

#### **Australasian Society for Immunology Incorporated** PP 341403100035 **ISSN 1442-8725**

**March 2011** 

### **Remembering Frank Fenner**

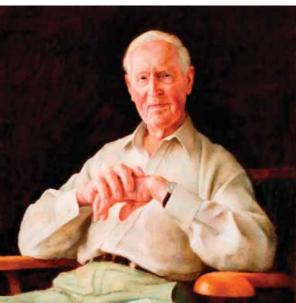
Phil Hodgkin

Before the start of the scientific program at the 2010 ASI meeting I was asked to deliver a short tribute to our long time colleague and great friend Frank Fenner who passed away the week before the meeting at the age of 95. In paying such a tribute it was difficult to know where to start – his lifetime of contribution to science was simply extraordinary.

Frank Fenner published his first scientific paper in 1934 at age 20, an anthropological study of South Australian aboriginal communities, and continued to publish well into his 80s – an incredible 70 year publication span.

Fenner worked as an army doctor during the Second World War, serving first in Palestine and later in New Guinea. In New Guinea he developed strategies for protecting Australian troops from malaria and achieved such great success that his work was cited as a major factor in the success of the New Guinea campaign and earned him an MBE. As a result, his scientific credentials came to the attention of Macfarlane Burnet who recruited Fenner to the Walter and Eliza Hall Institute, Melbourne, after the Second World War.

Fenner and Burnet were a great team. They worked together on many projects including the second edition of the classic book The Production of Antibodies published in 1949. This was probably the first immunology textbook and a call to arms for the new discipline. In a small section of this book, a sentence really, the idea that self-tolerance might be learned in young life was put forward. This idea was picked up by Peter Medawar in England and led to the award



Professor Frank Fenner AC CMG MBE 2007 by Jude Rae. oil on canvas. Collection: National Portrait Gallery, Canberra. Commissioned with funds provided by Mr Anthony Adair and Ms Karen MacLeod

of the Nobel prize to Burnet and Medawar in 1960. Fenner, ever humble, took no credit despite being co-author. He was always quick to say he was the researcher hunting down material for the book, but the ideas were Burnet's.

At WEHI Frank Fenner also worked on mousepox, establishing it as a model for human viral disease. His meticulous descriptions of the emerging spots and movement of infection between organs remain a standard in the education of every viral immunologist. Also considered a scientific classic is Fenner's later study of the epidemiology of myxomatosis virus introduced to the non-immune Australian rabbit population and leading eventually to the selection of resistant rabbit strains. Fenner described this work as "watching evolution before our eyes".

But Fenner is perhaps most famous for chairing the WHO global commission for the certification of smallpox eradication. In this capacity Frank had the honour of announcing to the world that smallpox had been eradicated in 1980. Surely one of the greatest ever public health achievements. Afterwards Fenner teamed up with Donald Henderson to write a comprehensive history of the disease - from its murky beginnings in history to its end brought about by vaccination.

In addition to his stellar scientific work, Fenner was a tireless leader and scientific administrator. In the late cont. p4

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#### Website

The ASI web site (www.immunology.org.au) has been fully remodelled and updated. New services include: > Downloadable forms for ASI awards,

- Positions vacant pages,
- Jobs wanted pages,
- Upcoming conferences listings,

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

A very successful businesswoman once told me, "If you want something done, give the job to a busy person". Perhaps that was the ASI's rationale behind my appointment to Newsletter Editor. I don't know if the logic in that adage is particularly sound; it seems everybody is busy but the correlation with getting things done is weak. Whatever the reason, I am very honoured to have this opportunity and I'm confident the enjoyment will outweigh the aggravation. My first task in preparation for this role was to get copies of all of the old newsletters and review them, hoping to understand the purpose, themes and directions of the newsletter over the years. The first thing that struck me was that there were clearly large parts of the newsletters that I had never read. The second thing was the high quality of the things that I had missed. This leads me acknowledge the excellent work of my predecessors (Nick King, Guna Karupiah, Geeta Chaudhri, Phil Hodgkin, Miles Davenport, Margaret Baird), like so many of the members of the ASI Council, recurring names with respect to service to immunology and the Society.

My hope for the Newsletter is that it will retain its high standard and role as the "face" of the Society. I would like the Newsletter to better reflect and expose the views and endeavours of the 1012 members and I encourage your suggestions and contributions.

In this edition we have some new features, including a review of the work that won prizes at the Perth conference including the **BD** Science Communication Prize winners Celine Deffrasnes and Ivana Ferriera, and Poster Prize winners Sarah Oracki and Hock Tay; with more to come in the next edition. We also have included a list of publications made by Society members over the last six months (of 2010). This list is not comprehensive as it only includes those who responded to our email. Compiling the list was harder than I had imagined as the responses came back in many different formats: meaning that it was impossible to cut and paste, nor retain the underlining of Society member (thanks to those of you who did that - sorry it could not be included). Nevertheless, the list is interesting reading and I don't think you will need any encouragement to scroll through and see what your peers have been up to. I

am very keen that the list continues and becomes more comprehensive; it would be great if it could be automated, it will certainly become an important measure of the Society's output. To this end I am calling out for a volunteer to assist/run with this project. I am also calling out for a volunteer to assist the newsletter by gathering/reporting interesting international news items (I have some ideas to make this easier for you).

This is an extraordinarily large issue as it includes are port of the AGM, introductions to new state councillors, reports on the Perth conference workshops, conference photos and the new features mentioned above. Our feature article this edition is an honour to the life and work of Frank Fenner, a truly great Australian and immunologist.

Finally, thank you to all our contributors and to Judi Anderson at the ASI Secretariat, your efforts are appreciated. If you haven't contributed yet, I urge you to get cracking.

Simon Apte



Your editor at the 2010 conference in Perth with (left) Denise Doolan and Natasha Stevens



#### Remembering Frank Fenner, cont.

1940s Howard Florey invited Fenner to become foundation professor for the new Department of Microbiology within the John Curtin School of Medical Research (JCSMR) in Canberra. Frank accepted the job and set about designing, building and recruiting a world class department that included at various times famous names such as: John Cairns, Bill Joklik, Stephen Fazekas De St Groth, Cedric Mims, Graham Laver, Joe Sambrook, Rob Webster, Gwen Woodroofe, Stephen Boyden and Kevin Lafferty.

In 1967 Fenner became Director of JCSMR and Gordon Ada was appointed head of Microbiology. Ada built on the strong virology group Fenner had established and appointed a series of immunologists to develop the field of viral immunology. Thus, between Fenner and then Ada, the wheels were set in motion for the Nobel prize winning work of Doherty and Zinkernagel at JCSMR in the early '70s.

Frank retired from JCSMR in 1973 but did not stop working – founding a new centre at the ANU dedicated to the study of the environment and sustainable use of resources, another lifetime passion.

Fenner finally retired in 1979 and amazingly began a near thirty-year period of further work as emeritus professor and visiting scientist at JCSMR. It was from his little office in JCSMR that a new generation of scientists, including myself, got to know and love this humble man. He would come to work at 7am each morning and work till around 3pm. Each morning he would sit for tea and discuss events with students and postdocs. His mental acuity never wavered with his age and his grace and work ethic were an inspiration. During this time he regularly updated his many popular virology textbooks, wrote histories of JCSMR, of Microbiology, and of the Australian Academy of Sciences as well as his autobiography and biography of his father.

I would like to finish with a personal story to illustrate the generous spirit of Frank Fenner the person, which itself is deservedly legendary.



Frank Fenner (left) and Gordon Ada relaxing in 2005

In 2007 we held celebrations at WEHI for the anniversary of the development of the clonal selection theory and Frank Fenner was one of the first invited. He was 91 at this time and I was nervous about his frailty and ability to travel. I had no need to worry. Frank attended every session and delivered a very memorable talk. At the final celebration dinner I asked him to let me know when he was ready to go back to his hotel. At around 10.30pm I noticed Frank signalling to me. I went over to him and asked if he was ready to go. "Oh no," said Frank, "I would like to say something". We hurriedly found a microphone and Frank rose to speak. He showed his dry sense of humour and extraordinary memory by telling numerous funny stories about Burnet and their times together. Most memorable was the story of when Frank and his wife Bobbie arrived in Melbourne in 1950 to begin a period of work at the WEHI. Burnet was days away from heading off to England on sabbatical and asked Frank whether he would mind looking after his house while he was away. "No problem," said Frank, "that will be very suitable". "Oh," Burnet replied, "and you won't mind looking after the children too." And so it came about that for many months, Frank and Bobbie Fenner 'family sat' for Burnet – looking after the house and the teen aged children. From his obvious enjoyment of this story it was clear that even Frank, the most generous of men, realised this was going above and beyond the call of duty.

It is fair to conclude that going above and beyond any ordinary sense of duty has earned Frank Fenner his place as one of the greatest servants of Australian science.

To quote Gus Nossal: "What a life, what a career, what generosity of spirit – We shall not see his like again!"

Valé Frank.

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### Scientific luminary prepares to shut up shop

In 2007 Journalist **Melissa Sweet** had the pleasure of interviewing Frank Fenner for a profile commissioned by pathology magazine, *PathWay*. Sweet's article gives further insight into the personality of Fenner and is reproduced in part below.

After a stellar career spanning seven decades, Professor Frank Fenner has begun the difficult task of packing up his office-almost 30 years after his official retirement. When Professor Fenner finally vacates his room at the John Curtin School of Medical Research in Canberra, as he intends to later this year, it will be the end of an era for Australian science and one of its most revered figures. "I really have to go home and get things in order," Professor Fenner explains. After all, he will be 93 in December and doesn't expect to be able to continue his current routine - rising at 5am, reading the latest journals until 8am and then driving to the Australian National University - for too much longer.

Professor Fenner is widely admired, not only because of the longevity of his career and the breadth of his achievements, but also because of his humility and decency. His name may be up in lights on the main avenue as you drive into Canberra - just outside Fenner Hall, in fact – but none of the usual marks of the celebrity are apparent when you meet the man himself. When I buzz the security phone to gain entrance to his office building one chilly Canberra morning, his response is typically low key, without a hint of any airs or graces. Just a quiet and simple: "Fenner". If you didn't know his pedigree, you would swear that the blue-eyed, white-haired gent shuffling down the corridor could be anyone's grandfather. What gives him away is the affection and respect that is so evident in the greetings from colleagues.

When Professor Fenner arrived at the newly established John Curtin School of Medical Research in 1949, aged 34, he already had quite a reputation. Much of his first 15 years at the ANU were absorbed by research into another pox virus - myxomatosis. This work, which contributed to the control of the rabbit plague that then decimated the countryside, is widely judged as one of his key achievements. However, it was a single unorthodox experiment in 1951 which really caught the general public's attention. In an effort to reassure those anxious about the safety of releasing myxomatosis, Professor Fenner and two other scientists injected themselves with the virus. All they suffered was a slight reddening at the injection site. Professor Fenner's work on myxomatosis

also led him into the study of the vaccinia virus, which was to prove such a useful background for the work on smallpox which later brought such international acclaim.

After becoming director of the John Curtin School in 1967, Professor Fenner made a conscious decision to cease scientific research because he didn't want to do it through assistants or students - "I am temperamentally unable to do research without being personally involved, hands-on at the bench," he once told a radio interviewer. Instead, he concentrated on writing and other work. Serendipitously, this allowed him to answer the critical call of his career-to assist the World Health Organization with ridding the world of smallpox transmission, a task requiring a grinding schedule of constant travel. In a career noted for many awards and prizes, Professor Fenner says his proudest moment came on 8 May, 1980, when he stood before the World Health Assembly in Geneva, as chair of the Global Commission for the Certification of Smallpox Eradication, and declared its mission accomplished. "Everybody was delighted about it," he recalls. "That was the great moment."

In latter decades, Professor Fenner's focus turned to environmental issues, inspired by one of his great mentors, René Jules Dubos, an American scientist and environmentalist credited with coining the maxim "think globally, act locally".

Professor Fenner is known among colleagues as a cautious scientist but he has no hesitation in sharing his alarm about global warming and the failure of the United States and Australian Governments to respond appropriately.

Professor Fenner is similarly upfront about sharing his political convictions. He has never voted for the conservative parties, he says, preferring to support the "underdog". "Conservative governments – although I think Menzies did a good job as PM for a long time – they tend to be greatly influenced by other rich men, company owners and so on and so forth," he says. Nor has Professor Fenner been reticent about digging into his pockets to support the causes close to his heart. After winning the prestigious Japan Prize in 1988 – sharing the ¥500 million bounty with two others involved in smallpox eradication – he established two endowment foundations, to help fund conferences on the environment and medical research.

Writing is another passion. He has published more than 300 scientific papers and written or contributed to 14 books, including a best selling textbook, *Medical Virology*. He refers often to the role of both chance and his father in his successes, so it is no surprise that both feature in the title of one of his most personally revealing books, *Nature*, *Nurture and Chance, The Lives of Frank and Charles Fenner*. It examines the similarities and differences between the lives and opportunities of the father and son.

When the young Frank, an enthusiastic collector of fossils, was contemplating a career as a geologist, his father suggested medicine would offer more opportunities. Charles Fenner, a teacher who became a senior education administrator in SA, was also a keen scientist and writer. And clearly an influential role model for his son.

Another central figure in Professor Fenner's life and work was his wife Bobbie, a nurse. They met at work and married in 1943. Much of the first two years of their marriage were spent apart while Fenner was posted to New Guinea. He wrote to her at least once a day during their separation and was moved, many decades later, to discover she had kept all these notes, which he once described as "pretty torrid love letters". He found her reading them as she lay sick with inoperable cancer.

For Dr Peter McCullagh, a developmental immunologist who retired from the John Curtin School in 1991, three things stand out about the man who has been a colleague and friend for more than 40 years. These are his enormous work ethic, his remarkable knowledge of virology, and his example of healthy, active ageing.

"Frank is an incredible example of what one can do, post-65, by staying active," says Dr McCullagh.

Professor Fenner has no plans to hang up his hat when he moves his office back to the home shared with his daughter Marilyn. He hopes to devote more time to his beloved vegetable garden, whose produce is regularly shared with friends. But he has no ambitions to fight against the inevitable. After seeing his good friend Nugget Coombs debilitated and lingering on for many months after a stroke, Professor Fenner wrote an advanced care directive which he carries in his wallet. "It says 'if I am found unconscious on the road, don't do anything to revive me'," he says. "I don't want to live for a long time. I want a quick death."

Whenever and however his last moment comes, one thing is certain. Frank Fenner's memory will be writ large in the history of Australian science and medicine.

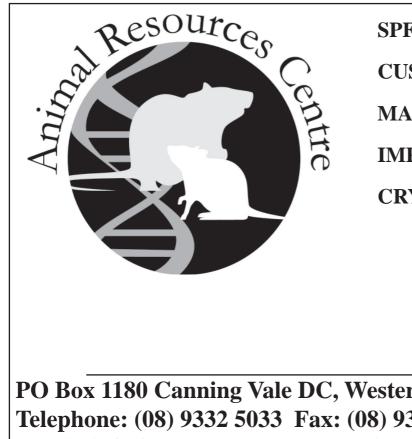
### **Reminiscence on Frank Fenner by Ian Mackay**

Frank Fenner will be particularly remembered with FM Burnet as Australia's most distinguished and scientifically productive virologist. I would make tribute too to his remarkable industriousness in that his *oeuvre* includes many authoritative books and compilations of valuable historical records of major scientific organizations in Australia, and also to his scientific rigor.

This became evident to me back in my very early days at WEHI in the 1960s when I sought his opinion on what seemed to me to be quite interesting results on human immune responses to autoantigens: after looking carefully at my data he returned a gentle smile and said, "Ian, if I got results like these I would order another 100 mice" – a salutary lesson!



Frank Fenner (left) and Ian Mackay are amused by something at the Power of One Idea conference at WEHI in 2007



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### HONORARY SECRETARY'S NEWS

2010 has been another exciting and eventful year for ASI.

Firstly I'd like to welcome the new Councillors elected to ASI Council. We have three new local branch Councillors: Anne La Flamme, University of Wellington (NZ), Ashraful Haque, QIMR (Qld) and Stuart Berzins, University of Melbourne (Vic) on voting council. Simon Apte has taken on the task of ASI Newsletter Editor and, if this issue and the number of emails I have received from him in the past few weeks is anything to go by, is determined to make the newsletter bigger and better than ever. So watch out for his requests to contribute! Franca Ronchese (Malaghan Institute of Medical Research, NZ) has been elected to the IUIS Council and is the IUIS Councillor on ASI Council. On a side issue I think it is worthwhile to mention that our very own Nick King has been elected to the IUIS Executive as Treasurer. Gabrielle Belz (WEHI) is now Editor in Chief of our journal, ICB. We also have two Student Reps for 2011: Kate Parham and Wai Yan (Kiwi) Sun (both SA Pathology, Adelaide). I wish all of you the very best and hope that you enjoy your time on ASI Council.

I'd also like to take this opportunity to say thanks to outgoing members: Steve Turner (Vic), Heiner Koerner (Qld), Jo Kirman (NZ), Baca Chan (Student Rep), Margaret Baird (Newsletter Editor) and of course, Chris Parish (ICB Editor in Chief and IUIS Councillor). Many thanks for all the hard work that you have put in over time!

The guidelines of the ASI visiting speaker program (VSP) have been changed and, as we'd like to hope, simplified. Please see Alejandro's article elsewhere in this newsletter for details on the application procedure.

The preparations to form the structures to organise the International Congress for Immunology (ICI) 2016 in Melbourne are underway. Watch this space for updates!

As always at this time of the year, I'd like to take this opportunity to remind everybody to renew your membership in time. Particularly those who want keep their option to apply for any of the travel awards open, renewal before 1st April is essential. Unfortunately we always have a couple of people missing out on travel awards because of failure to comply with these eligibility criteria. Don't be one of them!

In order to be eligible for postgrad or postdoctoral travel awards, the applicant must have been a full member in the year prior to application and must have renewed their membership before or on 1st April in the year of application. Naturally, membership must also be active at time of travel.

As in previous years, there will be two rounds of applications for travel awards. Applications for travel in second half of 2011 will be called in March, applications for travel in the first half of 2012 are called for in October.

For the Gordon Ada and Jacques Miller Senior Travel Awards, consecutive membership for five (5) years prior to application is essential. These awards are designed as opportunities for mid-career members who want to go overseas and are worth up to \$10000 per award. The next round for applications will be called for in March for travel from July 2011 to June 2012. We highly encourage our mid-career members to consider this exciting opportunity for travel planned later this year or early 2012. Don't be shy about putting in an application!

ASI is defined by its membership and a lot of benefits are available to its members, such as reduced registration rates to the Annual Scientific Meeting and other events organised by the ASI; free subscription to our Society journal with the ever increasing impact factor, *Immunology and Cell Biology*, along with access to *Nature Immunology* and *Nature Reviews in Immunology*; the quarterly Newsletter and (most importantly for some) eligibility to apply for our bursaries and travel awards.

Please remember that the ASI Council is there to support its members. Please do not hesitate to contact us with queries or suggestions that you might have. You can find all contact details on the inside cover of the newsletter and on the website.

Good luck with the grant writing!

Susanne Heinzel Honorary Secretary

#### 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.

> Gabrielle Belz, Editor-in-Chief Immunology and Cell Biology

### Sustaining Membership

ASI Inc acknowledges the support of the following sustaining member:

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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.

- 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 YOU COULD WIN \$200 FOR THE BEST ARTICLE PUBLISHED IN THE NEWSLETTER!

### **Introducing New Branch Councillors**

#### **Ashraful Haque**

I am writing to introduce myself as your new ASI Queensland Councillor. I will briefly summarise my current research interests, and also tell you a little of my previous research background. Although I am British, I have been living and working in Queensland since late 2005. Throughout my time here, I have been based at The Queensland Institute of Medical Research (QIMR) as a post-doctoral research officer in Christian Engwerda's Immunology and Infection laboratory. Our primary goal is to study immune responses to the protozoan parasite species Plasmodium and Leishmania, which cause malaria and leishmaniasis respectively in humans. Our predominant strategy has been to employ mouse models to understand why immune responses to these pathogens are often sub-optimal or deleterious. One of my major goals has been to discover new strategies for modulating immune responses, specifically T cells, in such a way that pathogen clearance mechanisms are enhanced and immune-pathology minimised.

Prior to moving to Australia, my first post-doctoral position was at the London School of Hygiene & Tropical Medicine (LSHTM), where I worked for three years with Dr Gregory J Bancroft on mouse models of human melioidosis, which is caused by the gram-negative, soil-dwelling bacterium *Burkholderia* 



Ashraful Haque - Ash with the Ashes!

pseudomallei. During this time we confirmed in vivo the role of T cell subsets in innate, adaptive, and vaccine-mediated immunity to infection, verified the importance of neutrophils in innate protection, and investigated novel generic therapies for boosting protective immune responses. Before my time at LSHTM, I completed my PhD in 2002, on non-typhoidal Salmonella pathogenesis, under the astute guidance of Professor Gordon Dougan (then at Imperial College, London, and who is now at the Wellcome Trust Sanger Centre, Cambridge, UK). On reflection, I suppose that I embarked upon a research career by investigating microbial virulence mechanisms, and over the past few years have become more interested in studying the host's response to microbial challenge.



#### **Stuart Berzins**

I am pleased to introduce myself as the new ASI State Councillor for Victoria and Tasmania. I'm sure it will be a rewarding time and I hope that my wide range of experiences will allow me to understand and represent the interests of all ASI members, from students who are entering the field, through to more experienced independent researchers.

I undertook my PhD at Monash University and subsequently worked as post doc in Boston before returning to Melbourne to establish myself as an independent researcher at Melbourne University. I have served on the IgV committee for two years where I have had central roles in organising Immunology Masterclasses and the IgV annual meeting, and have a long involvement in teaching and supervising Immunology at undergraduate and post-doctoral levels. As such, I have a wide range of experiences to provide representation for all ASI members.

As ASI representative, one of my objectives will be to improve student engagement by promoting initiatives to benefit their advancement and education. A particular emphasis will be to broaden the scope of ASI membership by maintaining the involvement of mainstream immunologists, but working to involve researchers from associated fields, such as innate, mucosal and tumour immunology, who may have been unaware of the many benefits ASI can provide to its membership. I invite anyone with an interest/ involvement in immunology to contact me should they require assistance with matters relating to our field.



#### **ASI Inc. Newsletter March 2011**

#### Anne La Flamme (NZ)



I received my BSc in Life Sciences from the Massachusetts Institute of Technology and my MSc in Molecular Parasitology and PhD in Immunoparasitology from the University of Washington, Seattle. After receiving my doctorate, I spent several years at Cornell University studying how parasites alter the host's immune response and cause immunemediated pathology. In 2001, I moved to New Zealand (for love!) and am currently an Associate Professor in Immunology and Cell Biology in the School of Biological Sciences at Victoria University of Wellington. I am also the head of the Multiple Sclerosis Research Programme at the Malaghan Institute of Medical Research and an Associate Investigator in the Maurice Wilkins Centre for Molecular Biodiscovery. My research interests include the regulation of immune responses during autoimmunity and infectious diseases, the involvement of macrophages in inflammatory diseases such as multiple sclerosis and atherosclerosis, and parasite-mediated liver pathology.



LtoR: Jonnel Jaurigue, Sarrabeth Stone, Hannah Frank, Marie Kharkrang, David O'Sullivan, Delgertsetseg Chuluundorj, Danielle Middleton, Sara Mirmoeini, Jenni Williams, Anne La Flamme

## Ralph Steinman announces the new International Society for Dendritic Cell and Vaccine Science



Luminaries Ralph Steinman and Bill Heath at ASI Perth

#### Simon Apte

Ralph Steinman presented a captivating plenary talk "Vaccines that target dendritic cells" at the ASI annual conference in Perth. He took the opportunity to announce the establishment of the new *International Society for Dendritic Cell and Vaccine Science*. The Society is exclusively a non-profit, web-based society and information network. All money from membership fees and fund raising is to be used towards travel awards for young scientists to attend dendritic cell research into vaccine design" and there are exclusive benefits to members which include: literature reviews of current research (starting in 2011, there will be \$1000 USD awards for the best reviews); a discussion forum; a multimedia library (videos, lectures, and other information sources); a job board to post and learn about opportunities in the field.

The Executive and Scientific Advisory Committees comprise a veritable who's who of dendritic cell and vaccine luminaries, including our own Ken Shortman, Eugene Maraskovsky and Bill Heath.

Find the Society online at www.dc-vaccine.org

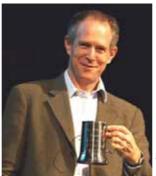
# **PRESIDENT'S COLUMN**

It is quite exciting to be sitting down to write my first President's report. While I am sure the novelty will wear off during the next two years, for you if not for me, I am at the moment filled with enthusiasm. I will, however, temper this enthusiasm at the moment to ensure some items are left for the next issue. In this report, I would like to highlight the state of ASI as I see it, the achievements made by Council under our immediate past President, Miles Davenport, and lastly, to outline areas where I think ASI might reflect on its current priorities.

It is fortunate that the newsletter exists as a forum to elaborate on the achievements of the members of ASI Council. The handover from President to Vice-President officially happens at the end of the AGM, a meeting routinely attended by just slightly more than the 40 members required for a quorum, and thus just a fraction of our total membership. There is a more public exchange at the last session of the scientific meeting, where the now ex-President gives a plenary address and is introduced by the new President. While I took this opportunity to highlight some of Miles' achievements and attributes, I feel making such an examination available to our full membership is justified.

ASI members will be aware of how large our Society has become over the last 10 years. We now have approximately 1000 members in total and our annual scientific meetings can involve up to that number of delegates. Clearly, ASI has become a large concern with turnover in the hundreds of thousands of dollars at our meetings and similar amounts in income and expenditure for the Society itself. With this expansion has come enormous opportunity to "do things" for ASI members. The most visible of these are the bursaries for students and post-docs travelling to international and national meetings and the Visiting Speaker Program that puts prominent international immunologists on tour in Australasia and, of course, funding to the ASI branches. These activities have expanded over the last few years, certainly in terms of the number of awards given and the total amount spent. This increase is commensurate with our increased resources, reflecting Council's view of their importance in giving value to members. Similarly, the Millar-AdaAwards, intended to enhance the career development of members after the post-doctoral period, have been through two rounds. While it may be a little early to determine if the current format of these awards achieves the aims of the awards when established, the principal of assisting ASI members throughout their careers is an excellent one and its implementation has been an important step. While some may regard all of this as business as usual, and it may well be, that usual business still requires considerable time and attention to detail. There is perhaps a natural tendency to take the day-to-day operation of the Society for granted, but it requires work, and that work is carried out in large part by the Executive, meaning the President, the Secretary, the Treasurer and the Vice-President.

Within the period of Miles' Presidency two initiatives were developed, one to fruition and the other being the beginning of the process of rationalising the running of the Society. The initiative that came to fruition was the bid, brilliantly organised and prosecuted by Jose Villadangos, for ASI to host the ICI in 2016 in Melbourne. ASI was awarded the rights to organise this meeting after a vote by the IUIS assembly at Kobe in August 2010. With these rights has come considerable responsibility and I think it is to Miles' credit that he made Council aware of these responsibilities and the requirement for structures to be put in place to ensure that the organisation of the meeting fitted with our legal obligations and within the rules and regulations of ASI. For most scientists, the term 'legal obligations' is not one likely to inspire excitement and enthusiasm, but it is unfortunately an adequate description of what had to be addressed. Council had to consider the various options for the organisational



Past President Miles Davenport with his presentation tankard



structure for ICI 2016 and then draft and enact the various changes to the rules of the Society that would allow such a structure to be created in a legitimate manner. Hardly the most exciting thing in the world, but certainly one of the more important in the immediate future world of ASI.

A major achievement of Miles, in my opinion (Miles can have the right of reply in the next newsletter) reflected the same desire to introduce high standards of governance in the running of ASI. Our Rules and Constitution date from the incorporation of the Society in Victoria in the 1970s. Many of our rules reflect the so-called Model Rules provided by the Department of Consumer Affairs as both a guide and as a default if no Societyspecific rule is put in place. As a result, many rules were somewhat antiquated, not reflecting, for example, the advent of email. Again, the average scientist would not be thrilled at the prospect at reviewing our rules and bringing them into the 21st century. But again, this is clearly a really important thing to do, allowing ASI to operate in an efficient yet legitimate manner. Rules are important (except in golf), but not in and of themselves (except in golf). I would thank Miles for ensuring that Council now has a set of rules that promote the aims of the Society, protect the membership from arbitrary or undemocratic decisions and, in so doing, protect the Councillors from recrimination. All in all, an excellent outcome, albeit one that is not particularly visible to those outside Council, which is why I thought it necessary of highlighting it to our members.

I will finish up by outlining some of the areas where I think ASI could become more visible. Immunology is a fantastic discipline in which every aspect of biology can be examined with incredible precision and with some of the most sophisticated tools in modern biology. I can't help feel, however, that immunology is something of a victim of its own success, with many who study cells and processes of the immune system regarding themselves as something other than Immunologists. I would hope that during the next two years we can make a concerted effort to identify these people and bring them into the orbit of ASI. I think this will be beneficial in both directions, making more people identify with Immunology and also broadening the areas in which our students might consider working in the future. Another aim is to create ways of raising the profile within the general public and amongst those who judge

us in the various peer review processes of the excellence in Immunology that exists within ASI members. Immunology has a great history in Australia and continues to be one of our highest impact disciplines internationally. It would be great to see our best proponents being recognised for their activities on a more public and emblematic manner.

Last for now is to consider ways of sustaining the inflow of students into Immunology. A graduate degree in Immunology is now one of many options for talented undergraduates and it is in all our interests to identify these students and to provide them with opportunities to experience high level Immunology research, which will hopefully excite them to a point where a PhD is their only thought. ASI might consider, for example, ways of rewarding outstanding undergraduate students and providing opportunities for them to be exposed to senior immunologists and the breadth, depth and excitement of Immunology research.

Our future is indeed bright, reflecting the excellent work done by previous ASI Presidents and Councils. I would hope to build on this foundation and leave the Society in an even stronger position when I step down in two years time.

David Tarlinton

### **News – IUIS Frontiers in Immunology**

The International Union of Immunological Societies (IUIS) has announced that Frontiers in Immunology has become their official journal. Frontiers in Immunology is part of the Frontiers Journal Series and on their website they "promise to exert a paradigm shift in immunological publishing". There are four components of the Frontier Journal Series that set it apart from other publishing methods: open access, an interactive review system, a tiering system where all accepted publications start on the lowest tier, and a dynamic bibliometric evaluation system post publication-enabling worthy publications to move to higher tiers. Below is a message from the Frontiers in Immunology Chief Editor, Kendall Smith, and the IUIS representative, Seppo Meri.

#### Dear IUIS member societies,

You may have heard by now that IUIS has agreed to be the official sponsor of the new on-line, open access journal entitled *Frontiers in Immunology*, of which I am the Chief Editor, and Seppo Meri of Helsinki is the official IUIS representative. We invite you to visit the website and check out our editorial boards (<u>http://www.frontiersin.org/immunology</u>), and to see the attached essay, the *Frontiers Publishing Paradigm*, which explains what this new publishing venture is all about. (Comment from Editor – contact me for a copy of the essay).

Frontiers in Immunology is not only a single journal. It will be comprise >20 distinct journals, each with its own Chief Editor, and an editorial board of >10 Associate Editors, and ~200 Review Editors. Thus Frontiers has a broad base, so as to involve many people in the reviewing process, thereby reducing to a minimum each individual's contribution/time commitment. By providing free access to see all material, Frontiers in Immunology will help the whole immunological community all around the world to access the latest information in immunology. While maintaining high quality, it will also be a global journal where all immunologists can contribute with their best research results.

Furthermore, *Frontiers in Immunology* is not only a collection [of] journals but provides a contact arena for all immunologists and a platform for networking within IUIS. We hope that you will embrace this new opportunity for publishing and to establish a new 'social network' of like-minded colleagues, one for the 21st century! For IUIS *Frontiers in Immunology* will be a new way of distributing information. Thus, we advise you to bookmark it to the tops of your screens.

As active members of the immunological community you can participate in the set-up of the journal structure and composition. At this time, Kendall A. Smith, as the Chief Editor, would like to enlist your help to suggest possible individuals, who you would think would make good Specialty Chief Editors for the following disciplines:

- 1) Secondary Immunodeficiencies (HIV)
- 2) Alloimmunity (Transplantation)
- 3) Tumor Immunity
- 4) Molecular NK cell Biology
- 5) Molecular Cytolytic & Apoptosis Mechanisms
- 6) Immunotherapy & Vaccines

Also, please circulate this announcement to all of your members, and solicit suggestions for potential Associate Editors (AEs) and Review Editors (REs), which could be sent to the appropriate Specialty Chief Editors. The AEs are intended to be people who are at the Associate Professor or early Professor level, who have not yet become burdened with administrative responsibilities, whereas the Review Editors will be individuals who are at the Assistant Professor or Senior Postdoc levels.

All the best regards Kendall & Seppo

# **ASI Councillors' News**

### W.A. News

The Western Australian branch of the ASI would like to thank all those delegates, speakers and sponsors who attended and supported the 2010 ASI Annual Scientific Meeting in Perth. We had a total of 422 delegates attend the meeting. The pre-meeting workshops were also well attended with 66 delegates at the Tumour Immunology Workshop, 56 at the Infection and Immunity Workshop and 35 delegates at the Post-graduate Workshop. I would also like to thank the organizing committee for their efforts. In particular I would like to thank the Chair of the Organising Committee, Christopher Andoniou. Chris really did the lion's share of the work for this meeting and any accolades must be sent in his direction. Thanks also go to the organisers of the workshops and the chairs: Tumour Immunology, Delia Nelson; Infection and Immunity, Andrew Currie; and the Post-graduate Workshop, Jane Allen and Gerard Hoyne.

In local news, WA immunologists should look forward this year to another Perth Immunology Group (PIG) meeting. A date for this has not been set yet but watch this space for updates. The local ASI committee will also be organising another event for the global Day of Immunology, information on this also be announced at a later date. In closing, I hope that those of you who attended the Annual Scientific Meeting had a great time in Perth and I wish the organising committee for the next ASM in Adelaide the best of luck.

> Alec Redwood Councillor

### **Queensland News**

Welcome to my first report as the Queensland ASI Councillor, replacing Prof Heinrich Korner who has "defected" from JCU to the Menzies Research Institute in Tasmania. I would, of course, like to wish Heiner all the best in his new post.

While many of us settle into 2011, fuelled with ideas for "must-fund" grant applications, having enjoyed the ASI Annual Scientific Meeting in Perth, the recent catastrophic flooding events in Queensland and Victoria remind me, at least, that scientific research is about people, as much as it's about ideas, equipment and buildings. Many Queenslandbased scientists will have suffered flooding to their homes, while the lucky majority escaped, having endured only the relative inconvenience of disrupted public services. Our thoughts as a Society go out to those who continue to suffer in the aftermath of these recent disasters. As I write, two cyclones threaten the Queensland coast, and so we also hope that this State, and the country as a whole, will avoid further environmental disaster in 2011.

This year's Brisbane Immunology Group Annual Retreat will be held at the Sea World Nara Resort, on the glorious Gold Coast, from 18-19 August 2011. I would like to recommend this meeting to all ASI members both in Queensland and beyond, particularly students and young post-docs. Please visit the link on the ASI website for further details. Last year's retreat, held on the Sunshine Coast, included an engrossing Plenary Talk on autophagy by Professor Vojo Deretic (University of New Mexico, USA), as well as lectures by Prof Lynn Corcoran (WEHI), Prof David Vaux (La Trobe University) and Dr Cecile King (Garvan Institute), in addition to a large number of talks given by young Queensland-based scientists.

Lastly, as the new Queensland ASI Councillor, I am able to communicate any issues, suggestions or comments you would like conveyed directly to the ASI Council. So, please don't hesitate to contact me at Ashraful.haque@qimr.edu.au. Best wishes for 2011.

> Ashraful Haque Councillor

### **N.S.W.** News

Happy new year to all! I hope you all enjoyed the summer break and festive season, and that no-one was too badly affected by the natural disasters that gripped the country in January. Congrats to the organisers of the ASI meeting held in Perth in December – you did a great job, continuing the tradition of excellent ASI conferences. And congratulations to everyone lucky enough to be awarded NHMRC grants/fellowships for 2011.

Plans are well underway for the organisation of the 2011 combined ASI NSW/ACT Branch Retreat, which will once again be held at Craigieburn Resort and Conference Centre in Bowral in the Southern Highlands of NSW. The dates have been confirmed for Thursday 25th and Friday 26th August. We have been lucky enough to secure generous sponsorship by Miltenyi, Becton Dickinson, StemCell Technologies and Jomar (who distribute all those eBioscience mAbs we use), with several other sponsors likely to come on board soon.

While the meeting will have a similar program as in the past, we will be introducing some changes. There will be two talks by invited speakers on technical advances that are impacting how immunology research is (or can be) done – one of these will be given by Dr Tri Phan (Garvan Institute) on the application of 2 photon microscopy/in vivo imaging. The second talk in this theme will cover next generation sequencing. We are also hoping to have an ASI international visiting speaker attend this meeting. Registration will open in June – so watch this space for more details at the date draws closer.

That's all for now - All the best for 2011.

Stuart Tangye Councillor

### N.Z. News

#### Taking over the reins

Following the ASI meeting in Perth, I have taken over from Dr Joanna Kirman as Councillor for New Zealand. While I am excited to be taking on this responsibility, I must acknowledge the difficult task of replacing Jo who has been a fantastic councillor and champion for New Zealand Immunology. I believe that it is primarily through the recent efforts of Jo that we have such a strong ASI branch; thank you, Jo! On the upside, while Jo is no longer an ASI Councillor, she is still integrally involved in organizing NZ ASI 2011 (more on that below) and the upcoming ASI 2013 (also below) in Wellington.

#### NZ ASI/Immunet Meeting 2011

Joanna Kirman has been hard at work organizing the upcoming NZ ASI branch meeting in Wellington. It will be held at the new Alan MacDiarmid building, Victoria University of Wellington from 30 June to 1 July 2011. We have an exciting line-up of speakers including Paola Castagnoli (Singapore Immunology Network, Singapore), Kiyoshi Takeda (Osaka University, Japan), and Ranjeny Thomas (University of Queensland, Australia). Additionally, this year we will have an inaugural oration to celebrate immunology in New Zealand ("From sheep and beyond") as well as introducing awards targeted to postdoctoral fellows and research technicians. I hope to see a repeat of the high level of participation in this annual event as in recent years.

#### Day of Immunology, April 29

The work is underway organizing this year's Day of Immunology celebrations. As in previous years we are planning events in both Wellington and Dunedin. The Wellington events are being co-ordinated by Joanna Kirman and myself with the help of Debbie Scarlet from the Malaghan Institute, and the Dunedin event is being organized by Roslyn Kemp and Alex McLellan. While the exact details of these events have not been formalized, we will keep you informed when the final programme has been arranged. As always, if you are interested in becoming involved in these events, please contact the organizers; we welcome your participation.

#### New initiatives

On a very different note, last year the Ministry of Research, Science, and Technology sponsored a delegation of NZ immunologists to visit leading immunologists in Japan. The scientists visited the RIKEN Research Center for Allergy and Immunology, Chiba University, and Osaka University. The purpose of this visit was to promote collaborative research between NZ and Japan, and immunology was viewed as a research area of significant interest and potential. It is hoped that stemming from this event, a strong linkage between NZ and Japanese immunologists will develop over the next few years.

> Anne LaFlamme Councillor

### Victorian News



On behalf of all Victorian and Tasmanian members, I'd like to acknowledge the fantastic job performed by Stephen Turner for the past few years. He has been a great representative for the ASI membership and leaves large shoes to fill. Nobody should be concerned that Steve is now taking it easy – he has become president of the Immunology Group of Victoria (IgV) and he and his wife Nicole recently welcomed a new baby boy into their household. Congratulations to them and I hope he won't mind too much helping me settle in.

Of course, it won't simply be Steve I'm relying on and I'm hoping everyone feels free to contact me with suggestions about how ASI can help local members at their institute.

I'd like to remind members that ASI funds visits by international speakers and we welcome nominations from members. If you have someone in mind, please provide a short (~one page) letter that gives some background about the person and outlines why they would be appropriate to support. Ideally, nominate someone with the broad support of local ASI members. I'll also be touch by email to let you know about more ASI-sponsored activities and to help publicize local events and job vacancies for members. You should have received some of these already – please let me know if we need to update records. Please encourage colleagues and students to become an ASI member for 2011 – and also remind your colleagues who were financial in 2010 to renew their ASI memberships for 2011; they need to renew before 1st April if they are thinking of applying for travel grants this year.

> Stuart Berzins Councillor

### S.A./N.T. News

2011 looks to be even better than ever for ASI members in SA/NT with a wonderfully vibrant scientific community ready for all the ASI events ahead, including being the hosts for the ASI Annual Meeting at the Adelaide Convention Centre in December. We are looking forward to the ASI speaker program this year and are keen to introduce our guests to the delectable food and wine SA has to offer.

#### Update on Program for ASI Annual Meeting 2011 to be held in Adelaide 11–15 December:

ASI 2011 will be held at the Adelaide Convention Centre and so far we have secured the participation of the following international speakers: David Artis (University of Pennsylvania, USA), Lisa Coussens (University of California, San Francisco, USA), Richard Flavell (Howard Hughes Medical Institute, Yale, USA), Paul Kubes (University of Calgary, Canada), Alberto Mantovani (University of Milan, Italy), Claudia Mauri (University College London, UK), Ed Palmer (University Hospital, Basel, Switzerland), Shigeru Saito (University of Toyama, Japan), Joachim Schultze (LIMES Institute, Bonn, Germany) and Megan Sykes (Columbia University Medical centre, New York, USA).

Our conference themes include: immune regulation and functional genomics, inflammation, autoimmunity, mast cells, reproductive immunology, transplantation, intravital microscopy and leukocyte trafficking, regulatory lymphocytes (B & T cells), innate immune responses, tumour immunology and more ...

Special thanks to our organizing committee: Dr Claudine Bonder

(Convenor), Simon Barry, Toby Coates, Maurizio Costabile, Lindsay Dent, Boris Fedoric, Antonio Ferrante, Cara Fraser, Claire Jessup, Erin Lousberg, Gabriela Minigo and Lachlan Moldenhauer. We would also like to warmly welcome our newly appointed student representatives, Ms Kiwi Sun and Ms Kate Parham, onto the committee. Kiwi and Kate will be helping to organize some of the student activities at the conference ... already there has been mention of a potential dinner to be held at the Adelaide Zoo with a planned tour to see Wang Wang and Funi, our pandas from China. Stay tuned with regular updates on the meeting available at www.asi2011.org.

We hope to see you in Adelaide at ASI 2011!

Michele Grimbaldeston Councillor





Sandeep Gupta & Alison Hodgkinson



Stephane Chevrier, Sarah Oracki, David Tarlinton



Su Heinzel, Claudine Bonder & family

### **ANNUAL GENERAL MEETING**

Tuesday 07 December 2010, Perth Convention Centre

### **MINUTES**

#### 1. WELCOME & APOLOGIES

Apologies:

Tony Basten, Judith Greer, Tony Cunningham, Frank Christiansen

#### **ORDINARY BUSINESS**

#### 2. CONFIRMATION OF MINUTES, AGM 2009

Minutes from last AGM as published in ASI newsletter March 2010. Proposed: Miles Davenport, Seconded: Alan Baxter. Carried.

### RECEIPT AND APPROVAL OF REPORTS FROM COUNCIL President's Report

As this is my last Council meeting as President, I thought I would start by saying what a great pleasure and an honour it has been to serve as the president of ASI over the last two years. The society is an increasingly dynamic organism that has gone from strength to strength over the past decade. This is reflected in increasing membership, increasing services to members in the form of regular activities and fellowship support, increasing scientific strength at meetings, and the increasing strength of its journal ICB.

All of these contributions are down to the dedication and volunteer effort of members and Councillors. It is been a particularly exciting time for the society over the last two years to both pass a membership of 1000 and to win the rights to hold the 2016 International Congress of immunology. In addition, we have seen the development of an active Women in Immunology Group, the awarding of the first "ASI Senior fellowships", introduction of bursaries for post-docs to the annual meeting, and a trial of an ASI session at AAI (albeit perhaps not as successful as we might have liked). To give some impression of the support flowing back to members, this year we awarded 25 PhD and post-doc students on international travel (more than half to the International Congress of Immunology), as well as 20 travel bursaries to attend this meeting, and a Senior Travel Award. The treasurer tells me that over 1/3 of total expenses are on this form of member support this year, which I feel reflects a strong ethic of career support for younger members.

The comments above reflect largely on the activities of the National Council, but it is exciting to read the new developments in State activities. Most states now have an annual State meeting, an active "Day of Immunology" program, and host numerous National and International speakers during the year. Moreover, as will be reported later, the Society Journal ICB seems unstoppable in its progress to overtake Journal of Immunology as the premier Society Journal.

The most visible evidence of the increasing professionalism of the society is the strength of the annual meetings, which we see around us this week. These are currently at a very high international standard, and reflect extremely well on the strength of immunology research being done in Australia. The increasing success of ASI also brings increasing challenges for the Council to manage a much larger and more professionally demanding organization. I am very happy to be handing over the presidency to Dave Tarlinton, who has long experience with ASI, not least as its Public Officer for over a decade. I am confident he will do an excellent job in leading ASI forward to new achievements, and will look forward to the opportunity of snoozing in the Council meetings as past President in 2011.

I would like to take this opportunity to thank the Council and members for their support, and in particular to thank Su Heinzel, who has worked tirelessly as secretary to smooth the workings of the Council, to provide support, and to keep me in line when necessary.

Thank you again for your support and I hope you enjoy the rest of the meeting.

### 3.2. Secretary's Report

#### Change in position of council for 2011

	Position	Outgoing	Incoming	
Voting Council	Qld Councillor	Heiner Korner (early retirement)	Ashraful Haque	
	Vic/Tas Councillor	Steve Turner	Stuart Berzins	
	NZ Councillor	Jo Kirman	Anne La Flamme	
Non-voting council	Newsletter Editor	Margaret Baird	Simon Apte	
ASI council 2011				
	Position			
Executive	President	David Tarlinton		
	Vice President	Miles Davenpor	t	
	Secretary	Susanne Heinz	el	
	Treasurer	Pablo Silveira		
Voting Council	NSW Councillor	Stuart Tangye		
	SA/NT Councillor	Michele Grimba	Ideston	
	Qld Councillor	Ashraful Haque		
	Vic/Tas Councillor	Stuart Berzins		
	ACT Councillor	Stephen Daley		
	NZ Councillor	Anne La Flamm	ie	
	WA Councillor	Alec Redwood		
Non-voting council	Newsletter Editor	Simon Apte		
	IUIS Representative	Franca Ronche	se	
	ICB Editor in Chief	Gaby Belz		
	ICB Deputy Editor	Chris Parish		
	FIMSA Representative	es Nick King		
		Guna Karupiah		
	Invited Speaker Progra	am Jose Alejandro	Lopez	
	Meeting Coordinator	Bernadette Sau	Inders	
	Dol Co-ordinator	Delia Nelson	Delia Nelson	
	Honorary Archivist and	d Webmaster Judith Greer		
	Student Representativ	re TBA		
SIG	Mucosal Immunology	SIG Phil Sutton		
	SIG Education	Margaret Coole	у	
	SIG Infection and Imm	nunity Ashley Mansell		
	SIG Tumour Immunolo		Joe Trapani	

#### Membership numbers

wiembersnip	,							Int	Int	TOTAL	Total	total	change	change to
		Full	Stud	Ret	Sust	Hon	Comp	Full	Stud	2010	2009	2008	to 2009	2008
ACT		27	21	3	-	-	5	-	-	56	67	69	-11	-13
NSW		107	62	5	-	2	9	-	8	193	215	180	-22	13
QLD		68	31	-	-	-	10	1	2	112	132	110	-20	2
SA/NT		32	19	-	1	2	7	-	5	66	64	69	2	-3
TAS		7	1	1	-	-	1	-	-	10	7	6	3	4
VIC		233	80	2	-	7	11	2	3	338	326	290	12	48
WA		48	13	1	-	1	5	3	-	71	68	70	3	1
NZ		74	44	-	-	1	5	-	1	125	115	100	10	25
USA		8	1	-	-	-	-	-	-	9	13	15	-4	-6
UK		6	-	-	-	-	1	-	-	7	8	6	-1	1
SWITZ		2	-	1	-	1	-	-	-	4	5	2	-1	2
H/KONG		2	-	-	-	-	-	-	-	2	3	3	-1	-1
CANADA		1	-	-	-	-	-	-	-	1	2	1	-1	0
N'LANDS		2	-	-	-	-	-	-	-	2	1		1	2
PNG		-	-	-	-	-	1	-	-	1	1	1	0	0
GERMANY		2	3	-	-	-	-	1	-	6	4	3	2	3
SINGAPORE		4	-	-	-	-	-	-	-	4	10	5	-6	-1
THAILAND		1	-	-	-	-	-	-	-	1	1		0	1
JAPAN		1	-	-	-	-	-	-	-	1	1	1	0	0
CHINA		1	-	-	-	-	-	-	-	1	1		0	1
SWEDEN		-	1	-	-	-	-	-	-	1	1		0	1
BELGIUM MALAYSIA		1	-	-	-	-	-	-	-	1			1	1
DENMARK												1	0	-1
FRANCE											1		-1	0
	[	(07	07/	10	1	14		7	10	1010	10.47		0	-1
total 2010	2000	627	276	13		14	55	/	19	1012	1046	933	-34	79
	2009	595	250	11	2	12 13	55	50	71 47	1046				
	2008	551	228	11	2	13	58	24	47	934				
change to 2009		32	26	2	-1	2	0	-43	-52	-34				
change to 2008		76	48	2	-1	1	-3	-17	-28	78				

**Honorary Life Member** Carolyn Geczy 2010

Awards ASI Gordon Ada Senior Travel Award Vasso Apostolopoulos, Burnet Institute

#### April 2010

Post doc \$3000 ASI International Travel Award Mifsud Monash Uni Nicole WEHI Xu Yuekang Harvard Medical School Joanna Groom

#### \$1000 Award for attendence of ICI 2010 in Kobe

Dominique	Gatto	Garvan
Elissa	Deeninck	Garvan
Ivan	Poon	Latrobe Uni
Kate	Graham	St Vincents Institute
Angela	Chan	University of Melbourne
Simon	Apte	QIMR
Joshua	Ooi	Monash Uni

#### Post grad

\$3000 ASI International Travel Award					
Kate	Markey	QIMR			
Sarah	Oracki	WEHI			

#### \$1000 Award for attendence of ICI 2010 in Kobe

Gerard	Kaiko	University of Newcastle
Sophie	Valkenburg	University of Melbourne
Rachael	Terry	University of Sydney
Zheng	Ling	University of Sydney
Julie	Brazzatti	University of Adelaide
Yuka	Harata-Lee	University of Adelaide

#### October 2010:

Postdoc		amount	
Edwin	Hawkins	3000	PeterMac
Dominique	Gatto	3000	Garvan
Sandro	Prato	2000	WEHI
Colleen	Elso	2000	SVI

#### Postgrad

Adam	Collison	3000	Uni Newcastle
Sarah	Moneer	3000	Uni Melb
Eric	Tu	3000	Uni Melb

#### **Travel bursaries for ASI Perth 2010**

#_	First Name	Surname	City of origin	Level	Costing
1	Daniel	Pellici	Victoria	PhD student	830
2	Adam	Collison	NSW	PhD student	800
3	Stacey	Walters	NSW	PhD student	800
4	Vivian	Turner	NSW	PhD student	800
5	Chun Ping	Yu	SA	PhD student	770
6	Jesscia	Moffat	Victoria	PhD student	830
7	Wai Yan	Sun	SA	PhD student	770
8	Emma	Job	Victoria	PhD student	830
9	Hamutal	Mazrier	NSW	PhD student	800
10	Nicole	Messina	Victoria	PhD student	830





Malissen



LtoR: Denise Doolan, Alejandro Lopez, Chris Andoniou, Chris Schmidt







Dan Littman

#### ASI Inc. Newsletter March 2011

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#### Total amount estimated set aside in 2010 for travel awards:

		45 recipients
ASI Perth	\$17.670	(20 x varying amounts)
ITA Oct 2010	\$19,000	(5 x 3000 + 2 x 2000)
ICI 2010	\$13,000	(13 x 1000)
ITA April 2010	\$15,000	(5 x 3000)

**Resolution:** That the AGM accept the President's and Secretary's reports. Proposed: John Fraser: Seconded: Andrew Lew. Carried

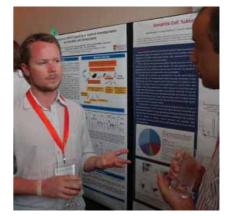
#### 4. RECEIPT AND APPROVAL OF FINANCIAL STATEMENTS

#### 4.1. Treasurer's Report

The treasurer presented details of the 9 month audit from 1 Oct 2009 until 1 July 2010.

#### INCOME STATEMENT

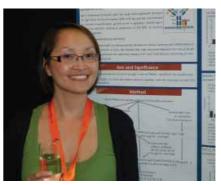
INCOME	2010 <i>(12 Months)</i>	2009 <i>(9 Months)</i>
Conference Income Investment and Savings Interest ICB Royalty Memberships Newsletter Advertising Sponsorship (State branch) Other Branch Income	55,580 13,992 77,579 101,062 2,262 3,636 82	3,908 11,860 70,595 82,382 1,703 3,000
TOTAL INCOME	254,193	173,448
EXPENSES		
Administration Audit/Accounting Bank Fees & Charges Council Meetings/Orator Dinner Day of Immunology ICB Subscriptions ICI 2016 Foreign Exchange Loss Meeting Loans & Support Postage, Stationery, Printing Society Memberships Travel Awards and Prizes Visiting Speakers Program	29,064 3,850 4,475 17,183 1,894 7,113 4,071 156 30,475 21,414 9,406 90,265 25,431	27,434 3,200 39 6,203 3,624 5,800 2,123 61,314 12,268 5,158 61,548 23,230
TOTAL EXPENSES	244,797	211,941
Profit/Loss	9,396	-38,493



Ben Fancke



Shalin Naik responds to a difficult question



Vanessa Yenson



Anne Kelso & David Pattinson

BALANCE SHEET			
ASSETS		2010	2009
Cheque/Saving Accounts Central ACT NSW NZ Old SA/NT Vic/Tas WA		450,960 5,707 13,774 17,257 17,329 6,654 43,335 6,173	437,800 5,421 18,263 13,314 10,505 10,565 37,549 4,791
	Total	561,189	538,208
Accounts Receivable Accounts Receivable		5,993	30,510
Other Current Assets Meeting Seed loans		20,000	20,000
Total Current Assets		587,182	588,718
LIABILITIES			
Accounts payable Audit Fees GST payable		0 3,200 0	0 3,200 0
Total Liabilities		3,200	3,200
TOTAL EQUITY		583,982	585,518
Budget 2011 INCOME	2011	2010	Query from the Andrew Lew allocated \$46,0 \$30,000 for the
ASI Conference Profit	5,000	55,580	Drof Low word

INCOME	2011	2010
ASI Conference Profit ICB Royal Investment & Savings Interest Membership Newsletter Advertising Sponsorship (State Branch) Other Branch Income	5,000 78,000 14,000 100,000 2,200 3,600 100	55,580 77,579 13,992 101,062 2,262 3,636 82
TOTAL INCOME	204,900	254,193
EXPENSES		
Administration Audit/Accounting Bank Fees & Charges Bursary Awards Council Meetings/Orator Dinner Day of Immunology Foreign Exchange Loss ICB Subscriptions ICI 2016 Meeting Loans and Support Postage, Stationery, Printing Society Memberships Senior Travel Awards (Ada/Miller) FIMSA Travel Awards Travel Awards Visiting Speakers Program	$\begin{array}{c} 30,000\\ 3,850\\ 4,500\\ 18,000\\ 15,000\\ 3,000\\ 0\\ 7,200\\ 0\\ 30,000\\ 22,000\\ 9,450\\ 10,000\\ 0\\ 36,000\\ 30,000\\ \end{array}$	29,064 3,850 4,475 24,111 17,183 1,894 156 7,113 4,071 30,475 21,414 9,406 15,316 17,709 33,129 25,431
TOTAL EXPENSES	219,000	244,797
Profit/Loss	-14,100	9,396

e floor:

enquired why there was 000 for travel awards but only he visiting speaker program. Prof Lew wanted to know if the \$30,000 could be increased as there is potentially more benefit to ASI members from the visiting speaker program. Prof Miles Davenport, supported by A/Prof Alejandro Lopez (Visiting Speaker Co-Coordinator), stated that money would be increased but more ASI members from each state need to propose potential international speakers as currently very few are proposed each year. Furthermore the process of application has been simplified. Prof Dave Tarlinton noted that the bar for visiting speakers is high but that some institutes could contribute to the travel costs if "lower" category scientists were to be invited. Previously there has been two categories for the invited speaker program where nominated speakers were assessed according to their CVs. Now there is only one category and the state branches will help to offset the travel costs.

#### Query from the floor:

Concerning income from conferences. It was noted that the expected profit from the Perth conference would be only around \$5000 and this is significantly lower than the last couple of conferences. Dr Chris Andoniou responded by stating that there were fewer registrants for the Perth meeting possibly due to the distance to travel to Perth and also potentially due to the ICI Kobe meeting held in Japan earlier in the year. Many supervisors of students might have elected to send students to the international conference rather than to the national ASI meeting in Perth.

**Resolution:** That the AGM accept the Treasurer's Report.

Proposed: Miles Davenport; Seconded: Dave Tarlinton. Carried

#### 5. RECEIPT AND APPROVAL OF REPORTS – OTHER

5.1. ICB Report

Chris Parish, the Editor-in-Chief of *Immunology and Cell Biology*, provided the meeting with a general update on the journal. He highlighted the continued success of *ICB* in 2010, with some notable achievements being listed below:

- The ICB impact factor has risen from 3.859 in 2008 to 4.200 in 2009. This represents the fourth year in a row that ICB has recorded a substantial increase in its impact factor. Indeed, since 2005 the impact factor of ICB has increased by a remarkable 226%! As a result of this large increase, ICB is now ranked 28th out of a total of 128 immunology journals, jumping from 76th in 2005. This ranking is even better than it sounds as 10 of the journals with higher impact factors than ICB only publish review articles, not research papers. ICB is also one of the most highly ranked immunology society journals, being well ahead of journals published by the Scandinavian, German, British and Japanese societies.
- Article page views and downloads from the *ICB* website are running at an all time high. Even more impressive is the number of electronic Table of Content (eToc) subscriptions, which has almost doubled in the last 12 months.
- There has been an almost 20% increase in the number of unsolicited papers submitted to *ICB*. As a result of the larger volume of submitted manuscripts, and the inevitable increase in accepted manuscripts, *ICB* will move in 2012 from publishing 8 issues to publishing 10 issues annually.
- The new article type introduced in 2007, called **Outstanding Observation**, has continued to attract very high quality papers. With this manuscript category

*ICB* hopes to capture papers that describe outstanding findings that, as yet, do not have a detailed molecular mechanism.

• During 2010 the vast majority of unsolicited articles (79%) originating from non-Australasian laboratories, highlighting the international nature of the journal.

Chris also reported that the 'Special Features' have continued to be very successful during 2010 and will be continued during 2011. At this stage, three Special Features have been planned for 2011, which are as follows:

January 2011 – Immunological tolerance February 2011 – Chemokines March/April 2011 – Human immunology, basic and translational aspects

He thanked Franca Ronchese, the Special Features Editor, for organising these Special Features.

#### ICB Editorial Board Matters

Chris reported that he will be retiring as the Editor-in-Chief of *ICB* in January 2011, with Gabrielle Belz becoming the new Editor-in-Chief. During 2010 Gabrielle, as Deputy Editor, has gradually taken on more editorial responsibilities. In early November, Simone Farrer was appointed as Gabrielle's Editorial Assistant at the WEHI. Bhama Parish, the current ICB Editorial Assistant, and Simone are actively involved in the hand-over of responsibilities, with Bhama retiring from the Editorial Assistant's position at the end of January, 2011.

Chris also thanked Bhama for the tremendous assistance she had given him as Editorial Assistant over the last 6 years. Without her help it would have been virtually impossible for him to manage the dramatic expansion in the journal's profile. In fact, her efficient running of the Editorial Office has been a major factor in the journal's success.

With the increased volume of submitted manuscripts Chris reported that two new Deputy Editors, Stuart Tangy and Adrian Liston, have been appointed to assist the Editor-in-Chief. Chris will also continue as a Deputy Editor during 2011 and mainly handle manuscripts already in the system and take over Editor-in-Chief responsibilities when Gabrielle is unavailable.

During 2010 the two News and Commentary Editors, Carola Vinuesa and Stuart Tangye, resigned. Chris acknowledged the wonderful job Carola and Stuart have performed during the last 3-4 years. N&C articles have now become a major feature of every *ICB* issue. Chris also welcomed the two new N&C Editors, Elissa Deenick (Garvan Institute) and Stephen Daley (JCSMR).

Franca Ronchese continued as the Special Features Editor during 2010. However, with increasing space pressure on the journal it was decided that the Editor-in-Chief should handle Special Features in the future. Thus, the position of Special Features Editor will be abolished at the end of 2010. Chris thanked Franca for her excellent contributions to the Special Features during the last 2 years.

Finally, Chris stated that it was with some regrets that he will be retiring as Editor-in-Chief in January 2011. Since taking up the position in 1992 he has seen the journal gradually grow in stature, the publishing agreement with NPG accelerating this process in recent years. He has always believed that this region should be the home of one of the world's top immunology journals. He thinks this mission is close to being accomplished and is sure that Gabrielle and her Editorial team will ensure the continued success of the journal.

Susanne Heinzel thanked Chris Parish for all of the work he has done over the years for the journal and the Society.

#### 5.1. IUIS Report

Representation of ASI members on IUIS council:

Franca Ronchese has been elected as IUIS councillor at IUIS council meeting in August in Kobe, Japan

On ASI council she holds the 'IUIS councillor' position (non-voting) Nick King has been elected IUIS treasurer on IUIS executive at the IUIS council

on IUIS executive at the IUIS council meeting in August in Kobe, Japan

#### 5.2. ICI 2016

At the IUIS council meeting in Kobe ASI's bid to hold the 16th ICI in Melbourne 2016 was accepted.

Council is drawing up plans for the structure of organising committee and the committee will be formed based on that structure.

On behalf of ASI Susanne Heinzel thanked Jose for all of his efforts associated with the bid to hold the ICI in Australia.

# 5.3. Meeting Reports 2010 Perth

For the 2010 meeting there were 420 registrants but it was noted that student numbers were lower this year. Over 70 people participated in the Tumour Immunology workshop, 35 students in the postgrad workshop, 220 attended the conference dinner and 80 students at the student function on the Tuesday night. \$115,000 was provided by sponsors and trade and some institutes also provided travel funds for the invited speakers. It is anticipated that the Perth meeting will close with a small profit.

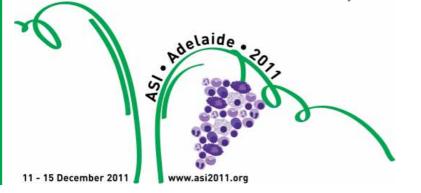
Susanne Heinzel thanked Chris and the other members of the Perth conference organizing committee for their efforts and a successful meeting.

#### Adelaide 2011

Committee: Dr Claudine Bonder (chair) Dr Michele Grimbaldeston (program chair) Prof. Tony Ferrante Dr Lindsay Dent Assoc/Prof Toby Coates Assoc/Prof Simon Barry Dr Claire Jessup Dr Lachlan Moldenhauer Dr Cara Fraser Dr Boris Fedoric Ms Erin Lousberg Dr Gabriela Miningo (NT)

<u>Confirmed international invited</u> <u>speakers:</u>

- David Artis, University of Pennsylvania, USA
- Lisa Coussens, University of California, San Francisco, USA



- Richard Flavell, Howard Hughes Medical Institute, Yale, USA
- Paul Kubes, University of Calgary, Alberta, Canada
- Alberto Mantovani, University of Milan, Italy
- Claudia Mauri, University College London, United Kingdom
- Ed Palmer, University Hospital, Basel, Switzerland
- Shigeru Saito, University of Toyama, Japan
- Joachim Schultze, LIMES Institute, Bonn, Germany
- Megan Sykes, Harvard Medical School, Massachusetts

**Resolution:** That the AGM approves the ICB, IUIS, ICI 2016 and Meeting reports. **Proposed:** Dave Tarlinton; **Seconded:** Andrew Lew. Carried

#### SPECIAL BUSINESS

#### 6. SPECIAL RESOLUTIONS TO AMEND THE RULES OF THE AUSTRALASIAN SOCIETY FOR IMMUNOLOGY INC.

Two resolutions were presented to effect changes to the rules of ASI Inc. These changes allow for (1) receipt of nominations to election for positions on council to be moved from 31st October to 15th October (2) add a 'Dispute and Mediation' section as requested by Consumer Affairs Victoria. See attachment for details.

#### **Special resolution 1:**

That section b. of section 18.2.

- 18.2. Nominations of candidates for election as officers of the Society or as ordinary members of the Council:-
- b. shall be delivered to the Secretary of the Society on or before the 31st of October each year.

#### to be replaced with:

b. shall be delivered to the Secretary of the Society on or before the 15th of October each year.

#### Special resolution 2:

That in accordance with the request of The Victorian Consumer Affairs the following section to be added to the rules

- 37 Disputes and mediation
- 37.1 The grievance procedure set out in this rule applies to disputes under these Rules between—(a) a member and another member:
  - (a) a member and another member; or
  - (b) a member and the Society.
- 37.2 The parties to the dispute must meet and discuss the matter in dispute, and, if possible, resolve the dispute within 14 days after the dispute comes to the attention of all of the parties.
- 37.3 If the parties are unable to resolve the dispute at the meeting, or if a party fails to attend that meeting, then the parties must, within 10 days, hold a meeting in the presence of a mediator.
- 37.4 The mediator must be—(a) a person chosen by agreement between the parties; or
  - (b) in the absence of agreement—
  - (i) in the case of a dispute between a member and another member, a person appointed by the Council of the Society; or
  - (ii) in the case of a dispute between a member and the Society, a person who is a mediator appointed or employed by the Dispute Settlement Centre of Victoria (Department of Justice).
- 37.5 A member of the Society can be a mediator.
- 37.6 The mediator cannot be a member who is a party to the dispute.
- 37.7 The parties to the dispute must, in good faith, attempt to settle the dispute by mediation.
- 37.8 The mediator, in conducting the mediation, must—(a) give the parties to the mediation process every opportunity to be heard; and

(b) allow due consideration by all parties of any written statement submitted by any party; and(c) ensure that natural justice is accorded to the parties to the dispute throughout the mediation process.

- 37.9 The mediator must not determine the dispute.
- 37.10If the mediation process does not result in the dispute being resolved, the parties may seek to resolve the dispute in accordance with the Act or otherwise at law.

**Resolution:** That the AGM accept Special Resolution point 1.

**Proposed:** Miles Davenport; **Seconded**: Dave Tarlinton. Carried

**Resolution:** Accept Special Resolution point 2.

**Proposed:** Andrew Lew; **Seconded:** Miles Davenport. Carried

#### **OTHER BUSINESS**

Lindsay Dent Queried if it is worth continuing the Annual Postgrad Student day, particularly as numbers were significantly lower this year and many students complain that often the presentations given by the invited international speakers on that day are the same as the ones given during the Conference meetings. Lindsay noted that the students have other functions that they can attend during the conference such as the postgrad BBQ and the BD Communication and Young Investigator Symposiums. Alan Baxter said that this year there were 35 positive reasons for this event to continue and that perhaps it highlights that the program needs to be tailored to the students needs. Pablo Silveira suggested that perhaps the format of the postgrad day needs to be addressed and suggested a student debate or that the students break into clusters with the international speakers to discuss particular topics that relate to conference themes.

#### Decision: Postgraddayheldon the Saturday or Sunday before the commencement of the conference will continue.

Outgoing President Miles Davenport thanked members of the ASI Council who had completed their terms of office. Included were: Chris Parish (ICB Editor-in-Chief), Margaret Baird (Newsletter Editor), Heinrich Korner (outgoing ASI councillor for Queensland), Steve Turner (outgoing ASI councillor for Victoria), Joanna Kirman (outgoing ASI councillor for New Zealand). Chris Andoniou was also thanked for his term as the Convenor of the Perth 2010 meeting.

#### 7. MEETING CLOSE

Meeting closed at 2pm.

### **The ASI Visiting Speaker Program 2011**

Following the discussions during the last AGM and ASI Council meetings, we have now simplified the rules of the ASI Visiting Speaker Program (ASI-VSP). We hope that this facilitated process will encourage the members to propose their candidates to this program and we look forward to supporting their visits.

#### Guidelines

- 1. Any member of the Society can propose an invited speaker.
- 2. The VSP will cover up to A\$3,500 dollars per speaker for economy international and domestic airfares, transportation in their home country and travel insurance. Should expenses be higher, the inviting ASI branches will equally pay the shortage.
- 3. All local accommodation, transport and food expenses will be covered by the branches visited. Each hosting branch is responsible for procuring funding for these expenses.
- 4. The invited speaker must visit at least 3 branches. However, if either of SA, WA, NT, or NZ is visited, a total of only 2 branches is required.
- Only under special circumstances in which a speaker needs to stay more than 3 days at a branch, accommodation for up to A\$150/night could be requested.

- 6. Speaker must take up offer within one year of approval.
- 7. Speaker must not have been supported in past 3 years as an ASI visitor.

#### **Detailed Procedure**

- 1. Nominations by any ASI member willing to host and co-ordinate the visit can be made at any time.
- 2. The ASI member who wants to propose a visiting speaker, submits a brief argument in a half page description of the contribution of person to the field, a list of recent major publications and if possible a timeframe of the visit to the VSP co-ordinator.
- 3. The VSP co-ordinator distributes this information to all branch councillors and canvasses interest from all branches. If sufficient branches (determined as per VSP guidelines) support the visit, the request is then passed to the executive.
- 4. The executive decides on the proposals as they come in.
- 5. The member gets OK and invites speaker.
- 6. The member provides a list of the cities that the speaker has agreed to visit.

### Contributions sought for the ASI online immunology quiz

As part of World Day of Immunology events, we have developed an online immunology quiz (see <u>http://www.immunology.org.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.

## Joint Winners of the Becton Dickinson Science Communication Prize: Celine Deffrasnes and Ivana Ferreira

#### Galectin-3 in West Nile Virus Encephalitis: the Chicken or the Egg? Celine Deffrasnes, University of Sydney



At the ASI in Perth last year, I was offered a fabulous opportunity to present my work to a general public. I was able to share what is happening in our lab, our efforts to understand WNV-induced immunopathology and increase our knowledge of the innate and adaptive immune responses that occur in the brain. I am very grateful for this opportunity and here is a summary of the project I presented, as well as a few words about my background.

As my colleagues like to remind me, I am French-Canadian. I grew up in the nice, old city of Quebec in the eastern part of Canada. I chose to study microbiology at Laval University because I have always been fascinated with bugs and diseases ... one of my favorite books is The Plague by Albert Camus. I also like to constantly learn, as I am very curious about everything. I thus decided to do a Masters in microbiology-immunology, studying a newly identified respiratory virus, Human Metapneumovirus, with Dr Guy Boivin at the Infectious Disease Research Center, CHUQ-CHUL, Qc, Canada. I then went on to do a PhD, developing antiviral molecules for Human Metapneumovirus and Human Respiratory Syncytial virus. Our two approaches were to block the entry of the virus into the cells by designing fusion inhibitors [1], and with collaborators from MDRNA (now Marina Biotech), to block the viral replication by targeting the polymerase complex with small interfering RNAs [2]. By the end of my PhD, I had a strong knowledge of virology and molecular biology but I felt the need to look on the other side of the coin: the immunology. So here I am, working as a postdoctoral research associate in Professor Nicholas King's lab, studying West Nile virus (WNV)-induced immunopathology.

In this lab, my focus is on WNV. This virus has a positive-sense single-stranded RNA genome and belongs to the Flaviviridae family along with other well-known members such as Yellow Fever, Dengue virus, Kunjin, Japanese encephalitis and Murray Valley encephalitis viruses. These neurotropic viruses are transmitted to humans following the bite of an infected mosquito, but natural hosts are birds and animals; humans are regarded as incidental or 'dead-end' hosts. Symptomatic infections in humans are not frequent but can be very severe and even fatal, especially for immunosuppressed patients and the elderly. In 1999, an epidemic outbreak occurred in New York in the United States and since then, WNV has spread throughout the Americas. Virulent strains cause encephalitis, meningitis and/or poliomyelitis-like flaccid paralysis. In clinical cases of encephalitis, 10-15% of patients die, while 50% of survivors have permanent nervous system damage. Currently, no more than supportive treatment

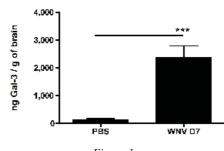


Figure 1

Gal-3 expression in the brain of WNV-infected animals on day 7 post-infection (p.i.) compared to PBS-infected animals as measured by ELISA. Mean of 3 experiments with 3 mice/group. \*\*\* P < 0.001. SEM is shown.

is available and no vaccine has been approved for humans yet. In the brain, WNV infects neurons, which secrete CCL2, a chemokine that recruits inflammatory macrophages to eradicate the infection [3]. While the innate and adaptive immune responses are responsible for viral clearance and return to homeostasis, exaggerated or uncontrolled activation of these responses trigger immunemediated central nervous system damage and death [3, 4]. The pathogenesis of this immunopathology is still poorly understood and research is urgently needed to develop efficient therapies that can selectively target and counter this uncontrolled activation. I am thus looking at pathogenic elements in WNV encephalitis with the aim to modulate their function to increase host survival.

One of my many interests in the lab is the role of Galectin (Gal)-3 in WNV encephalitis. Gal-3 has many functions related to immune modulation, including chemotaxis, cellular activation, and phagocytosis [5]. Studies have shown that Gal-3 is involved in the development of experimental allergic encephalitis (EAE), the mouse model of multiple sclerosis, a disease sharing very similar immunopathological elements with WNV encephalitis [6]. Gal-3 is mostly associated with inflammatory conditions and our preliminary experiments showed a significant increase in Gal-3 expression in WNV-infected brain compared to PBSinfected mice (Fig.1). We thus want to determine its role in WNV encephalitis.

To evaluate a possible pro-inflammatory contribution of Gal-3 to WNV encephalitis, we are investigating its role in chemotaxis, in leukocyte adhesion to endothelial cells, and its expression by different cell types in the infected brain.

**Gal-3 as a chemoattractant.** In WNV encephalitis, macrophages are attracted to the brain in a CCL-2-dependent manner. Blocking CCL-2 using a neutralizing antibody delays death in infected mice [3]. Since soluble Gal-3 has been shown to be more potent than CCL-2 in attracting human

#### **ASI Inc. Newsletter March 2011**

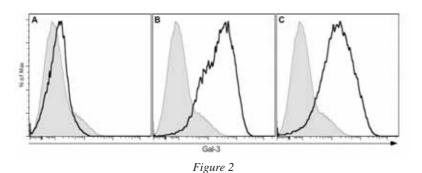
monocytes [7], we quantified soluble Gal-3 in the serum by ELISA. There was no difference in serum of infected (day 7 p.i.) and noninfected animals. We are currently repeating the ELISA with plasma to confirm that Gal-3 is not secreted during WNV encephalitis since some molecules are associated with carrier proteins in the blood.

Gal-3 as an adhesion molecule. Gal-3 has been shown to act as an adhesion molecule for leukocyte transmigration [8]. In uninfected mice, only microglia are found in the brain, but in WNV-infected animals, monocytes immigrating from the blood become macrophages and microglia in the brain [3] (Getts et al, unpublished). We are therefore evaluating Gal-3 expression by bone marrow leukocytes, circulating monocytes, as well as macrophages and microglia in the infected (day 1 to 7) and non-infected brain. These experiments are still ongoing but we detected Gal-3 expression on Ly6C<sup>+</sup> macrophages infiltrating the WNV-infected brain on day 7 p.i. but not on microglia from uninfected animals (Fig.2). This suggests a possible role for Gal-3 in macrophage immigration into the brain. More experiments are needed but these results are exciting.

**Gal-3 localization in the brain.** We are also identifying which cells express or release Gal-3 in the infected brain by immunofluorescence. Infected and noninfected neurons did not stain for Gal-3 but macrophages, microglia, and endothelial cells did. We will next look for Gal-3 expression by other cells in the brain such as oligodendrocytes and astrocytes. These experiments will be followed by many more to investigate other known and unknown functions of Gal-3 in inflammation and we welcome any comments, suggestions or collaborations that the ASI members might think of! For now, we pursue our quest to answer the question 'Gal-3 in WNV encephalitis: the chicken or the egg?" and our goal remains to determine if Gal-3 is a result of this WNV-induced immunopathology or if Gal-3 contributes to this immunopathology by its pro-inflammatory properties.

References

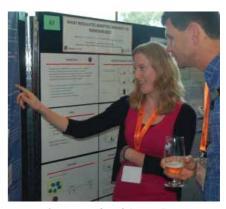
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Gal-3 expression on microglia and macrophages immigrating into the WNV-infected brain as measured by flow cytometry on a BD FACS Canto. (A) Microglia from uninfected animals, (B) Microglia from WNV-infected brain on day 7 p.i., (C) Macrophages from WNV-infected brain on day 7 p.i. Isotype is shown (shaded area).



Robert Brink & Stephen Nutt



Eleanor Woodward & Matt Sweet



Motoko Koyama

#### Using hookworm secretions to treat inflammation of the gut

<u>Ivana Ferreira</u><sup>1</sup>, Henry McSorley<sup>1</sup>, Nathalie Ruyssers<sup>1</sup>, Soraya Gaze<sup>1</sup>, Danielle Smyth<sup>2</sup>, Alex Loukas<sup>1</sup> <sup>1</sup>Queensland Tropical Health Alliance, James Cook University, Cairns, Qld, 4878 <sup>2</sup>Queensland Institute of Medical Research, Brisbane, Qld, 4006

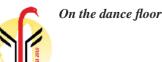


My story starts in Brazil, the country where I was born, a country where parasitic infections are rife. After moving to Australia when I was 8 years old, I noticed that a lot of my new school friends had a disease called asthma, something I hadn't even heard of in Brazil. After I finished school I started working part-time as a waitress in an Italian restaurant whilst I completed my Bachelor of Science degree. During this period I learnt that a lot of our customers had coeliac disease, an intestinal allergy to wheat products, and I noticed our gluten free options becoming ever more popular during my three years of study. In the final semester of my undergraduate

degree, an invited speaker, Dr Alex Loukas, sparked my interest by introducing me to the 'hygiene hypothesis', which simply states that autoimmune and allergic diseases are a consequence of the loss of parasitic infections in industrialized nations. Until then I was set on becoming a virologist but what he talked about that day was something that I had been witnessing my whole life in between travels to Brazil. After the lecture, I approached Alex about a possible Honours position in his lab at QIMR. Two years and a relocation to Cairns later, here I am about to complete the first year of my PhD at James Cook University in the steamy tropics.

For the past two years the focus of my studies has been on the excretory/secretory (AcES) products of the dog hookworm (*Ancylostoma caninum*), and how these proteins interact with the immune system. As far as the hygiene hypothesis goes, people with worm infections have less allergies, suggesting that worms have a 'suppressive' effect on the immune response. "Suppressive" is probably not the right word to use – it is not that people with helminth infections have a suppressed immune response, but that they are less likely to react inappropriately to non-pathogenic substances. The worms only have this effect when they are alive, suggesting that they actively release molecules into the host that modulate the immune system in their favour. It was known that helminth infections skew the immune response towards a Th2 phenotype, so I asked whether AcES could have the same effect in mice. Indeed, I found this to be true by showing that mice injected with AcES showed significantly higher production of hookworm-specific IL-4, IL-5 and IL-10 when compared to control mice. Mice also had elevated levels of alternatively activated macrophages and eosinophils recruited to the site of AcES injection.

The research has now been expanded into different models of colitis, such that AcES injection can alleviate some of the pathology associated with murine colitis. I hope that this model of disease will help to unravel the mechanisms by which AcES is modulating the immune system. There are mostly clues but few answers yet. The current focus is the involvement of IL-10, and I would really appreciate some IL-10 knockout mice if anyone has them (<u>ivbasfer@gmail.com</u>). The next step will be to find out which component of the AcES is responsible for the modulating effects and explore its potential as a novel therapeutic for autoimmunity and allergy.









### Poster Prize Winners: Sarah Oracki and Hock Tay

Lyn regulates plasma cell survival signalling

Sarah A. Oracki<sup>1,2</sup>, Kirsten A. Fairfax<sup>1</sup>, Michelle L. Janas<sup>1</sup>, Mhairi J. Maxwell<sup>3</sup>, Kristy O'Donnell<sup>1</sup>, Margaret L. Hibbs<sup>3</sup>, and David M. Tarlinton<sup>1</sup>

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The work described in this poster relates to a project I undertook during my PhD to attempt to unravel the means by which the number of plasma cells is strictly controlled in a healthy situation. Plasma cells are responsible for secreting antibody into circulation, each continually producing around 5000 antibody molecules a second to provide, in the best case, a lifetime of humoral immunity (1, 2). The number of these cells is normally surprisingly low, however, and while each infection produces a burst of new plasma cells, very few are admitted into the mature population (3).

It is generally thought that plasma cells are quite hardy. Once formed, they demonstrate the capacity to persist for up to a lifetime. Yet when these cells are removed from their native environment and placed in a Petri dish, they rapidly die. A small collection of publications has fostered the concept that plasma cells must access a defined set of factors, often called a survival niche, in order to be maintained (3) (Figure 1A). It is becoming clear, however, that this simple explanation is not the whole story (4). The plasma cell pool is homogeneous, with some cells only allowed to persist for a short period and others able to live for decades. What determines whether a plasma cell has what it takes to enter the long-lived population? Is this imprinted on a plasma cell by extraneous factors during its formation, or is it more intrinsically determined based on the B cell subset from which the plasma cell is derived? The factors that influence plasma cell survival are poorly understood, yet the importance of these cells for immunity merits their study.

The model we have used to investigate plasma cell survival is a mouse strain in which the normal limit placed on plasma cell numbers is subverted, allowing these cells to accrue in the bone marrow and at peripheral sites such as the spleen (5, 6) (Figure 1B). These mice lack Lyn, the predominant Src-family kinase in B cells, which initiates and subsequently limits B cell receptor (BCR) signalling (7). Lyn is therefore a significant regulator of BCR signalling thresholds and has a decisive role in determining the outcomes of B cell development. In mice lacking Lyn, mature B cells are severely deficient (5, 8) although the mice develop antibody-mediated autoimmunity similar to the human disease systemic lupus erythematosus (SLE).

Using a range of experiments we have shown the capacity for Lyn-deficient plasma cells to accumulate to be at least partially intrinsic and not simply a result of the autoimmunity that arises in these mice. Plasma cells lacking Lyn express high levels of the transcription factor Blimp-1, which we believe to be a hallmark of long-lived plasma cells in normal mice. This is despite the findings that they are unswitched and residing in the spleen, both of which are thought to be traits of short-lived plasma cells rather than their long-lived counterparts.

Lifespan and population turnover experiments showed that in the absence of Lyn, the formation of plasma cells occurs at a normal rate. This distinction is important as it demonstrates that the depletion of the B cell population and plasma cell accumulation in these mice is not due to an acceleration of the rate of plasmacytic differentiation. The B cell insufficiency instead seems due to cumulative defects in the survival of this population when Lyn is absent.

Our results also supported our contention

that Lyn-deficient plasma cells are long-lived. This suggests that the loss of this inhibitory kinase grants splenic IgM-secreting plasma cells the unusual privilege of long-term survival. What is the nature of this privilege? Rather than being sessile and unresponsive, the basic finding that plasma cells rapidly die outside their native environment demonstrates their need for access to constant extrinsic signals for their maintenance. It was possible that the absence of Lyn caused plasma cells to respond differently to environmental survival factors, or conferred on these cells an independence from external factors for their persistence.

Together with CXCL12, IL-6 is perhaps the most commonly quoted survival factor for plasma cells, although its deletion in vivo does not affect plasma cell numbers and untreated IL-6 over-expressing mice do not contain more plasma cells than normal mice. IL-6 does promote plasma cell survival in vitro, however, suggesting that it may be one of several soluble factors that have this role in vivo. Lyndeficient plasma cell survival in vitro, when provided with IL-6, was well above that of wildtype cells (Figure 1C). Using a flow cytometric assay we observed a robust STAT3 signalling response of plasma cells to IL-6 stimulation, which is the first demonstration of cytokine signalling in this cell type, and found that when Lyn was absent the amount of pSTAT3 produced following IL-6 exposure was much greater than in normal cells (Figure 1D).

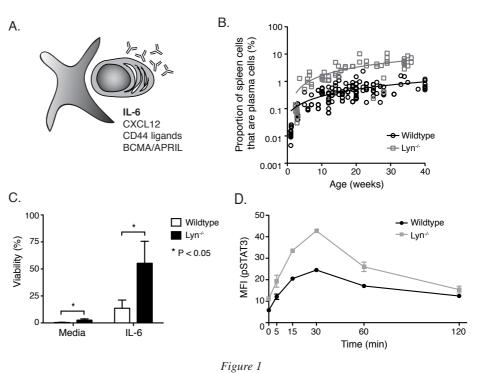
Our findings indicate that Lyn sets a baseline for triggering signal transduction in plasma cells. In the absence of Lyn, plasma cells might experience a sufficient signalling response to limited concentrations of survival factors that would not prevent wildtype plasma cell death. The loss of Lyn could therefore exempt these cells from the bulk of their requirement for extrinsic survival signals for their maintenance and allow them to accumulate where plasma cells normally would not survive.

#### Acknowledgements

This work was done under the supervision of David Tarlinton at the Walter and Eliza Hall Institute, Melbourne.

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- (A) The plasma cell 'survival niche' is comprised of insoluble factors and soluble factors such as IL-6. (B) Plasma cells accumulate with age in the spleens of Lyn-deficient (Lyn<sup>-/-</sup>) mice. (C) Plasma cell survival over 24 hours *in vitro* is enhanced in the absence of Lyn, particularly when provided with IL-6. (D) Excess phosphorylated STAT3 in Lyn<sup>-/-</sup> plasma cells (B220<sup>-</sup> CD138<sup>+</sup>) stimulated with IL-6, as measured by flow cytometry.
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#### MiRNAs regulate bacterial infection in lungs

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First I would like to thank the editor for giving me a chance to write in this newsletter.

I am glad that I am a lucky winner of the Student Poster Prize despite all the excellent posters displayed in the ASI 2010 conference. My success should be shared with both my supervisor and also the senior PhD students in my lab because without their guidance and support, I would not be getting this award!

I am currently doing my PhD at the University of Newcastle under the supervision of Professor Paul Foster. The laboratory primarily aims at defining the key cellular and molecular processes that underlie the development of allergic airway disease. The research mainly focused on the biology of T cells and granulocytes, and on signalling by cytokines and chemokines pertinent to regulating allergic inflammatory responses. Using a mouse model of asthma, our lab has shown the important role of microRNAs (miRNAs) in regulating the inflammation and airway hyper-reactivity. Other than asthma research, we are also interested in investigating the host immune response to infection (viruses, bacteria and microbial products) in the respiratory tract.

My PhD project is focusing on the role of miRNA in regulating the immune response to bacterial infection in the lung. MiRNAs are small (18-25 nucleotide) non-coding RNA that are usually phylogenetically conserved which enable us to study their function using animal models. Why is miRNA an attractive target for study? MiRNAs are naturally expressed in plants or animals. They primarily bind to mRNA through imperfect complementary binding to repress the protein production at the post transcriptional level. This unique feature allows miRNAs to perform their action on multiple target genes, hence regulating the important pathway involved in disease pathogenesis. The first miRNA was discovered in 1993 by Victor Ambros and since then more study has been done on this small regulatory molecule. To date miRNAs are found to be deregulated in multiple human diseases such as cancer, metabolic disease, heart disease, neural disease, and also diseases of immunological origin, for example autoimmunity.

In my study we focus on the roles of miRNAs in regulating inflammatory processes and also bacterial clearance. We used both *nontypeable Haemophilus Influenzae* (NTHi) and *Streptococcus pneumoniae* (Spn) as the lung pathogen in our model. To study the role of a specific miRNA, we knocked down the miRNA expression in vivo by using antagomir. Interestingly, knockdown of a specific miRNA followed by infection showed significant increase of bacterial load in the lungs. Cell counts on BALF showed a marked increase in cellular infiltrate, in particular neutrophils in the antagomir treated group compared to the scrambled control. These effects occurred within 24 hours of infection. This miRNA may play a protective role by reducing bacterial replication and suppressing cellular inflammation. Our study suggests that miRNA may play important roles in regulating the innate immune response to bacterial infection.

These results are rather encouraging for me as it definitely gives me plenty of optimism in my PhD! The next challenging part would be in finding the target for the miRNA as the mechanism of how miRNA bind to the target mRNA is still not well understood at the moment. Well, I guess if science is that easy we would not be in it, would we? Good luck to everyone!



LtoR: Luke Hatchwell, Hock Tay, Maximilian Plank, Alison Thornburn at the 2010 ASI conference

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

#### Inspired and challenged at the 2010 ASI Postgraduate Workshop Kim Charlton, University of Melbourne



Delegates were encouraged to challenge themselves at the ASI 2010 Postgraduate Workshop held in Perth last December. The workshop provided an engaging mix of thought-provoking speakers and interactive 'breakout' sessions that facilitated ongoing discussion on session topics.

One idea that created much dialogue was Eddy Liew's (University of Glasgow) categorisation of PhD students. He categorised students into three classes: those that publish papers throughout their PhD and thus effectively write their thesis as they go; those that take time off in their final year to write their thesis; and those that run over their allotted three-year time period. The concept that PhD students in the first category make the most successful scientists was one vigorously discussed in the breakout sessions and made many students reflect on their own research style.

Students were also encouraged to work on their mental flexibility. The ability to approach your research with an open mind and refrain from being constrained by preconceived ideas was emphasised by the speakers. Both Mariapia Degli-Esposti (University of Western Australia) and Steve Turner (University of Melbourne) conveyed the importance of being open to changing your hypothesis as your project unfolds, as a failure to do so can waste precious time and resources. Also touched upon was the value of adopting a more global research viewpoint instead of a narrow focus on one topic. Students learned that nurturing a broad outlook and developing strong collaborations creates the potential for greater scientific outcomes.

The workshop gave the students the opportunity to take on this message of adopting a global viewpoint through absorbing the varied research projects presented. Eddy Liew gave an entertaining presentation about the role of nitric oxide in immune regulation, while Dan Littman (Howard Hughes, USA) gave an excellent discussion on the interplay of commensal microbes and host immunity. Rachel Caspi (NIH, USA) explored autoimmune disease in the eye and gave a surprising new perspective on scallops, which we learnt have upward of 150 beautiful blue eyes. Mariapia Degli-Esposti explained how antiviral responses can stem from innate-adaptive immune interactions and reminded us of the importance of being able to translate animal models to human systems.

After actively reflecting on their research style and scientific outlook for a few hours some students were in need of a pick-meup. This was provided via a Fantail-fuelled sugar hit thanks to Steve Turner, who amused the audience with a quick quiz with chocolate prizes. Beyond chocolate, Steve's wide-reaching talk encompassed immunology's humble origins before looking to the future with a discussion of state-ofthe-art molecular techniques. The insights continued with Gerard Hoyne, hailing from nearby Notre Dame University (Fremantle), presenting a discussion on the integral role of splicing in T cell homeostasis and memory.



Denise Doolan (QIMR) also inspired us with an integrated approach to identify multiple antigens and work towards developing an effective malaria vaccine. Greg Bancroft from the London School of Medicine and Tropical Hygiene finished off the day by introducing the 'killer in the rice paddy', a rare bacterium causing acute infection in Thailand and Northern Australia.

Overall the workshop was very informative and thought-provoking. I'm sure many of the students came away with ideas to improve their own research and their overarching approach to science, which is a credit to



Lunch break at the Postgraduate Workshop. LtoR: Kerry Ko, Rangsima Reantragoon, Kim Pham

the speakers and organising committee.Onbehalf of all delegates who attended, I would like to thank the speakers and the organisers for putting together a thoroughly successful day.

# Society honours outgoing Immunology and Cell Biology's **Editor-in-Chief Chris Parish**

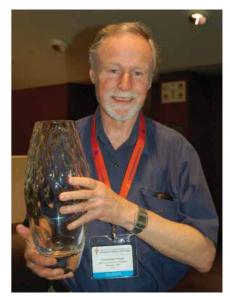
Since taking on the role of Editor-in-Chief of ICB in 1992, Chris has carefully guided the course of our journal to its current position where it is ranked as 28th out of 128 recognised immunology journals (including review only journals). The Society's association with the Journal began officially in 1986 after an approach to Council by Ieva Kotlarski, the Deputy Editor of the University of Adelaide-based Australian Journal of Experimental Biology and Medical Science and Blackwell Scientific Publications. Their proposal was to create a journal with a greater emphasis on immunology and cell biology. The Society was to have the right to nominate members of the editorial board and in return agreed to cover any financial losses in the following year. In fact there were no losses and in 1989 the newly named Immunology and Cell Biology became the official Journal of the Australian Society for Immunology. The Journal was available to Society members at a reduced rate and early efforts

Simon Apte

focused on strengthening the relationship between the Journal and the Society.

Chris oversaw the move of the journal to the Nature Publishing Group in 2006 and its spectacular impact factor rise from 1.854 in 2005 to 4.200 in 2009. The inclusion of "Special Features" and new article types have contributed to the ongoing success and the number of unsolicited articles continues to rise.

Chris was honoured at the ASI conference in Perth by outgoing President Miles Davenport. Miles thanked Chris for his fantastic efforts and achievement and presented him with a beautiful glass vase as a measure of the Society's appreciation. Chris acknowledged and thanked Bhama Parish for her assistance as ICB Editorial Assistant over the last six years. Chris passed the baton to Gabrielle Belz in January and will remain involved as a Deputy Editor.





Student Function Committee & "Helper" (LtoR): Iona Schuster, Baca Chan, Laura Masters, Jim Allison, Angela Fuery, Olivia White, Joanne Lisciandro





New ICB Editor in Chief Gabrielle Belz (left) & Stephane Chevrier



LtoR: Anna Hansen, Rachel Caspi, John Forrester, Anne La Flamme, John Fraser, Natalie Lorenz

### **Publications List**

Congratulations to ASI members who have published their following work in the last three months (articles with an ePub date between July and December 2010)

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#### **ASI Inc. Newsletter March 2011**

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Renee Robb, Imogen Gillions, Rebekah Brennan





Alison West, Azad Rahimpour, Steve Mattarollo, Adam Uldrich, Nicole Messina



Alex McLellan, Alan Baxter, Ian Frazer, Jonathon Sprent



Ray Steptoe, Michele Grimbaldeston, Antje Blumenthal



Andrew Lew & Kelli MacDonald

Cara Fraser & Brita Ardesjo Lundgren

#### The Lafferty Debate Matthew Wikstrom

On the second last day of the annual conference, as signs of deep fatigue began to appear in the registrants, the Lafferty Debate kicked off in the auditorium. In this year's debate, the ongoing battle between medical doctors and scientists was taken out of the lab and put on display for all to enjoy. With Delia Nelson as our chair, Phil Hodgkin, Lynn Corcoran and myself argued that medical doctors make poor scientists, while Ian Fraser, Carola Vinuesa, and Geoff Hill were there to defend the medics.

Seasoned campaigner Phil Hodgkin took the stage first and with a little help from the frigid Canberra winters, and Lafferty himself, argued that a literal interpretation of the term 'poor scientist' held for all but a few medics since there was no such thing as a well-paid scientist. Ian Fraser countered with his own analysis of the literal and found instead that a medic couldn't make a poor wage, even when working in science. I made my Lafferty Debate debut using choice examples from medical history to demonstrate the grubby behaviour of medics in science (I also managed to join a select group of immunologists who have publicly demonstrated their fondness for a dead language). Carola Vinuesa refused to be muddied and countered with a procession of science greats that all held medical degrees. I was out-gunned by the weight of her numbers.

Lynn Corcoran took to the stage and decided that if we couldn't win with sound reason or the weight of history, then a list ("top 6 reasons why doctors make poor scientists") and some funny photos (a travelling tie and the "Hodgkinator") would make our case. Her presentation was the highlight of the debate for me, and many of the audience agreed. Geoff Hill, unperturbed by Lynn's list, had his own collection of compromising photos and graphs with which to undermine "poor" scientists; he also rounded out the medics' perfect record for staying to time. Phil and Ian were impressive in their closing arguments, they kept everybody entertained without resorting to personal slurs then Delia invited the audience to deliver their verdict. Never one to defy her rigorous training, she took two measurements, and while there was enthusiastic support for both sides, the scientists took the trophy (in this case, a street sign).

I had a lot of fun preparing for the debate with Phil and Lynn. Delia was the perfect host, even providing champagne to help the teams "warm-up". Ian, Carola, and Geoff deserve thanks for entering the lion's den; they were a formidable team, but more importantly, helped us all enjoy the camaraderie that exists within ASI.



Ian Frazer contemplates how best to counter the Hodgkinator

The winning team





Debating is fun!



Lafferty Debate participants (LtoR): Ian Frazer, Geoff Hill, Carola Vinuesa, Delia Nelson, Matthew Wikstron, Lynn Corcoran, Phil Hodgkin

### **Travel Award Conference Reports**

### The 11th International Symposium on Dendritic Cells in Fundamental and Clinical Immunology September 26-30, 2010 — Lugano, Switzerland

#### Yuekang Xu Walter & Eliza Hall Institute, Melbourne

The 11th International Symposium on Dendritic Cells in Fundamental and Clinical Immunology (DC2010) was held in the beautiful lakeside city of Lugano, Switzerland, September 26-30, 2010. This five-day congress consisted of six plenary sessions and four forums, which covered broad areas of dendritic cells biology, including DC subsetting, signalling, viral response, ontogeny, antigen processing and presentation, as well as vaccination. It was a great success both scientifically and socially.

The conference welcome reception was impressive, where we were treated to a traditional performance of Swiss musical instruments by artists at the beginning of each session. Other conferences, after the opening ceremony and plenary sessions in the first couple of days, are usually broken up into several small groups in the afternoon; you have to choose the group that is interesting to you or closer to your research areas. However, more often than not, if the subjects in two or three groups are all interesting to you, then you have to attend one and miss the others. The DC2010 was good because throughout the conference, all of the oral presentation and lectures were done in one big auditorium, only poster presentations were displayed in a separate hall during lunch and dinner breaks. So you can't miss anything if you do not want to. As a matter of fact, the conference organizer was so considerate that there was even a live TV broadcasting of the conference in the resting lounge where you can have a drink or coffee as you listen to the reports.

I found the Keynote Lectures very helpful. They were delivered by famous experts in the fields and let me catch up with the latest development in immunobiological sciences. Prof. Xuetao Cao from China reported on the cross-regulation of TLR-triggered innate inflammatory response. He showed that RHBDD3 suppresses LPS-triggered NF-kB activation by interacting with IKK via its UBA domain, contributing to the balance of Treg, Th1 and Th17 through controlling DC maturation and IL-6 production. Prof. Eric Pamer from USA presented interesting data on inflammatory monocyte trafficking during bacterial infection, which suggested that bone marrow stromal and endothelial cells modulate their production of MCP-1 in response to varying concentrations of circulating microbial molecules, thereby regulating circulating inflammatory monocyte frequencies. There were also several participants from Melbourne at this conference: Prof. William Heath (The University of Melbourne) gave a talk on dendritic cell subsets, T cell memory and herpes simplex virus, and Dr. M O'Keeffe (Burnet Institute) on proteomic analyses reveal differential sensing of cytoplasmic viruses by dendritic cell subsets. Their talks, as invited speeches, were very well received.

Since this is my first time being in a European country, I have also made a good use of the time between the breaks of the conference to tour beautiful Lugano. I joined a social programme organised by the conference to visit Gandria and Morcote, two charming and typical fishing villages. Gandria shows its more attractive side reached by boat along the lake, and is an oasis of peace with its picturesque and romantic tiny streets and stairs that offer glimpses of great views. Morcote, with its narrow streets, the arcades of the old patrician house and lush subtropical vegetation, is called "the pearl of the lake".

In general, I had a fantastic time during the conference, both scientifically and socially. I would like to thank ASI for supporting my attendance at this splendid scientific congress. This experience has been extremely motivational and has enabled me to gain the acquaintance of some prominent immunologists in the world, which certainly laid solid foundations for me to build a future scientific network around the world.



#### 14th International Congress of Immunology, Kobe, Japan Sarah Oracki Walter & Eliza Hall Institute of Medical Research, Melbourne

It was an innocent mistake. Truly it was. They *both* were.

It started with an ASI International Travel Award. This award was to fund a trip to Japan for the 14th International Congress of Immunology (ICI), followed by a visit to a lab at Biopolis in Singapore, representing young Australian scientists and interviewing for a postdoc position. Both of these I attended; unfortunately the image I might have intended to portray went terribly wrong but goodness knows it makes for a fun story.

In the first few days in Japan I went to a pre-ICI satellite meeting called B Cells and Autoimmunity. This small meeting had around 80 people, including most of the investigators that had historically made significant contributions to the field and who were presenting work that would really improve or even shift the current understanding of antibody-mediated autoimmune disease. Everyone there, in that room full of very smart people, had come to work on this specific topic and had arrived there by quite diverse scientific routes. For the most part, scientific opinions and findings were well received and respected, apart from one minor incident. Expert A to Expert B, in question time following B's talk: 'Look, I think that you just don't get it.' Expert B, heavily into the microphone: 'NO, YOU don't get it!' Experts A and B were found happily (or tensely?) drinking sake together immediately afterwards.

I have a suspicion that one of my PhD examiners was there as part of the small meeting and one morning, Putative Examiner plus Chris Goodnow and my supervisor, David Tarlinton, were deep in conversation. I walked past but was stopped and asked by one of them, 'Sarah, how do *you* think the process of autoimmunity begins?' *Well*. (Say something sensible, Sarah. Now.)

Aside from giving me the chance to converse with potential thesis examiners and other eminent scientists, this satellite meeting was hugely educational for me. I took a large book's worth of notes to which I have referred frequently in the time since visiting Japan. I also met a big proportion of that room full of experts and have potentially paved the way for some interesting collaborations.

Following the satellite conference we were transported by bus in a sweltering but delightful sightseeing tour to the main congress. This was held in mammoth conference facilities in Kobe, a small man-made island near Osaka. Six thousand people attended and there were usually eight concurrent sessions in the workshops. This scale called for a targeted approach to workshop attendance and where one might hope for a broadening of one's scientific knowledge, the extent of the broadening was necessarily limited to those topics whose workshops were physically close together. Within the workshops it was normal to get a very detailed insight into the global state of each research area: who in the world is doing what and how are they doing it. I'm trying to work out how I fit into this scheme as I finish my PhD and come to look for postdoc positions.

In addition to the important scientific benefits of attending international conferences, I've come to learn that, socially, there's also a great deal to be gained as long as this aspect is handled in a restrained, mature and considered manner. I don't believe I can offer any further advice in this regard. I can, however, tell some cautionary tales to show you what *not* to do in social situations at conference time.

#### Major Incident number 1

Dinner on the first night at ICI was a nice little reunion with my WEHI family. Axel Kallies, man of international high regard and newly appointed lab head in the WEHI Immunology Division, had failed to make it to the hotel lobby at the appointed meeting time before dinner and meanwhile David Tarlinton, my supervisor and incoming ASI President, was stuck in his hotel room lying prone with terrible back pain. Our reduced party gave up waiting for Axel and headed out to a cute restaurant that seated just the six of us. Mine was one of the few foreign mobile phones that worked in Japan and during dinner an interesting text message exchange began.

#### 21:08 Sender unknown:

Axel has gone to find you at hotel. We are at the restaurant savanna ikki.

21:10 Sender unknown:

Hi, Axel is back here. Don't go hotel they'll catch up with you for postprandial drink. *21:12 Sarah:* 

Fine, we don't want Axel anyway. Who is this?

21:13 Sender unknown:

I represent a Russian firm specializing in human organ trading. Please send money: lots of money.

21:15 Sarah:

If you're tall dark and handsome you can have all my money.

21:17 Sender unknown:

I'm afraid I'm a fat bald Ukranian with a close resemblance to jabba the hutt and an equally insatiable appetite for wealth and power...

21:22 Sarah: enefits Dan? 25, I've 21:25 Sender unknown: 's also Not dan but almost as ugly as this 21:26 Sarah: mature Can I have a clue please? lieve I 21:29 Sender unknown: gard. I Gus Nossals Ukranian cousin. ales to 21:34 Sarah: iations I know who you are. [Of course I didn't know.] 21:39 Sender unknown:

You will never find me. I live in the shadows



deep on the dark side of the force. If you value your cherished Axel you will need to pay up. Or else... 21:40 Sarah: You can have Axel. Just leave me his ponytail. 21:44 Sender unknown: Горячая? [Hot?] 21:47 Sarah: Show off. 21:48 Sender unknown: овдааькщс ькдактт лдв к [Rubbish babble - no meaning] 21:49 Sarah: Is that all you've got? 21:54 Sender unknown: No we also have Axels kidneys. And his hair. A good ponytail will fetch 2000 on the black market. What have you got? 21:57 Sarah: We've got DT [David Tarlinton] - you can have him for 20 euros. He's proven breeding

have him for 20 euros. He's proven breeding stock. Gerbraucht. Guter Zustand. [Used. Good condition.]

22:08 Sender unknown:

Reproduktionsapparat verhandlungsbasis: 12 euros [Reproductive apparatus asking

price: 12 euros] 22:13 Sarah: 16 euros. Last offer. 22:18 Sender unknown: What s\* 22:21 Sarah: We've finished dinner. Can we come and join you? 22:24 Sender unknown:

Definitely. Only if we get DT for 14 euros.

It was silly banter but my worry was that it could be interpreted as flirting. Once we'd arrived at the restaurant I learnt the identity of the mystery texter. It was a jubilant, sakepositive Chris Goodnow, one of the most famous immunologists in Australia, potential future grant reviewer and man of quite some influence. *Oh man.* (Fat balding Ukranian? I don't think so. Insatiable appetite for wealth and power, however ...)

#### Major Incident number 2

(A source of large, regular doses of embarrassment for me and an entertaining anecdote for my supervisor.)

I had arranged a later trip to New York City to visit a few labs and interview for postdoc positions. One of these labs was that of Sasha Tarakhovsky at the Rockefeller University, member of the NYC 'Russian Mafia' and epigeneticist of divine status. One of the



WEHI contingent - LtoR: Steve Nutt, Sarah Oracki, Lynn Corcoran, Gabrielle Belz and Susanne Heinzel

labs that was NOT part of this tour was that of Sasha Rudensky, also a member of the Russian Mafia and godfather of the Treg field. In investigating all potential postdoc options, I had visited very many lab websites and had come across the headshots of a spectrum of daunting-looking investigators. Walking down a corridor in Japan with Lynn Corcoran, I spotted a Sasha. Tired and muddled on Day 8 of conferencing, I said to Lynn: "Ooh, is that Sasha Tarakhovsky?" What Lynn heard above the background bustle was "Ooh, is that Sasha ......sky?"

"Yeah," she said. "Want me to introduce you to him?"

"Sure, that would be great." We walked over to him.

"Sasha, this is Sarah Oracki." It was at this point that Lynn disappeared.

Sasha, with a straight face, simply replied "Mmm."

"I wrote to you; I'm coming to visit your lab soon."

"Mmm. So. When are you coming?" he asked, face still unmoving.

"The first week of November."

"Mmm. Well let me introduce you to some members of my laboratory. Ok, guys, this is ..."

"Sarah Oracki."

The huddle of Sasha's lab members opened up to let me in and said things like "Oh hi, yes we've heard of you, yes when are you coming, oh great it should be fun, how are you enjoying the conference ..." and so on. Later that day, I came across my supervisor David Tarlinton somewhere in the expanses of the conference grounds.

"So, I just had Sasha Rudensky come and ask me for a reference for you. You didn't tell me you were visiting his lab," he said.

"No, no, I'm not. I'm visiting Sasha Tarakhovsky."

"Well, I just spent ages telling Sasha Rudensky all about you. He's looking forward to your visit."

I noticed my heart rate pick up and said, "Couldn't be ... I'm not going there. What did he look like?"

"Medium height, short grey hair, black glasses."

If you have seen both Sashas you'll know that this description could fit either, so I began to feel somewhat better until I went back to my hotel room and checked their lab profile websites. *Oh man*. My heart rate plummeted.

I have to find Sasha and explain. Should I catch him at the conference party when he's in a good mood? I could shirk from confrontation and hide in the anonymity of an email, or even ask David to email? Or should I just leave it and hope he forgets what I look like? Oh, how hilarious. I did nothing and heard nothing more, except for David's subsequent retelling of the story many times to hysterical colleagues. *Postscript* – 20 October

I am at a small conference in Crete, Greece, called Gene Regulation in Lymphocyte Development. There are around 80 attendees, two of which are Sashas. Both Sashas are here, and they're good friends. Crunch time.

Later that day... Ok - I've introduced myself to the correct Sasha and avoided a conversation with the wrong Sasha. I was fully prepared to have a laugh about it over a beer with him, but the need never arose: he feigned a lack of recognition towards me. Oh, thank goodness. (I've no doubt that the two of them have had a chuckle over it.)

In all, this trip was a blast and was an enormous boost to my career, particularly at this time as I hunt for a postdoc position. I urge you to look out for similar opportunities; the travel awards offered by ASI make such things possible and are an important benefit for ASI members. Thanks ASI.

# UPCOMING LECTURES & CONFERENCES

Immunopharmacology 2011 June 26–30, 2011 Varadero Beach, Cuba www.immunopharmacologycuba.com

VI World Congress on Immunopathology & Respiratory Allergy September 15–18, 2011 Moscow, Russia info@wipocis.org www.wipocis.org

23rd Annual Conference of the Australasian Society for HIV Medicine 2011 & 2011 Australasian Sexual Health Conference September 26–30, 2011 Canberra, ACT, Australia. nicola.tatham@ashm.org.au

5th Asian Congress on Autoimmunity (ACA 2011) November 17–19, 2011 Singapore Online abstract deadline: Wednesday, June 1 Reduced registration rates end July 27 aca@kenes.com www.kenes.com/autoimmunity

V World Asthma & COPD Forum April 21–24, 2012 New York, USA info@wipocis.org www.wipocis.org

### ASI Annual Conference, Perth, WA, December 2010 Joanna Groom

I am currently doing my postdoctoral studies at Massachusetts General Hospital and Harvard Medical School in Boston, and was awarded an international travel prize to return to Australia for the ASI annual meeting 2010. I'm sure all ASI members present in Perth will agree that this was a great meeting. Aside from getting an overview of the excellent research being done in Australia, attending this conference allowed me to catch up with friends from my student days and make new connections to start planning my return to Australia. The high standard of Australiabased immunology presented in plenary, symposia and workshop sessions along with the continuous buzz of conversations at the poster sessions certainly has me excited for my return.

My postdoctoral studies have involved researching interactions between T cells and dendritic cells (DC) during T cell activation and effector polarization, which made the

Vaccination plenary session a particular highlight for me. Ralph Steinman gave a fantastic talk about combining the important factors of DC subsets, specific adjuvants and targeting molecules to design more efficacious vaccines. Jim Allison followed with a discussion on the effect of blocking CD28 family members (primarily CTLA4, but also ICOS and PD1) on T cells, to increase their potency of response following antitumor vaccination. Hearing these talks in close succession inspired visions of future vaccine strategies which combine these techniques to not only promote optimal DC activation and antigen presentation but dually directly target T cells for increased responses.

In addition, I am very grateful to ASI for getting me back to the sunny side of the world for Christmas – it sure beats snowstorms in Boston.



LtoR: Helen McGuire, Kim Jacobson, Elissa Deenick, Joanna Groom



Claudine Bonder (far left) with student representatives Kate Parham & Kiwi Sun

### Report on the Tumour Immunology Workshop at the 40th ASI Meeting (Perth 2010)

The annual tradition of the Tumour Immunology Workshop (TIW) continues to go from strength to strength. This year, Delia Nelson and her team organised a very exciting session that included two stellar International Speakers (Ralph Steinman and Jim Allison) and 10 presentations selected from the abstracts submitted by around 100 participants.

The format chosen was three cancer-themed sessions (DC, Immune subversion and therapy) followed by 20 minutes structured discussion initiated by selected tumour immunologists who prompted very active participation. This evolution of the program meets very effectively the expectation of a lively workshop and increased audience contributions. The discussions orbited around four key questions selected by the organisers and prepared by the leading discussants:

- Will targeting DCs be effective in human cancers? Paul Neeson, Ken Shortman, Ralph Steinman
- What can we do to improve immunotherapy e.g. adjuvant therapies, biobanking? Mark Smyth, Jim Allison, Chris Parish
- Does age, tumour burden and/or prior therapy matter when using immunotherapies? Graham Leggatt, Chris Schmidt, Bruce Robinson
- What models are relevant for human studies? Ruth Ganss, Ian Frazer, Richard Lake



Jim Allison

#### J. Alejandro López

We got exclusive insights on the latest successes and regulatory vicissitudes of cancer immunotherapy in the latest stages of the development pipeline in particular from the international speakers. The optimistic picture of the field included the progress on the use of antibodies specific for various immunoregulatory molecules, extensively discussed by Jim Allison, while Ralph Steinman presented the latest results on the DC-based therapies enhanced by antibodies to molecules (C-type lectins) involved in antigen-presentation currently being tested in various cancers and HIV. The traditional Gordon Ada Oration was delivered this year by Chris Schmidt (QIMR, Brisbane) who presented an animated version of his view on the paradigms to be subverted if immunotherapy against cancer is to be successful and how close we are to achieving that.

Once again, the TIW was a fantastic preamble and appetizer to the ASI meeting that augurs to grow further and stronger in the coming ASI meetings as the prolific audience participation testified.

### ASI STUDENT NEWS

Happy New Year, everyone! Firstly, we would like to congratulate the organisers of the 40th ASI Annual Scientific Meeting in Perth for a fantastic event. In particular, the 2010 student representative Baca Chan and her committee on organising a successful student function at the WA Rowing Club. It was an enjoyable night and a lot of fun was had by all! If you missed the ASI annual meeting and the student function last year, then

... bad luck! However, you have another chance this year!

The 41st ASI Annual Meeting will be held in Adelaide from 11–15 December at the Adelaide Convention Centre (pictured above), with an exciting student function to be organized during this time. We, Wai Yan (Kiwi) Sun and Kate Parham, as your ASI student representatives for 2011, would like to make this year student function fantastic. Thus, any suggestions for this event will be appreciated and can be sent to <u>waiyan</u>. <u>sun@health.sa.gov.au</u> and <u>kate.parham@</u> <u>health.sa.gov.au</u>, or sent to our ASI student Facebook.

Apart from organizing the student function this year, our main role as a student rep is to maintain a connection between the ASI and



all the student members. As mentioned above, we have ASI student Facebook and currently have approximately 50 members. The requirement for joining ASI student Facebook is to become a member of ASI. If you know other members of ASI who may be interested in joining, please don't hesitate to invite them. You will be updated with all the news about ASI 2011 there.

Keep the dates in mind and your days free to attend and present at the 41st ASI Annual Meeting this year. See you all in Adelaide!

Kiwi Sun and Kate Parham

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