiology; how to evaluate right ventricular function in health and disease; and importantly, how to manage right ventricular failure both through medical and surgical/device options.

10:00 AM Right Ventricular Structure and Function in Health and Disease, Andrew N. Redington, MD, FRCP(C), FRCP(UK), The Hospital for Sick Children, Toronto, ON, Canada

10:25 AM Clinical Assessment and Imaging, Anton Vonk Noordegraaf, MD, VU Medical Center, Amsterdam, The Netherlands

10:45 AM The Failing Systemic Right Ventricle, Daniel Bernstein, MD, Stanford University, Stanford, CA

11:05 AM Medical Management, John Granton, MD, University of Toronto, Toronto, ON, Canada

11:25 AM Surgical Approaches, Devices, and Transplant, Martin Strueber, MD, Heart Center Leipzig, University Leipzig, Leipzig, Germany

11:45 AM FEATURED ABSTRACT

2:00 PM – 3:30 AM CONCURRENT ABSTRACT SESSIONS
FRIDAY, APRIL 26, 2013
2:00 pm – 3:30 pm

Symposium 26

ISHLT/AST Joint Session I:
Pretransplant Circulating Antibodies: Making Sense of Sensitization (S13DEF)

CHAIRS: David O. Taylor, MD (ISHLT President) and Roslyn Mannon, MD (AST President)

SESSION SUMMARY: Anti-donor antibodies remain an obstacle to successful thoracic transplantation. The combined expertise of ISHLT and the American Transplant Society come to bear on this timely topic in two separate session. The first explores the detection, interpretation and potential treatments of these antibodies prior to transplantation. The second explores the development of antibody-mediated rejection after thoracic transplantation and importantly includes the perspective of the non-thoracic transplant community.

2:00 PM Antibody Detection and the Use of the C1q Assay, AST Speaker: Dolly B. Tyan, PhD, Stanford University, Palo Alto, CA, USA
2:20 PM Pretransplant Antibodies in Clinical Practice: Are They All Bad, When to Treat and Use of the Virtual Crossmatch, ISHLT Speaker: A.G. Kfoury, MD, FACC, Intermountain Heart Institute (UTAH Cardiac Transplant Program), Salt Lake City, Utah, USA
2:40 PM Desensitization Therapies in Patients Awaiting Kidney Transplantation, AST Speaker: Stanley C. Jordan, Cedars-Sinai Medical Center, Los Angeles, CA, USA
3:00 PM The Approach to Desensitization Therapies for Urgent Status and Mechanical Assisted Patients Awaiting Thoracic Transplantation, ISHLT Speaker: Maria G. Crespo-Leiro, MD, Hospital Universitario A Coruña, La Coruña, Spain
3:20 PM Moderated Panel Discussion

4:00 PM – 5:30 AM
CONCURRENT ABSTRACT SESSIONS

4:00 PM Antibodies After Thoracic Transplantation: The Clinical Meaning and When to Intervene, ISHLT Speaker: John D. Smith, PhD, Harefield Hospital, Middlesex, UK
4:20 PM Common Pathology Findings of AMR Across Solid Organ Transplantation, AST Speaker: Robert Colvin, Massachusetts General Hospital, Boston, MA, USA
4:40 PM Prophylactic Therapies in Sensitized Patients After Kidney Transplantation, AST Speaker: Millie Samaniego, University of Michigan, Ann Arbor, MI, USA
5:00 PM Treatment Strategies in AMR in Thoracic Transplantation, ISHLT Speaker: Jon A. Kobashigawa, MD, Cedars-Sinai Heart Institute, Los Angeles, CA, USA
5:20 PM Moderated Panel Discussion

Symposium 27

ISHLT/AST Joint Session II:
Antibody-Mediated Rejection: State of the “Current” Art (S13DEF)

CHAIRS: Lori J. West, MD, DPhil (ISHLT) and Cynthia J. Gries, MD MSc (AST)

SESSION SUMMARY: Anti-donor antibodies remain an obstacle to successful thoracic transplantation. The combined expertise of ISHLT and the American Transplant Society come to bear on this timely topic in two separate session. The first explores the detection, interpretation and potential treatments of these antibodies prior to transplantation. The second explores the development of antibody-mediated rejection after thoracic transplantation and importantly includes the perspective of the non-thoracic transplant community.

4:00 PM Antibodies After Thoracic Transplantation: The Clinical Meaning and When to Intervene, ISHLT Speaker: John D. Smith, PhD, Harefield Hospital, Middlesex, UK
4:20 PM Common Pathology Findings of AMR Across Solid Organ Transplantation, AST Speaker: Robert Colvin, Massachusetts General Hospital, Boston, MA, USA
4:40 PM Prophylactic Therapies in Sensitized Patients After Kidney Transplantation, AST Speaker: Millie Samaniego, University of Michigan, Ann Arbor, MI, USA
5:00 PM Treatment Strategies in AMR in Thoracic Transplantation, ISHLT Speaker: Jon A. Kobashigawa, MD, Cedars-Sinai Heart Institute, Los Angeles, CA, USA
5:20 PM Moderated Panel Discussion

5:30 – 6:30 PM
MINI ORAL POSTER ABSTRACT SESSIONS
International MCS Reimbursement

International MCS Reimbursement (512H)

NOTE: CME credit is not provided for this session

MODERATORS:
Jeffrey Teuteberg, MD (MCS Council Chair) and Daniel J. Goldstein, MD (MCS Council Vice Chair)

Reimbursement in the United States

5:30 PM Perspective from the Payers, Dennis Irwin, MD, OptumHealth, Golden Valley, MN, USA

5:40 PM Updates on Reimbursement in the US, Tina Ivovic, Thoratec Corporation, Pleasanton, CA, USA

5:50 PM Clinical Perspectives, Valluvan Jeevanandam, MD, University of Chicago Medical Center, Chicago, IL, USA

6:00 PM Q & A

The European Landscape

6:30 PM Updates on Reimbursement in Europe, Timothy L. Homer, MPA, HeartWare Incorporated, Framingham, MA, USA

6:45 PM Clinical Perspectives, Stephan Schueler, MD, PhD, FRCS, Freeman Hospital, Newcastle upon Tyne, UK

7:00 PM Q & A
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| Sunrise Symposium 10 | MCS and Congenital Heart Disease – Success and Failure | Carmelo A. Milano, MD and Asif Hasan MD, FRCS (C/th) | At the end of the session the attendees will be able to discuss the outcomes after heart transplant in patients with congenital heart disease, review the utility of mechanical circulatory support in patients with congenital heart disease and heart failure and learn from a case based discussion. | 7:00 AM Outcomes After Heart Transplantation for Adult Congenital Heart Disease, Anne I. Dipchand, MD, Hospital for Sick Children, Toronto, ON, Canada  
7:15 AM Failed Fontan and Use of Mechanical Assist, David L. S. Morales, MD, Cincinnati Children’s Hospital Medical Center, The Heart Institute, Cincinnati, OH, USA  
7:30 AM My Toughest Cases in Transplantation of ACHD, Jonathan M. Chen, MD, New York Presbyterian, New York, NY, USA  
7:45 AM Discussion |
| Sunrise Symposium 11 | PH and the Lung Parenchyma | Oksana A. Shlobin, MD and Mardi Gomberg-Maitland, MD, MSc | Pulmonary hypertension is commonly seen in patients with advanced interstitial and airway disease but is also seen in patients with relatively mild parenchymal destruction when it is regarded as out of proportion PH. This concept is well recognized but not so well defined. This symposium will discuss the evidence and clinical approaches to the use of targeted therapy for PAH in three common examples seen in clinical practice. | 7:00 AM Sarcoidosis – More Than Granulomas?, Steven D. Nathan, Inova Fairfax Hospital, Falls Church, VA, USA  
7:15 AM Scleroderma, Jeffrey A. Golden, MD, UCSF, San Francisco, CA, USA  
7:30 AM Pulmonary Hypertension in Chronic Obstructive Pulmonary Disease – When to Treat?, Martin P. Iversen, MD, PhD, Rigshospitalet, Copenhagen, Denmark  
7:45 AM Discussion |
| Sunrise Symposium 12 | Challenging Candidates for Lung Transplant Selection | Gregory I. Snell MD and David Weill, MD | Advanced therapies including VADs and transplantation are increasingly being offered to older patients, while the average age of organ donors is also increasing. Therefore more frail patients are referred for lung transplant. As survivors of malignant disease increase, some of them require lung transplant and clinicians are facing difficult decisions on whether they are candidates. As extracorporeal technology for lung failure advances, transplants for patients on ECMO is being considered more and more. Finally, patients with viral infections, especially HCV and HIV are living longer and present special challenges as possible lung transplant candidates. This session will provide a state-of-the-art overview of special considerations and outcomes of providing advanced organ support and replacement to all these groups of challenging recipients. | 7:00 AM Bridged or Ventilated Patients, Kenneth R. McCurry, MD, Cleveland Clinic, Cleveland, OH, USA  
7:10 AM Lung Transplant Candidates with Malignancy, Annette Boehler, MD, University Hospital Zurich, Switzerland  
7:20 AM The Frail and Debilitated Lung Transplant Candidate, David J. Lederer, MD, MS, Columbia University Medical Center, New York, NY, USA  
7:30 AM Viral Infections in the Lung Transplant Candidate (HIV and HCV), Lara Danziger-Isakov, MD, MPH, Cincinnati Children’s Hospital Medical Center, Cincinnati, OH, USA  
7:40 AM Discussion |
Sunrise Symposium 13

Pediatric Lung Transplantation: Developments and Controversies (S13ABC)

CHAIRS: Samuel B. Goldfarb, MD and Bart L. Rottier, MD

SESSION SUMMARY: This session aims to update the pediatric lung transplant community on recent developments in the field and to discuss controversies, in particular regarding strategies to overcome donor organ shortage, mechanical support as a bridge to pediatric lung transplantation, bronchoscopy in pediatric lung transplant recipients and specific pediatric aspects of treatment for Bronchiolitis Obliterans Syndrome (BOS).

7:00 AM  Pediatric Aspects of DCD Lung Donors – Where Are We in 2013?, Melinda Solomon MD, FRCP(C), Hospital for Sick Children, Toronto, ON, Canada

7:10 AM  Mechanical Support in Children Bridged to Lung Transplantation – Current Practice and Future Challenges, Nicolaus Schwerk, MD, Hannover Medical School, Hannover, Germany

7:20 AM  Bronchoscopy in Pediatric Lung Transplant Recipients – Surveillance vs. Clinically Indicated Procedures, Albert Faro, MD, Washington University in St. Louis, St. Louis, MO, USA

7:30 AM  Treatment Options for BOS in Children After Lung Transplantation, Christian Benden, MD, University Hospital Zurich, Switzerland

7:40 AM  Discussion

Sunrise Symposium 14

Travel, Leisure And Work After Transplant: Keeping Our Patients Safe From Infections (S13DEF)

CHAIRS: Valentina Stosor, MD and Amparo Solé MD, PhD

SESSION SUMMARY: This session will discuss the role of pre-transplant infectious diseases evaluations, managing donor-related infections and post-transplant strategies for assessing risk and avoiding infections related to everyday activities. The emphasis is on how transplant patients can lead more “normal” lives and safely enjoy the world around them.

7:00 AM  The Dreaded Donor Call that Needs the Transplant Infectious Diseases Specialist to Clear for Accepting the Organ: Resources, Diagnostics, Management Strategies, Amparo Solé MD, PhD, University Hospital La Fe, Valencia, Spain

7:15 AM  Pretransplant Infectious Diseases Evaluations: Assessing Risk and Nipping It in the Bud, Stanley I. Martin, MD, Ohio State University Medical Center, Columbus, OH, USA

7:30 AM  The Environment Bites Back, Kate Gould, Freeman Hospital, Newcastle upon Tyne, UK

7:45 AM  Discussion
Pharm Symposium: A Lifecycle Journey in Cystic Fibrosis and Lung Transplantation (512A-G)

**CHAIRS:** Christopher R. Ensor, PharmD, BCPS-CV and Allan R. Glanville, MBBS, MD, FRACP

**SESSION SUMMARY:** After the successful symposium “A lifecycle journey in advanced heart failure and transplantation” at the 2012 meeting, we will continue this innovative session for the 2013 meeting, sponsored by the ISHLT Pharmacy and Pharmacology Council. Traditional symposia are presented either in pure didactic tracks or cases with panel discussions. This series is a practical hybrid depicting an enduring case interspersed with a best practice based discussion at predefined key “journey intervals.” The symposium will be rounded off by a panel assisted and audience supported anchoring discussion. For the 2013 Montréal meeting, we will focus on the lifecycle of Cystic Fibrosis and Lung Transplantation with special emphasis on four “journey points:”

1. **Pre-transplant Journey:** Considerations With Multi-Drug Resistant Infections in the Lung Transplant Candidate With Cystic Fibrosis, Denis Hadjiliadis MD, MHS, University of Pennsylvania, Philadelphia, PA, USA
2. **Peri-operative and Immediate Post-operative Management of the Lung Transplant Patient With Cystic Fibrosis,** Joseph M. Pilewski, MD, University of Pittsburgh, Pittsburgh, PA, USA
3. **Middle Post-transplant Journey:** Metabolic and Interaction Considerations to Drug-dosing in the CF Lung Transplantation patient, and Haifa Lyster MSc, BPharm(Hons), Royal Brompton & Harefield NHS Foundation Trust, London, UK
4. **Late Post-transplant Journey:** Prevention and Management Strategies for OB in Cystic Fibrosis, Peter M. A. Hopkins, FRACP, The Prince Charles Hospital, Brisbane, QLD, Australia

8:00 AM  
**Moderated Panel Discussion**