



N E W S L E T T E R

## Australasian Society for Immunology Incorporated

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### The Milk of Human Kindness: How my Wife Helped me Crystallise Neuraminidase

**Gordon Ada**

Division of Immunology and Genetics, The John Curtin School of Medical Research, Canberra

On becoming Director of the Walter and Eliza Hall Institute in 1942, Macfarlane Burnet and colleagues began a major investigation of the influenza virus with the hope that they might be able to learn how to control an influenza pandemic like the one which killed at least 20 million people after the first world war. The virus was grown in embryonated chicken eggs. When harvesting the allantoic fluid from the infected eggs, Burnet noticed that the red blood cells (RBCs) were often in clumps (agglutinated). But it was George Hirst in New York who found that after incubating such agglutinated cells at 37°C for a few hours, the clumps of cells broke up, and adding more of the same virus no longer caused those cells to agglutinate. Hirst thus showed that the influenza virus contained an enzyme which would destroy a receptor for the virus on the RBC. Burnet soon confirmed this, but remembered a paper published years earlier which showed that *V. cholerae* grown in culture secreted a factor which affected the properties of RBCs. Burnet then showed that RBCs incubated in such a culture could no longer be agglutinated by the influenza virus. Thus, the culture was shown to contain an influenza virus-like receptor-destroying enzyme (RDE) and this became a very important tool in the influenza virus work. Alfred Gottschalk in the Institute then started work to elucidate the nature of the bond split by RDE which eventually he achieved. I thought his work would be facilitated if the enzyme could be purified.

Professor Gordon Ada giving a presentation at the JCSMR on his 80th birthday. Prof Ada has contributed two articles to this issue, each with a moral tale for young scientists. (Photo courtesy of Multimedia, JCSMR, ANU)

So in the mid 1950s I started such a programme, using a crude broth as the culture fluid for the Cholera organisms and Eric French agreed to carry out the assays for RDE activity. Despite using adsorption to RBCs at 4°C followed later by the elution of the enzyme at 37°C as an important step in the purification, the enzyme preparation was still not pure enough. An important visitor to the Institute in 1956–7 was Joshua Lederberg, who in 1958 was to share the Nobel Prize in Physiology or Medicine for his work on the genetic properties of bacteria. On telling him of my frustration, he said, “Gordon, you must grow the bacteria in a purely synthetic medium.” This I achieved, but – you’ve guessed it – absolutely no RDE was secreted. RDE was thus an inducible enzyme! (It would be fascinating to know how the decision is made to secrete or not secrete the enzyme). At this stage, the specificity of RDE was unknown. So, where would I find a rich source of an appropriate substrate which desirably would have a low molecular weight, and thus make purification of the enzyme easier?



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### Website

The ASI web site ([www.wehi.edu.au/collegiate/ASI/](http://www.wehi.edu.au/collegiate/ASI/)) 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 e-mail Judy Greer at [j.greer@medicine.uq.edu.au](mailto:j.greer@medicine.uq.edu.au)

### Email bulletin board

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

## EDITORIAL

In the previous issue of the Newsletter Professor Gordon Ada of the JCSMR submitted an article discussing the role of serendipity in the execution of Nobel Prize winning experiments. Gordon must have been inspired by the reception of this article as he has volunteered two new articles, both published in this issue. In the first, Gordon conjures up an earlier time in science when solving the problem was of primary importance and the manner of solution had fewer strictures than today. As Jim Goding notes in the story's postscript, the sequence of experiment and logic that Gordon took to reach a satisfying conclusion would struggle to make it past a peer review committee today. Gordon's second story concerns the developer of the polio vaccine, Albert Sabin, and gives an insight into why Sabin achieved a fearsome reputation from his peers. The moral of the story is that 'protecting your turf' can be a lifelong habit of success.

Discussing Gordon Ada's three contributions to the Newsletter gives me an opportunity to mention that ASI Council agreed to a new award each year for the best article submitted to, and published in the Newsletter. Obviously Gordon is a strong

contender for this year's award although we have other entrants already. We have in this issue an interesting article by Andrea McAdam, from Haematology at the Royal Melbourne Hospital. Andrea has identified a series of rare immunological proteins that you may have missed in your studies. If I can add two more - the related proteins Grantin and Grantnotin help control cyclical stress levels through the year.

Over the years the rules for hosting an ASI visiting speaker have become more complex and the number of visitors has declined. At the recent Council meeting a new policy was developed to simplify the process of hosting a visitor by clarifying the responsibilities of state branches. The new policy introduces a two tiered system. The top level, that of "ASI Visiting Speaker", is offered for eminent guests who are brought to Australia and New Zealand specifically for ASI and will bring new information, contacts and wisdom to our branches and members.

The second level, that of "ASI Sponsored Visitor", is designed to be able to increase the value of visitors being brought to Australia from other funds, and who are prepared to

travel to other centres as an ASI visitor. The new Visiting Speaker Co-ordinator is Alejandro Lopez who can be contacted ([alejL@qimr.edu.au](mailto:alejL@qimr.edu.au)) if you have any questions. Please think of appropriate invitees and submit your applications for either category for consideration at the next Council meeting in December.

Please read the report from President Chris Parish on important news about our Journal *Immunology and Cell Biology*. Chris has managed to negotiate a much better deal for the Society than was previously in place with Blackwell Publishing. This is a credit to both Chris and the continuing success of the Journal in the international arena.

Thanks to the entrants in the caption contest, and if anyone would like to submit new photos for another round please feel free to do so.

Finally, enclosed with this Newsletter should be the registration forms and information for the ASI annual meeting in Adelaide. Please plan to attend and submit your registrations early.

Phil Hodgkin

## HONORARY SECRETARY'S NEWS

I am pleased to convey that ASI continues to strongly support travel awards enabling our student and early postdoctoral members to attend International meetings. For this year's awards, preference was given to those applying to travel to the 12th International Congress of Immunology, Montreal, and as advertised, all awards for this year were awarded in this round. The successful applicants were Patrick Reading, University of Melbourne in the postdoctoral category and Amanda de Mestre, JCSMR; Tri Giang Phan, Centenary Institute; Yang Wang, JCSMR and Nicholas Wilson, WEHI, in the postgraduate category. We congratulate the recipients and hope they have a productive meeting. No doubt we will be reading accounts of their travel, funded by the award, in future editions of the newsletter.

I would like to take this opportunity to remind members that ASI offers a number of

bursaries and awards (<http://www.wehi.edu.au/collegiate/ASI/awards.html>). So please check the website for eligibility criteria.

Another development of note with regards to the awards is for the *Immunology and Cell Biology* Publication of the Year Award. As editor of *ICB*, Chris Parish has successfully negotiated quite an attractive package from the Publisher for this award. The new award would include conference travel to North America or Europe and take effect for 2004 publications to be judged in 2005. What a great, added incentive to publish in our journal! Details of the award will be updated on the website in the near future.

Alejandro Lopez, our Visiting Speakers Program co-ordinator, has updated and streamlined the guidelines of this valuable

ASI-sponsored program. These are available in this issue of the newsletter and are going on to our website as I write. Hopefully, we will see a reinvigorated program in the near future!

Lastly, I would like to remind members that the current term for a number of positions on Council comes to an end in 2004. These include Secretary and State Councillors for ACT, NSW, WA and NZ. I will be sending out nomination forms for these in the next month or two, so please think seriously about putting your hand up. These are very rewarding positions that would allow you to contribute to the running of our Society.

Cheers,  
Geeta Chaudhri

*The Milk of Human Kindness (cont.)*

My wife had recently had her fourth (and last) baby and as I was watching her breastfeeding him one day, it suddenly struck me – her milk must be an extraordinarily rich source of a great variety of different substances in order for the baby to survive and grow so quickly. My wife agreed to my having a small sample of her milk which I added to the synthetic culture medium. The bacteria were added and the culture incubated overnight, the bacteria then removed by centrifugation and the supernatant given to Eric French for assaying. Some hours later, Eric burst into my room, exclaiming, “Gordon, lots of RDE activity!” My wife then kindly agreed to my having another small sample of her milk. This I dialysed against some of the synthetic medium, then added the bacteria to the dialysate and incubated it. Fortunately, most of the active factor(s) was dialysable and (later), one component was found to be sialyl lactose.

We found bovine colostrum to be a rich source of the dialysable active factors and this led to my being able to produce enough

and subsequently to obtain crystals of the enzyme. Burnet was told about it before he left on an overseas trip. As I wanted to be absolutely sure my technique was reproducible, I prepared crystals of the enzyme (now called neuraminidase) from three successive batches before we submitted a paper to *Nature* with pictures of the crystals. It was accepted but one week before the paper came out in 1959, *Nature* published a paper with German authors claiming crystallization of the enzyme, but showing no pictures. I became a world supplier of the pure enzyme for about three years before Sigma became a supplier. Graeme Laver in the Department of Microbiology in the John Curtin School isolated and crystallized the neuraminidase (sialidase) from the virus about 20 years later. This led in due course to the synthesis of a compound which neutralised the neuraminidase activity of the influenza virus.

*Professor Gordon Ada is a former Head of Microbiology and Immunology Division, JCSMR Canberra*

**Postscript from Jim Goding who encouraged Gordon to pen this article:**

*If the proposal to study Vibrio supernatants to identify an enzyme that destroyed the receptor for influenza on red cells were proposed in a grant application today, or if it were proposed to use human milk to induce this enzyme in Vibrios, I can just imagine the referees' comments –*

*No rationale  
Not hypothesis driven  
Crazy idea  
Fishing expedition  
A stab in the dark?  
A really long shot, not worth funding*

*Perhaps this article should be read by a few economic rationalists too...*

[Professor Jim Goding is in the Department of Pathology and Microbiology at Monash University.]



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## Important Developments with *Immunology and Cell Biology*

Recently a new publishing agreement was negotiated with Blackwell Publishing Asia (BPA), the publishers of the societies official journal - *Immunology and Cell Biology*. The new agreement contains a number of changes that will benefit *all* ASI members. These include:

- **Freezing the cost of the ASI member subscription to the journal** at \$35 per annum for the next 5 years. In the old agreement the subscription increased by the CPI each year.
- **An increased share of ICB revenue to be received by ASI.** In the old agreement the revenue share was 8% but this has been increased to 12%. This translates into the Society receiving another \$15,000 per annum from the journal!
- **Retrodigitising all back issues of the journal over the next 3 years, free of charge.** *ICB* was formerly the *Australian Journal of Experimental Biology and Medical Science* which commenced publication in 1923. *ICB*, in its former incarnation, published many of Burnet's seminal papers as well as outstanding work by a number of other early biomedical

researchers in Australia. Digital versions of these important papers will be accessible on the *ICB* website over the next 2-3 years.

- **Introducing a new *ICB* Travelling Scholarship.** The scholarship is an extension of the *ICB* Publication of the Year award. Previous recipients of the *ICB* Publication of the Year award received BPA books and journals to the value of \$800. With the new award the recipient will not only receive \$800 worth of BPA books and journals but an economy class return airfare to the USA or Europe to attend a major scientific meeting. The scholarship will begin in 2005 and will apply to papers published in *ICB* in 2004. The eligibility requirements are simple. You must be the first author on a Research Article/Brief Communication published in *ICB* and be a financial member of ASI in the year in which the paper is published.

There are other important developments at the journal's website. From January this year an "on-line early" publication of manuscripts has been operating. With the new

arrangements once a paper has been typeset it will be displayed on the *ICB* website and appropriate abstracting and indexing services informed of the paper's existence. This is a particularly important development for *ICB* as being a bi-monthly journal we were previously unable to rapidly publish papers.

By late 2004 we also hope to have a **web-based editorial office** up and running. This will allow authors to submit their manuscripts electronically on the *ICB* website rather than having to post hard copies of their manuscripts to the Editorial Office in Canberra. Authors will also be able to monitor the progress of their manuscript through the reviewing process and resubmit modified manuscripts via the website as well.

So overall *Immunology and Cell Biology* is in great shape. All we need are more of your manuscripts!!

Chris Parish  
Editor-in-Chief  
*Immunology and Cell Biology*

## Caption Competition



"I'm sorry Rolf, you did not have the best limerick so please give me back the Bursa." – Alec Redwood

"Just hold still for one more second and I'll soon get rid of that last pesky B cell. Then you'll never have to worry about them again."  
– Miles Davenport (anonymously!)

"This'll put paid to that damn opera singing once and for all!" – Roger Booth

All great attempts, but the winner is ... Alec Redwood  
A bottle of wine is on its way Alec  
Thanks to all the entrants

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### Sustaining Membership

ASI Inc acknowledges the support of the following sustaining members:

- Jomar Diagnostics
- Dynal Biotech Pty Ltd

## The ASI Visiting Speaker Program (ASI-VSP)

### Definition

ASI will sponsor the visit of international speakers (Immunologists working overseas who are world-recognised authorities in their field of research) under two categories:

- a) ASI Visiting Speaker, coming from overseas; and
- b) ASI Sponsored Speaker, already in Australia/New Zealand.

The selection of the candidates will be made twice a year by the ASI Council and number of sponsored visitors will be decided according to the yearly budget. It is suggested that there would be two in category (a) and two in category (b) per year. The information about this program will be widely advertised in the ASI newsletter and website.

### ASI-VSP Co-ordination

The program will be co-ordinated by the ASI-VSP co-ordinator, a State Councillor elected for two years by Council and announced in the website. He/she will interact with the hosting member/branch, which will be responsible for the organisation of the visit.

The co-ordinator will circulate the information about the nominated visitors amongst the State Councillors and will

gather the interest expressed by the Branches to be presented in the Council, twice a year.

The co-ordinator will authorise the payment by the Treasurer to the host member upon receiving original tax invoices for the transactions. He/she will also be responsible to produce and deliver the corresponding certificate and thanking letter to be signed by the ASI President.

### Terms of Offer

The ASI will cover a maximum of \$A5,000 for the category (a) and \$A2,000 for category (b) to cover refundable economy airfares, transportation within the home country and appropriate travel insurance. In addition, every hosting branch will receive \$A150/night, to a maximum of 3 nights required for the ASI visit.

The hosting member (Branch) will be responsible for procuring funding to cover any additional expenses.

### Guidelines for applying for funds for visiting speakers:

#### a) ASI Visiting Speaker

- (i) Nominations can be made by any ASI member willing to host and coordinate the visit. The nominating member should seek "in principle" agreement of the "terms of offer" by the visitor

- (ii) Nominations to be made by email to the co-ordinator twice a year (deadlines: May 15 and November 15) and include a CV, a timeframe of the visit and a short justification. Later proposals will be considered if funds available
- (iii) Speaker must be visiting 4 or more cities, including two of Perth, Adelaide, Hobart, Brisbane, any NZ city
- (iv) Speaker must not have been supported in past 3 years as an ASI visitor

#### b) ASI Sponsored Speaker

- (i) Nominations can be made by any ASI member willing to host and co-ordinate the visit. The nominating member should seek "in principle" agreement of the "terms of offer" by the visitor
- (ii) Nominations will be addressed to the ASI Visiting speaker co-ordinator at any time. He/she will seek interest in the proposed speaker from the branches and will present the information to the Council. Decisions will be met by the Council depending on budgetary constraints
- (iii) Preference will be given to speakers visiting 3 or more cities/centres

### Journals available

I have past copies of *Annual Review of Immunology* and *Immunology Today* for which I no longer have any need. I am prepared to donate to any library or individual immunologist who may be interested in them.

The journals are:  
Annual Review of Immunology,  
Vols. 1 to 10 (1983 – 1992)  
Immunology Today (unbound),  
Vols. 1 to 15 (complete);  
Vol. 16, Issues 1 to 6

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**An invitation and a request to all ASI members**  
to contribute copy that they think might be interesting, useful,  
historical, humorous or thought provoking.

- Our Student Page is specifically designed for 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!**

## What does it take to be a great scientist?

**Gordon Ada**

Division of Immunology and Genetics, The John Curtin School of Medical Research, Canberra

**Preamble:** *What does it take to be a great scientist? It takes brilliance of course and persistence, and this can involve being prepared to fight very hard for your ideas and beliefs. The extent to which this can be pursued was brought home to me by a brief interaction with virologist Albert Sabin very late in his career.*

After I retired in 1987, I spent three years at Johns Hopkins School of Hygiene and Public Health in Baltimore and became Director of a Center for AIDS Research. This brought me into close contact with the AIDS Program scientists at the NIH in Washington and I was invited to give talks at various meetings there. Shortly after I returned to Canberra, I was asked to join a new NIH committee – an HIV Vaccine Working Group which was to meet three or four times a year in Washington. I was the only non-USA citizen on the committee and was appointed because I was thought to know something about cell-mediated immune responses generated following vaccination. I was also invited to give talks at various scientific meetings usually held at NIH. At one meeting – a Bob Gallo meeting – I gave a talk on what is called the common mucosal immune system. There was increasing evidence that stimulating at one mucosal site could result in a specific immune response at another site. For example, adenovirus infects via the respiratory tract, but the adenoviral vaccine is administered orally and gives good protection from a subsequent respiratory challenge.

It had become clear that increasing numbers of women became infected after unprotected sexual intercourse with HIV-infected partners. It was known that the female vagina is not well endowed with lymphoid tissue. In fact, the vaginal flora can include seven different non-pathogenic bacteria, five pathogenic bacteria and seven pathogenic viruses, and yet they induce poor immune responses. Normally, the non-pathogenic bacteria induce an environment which inhibits other infections. So in my talk, I stressed the

need to find out whether an HIV vaccine might be effective if given via another mucosal site (we now know the respiratory tract can be quite effective as an immunisation route for this purpose).

The next talk after mine at the meeting was given by Albert Sabin, the virologist who developed the oral poliovirus vaccine (OPV). For this he was almost revered in the USA. But he was recognised to be a somewhat difficult person: a young scientist, having worked with him once, rarely repeated the experience. Shortly after he started his talk, he stopped, glared at me sitting in the third row at this large meeting, and said in a very loud voice – “DR ADA, YOU MUST IMMUNISE AT THE SITE OF INFECTION”. I felt like creeping under the chair in front of me. I learnt later that he had spent much time seeing if he could vaccinate young children with measles vaccine by the respiratory route rather than by injection. This was possible but not feasible on a large scale. But how could I respond?

Early in 1992, a paper appeared in the Proceedings of the National Academy of Sciences<sup>1</sup> by Dr Sabin in which he stressed the improbability of being able to vaccinate against HIV infecting by the vaginal route. The reason was because infected semen contained latently infected cells (containing only viral DNA but no viral particles) which could persist in the recipient indefinitely and later initiate an infection. At the next meeting of the HIV Vaccine group, I pointed out the flaws in this argument – mainly that such cells

would, in nearly all recipients, be recognised as foreign and very rapidly destroyed by the recipient’s immune system (Host-versus graft reaction). Because of his high standing, none of my US colleagues wished to criticise Sabin; would I do something about it? Back in Canberra, Bob Blanden and Arno Mullbacher joined me in writing a short article gently pointing out the flaws in Sabin’s paper. We were also concerned that it might inhibit research aimed at developing HIV vaccines. Our article was published in *Nature* under the heading – “HIV: to vaccinate or not to vaccinate?”<sup>2</sup>. There was no immediate response. In March, 1993, Sabin died and was buried in the Arlington National Cemetery. Almost to the day, *Nature* advised me that they had just received a statement for publication sent by Dr Sabin before his death in which he stated he did not accept our arguments mainly because we had not actually shown such cells being destroyed in the recipients. Did I want to reply? I said there was now no point in replying; let Dr. Sabin rest in peace. But I thought that I had yet to meet an immunologist who would disagree with our argument.

Postscript: The WHO polio eradication campaign was initiated in 1988, but the time limit was finally extended to 2005. The year 1994 may go down in medical history as the time when the last case of natural infection worldwide was detected. Though many countries have now switched to the use of the inactivated virus vaccine (IPV), the use of the OPV was absolutely crucial in achieving the great success to date.

1. Sabin, A. B. Proc. Nat. Acad. Sci., USA. 89: 8852 (1992).
2. Ada, G., Blanden, B., Mullbacher, A. Nature 359: 572 (1992)



*Prof Gordon Ada*

## ASI Councillors' News

### Victorian News

With 2004 well underway, the IgV calendar promises another action packed year. Our first local event for Victoria, on May 13-14, was the visit by Dr David Serreze from The Jackson Laboratory. David was an international speaker at the recent Autoimmunity workshop held at the Centenary Institute, Sydney; and sponsorship by ASI allowed him to visit a number of other states. He was in high demand and graciously accepted the offer to deliver a number of talks to the immunology community. The title of his talk at the WEHI was "Promiscuity of a diabetogenic TCR: playing fast and loose with the MHC" and at Monash's Dept of Immunology, "Was there type 1 diabetes at the Olduvai Gorge". We are all very grateful for the opportunity to hear Dave present and discuss his studies and hope he and his wife had an enjoyable visit.

The first of the annual IgV events will be the Techniques workshop that is scheduled for July 9, and to be held at The University of Melbourne's Department of Microbiology and Immunology. The organising committee for the techniques

workshop has done a marvellous job yet again and details of the program and registering can be found on the IgV web site: <http://www.microbiol.unimelb.edu.au/IgV/> This is a great opportunity for new and old students to keep abreast of emerging techniques and we encourage all to attend.

Of course the most important date on our calendar is the annual IgV meeting at Beechworth. This really has become a very popular meeting with a nice mix of presentations from established researchers to new post-graduate student. Again it is a great opportunity for all members of the Immunology community to meet and enjoy each other's work and company. The dates for this year's Beechworth meeting are October 10-12, so pencil this in now. The IgV committee is hard at work on this and details will follow.

*Frank Alderuccio  
Councillor*

### Queensland News

The annual prize on Immunology at the James Cook University in Townsville was awarded to Hayley Gallagher for her performance during the 3<sup>rd</sup> year Immunobiology course. Hayley has progressed in her studies and, now in her 4<sup>th</sup> year, is currently enrolled in an Honours program. Congratulations to Hayley who received an annual registration to the ASI.

During this period, we have had the visit of various interstate (and international) speakers to Brisbane for which ASI has contributed alone or in association with other local organizations. Associate Professor Nikolai Petrovsky from Canberra delivered the Brisbane Immunology Group (BIG) seminar on March 8<sup>th</sup> and had discussions with various research groups in the light of future collaborations.

On March 29<sup>th</sup>, we had the visit by Dr Eugene Maraskovsky to Brisbane, co-sponsored by the ASI and the CRC for Vaccine Technology. Eugene gave us an update on the research on dendritic cell use for cancer immunotherapy currently undertaken at the CSL and the Ludwig Institute in Melbourne. Furthermore, fueled by pizza and soft-drinks, we had the opportunity to share an inspirational discussion about career prospects in Biotechnology and its balance with academic research, as derived from his own experience. The warm atmosphere and abundant attendance was a certain indication of the success. We thank Eugene for his effort which we all profited from.

As part of the ASI-Visiting Scientist Program, we hosted a two-day intensive visit by Dr David Serreze from the Jackson Laboratories in Bar Harbor, USA. David gave two seminars in Brisbane, at the Centre for Immunology and Cancer Research at the Princess Alexandra Hospital and the Queensland Institute of Medical Research. He also visited the Institute of Molecular Biosciences at the University of Queensland. Various future interactions emerged from his visit.

A very important event for the Immunology community in Brisbane was the election of Professor Ian Frazer as a Fellow of the Australian Academy of Sciences. Prof. Frazer was officially welcomed in the Academy

*David Serreze delivers his talk "Was there type 1 diabetes at the Olduvai Gorge" to ASI members at Monash University's Department of Immunology*





during the annual meeting on May 4<sup>th</sup>. A long standing career in successful basic immunology research and university teaching has been recently complemented with the impressive results of a vaccination program yielding a unique 100% success in the prevention of Papiloma virus infection, the leading cause of cervical carcinoma. The vaccine produced by the team is now commercialized and being delivered in extensive trials world-wide. Congratulations to Ian for a much deserved recognition.

The Australian Society for Medical Research is organizing the Medical Research Week between June 4<sup>th</sup> and 11<sup>th</sup>. The program includes:

**June 4<sup>th</sup>**, Annual ASMR dinner, with invited speaker Prof. Merry Hendrix, and the Queensland Premier-ASMR Science Awards to take place at the Hilton Hotel

**June 7<sup>th</sup>-11<sup>th</sup>**, School visits during the week

**June 9<sup>th</sup>** Hypothetical: Human Cloning, Panacea or Pandora Box, QUTTtheatre

**June 11<sup>th</sup>**, Student Science conference at the Wesley Hospital Auditorium

Further information available from the website: <http://www.asmr.org.au/states/QLd/events.html>

The final program of the BIG 2004 Annual Retreat (Tween Waters Resort, Sunshine Coast, August 19<sup>th</sup>-20<sup>th</sup>) is currently being finalized and will be announced soon. The presence of Prof. Richard Smallwood, President of the Royal Australasian College of Physicians and Commonwealth Chief Medical Officer, as the Jonathan Sprent Orator has been confirmed. Further details are available at the website: <http://www.qimr.edu.au/whatson/conf/BIG2004/BIG2001retreat.html>

Make sure that you register by July 15<sup>th</sup>.

*Jose Alejandro Lopez*  
Councillor

## N.S.W. News

Our activities this year commenced with hosting the ASI Visiting speaker, Dr Dave Serreze, from Jackson Lab Bar Harbor. He arrived from New Zealand, attended the Autoimmunity Workshop and, separate from the workshop, presented a fascinating seminar 'Promiscuity of a diabetogenic TCR: playing fast and loose with the MHC' for ASI members and guests. We followed this with lunchtime conversation, then we packed him off to Brisbane to continue his ASI tour.

In June we start the Postgraduate Research Workshops. Sponsored by ASI NSW and Centenary Institute, these workshops will address history, philosophy and immunology in a wider context than is normally presented in research and teaching seminars. Very special guest immunologists have been invited to present and open the discussion, everyone is invited to attend and contribute! The first workshop topic, 'Against all odds' will be addressed by Emeritus Professor Jacques Miller, on 3 June. Workshops will be held fortnightly; details will be circulated.

Plans for the branch meeting are in progress. We have secured The Retreat at Wisemans for September 3 and 4. We hope to have a good turnout and that the meeting will be even more successful than last year. The focus will be to give an opportunity for new postgraduate and honours students to present 'work-in-progress'. Guest speakers: to be advised.

On 15 September we will welcome Professor Jean-Laurent Casanova, ASI visiting speaker, in Sydney to present a seminar titled 'The human model: a genetic dissection of immunity to infection in natural conditions'.

I am aware of a number of postgrads who have been awarded travel scholarships to attend ICI Montreal in July. Congratulations to you all and particular congratulations to Cindy Ma (Immune Regulation Group, Centenary Institute) who is the sole Australian recipient of a FIMSA award. Her presentation title is 'Impaired B cell differentiation in vivo in XLP is associated with reduced effector function in CD4+ T cells.' Safe travel to all our delegates.

*Helen Briscoe*  
Councillor

## New Zealand News

Things have been quiet recently this side of the ditch but we were lucky enough to have Dr David Serreze stop off and see us on his way over to Australia. However, I feel his desire to come see us had more to do with his passion for fishing than for his wish to give another seminar! But after overcoming his jet lag and the fact that he and his wife had no luggage, David gave an excellent presentation on his theories on why diabetogenic genes exist. His talk was extensive and gave us many ideas to ponder on. The last day of his visit was devoted to the local wildlife - the fish (he caught and released two trout), albatrosses and penguins (he didn't catch any of them!).

On other matters, Glen Buchan, Vernon Ward and Margaret Baird are busy organising our annual 'Immunet' meeting which is scheduled for July 5 & 6. This year we are combining our meeting with the local Virology meeting. We are expecting to have an exciting conference with presentations by both local researchers and invited international experts. Ian Fraser, well known to our Australian colleagues, is to span the immunology/virology divide. This will appeal to the growing number of us here in NZ who are working on viral and virus-like particle vaccines. The ASI visitor, Dr Ihsan Gursel from the FDA, will bring us up to speed on DNA vaccine development.

*Sarah Hook*  
Councillor

## Australian and New Zealand Council for the Care of Animals in Research and Teaching Limited

16 June 2004

Dear Professor Parish,

On behalf of the Board of ANZCCART Ltd, I welcome the Australian Society of Immunology as a member of our organisation. We are keen to increasingly involve professional societies in our activities and your membership is looked upon as a very positive development.

The goal of ANZCCART is to provide leadership in developing community consensus on ethical, social and scientific issues relating to the use of animals in research and teaching. We do this through the promotion of excellence in the care of animals, responsible scientific use of animals, and informed discussion and debate within the community regarding these matters.

As a member of ANZCCART, the ASI is invited to nominate a representative to sit on the ANZCCART Council, and thus to influence policy as it relates to the use of animals in research and teaching. The Council meets annually and its present membership is set out in the Annual Report I sent to you recently.

A major forthcoming event for ANZCCART is the Annual Conference, which will be held in Sydney on 26th–28th September. Full details will appear soon on our website, and will be communicated to you separately. The conference is shaping up well, and there are certainly aspects of it that will be of much interest to ASI members.

Once again, it is a pleasure to have the ASI as a member of ANZCCART and I look forward to the development of strong and beneficial links between our two organisations.

Yours sincerely,  
(signed)  
Rory Hope  
Director

ANZCCART website address:  
<http://www.adelaide.edu.au/ANZCCART/>

### ASI Brief Notes

❖ Congratulations to recipients of the **2004 ASI Travel Awards**:

**Postdoctoral**  
Patrick Reading  
**Postgraduate**  
Amanda de Mestre  
Tri Giang Phan  
Yang Wang  
Nicholas Wilson

Enjoy your travel, and we look forward to hearing about your experience.

❖ The **Immunology & Cell Biology Publication of the Year Award** has had a major upgrade courtesy of Blackwell Publishing. The new award includes international travel to a meeting in Europe or North America. All articles published in 2004 will be considered for the first award in 2005. This means articles submitted now will be eligible.

❖ There is now an annual award of **\$100 for the Best Article** submitted to and published in the Newsletter. Please continue to submit your interesting ideas or reminiscences to qualify for this important prize. The Editor will be very pleased!

### DID YOU KNOW?

**That ASI has awarded \$37,940 in bursaries and travel awards to students and postdocs in the last 18 months, i.e. since January 2003.**

### Who is this?



This is an important person for ASI.  
Do you know who it is?  
The next Newsletter will reveal all!

## UPCOMING LECTURES & CONFERENCES

August 26–28 2004

The second Australian B cell Dialogue (ABCD) meeting will be held again at the WEHI. Please contact David Tarlinton (tarlinton@wehi.edu.au) or Rachel Mansfield (Mansfield@wehi.edu.au) for further details.

31 August – 2 September 2004

4th Australasian Hepatitis C Conference  
“Strategic Directions for an Expanding Epidemic”  
Canberra, Australia  
Website: [www.ashm.org.au/conference2004](http://www.ashm.org.au/conference2004)

16th Annual Conference of the Australasian Society for HIV Medicine

“Positive Partnerships – From Policy to Primary Care”  
Canberra, Australia  
Website: [www.ashm.org.au/conference2004](http://www.ashm.org.au/conference2004)

28–30 November 2004

“Inflammation: from cellular immunity to human disease”  
A symposium of the Monash Institute of Reproduction & Development and Southern Clinical School, Monash University  
Melbourne, Australia  
Website: [www.monashinstitute.org/seminars](http://www.monashinstitute.org/seminars) Email: [mark.hedger@med.monash.edu.au](mailto:mark.hedger@med.monash.edu.au)

6–10 December 2004

FIMSA/ASI Immunology Workshop  
Adelaide, Australia  
Website: [www.fimsa.org](http://www.fimsa.org) Email: [lindsay.dent@adelaide.edu.au](mailto:lindsay.dent@adelaide.edu.au)

12–16 December 2004

HLDA8/ASI34 Conference, AFCG27 Conference  
Adelaide, Australia  
Website: [www.plevin.com.au/hlda8asi](http://www.plevin.com.au/hlda8asi)

**The Walter and Eliza Hall Institute of Medical Research**  
**WEHI Seminars on the Web:**  
[www.wehi.edu/seminars/](http://www.wehi.edu/seminars/)

**Contributions sought for the  
ASI Newsletter**

**You could win \$100 !!**

**Deadline for the next issue:  
1st August 2004**

Please email your contributions to the Secretariat by the above date.

[asi@21century.com.au](mailto:asi@21century.com.au)

## Comments on ASI from Members

*On the Membership Information Update form which accompanies the membership renewal, members are asked to comment on whether ASI meets the member's expectations for a Scientific Society. Twenty-one comments were received which simply said that the member's expectations were met, or that the member was happy with ASI, or words to that effect. In addition, the following more substantive comments were received:*

Perth meeting fine, but Council to note comments made from floor at AGM re future role of ASI.

For 35 years ASI has facilitated scientific contacts and friendships, and stimulated my immunological thinking. I'm sure it can be improved, but at the moment I am just grateful and nostalgic!

Disappointed that there was no “B Cell Symposia” at ASI 2003. Otherwise, very happy!

I think it is doing a good job. Good communication, enjoyable informative newsletter, active state branches and national body.

I would like to see some more emphasis on Veterinary Immunology.

ASI should endeavour to provide more student travel awards especially for conferences held overseas.

The student immunology workshop was not very well structured. Different/unrelated topics and a vast range of levels of speakers. I really enjoyed the conference esp. plenary speakers. I thought the level of talks was lower than last year.

Perhaps more student functions/meetings.

The conference could have been improved by having more than one session on B cells! ASI (the organisation) is fine though.

## New Immunological Proteins

Reading journals and attending seminars, I am often inspired and sometimes bemused by the imaginative nomenclature of proteins. Where do the names come from? Diseases are named after doctors, haemoglobinopathies after cities, red cell antigens after patients, bacteria after microbiologists – but what are proteins named after? After a long evening at the pub, I sometimes suspect. We started tamely enough with *fibrin*, *elastin*, *crystallin*, *insulin* – but have lately moved to metaphysical realms with the poetic *ubiquitin* and the utterly prosaic *survivin*. Marking student essays recently, I began overexpressing *distractin* (homologue of *elsin*) and compiled the following list of potential additions to the protein catalogue. It is by no means complete . . . and not intended to be *takin D myc-E* out of anyone.

<b>surmisin</b>	may exist, based on experimental hints, but not sure
<b>exploitin</b>	has commercial potential – related to <i>patentin</i>
<b>speculin</b>	belongs to the <i>surmisin</i> super-family
<b>procrastin-8</b>	one of a series of proteins that is slow to characterise, hard to get round to writing about, and rarely meets publication deadlines
<b>politin</b>	may not be the protein you want to study but your supervisor is keen
<b>scratchin</b>	possible link to Type I hypersensitivity responses but funding is scarce
<b>pressreleasin</b>	hits the headlines in National Science Week
<b>parallelin</b>	strategically aligned, eight other labs worldwide have also identified it
<b>tremulin</b>	active site at lecture podium: amplified by laser pointers
<b>improvisin</b>	induced by direct questions; sometimes required for compliment activation
<b>incredulin</b>	the one no-one ever thought could exist but a technical assistant read off the sequence late one night and confirmed it
<b>supersedin</b>	replaces current protein of the month; may have Nobel Prize potential
<b>pencilin</b>	make a note of this one – hypothetical but would make a good PhD topic
<b>anakareninin</b>	related to <i>anamorsin</i> but plot is thicker
<b>strenulin</b>	neurotransmitter upregulated in honours students towards end of academic year. Co-expressed with <i>procrastin-8</i>
<b>fraudulin</b>	a highly refined form of <i>confabulin</i> , it occasionally mutates to <i>plagiarin</i> . No-one currently admits to working on it
<b>mysterin</b>	one of a large super-family that includes <i>obscurin</i> , <i>perplexin</i> and <i>controversin</i>
<b>paralipsin</b>	better to leave this one unmentioned
<b>interpretin</b>	important for cross-presentation at international conferences
<b>jargin</b>	blocks <i>interpretin</i>
<b>blitherin</b>	low affinity binding to target receptors, cross reacts with <i>wafflin</i>
<b>teradactilin</b>	recently isolated by paleoimmunologists – beats <i>Drosophila</i> wings
<b>cohabitin</b>	high affinity for target receptors
<b>poptin</b>	complexes with 2-C-U to form <i>digressin</i>
<b>concensin</b>	prototype of democratic signal transduction (also known as <i>coercin</i> in some centres but it is not clear that it has the same structure)
<b>espressin</b>	short, black and thermolabile (drink while hot)
<b>parisin</b>	lovely in the Springtime
<b>extrasensorin</b>	belongs to the ESP super-family and will be shown to exist next year

Andrea McAdam  
RMH Haematology / RMIT