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## From the ISHLT President John H. Dark, FRCP



The ISHLT, now in its 31st year has suffered crises in the past. Finances have fluctuated and annual meetings have suffered from threats as diverse as international terrorism and the SARS virus. But the biggest potential threat followed the uneven fight against the Icelandic volcanic ash cloud. More than 600 of us in Europe were prevented from even leaving our regional airports, never mind crossing the Atlantic to join our friends and colleagues in Chicago. The meeting, I am told, hardly faltered. Speakers stepped in from across North America, sessions were reorganised: the science and the socialising both went on. Executive Director, Amanda Rowe and her team worked non stop for almost 48 hours. Teleconferences, webcasts appeared overnight and hotel reservations were cancelled.

I would like to pay a personal tribute to the success of all those efforts in ensuring that whilst Chicago 2010 was memorable, it was for all the right reasons. Those of us in Europe had the opportunity to be involved, to feel that we were still part of the Society.

So into another year, the ISHLT goes

from strength to strength. Good news and continued progress in the science and medicine of heart and lung transplantation continues to flood in. In particular I would highlight the continued progress of the JHLT under the editorship of Mandeep Mehra. Building on efforts of his predecessor, past editor Jim Kirklin, has further increased the impact factor, proved submission rate and again elevated the journal in its ranking with other transplant related publications.

A major contribution to the scientific management of our patients comes with recent publication of the CAV nomenclature. The Chicago meeting also saw significant progress, under the leading of Jon Kobashigawa, in unravelling the complexities of antibody mediated rejection.



Former President James K. Kirklin, MD passes the gavel to Lori J. West, MD, DPhil who accepted on behalf of President Elect, John Dark, FRCP

The ISHLT Councils have become a driving force of the Society, where new ideas are forged. Their reports are widely disseminated on the website and I would urge you to read and appreciate the breadth of activity that is taking place. In particular I would highlight the actions of the newly established Junior Faculty Council, setting up mentoring schemes and making a significant new contribution to the annual meeting.

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I would strongly encourage all those just starting out in their careers in transplantation to join this Council and take advantage of all that it offers.

We also have a new entity, the Basic Science and Translational Research Council, with Jim George at the helm as Board Liaison. It is part of the concerted effort to get young scientists, both basic and clinical, closely involved with the aims and the future of the Society.

Although 31 years old, many of us can remember the early days of heart and lung transplantation. We worked and learned from the heroes of the past, the Shumways and the Cabrols, the Coopers and the Wallworks. Some of this heritage was brought alive in Jim Kirklin's Presidential address and the material displayed in Chicago (and transmitted to computer screens around the world). Through the History and Archives Council we hope to capture forever the detail of that era. Lori West and her collaborators have been interviewing the key figures so that we have a permanent record to couple with our collection of artifacts and memorabilia. Much of the feel for the early days of transplantation, together with the evolution in the Society can be enjoyed in Jim Kirklin's historical monograph and I would urge anybody

with an interest in our speciality to read and enjoy that publication.

The ISHLT occupies a premier position in our speciality, cemented by the scientific contributions examples of which I have mentioned. It is important that we interact with the other societies in the broader speciality of transplantation. So there are ISHLT sessions at the ATC, the Transplantation Society meeting in Vancouver as well as some of the equivalent meetings in Europe. These links are not so much to gain more members but to ensure that the world of transplantation knows that for the science and medicine of end stage heart and lung failure, the ISHLT is the authoritative organization.

As we move through another year, the highlight on our horizon is the 31st meeting in San Diego. The Programme Committee, under the able Chair of Robin Pierson will meet shortly. In a break with the past, we have made a change to the long established timetable. The abstract closing date will now be in late November pushed back almost 6 weeks from the previous deadline. So the final message is that we have time to enjoy the summer but come back with time and space to send our best work to the ISHLT for our San Diego meeting.



2010 Scientific Program Chair,  
Hermann Reichenspurner, MD, PhD

## From the *30th Anniversary Meeting of the ISHLT Program Chair*

**Hermann Reichenspurner, M.D., Ph.D.**

It was one of the greatest pleasures in my career to serve as Program Chair of the 30th Anniversary Meeting of the International Society for Heart and Lung Transplantation in April 2010 in Chicago. It was a very special congress for me and my Program Committee with the 2nd highest number of abstracts ever been submitted. We were able to select almost 600 excellent oral, mini-oral- and poster-presentations distributed among the various categories. In close cooperation with the various scientific councils, the Program Committee put together highly interesting satellite and breakfast symposia featuring excellent speakers and discussants. The plenary sessions comprised of outstanding invited speakers, most

of them being ISHLT members or past-presidents, and few selected featured abstract-presentations which received the highest grading. One of the highlights was the Anniversary Plenary Session with a great Presidential Address given by Jim Kirklin and the "Lifetime Achievement Award" which was presented to John Billingham in memoriam of his wife Margaret, a world-famous cardiac pathologist. The only downside of this highly successful meeting was that many of our highly respected European members and speakers were not able to participate because of flight cancellations due to the Icelandic volcanic cloud. Fortunately we were able to receive almost all the affected presentations via phone-connections and the congress could be followed via Internet - a true 21st century-congress! Thanks to all who contributed to making it such a success!



## *Highlights* of ISHLT 30th Annual Meeting and Scientific Sessions in Chicago Josef Stehlik, MD and Andreas Zuckermann, MD

The 30th Annual Meeting and Scientific Sessions took place in Chicago in April. The planning committee, chaired by Dr. Hermann Reichenspurner, and the ISHLT staff had an unusual challenge this year – to ensure effective progress of the meeting despite an unlikely adversary –international air-travel compromised by volcanic plume. However, many of us were literally amazed by the speed with which a teleconferencing network was set-up and allowed not only for the stranded speakers to present their work, but also for absent participants to attend our meeting virtually. Here is a small sample of the outstanding science discussed at the scientific sessions:

- 1. Consensus conference on antibody-mediated rejection**, organized under the leadership of Dr. Jon Kobashigawa and sponsored by the ISHLT and the California Heart Foundation, drew a considerable interest. Participants included pathologists, immunologists, transplant physicians, surgeons, and researchers from many institutions and continents. The summary of the lively discussion and consensus recommendations will be published soon in the Society's Journal of Heart and Lung Transplantation.
- 2. A day of satellite symposia** - The first day of the conference was dedicated to satellite symposia. This was a good opportunity to not only attend lectures by leaders in the respective fields, but also for interactive discussions of the hot issues in thoracic transplantation and mechanical assist. The satellite symposia covered a number of topics, including new infectious diseases in transplantation, approaches to sensitized recipients and treatment of antibody-mediated rejection, pulmonary hypertension and right ventricular failure management, mechanical assist approaches, ethical issues in transplantation, among others.
- 3. 2010 Post Heart Transplantation Guidelines** – Dr. Maria Rosa Costanzo reviewed an impressive effort that, under her guidance and with contributions from many, will result in a publication of ISHLT guidelines for post-transplant care of heart transplant recipients. An executive summary will be published in the JHLT this summer and the full guideline will be published as a monograph in 2011.
- 4. The IMAGE trial** - Dr. Michael Pham presented the results of the multicenter prospective randomized trial of gene expression profiling and endomyocardial biopsy for surveillance of acute cellular rejection. The trial showed non-inferior outcome with gene expression profiling and a decrease in the number of biopsies in the gene expression profiling arm. Dr. Mehra's discussion of this trial called for cautious interpretation of the results and for renewed discussion of the need for biopsy or gene expression surveillance in many low risk patients.
- 5. B-cell memory and development of donor-specific tolerance in ABO- incompatible heart transplantation in early childhood** – Dr. Simon Urschel presented data on the differences between infants and adults in the response of memory B-cells and expression of the CD21 receptor in response to ABO-antigen stimulation. This report provided new insights relevant to ABO-incompatible transplantation
- 6. Mini-oral sessions** – a new presentation format tested this year allowed for brief focused presentations of original work followed by short discussions.
- 7. Dr David Taylor presented an analysis of the Cardiac Transplant Research Database (CTRD) titled, "Changes in the causes of heart transplant mortality over two decades: successes, failures and opportunities."** This analysis described changing trends in the leading causes of death after cardiac transplant between 1990 and 2008.

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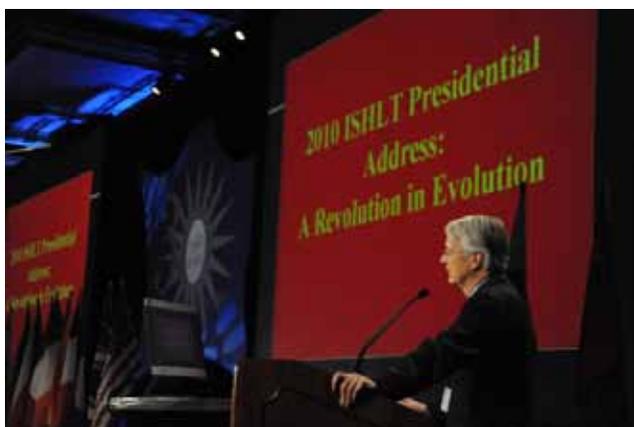
8. In an invited lecture **‘New therapies for sensitized renal allograft recipients’**, Dr. Patrick Dean shared his experience with novel therapies used in kidney transplant candidates. This lecture provided insights into approaches that might be used with success in thoracic transplantation.

9. Bronwyn Levey, RN in a featured abstract presentation **‘Excellent intermediate results from a donation after cardiac death - lung transplant national collaborative’** shared encouraging results from lung transplant DCD experience in Australia.

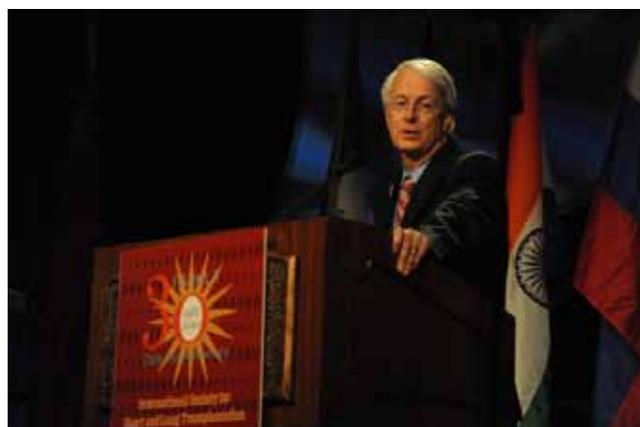
10. Dr Marshall Hertz provided us with both educational and entertaining preview of the **30th ISHLT International Thoracic Registry Report**, to be published in the JHLT this Summer.

11. Drs. Howard Frazier and Mandeep Mehra, in their thoughtful debate **‘Mechanical circulatory support is IN, heart transplantation is OUT’**, summarized, with lots of wit and grace, many of the problems that face the field of advanced heart failure in the year 2010.

## *Photos* from the 30th Anniversary Meeting April 2010, Chicago, IL



James K. Kirklin, MD, ISHLT President



James K. Kirklin, MD, ISHLT President, delivered the Presidential Address on the 30 year history of ISHLT and Heart and Lung Transplantation



Former ISHLT President Alec Patterson, MD, provides the Society with a History of Lung Transplantation



ISHLT Inaugural Masters Academy was a sell-out



# ISHLT *Links*



Bruce Reitz, MD, PhD commemorates the life and accomplishments of Lifetime Achievement Award recipient and former ISHLT President Margaret Billingham, MD



ISHLT Board of Directors



ISHLT Past Presidents gather at the Society 30th Anniversary Meeting



Dr. John Billingham accepts the ISHLT Lifetime Achievement Award on behalf of his wife, Margaret



# ISHLT *Links*

## ISHLT 30th Anniversary *Gala*





# ISHLT *Links*





## The ISHLT 30th Anniversary Meeting: Impressions from the *Past President* James K. Kirklin, MD

The ISHLT 30th Anniversary meeting at the Chicago Hilton promised a unique celebration of our heritage coupled with an invigorating, multi-national scientific exchange of the salient issues in advanced heart and lung failure, transplantation, and mechanical support. The week before the meeting, however, Iceland's volcano (Eyjafjallajokull) began spewing its internal volcanic debris and ashes into the atmosphere over northern Europe, threatening the travel plans of many of our European members. As the Board of Directors convened for the annual pre-meeting discussions, our focus promptly turned from the usual societal scientific issues to a salvage mission for this incredible important annual meeting. As information surfaced about expected airline cancellations, continuing volcanic activity, and the potential complete disruption of the travel plans affecting nearly one-third of our Society, the Board was faced with a unique challenge. Was there a way to include our stranded European members in these proceedings despite the rapidly developing geographic developments?

After detailed discussions with David Solin and his group at Solin Audio Visual Services, Ms. Amanda Rowe and the entire Board of Directors created an incredible plan for inclusion of our European members which was marked by creativity, inclusivity, and simplicity. After a series of emergent simulations and crisis management by all concerned in partnership with the Chicago Hilton personnel, a blast midnight email went to all European members and speakers which carried detailed information about our emergency plans. All potentially affected speakers were notified about methods of emailing their presentation, participating by conference call-in, and working directly with session moderators in a real-time fashion throughout their presentation.

Meanwhile, additional blast email information included information for internet access for all presentations through WebEx, all of which was organized within 24 hours. In an unprecedented display of crisis response, individual Board members volunteered to cover every

scientific session to make sure that dial-in presenters were properly identified within the list of abstract presentations, that moderators were informed of the appropriate procedures, and that the appropriate scientific exchange was facilitated.

The result was truly remarkable. More than 100 presentations were accomplished via call-in from Europe, and there was widespread use of WebEx by stranded members to view the ongoing presentations. By half way through the first day of sessions, the process was almost seamless; the clarity of call-in presentations was such that one could hardly discern a difference between a speaker actually at the podium and one sitting in his office in Europe.

In the end, many members yearning to join us found alternative routes of passage and arrived in Chicago as the meeting unfolded. We were especially pleased to greet our Program Chair, Dr. Hermann Reichenspurner, who endured multiple setbacks but arrived as the meeting commenced. A special tribute also goes to Dr. Heather Ross, Secretary/Treasurer of ISHLT, who arrived in time for her stunning performance at the Gala Event, having traveled thousands of miles in her return from an expedition to the North Pole when the volcano erupted.

So, the 30th Anniversary of ISHLT will be remembered not only for the wonderful exchange of scientific information from our international participants, but also for the Icelandic Volcanic Crisis which threatened the meeting. Fortunately, this was not a crisis which threatened loss of lives, but it nevertheless was of great importance to our Society members. The commitment to participation of all our international membership and the joy of our European colleagues at having the opportunity to deliver their presentations and view the ongoing scientific sessions was both touching to me personally and a reaffirmation of the true international spirit of the ISHLT.



## **JHLT Update from the Editor** **Mandeep R. Mehra, MBBS, FACC, FACP**

The Journal of Heart and Lung Transplantation continues its journey of excellence as evidenced by the recent release of the 2009 Journal Impact Factors. You will be pleased to know that JHLT's Impact Factor increased from 3.323 in 2008 (ranking 8th out of 21 Transplantation journals) to 3.541 in 2009 (ranking 5th out of 24 Transplantation journals). Indeed, the JHLT now ranks 2nd of 24 among transplantation journals that publish articles related to heart and lung transplantation.

Needless to say, Kudos are due to Dr. Kirklin and his team for his astute stewardship of the JHLT till April 2009 and to our incredible office editors, editorial consultants and journal management executive team, led by Dr. Patricia Uber. However, we would not have passed this milestone without the ardent support of our reviewers and importantly to investigators for choosing the journal as the preferred medium for showcasing their work.

The JHLT has seen a substantial increase in submissions this year (31%) and various new themes have been introduced, including incisive perspectives, opinion pieces and commentaries as well as State of Art papers. The original science paper acceptance rate stands at 24% and clinical dilemma category at 8%. Thus, the journal is continuing to push the standards of the science to greater heights and focus on relevant issues of interest to our scientific community by enhancing timeliness of decisions (time to first decision is 19 days) and rapid publications (time to online publication from date of acceptance is 4-6 weeks). We have found that our authors appreciate the intense impact that our editorial staff has had on the rapidity of our decision process.

We are grateful for your ongoing support of the JHLT and the Pride that you take in this society asset.

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## **Pediatric Transplantation Council Report** **Elfi Pahl, MD, Council Chair**

During our meeting in Chicago, Dr. Beth Kaufman was elected council vice-chair and Dr Robert Boucek has agreed to step up as workforce leader for Standards and Guidelines committee. Registries & Databases Workforce will be led by Dr Richard Chinnock and the workforce's focus in 2010/2011 will be on improved communication between the our council and the ISHLT Thoracic Registry Steering Committee.

I am happy to report that we have had much activity from the education workforce, led by Dr Daphne Hsu, who has had several conference calls to develop complete proposals for symposia, plenary sessions and invited lectures for the annual meeting in San Diego in April 2011.

### **GOALS FOR NEXT YEAR:**

- Enhance participation in the pediatric council and

pediatric representation in ISHLT

- Discussion of ISHLT ACADEMY for Pediatric Heart/Lung Transplantation-to take place either in San Diego or Prague.
- Plans for monograph on Pediatric Lung Transplantation

Volunteers are being sought to explore new media ways to improve interaction and education among the Pediatric Council members. Please email Dr. Hsu: dhsu@montefiore.org with suggestions.

Have a good summer. Please contact me with your questions, ideas and suggestions at epahl@childrensmemorial.org



## **Mechanical Circulatory Support Council**

**Emma Birks, MRCP, PhD, past chair and Francis Pagani, MD, chair**

At the Mechanical Circulatory Support Council Meeting on April 22 during the 2010 ISHLT Annual Meeting in Chicago, the membership met and the progress the council had made during the year was presented, chaired by Emma Birks and Frank Pagani. Comments, suggestions and contributions from the membership were wellcomed. The standards and guidelines committee have started writing guidelines for mechanical circulatory support. Subgroups have been formed, each incorporating surgeons, cardiologists and VAD coordinators. The guidelines have been divided into 5 sections – patient selection, optimization prior to device implantation, surgical aspects of implantation, “best practice” inpatient and “best practice” outpatient care. Stephanie Moore has worked hard in coordinating this as leader of the standards and guidelines workforce. Writing is in progress and the MCS standards and guidelines workforce also met separately during the ISHLT meeting to drive this forward. The outline has been approved by the ISHLT standards and guidelines committee and the plan is to submit the guidelines for publication in the Journal of Heart and Lung Transplantation before the meeting next year.

Paul Mohasci presented an update on the status of the formation of a European Registry. Last year a dataset consisting of a subset of the INTERMACS data was agreed after several meetings in Europe of surgeons and cardiologists from the main European centres. Now it is being proposed to form a group called EUROMACS to run this. They have already formed a website ([www.euromacs.org](http://www.euromacs.org)). This group was formed in 2009 initially by 2 of the prominent German centres in the field and now several more centres and other European centres (Austria, Switzerland etc) have joined. All will be welcome to join and discussions have started with the French centres who are likely to join soon. EUROMACS will be a separate legal entity and have a non-profit structure and they will produce annual reports regarding VAD therapy. They have formed a Board of Directors to review and approve research proposals. The first author

of a publication will be the one submitting the idea (which would be approved by the Board) and writing the paper and the senior author will be from the group with the most patients in data set. Concerns were raised by some that Euromacs is dominated by several large centers rather than being a reflection of the ISHLT and all European centers. Euromacs have submitted their proposal to be reviewed by the Board of Directors at ISHLT. It was recognized that there would be no current incentive (financial or regulatory) to submit data.

Roberta Bogaev presented an update from the Education workforce. She presented feedback from the ISHLT Education committee meetings to the council membership including a summary of the changes that have been made in the Journal of Heart and Lung Transplantation. She has also led a heavy involvement by representative of the MCS community in the Master Academy due to take place the day following the meeting. She also requested any suggestions for topics for speakers for the 2011 Annual Meeting from the membership.

The ISHLT MCS council has also formed a close collaboration with ICCAC. They have been heavily involved with the education committee and are writing a white paper on the role of a VAD coordinator and are currently setting an exam to set a formal qualification. They also provided their members to join the writing groups of the MCS guidelines currently being written by the council. It was discussed at the meeting that it would be very helpful if ICCAC would survey their current membership to investigate the current level of support they were providing to their programs so that some guidelines regarding this can be developed.

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## Heart Failure and Transplant Medicine Council Report

David A. Baran, MD

The Heart Failure and Transplant Medicine Council is off to an exciting start. Dr. David A. Baran of Newark Beth Israel Medical Center in New Jersey was elected as the Chair of the Council, and Dr. Lee Goldberg of University of Pennsylvania was elected as Vice Chair. One of the initial tasks was to invite new leaders for some of the Workforces, to allow an influx of new ideas and give welcome rest to those who served for the past year on behalf of the Society.

Dr. Robert Bourge (University of Alabama, Birmingham) generously agreed to continue in his role as Development Liaison, and Dr. Allen S. Anderson (University of Chicago) took over as Education Workforce Leader. He has the major responsibility for collecting suggested symposia ideas and actually fleshing out these ideas and suggesting speakers and formats for discussions. Dr. David Nelson agreed to continue as Communications Workforce Leader, and will be joined by his colleague Dr. Doug Horstmanshof. Both are at the Integris Baptist Medical Center in Oklahoma. They are responsible for sending updates to the ISHLT Links, as well as developing new ways to communicate with ISHLT members.

Dr. Naveen Pereira (Mayo Clinic, Rochester, Minnesota) was named the Leader of the Standards and Guidelines Workforce. He will be supported by his physician colleagues Monica Colvin-Adams at University of Minnesota, Michael Givertz at Brigham and Women's, Seema Mital at Hospital for Sick Children, Toronto, Jignesh Patel at Cedars Sinai Medical Center, Joseph Rogers at Duke University Medical Center, Adrian Vanbakel at Medical University of South Carolina, and Eulalia Roig at the Hospital Sant Pau, Barcelona, Spain. The Workforce will support the ongoing efforts at issuing guidelines in transplantation.

Dr. Josef Stehlik (University of Utah) was named the Leader of the Registries and Databases Workforce, where he is joined by his physician colleagues Anne I. Dipchand, Hospital for Sick Children, Toronto, Canada, Michael

X. Pham, Stanford University, California, and Stavros Drakos, University of Athens, Greece. The Workforce will be investigating ways to leverage the ISHLT database to predict outcomes post-transplant.

To help unify the council and facilitate communications, it was decided to try a "Google Group" which is an electronic bulletin board which emails all new messages to the members automatically. Membership in the group is free and is open to all who are part of the Heart Failure and Transplant Medicine Council. Most importantly, the site is "confidential" so none of the content is visible to search engines such as Google or Yahoo. This allows for colleague-to-colleague discussions, and "what would you do next" discussions that result in collaborations among colleagues who might not otherwise know each other.

If you would like to check it out, visit: <http://groups.google.com/group/isHLT-hf>

Create a login and after ISHLT membership is verified, you will be able to access the discussion boards.

With the Google Group, we have been able to collect several excellent ideas for symposia at the upcoming Annual Meeting, and will be forwarding these to the Program Committee for further consideration.

Over the next few months, the newly energized Council will begin embarking on new projects, including patient education materials translated into various languages, as well as other ideas that are still under development. All suggestions are welcome, and we are looking forward to a great and productive year.



## **Infectious Diseases Council Report**

**Martha Mooney, MD**

The ISHLT Infectious Diseases Scientific Council has had another busy year. The ISHLT Monograph: Infectious Diseases in Cardiothoracic Transplantation and Mechanical Circulatory is in full swing with authors working to finish by deadline. Publication date is projected to be April 2011, in time for the next Annual ISHLT meeting.

The ISHLT Infectious Diseases Scientific Council is continuing the work to create universal definitions for infectious diseases in the cardiothoracic transplant recipient and in mechanical circulatory support to allow for standardized reporting. At this year's annual meeting, the ID council sponsored a workshop entitled "Definitions of Unique Infections In Cardiothoracic Transplantation and Mechanical Circulatory Support". This was attended by members of the multidisciplinary taskforce selected by the ISHLT ID council to include Cardiothoracic Surgeons, Cardiologists, Pulmonologists, Pathologists and members of the Infectious Diseases scientific council with international representation. The volcanic ash cloud in Scandinavia and Europe shrank the attendance to the very interested. Excellent

feedback prompted more changes to the working draft of the definitions. This draft has since been revised by the ID council and multidisciplinary task force to reflect the input from the workshop and is now available on the ISHLT for review and comment by the entire ISHLT membership. After 30 days on the website, the working document will be taken down and further modified by the taskforce considering the feedback from the ISHLT membership. We hope to have the results published in the JHLT when the final consensus has been reached. These definitions will then be applied to the clinical arena in pilot studies for validation.

The ID council's membership has increased with new members of national and international notoriety- an ongoing goal of the council. The education, standards and guidelines, and registries workforces have increased in their membership- and activities. Details will be provided in the next communication or can be obtained by contacting the ID council workforce leaders listed on the ISHLT.org website: <http://www.ishlt.org/councils/infectious.asp>

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## **Pulmonary Transplantation Council**

**Lianne Singer, MD, Communication Workforce Leader**

The Pulmonary Scientific Council had a great meeting in Chicago. Lianne Singer (Chair) and David Weill (Vice-Chair) were joined on the council leadership by Michael Mulligan, newly elected Secretary. We acknowledged the excellent work of outgoing chair, Geert Verleden, who was stuck in the ash cloud back home. We will share just a few highlights from the many projects and activities of our Council:

We have two innovative databases in the works: a DCD mini-registry and the QUILT registry, which is an international quality of life registry for lung transplant recipients. A working group is actively engaged in developing diagnostic criteria and treatment options for antibody-mediated rejection.

Our Education Workforce has drafted a comprehensive Core Curriculum in lung transplantation and is hard at work putting together a Master Academy for the 2011 ISHLT meeting. Contact us to learn more about our Council activities and get involved! The Council leadership roster and contact information is available on the ISHLT web site: <http://www.ishlt.org/councils/pulmonary.asp>



## Pathology and Basic Science Council

James B. Atkinson, M.D., Ph.D., Communications Workforce Leader

2010/2011 Basic Science and Pathology Council

Operating Board:

Annalisa Angelini, M.D., Chair

Stephan Ensminger, M.D., Ph.D., Past Chair

Carmela D. Tan, M.D., Standards and Guidelines

Workforce Leader

E. Rene Rodriguez, M.D., Education Workforce Leader

Robert F. Padera, M.D., Ph.D., Registries and Databases

Workforce Leader

James B. Atkinson, M.D., Ph.D., Communications

Workforce Leader

This is a summary of the main issues discussed at the council's meeting during the ISHLT Scientific Sessions in Chicago:

### 1. Antibody Mediated Rejection Consensus Meeting: Pathology Break-out Session

Acute antibody mediated rejection (AMR) is now established as a serious cause of cardiac allograft dysfunction and is associated with diminished allograft survival and the development of transplant-associated vasculopathy. Over the last 2 decades the incidence, risk factors, serological, clinical and pathological features have begun to be elucidated. Previous ISHLT working formulations for the diagnosis and reporting of cardiac allograft rejection have addressed some of the diagnostic criteria. In the most recent report of 2005, the pathological diagnosis of AMR included the histopathological findings of endothelial-cell swelling and accumulations of intravascular macrophages in association with immunophenotypic evidence of immunoglobulin and complement deposition in capillaries by immunofluorescence on frozen sections and/or CD68 staining of intravascular macrophages in capillaries and C4d staining of capillaries by paraffin immunohistochemistry. The diagnosis of AMR required the clinical findings of hemodynamic dysfunction and circulating antibodies together with the histopathological and immunopathological findings. A number of studies have since raised the question of asymptomatic AMR. Further, pathologists have observed biopsy specimens showing the histopathological

findings in the absence of immunophenotypic changes and cases with immunophenotypic findings such as C4d deposition without either the histopathological findings or the presence of intravascular macrophages. These observations suggest that both a morphological and immunophenotypic spectrum of changes may exist. Further, the continuum of latent, silent, subclinical and clinical AMR has been proposed in a recent consensus document of AMR. The observations described above together with the published literature on AMR provided the basis for the reexamination of current pathological criteria.

As part of the AMR consensus meeting held on April 20, 2010 under the direction of Dr Jon Kobashigawa, a separate breakout session proceeded. This session included pathologists from North American centers and European centers. Recommendations of the group were summarized into a number of key points. The areas of discussion included technical, interpretative, reporting, and grading considerations. A number of issues remain unresolved, but ongoing discussion and elaboration is fully expected. The following points were considered:

A. Technical Issues: Recommendations will be made for optimal panels of antibodies for immunofluorescence (IF) and immunohistochemistry (IHC), antibody selection, and specimen fixation.

B. Interpretative Issues: Published validation studies have demonstrated acceptable levels of equivalency between IF and IHC techniques. Only staining of interstitial capillaries will be interpreted for IF and IHC. In addition to the previously reported histopathological criteria of endothelial swelling and intravascular macrophages, additional histopathological criteria to identify earlier changes in AMR will be sought and evaluated by centers. The definition of intravascular macrophages will be further defined in terms of quantity and the distinction between intravascular and interstitial patterns will be further elucidated. The diagnostic criteria for mixed acute cellular rejection (ACR) and AMR will be enumerated.



C. Descriptive / Reporting Issues: The distribution of staining by IF and IHC will be reported. Categories to be considered include negative, focal, multifocal and diffuse staining patterns. Staining intensity of IF staining will be reported in a semiquantitative method as previously reported: 0, 1+, 2+, 3+. Staining intensity of IHC staining will be reported in a descriptive method such as negative, faint, strong. For the purpose of classification as positive or negative staining results, only 2+ & 3+ IF staining and multifocal or diffuse staining in IHC will be considered as positive. The significance of patterns such as diffuse & faint staining by IHC will be studied prospectively. Currently the minimum positive histopathological findings of AMR are endothelial activation and intravascular macrophages. Interstitial hemorrhage, capillary fragmentation, mixed inflammatory infiltrates, endothelial cell pyknosis and/or karyorrhexis and marked edema are recognized as findings in advanced or severe AMR. These and other possible morphological criteria will be considered by the group. A template will be constructed for the accumulation of histopathological and immunophenotypic data which will provide the basis for a pathological registry.

D. Final Pathological Diagnosis: The group reached unanimous consensus that the combination of histopathological and immunopathological findings will be reported as the "Pathological Diagnosis of AMR" and will be designated by pAMR. An initial framework for the diagnosis of AMR was considered by the group. This framework will be the subject of further discussion and potential modification before publication or implementation. The preliminary categories for the reporting of AMR will include categories of negative for pAMR, suspicious for pAMR, pathological pAMR, and severe pathological AMR (which recognizes the rare

cases of severe or advanced histopathological findings of interstitial hemorrhage, capillary fragmentation, mixed inflammatory infiltrates, endothelial cell pyknosis and/or karyorrhexis and marked edema). However, a number of issues remain unresolved, but ongoing discussion and elaboration is fully expected.

## 2. Separation of the Pathology and Basic Science Council

This issue was raised by members of the executive board and discussed during the council's meeting in Chicago. Numerous reasons for and against a separation were raised during that meeting. Among the reasons cited as favorable to this separation were the main emphasis on AMR such that basic science issues were not taken care of sufficiently, the overlap of interests of the two subjects over the long term might not be sufficient, and preoccupation with pathological problems such as AMR kept 'basic science-interested persons' away. Among the reasons cited as not favorable for such a separation were the overlap of interests by members of the Pathology and Basic Science Council, the consequences of reducing members of the Council, and separation in the past had only moderate success. As council members opinions were not clearly for or against a separation of the Pathology and Basic Science Council, the Council operating board felt that this issue should be discussed with the executive board and leave the final decision to the executive board.

## 3. Agenda for 2010/2011

The council felt that emphasis should be on Basic Science issues this coming year. A variety of suggestions were made how to get more young members interested in basic science, including an additional young investigator basic science award.



## **Nursing, Health Science & Allied Health Council (NNSAH)** **Bernice Coleman, PhD, RN and Bronwyn Levvey, RN**

The Nursing Health Science and Allied Health (NNSAH) Council begins this year with great enthusiasm and a strong commitment to establishing and achieving our 2010-2011 goals. Our new leadership team had its first teleconference meeting on June 8 2010. We used 'Skype' in an effort to insure that all leadership members had input into the process. Use of this technology also facilitated meeting with members unable to join our scheduled meeting due to the challenges of international time zones.

The NNSAH leadership Council for the coming year consists of: Bernice Coleman, USA (Chair); Nancy Blumenthal, USA (Vice-Chair); Connie White-Williams, USA (Past Chair); Sharon Beer, UK (Education); Judy Currey, Australia (Grants & Awards); Michael Petty, USA (Standards & Guidelines); Bronwyn Levvey, Australia (Communications); Kevin Carney, USA (Development); Fabienne Dobbels Belgium (Registry & Databases), and Annette DeVito Dabbs USA (Research Mentorship). Our council is excited to have international volunteer representation on both our leadership council and individual task forces.

Our goals for this year include:

- Provide quality clinical and scientific education programs/symposia for ISHLT 2010/11: We intend to increase the number of clinical abstracts and grant proposals submitted by 20%. With close adherence to our membership needs assessment, we will complete the development of specific symposia.
- Establish Research Mentor/Mentee Relationships: We have begun to create a database of interested mentors and mentees. The NNSAH council will bring together research mentors and mentees desirous of preparing a research abstract or research grant proposal for ISHLT consideration.

- Improve Communication to Council Members; The prime goal of the communication taskforce is to provide the critical link of information flow from the council leadership to our members. To achieve this goal we will
  1. Post our council minutes including the goals for 2010-2011 year.
  2. Embed pictures of our NNSAH Council to promote familiarity with the leadership.
  3. Explore the use of other electronic media to disseminate our council activities.

- Increase council membership by 20% and recruit volunteers to Council Task Forces. Our communications task force will explore opportunities to increase membership through utilizing the ISHLT membership database. Through this process we will identify and invite potential members of the NNSAH Council who have not joined to consider volunteering.

- Collaborate with two additional ISHLT councils. We will continue to foster relationships with other councils in efforts to support joint development of educational initiatives, and standards and guidelines.

The Society is actively involved in developing guidelines for the management of MCS patients. NNSAH has members on each of the writing sections representing 3 countries and 2 reviewers.

This is a very active role for members of our council, and represents our ongoing commitment to collaboration and to being full members of each of the task forces. Thanks to all who volunteered to participate in this effort. In addition, we are working closely with the International Consortium of Circulatory Assist Clinicians as they complete their White Paper on the role of the MCS coordinator.



## Junior Faculty and Trainee Council Report

David Markham, MD, Chair, JFT Council

The Junior Faculty and Trainee Council had a productive meeting in Chicago! The council sponsored successful sessions and events that we hope to continue into the future.

First, the Council sponsored "Clinical Case Dilemmas in Thoracic Transplantation," a session featuring junior faculty and fellows. We were pleased by the enthusiasm and attendance at the session. Each of the cases represented specialty areas within our organization. After each presentation, faculty discussants joined the presenter to explore the important issues and themes featured in the cases. Dr. Oscar Kolsrud from Sweden received special recognition for his outstanding presentation. The presenters are listed here:

Challenges in Lung Transplantation  
Basar Sareyyupoglu, MD, Pittsburgh, Pennsylvania

Challenges in Heart Transplantation  
Oscar Kolsrud, MD, Göteborg, Sweden

Infectious Disease Challenges in Thoracic Transplantation  
Sonia Vishin, MD, Birmingham, Alabama

Challenges in Pulmonary Hypertension

Kathleen Tong, MD, San Francisco, California

Challenges in Pediatric Thoracic Transplantation  
Joseph Rossano, MD, Houston, Texas

Also, members of the Junior Faculty and Trainee Council met with senior mentors at the Mentor/Mentee Lunch. Conversations delved into such topics as building your CV, job transitions, time management, and how to become more involved in ISHLT. This was a wonderful opportunity for junior members of the organization to get together with leaders in their respective fields.

The JFTC is continuing work in the following areas:  
Establishing a mentoring program  
Development of web-based educational modules  
Planning for the 2011 Clinical Case Symposium  
Planning for Mentor Lunch at next year's meeting  
Senior Faculty-Junior Faculty topic reviews

If you wish to become involved with the Council, please contact any of the council leaders. The Council leadership roster and contact information is available on the ISHLT web site: <http://www.isHLT.org/councils/junior.asp>

## Brief report on the "Consensus Conference on Antibody Mediated Rejection in Heart Transplantation," April 20, 2010, Chicago, IL

Jon Kobashigawa, MD

The problem of AMR remains unsolved because standardized schemes for diagnosis and treatment remains contentious, and current immunosuppressive regimens are largely intended to interfere in T-cell signaling pathways. As a result, AMR continues to appear in roughly 10-20% of heart transplant patients, correlating with factors of poor outcome such as increased incidence for hemodynamic compromise rejection, greater development of cardiac allograft vasculopathy, and higher incidence of mortality.

Therefore, a consensus conference was organized on April 20, 2010 sponsored jointly by the ISHLT and the California Heart Foundation (Affiliate of the Cedars-Sinai Heart Institute) to assess the current status of Antibody Mediated Rejection (AMR) in heart transplantation. The conference had 83 participants (transplant cardiologists, surgeons, immunologists and pathologists) representing 67 heart transplant centers from North America, Europe, and Asia.



The conference opened with morning lectures from experts in various fields to disseminate current knowledge of AMR in heart transplantation. These AMR lectures included topics on mechanisms, current pathology diagnosis, circulating antibodies, accommodation, clinical presentations and management.

Many clinically relevant issues arose during the consensus conference. The 83 attendees of the consensus conference participated in three smaller break-out sessions to discuss these topics and attempt to achieve consensus. A separate pathology break-out session occurred during the morning lectures as requested by the pathologists in order to further discuss the pathology definition of AMR.

The pathologists presented the results of their break-out session held during the morning of the AMR consensus conference. A tentative pathologic diagnosis of AMR was reached and will be printed in the Consensus Conference paper. However, the pathologist felt that further discussion amongst their colleagues was needed prior to a formal recommendation for AMR diagnosis to the ISHLT Board of Directors. A separate AMR pathology final report will follow.

The final session which included all participants centered on clinical issues discussed in the afternoon break-out sessions. One of the most important aspects of AMR was whether a clinical definition was needed. In the past, the use of cardiac dysfunction and/or the presence of

DSA have been included as criteria for the diagnosis for AMR. However, during this meeting it became clear that asymptomatic (no cardiac dysfunction) biopsy-proven AMR was associated with subsequent greater mortality and greater incidence of cardiac allograft vasculopathy. It was also noted that the presence of donor-specific antibody was not always associated with subsequent poor outcome. In fact, low titers of DSA may even be protective. Therefore, there was consensus that AMR should be a pathologic diagnosis only.

Another aspect of AMR that was discussed in the final session included how to monitor for this form of rejection. Recommendations were made for the timing for specific staining of endomyocardial biopsy specimens and the frequency by which circulating antibodies should be assessed. Finally, recommendations for management and future clinical trials were given.

The AMR Consensus Conference brought together clinicians, pathologists and immunologists to further the understanding of AMR. Progress was made toward a pathologic grading scale and consensus was accomplished regarding specific clinical issues. The understanding of AMR is still ongoing and it is incumbent among clinicians, pathologists and immunologists to work together and continue efforts to clarify its existence, frequency and clinical significance. Detailed accounts of the AMR Consensus Conference will be forthcoming in the Journal of Heart and Lung Transplantation.