ISHLT Links

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Vincent G Valentine, MD
Editor

In This Issue

Click on the article you would like to view

ISHLT Links Marks Next Step In Its Evolution 1

Mission of the LINKS 1
Vincent G Valentine, MD

President's Message 2
Lori J West, MD, DPhil

Highlights from the NHSAH Symposia and Abstract Sessions ISHLT San Diego 2011 3
Nancy P Blumenthal, CRNP and Bronwyn J Levvey, RN, Grad Dip Clin Ep

On to Prague 4
Stuart Sweet, MD

Look Into My Eyes 5
Vincent G Valentine, MD and Leonardo Seoane, MD

CMV – The Gathering Storm 6
Glen P Westall, FRACP, PhD

Grants and Awards Committee 7
Duane Davis, MD, Chair

Report from Infectious Diseases Council 8
Stanley Martin, MD and Lara Danziger-Isakov, MD, MPH

Rules of Engagement 9
Vincent G Valentine, MD

What's Hot in Lung Transplantation 9
Allan R Glanville, MBBS, MD, FRACP

JHLT – Editor's June 2011 Highlights 11

The Journal of Heart and Lung Transplantation: Shooting For The Stars 12
Mandeep R Mehra, MD

Immune monitoring to predict infection in heart and lung transplantation. 31st ISHLT Annual meeting 12
J Carbone, MD

ISHLT ADMINISTRIVIA 13

ISHLT LINKS MARKS NEXT STEP IN ITS EVOLUTION

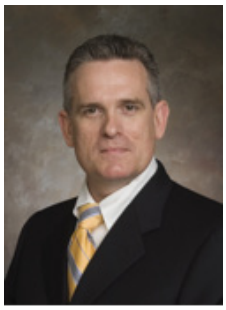
One of the most significant goals to emerge from the Society's 2008 Strategic Planning Process was that of improving communications within the Society, between members, between and within Scientific Councils, and between the Board and the members. The implementation of this goal has been an ongoing and evolving process, the most visible evidence of which is the Society LINKS Newsletter. This Newsletter emerged as a quarterly e-publication in 2009 under the stewardship of the Communications Committee and the editorship of David Feldman, MD. After two successful years of publication, the LINKS has recently evolved into a monthly publication, the first issue of which is the one you are reading now. Following a call for letters of interest, a new Editor, Vincent Valentine, MD, has been selected by the Board to shepherd the LINKS through its next evolution.

The main purpose of the shift to a monthly publication is to increase its impact and value to the members. The monthly issues will be more timely, taking advantage of the relative speed of e-publication, and shorter, designed to give you the information you need and want both efficiently and promptly.

As the Society's communication plan continues to improve, look for us to begin using more electronic communications media such as Twitter and Facebook, less-formal mechanisms for group interaction such as Google Groups, and a move towards the delivery of more information in electronic format and less in print format. Please be sure to check the ISHLT web site regularly for updated content. We welcome your ideas and suggestions for how our communications with you, our members, can be improved.

MISSION OF THE LINKS

Vincent G Valentine, MD



The ISHLT should strive for perfect harmony as exemplified by the life and career of AH Compton. He was, above all, a consummate scientist. During Compton's career, he worked and studied at Pittsburgh, the University of Cambridge, Minnesota, Chicago and Washington University in St Louis. In 1927, he earned the Nobel Prize in Physics for discovering the particle concept of electromagnetic radiation, "the Compton effect." The connections between the aforementioned universities parallel today's important "links" that we have in the ISHLT. This is my example of a "**cosmic link**." If this is too far-reaching for some of you, then accept it as an **"electromagnetic link,"** and read more about Compton and his works. Fortunately for the world and the medical field (but unfortunately for Japan from 1945 through today), this discovery leaves these synaptic transmissions within us.

You might ask why is Dr Valentine referencing AH Compton? According to Webster's 3rd International Dictionary, Unabridged, the following quote is attributed to AH Compton, ***"The fullest freedom comes when our desires are in harmony with our neighbors."*** May I remind you, as we attempt to promote the much needed science required in heart and lung transplantation, not unlike Compton, sometimes we must begin with creative thoughts outside the mainstream or just outside the box.

The whole point of this desultory ordeal of an introduction is to show you the countless

"Mission..." continued

connections we have with art, science and history. Frankly, I started out this missive to share with you my vision of the ISHLT Links. It begins with a call for help to every member in the Society who wants to contribute in order to build bridges, connections or links across all councils (neighbors) horizontally and, from our leadership, to members vertically. The integrated result will be the clearest vision of a mission of harmony (agreement in feeling or opinion), congruity (agreement or accordance of the parts of a whole), and simply understanding. Can anyone recall the "Crystal Ball Symposium"? I cannot resist the immediate link to Styx, the American rock band from Chicago known for its prog-rock style, with the presentations on the morning of April 15, 2011 in, of all places, the Sapphire Room (so aptly named) of the Hilton San Diego Bayfront. Imagine that Crystal Sapphire Ball, intentional or coincidental!

Well, back to the mission of "The LINKS" with my obvious penchant and flair for connections with art, especially music, movies, history and literature since we have yet not enough science, so for my "final link" in my inaugural issue as your Editor, lyrics from the "Age of Aquarius" by the 5th Dimension…

Harmony and understanding
Sympathy and trust abounding
No more falsehoods or derisions
Golden living dreams of visions
Mystic crystal revelation
And the mind's true liberation

If anyone in the Society would like to share their thoughts on any reasonable topic that connects with the mission of the ISHLT, *that is to improve care of patients with advanced heart or lung disease through transplantation, mechanical support and innovative therapies via research, education and advocacy*, then I urge you to submit a 300 – 500 word article.

The thoughts you submit, with their many potential links, will require final approval for publication.

Quotable Quotes

"There is nothing so annoying as to have two people talking when you're busy interrupting."
Mark Twain

"By failing to prepare, you are preparing to fail."
Benjamin Franklin

"Tell me and I'll forget; show me and I may remember; involve me and I'll understand."
Chinese Proverb

"My education was interrupted only by my schooling."
Winston Churchill

PRESIDENT'S MESSAGE

Lori J West, MD, DPhil

It was with great enthusiasm that I recently took over the ISHLT reins from the outstanding leadership of our immediate Past-President Prof. John Dark on the occasion of the 31st Annual Scientific Meeting. The San Diego meeting, organized under the superb guidance of Dr. Robin Pierson, exemplified the amazing diversity of our membership and the commitment of our community to all aspects of thoracic organ failure and transplantation.

Over the past few years, there has been tremendous growth overall in our field, particularly in pulmonary hypertension and transplant infectious diseases, together with the continued pace of spectacular advancement in mechanical circulatory and respiratory support. The Society is committed to continue the support of this growth as well as expanding activities in pathology, pediatrics and other areas on an international level.

Another area that is undergoing re-organization and rejuvenation this year is in the science related to thoracic organ failure and transplantation. The newly formed Basic Science and Translational Research Council met in San Diego as a large group of dynamic and intensely engaged individuals who put forward many new ideas to enhance the impact of science for our

"President's Message" continued

membership. These activities will continue to evolve in the coming months and will be a particular emphasis for the Program Committee in July as we seek to integrate science themes into the fabric of the Prague program. Innovative communication strategies and other novel ideas contributed by enthusiastic Junior Faculty members, in keeping with the trend of their activities over the past few years, will have promising application for the Prague program as well, together with the contributions of the other Councils. We also expect to see expansion of the evolving transplant pharmacy community as they become an organized ISHLT group.

In addition to preparation for the Prague meeting, over the next year we will continue to pursue opportunities for integration of ISHLT activities with those of other professional societies having common interests. In particular, of fundamental importance to the ethics mandate of the Society will be engagement in international advocacy efforts in partnership with The Transplantation Society towards increasing deceased organ donation and impairing transplant tourism. Our partnered sessions with the American Society of Transplantation at both the American Transplant Congress and the ISHLT Annual Scientific Meetings have been viewed as highly successful by both partners, and it is expected that these will be planned again. Similar success has been achieved in collaboration with the International Pediatric Transplant Association. These and other collaborative opportunities have brought new prominence to ISHLT in the broader transplant community as the home/voice of thoracic transplantation and related topics in thoracic organ failure. I look forward to working with our members on these and other initiatives that bring vibrancy to our Society and advance our field.

HIGHLIGHTS FROM THE NHSAH SYMPOSIA AND ABSTRACT SESSIONS

ISHLT SAN DIEGO 2011

Prepared for ISHLT Links May 2011 by Nancy P Blumenthal, CRNP (Council Chair) and Bronwyn J Levvey, RN, Grad Dip Clin Ep (Communication Chair)

For many members of the NHSAH council, the ISHLT conference in San Diego was kick-started on Tuesday in a very dynamic way by participating in an all day transplant nursing event (generously funded by Cedars-Sinai Heart Institute) entitled, 'Crucial Conversations in Thoracic Transplant Nursing'. Invited participants from eleven countries attended, linking together a highly experienced and diverse group of nursing professionals to discuss issues and challenges that will influence the future of thoracic transplant nursing. Formation of a white paper is underway which will provide, for the first time ever, consensus on many important issues addressed at this meeting.

This event was the perfect lead into the two NHSAH pre-meeting symposia on Wednesday. The first symposium addressed 'Old Problems, New Solutions.' The presentations by clinical exemplars from our council gave the large audience insights into the role of genomics and coumadin management, translating research into practice, nurse-managed clinics in the community for MCS patients, and interventions to improve adherence. The second pre-meeting symposium addressed the issues of 'Quality of Life in the Interventions for End-Stage Thoracic Organ Disease'. This was also a very well attended session with all presenters reflecting the difficulties faced in optimizing QoL for patients requiring MCSD, pulmonary hypertension management, as well as in heart, lung adult and pediatric transplant recipients.

Those attending the NHSAH concurrent abstract sessions on Thursday and Friday, plus the mini-oral session on Thursday, were certainly not disappointed as all presentations were of extremely high quality. This year our council was successful in combining with several other councils to develop a symposium entitled 'Palliative Care Across the Illness Trajectory'. Judging by the attendance (standing room only), applause for presenters, and discussion, this session was certainly a winner!

And who can forget the Gala Reception and fab band "Rockola"

"Highlights..." continued

who certainly had many of us rocking & rolling on the dance floor!! It certainly was one of the more memorable Gala events, with many of the ISHLT leadership (led by Lori West, John Dark, Robin Pierson and Marshall Hertz), along with the enthusiastic ISHLT staff (represented by Amanda Rowe and Susie Newton), letting their 'hair' down, taking over the stage, and showing us all how to have a truly unforgettable evening!! ISHLT San Diego 2011 was one of the busiest programs to date. The scientific and clinical content was generally outstanding, thanks to the leadership of program chair Robin Pierson, President John Dark, and President-Elect Lori West, and the commitment and contribution of the program committee members. It will be a hard act to follow in Prague 2012.

ON TO PRAGUE

Stuart Sweet, MD

Wow! What else can I say about the recently completed 31st ISHLT Annual Scientific Meeting in San Diego. Robin Pierson orchestrated a vibrant meeting packed from dawn to dusk with scientific content and (at least on Friday) from dusk 'til the wee hours with entertainment that included the ISHLT leadership and executive staff dancing on the stage with the band, accompanied by 'Crystal Ball Symposium' speaker Jay Zwischenberger on harmonica. How can I top that? Who knows, but I'll give it my best shot.

Next year we will meet in Prague, Czech Republic at the Prague Congress Centre. Located on a hill in the Vyšehrad section of the city, it commands a wonderful view of the Charles River, its historic bridges, and Prague castle to the north. From the subway stop located directly underneath the Congress Centre, the picturesque Wenceslas Square is only two stops away.

So my challenge will be not only to create a meeting with as much to offer as we had in San Diego but also to allow each of us the time and energy to explore Prague, a city with roots deep in the Middle Ages that has undergone a rebirth since the lifting of the Iron Curtain. Get lots of rest before you come!

We've convened an excellent Program Committee that will meet in Montreal this July to assemble the invited portion of the program. Relevant and interesting content proposals have already been submitted, but there is still time to submit yours by the June 17th deadline. I'm particularly looking for ideas that challenge us to think 'out of the box' and bring together the diverse and complementary components of our society. While honoring the traditional structure of our meeting, I'd like to provide opportunities for learning that transcend the usual disciplinary boundaries.

Most importantly, I plan to make plenty room for presentation of your work. To ensure we have time for fun, brevity and clarity will be key, particularly in oral presentations. The deadline for abstract submission is midnight, November 18, 2011. Get to work!

I hope to see you in Prague.

Stuart Sweet
Program Chair

Click Here to return to the Table of Contents

LOOK INTO MY EYES

Vincent G Valentine, MD and Leonardo Seoane, MD

It's such an honor to be selected by the Board to be your Editor of the ISHLT LINKS e-newsletter. This honor bestowed upon me puts me in a position that could enhance my professional career and allow me to develop more connections or links all around us. At the same time, I am put into the crosshairs of others. Either way my writing style will be on display for all to analyze, scrutinize and hopefully enjoy. Well, which style will emerge? Let's examine style. Does style really make a difference? Which style is best? Will it come naturally? To assist me, I turn to a few of my favorite American authors of fiction, Ernest Hemingway, William Faulkner and F Scott Fitzgerald. A few points about style is that: 1: no one style is better than another, 2: everyone has style, 3: not everyone is stylish, 4: style is substance, and 5: style is not trivial or unnecessary but may be important.

In order to give you a deeper appreciation of different literary styles; my former trainee, good friend and professional colleague, Dr Leonardo Seoane, Deputy Head of School for Curriculum, University of Queensland/Ochsner Clinical School and Co-Medical Director of Lung Transplantation at the Ochsner Medical Center in New Orleans, has helped me bring out Hemingway, Faulkner and Fitzgerald (who chose their writing styles deliberately) to describe one of the most important parts of the physical examination (the eye exam) that brought life to the ISHLT.

Ernest Hemingway

Dr Nick Adams opened her eyes. They did not move. He turned her head to the left. Her eyes moved to the left. He turned her head to the right. Her eyes moved with her head. Dr Adams pulled his penlight from his pocket. He shined the light in her eyes. Her eyes did not move. She did not blink. She gazed on and looked through everyone. She saw no one. He moved the light away from her eyes. Her pupils were fixed. Their size did not change.

Here we have an author who prefers simple language and short sentences. His sentences are uncluttered with one syllable, action verbs and with no modifying adverbs.

William Faulkner

As Dr Bundren activated the light by depressing his forefinger to complete the electrical circuit on a pen specifically engineered for emitting particles and waves of photons as bright, diffuse light aimed to penetrate layers of the cornea, the anterior chamber, and the near perfect gateway into her brain with an aperture whose circumference and diameter today remain as fixed as the quotient of its circumference divided by its diameter (pi) which ordinarily constricts obediently when light is shone directly on the pupil with apt obeisance of its partner pupil almost instantaneously provided that the light has unimpeded access from its source of emission towards its destination, her seemingly peaceful and tranquil retina, again which ordinarily should trigger enumerable electrochemical transmissions journeying from the retina through the optic nerve, its chiasm, and its tract to reach its targets in her midbrain which again ordinarily send signals of innervations bilaterally to the nuclei of Edinger and Westphal which in turn provide efferent preganglionic parasympathetic fibers running along the inferior division of cranial nerve III to synapse in the ciliary ganglion, where post-ganglionic parasympathetic fibers enter via the short ciliary nerves into the globe, to innervate the iris sphincters and ciliary muscles causing pupillary constriction and accommodation, respectively, for which today – there was no direct or consensual pupillary responses; in other words her windows were open, but no one was home.

Here we have Faulkner famous for his long, complicated and convoluted sentences. He is concerned with history and explanatory details. He encourages us to notice patterns and make connections, sound familiar? Link it to everything we know, thus the LINKS.

F Scott Fitzgerald

The room is bright with light as the diligent, dutiful doctor enters the room. Sanitized curtains seal the room as white-coated students file in, imprinting the curtains, forming a wailing wall of stately saints. The Doctor's penlight elucidates the illuminating truth as her pulseless pupils penetrate the room. The doll's eyes echo her youth, while the callous cornea foretells her doom. The doctor sighs; he knows it's no use. Her eyes wide shut his hope turns to another. Perhaps her sincere sacrifice can save others, so some can survive the night.

Here we have our lyrical and poetical writer who puts rhythm, meter and sound effects (literary alliteration, assonance, consonance and onomatopoeia) in his writing. He was greatly influenced by the great English poets Shakespeare and Keats.

Well, why the eyes? It all starts with the eyes; without the eye exam and established brain death criteria there may not have been an ISHLT.

"Look Into My Eyes" continued

Going further back, there may not have been any solid-organ transplant recipients. Here are three distinct literary styles describing a couple of the key brain death criteria under the right circumstances: no pupillary response and no oculocephalic reflex. Many times I have performed this exam in many non-sentient patients. Many times the chords of my emotions have been plucked. Many times my only recourse was to think about the following (in no special order): "These Eyes" – The Guess Who; "Behind Blue Eyes" – The Who and more recently Limp Bizkit; "Brown-Eyed Girl" – Van Morrison; and one I hadn't thought about but will: "Behind These Hazel Eyes" – Kelly Clarkson, great music to rekindle the soul. For brain death criteria and the multitudes who met these criteria, our patients and the ISHLT give thanks. As you reflect on this, let us determine your style?

CMV – THE GATHERING STORM

Glen P Westall, FRACP, PhD

Sir Winston Churchill was awarded the Nobel Prize for Literature in 1953 on the back of a series of extensive and largely biographical accounts of the early 20th Century and his own central involvement in that history. His magnum opus "The Second World War" remains a definitive albeit personal account from the victor's perspective of the last Great War. This monumental history was split into six-volumes entitled "The Gathering Storm", "Their Finest Hour", "The Grand Alliance", "The Hinge of Fate", "Closing the Ring" and ended with "Triumph and Tragedy", the latter being published in 1953.

In an imaginatively conceived satellite symposium, these same themes were co-opted to provide conference delegates with an updated "history" of CMV and its impact in thoracic transplantation.

Scott Palmer kicked off the session with a presentation on "Preventing CMV – Our Finest Hour" that highlighted data from a recently published multi-center randomized trial demonstrating that in adult lung transplant recipients who have received 3 months of valganciclovir, extending prophylaxis by an additional 9 months significantly reduces CMV infection, disease, and disease severity without increased ganciclovir resistance or toxicity. Long-term follow-up studies are now required to assess whether extended antiviral prophylaxis will also reduce the burden of chronic allograft dysfunction.

In "CMV Immunoglobulin – The Grand Alliance?" Javier Carbone commented that whilst there is a wealth of level-II evidence suggesting that CMV hyperimmune gammaglobulin may be efficacious in thoracic transplantation, we are still missing definitive level-I evidence from well-constructed large randomized trials to support its role. Interest in this product increasingly is moving beyond its humoral control of CMV control, to a wider appreciation of its potential immunomodulatory properties that may protect the graft from more widespread alloreactivity.

Sangeeta Bhorade discussed "Treating Ganciclovir-Resistant CMV – Closing the Ring". Risk factors for drug resistance include prolonged antiviral drug exposure, ongoing active viral replication due to host immunosuppression or immunodeficiency, lack of prior CMV immunity (D+R-), or inadequate antiviral drug delivery as with oral ganciclovir. Ganciclovir-resistant CMV is difficult to treat and is associated with high morbidity and mortality. Diagnostic assays have moved away from phenotypic parameters towards genotypic, allowing detection of multiple mutated genetic sequences that confer resistance to ganciclovir, which in turn can direct alternative drug therapy for CMV.

"Paediatric Issues in CMV Management – The Hinge of Fate" was covered by Lara Danziger-Isakov. Children are more likely to acquire primary CMV infection because they are more often CMV naïve at the time of transplant. In the absence of pediatric-specific evidence-based practices, diagnostic and therapeutic strategies for CMV are largely adult-based. Non-adherence to therapy, particularly in adolescents, may predispose this population to ganciclovir-resistant CMV.

"CMV – The Gathering Storm" continued

The symposium ended with "Diagnostics of CMV – Triumph and Tragedy." Molecular diagnostic tests based on PCR technologies are now the most commonly used diagnostic tools, and debate continues on the merits and importance of detecting CMV replication in the lung allograft (BAL) as opposed to the blood/plasma compartment. The duration of antiviral prophylaxis remains empirical to some degree, but assays that detect the presence or absence of CMV-specific immunity may allow tailoring of prophylaxis in the future, with therapy continuing until such time as robust antiviral immunity has been detected in the heavily immunosuppressed transplant recipient.

Churchill ended his history with the "triumph" of the allies, but also reflecting on "tragedy," as well as his own personal concerns on the onset of a nuclear age and the imminent rise of the Soviet nation as a superpower. Borrowing these same Churchillian themes, the transplant community can reflect positively on our ability to diagnose CMV better, to control reactivation, identify resistance and treat infection. However (and tragically), the battle is not over; despite some notable "triumphs," CMV continues to be associated with significant morbidity and mortality following thoracic transplantation.

GRANTS AND AWARDS COMMITTEE

Duane Davis, MD, Chair

ISHLT is pleased to recognize the 2011 grants and awards recipients, announced at the Awards Presentation on Saturday, April 16, 2011 at the ISHLT Annual Meeting in San Diego, California.

Pioneers in Transplantation Award

Elizabeth Hammond, MD
LDS Hospital
Salt Lake City, Utah, USA

Philip K. Caves Award

Ankit Bharat, MD
Mentors: Thallachallor Mohanakumar, MD, and G. Alec Patterson, MD
Washington University in St. Louis
St. Louis, Missouri, USA
Abstract: "Respiratory Viruses Convert CD4+CD25+Foxp3+Regulatory T Cells (Tregs) into Th-17 Cells: Role in Promoting Autoimmunity and Chronic Lung Allograft Rejection"

Nursing & Social Sciences Excellence in Research Award

Samantha Anthony
Mentor: Lori J. West, MD, DPhil
Co-Investigators: David Nicholas, Cheryl Regehr, Anne Dipchand, Mindy Solomon and Radha MacCulloch
Hospital for Sick Children
Toronto, Ontario, CANADA
Abstract: "Pediatric Thoracic Transplantation: A Transformative Process"

ISHLT/CSL Behring Nursing and Social Sciences Research Award

Christiane Kugler, PhD
Co-Investigators: Christoph Bara, MD and Axel Haverich, MD
Hannover Medical School
Hannover, GERMANY
Project Title: "Impact of Depression on Chronic Allograft Vasculopathy After Heart Transplantation"

ISHLT Nursing and Social Sciences Research Award

Hilde Bollen, RN
UZ Leuven
University Hospitals of Leuven, BELGIUM
Co-Investigators: Fabienne Dobbels, MSC, PhD, Katholieke University Leuven and Bart Meyns, PhD, University Hospitals of Leuven
Project Title: "Emotional Distress, Quality of Life and Care Burden in Patients with Left Ventricular Assist Devices and their Partners; A Prospective Study"

ISHLT/Astellas Research Fellowship Award

Alejandro Bribriesco, MD
Director of Research: Daniel Kreisel, MD
Washington University in St. Louis
St. Louis, Missouri, USA
Project Title: "The Role of CD8+ Regulatory T. Cells in Lung Allograft Acceptance"

ISHLT/XDx Research Fellowship Award

Alexey Dashkevich, MD
University Freiburg, Freiburg, GERMANY
Director of Research: Karl Lemstrom, MD,

PhD, Helsinki University, Helsinki, FINLAND
Project Title: "Molecular and Gene Therapy for Heart Transplantation: Targeting of Lymph Angiogenesis as a New Immunomodulatory Approach"

ISHLT Research Fellowship Award
Patricia E. de Almeida, DVM, MS, PhD
Director of Research: Joseph C. Wu, MD, PhD
Stanford University
Stanford, California, USA
Project Title: "Patient Specific Induced Pluripotent Stem Cell-Derived Cardiomyocytes for Modeling Familial Dilated Cardiomyopathy"

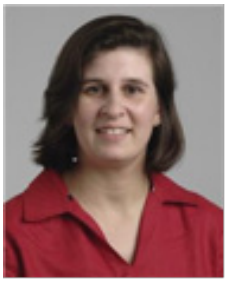
ISHLT Research Fellowship Award
Tiago Machuca, MD, PhD
Director of Research: Shaf Keshavjee, MD, MSc, FRCSC, FACS
University of Toronto
Toronto, Ontario, CANADA
Project Title: "Combining Anti-inflammatory and Pro-Tolerogenic Ex Vivo Treatment Using Interleukin-10 in a Pre-Clinical Model of Lung Transplantation"

Transplant Registry Early Career Award
Jose Nativi, MD
Director of Research: Josef Stehlik, MD
University of Utah
Salt Lake City, Utah, USA
Project Title: "Post Transplant Outcomes of Patients Requiring Biventricular Mechanical Bridge to Transplant"

Congratulations!

REPORT FROM INFECTIOUS DISEASES COUNCIL

Stanley Martin, MD, ID Council Communications/Links Representative
Lara Danziger-Isakov, MD, MPH, ID Council Chair



The past year has been exceptionally productive for the ID Council. The definitions for infections and ventricular assist devices were published in April 2011 JHLT. Martha Mooney, Margaret Hannan and Shahid Husain are to be congratulated, along with everyone else who contributed to the ID Monograph that was also recently published - a veritable encyclopedia of infectious diseases in modern cardiothoracic transplantation available at your fingertips for the first time ever!

As the ID council continues to develop and evolve, we welcome several new representatives (Amparo Sole, Fernanda Silveira, Paolo Grossi and Stanley Martin). There are many exciting new opportunities to engage in ISHLT beginning with the development of ID symposia proposals for the 2012 Annual Meeting in Prague! Everyone is invited to submit suggestions to Fernanda Silveira our Education Committee representative (silvfd@upmc.edu) with a copy to Susie Newton (susie.newton@ishlt.org). Deadline for submission is June 17th. The proposal form can be found at http://www.ishlt.org/meetings/annualMeeting.asp. A telephone conference call for ID Council members will also be held on Tuesday, June 7th at 10:30 AM Eastern (New York) to share and collect thoughts. Please contact Lara Danziger-Isakov for dialing instructions (danzigl@ccf.org).

We will also be organizing an Education Workgroup. Please let Fernanda know if you are interested in participating (silvfd@upmc.edu). Stan Martin is our new representative to the LINKS newsletter. If you are interested in contributing, please contact Stan (Stanley.Martin@osumc.edu). More exciting endeavors are in the works and we look forward to having as many people as possible from the ID council to participate. The minutes from our meeting in San Diego are posted on our ID council webpage under "Quick Links" (http://www.ishlt.org/councils/infectious.asp). Please contact Lara Danziger-Isakov (danzigl@ccf.org) with any suggestions.

RULES OF ENGAGEMENT

Vincent G Valentine, MD

Pardon this particular piece of pedantry, but we should constantly and constructively challenge each other for improvement. Wonderful comments were buzzing about ISHLT 2011, its content, its style, its venue, and its energy. Should we rest on our laurels? Or should we strive to be our best and press on to the next level? Now in a true Faulknerian tangent, allow me to suggest two books by Michael A Roberto. His book published in 2009, *Know What You Don't Know: How Great Leaders Prevent Problems before They Happen,* explains how great leaders unearth bad news and find hidden problems in organizations before they escalate into major failures. His 2005 book, *Why Great Leaders Don't Take Yes for an Answer*, analyzes how leaders can engender constructive debate for better decision-making. Over the course of the next several months, I will reference these books for my own self-improvement as a leader (which we all are), professional, teacher, and person. One such leader I try to emulate is Winston Churchill, one of our most influential leaders in history, who had the vision to see problems and threats long before others could. He was one of the greatest problem finders. How did he develop this ability? He linked up with people everywhere inside and outside the government. He was incredibly inquisitive and had a voracious appetite for learning.

How should we cultivate this appetite? I suggest that we all criticize and remain skeptical of not just what will come out of this e-newsletter, but from everything we are exposed to, and especially from what I share with you. We all need constructive conflict. I need it and please note: I can take it. I don't believe anyone can criticize me more than I criticize myself. So, Letters to the Editor, bring them on!

Now back to the tasks at hand. My proposed 'ground rules' for posters and presentations at our ISHLT Annual Scientific Meetings: first, keep them simple, brief and to the point. Some presenters confused some of us with their wordy and complex posters and presentations; there was often too much clutter. Some presenters and chairs alike went over their allotted time or into overtime (if we want to be sporty, I prefer the latter) during their presentations. Also, there was a structural change for the posters this year and obviously some of us did not read the rules. Lastly, as suggested by next year's Program Chair, Stuart Sweet, clarity and brevity will contribute to the success of ISHLT 2012 in Prague.

Speaking of Prague, the first rule of the ISHLT LINKS newsletter of 2011-2012 is that any idea, thought, suggestion, or criticism from any member is welcomed "anytime, anywhere." – Travis Bickle played by Robert De Niro in Taxi Driver. The second rule is that any published creative imagining that is appropriate, amusing, and relevant for improving the ISHLT is welcomed, but will be subjected to retaliation. Dissension is welcomed; this will clarify our thinking. There should be no room for "superficial congeniality" as characterized by Jack Welch, the former General Electric chief executive. Last of all, the rules for the LINKS will evolve and be refined over the year and may change, probably to no rules at all, in keeping with a true Bohemian style; in other words, "anything goes" which brings to mind a link of the United Kingdom (Sir PG Wodehouse) with the United States (Cole Porter) into a Broadway musical originally in 1936 with Ethel Merman and Bing Crosby followed by a reprise in 1956 with Mitzi Gaynor and Bing Crosby.

WHAT'S HOT IN LUNG TRANSPLANTATION

Allan R Glanville, MBBS, MD, FRACP

So why are we interested in 'What's Hot in Lung Transplantation', or any field for that matter? Simply put, we are all excited by the novel, exciting discoveries and research which expand boundaries or at least place even a single jig-saw puzzle piece in the rich tapestry of science. However, a note of caution is warranted. Abstracts and presentations at scientific meetings have not yet been subject to the crucible of peer review or sufficient clinical application to validate them. So it is the flavor rather than the substance which is highlighted here in this brief review of the hot topics in lung transplantation presented at the Society's Annual Scientific Meeting in San Diego, 2011.

COPD Mortality Risk Assessment

'Whom to transplant when' is always a vexing question and the group from Columbia presented a new risk score which adequately stratified

"What's Hot..." continued

mortality risk in COPD patients, using variables from a cardiopulmonary exercise test (%heart rate reserve, %predicted peak wattage, BMI and %FEV1). It was acknowledged that a prospective evaluation of this risk score and comparison with the BODE index is needed in order to predict mortality better in COPD patients and stratify risk in candidates. In concert, the Denmark group investigated the frequency and significance of pulmonary hypertension (PH) in COPD and found half of the patients with end-stage COPD had PH, usually of mild degree, one quarter of which had a postcapillary component probably due to left ventricular diastolic dysfunction. Hypoxemia and hypercapnia were associated with PH, while static lung volumes were unrelated to PH in end-stage COPD.

Antibody-Mediated Rejection

A number of abstracts focused on the topic of antibody-mediated rejection (AMR). The Melbourne group concluded that identifying donor-specific antibodies (DSA) pre-transplant predicts bronchiolitis obliterans syndrome (BOS) or death after lung transplant (LTx) and provides prognostic information beyond that which has been historically provided by a negative prospective crossmatch. Future studies need to focus on defining the level of pre-transplant DSA as measured using solid phase assays that predict for adverse outcomes following lung transplantation. However the Pittsburgh group concluded that a pre-LTx DSA < 8000 MFI was predictive of negative cytotoxic crossmatch and facilitated the donor selection and transplantation of LTx candidates that previously were considered at high risk. 90 day clinical outcomes in DSA-positive LTx were comparable with the non-DSA LTx group. Longer follow-up is warranted. After induction with alemtuzumab, the incidence of de novo DSA in lung transplant recipients was lower in comparison with previous reports. Patients with *de novo* DSA were at a higher risk of early BOS and mortality.

The Johns Hopkins group interrogated the United Network of Organ Sharing (UNOS) database in the USA and concluded that in the post-Lung Allocation Score (LAS) era high panel reactive antibody (PRA) levels do not negatively impact survival or incidence of rejection after LTx. However, highly sensitized patients spend more time on the waitlist.

What can be done about DSA? The Washington University group demonstrated that antibody-directed therapy results in decreased circulating levels of pro-inflammatory cytokines and development of autoantibodies and increased freedom from BOS. However, failure to clear antibodies to self-antigens correlated with BOS even when DSA cleared following treatment. Persistent DSA after treatment also portended a poor outcome. Using 4 criteria for the diagnosis of AMR (presence of DSA, C4d deposition, acute lung injury, and graft dysfunction) 5/19 patients did not respond to therapy and died.

Diffuse Alveolar Damage

The Toronto group examined the significance of diffuse alveolar damage (DAD) on transbronchial biopsy. DAD detected within 3 months post-Tx was associated with earlier onset of BOS. Late onset DAD increased the risk of restrictive physiology. Whether some of the DAD was really AMR was not tested.

Allograft Infection

Infection of the allograft is not unique to the lung but certainly more frequent than other solid organ transplants. On this theme, the Brisbane group examined the risk factors and significance of community acquired respiratory viral (CARV) infection. Patients with BOS and low serum IgA were more prone to CARV infection than those without. Infection with human metapneumovirus (hMPV) and respiratory syncytial virus (RSV), but not other CARV, were independently associated with an increased likelihood of death. One mechanism might be a reduction in host defense mechanisms. Subsequently, cross-sectional analysis showed secretory IgA levels were lower after lung transplantation, potentially putting the recipient at risk of CARV infection.

Outcomes of Donor-Recipient Size Matching

How much is enough lung to transplant, and is more better? The Johns Hopkins group interrogated the UNOS database and found that in the post-LAS era, a higher predicted total lung capacity (TLC) ratio of donor to recipient (pTLC-ratio) is associated with improved survival after lung transplantation. A higher pTLC-ratio likely reflects a mismatch between an oversized allograft and a smaller recipient thorax.

BOS Specificity for Obliterative Bronchiolitis

In the pediatric domain all is not as it seems, at least for BOS. The Washington University group examined the specificity of BOS for the finding of obliterative bronchiolitis (OB) on 67 open lung biopsies and 31 explants and found that early declines in lung function are sensitive but not specific for OB. They concluded that the low specificity for BOS

"What's Hot..." continued

stage to identify OB illustrates the challenge facing clinicians in determining the etiology of pulmonary decline following LTx. Blinded central panel review of the pathological findings might prove illuminating.

The stage is set for validation and development of these exciting themes in the realm of lung transplantation with the specific goal of achieving normal allograft function and maintaining freedom from chronic lung allograft dysfunction.

JHLT – EDITOR'S JUNE 2011 HIGHLIGHTS

1. This issue features the *new and approved* ISHLT formulation for the pathological diagnosis of Cardiac AMR. Long in its development and thoughtful in its approach, Berry and Colleagues define a standardized nomenclature but also outline the challenges and technical aspects that pathologists must focus on to achieve less variability and greater accuracy.

2. In tandem, Nair and colleagues offer a clinical perspective on the targets and pathways available for exploiting in the treatment of Cardiac AMR. Quite obviously, once diagnosed on pathology, the clinician must respond to this information in a manner that achieves optimal allograft outcomes – Currently, this is an evolving concept and therefore an opportunity for the scientific community to develop a standardized approach to tackle this devastating development.

3. Jaroszewski and colleagues decide to offer a "traveling MCS team" concept to go to where the patients are suffering from cardiogenic shock. In this innovative approach the group travels as a "rescue team" to resuscitate and bring critically ill patients to the regional expert center. In the new world health order, particularly in the US, such innovative plans will increasingly gain traction.

4. Primary Graft Failure after Cardiac Transplantation remains an important yet poorly explored concept. Segovia and colleagues take us a step forward in helping us develop predictive algorithms for those patients likely to suffer from this most perilous course. Obviously, this investigation is a critical step forward and demands that our community begin to think about refining and ameliorating the occurrence of Primary Graft Failure in Heart Transplantation.

5. Saini and colleagues provide a provocative concept that enhances our understanding of late complications of Lung Transplantation such as BOS. They propose that alloimmune responses to donor HLA can induce autoimmune responses to airway epithelial self-antigens, which in turn contribute to the pathogenesis of BOS.

6. Barst and colleagues study optimal combinations of therapy in pulmonary arterial hypertension. From this we are pointed towards the optimal consideration of montherapy with PDE 5 inhibitors or their use in combination with Endothelin Antagonists for this important clinical condition.

These features span the broad spectrum of heart and lung transplantation, mechanical circulatory support and pulmonary hypertension – Happy reading!

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THE JOURNAL OF HEART AND LUNG TRANSPLANTATION: SHOOTING FOR THE STARS

Mandeep R Mehra, MD – Editor-in-Chief

As we began the journey of renewal for the JHLT 24 months ago, we did not realize that the marathon would turn into a sprint. Largely due to the faith expressed in us by the leadership, the members of the society and our editors and consultants, I am proud to review with you the vast frontier we have traveled in this short time.

Simply said, the JHLT is now the benchmark journal for all breaking science in cardiothoracic transplantation and non-biological mechanical support of the failing heart and lung. Our scientific impact has continued to escalate. Today, we stand in the top two specialty journals within transplantation. As we have steered our attention away from the rather old and more "traditional" Impact Factor, our direction has evolved towards bringing the JHLT into the new information age. This requires us to track and focus upon very different factors that are novel "multi-dimensional indices" of Journal Academic Standing. Such indicators include the "Source Normalized Impact per Paper" (measures speed of citations and also contextual citation impact) and the "SCImago Journal Rank" (a measure of journal prestige), both of which have demonstrated a 17% and 25% rise within the past year itself, a truly remarkable feat.

Our citations from journal articles are being increasingly picked up by other journals (an 11.3% rise last year!) and this has been observed to be coincidental to the daring and dramatic changes in our online presence – We have a new and more interactive website and if you have not visited it yet, please do so at www.jhltonline.org. Our authors report great satisfaction with timeliness and quality of reviews their hard work receives – the time to first decision for submissions is 26 days and once accepted, papers appear online and in global indexing platforms within 4-6 weeks. No wonder this has led to a dramatic increase in submission rates to the journal (35% increase in the past 24 months)! Of course this has led to a lower acceptance rate in the JHLT but has allowed us to increase the "quality density" that ensures remarkable readership interest. You undoubtably have noted the many novel sections we have launched including the State of Art, Perspectives, Commentaries,

IMMUNE MONITORING TO PREDICT INFECTION IN HEART AND LUNG TRANSPLANTATION 31ST ISHLT ANNUAL MEETING

J Carbone, Clinical Immunology Department, University Hospital Gregorio Marañon, Madrid, Spain

According to the twenty-seventh official adult heart transplant report of the International Society for Heart and Lung Transplantation (ISHLT), non-cytomegalovirus (CMV) infection accounted for almost 30% of the deaths between 2 and 12 months after surgery. During the 31st annual meeting of the ISHLT, several studies described the association between infectious complications and risk of graft dysfunction or mortality in heart and lung recipients (abstract numbers: 352, 354, 427, and 584). Absence of infection post-transplant is a predictor of long-term survival following heart transplantation (187). Late CMV infection continues to be a problem even after extended duration prophylaxis in heart recipients (176). C. difficile infection (598) is an example of a classic unresolved problem while the impact of polyoma (BK) nephropathy in heart transplant recipients remain to be assessed (382). Identification of risk factors for infection should not only prompt early therapeutic intervention, but also facilitate early preventive measures. Few studies have assessed the potential role of immune monitoring to predict the risk of infection. During the meeting, Yerkovich et al described that decreased secretory IgA levels in BAL was a risk factor of community acquired respiratory viral infections in lung recipients (353). Reduced CD8+ EBV specific T-cell response was described by Schubert et al in patients with PTLD in pediatric heart recipients (232). Activated phenotype of CMV-specific CD8+ T cells during acute infection might be assessed as a risk factor in lung recipients (404). Low ATP production by CD4+ T cells in heart recipients was associated with risk of infection that prompted treatment with antimicrobials (409). Lower post-vaccination anti-pneumococcal polysaccharide antibody responses were associated with development of bacterial infections in adult heart recipients (102). The use of these markers should be studied prospectively in multicenter studies.

"The Journal..." continued

Research Correspondences and Comments and Opinions. We have diligently worked to heighten society activities by facilitating consensus and position statements from ISHLT. Thus, despite the increase submission numbers, these new approaches have allowed us to publish more papers annually, improve diversity and enhance scientific impact as well as readership interest.

I take this opportunity to thank the ISHLT members and our community of colleagues at large for supporting the vital mission of the JHLT. As always, our offices welcome your wise counsel and questions. Please feel free to contact us at jhlteditor@medicine.umaryland.edu.

Join us in this journey to the stars!

ISHLT ADMINISTRIVIA

- Preparations for Prague are already upon us. **The deadline for submitting proposals for Symposia at the Prague meeting is June 17.** Proposal submission forms can be downloaded from the ISHLT web site (http://www.ishlt.org/meetings/annualMeeting.asp).
- Please login to the ISHLT members section of the ISHLT web site and **update your Scientific Council affiliations**. This will ensure that you receive all relevant information about the activities and decisions in your areas of professional interest. Council membership is also used to select abstract reviewers, committee members, etc.
- The ISHLT Board of Directors welcomes the following new Directors to the Board:
  - President-Elect: David O. Taylor, MD, Cardiologist, USA
  - Richard Kirk, FRCP, Pediatric Cardiologist, United Kingdom
  - George Wieselthaler, MD, Cardiothoracic Surgeon, Austria
- Sincere thanks and appreciation for their years of service is extended to the following Directors whose terms on the Board expired in April:
  - James Kirklin, MD, Cardiothoracic Surgeon, USA
  - Jayan Parameshwar, FRCP, Cardiologist, United Kingdom
  - Andreas Zuckermann, MD, Cardiothoracic Surgeon, Austria
- The Board of Directors voted in April to proceed with the development of an **ISHLT International Mechanical Circulatory Support Database.** Subcontractors for the database will be UMACS and UNOS/TII. The database is expected to be operational in early 2012. James K. Kirklin, MD will serve as the initial medical director. A steering committee will be created over the next few months.
- The Board voted to conduct the next **ISHLT Academy** on the topic of **Mechanical Circulatory Support Devices.** The Academy will be held on the Tuesday prior to the 32nd Annual Meeting and Scientific Sessions in Prague, Czech Republic. Registration for this event will begin in September.
- The latest **Monograph, Volume 5: Diagnosis and Management of Infectious Diseases in Cardiothoracic Transplantation and Mechanical Circulatory Support,** edited by Martha L. Mooney, MD, FACP; Margaret M. Hannan, MD, FRCP, FRCPath; Shahid Husain, MD, MS; and James K. Kirklin, MD, was published in April 2011. The 408-page book is available for purchase from ISHLT. Order forms are available on the ISHLT web site.