Welcome to the 2012 Meeting and Scientific Sessions

From the President – Lori J. West, MD, DPhil

It is with great pleasure that I welcome you, on behalf of the entire ISHLT Board of Directors and staff, to Prague for the 32nd ISHLT Annual Scientific Meeting. This year’s meeting, organized under the superb guidance of Dr. Stuart Sweet and his program committee, promises an exciting and diverse program, as befitting the amazing diversity of our membership and the commitment of our community to all aspects of thoracic organ failure and transplantation. Attendance at the Prague meeting is anticipated to set new records. The ISHLT Academy for 2012 was developed to provide coverage of core competencies for our ever-expanding Mechanical Circulatory Support membership, and sold out early. The pre-meeting symposia on Wednesday will include an array of topical issues developed by the program committee in conjunction with the Scientific Councils. The Wednesday afternoon opening will include a special session on “Overcoming Political Barriers” in the advancement of science, formulated to highlight the city of Prague and advances in the Czech Republic in medicine and transplantation after the political changes brought about by the fall of the Iron Curtain, and will close with a keynote address by internationally acclaimed physicist, political commentator and essayist Prof. Lawrence Krauss. These sessions will set the stage for the scientific program to follow, which will engage the membership in contributions of original cutting-edge basic and clinical science, expert lectures and interactive panel discussions that include emerging technologies and new integrated topics. Enjoy the program and the spring days in the beautiful city of Prague!

From the Program Chair – Stuart C. Sweet, MD

Welcome to Prague and the 32nd Annual meeting of the ISHLT! From an opening plenary that focuses on the impact of politics on science and medicine, to a final plenary that will teach us how advances in information technology are changing our practices, with a multitude of symposia, concurrent abstract sessions and posters showcasing the diverse interests of our society in between, we hope to entertain and educate you. But don’t forget to step outside the Congress Center and explore the magical city of Prague. A few steps down the hill to the west is Výšehrad castle, once a seat of Czech power. Hop on the subway and two stops to the north is vibrant Wenceslas Square. Old Town Square and the Charles River Bridge are a short walk or subway ride from there. Finally, don’t forget to join us for the President’s Cocktail Reception at the beautiful Prague Municipal House on Friday.

I’d like to thank the Program Committee, Abstract Reviewers and most importantly the ISHLT Staff for their hard work in putting this program together. I’d also like to thank Lori West and the Board for giving me this wonderful opportunity to serve our society.

Enjoy!
Blogs and Clogs from Prague

At our annual meeting, it is routine to be aware of and disclose any Conflicts of Interest (COI). It’s within these COI where biases are introduced and scientific study becomes questionable. May I suggest another meaning of COI—Clusters of Interest? To reduce confusion, let’s be aware of and link all similar interests into clusters, or “cluster groups”. With this in mind, allow me to introduce you to CLOGS—Clustered Links of Groups!

Over the past year the monthly Links e-Newsletter, as well as a few newly formed Council “Google Groups” (BSTR, HF, MCS, NSHAH, PEDS, and PULM TX) have taken off. Now, it is time to nurture the many CLOGS with these forms of near-constant communication to identify and fill educational gaps with meaningful use material to benefit the many sufferers of heart and lung diseases.

While in Prague, enjoy the sights, the conference, and the time with friends from afar, but seek out the CLOGS that interest you. Then continue online communication with BLOGS after Prague to begin planning, organizing, and developing new ideas for next year’s program.

Vincent Valentine
Links Editor

PREVIEW:
Ex Vivo Alternatives

Given the shortage of available organs for transplantation, alternative strategies are being investigated. Marginal donor organs are used to increase the donor pool. Ex vivo perfusion of organs is used in recent years to treat, re-assess and improve the function of high-risk donor organs so they can be successfully transplanted into patients. Organs previously considered unusable can now be used for transplantation with excellent outcomes. Today’s Pre-Meeting Symposium 09: Ex Vivo Perfusion of Heart and Lungs - Why, with What, and How? begins with a talk given by Dr. Rutger J. Ploeg reporting experience in ex vivo perfusion in kidney transplantation, as there are significantly more data with the kidney as with thoracic organs. It continues with two presentations, one by Dr. Christoph Knosalla with the European experience and the second by Dr. Abbas Ardehali with the U.S. experience of ex vivo perfusion of donor hearts. The last part of the session will discuss ex vivo perfusion of donor lungs in different countries and usage of different perfusion systems. Dr. Shaf Keshavjee, one of the
pioneers in this field, will give us an update on “Clinical Experience with Warm Asanguinous ex vivo Lung Perfusion in Toronto,” followed by Dr. Stephen C. Clark who will present data on the Vivoline System.

Lastly, Dr. Gregor Warnecke will report his experience with the Transmedics device and gives an outlook regarding the prospective, randomized multi-centered INSPIRE trial.

MCS and VAD: Hot Topics at this Year’s ISHLT Academy

This year’s ISHLT academy focused on the role of mechanical circulatory support (MCS) devices in the treatment of advanced heart failure. During the morning session, Dr. Francis Pagani reviewed the current state of the art technology, including the continuous flow rotary/axial pump and the emerging continuous flow centrifugal pumps. The shift towards continuous flow pumps with the smaller size and fewer complications has lead to a significant paradigm shift in MCS. A greater percentage of ventricular assist devices (VAD) are being placed as a bridge to destination therapy and bridge to candidacy, with proportionately fewer as a bridge to transplantation.

In addition, there has been a shift towards placing VAD earlier in the course of decompensated heart failure with more placements in otherwise stable patients with NYHA Class IV heart failure and fewer patients with decompensated cardiogenic shock. The result has been a tremendous increase in the number of VAD implanted. However, Dr. Jeffrey Teuteberg mentioned there is still significant room for improvement. Too many VAD are being placed in the sickest patients with the highest mortality, and not enough INTERMACS Class 4 and 5 patients. Dr. Nicholas Banner stated that part of the reason is lack of early referral to advanced heart failure centers. Dr. Andrew Boyle suggested several simple questions, including whether the patient is unable to walk at least a block and whether there are increasing pulmonary artery pressures by doppler echocardiography as triggers for referral to a heart failure center.

At the same time, panelists emphasized that VAD placement has significant risks, and may not be appropriate for everyone. Thus, when VAD implantation is considered, palliative care should be involved so patients get an accurate view of both sides of the coin. The morning session can be summarized by Dr. Teuteberg comment that we truly are at the horizon of an exciting period of rapid advancement in the field of MCS, with ongoing improvements for ventricular assist devices and emerging applications for the pediatric population.

PREVIEW: If the Right Heart ain’t happy, ain’t Nobody Happy.

Failure of the right heart is an important factor contributing to mortality in end stage lung disease. Nevertheless, treatment of right heart failure is often non-rewarding and limited to supportive care. During this morning’s Pre-Meeting Symposium 10: The Right Ventricle and Pulmonary Vascular Load in Health and Disease, the focus is on this important structure. Dr. Ryan Tedford reviews how different conditions, including normal aging, pulmonary diseases, and left sided dysfunction, affect the right heart. Dr. Rajeev Sagar and Dr. Steven Mathai both expand on this, including the effect of exercise on the right heart and the pathophysiology of the failing heart. Dr. Anton Vonk-Noordegraaf’s will end the discussion with how to manage patients with right heart failure. Special emphasis will be placed on innovative strategies to maintain right ventricular function in patients with decompensated pulmonary hypertension while awaiting lung transplantation.

PREVIEW: Innate Immunity in Cardiotoracic Transplantation

The importance of modulating the immune system after lung and heart transplantation has been recognized since Dr. James Hardy performed the first lung transplant in 1963. Much of the focus is on the adaptive immune system, especially cell-mediated immunity, in the prevention of allograft dysfunction.

During today’s Pre-Meeting Symposium 17: Innate Immunity in Cardiotoracic Transplantation, Drs. Andrew Gelman, Daniel Kriesel, Jason Christie, and Joren Madsen will present data suggesting not to neglect the innate immune system. Topics to be discussed include how to evaluate the innate immune system after transplantation and evidence that the innate immune system contributes to acute lung injury after lung transplantation and chronic rejection in heart transplant recipients.

Detecting the Antibodies, Evaluate Biopsy, and Finally, the Patient (Meeting Hall I)

Pre-Meeting Symposium 15: Advances in Pulmonary Transplant Surgery (Panorama Hall)

Pre-Meeting Symposium 16: Thoracic Organ Donors: Optimal Management and New Avenues (Meeting Hall 4)

Pre-Meeting Symposium 17: Innate Immunity in Cardiotoracic Transplantation (Meeting Hall V)

Pre-Meeting Symposium 18: Congenital Heart Disease: Pulmonary Hypertension Dilemmas in Pediatric and Adult Patients (North Hall)

1:00 pm – 3:00 pm Lunch Breaks and Council Meetings

3:00 pm – 4:15 pm Concurrent Session 1: How VADs Impact our Community (Forum Hall)

Concurrent Session 2: Decision Making in Advanced Heart Failure:Bridge, Recover, Transplant (Meeting Hall 1)

Concurrent Session 3: What do Animals Models Teach us about BOS? (Panorama Hall)

Concurrent Session 4:
REVIEW:
Post Operative Period: Hot Topic at this Year’s ISHLT Academy

The second part of ISHLT MCS academy covered the postoperative period. Patients receiving a left ventricular assist device (LVAD) are at increased risk as most deaths occur within the first 30 days after VAD implantation. Close and careful monitoring and treatment are necessary. Right ventricular (RV) failure has been identified to be one of the most severe complications after LVAD implantation. Dr. Rajek highlighted that the postoperative care starts during surgery.

Dr. Strueber continued the same discussion emphasizing when RV failure occurs it is often too late. The best treatment for RV failure is its avoidance. As bleeding and thromboembolism is a constant risk in LVAD patients different anticoagulation regimens were discussed. Dr. Rao summarized the guidelines and recommendations by manufacturers and presented some challenging cases reviewing the management of bleeding in LVAD patients with modified anticoagulation and antiplatelet protocols. Dr. Goldstein reported gastrointestinal bleeding in patients on continuous flow LVAD. Possible reasons include: von-Willebrand syndrome, mucosal damage by ASA and pre-existing gastrointestinal bleeding sites. Dr. Potapov presented data on driveline infections, their prevention by different surgical techniques and possible treatment strategies. As destination therapy is an increasing indication for LVAD patients, the aim is for these patients to return home after implantation. This requires teaching and educating patients, families, nurses and referring physicians regarding pharmacology and lifestyle changes after VAD implantation. Drs. Petty and Nelson describe a multidisciplinary team approach including an outpatient network providing better patient care that increases quality of life. Outpatient management should monitor and screen for adverse events of MCS as outlined by Dr. Rogers, including infection, anemia, arrhythmia and secondary organ failure. Echocardiographic of the LVAD and unloading parameters need to be assessed for optimal patient care. Dr. Desai presented some interesting cases in this regard.

The recent advances in VAD technique with the switch from pulsatile to continuous flow devices improved quality of life and functional capacity, as presented by Dr. Grady representing a huge success for patients considered for DT. Despite this success, many patients have worries and psychological problems as reported by Dr. Pamboukian from her focus on supportive care in DT.

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Basic Phrases:
Czech

<table>
<thead>
<tr>
<th>English Greetings</th>
<th>Czech Greetings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hi!</td>
<td>Ahoj</td>
</tr>
<tr>
<td>Good morning!</td>
<td>Dobré ráno.</td>
</tr>
<tr>
<td>Good evening!</td>
<td>Dобrý večer.</td>
</tr>
<tr>
<td>Welcome! (to greet someone)</td>
<td>Vítej! (sing.) Vitejte (pl.)</td>
</tr>
<tr>
<td>How are you?</td>
<td>Jak se máš? (sing.) Jak se máte? (pl.)</td>
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