N E W S L E T T E R

Australasian Society for Immunology Incorporated

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2008 Annual Scientific Meeting

Bernadette Saunders

This year the shores of beautiful Manly Beach played host to our 37th Annual Scientific Meeting and what a great five days it was. We had 537 delegates from 16 countries attending this year's meeting which was spearheaded by a host of fantastic international and national speakers.

Organising a conference requires dealing with a myriad of practical issues, but our conferences are only the resounding success that they have become because of the great science that is presented at these meetings. Deciding on speakers to invite, and the onerous task of selecting talks from abstracts was brilliantly co-ordinated by Stuart Tangye. I would like to extend my special thanks to Stu, who put together a fantastic and varied program. Congratulations to Stu and Gill on the arrival of Damien Louis who was kind enough to delay his arrival until two days after the conference finished – talk about planning!

I would also like to express my thanks to the rest of the organising committee: Miles Davenport, Fabienne Mackay, Nick King, Lisa Sedger and Charles Mackay for their efforts in helping out on a host of issues, big and small. Thanks also to Helen McGuire who organised the student social function at Cerutis, which provided a great opportunity for the students to get together and chat with the invited speakers. I would also like to extend my thanks to all those who helped out in any of the multitude of events that are required to bring together a conference of this size. From scoring abstracts, chairing sessions to judging poster prizes, it is the combined efforts of so many members of the Society that really brings our annual meeting together. Thank you. Also a big thanks to our sponsors BD, CSL, Beckman Coulter and Ozgene whose financial assistance really is vital to keep down the costs of our conference.

Special thanks must also go to Mike Pickford and his team at ASN events. Several years ago the ASI council realised that convening an ASI conference had become a little like reinventing the wheel. While moving the conference from state to state is a great way to share the meeting around Australia and New Zealand, it did mean that every year the local organising committee had to relearn all that the previous committee had just discovered. Building a collective memory has been greatly aided by the appointment of Mike Pickford and the ASN Events Management team, who really oversaw all the practical aspects of the conference – everything from setting up and running the website to providing Velcro to put up posters, they handled it all. I am indebted to Mike and his team, in particular Katrina, Danielle and Jennah, who did such a great job and took so much of the hard work out of the conference organisation for me.

The meeting began with three excellent workshops on the Sunday. The Postgraduate, Tumour Immunology and Mucosal Immunology workshops attracted over 150 delegates. Of course these days did not run without the occasional hiccup. The scheduled 9am speaker for the postgraduate

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LtoR: Vice President Elect Miles Davenport, former President Phil Hodgkin, NSW Councillor & ASM organiser Bernadette Saunders, current President Alan Baxter

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Website

The ASI web site (www.immunology.org.au) has been fully remodelled and updated. New services include:

- Downloadable forms for ASI awards,
- Positions vacant pages,
- Jobs wanted pages,
- Upcoming conferences listings,

as well as a plethora of links to sites of immunological interest at home and abroad. If you'd like your lab home pages linked to the site, would like to advertise a job or conference, or have a favourite immunology-related site that doesn't currently appear on the ASI site, please email Judy Greer at j.greer@uq.edu.au

Email bulletin board

To subscribe to the ASI bulletin board, send an email to majordomo@explode.unsw.edu.au with the message: subscribe anz-imm.

Editorial

This is my last editorial after 3½ years as newsletter editor. This issue is a joint effort with Margaret Baird from Otago, who will take over the editing from the June issue. This year I have opted to hand over the editing, as I am moving on to a different role in ASI as Vice President for 2008. It has been a great experience working with the ASI team, and has provided a good opportunity to hear about the interests and achievements of our members.

I am very grateful to Judi at the ASI secretariat for all her support over the last few years. Without Judi's help in assembling and printing the newsletter, this would be a much more arduous task. I also want to thank all those who have provided stories and photos for the newsletter (sometimes at short notice), so we managed never to have a blank page (quite an achievement when they have to be in multiples of four), and sometimes even had to carry things over to the next issue!

Finally, I am very grateful to Margaret for agreeing to take over the role from this issue. I am looking forward to a New Zealand perspective on the Society in future editions, and especially to having the opportunity of reading rather than writing editorials!

Miles Davenport

It was with some trepidation that I accepted the invitation to become the next editor of our ASI Newsletter. Indeed, if it was not for electronic technology, the prospect of a New Zealand resident filling this role would have seemed very risky indeed. But trans Tasman co-operation has prevailed yet again and with Miles' excellent guidance through the publication of this first issue for 2008, I'm sure we can make the transition.

Australasia generates a wealth of exciting immunological news. Please do ensure that this reaches us so we can spread the word. We welcome debate. If you have a controversial point of view on an immunological topic, write a letter to the editor. If you recall some interesting, may be even hilarious, historical anecdotes, write them down and send them to us. The ASI Newsletter has always been a lively, informative journal. With your help it will continue to flourish. Thank you, Miles, for all your work as editor – I have big shoes to fill.

Margaret Baird

Honorary Secretary's News

Membership renewal

The activities of ASI are supported by the annual contributions of its members. Please renew your membership and encourage new arrivals in your departments to join. All ASI members benefit from reduced registration rates to the Annual Scientific Meeting and other events organised by the ASI, a free subscription to *Immunology and Cell Biology, Nature Immunology* and *Nature Reviews in Immunology*, and the quarterly Newsletter. Eligibility to apply to the substantial bursaries and travel awards offered by ASI requires payment of the annual fees by April 1st. For more information, please visit http://www.immunology.org.au/.

International Travel Awards

A new round of applications for Post-graduate and Post-doctoral Travel Awards to attend international meetings in the second half of 2008 will be called mid-March. Details of the evaluation process, dates for submission and application forms will be provided by e-mail and posted on the ASI website (http://www.immunology.org.au/awards.html).

Applicants to travel awards must have been ASI members since at least the year before the year of application, so if you think you will apply for an award to travel in 2008 or 2009, do not leave it for later, become a member before April 1st.

José A. Villadangos
Honorary Secretary

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New Zealand Branch Meeting June 5–6, Wellington

Confirmed keynote speakers:

Prof Marc Jenkins
University of Minnesota, MN, USA
Research interests: CD4+ T cells activation and memory, B cell activation and fate

Dr Bernadette Saunders
Centenary Institute, Sydney, Australia
Research interests: Immunology, pathology and genetics of tuberculosis

Dr Stuart Tangye
Garvan Institute, Sydney, Australia
Research interests: B cell differentiation and memory, IL-21 and X-linked lymphoproliferative disease

Registration due May 9:
Please complete the registration form available from http://www.malaghan.org.nz/newsevents/NZASImeeting
Free registration for ASI members.

Abstract Submission due May 9:
Complete the abstract submission form for oral presentation on page 2 of the registration document and submit by email only to Immunet@malaghan.org.nz

Further information:
Immunet@malaghan.org.nz

workshop only arrived in Sydney at 8am that morning; a slight speaker reshuffle followed which saw Diane Mathis literally walk off the plane and onto the podium to give a great talk to our students. Thanks to Nick King and Pablo Silveria for organising the Postgraduate workshop, to Joe Trapani for chairing the Tumour Immunology workshop and Allan Cripps the Mucosal Immunology workshop. From all the positive feedback, it is clear these workshops have proved to be a great start for the main meeting.

The meeting proper commenced in traditional style, with food, drinks and plenty of laughter at the welcome reception, before we were treated to two excellent talks by Jonathan Sprent and Max Brenner, who really set the bar for the remainder of the conference. The meeting delivered a number of fantastic talks covering a wide range of areas, from researchers at the forefront of their fields. From great plenary sessions to excellent symposium, the standard of the talks was exemplary. IL-17 and T regs were certainly hot topics for the year. Some of the imagery emerging from studies utilising two-photon microscopy was impressive indeed and I had to admit a personal bias at how pleasing it was to see the Infection and Immunity Symposia packed out the room. My thanks to all our invited speakers who not only delivered great talks but also participated with such enthusiasm in the conference, chairing sessions, judging posters and even participating in our great debate!

Our Burnet Orator continued the great tradition of orators past, with Chris Parish leading us on a tour-de-force through some of his outstanding research. Chris of course pulled double duty at the conference; not only was he a worthy Burnet Orator, but he also had a star role in this year's debate.

The Kevin Lafferty debate has become one of the major highlights of any ASI meeting in recognition of Kevin's enthusiastic and vocal style. This year's debate was no exception. Anne Kelso did an amazing job of containing the rabble (both on stage and off) and brought an air of dignified order to the proceedings. Her attempts to elevate the state of the debate were of course quickly undone by the hypothesis-busting, water-spraying antics of the affirmative team who mounted a spirited campaign to prove "The hypothesis is dead, long live discovery driven research". The affirmative team was resoundingly overwhelmed by the 'eloquent" prose of the opposition who, despite likening the argument of the affirmative team to the unpleasant consequences of hot vindaloo, were the crowd favourites and won the day.

The debate certainly set the scene for a fantastic conference dinner, cruising around Sydney Harbour. Thankfully the weather was kind that evening, and a fabulous evening watching the world go by aboard the decks of the John Cadman III was enjoyed by all. No ASI conference dinner is complete without our limerick competition and this year was no exception. Fierce competition raged to claim the coveted Bursar of Fabricius. The challenge to whittle the entries down to the two presented for judging on the final morning was tough indeed. Check out the selection of the best limericks that appear in this edition.

I think one of the strengths of the Society is our commitment to our students and this year ASI aided 20 out-of-state students to attend the meeting. We had over 100 students competing for poster prizes, which were deservedly won by Marian Turner, Yi Xin and Louise Randall. Congratulations. Marian Turner was also the recipient of the BD Communication prize. Of course the highest award for our students and junior post docs is the ASI New Investigator Award. This year we had over 130 applicants submit abstracts and we were treated to six impressive presentations from our talented finalists. Congratulations to Sandra Gardham from the Garvan Institute, who was this year's recipient of the ASI New Investigator Award.

My first ASI meeting was in 1991. I was an honours student at Melbourne University and my supervisor, a long-standing active ASI member, Christina Cheers, was organising the conference. From my limited perspective then, organising the conference did not seem like such a major task (I have since learned otherwise). The conference had an informal feel about it, the local cafe on campus supplied brown bag lunches and technical support consisted of myself and other members of the lab operating the slide projectors at the back of the room. I remember being struck then by the sense of warmth and friendship that perfused the meeting. The

The Kevin Lafferty Debate Teams

Debate Team 1
LtoR: Chris Goodnow, Anne O'Garra, Charles MacKay; and Moderator Anne Kelso

Debate Team 2
LtoR: Phil Hodgkin, Franca Ronchese, Chris Parish

conferences have certainly grown in size, tech support has its own department, but thankfully the essence of our ASI meetings remains. It still is a great time catch up with friends and colleagues, while discovering what is new and exciting in the fantastic work being undertaken both here and abroad. It was a pleasure and a challenge to have convened this years meeting. My thanks to everyone who attended and helped make Manly such a great meeting and I wish the ACT organising committee all the best for their year ahead.

Burnet Orator Chris Parish

LtoR: Max Cooper, Diane Mathis, Alan Baxter

President's Column

Singapore

On 14-16 January 2008, the Singapore Society for Immunology (SSI), which was registered on 27th September 2007, held its first Scientific Meeting. Titled the 1st International Singapore Symposium of Immunology, the meeting was held in the Biopolis complex and the Australasian invited speakers included Andreas Strasser, Ken Smith and Bill Heath. Rolf Zinkernagel gave the Keynote lecture. The meeting was exceptionally well catered and provided an opportunity to examine first hand the Singapore approach to building a sustainable biomedical research sector.

Singapore's Biomedical Sciences (BMS) initiative was launched in 2000 as part of the Singapore Government's efforts to transform Singapore into a knowledge-based economy. The Singapore Agency of Science, Technology and Research (A*STAR) is an agency of the Ministry of Trade and Industry. Operating under the guidance of its Chair, Mr Lim Chuan Poh, A*STAR has two main research divisions, the Biomedical Research Council (BMRC) and the Science and Engineering Research Council. In addition, it operates a division overseeing awards of scholarships and training fellowships, a commercialisation division and a management division.

The Research Centres operated by the BMRC include the Institute of Medical Biology (IMB), and those of Bioinformatics, Bioprocessing, Genomics, Bioengineering, Molecular and Cell Biology and Clinical Sciences. Immunological research at IMB is carried out in the Immunos laboratory building, which contains laboratories of 6000sq m, and houses eight chief investigators and 61 scientific staff and students. It is planned to ultimately house 250 staff.

In addition to the laboratories in the Immunos building, A*STAR funds a research consortium, the Singapore Immunology Network (SIgN). SIgN, under the stewardship of Philippe Kourilsky, aims to build core capabilities in immunology-related research, co-ordinate basic, translational and clinical research activities related to immunology, and expand Singapore's scope in immunology research to raise their profile and standing within the international research community. It provides project funds to

three immunological programs within the IMB (Cancer Immunology, Immune Regulation and Disorder, and Infectious Diseases), as well as collaborative projects with laboratories within the National University of Singapore, Nanyang Technological University and local hospitals.

The remit of SIgN is considerably broader than this, however, and it attempts to initiate and support collaborations with groups both within Singapore and overseas. SIgN's advisory board includes Peter Doherty, Rafi Ahmed, Jean-Laurent Casanova, Antonio Coutino, Tasuko Honjo, Andrew McMichael, Max Cooper and Hans Wigzell.

In addition to funds allocated through SIgN, the BMRC distributes an additional AUS$48M in research funding.

By any standards, the ministry's approach has been successful. Singapore's total research and development (R&D) expenditure has increased from AUS$2.4 billion in 2000 to AUS$4 billion in 2006. The private sector share of R&D has also increased from 62% in 2000 to 67% in 2006. The biomedical manufacturing output has more than trebled from AUS$5 billion in 2000 to over AUS$18 billion in 2006. Commercial R&D expenditure in the biomedical sector has grown from AUS$67 million in 2000 to over AUS$130 million in 2006. From a zero base in 2000, there are now over

25 biotech companies that have set up research centres in Singapore.

The SSI is still in a fledgling state; Mike Kemeny is its President by Declaration until elections are held, and it has not yet joined the International Union of Immunological Societies. In its 3-year start-up phase, it will be supported by A*STAR as well as major donations from BD, Dako/Coulter and Miltenyi. Membership for this year is free, and international members are accepted. If you are interested, please contact Mike Kemeny on mickdm@nus.edu.sg.

Mid-Career Blues and a Call to Arms

Over the last year, I have become aware of a substantial number of mid-career immunologists who discuss leaving the country, or even the profession, for greener fields. It cannot have escaped your attention that many academics in the 30s and 40s are not the bon vivants one might expect, given their professional performance and career success. At a time when the Higher Education Supplement proclaimed "Australia once again offered the highest comparative salaries by a significant margin, using purchasing power parity" (Contractor, 2007), many people seem dissatisfied with their workloads and remuneration. It is conventional, at such times, to strike a philosophical note and suggest that the roads to happiness are many and varied, that contentment is in the eye of the beholder. Here, I hope to convince you that this issue is not a problem of the individual, but for us all.

Fifteen years ago in Australia, the full time median wage was $24,000. At that time, postdoctoral research fellows on a CJ Martin fellowship were paid a salary of approximately $48,000, of which 24% was collected in income tax. This was an income of approximately two times the full time median wage. In 2007, the Australian full time median wage reached $60,000, but academic salaries have not grown in step with salaries in other parts of the public sector (Contractor, 2007), nor in industry. This year, a recipient of a Peter Doherty Fellowship receives $67,250 pa and a CJ Martin recipient, $74,500, of which 24% will be collected in income tax (www.ato.gov.au/scripts/taxcalc/calculate_tax.asp). The value of a training fellowship has therefore been devalued by over 30% to only 1.25 times the full time median wage.

But what about the bright young training fellow of the 1990s? What have DEST and the NHMRC done for her? If we assume she has been spectacularly successful, and reached the peak of the academic pay scale – a professorial appointment – she will probably be paid (the various institutes and universities vary by about $10,000) $120,000 pa; she will be paid twice the full time median wage. That is, she will be paid in real terms the same salary she received as a junior postdoc. But her income will now be taxed at 31% *and* she now has to pay 10% GST on all purchases *and* she has to subsidise health insurers (why them? why not public hospitals?) or else lose an additional 1.5% of her salary in Medicare levy. In total, a conservative 36% of her salary will be lost in federal taxation. Hardly surprising she feels under-appreciated.

This outcome is not an exception. Australian academic salaries have declined continuously relative to the ordinary-time median wage, the Average Weekly Earnings (AWE) and the Consumer Price Index (CPI), since 1970 (Horsley and Woodburne, 2003). The chart below illustrates the long-term decline in the remuneration of academics compared to average weekly (ordinary-time) earnings (Chapman, 2001). Several similar studies have been commissioned over the last three decades and all report a continual erosion of our standard of living. A report commissioned by DEST in 2005 examined academic salaries relative to average (they mean mean) weekly earnings over the period from 1977 to 2002 and found that they had declined across all levels, but with the greatest decline for the most senior academics. A professor's salary was 3.2 times greater than Average Weekly Earnings (AWE) in 1977 but by 2002, it was only 2.4 times greater. It is hardly surprising that Level E positions are now amongst the hardest levels to fill (Horsley and Woodburne, 2003).

The decline in Australian academic salaries needs to be directly contrasted with those in the USA, which have increased greater than inflation over the last 20 years. The situation is now so extreme that "even a cursory glance at US average academic salary scales … indicates that Australian academic salaries are uncompetitive with those in the US. The 2002 average academic salary in the US is almost double that of Australian academics at all positions and ranks" (Horseley, Martin and Woodburne, 2002).

The Government (of both brands) has made much of the need for productivity increases in the education sector. I will pass quickly over the obvious conclusion that in return for a 50% increase in taxation income, they have personally felt no pressure to improve their productivity; public health and education are in decline, social services are in disarray, and the life expectancy of our indigenous people remains 17 years less than the rest of the community (Australia Fair, 2007). What sort of productivity improvements have we made over the last 15 years? Speaking personally, as one of the poor sods who has

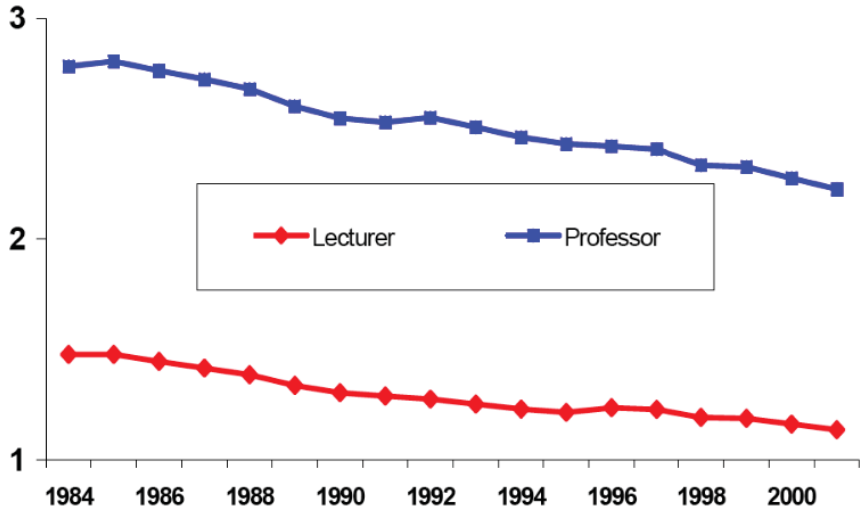

Figure: Academic Salaries as a Proportion of Average Weekly Ordinary Time Earnings

The long-term decline in the remuneration of academics compared to average weekly (ordinary-time) earnings as calculated from Academic Salaries Tribunal data (to 1996), ANU academic salaries data and ABS AWE series (Chapman, 2001)

been paid the same wage for a decade and a half, in 1993, I was the recipient of $50,000 in grants, supervised one honours student and reviewed one manuscript for an international journal. Last year, I oversaw grant funding of just under $500,000, directly supervised 10 staff and students and reviewed 21 papers for international journals. In addition, I co-ordinated an undergraduate subject, taught some lectures, supervised a few pracs, carried a substantial administrative load and performed significant services for the public good. By most simple estimates of performance, this represents at least a three-fold increase in productivity.

Again, the anecdotal evidence is supported by national surveys. Between 1996 and 2003, the sector adsorbed a 33% increase in student load, including a 57% increase in postgraduate students. Over the same period the numbers of academic staff increased by only 2.1% (DEST Review of Indexation Arrangements in the Higher Education Sector, 2005). In addition, the duties expected of senior academics have been substantially expanded. Advertisements for professorial positions now demand management skills and place a greater emphasis on links with the community, including business and the professions. The current notion of the professor as a leader who has as a key task the development of the faculty or school is a relatively new one (Horsley and Woodburne, 2003).

Senior management in the sector blame these changes on Government policy. From 1974 to 1995, the salary component of university operating grants was indexed against academic and general salaries. In the 1995-1996 budget, the Keating Labor government changed the formula to bring it in line with their policies that award rates of pay should be replaced by salaries determined by enterprise bargaining and that they would not longer fully fund cost increases. As a consequence, the salary component of the university operating grants (arbitrarily restricted to a 75% weighting) became indexed against the Safety Net Adjustment (SNA – used to calculate changes to the minimum wage; GO8 Position paper, 2004). Between 1997 and 2002, the SNA increased by only 8% compared to a 25% increase in the AWE. In addition, Commonwealth funding of the sector was arbitrarily cut in the 1996-1997 budget: by 1% for 1997, 3% for 1998 and 1% for each of 1999 and 2000. Senior administration of the Group of Eight universities now claims that the *annual* shortfall directly attributable to the indexation arrangements is approaching $1 billion (Gallagher, 2007).

The handling of the tertiary education sector by the Federal Government is in direct contrast to its handling of the primary and secondary education sector. The indexation applied to recurrent expenditure of government funds in public schools between 1997 and 2002 was over 32% (GO8 Position paper, 2004). Wages in the tertiary sector are now directly comparable to those in the secondary education sector; in some cases, inferior.

As a consequence of the steady decline in academic salaries over the last 35 years, recruitment into the profession has stalled. University of Adelaide demographer Graeme Hugo has provided detailed data on academic staffing in Australia. The academic profession has among the most age-heavy profiles of any group in the workforce, and between a fifth and a third of university staff will exit the profession in the first decade of this century. The disciplines of science and health science are particularly severely affected; in these disciplines of most universities in Australia, between 40 and 60% of current academic staff are over 50 years of age (Coaldrake and Stedman, 2007). Like other OECD nations, Australia is facing a crisis in the staffing of its biomedical teaching and research over the next two decades.

The obvious solution to these problems is to increase academic salaries; an especially strong case can be made for increasing the salaries of those involved in high value activities, such as research, mixed teaching/research, and those teaching full-fee paying international students. This suggestion raises the question of where the increased funding would come from. As a proportion of GDP, Australia spends the least on education of the English speaking OECD countries apart from Ireland (OECD, Education at a Glance 2006). Our spending on tertiary education per student has declined to such an extent over the last decade that we are now ranked alongside Portugal, Poland and the Slovak Republic (Illing, 1997). Clearly, the case made by the university bureaucrats for increased funding of the sector is a strong one (GO8 Position paper, 2004; Gallagher, 2007). But the picture presented by the senior administrators of the Group of Eight Universities is not complete. In 2003, the Australian higher education sector generated total revenue of $11.9 billion, contributing 1.5 per cent to Gross Domestic Product (GDP). The Higher Education Sector actually experienced significant total revenue *growth* over the last decade. In the eight years from 1996 to 2003, total revenues (excluding deferred superannuation) *increased* by 50.2 % from $7.9 billion in 1996 to just under $11.9 billion in 2003; an increase of $4 billion. In 2007, education replaced tourism as Australia's biggest services export and the country's third top export overall, after coal and iron ore (Milanda Rout, 2008). A large proportion of this revenue growth has come from overseas fee-paying students and other income generated by the direct activities of academic staff. For example, revenue from overseas fee-paying students grew by over 200 per cent from 1996 to 2003.

These figures raise the obvious question of where all the increased income is going in institutions that are, by and large, not-for-profit. It should not be overlooked that while the academic pay scale is still capped at the professorial level, the general staff pay scale has acquired an enhanced remuneration scheme for senior bureaucrats. Although not commonly known, the HEW Level 10, which used to be the ceiling of General Staff promotion, is now surpassed by five additional levels. In the amusingly titled paper "Fat Cat and Friends: which university pays its general staff the best?", Dobson (2006) points out that the (on average) 5% of the general staff paid at HEWL 10 or above were paid (on average) more than the top of the professorial scale. At my own university in 2004, these general staff were paid (on average) almost one-and-a-half times the top of the HEWL-10 scale distributed by the university's Human Resources department. Indeed, the most highly paid member of our general staff was paid 2.2-times the top of the publicly distributed scale. Don't laugh. Adelaide University paid a bureaucrat $350,000!

The position then, is this: The three core duties of our universities and research institutes are teaching, research and public service. All three of these duties are in practice borne by us. The last three decades have seen a dramatic increase in research and teaching productivity of our institutions, while the numbers

of academics employed in the sector has barely changed. Despite this, our salaries have steadily been eroded. The indexation of salaries applied by the Federal Government varies, but has for long periods failed to reflect either actual increases in costs of living, or the increased expectations of our employers. Our employers have over-seen the increase in workloads, and the resulting increase in revenue, but have chosen to restrict significant wage increases to themselves.

Who do we have to blame? Sadly, it can only be ourselves. Not only can I not recall any example of industrial action by academics in the last 30 years, but I can't even think of single occasion when the erosion of our salaries was discussed in a constructive manner. Our labours generate real income. Much of the funding received by the universities and institutes is directly indexed against our productivity – numbers of students, granting dollars, papers published etc. I am not necessarily advocating industrial action, but at least we could stand up for a decent return for a decent effort. Over the last year, the Australian full-time median wage increased by 10%. What did we agree to? And why did we accept that? Next time we receive an edict from on high declaring an agreed 2% pay increase, why accept it? If we all challenge the agreement on the most obvious bases (agreed by who? indexed against what?), someone (who is undoubtedly paid more than us) will have a hell of a lot more work to do. The reality is we are now a limited commodity and it is time our institutions started paying a competitive rate.

What I propose is this: As government and local indexation of our salaries has failed, I suggest that a subcommittee of ASI draw up a series of RECOMMENDED MINIMUM PAY SCALES. These could be indexed against real increases in the cost of living, and would provide a rational and solid foundation from which to argue individual pay scales in individual institutions. If applied consistently and fairly, such a step would at least help to stop the decline in our standard of living and may help reverse some of the damage of the last 30 years.

Other Opportunities

The Society has started publishing an events calendar in the back cover of Immunology and Cell Biology. If you are interested in having your events promoted in this way, please contact me with the relevant details.

The perspectives of students, in particular, make pleasant reading and I would like to encourage the younger members to contribute actively to the Society. Avenues for creative expression exist in the newsletter and the website, so please contact our new Newsletter editor, Margaret Baird (margaret.baird@stonebow.otago.ac.nz) or web mistress, Judith Greer (j.greer@uq.edu.au), respectively if you would like to make written or pictorial contributions.

As always, the Council is keen to hear from members regarding ways in which the Society can help foster the interests of members. Please do not hesitate to contact myself, or your State representative, if there is anything we can do to help.

Alan G Baxter

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2008 Day of Immunology

As the Australian co-ordinator of Day of Immunology (DoI), I am pleased to announce that **World Day of Immunology 2008 (April 29)** in Australia will be bigger and better as we have some wonderful volunteers from all states and territories contributing a small amount of their time to promote the importance of immunology to the general public.

We have assembled a fantastic team for DoI 2008 and our aim will be to convey that immunology is a topic of general concern worldwide and that no human being can survive without a functioning immune system. The challenges that an immune system faces in different parts of the world are unique according to prevailing conditions. Therefore, the better we understand how the immune system works the better we can help all people stay healthy and protect themselves against epidemics such as HIV or avian flu, to name just two. DoI is a special opportunity wherein we can participate in this unique global immunology forum and contribute to the offering of information, inviting exchange, announcing ideas and activities, and bringing immunology and health to all people worldwide. Be sure to support your local scientists on the day.

Throughout Australia our contribution to this special day will encompass public lectures, interactive displays and as well as meet-and-greet sessions for the public. Please go to the ASI website (www.immunology.org.au) for updates on local activities and www.dayofimmunology.org/initiative for global events.

I look forward to seeing you there.

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ASI Councillors' News

N.Z. News

The annual NZ Immunology meeting (formerly Immunet) has been re-named the NZ ASI Branch meeting and will be held in Wellington on June 5-6 this year. The meeting had almost 100 delegates in 2007, and we are hoping for an equally good turn out for 2008. This year, the two confirmed Australian keynote speakers are: Bernadette Saunders (Centenary Institute) and Stuart Tangye (Garvan Institute). We are also sponsoring an international keynote speaker to attend the meeting (to be announced) to give our local immunologists and students the opportunity to meet and spend time with three highly regarded immunologists.

As with last year's meeting, there will be prizes for the best student presentations – so we strongly encourage all Kiwi Immunology students to submit abstracts for the meeting. More information will be posted on the meeting website: www.malaghan.org.nz/NZASI

In March the Hopkirk Research Institute, a collaborative venture between Massey University and AgResearch, will celebrate its first birthday. Located in Palmerston North on the Massey University Campus, the Hopkirk has state-of-the art facilities and nearly 4,000 metres of laboratory space at Biohazard Levels II and III. With its focus on the health of pastoral-fed animals, research teams at the Hopkirk led by Immunologists Prof Wayne Hein (Director), Prof Bryce Buddle, Assoc Prof Allan Murray and Dr Ian Sutherland are investigating host: parasite interactions, mucosal immunology and vaccine development against pathogenic mycobacteria.

The Malaghan Institute in Wellington has an exciting start to 2008 with the acquisition of two new pieces of equipment: an LSRII flow cytometer funded by TEC Centre of Research Excellence grant to the Maurice Wilkins Centre for Molecular Biodiscovery, which the Malaghan Institute is a key partner of; and a new ELISpot reader capable of reading fluorescent ELIspots (ELR-04 IFL), funded by Lotteries Health Research.

Thanks to a supporting grant from the Lions Foundation, the benchtop LSRII flow cytometer will be fitted with five lasers instead of the standard 4-laser configuration. With the additional green laser the LSR II will be the only one of its kind in the southern hemisphere and will be able to analyse 18 different fluorophores and two physical properties simultaneously. Both new technologies will be available for use by collaborators. Enquiries to the flow cytometry suite manager, Kylie Price (kprice@malaghan.org.nz).

Jo Kirman
Councillor

Victorian News

The Immunology Group of Victoria
A branch of the Australasian Society for Immunology

Welcome to the start of another exciting year for the Society. This is my first year as Victorian ASI Councillor replacing Phil Darcy. I would first like to take this chance to thank Phil, on behalf of Victorian members, for his tremendous representation on the ASI National Council for the past couple of years.

I would also like to take this opportunity to congratulate Stuart Tangye, Bernadette Saunders and other members of the organising committee for the ASI meeting at Manly last December. The meeting was a terrific success attracting a number of excellent international speakers. The science presented was exceptional and the venue was terrific.

The ASI conference will be held this year in Canberra from December 7 – 11, at the National Conference Centre. Information regarding registration and the program can be found at www.asi2008.org. Both new and current Victorian students and postdoctoral branch members are reminded that to be eligible for some of the awards at the meeting they must renew their membership before 1st April. More details about this year's conference will become available on the ASI website http://www.immunology.org.au)

The IgV committee welcomed four new members on board for 2008. The new members are Stuart Berzins, John Stambas (both University of Melbourne), Edwin Hawkins (Peter MacCallum Research Institute) and Adam Karpala (AAHL, CSIRO, Geelong). The committee also had a change of office bearers with David Tarlinton (President), Andrew Lew (Treasurer) and Rosemary Ffrench (Secretary) heading the executive. Dale Godfrey stepped down after three years of being President. Ian Barr stepped down after many years as Secretary. I'd like to just take this opportunity on behalf of all Victorian ASI members to thank both Dale and Ian for their tremendous efforts over the last several years.

This year also saw the retirement of Kirsten Fairfax and Nick van den Velde as student representatives on the IgV committee. This has left the committee without anyone representing the significant ASI student membership within Victoria. The IgV committee relies heavily on feedback from its members, particularly from the student members to ensure those interests are heard and considered. At this stage I would encourage any students who are interested in joining the committee to contact myself or David Tarlinton (tarlinton@wehi.edu.) to learn more about it.

The local IgV council will be organising other worthwhile events this year including a celebration of World Immunology Day that will involve public lectures (April 29), Immunology Master Classes (details to be announced), the IgV Winter Seminar series (dates to be announced) and of course the annual IgV meeting (October). I would highly recommend the IgV annual meeting in October to postdocs and students alike. It is always a terrific meeting that is informal in its nature and is a terrific opportunity to meet other researchers from around the State and hear what they are up to. Last year we had Charlie Surh from the USA as an international speaker. Charlie was only too happy to talk to postdocs and students alike, providing a unique opportunity to meet and discuss their work with someone who is internationally recognised as a leader in the field. Students who are current ASI members presenting their research at the IgV meeting are eligible for bursaries to attend both national and international immunology conferences. So again, just a reminder to make sure you are an ASI member before April 1.

Being an ASI member offers many other benefits including reduced registration

rates at the annual scientific meeting and subscription to Immunology and Cell Biology. It is also an excellent opportunity for members (particularly new members) to mix and work with other immunologists in Australia and New Zealand. Membership details can be found on the ASI website.

Finally as Victorian ASI Councillor I represent our members' interests on the ASI national Council. Therefore, if there are any issues, suggestions or comments you would like conveyed, please don't hesitate to contact me. Also any ads for upcoming seminars or job opportunities that you would like advertised, just let me know.

Stephen Turner
Councillor

Contributions sought for the ASI online immunology quiz

As part of the recent World Day of Immunology, we have developed an online immunology quiz (see http://www.immunology.org.au/immquiz1.html) on the ASI website. This quiz is targeted at the general public, but it would be good to add a few more questions (especially some with an Australian flavour), and maybe even add an "Advanced Level", with questions that undergrad students might find useful for revising for exams. All that's needed now are the questions and answers.

If you would like to contribute any multiple choice questions for either the general quiz or an advanced version, please send them to Judith Greer at j.greer@uq.edu.au.

Minutes of ASI 2007 Annual General Meeting December 4, 2007 Sydney, Australia

1. Attendance and Apologies
Attending: 80 members
Apologies: Alejandro Lopez

2. Confirmation of Minutes of 2006 AGM
Moved: Chris Parish
Seconded: Phil Hodgkin

3. Business Arising
Covered in other items below

4. President's Report (Alan Baxter)

- *ASI's membership* exceeded 900 for the first time this year, with Queensland and New Zealand showing particularly strong growth. Nearly a third of our members are students.

- *Period of service for regional councillors* will be three years from now, with the following outgoing members this year bringing approximately one third of these positions into re-election each year.

o Outgoing

1.	Past-President:	Phil Hodgkin
2.	New Zealand:	John Fraser
3.	Victoria:	Phillip Darcy
4.	ACT:	Guna Karupiah

We are very grateful for the contributions of these members of Council, particularly Phil's inspiring reign as President, John's leadership of the organising committee of the Auckland meeting, and Phillip Darcy's continuing contributions to the very active IgV.

o Incoming members are:

1.	Vice President:	Miles Davenport
2.	New Zealand:	Jo Kirman
3.	Victoria:	Steve Turner
4.	ACT:	Gerard Hoyne

Thank you for nominating; we welcome your contributions to the Society over the next three years (four for Miles).

- *Special Interest Groups*
Council resolved to retain, but alter, the status of SIGs. The existing SIGs were dissolved, with the exception of the successful Mucosal Immunology group. The Tumour Immunology group, which has run the Tumour Immunology workshop in association with the Annual Scientific meeting for many years, was declared to have SIG status, and Joe Trapani has agreed to be co-ordinator. We anticipate that a number of subdisciplines may wish to rejuvenate or initiate SIGs and these moves are welcomed. SIGs will no longer necessarily have the right to a venue at the Annual Scientific Meeting, but can propose sessions to the local programme committee, and if accepted, help organise them with the local organising team. We also strongly encourage such groups to co-ordinate satellite meetings with the meeting organisers. In addition, SIGs and other groups of Society members with shared interests are encouraged to involve themselves in the Visiting Speaker Program by contacting Alejandro Lopez to nominate a visiting speaker and to apply to Council through the Secretary, José Villadangos, for one or other of the financial support packages for small meetings being introduced this year. One of the great successes is the Mucosal Immunology Group, which has this year brought its annual meeting to the ASI Scientific Meeting as a workshop. This has been very successful, and I

am very grateful to Allan Cripps for his enthusiastic efforts and steering of this process.

- *Financial Support for Small Meetings*. Council approved the development of two new schemes: Meeting Seed Funding and ASI-Sponsored Speaker Support:
  - Meeting Seed Funding aims to provide a short-term loan of up to $10,000 ($6-8,000 being a typical figure) to SIGs or groups of members with a shared interest to cover the costs of holding a small meeting that are payable prior to registration. A typical example of such a cost is the holding deposit on a venue. Liability to the Society for this program will not exceed $30,000 at any time.
  - The ASI-Sponsored Speaker Support aims to provide up to $3,000 ($2,000 being a typical figure) to SIGs or groups of members with a shared interest to cover the costs of inviting an international speaker to contribute to a small meeting.

  These programs were very popular in their first year of operation. Thanks to Jose for co-ordinating them.

- *The Visiting Speaker Program* continues to run smoothly under the direction of Alejandro Lopez. From a personal point of view, this program has played a critical role in bringing outstanding international speaker to our regional centre, for which we are very grateful.

- *World Day of Immunology*. The Day of Immunology was held worldwide for the first time in 2007 and ASI took part. The events promoted by ASI were organised by volunteer regional co-ordinators, and public lectures were given in Adelaide, Canberra and Townsville; interactive displays were set up in the foyer of the South Australian Museum; a set of teaching materials on vaccination for use in Years 3-4 in junior primary schools were developed; and the ASI website hosted a description of what immunologists do and a quiz on immunology for school students. Thanks to all those who took part, especially Susan Lester, Shilpa Prasad, Michael Brown, David Gordon, Christopher Parish, Claudine Bonder, Georgina Clark and Judith Greer. As a generalisation, the public enthusiasm for this event was greater than we could have predicted; there is a lot of interest in immunology in the community, and continuing efforts in public education is probably desirable and appropriate. Next year's WDI will be held on 29 April and ASI's efforts will be co-ordinated by Claudine Bonder. We have received an expression of interest from the Producer of Radio National's *Ockham's Razor* and *The Health Report*.

- *Satellite Meetings*. Council has established the following guidelines for satellite meetings held by SIGs at the ASM:
  - General Principles:
  1. The approach taken needs to be scalable, applicable to all Annual Scientific Meeting locations (that may also have few or no members of a special interest group), and applicable to all special interest groups.
  2. There is no reason why the program organiser of the satellite meeting needs to live locally to the site of the Annual Scientific Meeting.

  - Specific Guidelines:
  1. Initiation of the satellite meeting is the responsibility of the SIG and the local organising committee needs to be approached 10-12 months prior to the Annual Scientific Meeting with an expression of interest.
  2. The booking of venue and catering needs to be done by someone on site who is part of the organising committee to ensure integration. While it would be preferable for this to be a member of the special interest group, it doesn't necessarily need to be.
  3. If there is no local member of the SIG who is prepared to help, it is not reasonable to expect the organising committee for the annual meeting to organise the program for a special interest group.
  4. As speakers are shared between the programs, it is reasonable that the program organiser for the Annual Scientific Meeting at least be informed of, and probably consulted in deciding on, the workshop program.

- *Travel Awards*. The number and size of travel awards by the Society have been significantly increased. I am particularly grateful to the other members of the Executive and Alejandro Lopez for their time spent in assessing these applications. This year, for the first time, the Annual Scientific Meeting's organising committee awarded the Student Travel Bursaries to support attendance at the Annual Scientific Meeting. This change has eliminated the very uneven success rates between regions and I'd like to thank those who rose to the task when they were so busy.

- *ICI 2016 bid*. With widespread support from the major research institutes and with offers of significant financial backing from several State Governments, Council has decided to bid to hold the International Congress of Immunology in Australasia in 2016. We have contracted ASN Events to act as secretariat in the preparation of the bid, and have identified the conference venues in Melbourne, Sydney and Brisbane as the only ones in Australia likely to be able to cope with the estimated numbers of registrants. These venues have developed draft proposals, based on guidelines prepared by ASN, and these have been considered by a steering committee. At this stage, it is likely that we will progress to site inspections of the facilities in Melbourne and Brisbane early next year, with a view to advising Council of a preferred venue at the mid-year Council meeting. This is part of a broader strategy to increase ASI's international interactions, a move which the Immunological Societies of Japan, China and Russia are encouraging.

Moved: Bernadette Scott
Seconded: Andrew Lew
Carried

5. Secretary's Report

Jose Villadangos reported the following points.

- Elections to Council. The positions of Vice-President/President Elect and Councillors for ACT, New Zealand and Victoria were renewed in 2007 as described by Alan.
- Membership. ASI has 904 members, an 8% increase over last year.
- Awards
  - International Travel Awards. A total of 20 awards (seven for post-docs, 13 for postgraduates), amounting to $51,000, were given last year.

- Bursaries. Twenty bursaries were awarded in 2007 to attend the annual ASI conference. The expenditure was $12,415.

- Communication between local membership and the Council. Jose encouraged ASI members to contact their regional councillor to raise issues for discussion at the Council meetings held mid-year and at the end of the year. The Council recommends to organise regional committees to organise local events and co-ordinate proposals.

Moved: Su Heinzel
Seconded: Anne Kelso
Carried

6. Treasurer's Report

Chris Andoniou presented the accounts for the year 2006/2007.

- The audit for this period has been completed with no problems.
- ASI had a $5,486.80 loss during this period, much smaller than intended due to a larger-than-expected profit from the annual meeting held in NZ last year.
- The total equity of the Society is $399,998. The expected income over the next year financial year is $196,000, but this may vary depending on the royalties generated by ICB. The expenditure budgeted for next year is $245,747, for a $49,747 loss.

Andrew Bean moved to accept the Treasurer's report
Seconded: Andrew Lew
Carried

7. Report from the Editor of ICB

Chris Parish reported the following items.

- A successful first year with Nature Publishing. Commencing with the January 2007 issue, Immunology and Cell Biology (ICB) joined the Nature Publishing Group (NPG). As a result of this transfer to NPG there were a number of important changes to ICB.
- The journal has a new look with a totally new cover design and manuscripts being formatted in a style similar to other NPG titles.
- There has been an increase in the number of issues of ICB in 2007 from 6 to 8.
- A new, more international Editorial Board has been appointed.
- News and Commentary articles now appear in each issue. I am indebted to Carola Vinuesa who has performed a wonderful job as the News and Commentary Associate Editor.
- Several new article types appeared in the journal during 2007. These include Landmark articles, Editorial articles and Meeting Reports. A totally new article type, called Outstanding Observation, was recently introduced that attempts to capture papers that describe outstanding findings that, as yet, do not have a detailed molecular mechanism. It is hoped that this article type will satisfy an unmet publishing need in immunology. The journal continued to publish Theoretical Articles that report new and provocative ideas in immunology. ICB has also become more active in encouraging the submission of Review Articles from outstanding graduate students.
- Special Features continued as an important component of ICB.
- Once accepted, manuscripts have become publicly available much more rapidly than previously via Advanced Online Publication.
- Finally, the journal has undoubtedly had a dramatically increased visibility by its new website being hosted on nature.com. The number of article downloads from the ICB web site in 2007 has trebled compared with 2006.

Overall the move to NPG has been a resounding success which, I believe, will eventually result in ICB becoming a new, high impact, journal for publishing the highest quality immunological research. I should add that our success so far with NPG has been greatly enhanced by the wonderful support provided by the NPG staff, particularly by Nick Campbell.

- ICB Statistics for 2007
  - This year the ICB impact factor of 2.482 represents a return to the level of previous years. I also anticipate that the move to NPG will result in a gradual increase in the impact factor of the journal in the next few years.
  - The acceptance rate for refereed papers was 49% in 2007, up from 40 in 2006. The average length of time to review papers was 19 days, which is an improvement on the 2005 figure of 24 days.
  - 76% of unsolicited articles originated from overseas.

Moved: John Fraser
Seconded: Warwick Britten

8. Report from Newsletter Editor (Miles Davenport)

Miles announced he was stepping down as Newsletter Editor to concentrate on his executive position in ASI. He also announced that Margaret Baird has agreed to step into the role and he wished her every success. He passed along the message that the new Newsletter editor encouraged the ASI membership to submit more contributions for the newsletter.

9. FIMSA

The following items were reported by FIMSA vice-president Nick King:

- 9th FIMSA Advanced Training Course, Jeju, Korea, February 1-4, 2007. The theme of the course was "From basic to Translational Immunology". There were 246 participants. FIMSA sponsored the opening speaker (Kiyoshi Takatsu) and the Japanese Society for Immunology (JSI) sponsored four other speakers. Australia sponsored three speakers – Bernadette Saunders, Miles Davenport and Stuart Berzins.
- The 10th FIMSA Advanced Immunology Training Course, in conjunction with 4th FIMSA Congress, Taipei, Taiwan, ROC, will be held on October 17-21, 2008. The ASI Council has allocated $3,000 to support this meeting.
- New FIMSA Members. FIMSA welcomes the admission of the Iranian Society of Immunology and Allergy and the Allergy Immunology Society of Sri Lanka.

10. IUIS

Chris Parish noted that most IUIS issues had been raised in the President's report. He noted that the IUIS council meeting in Japan in 2010 will decide upon the 2016 bid for the ICI meeting and that lobbying on behalf of the ASI bid prior to, and during, the meeting in 2010 would be a critical determinant in our success.

11. Meetings

- The next meeting will be held in 2008 in Canberra
- The Council has decided to establish an external committee, composed of the organiser of the previous meeting plus a member chosen by the council, to support the organisation of the annual meeting. This will provide advice to the local organising committee. Bernadette Saunders and Phil Hodgkin will the members of this committee for 2008.

Moved: Bernadette Scott
Seconded: Stuart Tangye

12. Other Business

Andrew Lew proposed that ASI should pay registration for the Chair of an ASI annual meeting organising committee to attend the following ASI meeting. John Fraser spoke in support. Alan Baxter noted that the current plan was to have the meeting chair sit on the upcoming organising committee with costs covered by ASI. Su Heinzel spoke in support of having the meeting co-ordinator paid to attend the meeting previous to the one they were organising thereby increasing the benefit. Alan Baxter argued that any move should benefit the Society rather than been seen as a reward and that attending the meeting prior to become informed about organizational details, and to attend the meeting afterwards to assist in oversight of the meeting, was a good way to maximise the benefit.

Alan Baxter put the motion that registration costs and airfares be paid for the Chair of the Organising committee, or a representative, to attend the annual meeting immediately prior to, and immediately after, the meeting they organise.

Seconded: John Fraser
Carried

Meeting closed at 2.30pm.

Upcoming Lectures & Conferences

Australasian Vaccines & Immunotherapeutics Development Workshop
May 14–16, 2008
Surfers Paradise, Queensland, Australia
Rajiv.Khanna@qimr.edu.au
http://www.asnevents.net.au/avid/

ASI NZ Branch Meeting
June 5–6, 2008
Wellington, New Zealand
Immunet@malaghan.org.nz

Frontiers in Immunology Research 2008 International Conference
July 22–26, 2008
Florence, Italy
www.firnweb.com

20th Annual ASHM Conference
September 17–20, 2008
Perth, WA, Australia
conferenceinfo@ashm.org.au
www.ashm.org.au/conference

Travel Award Conference Reports

2nd European Symposium on Tetraspanins, Madrid, Spain, September 2007

Kate Gartlan, Burnet Institute of Medical Research

Recently, with the assistance of the ASI Postgraduate International Travel Award, I was lucky enough to attend the 2nd European Tetraspanin meeting in Madrid, Spain. As imagined, this was a happy mix of data-ogling, debate, tapas and a little bit of boozing…

The European tetraspanin meeting is one of only two regular specialist meetings on tetraspanins and provides a terrific forum to discuss developments on this unique family of proteins. The pleiotropic nature of tetraspanin function is reflected by the scientists attracted to these meetings, with representatives from a variety of fields such as immunology, neurobiology, structural biology, cancer biology and virology. This meeting was hosted by Professor Francisco Sanchez-Madrid at the Hospital Universitario de la Princesa who succeeded in gathering tetraspanin researchers from Europe, UK, US and Australia (us!).

Assoc. Prof. Mark Wright opened the meeting with the plenary session discussing the immunological insights gained by a reverse genetics approach to tetraspanin research and set the scene for a very interesting, data heavy, series of presentations. The first session focused on the role of tetraspanins in viral trafficking and entry in HCV and HIV infection, where Prof. Mark Marsh (UCL) presented some stunning EM & confocal data on HIV assembly in potentially novel tetraspanin rich compartments. This was then followed by a look at the regulatory role of CD9 and CD151 in protease activity. The third session was primarily aimed at understanding the interactions underpinning the classical model of 'tetraspanin webs' and also their function within the immunological synapse. It is quite exciting at the moment to see the recent data generated by confocal microscopy that allows us to visualise tetraspanin microdomain formation and cell surface organisation.

Most relevant to my work was the series on 'tetraspanins in the immune system'. Here I had the opportunity to present work from my PhD on the potential for functional overlap between tetraspanins in immune function. This was also a great chance to see the latest work from our favourite collaborator (& ex-Postdoc) Annemiek van Spriel. Prof. Martin Hemler (Dana-Farber) presented his recent work on CD151 and tumour progression in the cancer biology session, which was followed by a look at other animal models used in the study of tetraspanin function.

One of the most rewarding aspects of this conference was the presence of a number of other students at this meeting who like me, have been drawn into the world of tetraspanins (not all kicking and screaming either!). Notably among these was "Stormin" Norman Sachs who generated much debate again this year with his striking data on abnormal kidney development in CD151 knockout mice – a novel phenotype not seen by our laboratory or the Hemler laboratory. It was great to meet other junior researchers who share an enthusiasm for this family of proteins.

After the conference, I visited the laboratory of the meeting organisers and gave a departmental seminar. My hosts were particularly generous and it was a great opportunity to hear direct feedback on my work from Prof. Sanchez-Madrid and others.

Naturally, 'all work and no play makes Jack a dull boy' so we did perform some 'cultural activities' which included seeing Picasso's Guernica, enjoying Madrid's nightlife, consuming excess quantities of tapas/beer and generally getting into the Spanish way of life … and yes … it was pretty darn good. Thanks ASI!

Clockwise from left: Ralph Hyde, Michael Trikic, Rachael Hulme, Kate Gartlan, Neil Tomlinson, Adam Jennings and (kneeling) presenting the 'Jamon'… Mike Tomlinson. ***This was taken after receiving the surprise gift of 'a leg of ham' from bar staff in Madrid … for just one night, that ham was like family ... Ahh memories.***

Contributions sought for the ASI Newsletter

You could win $100 !!

Deadline for the next issue: 1st May 2008

Please email your contributions to the Secretariat by the above date.
asi@21century.com.au

The Centenary Conference of The Royal Society of Tropical Medicine and Hygiene
One Hundred Years of Tropical Medicine: Meeting the Millennium Development Goals
September 13–15, London, UK
and
The First International Conference on Malaria Vaccines for the World
September 17–19, London, UK

Marthe D'Ombrain, The Walter and Eliza Hall Institute of Medical Research

The Centenary Conference of the Royal Society of Tropical Medicine and Hygiene (RSTMH) was a celebration of the society reaching 100 years (1907-2007), with a particular focus on reaching the Millennium Development Goals (MDG). HRH The Princess Royal officially opened the meeting, which was held at the Queen Elizabeth II Conference Centre in Westminster, London. Over three days, a number of leading international researchers and practitioners addressed delegates with their latest findings and recommendations on reducing child mortality, improving maternal and newborn health, combating HIV/AIDS, TB and malaria, and overcoming environmental, cultural and financial challenges for international health. No concurrent sessions were scheduled in the scientific programme, enabling all delegates to attend all sessions. As this limited the number of oral presentations, the majority of delegates presented their research in one of two large poster sessions. Delegates were given the opportunity to mingle at the conference dinner which was a dinner cruise on the river Thames. The boat passed by many of London's famous sites and the Tower Bridge was raised for our boat to sail through.

During the first day of the conference, the challenges for international health were discussed. Jeffrey Sachs (USA) argued that 0.1% of the rich world income is enough to solve extreme poverty and associated ill-health in the developing world. However, Zulifqar Bhutta (Pakistan), Peter Mwaba (Zambia) and others emphasised that the issues surrounding international health are extremely complex and although we need money, education is needed just as desperately to stop the ethnic, gender and religious discrimination that contribute to morbidity, mortality and extreme poverty. Many speakers also stressed that the lack of infrastructure in the developing world is a major hurdle for meeting the MDG and that more research is required on implementing the interventions we already have, rather than developing more interventions.

A number of new strategies to reduce child mortality were presented. Among these, Aggrey Wasunna (Kenya) showed that a simple one day newborn resuscitation course may reduce birth asphyxia-associated infant mortality. Kate Sadler (UK) and Stephen Collins (UK) showed that Severe Acute Malnutrition (SAM) patients treated as outpatients rather than inpatients could reduce SAM mortality by 50%. Strategies for improving maternal health were discussed by Staffan Bergstrom (Sweden) and others who reported that "non-physician clinicians" (*técnicos da cirurgia*) will be integral to overcoming the huge deficit of physicians in the developing world. Midwives are also being trained in a controversial world-first to carry out lifesaving caesarians in rural areas to try and reduce maternal mortality. Peter Mwaba (Zambia) presented a very moving and confronting presentation on the challenges of caring for HIV patients in Africa. Sadly, many Zambians currently believe that HIV was created in the West to wipe out the African people. Consequently, antiretrovirals (drugs of the West) are often refused. However, as Dr. Mwabe stated, even if antiretrovirals are used, how does one deal with the associated increase in appetite when there is no food to eat? The challenges of TB-HIV coinfections were also addressed. As discussed by Salim Karim (South Africa) and Anthony Harries (UK), HIV dramatically increases the risk of TB infection and TB is a major cause of death by HIV. New efforts to control TB are thus urgently required to also fight HIV.

Combating malaria was another hot topic. Nick White (Thailand) reviewed the current antimalarial drugs and the policies regarding their use. Artemisinin Combination Therapy is now the first line treatment for *Plasmodium falciparum*, with cure rates of approximately 92%. Of the new drugs under development, piperaquine appears to be the most promising. Pedro Alonso (Spain) reviewed the current malaria vaccine candidates of which RTS,S is the most advanced. Janet Hemingway (UK) addressed vector control, an area which has seen very little advance in the past 50 years. They are now working with industry to try and develop insecticides specifically for public health use in the hope of finding a safe alternative to DDT. In addition, Nicholas Beare (Malawi) reported on a retinopathy that is unique to cerebral malaria (CM) patients. The malaria-specific retinopathy occurred in about 2/3 of CM patients and was associated with poor prognostic outcome, while the 1/3 of CM patients without the retinopathy generally recovered better from coma. The unique retinopathy may enable rapid and more effective diagnosis of CM, potentially decreasing the risk of patient mortality.

Overall, the main message from this conference was that we need to take what we know *now* and use it to make a difference *today*. Deaths that occur in the developing world but not in the developed world are preventable. While we may not be able to eradicate diseases such as malaria and HIV in the absence of effective vaccines, we can certainly prevent a lot of infections using the tools we have now, thereby significantly reducing mortality and morbidity rates now, until medical and scientific research advances enable full control.

The First International Conference on Malaria Vaccines for the World aimed to give scientists, physicians and other professionals from the academic, industrial/commercial and governmental/policy/regulatory sectors an opportunity to discuss the current status of new malaria vaccine initiatives, vaccine candidates and clinical trials. The meeting was held at The Royal Society of Medicine in London, which was an excellent venue, both for hosting the sessions and for facilitating discussions between the 250 or so delegates that attended. The sessions encompassed all aspects of malaria vaccine development including epidemiology, immunology, target discovery, immunogen construction, enhancement of immunogen-elicited

protective immunity, manufacturing, pre-clinical development, regulatory approval of malaria vaccines, clinical trials, use and impact of malaria vaccines, and recommendations for the future. No concurrent sessions were run, enabling delegates to attend all sessions. A small number of posters were displayed for the duration of the conference.

Overcoming the poor immunogenicity of malaria antigens and alleviating the parasite-mediated suppression of the immune response to achieve better antibody and T cell responses was intensely discussed. Viral vectors appear to offer great promise in this area, serving as a carrier for the desired malaria antigen without the requirement for an adjuvant. Adrian Hill (UK) presented encouraging results from a Simian monkey trial. Monkeys were vaccinated using a heterologous prime-boost strategy with an adenovirus vector expressing the sporozoite ME-TRAP protein (prime) followed by boosting with an MVA vector expressing the same protein. High numbers of immunogenic CD8 T cells were observed following vaccination. Promising results in humans using a similar vaccination strategy were presented by Martha Sedegah (USA) who showed that humans vaccinated with a multi-stage, multi-antigen adenovirus *Plasmodium falciparum* vaccine had very strong immunogenic CD8 T cell responses. The development of new adjuvants and the use of nanoparticles as vaccine carriers were also discussed.

Elizabeth Nardin (USA) showed that topical application of Imiquimod, a synthetic TLR7 ligand, at the site of injection of a synthetic malaria vaccine served as a potent adjuvant in mice, promoting strong IgG2 antibody responses and Th1 CD4 T cell responses. Magdalena Plebanski (Australia) presented data on the use of nanobeads conjugated with parasite proteins to vaccinate mice against malaria. The nanobeads were taken up by DC and induced homologous and heterologous protection that was long lasting following parasite challenge.

Understanding which immune responses lead to protection and which to pathogenesis will also be instrumental in the development of an effective malaria vaccine. Based on extensive studies in a range of experimental murine models of uncomplicated malaria, Michael Good (Australia) presented a model proposing that, in a protective scenario, parasites activate DC, inducing IL-12 and downstream IFN-γ production. This in turn activates macrophages to produce TNF-α leading to the phagocytosis and destruction of parasites. However, as discussed by Prof. Good, this protective IFN-γ pathway can be "short-circuited" such that the parasites directly activate macrophages instead of indirectly activating them via DC. This was proposed to result in rapid production of TNF-α in the absence of IFN-γ, resulting in pathological consequences for the host.

The discovery of new vaccine candidates was also on the agenda. Using proteome microarrays, Denise Doolan (USA) and colleagues discovered 56 novel *P. falciparum* proteins. The issue was raised, however, that we already have more than enough malaria vaccine candidates. Many believe that it is not the candidates that are the problem but immunogenicity. Thus, if we focus on overcoming immunogenicity and immune suppression, many of the existing candidates may prove to be much more effective in the field.

Of all the malaria vaccine candidates under development, RTS,S (which targets the liver stage of the parasite) is the most advanced. A special symposium was held on this vaccine which is about to move into Phase III clinical trials. An overview of the Phase III study design was given for which the primary objective will be to look at efficacy against clinical malaria. The study will encompass 10 different field sites (to reflect different transmission settings) and 16,000 children (from infants to 17 months). The progression of RTS,S into Phase III clinical trials was under hot debate at this conference. Some of the major concerns were that Phase III trials are scheduled to begin before all of the Phase 2b trials have been completed. Furthermore, the adjuvant has been changed from ASO2 to ASO1, for which no safety database presently exists. Other promising vaccines that were discussed include the metabolically active, non-replicating whole parasite *P. falciparum* sporozoite vaccine (Stephen Hoffman, USA) and the low dose whole parasite *P. falciparum* blood-stage vaccine (Michael Good, Australia).

I really enjoyed attending both of these international conferences and I would like to thank the ASI for supporting my attendance. In addition, funding from both the ASI and the Edith Moffat Fund (WEHI) enabled me to visit a number of international laboratories in pursuit of potential post-doctoral positions. These visits were a wonderful experience and opened many doors for future post-doctoral training and scientific collaborations.

Sustaining Membership

ASI Inc acknowledges the support of the following sustaining member:

• Jomar Diagnostics

Gottschalk Medal win for Dr Gabrielle Belz

On December 20, 2007, the Australian Academy of Science announced that Dr Gabrielle Belz had won the coveted Gottschalk Medal for 2008. The medal recognises outstanding research in the medical sciences by a researcher under forty years old.

The citation notes that Dr Belz, from WEHI's Immunology Division, has made a series of groundbreaking discoveries regarding the regulation of the immune response to viruses. She studies how multiple types of dendritic cells and killer T lymphocytes work together to defend the body from viral infections. Dr Belz's studies aim to improve the performance of vaccines against viral infections.

Commenting on the award to Dr Belz, the Director of WEHI, Professor Suzanne Cory, said, "Dr Belz is a highly productive immunologist whose career has great momentum. Her example in winning this award will inspire many young women to continue their scientific careers."

Previous WEHI alumni to be awarded the Gottschalk Medal include Chris Parish, Tony Burgess, Nick Nicola, Nick Gough, Andrew Cuthbertson, Alan Cowman, Doug Hilton and David Vaux.

Alfred Gottschalk (1894–1973), after whom the medal is named, was a German MD and biochemist who had a most distinguished academic career before fleeing Nazi Germany to Australia in 1939 where he was offered a position as a biochemist at WEHI. Gottschalk later collaborated with Macfarlane Burnet and discovered neuraminidase, an enzyme on the surface of the influenza virus, which was subsequently targeted by Peter Colman and his colleagues for the development of Relenza, the anti-flu drug. Gottschalk was elected to the Australian Academy of Science in 1954. He returned to Germany in 1963.

Submission of photos with articles

When submitting articles, reports, etc. to the newsletter, please do not embed the photos in the Word article, but always send as separate jpeg files - preferably around 300–400kb. Embedded photos/graphics cannot be imported into the desktop publishing program nor edited if required and delays occur in requesting photographs to be re-sent. Thank you for your co-operation.

Immunome Research

http://www.immunome-research.com/

Request for Article Submissions

Immunome Research is the journal of the International Immunomics Society (IIMMS). It is an open access, peer-reviewed, online journal publishing cutting edge research at the intersection of immunology research with the latest technologies, including genomics, immunoinformatics and mathematical modelling.

Examples of recent papers include Alex Sette's groups new model for predicting B cell epitopes, plus papers describing new methods for predicting MHC-peptide binding, modelling viral/host interactions, and using genomic technologies to better understand immune function.

Immunome Research accepts reports of original data, comprehensive reviews of any subject within the scope of the journal, commentaries, database articles, hypotheses, meeting reports, methodology articles and software articles. Immunome Research's articles are archived in PubMed Central.

Manuscripts should be submitted electronically to Immunome Research using the online submission system at http://www.immunome-research.com/

For further information please contact the Editor-in-chief, Professor Nikolai Petrovsky, (nikolai.petrovsky@flinders.edu.au) or the Associate Editor, Dr Susanne Heinzel (Susanne.Heinzel@fmc.sa.gov.au)

ASI Student Page

Inspired by yet another PhD comic strip, I was going to write about the authorship in scientific publications (hopefully I will do that in the next issue). However, I thought I would start off with something that could involve other students in the Society.

At right are two new columns, the first is a list of things that some of us may wish that did or did not happen (purpose: it is a bit geeky but it helps to share the pain!), the other column is a list of advice or comments that we may never forget from our mentors (purpose: actually quite useful I thought). Anyway, these are some of the things we came up with and I hope that other students can send some more to me (ivan.poon@anu.edu.au) for future issues.

Cheers,
Ivan Poon

I wish…

"I wish I could remember what sample A1 was"
"I wish I didn't co-transfect two GFP constructs and look for co-localization"
"I wish I had spun my cells down before flicking them down the sink"
"I wish my control samples didn't outnumber my experimental samples"
"I wish yeast don't grow in RPMI"
"I wish I had written down which -70 freezer box I had stored my samples in. My frozen fingers certainly regret it!"

Advice from mentors…

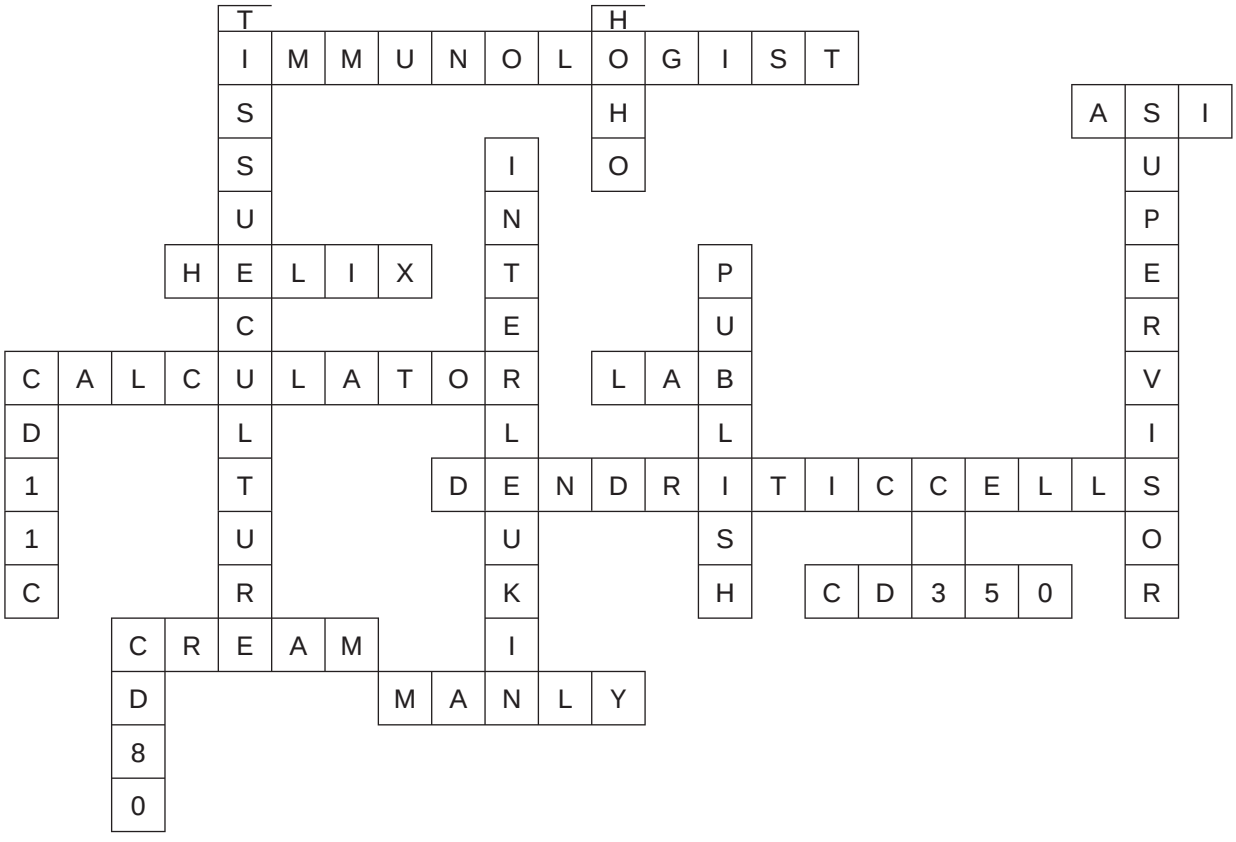
"If an experiment cannot contribute to a publication, it is a bad experiment"
"I am no smarter than you, I have just read more papers than you"
"Don't just work hard, you need to work smart as well"

An invitation and a request to all ASI members

to contribute copy that they think might be interesting, useful, historical, humorous or thought provoking.

- We invite our student membership to voice their views on issues that interest or directly concern them.
- It's our newsletter, so let's support it and strive to make it even better.
- The ASI newsletter comes out 4 times a year and we welcome your contributions.
- **AND NOW YOU COULD WIN $100 FOR THE BEST ARTICLE PUBLISHED IN THE NEWSLETTER!**

Crossword Solution (from December Newsletter):



The ASI Visiting Speaker Program

We would like to invite proposals for candidates from any member of the ASI. Twice a year, at the midyear and annual Council meetings, candidates are evaluated and selected. The deadlines for the proposals every year are: May 15th and November 15th. For further details, please visit our website: (http://www.immunology.org.au/vsp.html).

Planned visits for 2008

August/September

A/Prof. Steve Reiner from the University of Pennsylvania, Philadelphia, USA.

Dr Reiner studies various aspects of T cell immunity with a particular focus on molecular mechanisms of T cell function including how expression of specific transcription factors can determine lineage specific function. He has published over 80 papers with a large proportion appearing in high-ranking journals such as *Science, Nature Immunology, Immunity* and the *Journal of Experimental Medicine*. More recently he described a potential mechanism, termed asymmetric division, for how a single naïve T cell can generate both memory and effector cells. This paper, published in *Science* last year, resulted in a complete re-evaluation of how T cell memory is established. Importantly, the mechanisms controlling immune cell lineage commitment and function are broadly applicable to many areas of immunological research.

Dr Reiner's visit is being co-ordinated by Stephen Turner (sjturn@unimelb.edu.au) from the University of Melbourne.

Selected publications:

Chang JT, Palanivel VR, Kinjyo I, Schambach F, Intlekofer AM, Banerjee A, Longworth SA, Vinup KE, Mrass P, Oliaro J, Killeen N, Orange JS, Russell SM, Weninger W, **Reiner SL**. 2007. Asymmetric T lymphocyte division in the initiation of adaptive immune responses. *Science* 315:1687-91.

Reiner, S.L. 2007. Development in motion: helper T cells at work. *Cell* 129:33-36.

Reiner, S.L., F. Sallusto, and A. Lanzavecchia. 2007. Division of labor with a workforce of one: challenges in specifying effector and memory T cell fate. *Science* 317:622-625.

Intlekofer AM, Takemoto N, Kao C, Banerjee A, Schambach F, Northrop JK, Shen H, Wherry EJ, **Reiner SL**. 2007. Requirement for T-bet in the aberrant differentiation of unhelped memory CD8+ T cells.*J Exp Med.* 204:2015-21.

Intlekofer, A.M., E. John Wherry, and **S.L. Reiner.** 2006. Not-so-great expectations: re-assessing the essence of T-cell memory. *Immunol Rev* 211:203-213.

Sallusto, F., and **S.L. Reiner**. 2005. Sliding doors in the immune response. *Nat Immunol* 6:10-12.

Reiner, S.L. 2003. Immunity and the animation of the genome. *Immunity* 19:775-780.

Mullen AC, High FA, Hutchins AS, Lee HW, Villarino AV, Livingston DM, Kung AL, Cereb N, Yao TP, Yang SY, **Reiner SL.** 2001. Role of T-bet in commitment of TH1 cells before IL-12-dependent selection. *Science.* 292:1907-10.

November

***Professor* Wayne M. Yokoyama,** from the Washington University School of Medicine, St. Louis and the Howard Hughes Medical Institute, USA.

Prof. Yokoyama is a leading scientist in the field of NK research, in particular the role of NK in viral infections and autoimmune diseases. His contributions include over 200 publications on NK mediated lysis in tumour and viral models investigating the role of NK ligands and receptors responsible for tolerance to self-antigens.

Prof. Yokoyama will be attending the NK meeting in Perth from November 26-29 and will be then visiting other states. Prof. Yokoyama's visit is being organised by Guna Karupiah (Guna.Karupiah@anu.edu.au) from ANU, Canberra

Selected publications:

Yokoyama WM, Kim S. 2006. Licensing of natural killer cells by self-major histocompatibility complex class I. *Immunol Rev.* 214143-154

French AR, Sjolin H, Kim S, Koka R, Yang L, Young DA, Cerboni C, Tomasello E, Ma A, Vivier E, Karre K, Yokoyama WM. 2006. DAP12 signaling directly augments proproliferative cytokine stimulation of NK cells during viral infections. *J. Immunol.* 177 (8):4981-4990

French AR, Holroyd EB, Yang L, Kim S, Yokoyama WM. 2006. IL-18 acts synergistically with IL-15 in stimulating natural killer cell proliferation. *Cytokine.* 35 (5-6):229-234

Yokoyama WM. 2006. Contact hypersensitivity: not just T cells! *Nat Immunol.* 7 (5):437-439

Yokoyama WM, Kim S. 2006. How do natural killer cells find self to achieve tolerance? *Immunity.* 24 (3):249-257

Tripathy SK, Smith HR, Holroyd EA, Pingel JT, **Yokoyama WM**. 2006. Expression of m157, a murine cytomegalovirus-encoded putative major histocompatibility class I (MHC-I)-like protein, is independent of viral regulation of host MHC-I. *J Virol.* 80(1):545-50

Kim S, Song YJ, Higuchi DA, Kang HP, Pratt JR, Yang L, Hong CM, Poursine-Laurent J, Iizuka K, French AR, Sunwoo JB, Ishii S, Reimold AM, **Yokoyama WM**. 2006. Arrested natural killer cell development associated with transgene insertion into the Atf2 locus. *Blood.* 107(3):1024-30.

Kim S, Poursine-Laurent J, Truscott SM, Lybarger L, Song YJ, Yang L, French AR, Sunwoo JB, Lemieux S, Hansen TH, **Yokoyama WM.** 2005. Licensing of natural killer cells by host major histocompatibility complex class I molecules. *Nature.* 436(7051):709-13.

French AR, Pingel JT, Wagner M, Bubic I, Yang L, Kim S, Koszinowski U, Jonjic S, **Yokoyama WM.** 2004. Escape of mutant double-stranded DNA virus from innate immune control. *Immunity.* 20(6):747-56

Yokoyama WM. 2004. Betting on NKT and NK cells. *Immunity.* 20(4):363-5.

Yokoyama WM, Kim S, French AR. 2004.The dynamic life of natural killer cells. *Annu Rev Immunol.* 22:405-29.

2007 Newsletter Article Winner

Congratulations to John Marbrook for his article, *The Resurgence of the Double Chamber in Immunology*, which appeared in the June issue.

$A100 will wing its way across the ditch to John in New Zealand