Editorial Comment

Dear Members,

It’s been quite a while since the last newsletter, and there is a lot to report. The incoming President, Frank Ierino, will present his vision for how the Society should move forward in 2009 and beyond. The new Secretary, Toby Coates, will detail the outcome of voting at this year’s AGM on changes to the Constitution, and how they will be implemented. The new Treasurer, Scott Campbell, will report on the strong financial position of the Society following last year’s very successful TTS meeting in Sydney. The Chair of the Standing Committees and President-Elect, Peter Macdonald, will outline progress on the development of guidelines for the National Transplant Authority Project. Finally, Steve Alexander and I, the joint Education & Research representatives, will report on the successful 2009 Annual Scientific Meeting and Postgraduate Course at their new venue in Canberra, and on planning for next year’s events.

We hope that all members will take the time to read this newsletter to catch up on the latest news and to see how their Society continues to grow and thrive.

Peter Cowan

President’s Message

There have been a number of changes to the face of TSANZ Council. We should all thank the hard work over the years of Josette Eris who recently completed her term of office as TSANZ President, and also thank the other outgoing Council members, Jonathan Fawcett, Alex Sharland and Steve Chadban. Peter Macdonald is our new President-Elect and remains as Chair of the Standing Committees. We have four new Council Members who were elected from a very competitive field of nominees, and the new Council Members include Geoff McCaughan, Scott Campbell, Toby Coates and Stephen Alexander. Toby Coates is the new Secretary and Scott Campbell is Treasurer.

We have a focus on research and education with two Council Members (Steve Alexander and Peter Cowan) attached to this role, and Geoff McCaughan in charge of Awards and Grants. TSANZ now has a Scientific Advisory Committee which will provide advice on our educational and scientific components which are largely the Annual Scientific Meeting, Postgraduate Course and Awards. The Co-Chairs of the Scientific Advisory Committee will be the Education and Research officers, Steve Alexander and Peter Cowan. We also welcome Francesca Rourke as the new ATCA Representative on Council. The very high quality of nominations for Council Membership reflects positively on the healthy state of our Society and the growing membership. An important change to our constitution and composition of Council is the new standing position of a Surgeon on the Council. Three nominations for this position have been received and ballot papers distributed to the membership for voting and we look forward to having this new member on Council who will fulfil a central and important role in contributing to surgical
representation for all TSANZ matters and provide an ongoing link with the Royal Australasian College of Surgeons.

I would like to personally thank Michael Fink and Hilton Gock for a very successful Annual Scientific Meeting which provided a smooth transition in location from the Academy of Sciences building to The Manning Clark Centre within the Australian National University in Canberra. The Manning Clark Complex provided a larger conference facility which was functional and better suited to the growing needs of our Society. The other cornerstone of our educational activities is the Postgraduate Course which was ably run by Brendan Ryan and Wayne Hawthorne.

As TSANZ moves forward into the future, we are faced with two major areas of business – our core role of advancing Education, Research and Excellence in Clinical Transplantation, and second, the role of TANZ in the governance of Transplantation in Australia with the recently established Australian Organ and Tissue Donation and Transplantation Authority. The TSANZ Standing Committees have assumed an important role in providing policies and protocols, and providing expert advice on transplantation matters to external bodies such as the Organ and Tissue Donation and Transplantation Authority. Xenotransplantation continues to present complex medical and regulatory issues related to the prospects of clinical trials and these will need constant review by the Xenotransplantation Standing Committee while the moratorium remains in place. Our activities and interaction with Transplantation Societies in our region and internationally, Scientific Societies such as ASMR, and our links to other professional bodies such as the Royal Australasian College of Physicians (and related Specialty Societies) and the Royal Australasian College of Surgeons, should be fostered.

Finally, in a recent global letter to all members, I communicated the need to secure our investments following the successful TTS Meeting in Sydney in 2008. I would like to take this opportunity to remind all members that TSANZ Council will meet in September this year to outline a future strategic plan for TSANZ. The scope of this strategic planning meeting will be broad and include administration, sponsorship issues, membership benefits (Awards, Grants etc), Education/Research (Postgraduate Course Curriculum and Annual Scientific Meeting) and financial planning. I am asking for the Membership to write to Council with ideas they consider are important. It is my view that Education and Research remains a high priority for our membership and is not lost amongst the ever-growing work associated with governance issues, which are also very important. I am very keen to see the continued development of our Postgraduate Course and establishment of a state-of-the-art course curriculum which covers all areas of clinical and scientific aspects of Transplantation, and the development of other membership benefits.

I look forward to working with the new Council on all above issues and hearing from the Membership on your ideas for future planning.

Frank Ierino
President, TSANZ

Secretary’s Report

The major outcome of the last AGM was the vote to increase TSANZ council by one surgical member. The Surgeon on Council will ensure the needs and views of the transplant surgeons are represented and will provide an ongoing link to the Royal Australasian College of Surgeons. With the society undertaking an increasing role in post-graduate education, specialist surgical presence on council will ensure these important surgical educational needs are satisfied. The importance of this change was eloquently argued by Richard Allen and Adrian Hibbard and the motion to increase the TSANZ Council was passed unanimously. By now members will have received voting forms by mail. The three candidates are Dr Michael Fink, Dr Christine Russell and Dr Daryl Wall. The deadline for receipt at the Society Office of completed ballots is 5pm on the 4th of September 2009.

A major role of the society is to promote the participation of its members in international transplantation related scientific meetings and this goal is achieved through a large number of travel awards and grants. Attention of the membership is drawn to the society awards and the conditions under which the awards are made. The deadline for submission for the international travel awards is 3 months before the meeting or the closing date for abstract submission (if it is less than 3 months before the meeting). It is important to note that abstract acceptance may not be known at the time of submission, but that this does not preclude application for an award. However, successful eligibility criteria for a travel award requires having a presentation (oral or poster) accepted at the proposed meeting, being a financial member and having membership of the society for 12 months preceding the meeting. Preference is given to younger members of the society, and young
investigators and full time students are eligible to apply twice within a five year period. Senior investigators are eligible to apply once in every three years.

The society offers at least six of these international travel awards per year. Successful applicants supply written reports of their attendance at the meetings, which are periodically published in the newsletter. In this newsletter Kylie Webster, Tharun Mysore, Evelyn Slavaris, Jingjing Wu, Robyn Sutherland, Rebecca Stokes, Hool Sian Eng, Kate Markey, Ling Gao, Alasdair Watson, Huiling Wu, Moses Wavamunno and Winsome Abbott present their travel reports. These grants are a major membership benefit and I urge all eligible members to consider applying for these awards. The society is particularly grateful to our sponsors Novartis and Roche for their assistance in funding these awards.

Toby Coates
Honorary Secretary, TSANZ

Treasurer's Report

The Society enters 2009-2010 in a strong financial position, despite some inevitable depreciation in the value of our investments due to the decline in the share market. Hopefully 2009-2010 will see these investments return to positive growth.

The improvement in our position has been brought about by the tremendous success of the International Meeting in Sydney last year. Profits from this meeting have boosted coffers by approximately $450,000. Frank Ierino has convened a special Strategic Directions meeting of Council in September, at which the question of how to best use these funds will be addressed.

Pleasingly, membership has also grown with the International Meeting in Sydney. It has been possible to keep membership subscription fees unchanged this year.

The Annual Scientific Meeting was very successful in its new larger accommodation this year. This bigger venue does however come at an increased cost, and so it is anticipated that there will be some rise in the cost of registration for the Annual Scientific Meeting in 2010. Any increase will be significantly smaller than would have been incurred had we moved to another Canberra venue, or to another city altogether.

Scott Campbell
Treasurer, TSANZ

Standing Committees

National Transplant Authority Project

The major task confronting the Standing Committees has been the development of nationally uniform eligibility and allocation guidelines for organs and tissues. This remains a work in progress, but one which hopefully is nearing completion.

The process began in 2008 when TSANZ was approached by the Federal Department of Health and asked to take the lead in implementing the recommendations of the National Clinical Taskforce Report related to the Transplant Sector. In addition to developing national guidelines in relation to eligibility and allocation of deceased donor organs and tissues, TSANZ was also asked to develop audit mechanisms for these activities.

The Department of Health has allocated $1 million over 4 years from its national reform package to fund this process. The money has been used by TSANZ to employ an Executive Officer, Rosemary Allsopp, and a Senior Project Officer, Maria-Jose Velasco, to work on the project. Rosemary and Maria were recruited in March 2009 and currently work from an office in the same building as the TSANZ/ANZSN executive office in Macquarie St, Sydney. The rental and furnishing of the office is also covered by the project funding.

The remainder of the money has been (and will be) used mainly to fund combined face to face meetings of the Standing Committees and other stakeholders. The first of these meetings was held over two days in Sydney in March 2009. This enabled all Organ and Tissue Committees to present their existing eligibility and allocation guidelines and to better identify their strengths and weaknesses. Subsequent to the March meeting, all Standing Committees have revised their guidelines with a particular emphasis on including published evidence to support recommendations made in the guidelines. Individual Committees met again at the time of the TSANZ ASM in June to review their progress.

The next step involves a round of public consultation. The draft guidelines have been placed on the TSANZ website together with an advertisement in the national media calling for public feedback on the drafts. One month will be allowed for this phase in accordance with NHMRC recommendations.

Subsequent steps will be a teleconference of the SC chairs in early September 2009 to review
submissions from the round of public consultation, then a face-to-face meeting with key stakeholders which is scheduled for September 16. The feedback obtained from the public consultation and stakeholder meeting will be used to inform the final versions of the guidelines which should be completed by the end of October 2009. Development of audit mechanisms will follow.

Peter Macdonald  
Chair, Standing Committees

Education & Science Report

The Annual Scientific Meeting and the Postgraduate Course were an outstanding success this year, due in no small part to the tireless efforts of the convenors (and of course Aviva and her team), with remarkably few teething problems associated with the move to the new venue. The convenors’ final reports are included below.

Annual Scientific Meeting 2009

Hilton Gock & Michael Fink
Conveners 2009 ASM

The 2009 Annual Scientific Meeting was highly successful and incorporated a significant number of changes compared to the previous twenty-five meetings at the Academy of Sciences at ANU. Whilst the Shine Dome was sentimentally missed by many members, the new location at the Manning Clarke Centre, also within ANU, was embraced by delegates because of the extra space that allowed a more efficient format to minimise the movement of delegates during sessions, despite an increase in number of concurrent sessions. It was possible to use the six-theatre complex for up to five concurrent free-communication sessions with one theatre reserved as an audiovisual preparation area.

Other new features included (1) The replacement of posters with mini-orals that directly followed full-oral presentations of the same topic that were divided into processes rather than organ to encourage delegate exchanges across disciplines, (2) State-of-the-art concurrent sessions that complemented the plenary sessions on recent advances in various fields of transplantation, (3) Foyer display terminals so that all delegates with accepted abstracts had the opportunity to display their abstracts in slide show format on-demand throughout the meeting, (4) An increased emphasis on transplant surgery to encourage and improve the profile of transplantation surgery within the society and country, (5) A dedicated counter where the now famous sponsored coffee stand was strategically placed near the main entrance.

The venue and format changes were well complemented by the world-class contributions of over 133 abstracts and over 250 enthusiastic delegates that robustly discussed the science in true Australian-style without inhibition. All abstracts were independently reviewed by 2-4 peers that were blinded to author(s) and institution. Forty-four percent scored ≥7/10 and were offered oral presentations. Three abstracts (2%) were not accepted (two did not achieve a minimum acceptable score and one was deemed by Council to be not acceptable) and the remaining 54% were offered mini-oral presentations.

The quality of the invited speakers was second-to-none and provoked much discussion during and following their sessions. There were four international speakers. Professor R Mark Ghobrial, a liver surgeon and scientist from Houston, USA spoke on MHC 1 and tolerance, hepatocellular carcinoma and transplantation, and along with Dr Paolo Muiesan, a fellow liver surgeon from Birmingham, UK presented a number of innovative surgical techniques in liver transplantation and methods of organ preservation. Professor Wayne Hancock, a former Melbournian now working in Philadelphia, USA, presented what many considered a quadruple-strength dose of science but incredibly well articulated for the diverse audience on the epigenetic regulation of Foxp3 and allograft tolerance and a futuristic look at cancer control in transplantation recipients. Professor Anita Chong, a scientist from Chicago, USA presented some thought provoking data on the influence of bacterial infections on transplantation tolerance and new insights on the relationship between memory B-cells, alloantibodies and tolerance.

The international speakers were complimented by a contingent of local talent that included Richard Allen, Steve Chadban, Toby Coates, Shlomo Cohnen, Tony d’Apice, Stephen McDonald, Philip O’Connell, Alex Sharland, Charmaine Simeonovic, and Greg Snell all of whom gave updates at the frontiers of their respective fields. The Joint TSANZ/ATCA symposium was of particular note and relevance as Karen Murphy, CEO and Dr Gerry O’Callaghan, Medical Director of the Australian Organ & Tissue Donation and Transplantation Authority presented the evolving government initiative and received some healthy scrutiny by a number of eminent society members.
Despite the powerhouse of speakers and abstract presenters, the new location and the flexibility it has allowed, the true success of the meeting was the result of enthusiasm of members. This includes the leadership and foresight of the TSANZ Council, the relentless efforts of society executive Aviva Rosenfeld, the insights of all the reviewers and chairpersons, the program & abstract book producer, Sally Cowan and the willingness of all the delegates to chip-in when called upon. It really made the task as convenors an overwhelmingly positive experience and we wish to thank everyone for their support over the past year and all the feedback we have received. We hope that our experience can be built upon so that the meeting will continue to evolve, improve and expand in future years.

**Postgraduate Training Course 2009**

**Wayne Hawthorne & Brendan Ryan**

**Conveners 2009 PGC**

The 2009 Postgraduate Training Course was a successful and well attended course with 56 participants coming from all parts of Australia and even some from overseas from as far abroad as Edinburgh, Scotland; Ibadan, Nigeria; and Bangkok, Thailand. The large number of participants required the meeting to be held in one of the medium sized lecture theatres which was no problem in the new venue at the Manning Clarke Centre, within the ANU.

In line with the aims of the educational policy of TSANZ various people from differing vocations of the transplant community offered a broad spread of topics for lectures over the 2-day programme. Starting with a basic introduction to Immunology of the donor and recipient placing the aspects of science in relation to organ transplantation, on the subsequent day more clinical talks that lead on to care and management of the patient were given to provide a broad introduction to both scientists and clinicians.

The quality of the invited speakers was second-to-none and provoked much discussion during and following their sessions, and during morning tea and lunch.

Three of the four international speakers from the main meeting were invited to take part in the postgraduate course. Professor Anita Chong, a pre-eminent immunologist from Chicago, USA provided the opening lecture on the MHC and the Roles for T cells, B cells and innate immunity. Professor R Mark Ghobrial, a liver surgeon and scientist from Houston, USA gave a very invigorating lecture on the second day on the care of the transplant recipient. Dr Paolo Muiesan, another liver surgeon from Birmingham, UK provided an enlightening and very open lecture on the management of complications in the transplant patient.

There was also very strong support from the local speakers that included Fred Aboudaher, Narelle Watson, Shane Grey, Hilary Warren, Alex Bishop, Stephen Alexander, Peter Cowan, Carrie Alvaro, Paul Robertson, Lincoln Dealty, Toby Coates, Alison Skene, and Angela Webster. All of the speakers gave up their own time to take part and presented excellent lectures in their respective fields of transplantation.

The new venue provided great facilities with wide-open areas for discussion where lunches and morning and afternoon teas were also provided. The new time of year for the meeting created some havoc with speakers who were meant to arrive for their early morning lectures being delayed by fog, necessitating some quick reshuffling in the order of the speakers. The dinner was a great hit as it provided a relaxed atmosphere for the speakers and participants to mingle and have enthralling discussions.

Overall the meeting was a great success as a result of the enthusiasm of participants, the generosity of the speakers who gave up their own time to take part, the advice provided by the TSANZ Council, and the hard work of society executive Aviva Rosenfeld.

We wish to thank TSANZ for the opportunity to convene the meeting and to everyone for their support.

**Wayne Hawthorne & Brendan Ryan at the PGC Dinner**

**Awards & Prizes 2009**

The Society’s major awards and prizes were presented at the Annual Dinner, and included the
following:

**Prizes associated with the ASM**

*President’s Prize:* Andrew Jabbour  
*KHA Clinical Research Award:* Shaundeep Sen  
*KHA Laboratory Research Award:* Siddharth Rajakumar  
*Amgen Book Vouchers:* Amy Hughes, Kate Markey, Emma Carrington  
*Novartis and Wyeth Young Investigator Awards:* Joanne Chia, Andrew Jabbour, Hungta Ko, Motoko Koyama, Siddharth Rajakumar, Renee Robb, Shaundeep Sen, Lei Sun, Alasdair Watson, Moses Wavamunno, Kylie Webster

Steve Chadban presenting Shaundeep Sen with the KHA Clinical Research Award  
Josette Eris presenting Andrew Jabbour with the 2009 President’s Prize  
Michelle Goodwin presenting Amy Hughes with an Amgen Book Voucher  
Steve Chadban presenting Shaundeep Sen with the KHA Clinical Research Award  
Michelle Goodwin presenting Kate Markey with an Amgen Book Voucher
Michelle Goodwin presenting Emma Carrington with an Amgen Book Voucher

Paula Dry presenting Motoko Koyama with a Wyeth YIA

Paula Dry presenting Joanne Chia with a Wyeth Young Investigator Award (YIA)

Sandy Sterrantino presenting Sid Rajakumar with a Novartis YIA

Sandy Sterrantino presenting Andrew Jabbour with a Novartis YIA

Sandy Sterrantino presenting Renee Robb with a Novartis YIA
Sandy Sterrantino presenting Shaundee Sen with a Novartis YIA

Paula Dry Presenting Lei Sun with a Wyeth YIA

Sandy Sterrantino presenting Moses Wavamunno with a Novartis YIA

Paula Dry presenting Kylie Webster with a Wyeth YIA

Paula Dry presenting Alasdair Watson with a Wyeth YIA

Josette Eris, Ian McKenzie and Geoff Hill, the 2009 Ian McKenzie Prize recipient

**Other prizes for 2009**

*The Ian McKenzie Prize:* Geoff Hill

*The Amgen-TSANZ Research Grant Awards:* Nikky Isbel and Karen Dwyer

*The Mark Cocks Transplant Research Scholarship:* Robert Carroll
ASM & PGC 2010
Mark the dates in your calendar – next year’s ASM, organised by Kate Wyburn and Nick Shackel, will be held from:

23rd – 25th June 2010
at the Manning Clark Centre, ANU. The PGC, organised by Bill Mulley and Glen Westall, will be held from:

21st-22nd June 2010
at the same venue.

Steve Alexander and Peter Cowan
Education & Research Representatives

Travel Grant Reports

Keystone Symposia, February 2007,
Keystone, Colorado, USA:

Kylie Webster
The Keystone meeting “Tolerance in Transplantation and Autoimmunity” was held in Keystone, Colorado, in February of this year. In the opening plenary, Christopher Goodnow of ANU, set the tenor of the meeting by addressing the common themes to tolerance induction in transplantation and autoimmunity. He described their analysis of the molecular pathways underpinning tolerance checkpoints, discovered predominantly via studies on autoimmunity, and suggested in turn that we can apply this information to our attempts at creating transplantation tolerance.

The meeting then continued with an interesting mix of basic and clinical research into tolerance mechanisms. Of particular interest to my research were the many talks and posters on regulatory T cells (Tregs). This subset of T cells, which hold the promise of reducing or avoiding chronic immunosuppressive therapy, dominated many sessions. Kathryn Wood outlined work investigating the molecular profile of tolerant, immunosuppressive free transplant patients, including their tendency for higher numbers of FOXP3+ cells. Tregs in transplant patients also made it into the talks of Megan Sykes, who spoke on combined kidney and BMT, and Terry Strom, who outlined their investigation of the molecular signature of transplant rejection. Meanwhile, a step away from the clinic, the talks of Diane Mathis, Jeffery Bluestone, Alexander Rudensky and Dario Vignali each included insights into the molecular mechanisms of Foxp3+ Tregs and consequences
of their ablation, using recent conditional murine knockouts.

Following the talks, and the optional hour or two of exhilarating (or perhaps alarming) winter sport activities, it was time for the poster sessions. And a livelier poster session was never seen before. They were an excellent opportunity to discuss issues raised during the day, and establish potential collaborations.

This Keystone Symposia was held at the namesake (Keystone, Colorado) of this now giant conference conglomerate. It lived up to its reputation for being an outstanding meeting of high calibre scientists in a relaxed setting, and I would like to thank TSANZ for the President’s Prize travel grant that enabled me to attend such a meeting.

**CTS-IXA-IPITA Meeting, September 2007**

**Minneapolis, USA:**

**Tharun Mysore**

TSANZ provided me with the opportunity to travel to Minneapolis for the first joint *International meeting of the Cell Transplant Society, International Pancreas and Islet Transplantation Association & International Xenotransplantation Association* (CTS-IPITA-IXA, 2007). This was a great opportunity for me to experience the latest research in the fields of islet cell transplantation and xenotransplantation.

The meeting was a historical one and by far the biggest one I have attended so far. A great deal of my interest at this conference was dedicated to islet transplantation including both basic science and clinical research. It provided me with an invaluable opportunity to hear from the leading scientists who are at the forefront of islet research such as the Edmonton group, Miami, Camillo Ricordi and several others. There were also impressive numbers of speakers from the field of xenotransplantation, which made the program interesting and thought provoking.

The focus of my PhD research involves genetic strategies to improve islet graft revascularisation and prevention of primary-non-function, and so the session on endothelial activation/angiogenesis/ revascularization, was of particular interest as it was directly related to my PhD project. Having the opportunity to hear from Dr Gary Levy, Dr Jordan S Pober and Dr Fritz Bach, who provided excellent updates on angiogenesis, was one of the highlights. Talks from Dr Jon S. Odorico and Dr Sussan Bonner-Weir on islet beta cell regeneration from stem cells made me contemplate about my post-doctoral position in this exciting field of research.

My sincere thanks go to TSANZ for their generous support and making it possible for me to attend this meeting.

**Evelyn Salvaris**

I would like to thank the TSANZ for providing me with a travel grant to attend the *Joint Conference of CTS, IPITA, and IXA* held in Minneapolis during September 2007. The support provided by the TSANZ gave me the opportunity to present an oral presentation at an International level. My attendance at this meeting reinforced that the work carried out locally at the Immunology Research Centre, St Vincent’s Health is of high international standing.

My area of research interest is xenotransplantation, in particular the dysregulated coagulation of xenorejection, therefore the sessions of interest to me were: genetically modified pig organs; the issues of coagulation and thrombosis and the complexity of innate immunity and inflammation in organ graft rejection. The plenary sessions given by the world leaders in each of these fields presented informative reviews of these topics enabling me to update my knowledge about the status of xenotransplantation at the global level.

The project I have been involved in is the generation of CD39 transgenic pigs on a GAL KO background. Presenting this work at an international level gave me the opportunity to discuss and answer questions and receive important feedback that will greatly facilitate future work in this area. The presentation by Robert Colvin “Pathogenesis of Antibody Mediated Rejection” was useful as it highlighted the use of Cd4 as a marker for the identification of antibody-mediated rejection. The session on Antibodies/Humoral Rejection, in particular the role of non-Gal Abs in rejection provided me with possibilities for future directions for research in our xenograft model.

The presentation by David Ayares from Revivicor was interesting. He listed the large number of single and multiple genetically modified pigs that Revivicor and colleagues have generated and summarised data listing the advantages and disadvantages of these pigs for use as donor organs in pig-to-primate xenograft models. An update on recent genetically modified pigs and breeding programs of the many genetically modified pigs lines held at Revivicor was also presented.
I was also able to attend the Satellite Symposium “Source of Pigs for Xenotransplantation” the day before the official start of the conference. This meeting provided an informative introduction to the conference and featured many new and innovative techniques which may aid the advancement of more effective genetically modified pigs. The symposium highlighted the requirement for the inclusion of multiple human genes, covering the complement, coagulation and immuno-regulatory pathways, along with the removal of the Gal epitope for the generation of the “ideal” genetically modified donor pig organs that will be resistant to xenorejection.

The combination of ICTS, IPITA and IXA meetings under the “one roof” was of benefit as there were many interesting and relevant presentations across the groups. However, the interesting but tight IXA schedule unfortunately did not permit much time for attendance of ICTS and IPITA presentations.

I have greatly benefited from attending this meeting and I would like to once again thank TSANZ for its contribution of financial support towards my travel through its travel scholarship program.

Jingjing Wu
I wish to thank the TSANZ committee for the opportunity to attend the CTS-IPITA-IXA Joint Congress. This was my first international conference, which was held in Minneapolis. I was very impressed by the many new advances in the field of transplantation and meeting talented researchers.

My project investigates the suppressive function of human and mice CD4+CD25+ T regulatory cells in the xenoinmune response. I am using the diabetic mice model transplanted with porcine islets to determine whether T regulatory cells can prolong xenograft survival.

I was able to attend sessions about broad aspects of the area of xenotransplantation. A Treg cell presentation showed in vitro expanded Treg cells were able to suppress the xenoinmune response in large animal models. Perhaps this demonstrates the bright future for expanded Tregs in xenotransplantation.

My work also focuses on macrophage function in the xenoinmune response by using microarray technology. I had the opportunity to meet Dr Mana Kuezereli, from the University of Stanford, who is very experienced in micro-array technology. We were able to discuss the experimental design of my microarray project.

I am also involved in islet isolation and transplantation, so have an interest in the large scale manufacture and assessment of islet cell products. An evening workshop describing the production of consistently good quality porcine islets proved very informative.

In summary, the ability to attend this meeting enabled me to learn about the “cutting edge” studies in my area, as well as other immunological mechanisms involved in graft rejection. Discussions with a wide variety of people supplied new ideas related to my current studies.

I hope to present some of my recent work in international transplantation meeting 2008 in Sydney and again thank the committee for their support for my attendance at the meeting.

Concurrent Keystone meetings ‘Islet and Beta Cell Development and Transplantation’ and ‘Islet and Beta Cell Biology’, April 2008 Utah, USA:

Robyn Sutherland
I am grateful to TSANZ and Novartis for the travel grant to attend the concurrent Keystone meetings ‘Islet and Beta Cell Development and Transplantation’ and ‘Islet and Beta Cell Biology’ held in Utah in 2008. A number of talks were directly relevant to my studies of the immunology of beta cell destruction in autoimmune and transplant settings. In addition, this was a great opportunity to brush up on my beta cell biology and some of the non-immunological barriers to successful islet transplantation.

In Type 1 diabetes it is becoming clear that residual beta cells can persist e.g. circulating C-peptide often detected even in long-standing disease (Harlan). The potential for beta cell regeneration is of central importance to the rescue of these endogenous beta cells as well as preservation of transplanted beta cells. In humans, examination of beta cell DNA (labelled with IdU or BrdU administered during clinical trials or by Carbon 14 exposure during atomic weapons testing in the 1960’s) suggests that adult beta cells undergo limited replication (Perl). However, studies in diabetic mice indicate that increased beta cell replication can be driven by hyperglycemia (Pechhold) and inflammation (Herold). Beta cell replication is inhibited by Tacrolimus (Dor).

An update of anti-CD3 trials in humans with recent onset of Type 1 diabetes was presented (Herold). Anti-CD3 therapy attenuated the loss of beta cells.
(C-peptide) over the first 1-2 years of disease. The contribution of CD8 Treg is being investigated.

T cell regulation through PD-1 and its ligands (PD-L1, PD-L2 and the more recently described interaction with B7-1) was elucidated (Sharpe). It was noted that PD-1 ligands are not restricted to APC. PD-L1 and B7-1 are expressed by both APC and T cells, and a bi-directional interaction between these was described. The role of PD-L1 expressed by non-hematopoietic cells in the maintenance of tolerance was also covered. This was of relevance to our studies of immune responses occurring at the transplant site and the local immunosuppression of these.

The Beta Cell Biology Consortium (www.betacell.org) was described as a model of collaborative science, and as a source of reagents including antibodies and adenoviral vectors that are available to the wider community.

I highly recommend the Keystone meetings for their scientific content, and as a great forum in which to meet international colleagues. Many thanks to TSANZ and Novartis for this fantastic opportunity.

American Transplant Congress, May/June 2008 Toronto, Canada:

Rebecca Stokes

I would like to thank the TSANZ for providing me with a travel grant to participate as an oral presenter at the American Transplant Congress, held in Toronto Canada in June 2008. The goal of the meeting was to present the most up to date information on the development, function, mechanism of action, and techniques of islet transplantation and so it was a great experience for me to present my research at a world stage. My presentation was entitled “Increased expression of Hypoxia Inducible Factor 1α (HIF 1α) markedly improves outcomes following transplantation of human islets into mice”. This presentation included novel evidence that described stabilisation of HIF 1α by means of an iron chelator dramatically reduced β cell death, thus resulting in improved islet function and survival post transplantation.

Presentations were varied, however there was a distinct trend towards improving islet transplantation outcome. In particular, decreasing β cell dysfunction and therefore reducing islet death being a predominate area researched. Examples included genetic manipulation, such as decreasing endoplasmic reticulum stress and the use of oleanolic acid to increase islet survival. Many of these alternative approaches were new to me and are areas I definitely now intend to delve into.

Several presentations addressed approaches used and the results obtained from preclinical and clinical trials involving human islet transplantation, all of which were very informative and interesting. In particular, the long standing controversies of whole pancreas transplant versus islet transplantation. This debate was very effectively presented by Paolo Fiorina from Boston’s Children’s Hospital in favour of islet transplantation and Raja Kandaswamy from the University of Minnesota, Minneapolis for whole pancreas transplantation. They addressed the advantages and disadvantages for both transplant procedures, including technical aspect, outcomes, immunosuppression, donor use and resource utilisation and economic cost. Although islet transplantation is constantly developing and shows to be a promising technique for type 1 diabetic patients, whole pancreas transplantation still remains very effective in its outcome and remains an important cure towards type 1 diabetes.

On a tourist note, Toronto was a wonderful city and in many ways much like Sydney in the relaxed lifestyle and friendliness of the locals.

Overall the meeting has vastly improved my general knowledge of islet transplantation and I made many unique contacts that will only further my endeavours into this field. Thank you for this wonderful opportunity.

34th Scientific Meeting of the American Society for Histocompatibility & Immunogenetics, October 2008 Toronto, Canada:

Hooi Sian Eng

I would like to thank the TSANZ for supporting my attendance at the 34th Annual Meeting of the American Society Histocompatibility and Immunogenetics held in Toronto from Oct 27 to 31, 2008. I presented 2 studies entitled “Donor-specific antibodies (DSA) in transplant glomerulopathy” and “Predictive value of B-cell crossmatch and Luminex antibody analysis in well-matched highly sensitized patients from the Australian National Interstate Exchange.”

Key areas at the meeting that interested me were:

Acceptable DSA level for deceased and living donor transplantation after desensitization; HLA / MiC / KIR gene polymorphisms and disease association; complement–independent mechanisms of anti-HLA antibodies in transplant
vasculopathy and accommodation; data interpretation using solid phase assays and finally advances in antibody detection and gene typing technologies.

A few posters reported correlation between DSA strength and antibody mediated rejection (AMR) in renal transplantation. In Cao et al study, patients with strong DSA have significantly higher risk of AMR. A few patients had low titer DSA, but have not experienced AMR which suggested that it is important to establish the acceptable DSA level for renal transplantation. In lung transplantation, presence of DSA post-transplant does not correlate with lung function status.

Several presentations reported use of Luminex crossmatch. Studies showed that specificity and sensitivity of Luminex crossmatch were >80% in detecting DSA defined by single antigen beads. This assay is useful for monitoring antibody production post-transplantation.

Torres et al reported AMR caused by anti-MICA DSA, suggested that anti-MICA antibodies maybe clinically significant. The pattern of MICA antibody specificity generated by the LSA-MIC assay can be explained by the structurally-based HLAMatchmaker. This approach may assist in predicting antibody responses and acceptable mismatched MICA antigens in transplantation.

Zachary group reported frequency of DP antibodies (126/287, 44%) in sensitized patients. 70/126 DP+ sera also positive for DR1 and/or DR11, suggested DR1 and DR11 share epitopes with certain DP antigens.

New technology such as DynaChip has been evaluated. Studies showed that DynaChip assay permits precise identification of HLA antibodies at high resolution level.

In summary, attending this meeting has significantly improved my knowledge of histocompatibility and immunogenetics.

European Group for Blood and Marrow Transplantation Annual Meeting, March/April 2009 Goteborg, Sweden:

Kate Markey
I received funding from the TSANZ to travel to Sweden to present my abstract, entitled ‘Conventional dendritic cells are the critical population presenting alloantigen after BMT’ at the European Group for Blood and Marrow Transplantation (EBMT) Annual Meeting.

Prior to the meeting in Europe, I travelled to Oxford to visit Kathryn Wood’s lab (which focuses on transplant immunology, particularly regulation of immune responses and tolerance induction) where I met with various members of her laboratory, and gave an informal presentation of the work that I was to present at EBMT.

The scientific meeting was held in the Swedish city of Goteborg. Among the scientific highlights were the plenary talks, and workshop lectures which were given by experts in the field of BMT, and authors of key papers that have shaped the field over recent years. These included a workshop session on emerging pathways in the pathophysiology of chronic GVHD given by Warren Shlomchik, an overview of pulmonary GVHD by Ken Cooke, and a discussion of clinical management strategies for cGVHD presented by Gerard Socie. Additionally, the parallel scientific sessions were highly relevant, as were the clinical education sessions.

There were many talks in the parallel sessions which would have been of particular interest to society members. These included a case report describing third-party allogeneic BMT in a previous renal allograft recipient (Snarksi et al). The authors reported that there was no renal graft rejection despite the occurrence of both acute and chronic GVHD post-transplant. One of the working-party sessions (Bregni et al) involved a discussion of long-term outcomes in metastatic renal cell carcinoma patients treated with reduced-intensity allogeneic SCT in order to take advantage of graft-versus-tumour effects and provide adoptive immunotherapy. Their data from a cohort of 25 patients suggests that allografting has a potential role in treatment of cytokine-resistant disease in a subset of patients.

This was the first EBMT meeting that I had the opportunity to attend, and I found that it was a well organized meeting, with an excellent scientific program, held in a beautiful city – I hope I get the chance to attend meetings of the EBMT again in the future.

International Society for Heart & Lung Transplantation, April 2009 Paris, France:

Ling Gao
I would like to sincerely thank TSANZ for providing me with a travel grant to participate in the 29th Annual Meeting and Scientific Sessions of the International Society for Heart and Lung Transplantation, held in Paris, France during April
22-25 this year. It was an unforgettable experience for me as it was the first international conference specialising in heart and lung transplantation I have attended since my work in heart transplantation related basic research started 6 years ago. Attending this conference gave me a good opportunity to present works I have done together with my colleagues here in Australia and, most importantly, I have had a chance to communicate with other experts in this field.

There were several excellent Plenary Sessions formatted to profile the best of the abstract submissions and invited lectures by experts on topics related to the abstracts. Of particular interest was the Pioneer Lecture given by Christian Cabrol during the Opening Plenary Session. Dr Cabrol performed the first heart transplant in Europe in 1968, the first heart lung transplant in Europe in 1982 and the first Jarvic total artificial heart implant in Europe in 1986. He deserves the title of pioneer in organ transplantation field.

Having worked on research about ischemia reperfusion injury during transplantation and strategy to improve donor organ preservation for several years, my particular interest at the conference was for sessions about mechanisms involved in ischemia reperfusion (IR) injury during organ transplantation. Specifically, novel therapeutic approaches against IR injury during organ preservation and transplantation procedure, was the topic of several excellent works presented at the conference and it is impressive that so much have been achieved in this area in recent years. Among those, use of carbon monoxide in reducing IR injury has been proved promising in both experimental and clinical studies as was indicated by works of Sabara and colleagues from Nippon Medical School in Tokyo, Japan. It may represent promising targeted therapeutic approaches against IR injury in the near future.

Works presented at the conference by our research group included the cardioprotective effects of erythropoietin and a recombinant human neuregulin-1 peptide added to Clesior solution during donor heart preservation in heart transplantation. I received very helpful comments and advice from the audiences which certainly will benefit our future work.

Alasdair Watson

With the financial support of the TSANZ I was able to attend the 29th Annual Meeting & Scientific Sessions of the International Society for Heart & Lung Transplantation. The meeting was held at the Palais des Congres in Paris, in April of this year. Whilst there I presented an abstract of my work entitled *Erythropoietin improves functional recovery of the rat heart after prolonged cold storage in celsior solution*.

The surgical management of advanced heart failure, and mechanical circulatory support in particular, is a key focus for the ISHLT. This year’s meeting was no exception, with eight sessions devoted to mechanical circulatory support. Whilst most papers describing left ventricular assist devices and total artificial hearts, Tozzi and colleagues from Lausanne in Switzerland reported the first animal implant of a novel atrial assist device, the Atripump. When implanted in 10 sheep in which atrial fibrillation was induced by rapid pacing, they were able to increase the right atrial ejection fraction from 5 to 22%, and the cardiac output from \(4.4 \pm 0.8\) L/min to \(5.1 \pm 0.3\) L/min. Such a device has potential as an adjunct to heart failure management in patients with chronic atrial fibrillation, by restoring the ‘atrial kick’ to ventricular filling.

The successful use of mechanical devices to support waitlisted transplant candidates has stimulated interest in the use of mechanical devices to support donor organs. The Toronto General Hospital group have recently translated their X Vivo lung perfusion system from the ‘bench to the bedside’. This system has the potential not only for organ preservation but also *ex vivo* assessment and even reconditioning of suboptimal donor organs. They have successfully employed the system in 7 human lung transplants, using organs that were initially rejected using conventional gas exchange criteria.

A number of small series were presented (5-7 patients each) reporting early results with lung transplantation from donation after cardiac death (DCD) donors. Each institution reported zero inhospital mortality and acceptable morbidity with their early NHBD experience. An interesting experimental study by Ali et al from Stanford University & Papworth Hospital explored the potential for DCD heart transplantation. They compared LV contractility in rat hearts that had been subjected either to brain death (BD group) or hypoxic cardiac arrest followed by *in vivo* cardiac resuscitation with extra-corporeal membrane oxygenation (DCD group). They found superior LV contractility and sarcomere shortening in the DCD group compared with the BD group. Such findings, along with the development of *ex vivo* cardiac preservation systems, raise the potential for heart transplantation using the expanding pool of DCD donors.
American Transplant Congress, May/June 2009 Boston, USA:

Huiling Wu
I would like to thank the TSANZ for supporting my travel to Boston for American Transplant Congress 2009. This was a great opportunity for me to learn more about “cutting edge” research in transplantation.

The meeting program was extensive, and covered a broad range of topics in transplantation, both scientific and clinical aspects. In the basic science session, the roles of Th17, Treg and TIM pathway in transplant rejection and tolerance, diagnostic and therapeutic opportunities of microRNAs in transplantation, and new therapeutics in transplantation were of particular interest for my current research.

My project involves targeting innate immune receptors in kidney ischemia reperfusion injury and allograft rejection, particularly TLRs. This conference gave me the opportunity to present my research entitled “High-mobility group box1 (HMGB1) contributes to kidney ischemia reperfusion injury through TLR4 signaling” in the session of ischemia reperfusion injury, which was one of several sessions looking at the role of innate immunity in transplantation. I was pleased to be able to meet and discuss with so many experts in the field related to my current research.

Attendance and presentation of my work at this meeting has hugely improved my knowledge of transplant immunology. Once again, I would like to thank the TSANZ for their support.

Moses Wavamunno
In June 2009 I had the opportunity to attend the American Transplant Congress in Boston Massachusetts. My trip was facilitated by a travel grant from the Transplantation Society of Australia and New Zealand. Some of the highlights in the meeting were the opportunity to interact and exchange ideas with transplant professionals from all over the world.

The meeting was of a high standard and good educational value, this gave me a broad update on what’s happening in the rapidly evolving field of renal transplantation. Of special interest to me were presentations on the role of HLA antibody in antibody mediated allograft injury. Outstanding presentations included talks on the use of the Luminex assay in detection of DSA and emerging therapies for chronic antibody mediated rejection.

These talks enabled me to better understand my area of research.

I am grateful to the Transplantation Society of Australia and New Zealand for this opportunity.

Janssen-Cilag Travelling Fellowship
Association for Research in Vision and Ophthalmology (ARVO) Conference 2009, and visit to Assoc Prof Greg Jackson, Hershey Medical Centre, Pennsylvania:

Winsome Abbott
I attended the ARVO Conference in Ft Lauderdale FL May 3-7, 2009. My poster was no 2740 ‘Dark adaptation in Pre Liver Transplant Patients Before and After Intramuscular Vitamin A’ and was the only poster on liver disease and vision. The conference was very large (10,000 in attendance) and was very well organised.

There was good interest in the poster which was visited by Cynthia Owlsley (University Birmingham AL) who specialises in low vision and is an organiser for a conference on ‘vision and the auto’ to be held in Detroit. Cynthia referred me to Prof Joanne Wood, QUT Brisbane who specialises in driving and vision. Prof Richard Chappell, New York advised on the bioavailability of zinc supplements. This was of interest to me because zinc status affects dark adaptation and zinc is commonly low in patients with liver disease. The poster was visited by people who were familiar with the dark adaptometer which I used, and also by ophthalmology clinicians who are referred to assess vision in patients with liver disease. The poster alerted some ophthalmology clinicians to the likelihood of night vision problems in this patient group.

Other valuable aspects of the conference included a grant writing seminar from the National Eye Institute, a luncheon for women in vision research, ‘pizza with a professor’ at which issues relevant to being a clinician and researcher were discussed. A large focus of the conference was age related macular degeneration. I gathered information about nutrition and age related macular degeneration from posters.

I then visited Assoc Prof Greg Jackson (who specialises in rod function of the retina) at Hershey Pennsylvania for one week. This is my fourth visit to see Prof Jackson. Previous visits have been self funded. Assoc Prof Jackson assisted me with describing the dark adaptation curves for my PhD.
He has patented a new dark adaptometer which has better features than the dark adaptometer which I used for my PhD. One feature is a shorter testing time which reduces the testing burden on patients with liver disease. During the visit I received training on the use of this instrument. I am preparing a collaborative grant with Assoc Prof Jackson on ‘Biomarkers of dark adaptation in patients with liver disease’.

I wish to thank the Transplant Society for the generous support which I received to attend the conference and visit Assoc Prof Jackson.

Membership

In 2009, Council has welcomed the following new TSANZ members:


In 2009, Council has accepted the following resignations:


Society Awards and Grants

The Society, together with the generous support of Society sponsors, offers a number of awards and grants to attend the Annual Scientific Meeting, Postgraduate Training Course and to attend relevant international meetings.

The awards currently available are:

*President’s Prize at the ASM*

*Kidney Health Australia Awards for the best clinical & laboratory presentations at the ASM*

*Novartis and Wyeth Young Investigator Awards at the ASM*

*Amgen Young Investigator Book prizes at the ASM*

*Janssen-Cilag Travelling Fellowship*

*Novartis, Roche and TSANZ Travel Awards to attend International Meetings*

## Calendar of Events

### 2009 Meetings:

1. **14th Congress of the European Society for Organ Transplantation (ESOT)**
   - Paris, France
   - August 30 2009 - September 2 2009
   - Email: esot2009@colloquium.fr
   - Website: [www.esot.org](http://www.esot.org)

2. **2009 Organ Donation Congress 10th ISODP and 16th ETCO**
   - October 4 2009 - October 7 2009
   - Berlin, Germany
   - Conference Office
   - Agentur WOK GmbH
   - Palisadenstr. 48
   - 10243 Berlin - Germany
   - Phone +49 30 49 85 50 -31/-32
   - Fax +49 30 49 85 50 30
   - Email: info@isodp2009.org
   - Website: [www.isodp2009.org](http://www.isodp2009.org)

3. **Joint meeting of the International Pancreas and Islet Transplantation Association (IPITA) and the International Xenotransplantation Association (IXA)**
   - October 12 2009 - October 16 2009
   - Venice, Italy
   - Organizing Secretariat
   - Key Congress
   - Via Makalì, 75 - 35138 Padova - ITALY
   - Ph. ++39 049 8729511
   - Fax ++39 049 8729512
   - Email: ipita-ixa2009@keycongress.com
   - Website: [www.keycongress.com](http://www.keycongress.com)

### 2010 Meetings:

1. **World Congress of Internal Medicine 2010 in Conjunction with RACP Physicians Week**
   - March 20, 2010 - March 25, 2010
   - Melbourne, Victoria
   - For further information contact:
     - Tour Hosts Conference & Exhibition Organisers
     - GPO Box 128
     - Sydney Australia 2001
     - Phone: +61 2 9265 0700
     - Fax: +61 2 9267 5443
   - Email: wcim2010@tourhosts.com.au

2. **American Transplant Congress**
   - San Diego Convention Center
   - San Diego, California, USA
   - May 1 2010 - May 5 2010
   - Website: [www.a-s-t.org](http://www.a-s-t.org)

3. **TSANZ Annual Scientific Meeting**
   - Manning Clark Centre
   - ANU, Canberra
   - June 23, 2010 – June 25, 2010

4. **TSANZ Post Graduate Training Course**
   - Manning Clark Centre
   - ANU, Canberra
   - June 21, 2010 – June 22, 2010

5. **23rd Scientific Meeting of the International Society of Hypertension 2010 (ISH 2010)**
   - September 26, 2010 - September 30, 2010
   - Vancouver, Canada
   - Conference Organizer
   - Sea to Sky Meeting Management Inc.
   - Ph: +1 604-984-6455
   - Fax: +1 604-984-6434
   - Email: kazia@seatoskymeetings.com
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