



MAY 2013, VOLUME 5, ISSUE 1 FOCUSING ON COUNCIL REPORT SUMMARIES

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Vincent's Two Cents

Don't you just get the sense that it makes good sense as we did last year since the 32nd Annual Meeting in Prague was a smashing success to give a few cents more for pause and reflection on the 2013 33rd Annual meeting in Montréal. Perhaps some will disagree or could be on the fence but at least I'm convinced, please call me Vincent, not Vince- and take no offense that this meeting was the most successful ISHLT meeting in my lifetime, or at least the lifespan of the ISHLT. We must pay, but at whose expense a special tribute, more than two cents, to David Taylor and Allan Glanville for a job very well done.

But the monstrous success in Montréal would have never been possible without the hard work of all of you. Your synergy and energy through your councils and other committees convincingly contributed to the orchestration of this well planned event. Of course, we cannot leave out any laudatory remarks for the fabulous five: Amanda, Lisa, Phyllis, Lee Ann and Susie, the heart and soul or rather the heart and lungs of the ISHLT. Now I leave you in suspense with no defense of what's yet to come as we "charge" with intense attention to the home of the Padres and a haven of biotechnology for ISHLT 2014 in beautiful San Diego, California.

Vincent G Valentine, MD
Links Editor



IN THE SPOTLIGHT:



**2013 ISHLT Pioneer in Transplantation:
Jack Copeland, MD**

Cardiac Replacement: A Journey “Outside the Box” – Another Form of Enlightenment

Vincent Valentine, MD
ISHLT Links Editor

By the end of the American Revolution roughly 230 years ago, a number of intellectuals were “hanging out” in a number of salons in Berlin and Paris talking about the Enlightenment. In an effort to clarify its meaning, the Editor of the Berlin Monthly posed a prized question, what is the Enlightenment? One of the entries was submitted by Immanuel Kant, a professor from Königsberg, Prussia. Kant characterized the Enlightenment as a waking up to a realization that we have created realms separate from ourselves on which we have become dependent. In other words, we are “boxed in” by our biases and opinions thus limiting our ability to objectively examine the truth. Kant further pointed out that we have erected transcendent religious realms also shackling our ability to be objective. We defer to these realms because we believe they make claims on us. Kant also said that once we are “Enlightened” we then have the courage to discern that we have been trapped in these realms and that we must act on them to get rid of these self-imposed dependencies.

Immanuel Kant was a champion of natural science in his day. Among the achievements were the remarkable strides of the great natural philosophers from the Enlightenment Era. The time frame from this era has been marked by its commitment to discover truth and by its confidence in reason as the means with which to do it. Today we refer to it as the Age of Reason. Among the many factors that kept our original philosophers’ thoughts confined to the box, the church was probably the single most important one. Today, we still have our own inherent biases, perhaps religion, politics and other social variables that can box us in. It is this box that becomes the symbol of how we must challenge ourselves.

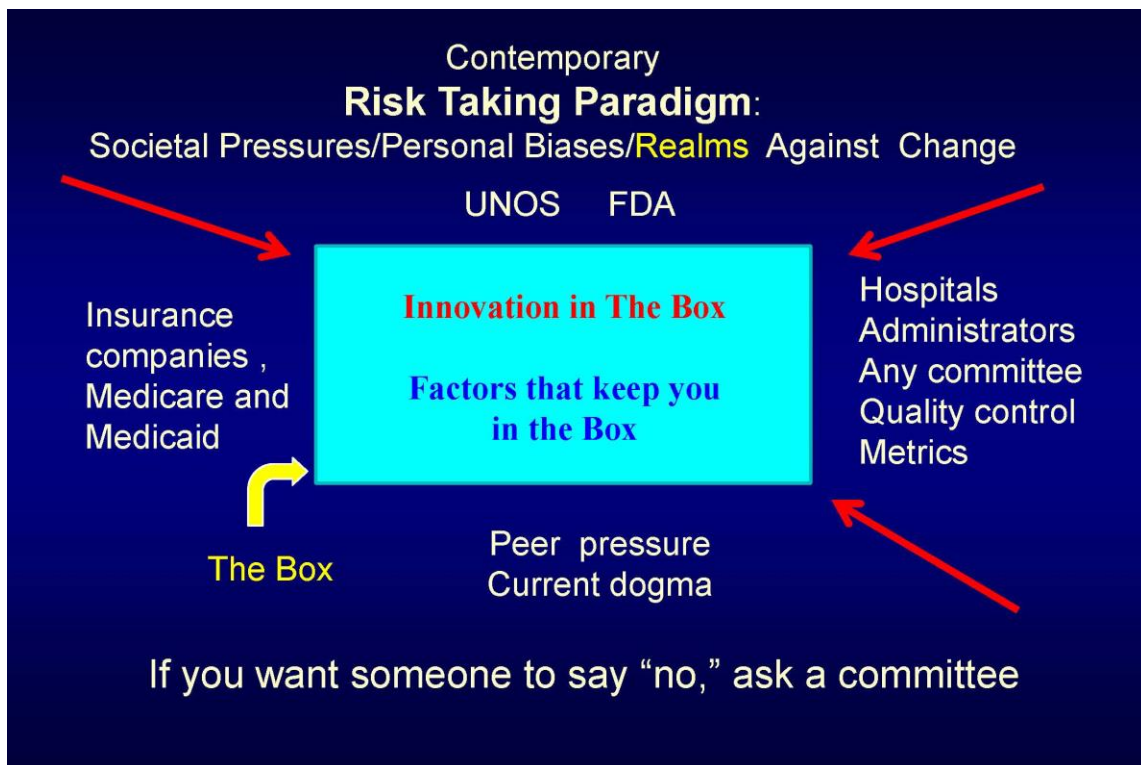
During the opening Plenary Session our very own Pioneer, Jack Copeland, took us on a journey outside the box with cardiac replacement by challenging himself and societal pressures. He used Thomas Kuhn’s concept of the paradigm and paradigm shift. In order to take a great stride as our great thinkers did in the Age of Enlightenment, Dr Copeland referred to our former pioneers including: Christian Barnard, Joel Cooper, Norman Shumway, Michael DeBakey, Bruce Reitz, Leonard Bailey, Richard Lower, Christian Cabrol, and Elizabeth Hammond. He paid special tributes to his mentors who were important in shaping his career: Richard Lower, Edward Hurley, Albert Iben, William Angell, and Edward Stinson.

No different from the Age of Reason, trying to escape or think outside the box could be very dangerous. There were no beheadings or boiling anyone in oil, however there were lawsuits in this Journey of Cardiac Replacement. Lower, Hume and Shumway were accused of murder during the procurement of hearts from our early days, but were proven innocent when indeed the donors died of brain death.

When Jack Copeland started heart transplantation in Arizona in 1979, he was confronted with a number of obstacles again confining him to another box. The possibility of no donors because of the risk of coccidioidomycosis, a waste of resources, and medico-legal risks did not stop him from thinking and escaping outside the box. Moreover, along with another one of our own Roger Evans, we must be grateful to Jack and Roger for finding that heart transplantation was both cost effective and improved quality of life over medical therapy. Now, Medicare and other third party payers pay for heart transplantation and continue to do so.

Jack turned his attention to Michael Hess, the Father of the ISHLT as well as Phil Oyer and Donald Hill who bridged our first bridges to heart transplantation with LVADs. Then there was the Phoenix Heart, the story of the Total Artificial Heart and the First Berlin Heart in the United States by Jack Copeland.

Finally, allow me to tie in nearly three centuries of thinking outside the box from the Age of Enlightenment to Cardiac Replacement (A Journey Outside the Box). This is how we make progress not just over a period of time, but day by day and perhaps minute by minute. Some decisions must be made over time and with patients in the operating room, in the ICU, in the hospital and in the clinic, and at times these decisions must be made snappy. Knowing when and how to make the right decision requires evidence and yet at times requires innovation. We will always be confronted by those factors that trap us in our biases or realms if you will. 300 years ago it was very likely the church or religion. Today, I refer to Jack Copeland's slide with Innovation in the Box, front and center and all the factors that try to trap us in that box. And remember, from Jack Copeland, "if you want someone to say "no," ask a committee."





Basic Science & Translational Research Council Year in Review



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The BSTR had a productive year. The major accomplishments focused in two important areas:

First of all, the BSTR organized plans for an academy at the 2014 annual meeting. This academy will focus on transplant immunology and will be designed to cover basic concepts in transplant immunology that are important to a clinician in their care of patients. The academy is being design to intersperse case presentations with engaging lectures.

The second major accomplishment involves an agreement with the *Journal of Heart and Lung Transplantation* to publish a BSTR related section in each monthly issue in order to bring basic science and translational research to the readership in a format that is more in keeping with their needs.

ISHLT members interested in participating in any of the above projects should e-mail at Kim Gandy (kgandy@mac.com).

The BSTR has also formed a Google group. Members interested in joining the Google group should e-mail Howard Eisen (Howard.Eisen@DrexelMed.edu).

Looking forward to hearing from you.

Disclosure statement: The author has no conflicts of interest to disclose related to this article.



ISHLT ID Council Year of Accomplishments



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The Infectious Disease Council continues to grow and thrive.

First, we would like to congratulate Michele Estabrook (Writer of the Year!) and Mace Schuurmans as inaugural Leach-Abramson-Imhoff Links Travel Award Winners. We are proud to have two of our colleagues recognized for their contributions to the Society.

Amparo Sole, our Education Committee representative, recently submitted the Infectious Diseases Core Competency in Thoracic Transplant document so aptly spearheaded by Michele Estabrook and Martha Mooney with contributions from over 20 council members.

Shahid Husain, Amparo Sole and Orla Morrissey convened a day-long meeting of the Fungal Workgroup just prior to the annual meeting in Montreal. We are looking forward to their consensus document on Fungal Infections in Thoracic Transplantation.

We hope you viewed the poster presentation from Shimon Kusne about infection prevention practices in Mechanical Circulatory Support (MCS) from over 100 member institutions of ISHLT. Dr. Kusne worked closely with the ID Council to develop, circulate and analyze the data. A special thanks to Susie Newton and Amanda Rowe at ISHLT who facilitated distribution of the survey through the ISHLT.

The ID Council represented by Margaret Hannan continues to join forces with IMACS to thoughtfully consider ways to impact infectious outcomes in MCS.

Finally, Fernanda Silveira (our Council Chair) and Amparo Sole along with our Junior Faculty representative Me-Linh Luong have been working with the Standards and Guidelines Committee to gain approval of the author list for the ID for Symptom-based diagnostic guideline. More information about this endeavor in next month's LINKS!

Disclosure statement: the author has no conflicts of interest to disclose.



ISHLT Junior Faculty & Trainee Council Year in Review



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The Junior Faculty Trainee Council (JFTC) has had a very productive year with many exciting plans for 2013-2014. In order to promote junior faculty and trainee involvement in the ISHLT and to inform junior clinicians about the ISHLT, the JFTC is focusing on outreach for 2013-14. New this year at the Scientific Sessions was a JFTC booth to advertise the council and promote the council's role in the ISHLT. The JFTC Annual Mentor Luncheon remained popular as ever with over 60-70 registered participants. Now in its 3rd year, Jason Gluck led this year's formal mentorship program, pairing ISHLT senior faculty with trainees and junior faculty to facilitate personal introductions that will hopefully lead to new academic collaborations. If you participated in this program we would love to hear from you so that we can continue to improve the experience. In addition to the annual JFTC "Challenging Clinical Cases" session, there were several collaborative symposiums between JFTC and other ISHLT councils at the 2013 ISHLT Annual Meeting. Highlights included the JHLT and JFTC "Year in Review", with a review of the past year's most noteworthy publications; a quality of life after lung transplant symposium, led by Daniel Dilling and Annette DeVito Dabbs; and a "Challenges in Pediatric Heart Transplantation" symposium led by Jonathan Johnson and Elizabeth Blume. We are now calling for symposium submissions for 2014! If you have ideas for 2014 symposium that you would like to develop with the JFTC or co-develop with another council, please contact us at one of the addresses below.

We have exciting new projects upcoming this year. Manreet Kanwar took on the challenge of creating a training database with a link on the ISHLT website to advanced medical and surgical fellowship training opportunities (please see announcement below). Finally, JFTC members will be writing brief biographical summaries of our field's pioneers and marvels—stay tuned for this addition to an upcoming Links! If you are interested in symposium development, want more information on the JFTC, or would like to share your experience with the mentorship program please contact Jennifer Cowger at jennifercowger@gmail.com or Pali Shah at pdedhiy2@jhmi.edu.

NEW ISHLT FELLOWSHIP TRAINING PROGRAM DATABASE:

We are excited to announce our efforts to create an 'International Fellowship Training Database' survey. The aim of the survey is to create an online directory of training opportunities (medical and surgical) for adult and pediatric heart failure, thoracic organ transplantation/mechanical assist devices, and

pulmonary hypertension. Once compiled, the information will be available on the ISHLT website and includes informational and contact details. We are trying to improve visibility of these highly specialized training programs to individuals seeking advanced training opportunities. Please join us in making this endeavor a success and boost young trainee and faculty involvement in ISHLT! Programs interested in submitting their training program information should go to <http://www.surveymonkey.com/s/FellowshipDatabase>.

Finally, the ISHLT and the JFTC would like to congratulate Mustafa Ahmed (and his fellow Bhalaghuru Chokkalingam Mani), for the highest scoring presentation out of >100 entries in this year's ISHLT audience interactive session, "*Clinical Case Dilemmas in Thoracic Transplantation*". His presentation, titled "*Infectious Disease: Rapid Respiratory Failure After Heart Transplant*" was an excellent presentation of a case of donor-derived stronglyoides hyperinfection syndrome. Our multidisciplinary panel of experts who graciously discussed the case during the session without knowing the diagnosis, praised Dr. Ahmed's presentation for its excellent discussion and novelty of mode of transmission. For his award he will receive a complimentary registration to next year's ISHLT Annual Meeting in San Diego, CA. If you have a unique clinical case, remember to ask your junior faculty and trainees to submit their cases during the call for abstracts in fall 2013!

Disclosure statement: the author has no conflicts of interest to disclose.



Mechanical Circulatory Support Council Year in Review



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Well, it is spring time in Pittsburgh (although you would never know it by the weather), but it means that it is time, once again, for the Annual Meeting. In many ways it is difficult to believe that the Prague meeting was a year ago. With the arrival of the 2013 meeting in Montreal, it is time to look back over the past year and highlight some of the accomplishments of the MCS Council.

The 2013 ISHLT MCS guidelines were obviously the major focus over the past year. While the guidelines, their progress and eventual publication have been well documented in the *Links* and elsewhere, I would like to once again thank Salpy Pamboukian and David Feldman for all of their time and emotional support throughout the process. Needless to say the guidelines were not possible without all of the energy, enthusiasm and effort of all the contributors, reviewers, the Standards and Guidelines committee as well as the Board. I would also be remiss if I didn't mention the invaluable assistance of Susie Newton and Amanda Rowe, without whom the guidelines would not have been possible. We look forward to continued feedback from the entire ISHLT community and hope that this, along with ongoing MCS research will serve as the basis to add to and improve upon the guidelines.

The ISHLT also challenged the MCS Council to reprise the MCS Academy in Montreal and I would say that Danny Goldstein, Andreas Zuckermann and David Feldman once again rose to the occasion and produced another excellent agenda and a lineup of dynamic speakers. The Council also took an active role in symposia suggestions for this year's meeting and due to the success of a reimbursement session during last year's council meeting, we were able to have a longer and free-standing MCS Reimbursement session this year and hope to be able to offer this session as part of each year's meeting.

The MCS Council was also asked to present on behalf of the ISHLT for the MEDCAC meeting last fall and to submit a comment on behalf of the ISHLT for the opening of the national coverage decision for MCS. Evgenij Potapov, the council's Communication Liaison, also did another excellent job in overseeing the MCS Council's many contributions to the ISHLT Links. Sean Pinney, our I2C2 liaison, is spearheading an effort to work with national EMS organizations to standardize first responder's education and approach to patients with MCS.

In light of the key role of the VAD coordinators in the MCS community, we have partnered with the VAD coordinators and have planned a permanent VAD coordinator liaison on the MCS Council. We also plan to submit a joint MCS symposium with the VAD coordinators for each year's annual meeting. In addition, we have collaborated with the PH Council on their efforts to compile a position paper on PH in left heart disease. Lastly, our educational goal for the upcoming year is to establish an online topic review. Our vision for this is to have members of the Junior Faculty Council partner with senior members of the MCS Council to produce the topic reviews. The reviews themselves would be a bibliography of all of the recent developments in a particular subject, such as aortic insufficiency, with brief summaries of the salient findings of the articles and PubMed links to the articles. The goal of this effort is to provide members with a source of timely updates of the literature for review, presentations, a source of updates to future versions of the guidelines, and an opportunity for junior faculty to have exposure to the society in general and senior MCS council members in particular.

I would like to thank all the members of the MCS Council for all of their advice, guidance and time over the past year. These accomplishments are a testament to the enthusiasm and dedication of our council's members. We are fortunate to have Danny Goldstein take over as chair of the council for the upcoming year and I know that the council will thrive under his enthusiastic leadership.

Disclosure statement: The author has no conflicts of interest to disclose.



Nursing, Health Sciences and Allied Health Council Report



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This last year has seen much activity in our council and great anticipation of the possibilities to come. Firstly I would like to thank the wonderful Council Executive – all of whom have worked so hard to move our goals forward. They really have done amazing things!

At the Prague meeting last year, we were pioneers for the Society by being the first group to record a number of our sessions/symposia and offer it on-line to those who were unable to attend the meeting. As well, we were able to offer CE credits for the American Board of Transplant Certification to those who attended. The webcast was viewed by 35 participants. We learned a lot through this exercise and hope to be able to do this again on a larger scale in the coming years.

Through our Communications Workforce we were able to spark active and interesting discussions through our “Google Group.” Topics ranged from difficult ethical dilemmas to immunosuppressive regimes. We have found it a great way to stay in touch with Council members. If you haven’t joined yet, we encourage you to join (instructions at <http://www.isHLT.org/councils/nursing.asp>).

Another exciting development is the creation of a standardized patient teaching slide template for those of us who provide patient education in groups. The template was developed by our council and is being reviewed by the Pharmacy Council and others and hopefully will be available through the ISHLT website just after the Annual Meeting. This slide set can be modified to local practices and protocols but contains the basic important subjects in an easy-to-understand format which our council agrees is important patient information.

Finally, we have commenced work on a core curriculum for heart and lung transplant nurses. This work will be completed once the draft has been reviewed by the membership and relevant stakeholders. Once completed, we will prepare to host an ISHLT Academy, hopefully in the next year.

Our goals for the coming year are to finalize the work that we’ve outlined above. We will apply for and prepare our ISHLT Academy. We hope to increase the availability of web-based interaction and education for our council members recognizing that not all members are in a position to attend the yearly meeting. We aim also to foster formal partnerships with professional groups that share similar goals and interests with a view to sharing our

combined skills and expertise. Michael Petty is our representative on the International and Intersociety Coordination Committee (I2C2).

As nursing and allied health professionals have interest in many of the councils and would like to participate actively on these councils we have found that it may be of benefit to appoint selected council members to become active in the other councils and report back to provide improved communication. Also we have appreciated the implementation of quarterly council chair meetings to improve communications between the councils.

Disclosure statement: the author has no conflicts of interest to disclose.



Pediatric Council Report 2012-2013



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The Pediatric Council has been active on a number of projects during 2012-2013.

The first Pediatric Thoracic Transplant Masters Academy was held April 23rd in Montreal with topics of interest for heart failure and cardiac transplant specialists, cardiothoracic surgeons, and respiratory failure and lung transplant specialists. The learning objectives and topics discussed at the Masters Academy will be used by Daphne Hsu, Debra Dodd, and the Education Workforce to establish the framework for the Core Competencies in Pediatric Thoracic Transplantation. These core competencies will be developed over the next 12 months.

Online education material about pediatric heart transplant for patients and their parents was developed by members of the Pediatric Heart Transplant Study Foundation and was endorsed by the ISHLT at the December 2012 board meeting. The ISHLT, AST, CST, and PHTS have now endorsed this important educational resource which will be available later this year.

Guidelines for the management of both pediatric heart failure and pediatric lung failure are in progress:

- The Pediatric Heart Failure Guidelines are well underway. The first draft is under review by the senior editors (David Rosenthal, Anne Dipchand, and Richard Kirk) with the goal date for monograph publication and executive summary in the Journal for Heart and Lung Transplantation in 2014.
- A proposal for Pediatric Lung Failure Guidelines is being developed by Don Hayes and was discussed at the ISHLT Meeting- more to come on this. Meanwhile, the Pediatric Lung Transplant Monograph is available to order at <http://www.isHLT.org/publications/monographSeries.asp>.

Lastly, members of the Pediatric Council have provided important feedback regarding issues related to UNOS policy and pediatric requirements for transplantation center classification and physician/surgeon training. Members were also polled regarding their interest in having a patient advocacy group as part of ISHLT. While opinions on both of these topics were varied, it is important to note that many members participated in these discussions and their input is vital to the ISHLT as well as to policy-making bodies such as UNOS.

The pediatric thoracic transplant community through the Pediatric Council of ISHLT has made a difference this year on a number of fronts. Through education, research, practice guidelines, and shaping of transplant policy we can continue to positively affect pediatric thoracic transplantation for our Council and our patients.

Disclosure statement: The author has no conflicts of interest to report.



Pulmonary Hypertension Council Year in Review



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The field of pulmonary hypertension crosses multiple disciplines in a fashion that impressively mirrors the broad interests, expertise, and perspectives of the membership of ISHLT. Pulmonary hypertension and right ventricular failure influence prognosis of left heart failure, parenchymal lung disease, mechanical circulatory support, and outcome of heart and lung transplantation. Lung transplantation is a critical therapeutic option in pulmonary arterial hypertension, yet lung transplantation in pulmonary arterial hypertension entails unique challenges, and the Lung Allocation Score as it pertains to PAH remains imperfect. These realities represent both challenges and opportunities for ISHLT to further the understanding and management of many forms of pulmonary hypertension. In this distillation of the PH Council Report to the ISHLT Board that was presented in Montreal, I will strive to convey the progress and future directions of the PH Council for the year ahead.

The Pulmonary Hypertension Council has had another highly successful year, further solidifying the reputation of ISHLT as an outstanding venue for pulmonary hypertension content. The Montreal meeting provided a tour de force of symposia, plenary presentations, sunrise sessions and poster sessions that energized, informed and challenged the attendees to keep pushing the science forward.

In the ongoing efforts to foster solid basic science and translational research within ISHLT, Dr. Marlene Rabinovitch (Stanford University) gave a Plenary session presentation entitled "BMP2: From Mutation to Modulation" that enhanced our understanding of the role of this pathway not only in familial PAH but in other forms of PAH. Multiple other symposia had a remarkably international and multidisciplinary array of speakers and topics, including symposia on medical and surgical approaches to chronic thromboembolic pulmonary hypertension, perioperative management of the right ventricle during lung transplantation, the role of right heart catheterization in MCS patients, and proteomics and inflammatory pathways in PAH.

PH Council successes for the past year include an important analysis of predictors of lung transplant waiting list survival in PAH patients utilizing data from the Scientific Registry of Transplant Recipients (SRTR) spearheaded by PH Council Vice Chair Dr. Mardi Gomberg-Maitland (University of Chicago), and presented in a Plenary session in Montreal. A new survival equation was developed and validated using boot-strap methodology, and

outperformed the existing LAS equation. Such initiatives are having a direct impact on improving lung allocation strategies to ensure that those patients most in need receive these precious organs.

The PH Council has also proposed a Pulmonary Hypertension Masters Academy for San Diego in 2014. A comprehensive curriculum has been developed under the able guidance of PH Council Education Workforce Leader Dana McGlothlin MD (San Francisco) that addresses the educational needs of the ISHLT membership with regard to pulmonary hypertension ranging across multiple fields (PAH, PH with left heart or lung disease, mechanical support options, peri-transplant management).

An additional important initiative put forth by Teresa DeMarco MD (San Francisco) is intended to extend deliberations at the 2013 Nice WHO Pulmonary Hypertension Symposium with particular regard to WHO Group II PH (with Left heart disease). This cooperative initiative is intended to develop additional documents and research with regard to hemodynamic evaluation and predictors of outcome of heart transplant and MCS in the context of Group II PH.

I2C2 initiatives include working with Pulmonary Vascular Research Institute (PVRI) on collaborative efforts including a proposed joint ISHLT/PVRI symposium in Bad-Nauheim, Germany in 2014.

The outlook for pulmonary hypertension initiatives and educational excellence within ISHLT is as bright as ever, with an increasingly collaborative approach across ISHLT councils. All are welcome to join in the collegial and productive atmosphere of the pulmonary hypertension corner of ISHLT!

Disclosure Statement: The author has no conflicts of interest to disclose.



Scientific Council on Pharmacy and Pharmacology Year in Review



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"We are different, in essence, from other men. If you want to win something, run 100 meters. If you want to experience something, run a marathon." – Emil Zatopek, Four-Time Olympic Marathon Gold Medalist, Czech Republic

This past year's work on behalf of the Scientific Council on Pharmacy and Pharmacology has been a marathon. Our first year with a conventional council structure, function, and leadership design, has been both an exciting and humbling experience. Our committee representatives have functioned as integral parts of the various ISHLT committees and cross-council collaboration efforts were started. Lastly, membership and interest in our council has grown amongst pharmacists, pharmacologists, and others alike.

This year has seen exciting developments for our council. First, we elected and installed a core group of officers and committee representatives for the first time. Initiatives within the Education, Standards and Guidelines, and Registries and Databases committees relative to our council involvement have occurred. Furthermore, we are grateful to the ISHLT community who has welcomed our representatives on the various society committees with open arms. Second, we undertook the writing of a Core Competency Statement for Pharmacy and Pharmacology Practitioners in Thoracic Diseases. Our work is nearly completed on this exciting paper. Third, the beginnings of cross-council collaborations were undertaken. Ongoing work on education materials with the Nursing, Health Sciences, and Allied Health Council, and future collaborations with other councils on myriad activities are critical to our success.

Our council again sponsored a Lifecycle Journey Symposium in Cystic Fibrosis and Lung Transplantation at the Montreal meeting. Many of our council members presented posters and orals throughout the week's curriculum either in our focus sessions or integrated into various others. Additionally, we entered into discussions with pharmacy-based continuing education providers and the ISHLT to provide CE at the San Diego meeting next year. We believe this to be critical in our recruitment efforts for additional pharmacists and pharmacologists into the society.

While this year's marathon is coming to conclusion, an exciting new one is simultaneously beginning with a bright outlook for our council.

"The marathon can humble you." – Bill Rodgers, Four-time winner of the Boston and New York City Marathons.

To help the victims of the Boston Marathon Tragedy, visit: www.OneFundBoston.org.

Disclosure statement: The author has no conflicts of interest to disclose.



Pulmonary Transplantation Council Year in Review



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Our Pulmonary Transplantation Council had another productive meeting at the ISHLT Conference in Montréal.

Some of the meeting highlights include the organization of a formal working group regarding Antibody Mediated Rejection (AMR), which will foster collaboration with other Councils while also adding the pulmonary perspective to this important clinical problem. There was also discussion of how to proceed with regards to Ex Vivo Lung Perfusion. There was broad agreement that we summarize what we know now and how to proceed going forward, particularly with regard to formation of a registry and policy recommendations addressing EVLP and lung allocation. There was recognition that it was too early to come to consensus about EVLP but that, as a Council, we should begin to express what is known at this point. This effort will be performed jointly with members of the American Society of Transplantation.

There was also discussion at the Council meeting and the ISHLT Board of Directors meeting subsequently about the Chronic Lung Allograft Dysfunction (CLAD) manuscript that was drafted by some of our Council meetings. It was decided that, in order for the document to be considered an official Pulmonary Council publication (although not an official "Guideline"), it would first need to be vetted by the entire Council. Toward that end, the document has been sent to Council members for public comment (due May 10th).

As a reminder, regarding the 2014 ISHLT meeting in San Diego, please remember to get in your Symposia ideas by **June 21**.

These were just some of the highlights. I will outline more 2013-2014 goals in a subsequent LINKS issue. Finally, it has been a privilege to be your Council Chair the last year, and I look forward to serving another year. I also want to thank our Vice-Chair Mike Mulligan and Past Chair Lianne Singer for their support of our activities. Please contact me with comments (constructive or otherwise) on how we as a Council can be more effective.

Disclosure statement: The author has no conflicts of interest to disclose.



ACC 2013: Highlights of Interest to ISHLT Members

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The 2013 Scientific Sessions of the American College of Cardiology were held in San Francisco, CA from March 9-12, 2013. The sheer size of the meeting made it challenging even for ISHLT members to attend all sessions relevant to Advanced Heart Failure and Transplantation. To assist in summarizing important studies presented at this year's meeting, I have asked other ISHLT members to help assemble a list of presentations of significant interest to ISHLT members. My thanks to Richard Cheng and Leigh Reardon for helping to compile this list of highlights.

Three late breaking clinical trial presentations have the potential to significantly impact the care of patients with advanced heart disease including:

1. **RELAX (Phosphodiesterase-5 Inhibition to Improve Clinical Status and Exercise Capacity in Heart Failure with Preserved Ejection Fraction):** This randomized trial, conducted at 26 centers in the United States and Canada, compared the effect of phosphodiesterase-5 inhibitor sildenafil to placebo on exercise capacity and clinical status in heart failure with preserved ejection fraction in 216 stable outpatients with heart failure. Sildenafil was administered orally at 20 mg three times daily for 12 weeks followed by 60 mg three times daily for 12 weeks. At 24 weeks, there was no benefit in regards to peak oxygen consumption and 6-minute walk distance. The RELAX study, therefore does not support the use of sildenafil in heart failure with preserved ejection fraction patients. This study has been subsequently published in the Journal of the American Medical Association (JAMA 2013; 309(12):1268-1277).

2. **RED-HF (Reduction of Events by Darbepoetin Alfa in Heart Failure):** The RED-HF study compared the use of darbepoetin alfa and placebo in 2278 patients with systolic heart failure and mild-to-moderate anemia (hemoglobin level, 9.0 to 12.0 g per deciliter). The primary outcome, a composite of death from any cause or hospitalization from worsening heart failure, was met in 50.7% of the darbepoetin alfa group compared to 49.5% of the placebo group (hazard ratio in the darbepoetin alfa group 1.01; 95% confidence interval, 0.90 to 1.13; P=0.87). Thromboembolic events were significantly higher in the treatment group (13.5% vs 10.0%, P=0.01). The RED-HF study does not support the use of darbepoetin alfa in patients with systolic heart failure and mild-to-moderate anemia. This study has been subsequently published in the New England Journal of Medicine (NEJM 2013; 368:1210-1219).
3. **ASTRONAUT (Aliskiren Trial on Acute Heart Failure Outcomes):** This study sought to assess whether aliskiren, a direct renin inhibitor, would reduce the rate of cardiovascular death or heart failure rehospitalizations compared to placebo in heart failure with reduced ejection fraction when added to standard therapy in 1639 patients. There was no difference in heart failure rehospitalizations at 6 or 12 months. In addition, the rates of hyperkalemia, hypotension and renal impairment/failure were higher in the aliskiren group compared with placebo. The ASTRONAUT study does not support the addition of aliskiren to standard therapy, failing to reduce cardiovascular death or heart failure rehospitalization at 6 or 12 months after discharge.

Additional presentations of interest to ISHLT members included the following:

1. **Lactate dehydrogenase is Superior to Serum-Free Hemoglobin as a Marker of Pump Thrombosis in Left Ventricular Assist Devices (P Shah, V Mehta, JA Cowger et al, Abstract 915-6):** Shah and colleagues from the University of Michigan sought to establish a threshold value for lactate dehydrogenase (LDH) to identify clinically significant hemolysis in patients with LVADs (axial and centrifugal). Mean LDH was higher in axial LVADs than centrifugal devices. LDH was demonstrated to be a better marker of device thrombosis than serum-free haptoglobin (AUC=0.94 ± 0.01). In axial devices, a threshold of 573 resulted in 85% sensitivity and 95% specificity for pump thrombosis. This study demonstrates the clinical significance of LDH as a marker of clinically significant hemolysis.
2. **Survival of Heart Transplant Recipients Bridged with LVAD Support by Gender (E DePasquale, RK Cheng, et al, Abstract 915-3):** DePasquale and colleagues from the University of California, Los Angeles examined gender differences of heart transplant recipients in those bridged with LVAD support. 3020 were identified from the UNOS registry and were demonstrated to have similar 1-, 3- and 5-year survival. There was a non-statistically significant trend towards increased LVAD utilization in women highlighting continued disparities in LVAD use in this population.
3. **Adult and Pediatric Congenital Heart Disease Hospitalizations in the United States (O'Leary, de Ferranti, Siddiqi et al, Abstract 1290-120):** This observational study demonstrated that the annual adult congenital heart disease hospitalizations increased from 72,656 ± 5,258 in 2005 to 117,483 ± 8994 in 2009,

representing 42.2% of congenital heart disease admissions in 2009. This has increased from 25.4% in 1998. The continued growth in adult congenital heart disease hospitalizations in the United States highlights the growing needs of this population. Increasingly, this challenging patient population will have increasing needs for advanced heart failure treatment, mechanical support and heart transplant.

Three studies at ACC assessed the use of off-pump as compared to on-pump coronary artery bypass graft (CABG) surgery. The two larger studies, German Off-Pump CABG in Elderly Trial (GOB-CABE), containing 2539 patients, and the 12-month follow-up to the Coronary Artery Bypass Grafting Surgery Off or On Pump Revascularization Study (CORONARY), containing 4752 patients, demonstrated no clear benefit to off-pump surgery. A smaller study, PRAGUE-6 appeared to show some benefit to off-pump surgery, but it contained only 206 patients.

1. **GOB-CABE:** This study randomized 2539 patients aged 75 years or older undergoing elective first-time CABG to either off-pump or on-pump CABG. Mean age was 78.5 years. The primary composite endpoint was death, stroke, myocardial infarction (MI), repeat revascularization, or need for renal-replacement therapy. They demonstrated no significant difference in the primary endpoint for off-pump as compared to on-pump CABG at 30 days [OR 0.95, 95% CI 0.71-1.28, $p = 0.74$] or at 1 year [OR 0.93, 95% CI 0.76-1.16, $p = 0.48$]. Per protocol analysis excluding cross over patients also found no significant difference between the two arms. This study has been subsequently published in the New England Journal of Medicine (N Engl J Med 2013;368:1189-98).
2. The **CORONARY** trial investigators provided 1 year follow up to their initial study (N Engl J Med 2013;368:1179-88) in which 4752 patients with coronary artery disease who were scheduled to undergo CABG were randomized to either off-pump or on-pump surgery at 79 centers in 19 countries. The primary endpoint was a composite of death, stroke, MI, and renal failure. One year follow up continued to demonstrate that there was no significant difference between the surgical approaches (HR 0.91, 95% CI 0.77-1.07, $p = 0.24$). Further, there was no difference in measures of quality of life or neurocognitive function at 1 year - however, there was significant loss of follow-up for the neurocognitive testing and as such this should be interpreted with caution (Lamy, Devereaux, Pogue, et al, Abstract 303-13).
3. The **PRAGUE-6** study was a smaller study randomizing 206 high-risk patients with stable coronary artery disease, unstable angina, or acute myocardial infarction with EuroScore ≥ 6 to off-pump versus on-pump surgery. Mean age was 74 years, 62% of patients had recent myocardial infarction, and 11% of patients had LVEF $< 30\%$. At 30 days, there was a significant reduction in the combined primary endpoint of death, MI, stroke, or new renal failure for off-pump compared to on-pump surgery [HR 0.41, 95% CI 0.19-0.91, $p = 0.028$]. These findings were mostly driven by a reduction in acute MI, without any significant difference in the individual endpoints of death, stroke, or renal failure.

Disclosure statement: The authors have no conflicts of interest to disclose.



2014 Call for Symposium Proposals



Jason Christie, MD
2014 Scientific Program Chair
jchristi@mail.med.upenn.edu

Dear ISHLT Members and colleagues,

Now is the time to submit content for the ISHLT 34th Annual Meeting to be held in sunny San Diego, April 9-12, 2014.

As program chair for the San Diego meeting, I encourage you to submit ideas for satellite symposia and/or invited talks. Your input into this process will be very valuable to the Scientific Program Committee: the majority of the invited scientific content for the Annual Meeting will stem from proposals submitted by ISHLT Members and Scientific Councils.

You may submit a proposal for a FULL SYMPOSIUM (including 3-6 talks) or a SINGLE INVITED TALK. Both forms are available on the Future Meetings page of the ISHLT website. If you have any questions about the submission process, please contact Susie Newton (susie.newton@ishlt.org) at the ISHLT office. You are strongly encouraged to consult with the Education Workforce Chair(s) and Council Chair(s) appropriate to your topic before submitting a proposal. They will provide guidance regarding educational areas identified as priorities for the Annual Meeting. The list of current committees and councils can be found at www.ishlt.org under the "Boards and Committees" and "Councils" tabs.

The deadline for receipt of proposals is Friday, June 14, 2013.

All proposals will be reviewed by program committee representatives from the relevant area. The final development of invited scientific content will take place during the Program Committee meeting in July.

Please accept my thanks in advance for your valuable input. I look forward to seeing you in San Diego!

Sincerely,

Jason D. Christie, MD
2014 Scientific Program Chair



In Memoriam: Robyn Barst

April 19, 2013

Dear Colleagues,

It is with great sadness that we announce the passing of Dr. Robyn J. Barst, Professor Emeritus, this morning. Dr. Barst spent most of her academic life here at Columbia as an early pioneer in the field of pulmonary hypertension and establishing a world renowned Pulmonary Hypertension Center. She was deeply committed to developing novel therapeutics to treat an otherwise lethal disease and made tremendous contributions to completely re-shape the course of this disease today. Dr. Barst also established a legacy of teaching, clinical care and research which will continue to have an extraordinary impact on our campus and abroad.

Information on funeral arrangements will be forth-coming.

Condolences may be sent to:

Samuel Barst, MD 31 Murray Hill Rd
Scarsdale, NY 10583
samuel.barst@gmail.com

Sincerely,

Lawrence R. Stanberry, MD, PhD
Reuben S. Carpentier Professor and Chairman
Department of Pediatrics
Columbia University, New York, NY, USA



Additional Links:

Link to [New York Times Obituary](#)
Pulmonary Hypertension Association [Barst Fund](#)



2013 ISHLT Grants & Awards Recipients

Pioneer in Transplantation Award

The Pioneer in Transplantation was awarded to Jack Copeland, MD during the Opening Plenary Session at the ISHLT Annual Meeting in Montréal. This award is bestowed every other year to an ISHLT member who is recognized for their landmark contributions as a pioneer in the field of heart and/or lung transplantation. Dr. Copeland presented a lecture entitled, "Cardiac Replacement, A Journey Outside the Box."

Grants

The ISHLT awarded a **Research Fellowship Grant** to each of the following four individuals:

Raymond Givens, MD, PhD

Columbia University, New York, NY, USA

Project Title: *MicroRNA Profiling in Patients with Orthotopic Heart Transplant Rejection*

Nikolaos Diakos, MD

University of Utah, Salt Lake City, Utah, USA

Project Title: *Humans as a model organism to study metabolic changes in heart failure and myocardial recovery*

Ivana Ferrer, PhD

Emory University, Atlanta, GA, USA

Project Title: *Characterizing the Impact of Chronic Cytomegalovirus Infection on Transplantation Tolerance*

Pablo Sanchez, MD, PhD

University of Maryland, Baltimore, MD, USA

Project Title: *Increasing the number and outcomes of lung transplants by using mesenchymal stem cells*

The ISHLT awarded the **Branislav Radovancevic Memorial Fellowship Grant** to the following individual:

Leonardo Salazar, MD

Stollery Children's Hospital and the University of Alberta

Project Title: *Relation of physical activity measured through triaxial accelerometry and Brain natriuretic peptide in children with heart failure, heart transplant and on ventricular assist devices*

The ISHLT awarded the **Transplant Registry Early Career Award** to the following three individuals:

Eugene DePasquale, MD

UCLA, Los Angeles, CA, USA

Project Title: *Influence of Chronic Kidney Disease Stage on Patient Selection for Heart and Heart-Kidney Transplantation*

Aaron Healy, MD

University of Utah, Salt Lake City, UT, USA

Project Title: *Predictors of Post-Transplant Outcomes in Patients Bridged to Transplantation with Continuous-Flow Left Ventricular Assist Devices – an Analysis of the International Society for Heart and Lung Transplantation Transplant Registry*

Chesney Castleberry, MD

Cincinnati Children's Hospital, Cincinnati, OH, USA

Project Title: *mTOR Inhibitors in Pediatric Heart Transplantation: Do the potential benefits outweigh the risks, clues from the ISHLT Registry*

The ISHLT awarded the **Nursing, Health Sciences & Allied Health Research Grant** to the following two individuals:

Jo Wray, PhD

Great Ormond Street Hospital for Children, NHS Foundation Trust, London, United Kingdom

Project Title: *An exploratory study of the psychological impact of a ventricular assist device for children and their families*

Supported by funding from CSL Behring:

Jane Haines, DNP, RN, CMSRN

University of Pittsburgh School of Nursing, Pittsburgh, PA, USA

Project Title: *A randomized controlled trial to assess the effect of mindfulness-based stress reduction on stress and anxiety in caregivers of lung transplant patients*

Abstract Awards

The **Philip K. Caves Award** was awarded to the following individual:

Alexey Dashkevich

University of Helsinki, Helsinki, Finland

Abstract Title: *Intracoronary Treatment with VEGF-C/D Inhibitor Enhances Cardiac Allograft Survival and Prevents Chronic Rejection by Regulating Lymphatic Endothelial Cell Activation*

The **Branislav Radovancevic Memorial Best MCS Abstract** (funded by a grant from Thoratec) was awarded to the following individual:

Claire Watkins, MD

University of Maryland, Baltimore, MD, USA

Abstract Title: *Evaluation of the Infant Jarvik Ventricular Assist Device in a Chronic Juvenile Sheep Model*

The **Nursing, Health Sciences & Allied Health Excellence in Research Award** was awarded to the following individual:

Jane Haines, DNP, RN, CMSRN

University of Pittsburgh School of Nursing, Pittsburgh, PA, USA

Abstract Title: Stress and Anxiety in Caregivers of Lung Transplant Patients: Effect of Mindfulness Based Stress Reduction

The Junior Faculty and Trainee Council awarded the **Best Case Presentation** during the session, *Clinical Case Dilemmas in Thoracic Transplantation*, to the following individual:

Mustafa Ahmed, MD and Bhalaghuru Chokkalingam Mani (fellow)

Temple University School of Medicine, Philadelphia, PA, USA

Case Presentation: *Infectious Disease: Rapid Respiratory Failure After Heart Transplant*

International Traveling Scholarships

The ISHLT awarded 13 traveling scholarships in 2012 to the following individuals:

Ramin E. Beygui, MD

Kevin C. Carney, MSN

Alexandre Souza Cauduro, MD

Esme Dijke, PhD

Rochelle M. Gellatly, BScPharm, ACPR, PharmD

Daniel R. Goldstein, MD

Manon Huibers, MSc

Marco Masetti, MD

Ana Belen Mendez, MD

Laveena Munshi, MD, FRCPC

David Schibilsky, MD

Aleem Siddique, MBBS

Amparo Solé, MD, PhD

Leach-Abramson-Imhoff Links Travel Awards

The Links Travel Award Committee awarded travel scholarships to the following outstanding writers and contributors to the Links Newsletter:

Writer of the Year, \$2,500

- Michele Estabrook, St. Louis, MO, USA

First Runners-up, \$1,000

- Melanie Everitt, Salt Lake City, UT, USA
- Christina Migliore, Newark, NJ, USA

Honorable Mention, \$500

- Veronica Franco, Columbus, OH, USA
- Manreet Kanwar, Pittsburgh, PA, USA
- Luciano Potena, Bologna, Italy
- Mace Schuurmans, Zurich, Switzerland
- Jeff Teuteberg, Pittsburgh, PA, USA

Congratulations to all of this year's award recipients!



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