

Australasian Society for Immunology Incorporated

PP 341403100035

ISSN 1442-8725

September 2008

ICB Impact Factor Soars

Christopher R Parish, Editor-in-Chief, Immunology and Cell Biology

Recently I received great news from the Nature Publishing Group, the publishers of *Immunology and Cell Biology*. The impact factor for *ICB* has risen from 2.483 in 2006 to 3.033 in 2007, a whopping 22% increase in the last year and the highest impact factor the journal has ever achieved! As a result of the large increase, *ICB* is now ranked 47th out of a total of 119 immunology journals, jumping from 60th in the previous year. This ranking is even better than it sounds as 15 of the journals with higher impact factors than *ICB* only publish review articles, not research papers.

How then does *ICB* compare with other well known immunological journals? The *ICB* impact factor is well ahead of journals such as *J. Clinical Immunol., Human Immunol., Immunogenetics, Clin. Exp. Immunol.* and *Autoimmunity*. Our ranking is also close to that of *Immunology*. This is extremely encouraging as *Immunology* could be considered a sister journal as it

is the official journal of the British Society of Immunology. Journals with a similar impact factor to *ICB* are *Vaccine*, *Int*. *Immunol.*, *J. Autoimmunity* and *J. Neuroimmunol*.

Of course, the move to the Nature Publishing Group in 2007 and the associated higher profile of the journal on the nature.com web site is almost certainly an important factor in the impact factor rise. But I believe this is only the beginning. Perhaps the most striking evidence of the



Another important innovation is the publication of several *News and Commentary* articles in each issue of the journal. These articles have a similar format to the classic *Nature* 'News and Views' and cover important papers recently published in other journals or in *ICB*. Thanks to the tireless efforts of the News and Commentary editors, Carola Vinuesa and Stuart Tangye, this innovation has been a resounding success.

International Action of the second se

The higher profile of *ICB* is also translating into an increased number of subscriptions for the journal around the world, a remarkable result considering the current economic climate. This has resulted in unexpectedly high financial returns to the ASI. In 2008, ASI *ICB* income will be \$88,000, up from an anticipated \$60,000, and this payment is expected to grow to ~\$110,000 in 2009!

Of course, the implication of all of this is that *ICB* has now reached such a high international standing that all ASI members should consider submitting their next paper to *ICB*. In particular, why not consider submitting an *Outstanding Observation* article? With granting bodies and promotions

cont.	p4
-------	----

Contents *ICB* Impact Factor Soars

*	
Editorial	3
Streamlined Visiting Speaker Program	3
New SIG, Immunology & Immunity	4
ICB Publication of the Year Award	4
Honorary Secretary's News	5
President's Column	6
Visiting Speaker Program	13
World Day of Immunology, Darwin	13
Councillors' News	14
ASI 2008	17
Inventorship is not Authorship	20
Travel Award Conference Report	21
Student Page	22
Conferences & Pacific Politics	23
Upcoming Lectures & Conferences	17

ASI Inc. COUNCIL

President

Professor Alan Baxter CGC, James Cook University Townsville Qld 4811 Ph: 61 7 4781 6265 Fax: 61 7 4781 6078 Email: Alan.Baxter@jcu.edu.au

Honorary Secretary

Dr Jose Villadangos Walter & Eliza Hall Institute 1G Royal Parade Parkville Vic 3050 Ph: 61 3 9345 2532 Fax: 61 3 9347 0852 Email: villadangos@wehi.edu.au

Vice President A/Prof Miles Davenport

Centre for Vascular Research University of New South Wales Kensington NSW 2052 Ph: 61 2 9385 2762 Fax: 61 2 9385 1389 Email: m.davenport@unsw.edu.au

Honorary Treasurer

Dr Chris Andoniou Centre for Experimental Immunology The Lions Eye Institute 2 Verdun Street Nedlands WA 6009 Ph: 61 8 9381 0799 Fax: 61 8 9381 0700 Email: cadoniou@cyllene.uwa.edu.au

State Councillors

New South Wales

Dr Bernadette Saunders Ph: 61 2 9565 6114 Fax: 61 2 9565 6101 Email: b.saunders@centenary.usyd.edu.au

Queensland

Ďr Christopher Schmidt Ph: 61 7 3362 0313 Fax: 61 7 3845 3510 Email: chriss@qimr.edu.au

Western Australia

Dr Delia Nelson Ph: 61 8 9346 3510 Fax: 61 8 9346 2816 Email: Delia.Nelson@curtin.edu.au

New Zealand

Dr Joanna Kirman Ph: 64 4 499 6914 Fax: 64 4 499 6915 Email: jkirman@malaghan.org.nz

FIMSA Councillor

Professor Nicholas King Ph: 61 2 9351 4553 Fax: 61 2 9351 3429 Email: nickk@med.su.oz.au

South Australia & Northern Territory Dr Claudine Bonder

Victoria & Tasmania

Dr Stephen Turner

Ph: 61 8 8222 3504 Fax: 61 8 8232 4092 Email: claudine.bonder@imvs.sa.gov.au

Ph: 61 3 8344 8090 Fax: 61 3 9347 1540

Australian Capital Territory

Email: sjturn@unimelb.edu.au

Dr Gerard Hoyne Ph: 61 2 6125 2935 Fax: 61 2 6125 0413 Email: gerard.hoyne@anu.edu.au

Non-Voting Councillors:

Newsletter Editor

A/Prof Margaret Baird Ph: 64 3 479 7712; Fax: 64 3 479 8540 Email: margaret.baird@stonebow.otago.ac.nz

Journal Editor

Professor Chris Parish Ph: 61 2 6125 2604 Fax: 61 2 6125 2595 Email: christopher.parish@anu.edu.au

Visiting Speakers Co-ordinator

A/Prof J. Ålejandro Lopez Queensland Institute of Medical Research CBCRC/I, Post Office Royal Brisbane Hospital Qld 4029 Ph: 61 7 3845 3794 Fax: 61 7 3845 3510 Email: Email: alejL@qimr.edu.au

Council Member of IUIS

Professor Chris Parish Ph: 61 2 6125 2604 Fax: 61 2 6125 2595 Email: christopher.parish@anu.edu.au

Honorary Archivist & Webmaster:

Dr Judith Greer Ph: 61 7 3346 6018 Email: j.greer@uq.edu.au

Administrative Correspondence

Ms Judi Anderson ASI Inc. Secretariat PO Box 7108 Upper Ferntree Gully Vic 3156 Ph: 61 3 9756 0128 Fax: 61 3 9753 6372 Email: asi@21century.com.au

Contact for Tasmania

Dr Greg Woods Tel: 61 3 6226 4830 Fax: 61 3 6226 4833 Email: g.m.woods@utas.edu.au

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@ug.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 indeed a bumper issue. Maybe we're on the way to rivaling Beijing. And we have a great story to lead this issue. Chris Parish, Editor in Chief of *Immunology and Cell Biology*, surely has the Jamaican touch. Does he have golden shoes? A 'high five' to him for pushing the Impact Factor through the '3' barrier.

But there remains plenty to be concerned about. Alan Baxter's "Call to Arms (Part 3)" is a timely reminder that all is not well in the operation of the major grant funding body in Australia. This is a source of particular anguish for those dependent on 'soft money', for their livelihood is at stake. They want a fair, rational and efficient appraisal of their science and yet, as the liberal quotations from individuals tell, the story is really very different. This article should be read by those at the top.

This newsletter also introduces a new column to help us all come to grips with legal issues relating to research findings. We hope this will become a regular feature. The article in this newsletter provides some much-needed information on the distinction between inventors and authors.

Finally, a bit of ASI pre-history. Barbara Heslop gives pause for thought with a delightful reminiscence of a 1988 conference (on the alloantigenic systems in the rat) in the face of an unexpected military coup! But nothing should be taken from the juxtaposition of this article with the speaker profiles for what promises to be an exhilarating ASI Annual Meeting in Canberra in December.

Margaret Baird

The ASI Visiting Speaker Program Streamlined

We are interested in increasing the number of international speakers invited to tour Australia within the ASI-Visiting Speaker Program (ASI-VSP). For this purpose we have introduced two main changes in order to facilitate the process of nomination of speakers.

- There is no need for the ASI member to obtain an "in principle" agreement from the potential invite before proposing their name to the Council
- The Executive will make decisions on candidates proposed, at anytime of the year

The detailed steps on the new process are as follows:

- 1. Member who wants a speaker chooses person, makes brief argument. A halfpage description of the contribution of person to the field, a list of recent major publications and a timeframe of the visit.
- Member approaches Visiting Speakers co-ordinator, who finds two (in the case of Sponsored), or three (in the case of Invited) other branches in different cities who sign on as hosts in those cities.
- 3. Visiting Speakers co-ordinator submits application to Executive, with details of speaker and other hosts.
- 4. Executive approves (or not) them as they come in (this is done by email).
- 5. Member gets OK and invites speaker including a cover letter with the details of the offer.
- 6. Member provides list of cities that have agreed (which speaker encouraged to present at) plus list of other venues should speaker choose additional cities (they can swap if they want, as long as they do the requisite number).
- 7. Speaker must take up offer with one year of approval.

Terms of offer

ASI will cover a maximum of A\$5,000 for the category (**a**) and A\$2,000 for category (**b**) to cover refundable <u>economy</u> airfares, transportation within the home country and appropriate travel insurance. In addition, every hosting branch will receive A\$150/night, to a maximal of three nights required for the ASI visit. The hosting member (branch) will be responsible for procuring funding to cover any additional expenses.

Specific descriptors

- (a) ASI Visiting Speaker
- Nominations can be made by any ASI member willing to host and co-ordinate the visit
- They are made by email to the co-ordinator and include a brief justification (short CV/major publications)and a timeframe of the visit, at any time
- Speaker must be visiting four or more cities, including two of Perth, Adelaide, Hobart, Brisbane, any NZ city
- Speaker must not have been supported in past three years as an ASI visitor

(b) ASI Sponsored Speaker

Nominations can be made by any ASI member willing to host and co-ordinate the visit

- Nominations will be addressed to the ASI Visiting Speaker coordinator at any time. He/she will seek interest in the proposed speaker from the branches and will present the information to the Executive who will make decisions depending on budgetary constraints
- Preference will be given to speakers visiting three or more cities/centres.

 \geq

ASI Secretariat PO Box 7108, Upper Ferntree Gully,Vic. 3156 Australia Tel: +61 3 9756 0128 Fax: +61 3 9753 6372 Email: asi@21century.com.au Office hours: 8.30am - 4.30pm

A New Special Interest Group: Infection and Immunity

Like a phoenix rising from the ashes, immunology has been stunned by the recent re-emergence of innate immunity as a force in immunology. The discovery of a family of pattern recognition receptor constituting the Toll-like receptors (TLRs), RIG-like helicases (RLHs) and NOD-LRR-like receptors (NLRs) has led to a re-evaluation of innate immunity. From humble beginnings as a nonspecific, generic response mechanism to pathogen threat, the discovery of TLRs has led to the discovery of a highly evolved specific response mechanism to both pathogen and self antigens that, heaven forbid matures the adaptive immune system. Some may say the little brother has grown up.

Over 10,000 publications in the decade since their discovery alone stands testament to their incredible influence on our understanding of immunity. The maturation of adaptive immunity, coupled with dysregulation of PRR responses and autoimmune disease has also broadened the scope and appeal of this research field on immunology.

Given the broad implications of this field, and its appeal to a wide range of immunologists, we have recently formed a new Special Interest Group within ASI which will hopefully appeal, and give a voice to the multitude of researchers that have an interest in Infection and Immunity. The Infection and Immunity SIG hopes to fill that void at the moment of host-pathogen interactions and how these responses impact on the host, the dysregulation of which can lead to clinical disease. As convener of both the Australian TLR network, with its associated conference TLROZ, and now the Infection and Immunity SIG, I see both groups complementing one another; assisting members in promoting research, facilitating collaborations and a contact point for information and reagents both within ASI and also for the broader research community.

As a means of introduction to the wider ASI community, we have undertaken to help organize a session of the upcoming ASI2008 conference in Canberra and would welcome suggestions from interested people as to themes or speaker suggestions for the meeting. Hopefully in the future we will organize a SIG symposia prior to the ASI meeting and possibly, smaller, focused meetings during the year.

As a new SIG, we welcome suggestions, input and feedback to ensure Infection and Immunity is representative of what ASI members want in a focused SIG. We also need to form a committee to organize and represent the SIG members. Therefore I'd also like to hear from those who may be interested in serving on a committee, hopefully we will be able to get representation from all states/NZ.

For those interested in participating in this SIG, please forward your email to: <u>Ashley.</u> <u>Mansell@med.monash.edu.au</u> for inclusion in a mailing list.

Ashley Mansell

ICB Impact Factor Soars, cont.

committees now emphasising the importance of publishing your research in high impact journals, it is in your interest to consider *ICB* as the journal in which to publish your work.

If you don't have a research paper to submit you can:

- ↔ Write a theoretical article for *ICB*;
- Suggest a topic for a Special Feature in *ICB*, with your lab contributing one of the papers;
- Write a topical review for *ICB*. In particular, I am very willing to consider the publication of reviews based on Literature Surveys prepared for PhD theses.

I look forward to receiving high quality manuscripts from many of you in the near future.

ICB Publication of the Year Award – \$1,000 Waiting to be Won!!

As many of you are probably aware, each year *Immunology and Cell Biology* offers an *ICB* Publication of the Year Award. The eligibility requirements for the award are quite simple. The first author of any Original Article, Outstanding Observation Article, Theoretical Article or Brief Communication published in *ICB* is eligible providing they are a financial member of ASI by April of the year in which the article is published. The award consists of an AU\$1,000 scholarship provided by The Nature Publishing Group.

Unfortunately this year *ICB* is unable to make the award because of there were no eligible first authors on any of the papers published in the journal in 2007. This is despite over 20 of the papers published by *ICB* last year having first authors who clearly came from Australasian laboratories and would be expected to be ASI members. In order to ensure that this sorry state of affairs does not occur in 2008 *ICB* is changing the eligibility requirements of the award for 2008. First authors of published articles now have to be financial ASI members by October 31, 2008 (rather than April 1 as in previous years) in order to be eligible for the award. In short, if you are the first author of a paper that has already been published or is likely to be published in *ICB* in 2008, then become an ASI member and have a chance of winning \$1,000.

Could all ASI members please let their research colleagues know about this change, particularly those colleagues who are not members of ASI and recently had an article accepted for publication by *ICB*.

Christopher R Parish Editor-in-Chief Immunology and Cell Biology

HONORARY SECRETARY'S NEWS

Selection of venue to bid for the organization of the International **Congress of Immunology in 2016**

As announced at the 2007 Annual General Meeting in Sydney, a committee that included Alan Baxter, Richard Boyd, Lindsay Dent, Chris Parish and myself (as chair), visited the facilities in Brisbane and Melbourne during February to select the city that will bid for the organisation of the International Congress of Immunology in 2016. Following thorough discussions and consideration of the facilities and infrastructure offered by each city, the committee decided to recommend Melbourne as the bidding city. This recommendation was unanimously endorsed by the ASI Council in its mid-year meeting in May.

As chair of the selecting committee, I wish to emphasise that reaching a decision was very difficult. Both bids were very strong and presented with high professionalism by the venue management companies involved, and both were supported by strong endorsements and financial commitments from local government organizations and research institutes. The committee wishes to thank all the parties involved for their time and efforts and congratulate them for their excellent work.

The ASI Council elected me to chair an expanded committee to prepare the bid for the organisation of ICI 2016. This bid will be presented in 2010 during the next ICI in Kobe, Japan. I thank the Council and my fellow committee members for their confidence and support. Over the next two years we will work hard to try convince the council of the International Union of Immunological Societies that the ASI is prepared to organise a high-quality meeting in a world-class venue. We expect very strong competition from other locations, and we will require the support and commitment of the best immunologists the ASI has to offer to win this bid. I encourage all members to contact their local councillor to receive updates and to find out how you can help to bring the largest Immunology meeting in the world to our region.

International Travel Awards

The most recent offer for International Travel Awards, to travel in the second half of 2008, once again had an enthusiastic reception, and a large number of high-quality applications were submitted. The judges awarded six applications totalling \$18,000 Post graduate to the following ASI members:

Postdoctoral

Awards (2) \$3,000 each

- Justine Mintern University of Melbourne, Vic. - 10th International Symposium on Dendritic Cells, Kobe, Japan
- Kate Schroder

University of Queensland, Qld - 22nd Annual Meeting of the European Macrophage and Dendritic Cell Society, Brescia, Italy

Postgraduate

Awards (4) \$3,000 each

Stacey Harbour

University of Melbourne, Vic. - 8th International Workshop on Pathogenesis & Host Response in Helicobacter Infections, Helsingor, Denmark Sandro Prato

WEHI, Vic. - 10th International Symposium on Dendritic Cells, Kobe, Japan; and Recent Advances in Cancer Immunotherapy with an Emphasis on Vaccines, Athens, Greece

- Faruk Sacirbegovic PeterMacCallum Cancer Centre, Vic. - 4th International Conference on Gene Regulation in Lymphocyte Development, Rhodes, Greece; and Mini-symposium on Cell Shape and Polarity, Chicago, USA
- Helen Simkins MalaghanInstitute,NZ-GordonResearch Conference on Immunochemistry and Immunobiology, Oxford, UK.

The next round, to attend conferences in the first half of 2009, will be announced by email in September. The guidelines and application forms are posted on the ASI website (http:// www.immunology.org.au/awards.html), although these will be updated closer to the application date.

Special FIMSA 2008 International Travel Awards

The ASI offered a special round of International Travel Awards to attend the 4th Congress of the Federation of Immunology Societies of Asia-Oceania (FIMSA) 2008 in Taipei, Taiwan. The following ASI members received an award:

Post doctoral

John Miles, QIMR, Qld - \$3000 Yuekang Xu, WEHI, Vic. - \$3000

Helen McGuire, Garvan Institute, NSW - \$2000

- Santi Suryani, Garvan Institute, NSW - \$2000
- Alexis Vogelzang, Garvan Institute, NSW -\$3000

Student Bursaries

The next round of applications for Student Bursaries is to attend the 38th Annual Scientific Meeting in Canberra. Instructions to apply will soon be available on the ASI 2008 website (http://www.asi2008.org). Please note that the application deadline is the same as for abstract submission.

Elections to Council

Three positions on Council will be vacated this year: Regional Representatives for New South Wales and Queensland, and ASI Secretary. The term of these positions is three years. A call for nominations, information on the nominees and instructions to vote will be distributed to the membership by email in due course. It is anticipated the deadline for nominations will be September 26th and the polling period will be September 29th – October 17th.

> Jose Villadangos Honorary Secretary

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 cooperation.

PRESIDENT'S COLUMN

How to meet the famous

Council has recently re-visited the Visiting Speaker Program, which provides the resources to allow immunologists of international repute to travel between the Regional Branches, speaking at a number of locations throughout Australia and New Zealand. The program, which has been very successfully co-ordinated by Alejandro Lopez for over four years, has been strengthened by simplifying the process by which you may nominate a speaker, and to provide feedback from the Executive before you contact the proposed visitor. Please see Alejandro's column in this newsletter, and contact him (alejL@qimr.edu.au) or your Regional Councillor if you have any questions or suggestions.

How be the famous

The Society offers a number of travel awards of up to \$3,000 per recipient to support the attendance of productive students and postdoctoral fellows at international meetings. These are awarded twice a year on a competitive basis and while the details of eligibility, application procedure and assessment criteria are posted on the Society's website, a few general observations are probably appropriate.

The aim of these awards is to develop the careers of junior members, while enhancing the reputation of Australasian Immunology worldwide. As a generalisation, these awards are usually made to individuals who have published at least one scientific manuscript as first (or last) author. The impact of these papers and of the journals in which they were published is taken into consideration when ranking applicants. The level of travel support is reasonably generous and it is anticipated that the applicants will capitalise on this opportunity to visit other laboratories, and attend other workshops or training opportunities. This is an important component of the assessment of the awards and often makes all the difference in competitiveness. The enthusiastic support of the supervisor is also expected - and should be extracted - in a timely manner. Although not strictly a criterion, it is my observation that the assessment panel tend to expect to

recognise the supervisor's name through their contributions to the field and the Society.

From time-to-time the Society offers additional travel awards and recently advertised for submissions from students and postdocs interested in attending the fourth Federation of Immunological Societies of Asia-Oceania (FIMSA) Congress, which will be held in Taipei, Taiwan from 17–21 October, 2008. On this occasion, about half the applicants were successful.

The 38th Annual Scientific Meeting of the Society will be held 7-11 December 2008 at the National Convention Centre, Canberra, ACT. Guna Karupiah and the rest of the organising committee have made a fantastic effort to secure the premier venue in the ACT and develop a world-class program with outstanding invited speakers, including Stephen Galli, Marc Jenkins, Pam Ohashi, Jonathon Cebon, Dale Umetsu and Kathryn Wood. There will also be two satellite workshops this year, both running on 7th December-the Tumour Immunology Workshop and the Postgraduate Training Workshop. Early Member Registration expires September 19th, so please plan ahead.

The Society provides several Student Travel Bursaries to support attendance at the Annual Scientific Meeting. The success rate of applications for these awards is very high, largely a result of Council's desire to see as many students attend as possible. I strongly advise all eligible students to apply.

Call to Arms – Part 3

Over the last few Newsletters, I raised the issue of falling morale amongst mid-career immunologists (and biomedical scientists in general), provided evidence of a 30-year program of degradation of our employment conditions and remuneration, highlighted the plight of our postgraduate students living under the Henderson poverty line, and examined other aspects of employment conditions that have contributed to the current problem of undersupply of biomedical researchers. In this column, I wish to briefly touch on an issue that was raised in response to the last two newsletters, before I address the role of the National Health and Medical Research Council's (NHMRC) Project Grant Scheme.

I have received feedback through the membership on the issue of recurrent one year appointments. Some of the Society's members have been employed for as much as a decade on annual contracts. Many years ago, there was little point in institutions doing this; the concept of "de facto tenure" provided such people with much the same rights as those on ongoing or renewable contracts. The Howard government did much to change the industrial landscape, and on 29 April 2005, the Federal Government released new Higher Education Workplace Relations Requirements (HEWRRs) for Australian higher education institutions. To be eligible for an increase in funding under the Higher Education Support Act 2003, all higher education workplaces had to offer Australian Workplace Agreements (AWAs) to all staff by 31 August 2006. As a consequence, employment conditions now vary significantly from institution to institution, depending on the content of those individual agreements.

Most institutions wish to distinguish between short term and ongoing or tenured appointments, by providing better employment conditions for permanent staff. The aim is to establish a fruitful and stable relationship between employee and institution, providing a measure of security for both. The way this distinction is handled varies between institutions. For example, the University of Western Australia (UWA) only fulfils the Superannuation Guarantee employer contribution of 9% of salary for fixed term employees with a contract term less than two years, whereas full-time and part-time employees are offered a 17% employer superannuation contribution. The problem with an arrangement like this is that it encourages unscrupulous managers to repeatedly employ some individuals on contracts shorter than two years in order to reduce the superannuation payments agreed to by the host institution. This is generally regarded as being contrary to good HR practices. At my own institution, for example, employees on fixed term appointments who have been employed under contracts for periods of less than two years are entitled to full employer superannuation contributions from the commencement of a contract that extends their total service to two years or more. If you find that you have been employed under a series of short term contracts and that this has affected your employment conditions, you should raise the issue with your National Tertiary Education Union (NTEU) representative before the next round of award negotiations. You can access documentation of your employment rights and conditions on http://www.nteu. org.au/rights/agreements.

In discussing the NHMRC, I can not pretend that the things I have to say have any particular relevance to our members in the New Zealand branch. I am sorry for this; I can only hope that my comments encourage a similar appraisal of the Health Research Council of New Zealand.

In addition to being the premier medical research funding body in Australia, the NHMRC plays a number of important roles, particularly in providing Government and the community balanced advice on public health issues. Usually it gets this spectacularly right, providing a model for rational health planning, as it did in the prion scare in the 1990s. The NHMRC supports medical research through infrastructure and enabling grants, program grants, project grants, strategic funding, fellowships and scholarships. Its total annual expenditure is about \$500 million - just under 8% of total Australian Government science and innovation funding - over 40% of which is spent in Victoria.

The NHMRC really aims to fund only the best research in the field; 40% of universities have no NHMRC funding at all. As a consequence, a track record of NHMRC funding strengthens applications for other types of support – professional, institutional and financial. It therefore plays a critical role in career development of our Australian members, and it is essential that the funding decisions made by the NHMRC committees and panels are as fair and as accurate as possible.

In this column, I am largely restricting my comments to the Project Scheme because it is the aspect of funding with which I have had the most experience and which has generated the most complaints to the Society. The Project Scheme is not a panacea for research funding, and in many ways is principally designed to support junior staff establishing their careers, senior staff in the twilight of their research careers, small institutions and more exploratory projects. Despite this, it does account for over 60% of all research support (i.e. not people support or infrastructure funding) by the Council.

In order to deal with a number of misconceptions at one time, I will describe a typical project grant round. This description does not apply to the most recent round, nor, in fact, any recent round, because the system is changed every year. But, each year, something a little like this happens: Grants are submitted in early March. Some time around April, the Grant Review Panel (GRP) Chairs are chosen, and they meet to allocate grants between the various panels. Although initial allocation is based on the computer codes entered by the applicants, some fields are very heavily oversubscribed, and redirect grants to other panels. For example, an immunogenetics grant has a good chance (about 50%) of being reviewed by the Genetics panel; an infection and immunity grant has about equal chances of being reviewed by the Immunology, Microbiology or Inflammation panels. Since an applicant doesn't even know which panel their grant was assessed by, second guessing the identities of spokespersons or reviewers is a fairly pointless exercise.

The Chairs then select panel members, based on the subjects covered by the grants they have to review. As a generalisation, a panel of 10 would change three or four members each year, trying to maintain a fair spread of geographical representation and including a reasonable number of women and at least one each of a more clinically oriented researcher and a relatively young investigator, and attempting to accommodate the recent outspoken critics. The GRP members make a huge contribution to the system. A grant round requires they read something like 70-100 grants and can speak sensibly to them. For perhaps 12-20 of these, they would be primary or secondary spokesperson and have a detailed knowledge of the grant. For various reasons, about half of the new members do not perform well. Some are not sufficiently diligent to read their grants carefully (or at all); some are too preoccupied with other concerns and some have agendas, prejudices or biases that make them relatively unsuitable. For all, the massive work load is a struggle, and it would be fair to say that only a very small proportion are completely happy with their contribution the first year they sit.

Panel members, having been allocated their grants around May, seek at least two

external reviewers per grant. These are either people with a general interest in the subject, or else specialists brought in to comment on areas of expertise that are not well represented on the panel. Again, quality reviewing does not come easily. The individual scores given by reviewers tend to reflect the qualities of the reviewer, more than those of the grant, so are given less consideration than the comments themselves. Personal, abusive and irrelevant comments are largely ignored - other than to key the spokesperson in to the biases inherent in the report. What is of most value to the GRP are comments about the techniques and approach. Can the applicants do what they say they will? If they can, will that address the hypothesis adequately? Although the NHMRC places a lot of emphasis on Significance and Innovation, these are really issues that are very much in the eye of the beholder than objective criteria. I think it is inappropriate to rank a project poorly because the subject does not fire my interest. Clearly, it interests someone, or they wouldn't have submitted it.

The applicants will then receive the external reviews and usually some comments and questions from the primary and secondary spokespeople. They will then have the opportunity to respond to these reviews. Many applicants do not take the rebuttal process seriously enough. It is possible for a well reasoned and clearly argued rebuttal to reverse a poor assessment. It is important to remember that for much of the panel, the rebuttal will be the last document relevant to the grant they read before meeting for assessment and ranking.

The GRP meet over a week to discuss grant ranking. The job of the Chair is to orchestrate the process, ensure the panel covers the work required at an appropriate rate, oversees issues of propriety, such as conflict of interest, and to assess the performance of the panel members. The Chair does not influence the outcome of a particular grant (although s/he will generally observe trends, such as the relatively harsh marking sometimes seen at the beginning of the week), and if he or she should step out of line with a suggestive comment, is generally howled down by the more senior members of the GRP, who also monitor the process. It is also possible for the Chair to be

disciplined by the secretariat, which in addition to a secretary, has placed independent observers in the room to report on fair play.

At the GRP meeting, the consideration of each grant progresses as follows. The Chair reads out the grant title, applicants and any previously declared conflicts of interest. Any other conflicts identified at that time are discussed, and those with a conflict leave the room. The primary spokesperson then provides a brief summary of the grant and then gives an assessment of its strengths and weaknesses. The secondary spokesperson would briefly comment further, emphasising any differences of opinion. After that, the grant is opened up for general discussion. In general, all the GRP members will have read at least the synopsis, reviews and rebuttal. A few have minds like steel traps and remember the whole of the documentation relevant to the grant, word for word. It is helpful to have at least one of these people on the panel.

During the discussion, the Chair ensures that comments remain focussed, pertinent and appropriate. Following the discussion, the grant is scored. The primary and secondary spokespeople announce their scores publicly, while the others complete a secret ballot form and are only required to state their score and justify it if their score differs markedly from those of the spokespeople. The average score is used as a mechanism to rank the grants, and to merge the results of one panel with those or all others. The GRP does not know exactly what the funding threshold will be, and as the majority of the grants assessed receive a score somewhere around the threshold, can only infrequently can predict the outcome for any applicant.

The strengths of the system are as follows: It is a peer review process that effectively deals with conflict of interest at the panel level; it is open to scrutiny by observers from the community and other disciplines; it is accessible, and as a generalisation, those who wish to contribute to the process may; it provides a right of reply, so that misconceptions and non-truths can be corrected; and it manages to harness major differences in approach, technique and knowledge to provide reasonably detailed, co-ordinated and robust advice to the Minister on research funding.

Perhaps its greatest strength is its ability to provide a structured mentoring system to develop the reviewing skills of biomedical research scientists in Australia. Postdocs asked to perform external reviews receive feedback from the GRP members (even if the only form it takes is the increased number of requests the following year!); new panel members quickly learn methods for keeping the details of each grant straight in their heads (or notes); more experienced panel members learn the ropes of chairing by observation, or from practice, when then Chair vacates the room due to a conflict of interest, allowing a panel member to act as Chair for a grant. This structured system provides a training in committee work second to none. I speak from experience when I say that an experienced NHMRC GRP panel member can chair an NIH granting panel entirely to the satisfaction of the NIH.

Why then, is there so much dissatisfaction with the system? Some of the issues relate to those I have discussed in previous columns: the tyranny of poorly functioning bureaucrats preying on time-poor and overloaded academics. Some of the problems are simply structural, and we need to understand them, in order to accept that they will always be present in any peer review system, no matter how good it is. Some of the problems result from decisions by the NHMRC that I believe were bad decisions, and have had serious consequences for the Project Grant Scheme and for the Council. In commenting on these problems, I will rely heavily on the correspondence I have received over the last two years from Society members, as well as a smaller number from scientists working in allied disciplines.

A common complaint about the NHMRC project scheme is that insufficient time is provided by the Council for academics to accommodate the wishes of the Council. For example:

"A request was made [to review a grant] on a Friday afternoon, with the report due the following Monday."

"Why does the process have to be so rushed at all stages when we submit grants in February and we receive final comments in November?"

"The amount of time allowed for the applicants

response is completely inadequate."

"Applicants do not get notified [of outcome] until late October or November so it offers little time for [them] to improve their chances next time."

"[Last year] we only had seven days for the [rebuttal] due to the late arrival of the assessments ... I think this [was] a clear disadvantage over other applicants who had the full 14 days for their reply."

"Given that the grants are submitted in early March and results aren't available until towards the end of the year, it is perplexing why both reviewers and applicants are given such small amounts of time to contribute to this process."

"Last year I received three requests [for reviews] within a day, all wanting my assessment within one week. Due to other commitments this was just not possible and I had to decline one application mainly based on time."

In cases when little time is provided for applicants to apply or respond to review, they often feel placed at a disadvantage; particularly so when the time available varies between applicants. Given the time constraints academics work under, this undermines any sense of fair play. Some people who do not feel that they have been offered an opportunity to portray their work at their best, have lost faith in the system. This problem is seriously compounded when a shortened deadline is excused with an economical use of the truth. This year, we were told:

"Applicants will be provided with up to seven working days to submit their responses to NHMRC (instead of the previous policy of seven calendar days in which to submit their responses)."

Unfortunately, the bracketed information was misleading – previously, two weeks were provided for rebuttals.

In cases when the NHMRC is requesting the input of academics, the short time spans provided are inappropriate at best, and in the eyes of many, just downright rude. Most academics have their teaching and travel commitments inked in 4–6 months in advance. Not surprisingly, requests for academics to travel interstate for granting meetings with a month or less notice are met with resistance. The response of the NHMRC to this is perhaps predictable: "Researchers who are currently receiving NHMRC funding are required to nominate. The Deed of Agreement ... obliges Institutions to use their best endeavours to facilitate compliance by Chief Investigators ..."

Given the large number of other bodies, committees and lone gun bureaucrats all parroting the same apocalyptic message, the failure of this tactic is understandable.

Similarly, short deadlines inhibit acceptance of external reviewing:

"The reason for [refusal to review] is obvious; they were given no date for submission just told that they had one week for return of the report. As they did not know when they would receive the grant, they could not plan ahead around their other commitments – especially travel."

Despite the very tight deadlines the NHMRC imposes on academics, those applicable to their own staff appear extraordinarily generous, yet surprisingly flexible:

"The NHMRC has a chronic inability to keep to deadlines. This includes not getting application forms out on time, not getting grants to reviewers etc. etc. This is independent of the scientists."

"It would be helpful to receive grants promptly after having accepted to review them, or hear whether a review is no longer required."

"This job was made much harder by ... inexplicable delays at the level of NHMRC in getting the final documentation to the panel members."

"External assessors did not receive grants quickly (several weeks from assessor accepting to getting grant). In fact, in some cases we found out that the external assessor did not receive it at all and it had to be sent by the spokesperson."

"We did not receive external assessor's reports for over half the grants from the secretary – we had to get them ourselves from the external assessor."

The issue is not just a lack of timeliness, but a lack of professionalism:

"[Direct contact of external reviewers] revealed that some nominated assessors had not been contacted [by the secretariat], some had not received grant applications and some had declined due to other commitments, but these had not been followed up for a replacement assessor ... some assessor reports had been submitted to the Secretariat and had been lost."

"Now, one accepts to do the review, hears nothing for a while, reminds them, gets some applications and not others, and is left wondering whether more will come or not."

"Other NHMRC errors, including mixing reports amongst my and others grants, no editing of inappropriately personal comments, etc."

"Dr [name deleted]'s grant review was sent to Dr [different name, deleted] by accident. I rang the NHMRC and they said that would send it again. They did. To Dr [different name, deleted] again."

"Precious time was lost contacting potential assessors to find that they were serving on other panels and therefore, were unavailable. We asked for a list [of] all panel members to avoid this, but were told that a list wouldn't be available ..."

The most consistent complaint I received about the NHMRC Project Grant Scheme was that the rules kept changing year to year:

"[They should] avoid the constant alteration of the peer review process. One year it is three external reviews, then no external reviews, then one review and now back to two reviews. All this in the 6-year period I have been in the system. Ridiculous!"

"I think the forms need to be standardised and not changed annually."

"Why the hell does the review system change every year? One year it is three external reviews, then two then one, then back up to three!"

"The GRP system was working well, but continues to be disrupted and eroded by major changes that typically seem to cause many more problems than they solve."

"NHMRC seems to change the method of review every year."

"Unfortunately, many of the good points of this system have been lost, due to major changes in the way the grant review process works from year to year."

"The playground shifts too frequently; every year in fact."

"People faithful to the system are really annoyed with all the changes ... Now those experienced people cant be bothered wasting their time."

One potential explanation for the constant changes is that the Project Scheme is under stress from two opposing structural forces. The first is that as Australia is a democracy, the processes applied by the Council must be open to feedback and revision. The second is that the individuals who provide such feedback are almost always those who did not receive funding. Regardless of how well the system operates, there will always be complaints, but now regardless of how badly it works, the Minister will receive a ranked list recommending funding. A major issue for the NHMRC is distinguishing between valid concerns and the purges of disaffected applicants.

Some of the complaints I received about the scheme make very specific accusations of cronyism, prejudice and bias. For example:

"The panels are to a large extent selfserving since the chairs of the panels have an undue influence in selecting panel members and hence only select 'yes' men or women who either share their biases or are too weak to stand up to more senior panel members. This bias then spreads out as the panel then select external reviewers again on the basis of their like mindedness. Thus there is no such thing as fair and independent review within the NHMRC context and to this extent it is the exact opposite of what happens within for example the NIH system from which the NHMRC could learn a lot."

Although this accusation was made by someone who has never worked on a GRP and so is not really in a position to know if the system is biased or not, he would no doubt claim that this is exactly the sort of thing I would say, being weak minded, or perhaps having shared biases. The problem is that any system that relies on training and mentorship to develop a skill set is prone to this sort of accusation regardless of whether it has any substance or not. In my view, the best way of dealing with it is to absorb the complaints. They were made by a senior, well funded investigator. If he is prepared to donate six to eight weeks of his time to the process, let him contribute and then specifically identify the bias where he sees it during a grant round. If his view remains unchanged, we could no longer attempt to dismiss his comments as the sour grapes of an unsuccessful applicant. It is, however, important that I make this point: the success or failure of one's own grant must not - can not - be the

standard by which an assessment system is judged. Instead, we must pay attention to the processes applied. If the process is fair, we should trust that the outcome is fair, even if painful.

I wish I could say that the reason the Council constantly changes its procedures is driven by criticisms received. Unfortunately, when I pursued the issue some years ago, the explanation I was given was astonishing. It is the view of the secretariat that if the grant review process remains unchanged, then individuals learn skills directly related to the format of the assessment. As a result, the process assesses the acquisition of these skills, rather than any underlying scientific ability. In order to prevent this, the Council aimed (and presumably still aims) not only to change the procedure ever year, but to keep key aspects of the application procedure secret for as long as possible. This astonishing tactic was described as "outgaming the game players". Now, while Game Theory is a perfectly innocent way of amusing oneself for a few hours, it was never meant to be taken seriously by anyone other than computer geeks and mathematicians. In case the secretariat hasn't noticed, the Prisoner's Dilemma bears no similarity to the actual handling of suspects and the procedures described have not yet been adopted by the police service.

In my opinion, the constant, directionless and unproductive changes in procedure each year do not remove unfair advantage for experienced applicants, but rather ensure it. Only the largest institutions can afford administrative support staff to carefully examine the ramifications of any changes and notify staff accordingly. Only the largest institutions will have enough academic staff on GRP or otherwise in a position to understand the implications of the changes and mentor colleagues appropriately. Certainly, of the many complaints I received on this issue, as a generalisation the personal concerns were voiced by junior staff, whereas concerns about its effect of the viability of the process were raised by more established staff. In addition to adding an unfortunate inequality, the simple fact is that the NHMRC secretariat is the least equipped to cope with constant changes. In my experience, not a single year passed without the secretariat making at least one very serious mistake involving procedure. On one occasion a mistake was made that was so damaging that the GRP had to re-assemble later in the year to complete the assessment round. This experience was echoed by those of others:

"The secretary sent us ... approximately 150 files as individual email attachments. This [creates] incredible work for otherwise busy people and basically shows contempt for our time. The secretary then went on stress leave and missed the review week."

"Issues with the administration of the process seem to happen every year, although the issues seem to differ."

In my experience, the members of the secretariat are well intentioned, and the few senior members are very effective administrators. There is, however, a practical limit to the amount of change a bureaucracy can cope with within a limited time frame. The problem is compounded by a large proportion of relatively junior staff, a failure to match increased numbers of applications with increased numbers of staff to process them, and a lack of appropriate training and mentoring before junior staff are thrown in the deep end of trying to coordinate a GRP's workload. Even the scariest days of surgical training applied the rule of "see one, do one, teach one", yet the NHMRC secretariat doesn't even have the benefit of seeing a grant round before it is expected to co-ordinate one.

In actual practice, the effects of the yearly changes are even worse than just causing confusion. In some cases, they were ill conceived, ill executed and appear to have seriously impeded the ability to provide a fair and timely assessment of grants. For example, this year, the duty of nominating external reviewers was removed from GRP members and given to a shadow committee of supposedly secret uber-GRP. The uber-GRP was not to contact reviewers directly, but via the secretariat, which was not supposed to reveal whether the proposed reviewers were actually available or not. Now, clearly, nominating as external reviewer a member of the GRP is pointless as they could not accept the nomination, but the secretariat would not provide a list of the GRP members. An additional problem was that, as potential reviewers were contacted by computer generated form emails instead of by a professional colleague they hoped would think well of them, the rejection rate was much higher that previous years.

As the uber-GRP had no way of knowing whether the suggested reviewer did a good job (not being involved in consideration of the reviewer's reports), there was a tendency to avoid relatively junior reviewers, which effectively locked bright young scientists out of review mentoring – something that used to be a strength of the system.

Clearly, the system functioned poorly. I was asked to review a grant on which I was an applicant (declined). Others had similar problems:

"I think that the major issue confronting the system at the moment was highlighted by the offer of a grant for review to a 2nd year PhD student in the institute! If there are no quality reviews, there can be no sense of fair play!"

"Removing responsibility for selecting reviewers from SPs also seems to suggest that spokespersons are not looking out for the applicant's best interest, and that they can't be trusted with this job. This change effectively puts one or two people in a position where they influence the entire field of grants."

"The person who chooses the reviewer should wear the responsibility for the quality of the review – that way they can learn to distinguish good from bad reviewers."

"Having already acted as an external review selector for almost 200 grants, I was subsequently sent individual grants (which I had selected reviewers for) to review. This places far too much influence in the hands of one individual."

"Obviously [the external review selector] could not be expert in all areas within the field, so many reviewer choices will not be ideal, and SPs (who also won't necessarily be familiar with the field of the application) will have to manage with whatever they are dealt."

"The current system of assigning assessors is not working optimally. Previously, when I have served on GRPs, the chairs have placed great emphasis on the selected assessors coming from different states. In this round another member of our research group and I received the same project application to review."

Similar to the problem of the person responsible for selection of external reviewers not having to suffer (or prosper under) the consequences of their actions, the selection of panel members was removed from the Chair. Instead, it was performed by an ober-uber-GRP committee of one. I believe that it is probably not possible for a single individual to simultaneously consider all the representation issues required (geographical, institutional, sex and seniority) as well as have sufficient personal contacts to be able to convince enough suitable people to assemble a GRP of 10 or more. I believe that critical aspects of the NHMRC's responsibilities as an organ of a democracy were compromised by this step and I am not alone in this view:

"The chair of the GRP has to bear the consequences of having an imbalanced panel. An external selector does not. Therefore, I think the chair should have a major input into the GRP composition."

"Previously the Chair had this responsibility, for their own panel, and there were many excellent chairs who took it very seriously ... People who came on to panels for the first time ... went away saying how well the system worked, and what lengths the panels went to be fair. "

"We are told that 'there were concerns' about the 'old boys network' but these are all vague and unsubstantiated rumours – noone has come forward publicly to state what their personal concerns were. There were probably also poorly performing chairs and panels, but these should have been fixed, instead of destroying a system that worked extremely well."

Even from a purely theoretical level, having ghost members of a committee (which is essentially what the uber-GRP and oberuber-GRP are) destroys the structure and therefore the operation of the committee. These people act without feedback from other panel members, without inducements to consider otherwise forgotten factors and without encouragement for a good job or chastisement for a bad one. Their decisions are passed down from on high without justification or explanation, and have been met, in many cases, with hostility. Rightly so.

Other damaging changes were removing the rebuttal process (in 2006) and introducing a primary cull (in 2005) prior to applications being sent out for review.

Perhaps one of the most damaging decisions was taken last year, when it was decided that an attempt would be made to replace almost the entire panel with new members in a single year. This decision was compounded by implying to the members of previous years' panels that the step was taken to eliminate entrenched cronyism. Naturally, the previous years' panel members were insulted, but nevertheless relieved to have avoided a task that would remove them from productive research for the best part of two months of the year. What had not been considered, was that in the 1990s the NHMRC had almost completely stopped funding career development awards (perhaps half a dozen RD Wright awards were funded in 1996) and eliminated the Research Fellow level of appointment, decimating the training of researchers at the time. Consequently, there are relatively few people of an appropriate level of seniority to contribute as GRP panel members. This problem is compounded by the increasing numbers of grants submitted; a diminishing pool of suitable reviewers is expected to cope with an ever increasing workload. The fact was that most of the individuals who had been told that they were no longer regarded as suitable for the panel had to be invited back on. In many cases repeatedly and in few cases significant pressure was bought to bear. Nevertheless, most steadfastly refused to contribute further to the GRP:

"It is ridiculous, unworkable and clearly irritating the life out of most of the people involved. I've never seen such widespread dummy-spitting from usually tolerant individuals."

"And as this process runs on and on, I fear that our patience is running out."

"Appointing a large number of nonexperienced panel members in 2007 ... was counter-productive, because much valuable experience was lost. This was also quite insulting for GRP members who had worked very hard and conscientiously in previous years and were willing to participate again but were not invited."

"Unfortunately [very junior GRP members] carry a baggage of career issues to these meetings which makes them less than objective."

"Now those experienced people can't be bothered wasting their time."

Remarkably, despite difficulties in recruiting panel members, some experienced, well funded researchers are disappointed that they have not been asked to serve:

"Guess what! Almost [time deleted] years after moving to Australia I will be on a GRP this year for the FIRST TIME! Youhou!" "In my view as an outsider not permitted to

serve on NHMRC panels ..."

"I was never even on a project panel ... for decades."

One simple explanation for not being invited to assist on a GRP is that most nominations are made by the institution. If your research office does not nominate you, you are relatively unlikely to be asked. There is no need to be shy! If you have a reasonable funding track record and you have carried a fair external granting load for the system over the last few years (indicating you are capable of incisive review), then you are an ideal candidate. Go ahead. Make my day and nominate yourself!

At this particular time, there are probably few contributions one can make to the discipline as important as providing input to the NHMRC peer review system – both as a reviewer or panel member and as a participant in democracy. The mismanagement of research manpower in the 1990s was so severe that the system is now on the brink of collapse. In addition, largely through ill-treatment of academics, refusals to review or participate in review panels is at an all-time high. Unless we rally together to ensure a fair and robust peer review process, it will fail, and as a consequence we stand to lose funding for investigatordriven research. For science without peer review is science by edict.

I can probably sum up the situation best with the words of a colleague: "I think the GRP system was working well, but continues to be disrupted and eroded by major changes that typically seem to cause many more problems than they solve. As a panel member, I was never consulted about any of these changes - they were simply announced. It is also my understanding that panel chairs were not given an opportunity to comment prior to these changes being instigated. A greater effort to discuss proposed changes with existing/prior GRP members and chairs would certainly help avoid many of the problems that have occurred over recent years."

Clearly the system requires tweaking from year to year, to iron out bugs and improve the quality of the process. However, I think it is also clear that many of the changes implemented are major revisions, many so disastrous that they are immediately reversed the following year. The Council seems to reel from one calamity to the next emergency, providing little evidence of intelligent design, and inspiring the now rampant rumour that the Project Grant Scheme is designed by a different work experience student each year.

In my opinion, the practicality of each proposed change should be considered carefully by at least one experienced member of the NHMRC secretariat and a committee of academics. Members of this committee should be experienced ex-chairs of outstanding calibre. The meeting should be short because the agenda should be short. The number and scale of changes needs to be reduced – at least to a level that the secretariat can cope with and is not wasteful of the time of applicants and the panel members.

A Bloody Good Cause

Can I remind you of the importance of donating blood? Next year will be the Year of the Blood Donor and Australia will host World Blood Donor Day in June 2009. With recent infection control measures, the number of potential donors is falling and some blood types are scarce in some areas. The Australian Red Cross plays an important role for Society members by acting as a source of clinical and control samples, as well as by supplying over 350 tonnes of plasma to CSL annually for extraction of blood products; CSL, of course, is a major supporter of the Society. Please support the people who support us!

Opportunities

A revised version of "A Call to Arms – Part Three" (above) will be submitted to Professor Elim Papidakis, the Executive Director of Research Investment at the NHMRC later in the year. You still have an opportunity to contribute to this review if you wish. Please feel free to send me any constructive criticisms and suggestions you would like me to pass on. No comments will be directly quoted and all sources will be de-identified. Please avoid confidentiality issues by NOT referring to particular individuals or grants by name or identifier. Kindly use the Subject "NHMRC PROJECT SCHEME" in any emails to me on this subject.

The Honorary Secretary position, which has been so ably filled by Jose Villadangos for the last three years, will become vacant at the end of this year. This position offers an opportunity to make a major contribution to the Society and win the undying gratitude of the President. If you are interested, please nominate for the forthcoming elections. 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



Blood donor - ASI President Alan Baxter



Sustaining Membership

ASI Inc acknowledges the support of the following sustaining members:

 Freehills Patent & Trade Mark Attorneys
 Lomar Diagnostics

Jomar Diagnostics

The ASI Visiting Speaker Program

Planned visits for 2008

October

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

Wellington 5–7 Brisbane 7–9 Melbourne 10–14 Sydney 14–17 Co-ordinated by Stephen Turner (sjturn@unimelb.edu.au)

October/November

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

Canberra 20–21 October Adelaide 21–22 October Perth 23 October – November 2 Sydney November 4–5 Co-ordinated by Guna Karupiah (Guna.Karupiah@anu.edu.au)

With support from the Australian Centre for Vaccine Development (ACVD, Brisbane), we have now secured the visit of Professor Hans-Georg Rammensee to Australia in November.

Prof. Hans-Georg Rammensee from the Department of Immunology at the University of Tübingen is arguably the most influential immunologist in the development of our current understanding of the MHC- peptide complex formation. His contributions in the early '90s paved the way to the field of epitope prediction and vaccine design currently applied to all fields of immunology. His research established the motifs required for binding to MHC class I and II which were to become the key instrument in epitope prediction and subunit vaccine development, available from the SYFPEITHI database.

His current research interest continues to dissect the properties of epitopes presented by MHC class I and II molecules with a specific emphasis on clinical applications.

With over 300 papers published his seminal papers on epitope prediction count amongst those more often cited in immunology. Here is a selection of the publications of his group:



Selected Publications since 2005

Rock, F., K. P. Hadeler, H. G. Rammensee, and P. Overath. 2007. Quantitative analysis of mouse urine volatiles: in search of MHC-dependent differences. *PLoS ONE* 2:e429.

Rammensee, H. G. 2006. Some considerations on the use of peptides and mRNA for therapeutic vaccination against cancer. *Immunol Cell Biol* 84:290.

Rammensee, H. G. 2006. Peptides made to order. *Immunity* 25:693.

Pascolo, S., F. Ginhoux, N. Laham, S. Walter, O. Schoor, J. Probst, P. Rohrlich, F. Obermayr, P. Fisch, O. Danos, R. Ehrlich, F. A. Lemonnier, and H. G. Rammensee. 2005. The non-classical HLA class I molecule HFE does not influence the NK-like activity contained in fresh human PBMCs and does not interact with NK cells. *Int Immunol* 17:117-122.

Dengjel, J., O. Schoor, R. Fischer, M. Reich, M. Kraus, M. Muller, K. Kreymborg, F. Altenberend, J. Brandenburg, H. Kalbacher, R. Brock, C. Driessen, H. G. Rammensee, and S. Stevanovic. 2005. Autophagy promotes MHC class II presentation of peptides from intracellular source proteins. *Proc Natl Acad Sci U S A* 102:7922.

Itinerary for his visit (November): Brisbane 20 & 21 Wellington 24 Melbourne 25 Adelaide 26

Co-ordinated by J Alejandro López (alejL@qimr.edu.au).

For further details, please visit our website (<u>http://www.immunology.org.au/vsp.html</u>).

World Day of Immunology, Darwin

World Day of Immunology was celebrated for the first time in the Northern Territory this year. Tonia Woodberry, Christabelle Darcy and Annette Dougall from the Menzies School of Health Research in Darwin decided on an informal and interactive day. So in tropical Darwin style, they set up a stall at Parap markets on a sunny Saturday morning. They talked about how the immune system works and challenged kids to some tricky immunology puzzles. The stall also had pamphlets about the immune system, posters about scabies, leishmania and malaria; and a laptop playing groovy scientific animations. Visitors to the stall asked questions such as "What is scabies?" "Why don't we have malaria in Australia?" and "Why is blood red?" The day was a great opportunity to get adults and children interested in immunology and to remind people about the importance of health research.





ASI Councillors' News

N.Z. News

NZ ASI Meeting 2008

I am pleased to report that the NZ ASI meeting (Wellington, June 5-6), supported by the University of Auckland, the University of Otago and the Malaghan Institute, was a great success. Although numbers were slightly down from 2007, the meeting was well attended, and the invited keynote speakers (Marc Jenkins, Bernadette Saunders and Stuart Tangye) did a tremendous job with excellent presentations and insightful contributions throughout the meeting. Marc wowed the audience with his ability to detect extremely low-frequency CD4+ T cells using class II tetramers with a bead enrichment step. This technique has enabled tracking and analysis of very low numbers of Th1 memory cells after bacterial infection. Bernadette gave a fantastic presentation of her model of the role of membrane-bound and soluble TNF and lymphotoxin-alpha on inflammation and granuloma formation in response to mycobacterial infection, and the meeting got off to a great start with Stuart speaking on the effect of STAT3 deficiency on T and B cell differentiation. Thanks to Jacquie Harper who chaired the meeting, our sponsors, and the many others who helped the meeting run so smoothly.

One of the most fun aspects of the NZ ASI meeting is the student speaker competition. Each year the students never fail to impress, and the judges Grant Munro, Merilyn Hibma and Janine Duckworth had a difficult job deciding a winner from the 16 excellent students who participated. A special congratulations to Diane Sika-Paotonu, winner of the Buck Travel Award for best student presentation, and runners-up Lisa Goldsack and Willy-John Martin.

Medical Sciences Congress, Queenstown 2008

Immunet members will combine with researchers from other disciplines in the forthcoming Medical Sciences Congress in Queenstown, 24-28 November. The philosophy of the meeting is that each of the contributing societies will host their own sessions, with joint symposia and plenary lectures. Between sessions, all delegates will be encouraged to come together for refreshments, allowing maximum opportunity for interdisciplinary discussions and networking.

The conference will focus on the latest breakthroughs in the fields of bioimaging, inflammatory bowel disease and gut permeability, neuroendocrinology, cardiovascular monitoring, and muscle wasting in addition to more general aspects of physiology, endocrinology, immunology and anaesthesia research. Paul Coussens, the director of the Centre for Animal Functional Genomics at Michigan State University, and Stephen Riordan from the University of Sydney will be the Immunet-sponsored guests.

NZ ASI 2009

We are already looking ahead to next year's meeting, and would appreciate suggestions from our members for invited speakers from Australia (2) and beyond (1). Please email: immunet@malaghan.org.nz

Suggestions for a new name for the meeting included: ICoNZ–Immunology Conference of NZ; SKI–Society of Kiwi Immunology; KIS – Kiwi Immunology Society; IGA – Immunology Group of Aotearoa; IONZ – Immunology Organisation of NZ; INZ – Immunology NZ and SINZ – Society of Immunology NZ. No decision was reached on a name change so we may put it to the vote at the next meeting.

International Day of Immunology 2009

I'd like to encourage NZ members to start thinking about planning for the International Day of Immunology 2009 – ideally it would be good to have volunteers from each main centre. Funding support is available for events that will help promote public awareness so please email <u>immunet@malaghan.org.nz</u> for more information and ideas.

> Jo Kirman Councillor

Victorian News



Immunology Master Class

The inaugural IgV Immunology Master Class was on Tuesday, 22nd July at the University of Melbourne. The attendance was tremendous with over 200 people on the day. They were treated to fantastic talks by Richard Boyd, Bill Heath, Sharon Lewin, Mark Smyth, David Tarlinton, Jose Villadangos and Nigel Waterhouse. They covered a wide range of topics from stem cell biology to how to time-lapse microscopy to visualise cytotoxic T cell killing of target cells. The feedback has been great and I would like to take this opportunity to congratulate Stuart Berzins for initiating and organising the event. He did a wonderful job in bringing it together. Also thanks to other members of the committee who supported Stuart including Andrew Lew, David Tarlinton and Rose Ffrench. Given the success of this year's event, the Master Class is sure to be repeated again next year.

IgV-Miltenyi Winter Seminar

The IgV-Miltenyi Winter Seminar is to be held on Wednesday, 27th August at the Walter and Eliza Hall Institute. This year's speaker is Professor Michael Good, from The Queensland Institute of Medical Research. The title of his talk is "Malaria parasite escape mechanisms and strategies to induce immunity."

IgV Retreat

Finally, don't forget the IgV retreat in the Yarra Valley, Sunday October 12 – Tuesday October 14. Details about speakers and registration will be available soon.

Stephen Turner Councillor

ICB Online Manuscript Submission

Online manuscript submission for Immunology and Cell Biology now available via: http://mc.manuscriptcentral.com/icb

All manuscript submissions to ICB should in future be made online via this web site to speed up the reviewing and acceptance of manuscripts.

> Chris Parish, Editor-in-Chief Immunology and Cell Biology

W.A. News

The WA ASI committee has now met on a number of occasions and we have organised several local events. Shelley Stone from the Anaphylaxis and Immunotherapy Research Group with the Emergency Medicine Research Unit at Fremantle Hospital gave her talk on 'Mediators of human anaphylaxis', and Stuart Tangye from the Immunology & Inflammation Group at the Garvan Institute of Medical Research gave his talk on the 'Requirement for STAT3 in human T and B cell differentiation as revealed by the hyper-IgE syndrome'. Both were well received.

Our event for the Global Day of Immunology (DoI) was held in collaboration with ASMR and SciTech on 3rd June. This event was 'Science in the cinema' and was based on similar events held by ASMR committees in other States. We targeted high school students and members of the general public. SciTech generously offered the planetarium as the venue. The movie we chose was Young Frankenstein for which we had to obtain copyright approval. On the day of the event, SciTech also provided three staff free of charge; one projectionist and two assistants. We provided pizza and drinks before the movie, and midway through we stopped the movie and conducted a scientific discussion with a panel. The invited panel members were Fiona Wood (plastic surgeon and an Australian of the Year who heads the Burns Units at Royal Perth and PMH), Phillipa Lamont (a neurologist and neurogeneticist who also works at Royal Perth and PMH), Giles Plant (Director of Spinal Cord Research Lab at UWA) and Nick Acquarola (a Medical Scientist in Clinical Immunology at Royal Perth Hospital). Around 70 high school children and their teachers or parents attended, and the pizza was really popular! During the panel discussion, the kids proved to be highly motivated and asked numerous in-depth questions. We could have gone on for longer than the designated 45 minutes. The panel members engaged beautifully with the kids and a lively and entertaining discussion ensued. Ice-creams were offered as the attendees left. We have received several letters from the teachers who attended. All were very positive, wanted us to do another one and offered to help if we did.

The major event we are organising for 2008 is a local immunology meeting that we have agreed to call the Perth Immunology Group meeting. We hope that this inaugural meeting will bring together work in WA and create network/collaborative opportunities between members of the local immunology community. The venue will be the Flying Squadron Yacht Club, the date is 9 & 10 October, and invited speakers are our national ASI President, Alan Baxter (James Cook University), as well Ray Steptoe (Diamantina Institute and University of Queensland) and Ashley Mansell (Monash University).

> Delia Nelson Councillor

S.A./N.T. News

We are looking forward to two outstanding international guests visiting Adelaide in the near future as part of the ASI sponsored speaker programs. Prof Wayne Yokoyama, a Howard Hughes Investigator, at the end of October and Prof Hans-Georg Rammensee from the University of Tubingen, Germany at the end of November. It's been a few months between ASI sponsored speakers coming to Adelaide and we're delighted that the weather is warming up and that the vines are ready for some great wine tasting with our guests.

We are extremely excited about the 4th Adelaide Immunology Retreat (AIR) which will be held 12-13 September 2008 at Lady Links Bay Grand Mecure in Southern community of Normanville. AIR focuses mainly on students and young scientists, but we are delighted to see some of the more senior names out of the local immunology community on the delegate list as well for the 1¹/₂ day live-in retreat which will incorporate lots of scientific and social activities. Students



ADELAIDE IMMUNOLOGY RETREAT 2008



will be able to present their work and we will have Best Presentation awards for both Honours and PhD students. In fact, for best PhD student presentation we will award registration and flights for the Annual ASI Scientific Meeting to be held in Canberra later this year. Past retreats indicate that this is a great opportunity for budding immunologists of SA and NT to network with their peers and high profile immunologists and enjoy the local attractions (usually including local wildlife and wine tasting). Finally, we are delighted with AIR's continuing popularity which is now an annual event and give thanks to the local student (and not so student) members who have helped make organising AIR-4 easy and fun (thanks go to Sarah Haylock-Jacobs, 'Kiwi' Wai Yan Sun and Plinio Hurtado).

See you at AIR, a seminar, or the annual meeting!

Claudine Bonder Councillor

Queensland News

At the time of writing, the Brisbane Immunology Group Annual Retreat is imminent (August 21/22). This year, Charles Mackay (Garvan Institute) will present the Postgraduate Plenary Lecture, and the Jonathan Sprent Oration will be delivered by Ken Shortman (WEHI). Other invited speakers include Robyn Starr (St Vincent's Institute, Melbourne) and Stuart Tangye (Garvan Institute). President Alan Baxter will find out what it means to be a "BIG Icon" when he delivers the final lecture of the meeting. As usual, the location (this year Marcoola Beach on the Sunshine Coast) will provide plenty for delegates to do out of sessions. ASI supports this meeting strongly, for example through discounts for ASI members - usually a large proportion of delegates.

This year, Brisbane hosts the Australian Health and Medical Research Congress, at the Convention Centre, from 16 - 21November (www.ahmrccongress.org. au). The Congress has many sessions of interest to immunologists, and a stellar line up of international and national speakers. ASI will hold a session concentrating on "Tolerance, Anergy and Regulation" on Wednesday, November 19 from 3:30 - 5:30pm (just before the Carnavale!). The speakers will be: Diane Mathis, Harvard University (The Molecular Mechanism of Aire), Pierre van der Bruggen, Ludwig Institute for Cancer Research, Belgium (Anergy in tumor-infiltrating lymphocytes), Barbara Fazekas de St Groth, Centenary Institute of Cancer Medicine and Cell Biology, and Ray Steptoe, Diamantina Institute (Steady-state DC expressing cognate antigen terminate memory CD8+ T-cell responses).

> Christopher Schmidt Councillor

ASI2008 – Invited Australian Speakers

- Gabrielle Belz, The Walter and Eliza Hall Institute of Medical Research
- Warwick Britton, Head, Disciplines of Medicine, Infectious Diseases & Immunology, Central Clinical School, The University of Sydney
- Frank Carbone, Department of Microbiology and Immunology, The University of Melbourne
- Jonathon Cebon, Ludwig Institute for Cancer Research
- Ian Frazer, Diamantina Institute for Cancer Immunology and Metabolic Medicine, The University of Queensland
- · Michael Good, Director, Queensland Institute of Medical Research
- Graham Le Gros, Director of Research, Malaghan Institute of Medical Research, New Zealand
- Ashley Mansell, Centre for Functional Genomics and Human Disease, Monash Institute of Medical Research Faculty of Medicine, Nursing and Health Sciences, Monash University
- Jim McCluskey, Department of Microbiology and Immunology, The University of Melbourne
- Gustav Nossal, The Walter and Eliza Hall Institute of Medical Research
- Stephen Nutt, The Walter and Eliza Hall Institute of Medical Research
- Mark Smyth, Peter MacCallum Cancer Centre
- Ranjeny Thomas, Diamantina Institute for Cancer Immunology & Metabolic Medicine, The University of Queensland
- Carola Vinuesa, Viertel Senior Medical Research Fellow, Division of Immunology
 and Genetics, John Curtin School of Medical Research



ASI2008: 38th ASI Annual Scientific Conference Canberra, December 7–11 2008

The annual scientific meeting is the highlight event on the ASI Calender each year and serves the immunology community in terms of scientific exchange, establishing and strengthening collaborative networks and more. To facilitate these outcomes, we are putting together a terrific scientific program and a number of social events. The meeting this year will be held in Canberra and the newly renovated National Convention Centre promises to offer an excellent venue for the scientific part of the conference. Canberra, Australia's bush capital, is an ideal match for ASI -providing substance (in terms of national museums, galleries, gardens, national institutions and so on) in a fun and relaxed setting!

The theme of the meeting is *Immunological Challenges of the 21st Century* and there should be something there to interest everyone! We have a great line up of both local and international speakers. The organizing committee is formulating an exciting program and a preliminary draft can be found on the conference website. This will be updated as details are further finalized – so please bookmark the page (<u>http://www. asi2008.org</u>).

Registration

Both abstract submission and registration is through the conference website and the deadline for early registration rates, as well as abstract submission is Friday 19th September. Please note this date in your dairy, especially if you are interested in applying for any of a number of awards on offer.

Satellite Workshops

As in previous years, before the start of the meeting proper on Sunday afternoon (7th December), we have two workshops to choose from: the Tumour Immunology Workshop and the Postgraduate/Postdoctoral Workshop. The latter is open to all students, new postdoctoral fellows and anyone else interested in brushing up on bit of advanced immunology. The presenters, many of whom will be drawn from the invited speakers at the conference, will discuss some of the "big picture" questions in immunology. The workshop is designed to be interactive and, hopefully, fun. We therefore strongly encourage at least all students to attend.

Awards

We will be offering a number of poster and oral presentation prizes. For details on eligibility etc check the conference website or the ASI website on (<u>http://www.immunology.</u> <u>org.au/awards.html</u>). The prestigious ASI New Investigator Award will be judged on the basis of abstracts and the finalists given an opportunity to present their work at the meeting in a session with no other parallel sessions. Please remember to tick the correct box when submitting your abstract to be considered for this award. In addition, there will be a BD Science Communication Prize and a separate abstract, in lay terms, is required for this one.

There will also be a number of student bursaries available for eligible students. The purpose of these is to enable ASI student members to attend the Meeting and consists of conference registration plus a reasonably priced return airfare. Applications should be sent to Dr Carola Vinuesa at <u>TravelASI2008@</u> <u>anu.edu.au</u>. The deadline for applications is the same as for Abstract submission and is Friday 19th September.

Social Program

In keeping with tradition, we plan to hold a Welcome Function on Sunday night at the Convention Center. On Tuesday evening, there will be a Student Function (dinner and drinks), open to only students and early postdocs. This should provide a great opportunity for them to mingle with and talk to both our international and local invited speakers plus socialize (and empathize) with fellow students. Then on Wednesday evening we start with the greatly anticipated Lafferty Debate, which has become a highlight feature of the conference, followed by the Conference Dinner at the beautifully situated Australian War Memorial. Tickets for both the Student Function and Conference dinner can be bought at the time of registration.

Accommodation

The National Convention Centre is located near the city centre and therefore there are a number of accommodation options. Many of these are listed on the conference website. In particular, we have available a number of shared, apartment style options that could keep costs down and if you decide to go for college-type (ANU) or backpacker-type options, they can be arranged directly with those places.

So, the Organizing Committee warmly invites you to what promises to be a great meeting with lots of excellent immunology and some fun. See you in Canberra!

INTERNATIONAL INVITED SPEAKERS

Mark Davis is Professor of Immunology at Stanford University School of Medicine and Director, Stanford Institute for Immunity, Transplantation and Infection. He received his BA in molecular biology at Johns Hopkins University in 1974 and PhD in molecular biology in 1981. He spent three years as a postdoctoral and staff fellow at the National Institutes of Health before moving to Stanford in 1983. Mark was Associate Chair and Chairman of the Department of Microbiology and Immunology from 1999-2004. In 2004 he was named Director of the Institute for Immunity, Transplantation and Infection. One of his important contributions to immunology is the identification in the 1980s of the elusive T-cell receptor (TCR) genes. His group has subsequently made many inroads on TCR genes and have also discovered a number of other important genes expressed by lymphocytes, including BLIMP-1, and with Dr Alan Krensky, granulysin, important in natural defense against tuberculosis. Mark has also pioneered the development of diagnostic assays for immune function, the development of peptide-MHC tetramers which allows the precise quantitation and characterization of T cells from clinical samples and more recently, with Patrick Brown and Yueh-hsiu Chien the invention of a high throughput cellular array system, which can obtain information about many different types of blood cells simultaneously.

Marc Jenkins is Distinguished McKnight University Professor, Department of Microbiology, University of Minnesota. Mark received his PhD in Microbiology and Immunology in 1985 from Northwestern University.

ASI Inc. Newsletter September 2008



Mark Jenkins

After postdoctoral training in the laboratory of Ron Schwartz in the Laboratory of Immunology at the National Institutes of Health, he joined the Microbiology Department at the University of Minnesota in 1988. In 2002 he was awarded the American Association of Immunologists-Huang Foundation Meritorious Career Award and in 2004 was elected to the Academy for Excellence in Health Research. His research centres on the biology of CD4+ helper T cells. Mark and his colleagues investigate CD4+ helper T and B cell activation in vivo by directly tracking antigen-specific cells. Using genetargeted recipients or antibody blocking approaches, they identify molecules that are critical for in vivo T and B cell signal transduction, proliferation, lymphokine production, survival, and differentiation, with the ultimate goal of improving the efficacy vaccines and preventing autoimmunity.

Dale Umetsu graduated from Columbia University and received MD/PhD degrees from New York University. After completing an internship and residency at Children's Hospital Boston, Harvard Medical School, he conducted postdoctoral work at Children's Hospital Boston, before being appointed Assistant Professor of Pediatrics at Stanford University. Dale was promoted to Associate Professor with tenure and to Professor at Stanford, and was Director of the Center for Asthma and Allergic Disesases, before moving back to Harvard and the Children's Hospital Boston, as the Prince Turki al Saud Professor of Pediatrics in the Division of Immunology. Dale's laboratory focuses on the study of subpopulations of human and murine CD4 T cells, which play a



central role in the regulation of adaptive immunity and tolerance. The laboratory studies allergic diseases and asthma in humans and in mice as models of immune dysregulation, and examine the function of CD4+ aß TCR T cells with restricted cytokine profiles (Th1, Th2 and Th0 cells), CD4+ antigen-specific regulatory T cells (Treg), as well as iNKT cells in regulating these diseases. He is interested in the cellular, molecular and genetic mechanisms that control the interaction of T cells with dendritic cells, and that regulate cytokine synthesis in and the function of CD4+T cells. which mediate development of, or protection against, disease.

Silvia Vidal holds the Canada Research Chair in Host Response to Virus Infection at McGill University. Dr Vidal graduated with a BSc (1984) and MSc (1984) in Animal Biology and PhD in Microbiology (1990) from the University of Geneva. Silvia is a virologist with a strong interest and experience in the genetics of viral resistance. She has positionally cloned and identified a mutation of the mouse Ly49h gene, encoded at the Cmv1 locus, that controls resistance or susceptibility to cytomegalovirus, a prevalent human pathogen, and will direct the phenotypic screening of mutagenized mice for variation in antiviral host resistance.

Dario Vignali is an Associate Member, St Jude Children's Research Hospital, Memphis. Dr Vignali received his PhD from the London School of Hygiene & Tropical Medicine, University of London. His research interests include molecular initiation and control of signal transduction of the T cell receptor (TCR):CD3 complex, control of TCR transport and down-modulation and the role of CD3 in T cell development and function. Dario's group also delves into regulatory T cells (Treg) and focuses on identification of novel Treg molecules, mechanisms of Treg function, control of Treg function by LAG-3 and IL-35 and studies the role of LAG-3 in pDC function. The group also has a special interest in Type 1 diabetes and investigate the importance of TCR specificity and affinity in the diabetogenic or regulatory potential of T cells, the mechanisms that regulate T cell islet entry and diabetogenicity and tolerance induction by manipulation of ß cells.

Kathryn Wood is Professor of Immunology in the Nuffield Department of Surgery, University of Oxford. She is a Fellow of The Academy of Medical Sciences and recently received a Royal Society Wolfson Merit Award for research excellence. Kathryn has just completed her term as President of The Transplantation Society (International) and is an editor of "Transplantation". Her research focuses on transplantation, particularly immune regulation and mechanisms of tolerance induction at the molecular and cellular level, an area in which she has made major contributions. Kathryn's group is also exploring the impact of T cell memory on rejection and tolerance. Besides identifying new sources of tissues and cells for transplantation, one long-term goal of the group is to transfer successful tolerance induction protocols from the lab to the clinic.



David Woodland

David Woodland is President and Director of the Trudeau Institute. He did his PhD in Immunology at the Max Planck Institute for Immunobiology in Freiburg, West Germany. He then worked as a post-doctoral associate at the National Jewish Hospital in Denver, before moving to St Jude Childrens' Research Hospital in Memphis to set up his own independent research program in viral immunology. David joined the Trudeau Institute in 1999 and has been there since then. His group has made significant contributions to viral immunology is currently studying the mechanics of a CD8+ T cell recall response to secondary virus infection and how the immune response deals with persistent pathogens.



Gabriel Rabinovich

Gabriel Rabinovich is at the CONICET (National Council Research in Argentina), Associate Professor at the Faculty of Exact and Natural Sciences (University of Buenos Aires) and Visiting Professor at the University of Maryland (Baltimore). He did his PhD in Immunology at the National University of Cordoba in 1999. He was a research fellow of the British Council and Antorchas Foundation at the Gene Therapy Laboratory, Kennedy Institute of Rheumatology (Imperial College London) and a visiting scientist at the Weizmann Institute of Science (Rehovot, Israel). The main research interest of his group is unveiling the role of carbohydrateprotein interactions in immunoregulation, autoimmunity and tumour-immune escape, in particular the role of galectin-1 in tumour immune escape.



Jean-Pierre Abastado

Jean-Pierre Abastado obtained his Master's degree in Mathematics and Physics from the Ecole Polytechnique (Paris) and his PhD in Immunology from the Paris-6 University. He worked at the Pasteur Institute (Paris), the Cochin Institute (Paris) and at NIH (Bethesda, USA). He is Research Director at the Centre National de la Recherche Scientifique (CNRS). From 1998 to 2005, Jean-Pierre was Vice-President, Chief Scientific Officer of IDM-Pharma, a Biotech company based in Paris and Irvine (USA) specialized in the development of cell therapies against cancer. He joined Singapore Immunology Network (SIgN) in June 2006. His research focus in on the role of tumor immune microenvironment in cancer progression in patients with various malignancies. Using transcriptome analysis, the molecular classification of human tumors has been refined to highlight gene signatures with prognostic and theragnostic values. Using human liver cancer and a mouse melanoma model characterizing the tumor immune milieu, Jean-Pierre and his colleagues have has shown that better understanding of how the organ-specific immune milieu affects the success of metastasis is important for design of more effective treatments.

Alessandro Moretta is Professor of the Institute of Histology and Embryology of the University of Genoa (since 1997). He studied Medicine in the University of Genoa, Italy, and attended a specialization course in Allergology in the University of Firenze, Italy. The post-doctoral fellowship was done at the Ludwig Institute for Cancer research, Lausanne and at the NIH. He held various appointments at the Ludwig Institute University of Genoa, University of Brescia and the Biotechnology Institute (CBA), Genoa. Alessandro recalls that he entered the NK cell field by chance. In his own words "I was studying gamma/delta T cells and many mAbs that I was isolating against these cells were also reacting with a still poorly defined CD56+CD16+ lymphocyte population ... little by little I started to become interested by these cells ... " Amongst the most important contributions from his group is the identification of KIRs and NCRs. As a clinical application of KIRs already exists in the treatment of transplanted AML patients, Alessandro envisions that it is possible that the use of human mAbs against NK receptors may represent a novel source of immunomodulatory drugs not only for cancer patients.

Pam Ohashi is Senior Scientist at the Division of Signalling Biology, Ontario Cancer Institute. She was the first to show that T cells for tissue specific antigens remain ignorant of the tissue self-antigen. Pam, who trained under Rolf Zinkernagel, is a highly recognized scientist who has received several awards for her work in research, including the Pharmingen Investigator Award from the American Association of Immunology and a Canada Research Chair. She is also a Fellow of the Royal Society of Canada and a recipient of the William E. Rawls Prize awarded by the National Cancer Institute of Canada and Eli Li. Her lab investigates the mechanisms



Pam Ohashi

that maintain tolerance or promote T cell activation, leading to the induction of immunity, autoimmunity or potentially tumour immunity. Pam and her team use a combination of transgenic models that allow them to follow a responding T cell population specific for a defined selfantigen or tumour-associated antigen. In many studies they also combine these models with various gene deficient mice to examine the importance of different molecules on the induction of T cell tolerance or activation. Her lab pursues several lines of investigation including: the role of survival versus apoptosis on tolerance and autoimmunity, signalling pathways that control T cell tolerance, activation, immunity, autoimmunity or tumour immunity; and the potential for immune surveillance and tumour immune therapy

Shizuo Akira is Professor at Department of Host Defense, Research Institute for Microbial Diseases, Osaka University, He received his MD and PhD from Osaka University. After postdoctoral work in the Department of Immunology, University of California at Berkeley, he studied IL-6 gene regulation and signalling at the Institute for Molecular and Cellular Biology, Osaka University, and cloned transcription factors NF-IL6 (also known as C/EBP beta) and STAT3. His current research interests are molecular mechanisms of host defense and innate immunity, which he studies primarily by generating knockout mice.

Hoosen Coovadia is the Victor Daitz Professor of HIV/AIDS Research at the Nelson R Mandela School of Medicine, University of KwaZulu-Natal and an expert in perinatal HIV transmission. By training he is a paediatrician and has held appointments as immunologist in

ASI Inc. Newsletter September 2008

the United Kingdom and at the Walter and Eliza Hall for Medical Research. He has made a substantial contribution in paediatric diseases, including the definitive work on nephrosis in South African black children, malnutrition and immunity, measles, particularly the effect of Vitamin A supplementation on children with measles and other infections. He is internationally recognized for his groundbreaking research in HIV/AIDS transmission from mother to child, especially through breastfeeding.



Steve Galli is Professor and Chair, Department of Pathology, Stanford University School of Medicine. Steve received his MD in 1973 from Harvard Medical School and completed his residency in the Department of Pathology at Massachusetts General Hospital in 1977. He was recruited to Stanford in 1999 from Harvard, where he was professor of pathology, director of the Division of Experimental Pathology at Beth Israel Deaconess Medical Center, and a member of Harvard's Committee on Immunology. Steve's interests are in the area of mast and basophil cell biology. His laboratory develops and employs genetic approaches in mice to understand the regulation of mast cell and basophil development and the expression of their functions, and to elucidate the roles of these cells in health and disease. In parallel with these mouse studies, Steve and his team investigate the roles of mast cells in human health and disease by conducting studies of human mast cells, or by analyzing specimens derived from patients with asthma or other disorders in which mast cell have been implicated. Another side interest of Steve is creating limericks such as this one:

The mast cell has earned a bad name, Because for wheezing it's partly to blame. But it also keeps us all healthy, Despite pathogens stealthy, By helping us win in the host-defense game. (source: http://dartmed.dartmouth.edu/ fall04/html/alumni album.shtml)

Steve may turn out to be a serious contender for our Bursa of Fabricius Award at the Conference dinner.

Inventorship is not authorship

It is one thing to get authorship wrong on a manuscript, but it is quite another to get inventorship wrong on a patent. Why? It is true that reputation and recognition arise as concerns in both circumstances. However, where inventorship is wrong, the real concern relates more to ownership of property.

That's right, a patent is property, the same as is a house or a car. And absent an agreement to the contrary, in most countries an inventor is the owner of the property claimed in a patent. So in many cases, inventorship can mean ownership.

Importantly, where inventorship is wrong, the patent can be invalid, meaning that the wrongful inclusion of an individual as an inventor can effectively destroy the property rights of the true inventor. It follows that it is very important for all concerned that rules surrounding authorship and inventorship are not confused.

So how does one go about determining inventorship? Unfortunately, this is a difficult area of Australian law and there are differences in domestic law on the point from country to country. However, the following approach seems to be generally consistent with the law of many countries.

The first step is to have a patent specification drafted that describes the invention or inventive concept. Why? Because there needs to be some agreement between the parties claiming ownership as an inventor as to the definition of the property at issue. Without a patent specification, it is much like determining who is the owner of land without a survey that describes the boundaries of it. In fact it is even more problematic because land is a tangible asset whereas intellectual property, by its very nature, is not. Having obtained a patent specification, the next step is to carefully review the specification to understand what the invention or inventive concept is. In some countries such as the US, the focus is on the claims, so that a person claiming entitlement as an inventor might in law not be so entitled if his contribution is disclosed, but not claimed by the patent claims of the specification. In other countries such as Australia, the focus is on the specification as a whole, and a finding that a contribution has been disclosed but not claimed in a specification does not necessarily void a claim to inventorship.

Of course not all contributions that appear on the face of a specification will provide basis for a valid inventorship claim. What is much more important is the nature of the contribution. On the other hand, the contributions do not have to be equal. The question is more around whether a contribution has been qualitative rather than quantitative. To drill down on the point a little more, the following contributions may indicate inventorship:

- where a contribution has had a material effect on formation of the invention;
- where a contribution was to the 'conception of the solution' to a problem solved by the invention;
- where one person had a general idea of what was required but did not necessarily know how to put that idea into effect, and another person did so;
- where the final concept of the invention would not have come about without a particular person's involvement.

In contrast, the following are not normally associated with inventorship (but might well give rise to authorship):

- where a person's contribution involved no more than carrying out instructions;
- where the contribution amounted to nothing more than a suggestion of something well known that has no material effect on the invention;
- where the contribution was more along the lines of explaining how an invention works once that invention had been made.

Finally, the inventorship determination must be done before a patent is allowed or granted and ideally it is done before filing.

Tom Gumley PhD Partner Freehills Patent & Trade Marks Attorneys 0417 426 407, tom.gumley@freehills.com

Travel Award Conference Report

American Thoracic Society, Toronto 2008 Damon Tumes, University of Adelaide

Recently I had the opportunity to attend the American Thoracic Society (ATS) 2008 international conference in Toronto from 16–21 May with support from an ASI postgraduate international travel award. The ATS conference is one of the largest of its kind with over 16,000 attendees each year. This provided an excellent opportunity to interact with the greater scientific community and to see some world class research occurring in the field of asthma, allergy and lung disease.

I am currently a PhD student (in my 4th year) at The University of Adelaide and have been studying mouse straindependent susceptibility to pathology in models of allergic asthma. The conference had numerous sessions on mouse models of asthma and also a large clinical and translational component devoted to human asthma. The conference therefore had something for all asthma researchers and it was great for those of us that are focused on basic research to be exposed to the "big picture" and clinical applications of our research.

My poster was placed in a discussion session in a setting of about 15 presenters which provided time for poster viewing and then questions and debate among the presenters and audience. This was a great opportunity to gain valuable feedback on my own work and encouraged discussion in the context of similar research. In addition, the relatedness of the posters gave the opportunity to meet other researchers with similar interests.

Each symposium had clear objectives regarding what the audience should be able to take away from the session. This meant that the conference had an obvious educational component while at the same time providing exposure to cutting edge research. One session I personally found very interesting focused on the usefulness of mice in modelling human asthma. James Martin discussed the efficacy of anti IL-5 as a treatment for asthma in the context of previous studies in the mouse. Jamie Lee discussed the usefulness of transgenic mouse models of asthma in modelling human disease. Anuradha Ray discussed the use of adjuvants during the sensitisation phase of acute mouse models and contrasted this with the recently emerged chronic models of asthma. Patricia. Rocco and Jason Bates discussed the architecture of the mouse lung and how this affects the reaction to antigen exposure and the measurement of airway reactivity. Overall the session provided a comprehensive overview of some of the most relevant issues facing researchers that use these popular models of asthma. It was also a great chance to get a feel for where these great researchers felt the field of mouse modelling of asthma would be heading over the coming years.

Another session with the catchy title "chitins: flying high" focused on recent research on chitinases and chitinase-like proteins. This family of molecules is attracting a lot of attention in asthma research at present. One example is the chitinase-like protein Brp39 and its human homologue YKL40. Daniel Hartl showed that BRP-39 Tg mice have elevated numbers of alternatively activated macrophages and Alison Humbles showed that in a mouse model of asthma, allergen challenge induces BRP-39 expression in the lungs and knocking out this gene reduces pathology to near baseline levels. Geoffrey Chupp showed that increased YKL-40 in the serum is associated with asthma severity and remodelling and Carole Ober and colleagues used a genome wide association study to define a promoter polymorphism associated with increased levels of this protein in the serum and susceptibility to asthma. This study was published in the April addition of the New England Journal of Medicine. Drs Hartl Humbles and Chupp are from Yale University and Dr Ober is from the University of Chicago. This was an interesting session on a family of molecules that were characterised quite some time ago but whose importance in asthma has only recently become evident.



Each evening there were post-graduate seminars covering a series of topics related to respiratory health. These made for long days but were a good opportunity to get a basic background of several different research areas, not to mention a great buffet dinner. There were many notable speakers including Barry Kay who spoke about chronic obstructive pulmonary disease (COPD) and the mechanisms of steroid resistant COPD and asthma.

Following the conference, I had the opportunity to visit several labs and present my data. Firstly, I visited Marc Rothenberg and Simon Hogan at the Cincinnati Children's Hospital. Their research interests include eosinophil involvement in numerous human diseases including asthma, inflammatory bowel disease and eosinophilic esophagitis. While at the Cincinnati Children's, I also met with Marcia Wills-Karp. Professors Wills-Karp and Rothenberg have long and distinguished histories in asthma research with notable achievements including contributions to the characterisation of the eotaxin family of molecules and the involvement of IL-13, IL-4 and the complement system in asthma. Following these meetings, I presented my data to Simon and Marc's labs. It was good to get experience presenting in this format and it was also great to gain feedback from these outstanding researchers. Following the day of discussions we all went out to dinner on the very impressive Ohio River that separates Cincinnati from Kentucky. Seeing that much water made me more than a little envious and I began to wonder if I could take just a bit home with me for the Murray. The Ohio is a "working river" and during the day there is a constant flow of huge barges that transport goods up and down its length. The view of the Cincinnati skyline across the river was great, as was the steak for dinner.

Damon at Niagara Horseshoe Falls, the most famous of the Niagara Falls, Canadian side (about an hour out of Toronto)

The next day I was off to Washington. First, I had a day of sightseeing that included the impressive monuments and museums that make up the Capital. It was then back into the lab visits, both of which were at the NIH. Entering the NIH was an adventure in itself, involving a passport check, baggage screen and a couple of questions about my reason for being there. I then expected a stamp on my passport and to be granted entry into another country. I was however still in the US. Once inside I visited the labs of Drs John O'Shea and Warren Leonard. The focus of both of these labs is T cell biology. Both have broad interests in cytokines, signal transduction pathways and transcription factors that are important for T cell lineage commitment and function. Important contributions from these labs include the characterisation of Th17 cells in the case of John O'Shea and IL-21 in the case of Warren Leonard.

My final lab visit was in Japan. After a day to acclimatise myself, I headed down to the Medical University in Chiba where I met with Professor Toshinori Nakayama. His laboratory is focused on CD4 memory and how epigenetic modifications of transcription factors and their associated genes can control memory phenotype. After meeting Professor Nakayama and several members of his laboratory, I again presented the data from my PhD to his department. We then went out to dinner at a Japanese restaurant. Needless to say I let Professor Nakayama choose our food for the evening, which was all very nice and also quite healthy (a welcome change after the past couple of weeks).

As I am writing this conference report I have accepted a position in Professor Nakayama's Lab in Chiba for a postdoc. This was a hard decision but I am very excited about the prospect of experiencing Japanese culture and research firsthand. I found it extremely beneficial to have the opportunity to visit labs at this stage of my PhD and several employment opportunities arose from my trip. This would not have been possible without the support of the ASI and for that I thank the organisation and all of its contributors very much. Also, I would like to take this chance to say a big thank you to my supervisors Lindsay Dent and Ashley Connolly for all their help, friendship and guidance during my PhD.

ASI Student Page



ASI Student Representative: Ivan Poon, ivan.poon@anu.edu.au

Conferences and Pacific Politics Remembered Professor Barbara Heslop

Barbara Heslop is an Emeritus Professor from the University of Otago, now in her 80s. She was the President of the New Zealand Society of Immunology at the time of the amalgamation with ASI. She was the Convenor of the first joint meeting of the NZ Society of Immunology and the then Australian Society in Queenstown, NZ in 1985. It was a superb meeting still remembered fondly by current ASI members. Barbara was also honoured for her service to the Australasian College of Surgeon Examining Board as the 'setter of immunology questions' to test aspiring surgeons over many years.

The Xll International Congress of The Transplantation Society was held in Sydney in August 1988 – the Society's first meeting in the southern hemisphere. The considerably smaller 7th International Workshop on Alloantigenic Systems in the Rat was held in Fiji during the preceding week, likewise a southern hemisphere first for this group, whose meetings had for several years been aligned with the Transplantation Society meetings.

The members of the rat group came mainly from the UK, USA, Europe, Scandinavia, Japan and New Zealand. In 1988 its secretariat had existed courtesy of a handful of university departments around the world, and its meetings were not big enough to justify employing conference organisers. It was a matter of pride that nobody charged a conference fee, which meant that conference participants paid for little other than the social events. Today we would probably add, a little smugly, that its meetings were environmentally friendly – relatively uncluttered with sponsors' freebies.

The Dunedin group was due to host the meeting just before the Transplantation Society's congress in Sydney in August 1988. There were a couple of compelling reasons for not meeting in Dunedin – the likely weather in the south of the country in August, and the cost of travel. Fiji was on the way to Sydney for many of our northern hemisphere colleagues, and the Fijian Resort on Yanuca Island had recently built a new conference centre in its very attractive grounds. We tentatively suggested this venue at the Cambridge UK meeting in 1982 which preceded the IX International Congress of



The Transplantation Society in Brighton. Shortly after the 1986 meeting in Rotterdam (preceding the XI International Congress of The Transplantation Society in Helsinki), we made a firm booking with the Fijian Resort for 1988. The tourist pictures looked attractive – as tourist pictures always do.



The only mildly daunting thing about organising a meeting in Fiji - or so we thought at the time – was that we were going to have to find money to take some of our lab staff to help with jobs like running the slide projector (there was no Powerpoint in the 1980s) and attending to all the little housekeeping jobs that go with running meetings smoothly. In other circumstances, sponsorship might have helped. But despite the number of animal-based businesses in New Zealand, or perhaps because of them, there was little chance of raising a sponsor. Had we been in the business of exterminating rats, things might have been different. In the end financial assistance came from the governments of both countries, although neither actually set out to help.

The NZ taxation system provided part of the solution. In the early 1980s, the country had a top tax rate of 66 cents in the dollar. It cut in at a very low level of income. There were plenty of loopholes in the system and, not surprisingly, tax avoidance schemes flourished. Many university departments and research groups had slush funds. By putting lecture fees and other items of income into a fund, and avoiding the 66% personal tax, it became possible to provide "out of the ordinary" expenses like the ones that we had in mind. There were, of course, some legal constraints on how the money was used, but in effect it was a government subsidy.

Further financial assistance came from the Fijian government, likewise unintentionally. In May 1987 the unbelievable happened in Suva -Lieutenant Colonel Sitivena Rabuka staged a coup and took over parliament. Ten masked armed men in army uniform marched into parliament, while Rabuka wearing civilian clothes in the public gallery, ordered the members of parliament to leave. They had little option but to comply. Compromise parliamentary arrangements were later made by the governor general, but Rabuka was dissatisfied with these, and staged a second coup later the same year. Fiji duly became a republic and was expelled from the Commonwealth. The tourist industry took a pounding, and hotels were forced to reduce their charges substantially.

A final problem was political. Some of our Americans colleagues were prepared to accept that Fiji was now a republic outside of the Commonwealth, as long as the new government did not have communist backing. The deep suspicion of communism that prevailed in the 1980s was a hangover from the cold war. We were at that time several years away from Al Qaeda. Far from having initiated the 1987 coups in Fiji, the left wing labour government had been on the receiving end of them. The new nondemocratic government was right wing. If nothing else, this was expedient as far as we were concerned.

The rat workshop duly went off smoothly in very pleasant surroundings. The weather stayed fine, and the hotel, suffering from a lack of tourists, excelled itself. The real costs, as always in circumstances like this, were paid by the Fijian people over time.

ASI Inc. Newsletter September 2008

The Transplantation Society will be back in Sydney later this year for the XXII International Congress. (The burgeoning Roman numerals add a sort of dignified avoirdupois as the society ages.). Fiji currently has a military government as a result of its fourth coup; it was suspended from the Commonwealth only nine years after re-joining in 1997. And the rat genome was published in 2004. Postcript: Comedian John Clarke in an earlier New Zealand incarnation created the character Fred Dagg, who composed what has been called a New Zealand folk song. The original chorus went:

We don't know how lucky we are, mate We don't know how lucky we are

(http://folksong.org.nz/howlucky/index.html)

I guess that we were lucky with the Fiji workshop. But all of us who can take political stability for granted are pretty lucky, too.



Conference Dinner, Fiji, 2008

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 <u>http://www.immunology.org.</u> <u>au/immquiz1.html</u>) 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.

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!

UPCOMING LECTURES & CONFERENCES

4th FIMSA Congress October 17–20, 2008 Taipai, Taiwan www.fimsa2008.org

HAA 2008 (HSANZ ANZSBT ASTH 2008 ASM) October 19–22, 2008 Perth, Western Australia haa@fcconventions.com.au www.fcconventions.com.au/HAA2008/

Vaccine 2nd Global Congress December 7-9, 2008 Boston, USA vaccinecongress@elsevier.com www.vaccinecongress.com

Frontiers in Immunology Research 2009 January 8–11, 2009 Acapulco, Mexico hkan@firnweb.com http://www.firnweb.com

96th Annual Meeting of The American Association of Immunologists May 8–12, 2009 Seattle, USA Jennifer.riggs@specialdevents.com

Frontiers in Immunology Research 2009 July 22–26, 2009 Kona, Hawaii, USA hkan@firnweb.com http://www.firnweb.com

HAA 2009 (HSANZ ANZSBT ASTH 2009 ASM) October 18-21, 2009 Perth, Western Australia haa@fcconventions.com.au

The Walter and Eliza Hall Institute of Medical Research WEHI Seminars on the Web: www.wehi.edu/seminars/