



N E W S L E T T E R

Australasian Society for Immunology Incorporated

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On the Road with Mark Smyth 2009 Gordon Ada Senior Travel Award Recipient

One never sets off on international travel these days without some feeling of trepidation. My task was to get around the world in one piece, along the way catching the 2010 Annual Meeting of American Association of Cancer Research (AACR) in Washington DC, followed by my first ever visit to Croatia for the International NK Cell Workshop and a few busy days afterwards in Paris hosted by Madame Zitvogel (our flamboyant ASI visitor, Laurence). After my previous 40 hour trip from Miami to Melbourne in February, including unforeseen pit-stops in Hawaii and Sydney, I was not brimming with confidence. My airline of choice for this around the world was United – a dubious choice – particularly confirmed after my upgrade to Premium Economy left me wondering what century US carriers are operating in. More importantly, they got me to DC safely and I spent the first day recovering with my old colleagues in Frederick, Maryland (site of my now ancient post doc in 1989–91) – once again enjoying the delights of civil war historic Gettysburg, in some much unexpected sunshine. Anyway, it did wonders for my jet lag. Frederick houses Fort Detrick, home to US Army Medical command, most of the NCI, and some rather interesting buildings making all kinds of biologicals!

Two good reasons to visit were to see my old mate Steve Giardina, one of the pioneers in monoclonal antibody technology and now making all the NCI's new immunotherapeutics, and Giorgio Trinchieri's (of IL-12 fame) new Centre for Cancer Research. Their studies are shedding quite a different light on the way in which innate resistance, as an integral part of inflammation, is participating in oncogenesis and tumour surveillance. It is now becoming evident that the processes that organisms used for resistance to infections are derived



and shared with the mechanisms essential for tissue homeostasis and morphogenesis. In cancer biology, it is becoming recognized that what used to be considered the defensive mechanisms of innate resistance and inflammation are indeed manifestations of tissue homeostasis and control of cellular proliferation that have many pleiotropic effects on carcinogenesis and tumour progression and dissemination.

Like all enormous US meetings, AACR kicked off on a Saturday morning at 7am. This meeting is a 5-day job, generally attended by more than 10,000 registrants, with a Program book the size of the Yellow Pages, and the attendees wishing they had phone roaming and a GPS to seek out their next great collaborator, post doc, or student. The Walter E Washington Convention Centre (not George's half brother, but named after the lawyer and first mayor of DC) was capable of holding 40,000+, with an impressive design and so, by week's end, finding people was an acquired skill that I think I had mastered.

One of the benefits of becoming a senior editor at Cancer Research was the use of

the Editors' Lounge at AACR – a retreat from the madness – my office away from home. It was a great chance to understand the Society's wish to be far more proactive with immunology. There were many great sessions and talks at the meeting, and clearly immunology is developing a greater profile with each year that passes. There was at least one major "meet the expert", "major symposium", "educational" and "poster" session on tumour immunology every day. The AACR also set up a tutorial-style Cancer Immunology for the Non Immunologist that ran for an hour each day – round-table discussions with experts in the field. Anyone could learn something at these and I thought it was a great idea to bring the discipline to outsiders – perhaps something ASI should consider when representing the Society at more general meetings.

Highlights over the meeting for me included several talks collectively from Stephen Rosenberg, Nick Restifo and Carl June around the genetic engineering of either tumour specific TCR or chimeric antibody

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Website

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

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

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

Email bulletin board

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EDITORIAL

One of the first Gordon Ada Senior Travel Award winners, Mark Smyth, is back after an eventful trip, only slightly frustrated by a volcano. His report makes entertaining and informative reading. This award, instituted in 2009, acknowledges high-flying, mid career immunologists who have, in the past, dropped under the radar in the awards arena. Mark was a splendid choice. Who will be successful in 2010?

Immunology has lost a great scientist with the passing of Professor Tomio Tada. He made an extraordinary contribution to this discipline over a very long period of time. His work on peripheral T cell suppression has been amazingly predictive. Indeed, the title of a 1979 paper published in *The Journal of Immunology* (Yamauchi K, Fujimoto S, Tada T. 123:1653) 'Differential activation of cytotoxic and suppressor T cells against syngeneic tumors in the mouse' has a certain resonance some 30 years later. The obituary in this issue, provided by colleagues, is a fitting tribute to a fine, inspirational, many-faceted man.

On a lighter note, do turn to the fabulous montage of FIMSA photos in this issue. It is a regular 'who's who' of Australasian immunologists (I see at least one New Zealander – can you?). There are so many smiles, so many teeth. This was clearly a very jolly meeting, full of intellectual excitement. We welcome pictures from meetings – they often tell a great story. Do make sure you have a photographer on board when you have your next conference. Alan Baxter has been a great source at the annual meeting but he can't be everywhere. Or can he? He is a speaker at the NZASI meeting in July so he should have his camera put into his hands as he shuts down his Powerpoint.

Margaret Baird

HONORARY SECRETARY'S NEWS

The second quarter is typically a very quiet one with most members recovering from grant writing and trying to catch up with their normal work life.

The Day of Immunology (DoI) was again held on or around 29 April in a number of different centres throughout Australia/NZ. Please see <http://www.immunology.org.au/wdi.html> for more information. Big thanks to all who helped making this a success, and demonstrating the importance of the work that we do to the general public! Special thanks to Delia Nelson who has taken on the co-ordinator role for this event!

It has been a busy time for the judging panel of the International Travel Awards. With the International Congress for Immunology (ICI) being held this year in Kobe, we received the expected large number of applications. Announcements of the successful applicants will have been made by the time you read this.

On this matter I'd like to remind everybody that it is essential to renew your membership before March 31 if you want to apply for ASI travel awards.

I've also been asked to clarify the rules for new members joining ASI during the year and you can find these explained in a separate column.

The American Association of Immunologists (AAI) holds its annual scientific meeting in May. This year for the first time there will be an ASI organised/supported session during the AAI meeting. Jose Villadangos' proposal was chosen (D. Hart, Chair; Speakers: K. Radford, L. Wu, B. Robinson, A. Lew and J. Villadangos) by the selection committee and he will report on this in the next newsletter.

Finally, on a personal note: some of you may have already seen in my auto email reply that I have moved from Adelaide to Melbourne to join Phil Hodgkin's group at the WEHI. My new contact details are in the front of the newsletter and on the ASI webpage.

*Susanne Heinzel
Honorary Secretary*

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1st August 2010**

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On the Road, cont.

receptors (CAR) into various T cell populations. While still largely restricted to some clinical success in malignant melanoma and a few other tumours, refinements in preconditioning patients and culturing and transferring far fewer "young" T cells are rapidly turning this into a cost effective therapeutic option that may be accessible to even smaller cancer centres. New lentiviral delivery methods to enable more effective TCR pairing (Pietro Genovese, Milan) were very exciting to hear about. Other papers concerning effective blockade of milk fat globule EGF-8 (MFG-E8) on dying cells (Jinushi, Dranoff, Dana-Farber) to enable more effective DC activation and anti-tumour immunity spoke volumes for the current interest in understanding how cancer cells die and what effect that has on host immunity. Antibodies to CD47 on leukemias (Majeti, Weissman, Stanford) enable macrophage-mediated phagocytosis and following back-to-back papers in *Cell* last year, the Weissman group has this antibody humanized and already looking exciting pre-clinically in combinations with rituximab (anti-CD20).

There were so many other talks of interest on tumour microenvironment or your favourite immune pathway, including one in my own session from a distant Vincenzo Bronte by teleconference (in Padua), who described for the first time the transcriptional control of myeloid derived suppressor cells (to soon appear in *Immunity*), and the ability of tumours in mice and humans producing nitrosylated peptides including chemokines, such that they were incapable of binding receptor on T cells, but could still signal for myeloid cells. Consequently, tumours were full of macrophages and surrounded by T cells. When nitrosylation was blocked, the T cells rushed in and infiltrated tumours, restricting their size. Suffice to say – if you are an immunologist and you think you might be interested in tumour immunology and more broadly cancer, AACR is actually not a bad place to start.

Many other sessions also revealed great advances in new mouse models of cancer and imaging technologies that only bring experiments and the clinic even closer together, with immunology quite well placed as a fundamental discipline and a pipeline of new targets (CTLA4, PDL1, etc) that may soon even please the FDA.

And what about the European vacation to follow you might ask? Well, there was a good reason why the conference was a little quieter than usual and Vincenzo and others were not in DC as expected. That baby that only SBS reporters can pronounce, "Eyjafjallajökull", had burst its bubble and the transatlantic world kind of ground to a halt. Iceland's second liquidity crisis made its mark. Not long after, my Croatian friends were soon considering the flukey winds, volcanic ash, and a distinct lack of airport action and cancelling the NK meeting before it became a debacle. Sadly I, too, was forced to rapidly change my plans and return home, reflecting on a missed opportunity to share new and old NK cell stories by that gloriously blue Adriatic. I think at least Mariapia Degli-Esposti got a much-needed vacation, and Dan Andrews was spared my snoring for a week. The NK cell meeting will live another day (September, I believe), but that and Paris will have to wait for me for another time.

In closing, I would like to thank the ASI for the career-long support and particularly the very generous 2009 Gordon Ada Travelling Award. I am very honoured. We may not always travel in the style of our business colleagues, but the ASI awards are a fabulous opportunity for extensive travel to educate and be educated. This Society can really add something to your life.



The Eyjafjallajökull plume



The ASI Visiting Speaker Program

August

Professor Chen Dong

Professor of Immunology and Director
Center for Inflammation and Cancer
MD Anderson Cancer Center
University of Texas, USA.



Prof. Dong is a world-class T cell biologist working at the forefront of T cell activation and function, with a focus on the cytokine and costimulatory molecule regulation of T cell phenotype commitment and differentiation. His previous work led to the discovery of Th17 and Tfh cells as a distinct lineage of helper T cell differentiation and his current research addresses how the Treg / Th17 cell balance is controlled to effect tolerance and immunity, and how phenotype switching can lead to plasticity and adaptation in the immune response and influence autoimmunity and allergic disease. He has an outstanding track record with over 100 publications since 1990, in journals including *Science* (2), *Nature* (4), *Nature Immunology* (1) and *Immunity* (5). He was recently awarded the American Association of Immunologists BD Biosciences Investigator Award for outstanding early-career research contributions to the field of immunology (2009), and is an Editorial Board Member of the *Journal of Biological Chemistry*.

Recent major publications

1. Nurieva, R. I., Chung, Y., Martinez, G. J., Yang, X. O., Tanaka, S., Matskevitch, T. D., Wang, Y.-H. and Dong, C. Bcl6 mediates the development of T follicular helper cells. (2009) *Science*. 325:1001-1005.
2. Yang, X. O., Nurieva, R., Martinez, G. J., Chung, Y., Kang, H. S., Pappu, B. P., Shah, B., Chang, S. H., Schluns, K. S., Watowich, S. S., Feng, X., Jetten, A. M. and Dong, C. Molecular antagonism and plasticity of regulatory and inflammatory T cell programs. (2008) *Immunity*. 29:44-56.
3. Nurieva, R. I., Chung, Y., Hwang, D., Yang, X. O., Kang, H. S., Ma, L., Wang, Y.-H., Watowich, S. S., Jetten, A. M., Tian, Q. and

Dong, C. Generation of follicular helper T cells is mediated by IL-21 but independent of TH1, TH2 or TH17 lineages. (2008) *Immunity*. 29:138-149.

4. Nurieva, R., Yang, X. O., Martinez, G., Zhang, Y., Panopoulos, A. D., Ma, L., Schluns, K., Tian, Q., Watowich, S. S., Jetten, A. M. and Dong, C. Essential autocrine regulation by IL-21 in the generation of inflammatory T cells. (2007) *Nature*. 448: 480-483.
5. Park, H., Li, Z., Yang, X. O., Chang, S. H., Nurieva, R. I., Wang, Y.-H., Wang, Y., Hood, L., Zhu, Z., Tian, Q., Dong, C. A distinct lineage of TH cells regulates tissue inflammation by producing IL-17. (2005) *Nature Immunology*. 10: 1133-1142.
6. Zhang, Y., Blattman, J., Kennedy, N., Duong, J., Nguyen, T., Wang, Y., Davis, R. J., Greenberg, P., Flavell, R. A. and Dong, C. Regulation of innate and adaptive immune responses by MKP5. (2004) *Nature*. 430:793-797.
7. Dong, C., Juedes, A. E., Temann, U.-A., Shrestha, S., Allison, J. P., Ruddle, N. H. and Flavell, R. A. ICOS costimulatory receptor is essential for T-cell activation and function. (2001) *Nature*. 409:97-101.
8. Dong, C., Yang, D. D., Tournier, C., Whitmarsh, A. J., Xu, J., Davis, R. J., and Flavell, R. A. JNK is required for effector T cell function but not for T cell activation. (2000) *Nature*. 405: 91-94.
9. Dong, C., Yang, D. D., Wysk, M., Whitmarsh, A. J., Davis, R. J., and Flavell, R. A. Defective T cell differentiation in the absence of *Jnk1*. (1998) *Science*. 282: 2092-2095 (*contribute equally).

August 9/10, Melbourne

August 11/12, Canberra

August 13, Sydney

August 15-19, International Congress for Reproductive Immunology to be held in Palm Cove, Qld

The visit is being co-ordinated by A/Prof Sarah A Robertson, University of Adelaide (sarah.robertson@adelaide.edu.au)

November December

ASI Visiting Speaker – Professor Gregory Bancroft

Immunology Unit, Department of Infectious & Tropical Diseases, London School of Hygiene and Tropical Medicine

Dr Bancroft is an Infectious Diseases Immunologist as the London School of Health and Tropical Medicine, UK. His research interests are related to how the host responds to pathogens within the



first few days following infection. Dr Bancroft's research group studies cell mediated immunity against *Burkholderia pseudomallei*, with particular interest in the mechanisms of cell fusion and giant cell formation and the role of bystander T cell and NK cell activation in resistance infection. His team also studies molecular determinants of virulence of *Mycobacterium tuberculosis* and mechanisms of granuloma formation and tissue remodelling in tuberculosis.

The visit is being co-ordinated by Dr Natkunam Ketheesan from the JCU, Townsville (n.ketheesan@jcu.edu.au)

Wednesday 24th November

Seminar at Malaghan Institute, Wellington

Host: Dr Joanna Kirman (jkirman@malaghan.org.nz)

Friday 26th November

Seminar at Centenary Institute, Sydney University

Host: Dr Bernadette Saunders (B.Saunders@centenary.usyd.edu.au)

Monday 29th November

Seminar at QIMR, Brisbane

Hosts: Drs Christian Engwerda & Ash Haque (christian.engwerda@qimr.edu.au; ashraful.haque@qimr.edu.au)

Tuesday 30th Nov – Friday 3rd Dec

JCU and World Melioidosis Congress
Hosts: Drs N Ketheesan & Heiner Koener (n.ketheesan@jcu.edu.au; heinrich.korner@jcu.edu.au)

Sun 5th–Wed 8th December

ASI Congress 2010 Perth – Workshop & Symposium

Hosts: Drs Christopher Andoniu & Dr Andrew Currie (candoniou@lei.org.au; ajcurrie@cyllene.uwa.edu.au)

Joining ASI

Membership options for new members explained (please pass on to anybody interested in joining ASI!)

A: Join at any time of the year and pay full membership fee (either Student or Ordinary member). This will grant full membership (including reduced ASI meeting registration in that year) and if renewed before 1st April the following year, these members are eligible to apply for International Travel Award (provided other eligibility criteria are met). i.e. pay full membership fee in 2010, renew before 1st April 2011 and be eligible to apply for ITA in 2011.

B: Join in the second half of the year and pay Interim Student or Ordinary membership. This will grant Interim membership which allows for reduced ASI annual

meeting registration in that year but will NOT be counted towards ITA travel awards. i.e. become interim member in 2010, renew membership in 2011 and before 1st April, 2012 and be eligible to apply for travel awards in 2012 (one year later than with full membership).

C: Join ASI when registering for meeting and pay full Student or Ordinary membership at that time. This will give discounted meeting registration in year of joining and full membership with all benefits for the following year. However this will not be counted as membership for the year of the meeting for purposes of travel awards etc. i.e. join with meeting registration in 2010, receive discounted meeting registration in 2010 and full membership in 2011 and be eligible for ITA applications in 2012 if renewal received before 1st April 2012.

Submission of photos with articles

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

Thank you for your co-operation.



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 - preeclampsia and preterm delivery
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 - sexually transmitted disease
 - contraception and fertility control

44 invited speakers from 12 countries are confirmed!

A full program with confirmed speakers is now available on the website
www.icri2010.org

There are travel grants, and awards for best oral and poster presentations, for student and trainee delegates.

We look forward to seeing you in Palm Cove, near Cairns on the Great Barrier Reef.

Sarah Robertson
Chair, Local Organising Committee XI ICRI 2010





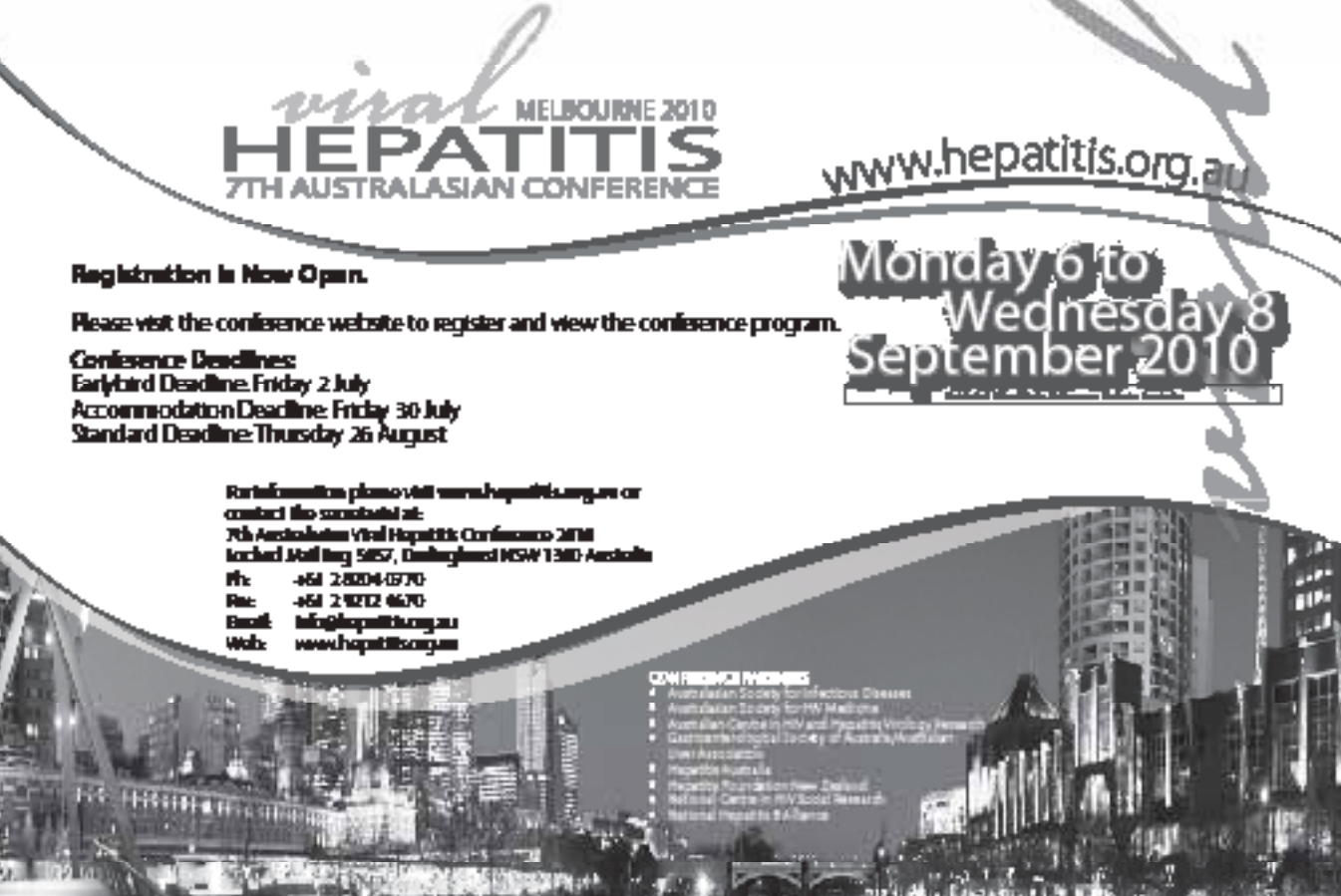
ashm
Australasian HIV/AIDS Conference 2010
22nd Annual Conference of the Australasian Society for HIV Medicine
Sydney, 20-22 October 2010

Wednesday 20 - Friday 22 October 2010
Sydney Convention and Exhibition Centre, Darling Harbour, Sydney

The Australasian HIV/AIDS Conference 2010 (22nd Annual ASHM Conference) will be held in Sydney from Wednesday 20 to Friday 22 October in Sydney. The conference will again be held back-to-back with the Australasian Sexual Health Conference, Monday 18 to Wednesday 20 October.

Conference Deadlines:
Abstract deadline: Friday 18 June
Earlybird deadline: Friday 13 August
Scholarship application deadline: Friday 9 July

For further information please visit www.hivaidsconference.com.au or the secretariat at:
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- Australasian Society for HIV Medicine
- Australian Centre in HIV and Hepatitis Virus Research
- Gastroenterological Society of Australia, Hepatitis Liver Association
- Hepatitis Australia
- Hepatitis Foundation New Zealand
- National Centre in HIV Social Research
- National Hepatitis Alliance

Obituary – Professor Tomio Tada

The following obituary was authored by Masaru Taniguchi, Toshitada Takemori, Takashi Saito, Ryo Abe, Noriko Sorimachi, Peter D Burrows and Masato Kubo.

Tomio Tada, internationally recognized investigator and Professor Emeritus of the Department of Immunology at the University of Tokyo, died on April 21, 2010 of prostate cancer. He was 76.

Dr Tada earned his medical degree from Chiba University in 1959 and joined the laboratory of Dr Okabayashi to start a long and distinguished research career as an immunologist. He earned the Doctor of Philosophy degree from the Department of Pathology in Chiba University in 1964. After joining the laboratory of Drs Kimishige and Teruko Ishizaka at Denver Children's Asthma Research Institute and the Department Microbiology, University of Colorado, Denver, Tomio pursued studies on basic mechanisms of the allergic response. Their characterization of the mysterious antibody, reagin, eventually led to the internationally recognized discovery of a new immunoglobulin isotype, IgE.

In 1971, in contrast to the general view at that time that T cells only help antibody responses, Tomio for the first time demonstrated the existence of suppressor T cells, which suppress the primary antibody response. At about the same time, Dr Richard Gershon suggested that T cell mediated suppression is involved in immunological tolerance. Later, Tomio and his colleagues continued to analyze the properties of suppressor T cells and, together with Gershon's group, he established the concept that immunological homeostasis is regulated by suppressor T cells through interaction with other T cells. This exciting new paradigm of "peripheral tolerance" went beyond the classical concept explained by central tolerance, which is mainly regulated by clonal deletion in the thymus. Tomio's suppressor T cell idea predated the concept of regulatory T cells, which have recently become a topic of great interest among immunologists. His efforts then turned to discovery of molecules responsible for suppressor T cell activity and he proposed I-J; however, genetic analysis failed to define this molecule. Tomio continued the physicochemical analysis of suppressor molecules and his studies on the role of suppressor cells in immune networks,



T-cell signaling, and T-cell development throughout his entire academic career.

In 1974, Tomio became a professor of the Department of Immunology in Chiba University and, in 1977, he was appointed professor of the Department of Immunology, Faculty of Medicine, Tokyo University. He devoted an enormous effort in science and the education of young students and researchers at both universities. His academic progeny now play important roles in many different fields of Immunology.

After retirement from Tokyo University in 1994, Tomio became Emeritus Professor of the Department of Immunology at the University of Tokyo and in 1995 became director of the Research Institute for Biological Science (RIBS), Tokyo University of Science. RIBS was the first research institute in Japan that focused on Immunology. He served there until 2000 with strong leadership to expand the research status of this institute.

Tomio was a distinguished leader, not only in the international research field but also in others such as The World Health Organization (WHO). He was invited as a representative from Japan to The Second International Meeting "Life Science and Humanity" in 1985. Tomio also served on the executive board of the International Union of Immunological Societies (IUIS), vice president of IUIS (1991–1994), and president

of IUIS (1994–1997). He was an Editor of many journals: *Journal of Immunology*; *Molecular Immunology*; *Microbiology and Immunology*; *Immunology Letters*; *Thymus*; *Immunopharmacology*; *Immunology Today*; *Journal of Molecular and Cellular Immunology*; and the *Scandinavian Journal of Immunology*. He was an honorary member of the National Academy of Sciences of Rumania (1976), life member of the World Congress of Allergy, scientific councilor of the Cancer Research Institute (1987), honorary member of the Medical and Science Academy of Romania (1997), and honorary doctor of the Poland Copernicus Medical University (1998).

Tomio was recipient of the Hideo Noguchi Prize (1976), the Erwin von Baeltz Prize (1977), and the Emil Adolf von Behring Prize (1980). In 1984, he received a Cultural Merit award from the Emperor of Japan. In 2009, he was awarded the Order of the Rising Sun, and Gold and Silver Star from the Emperor and Empress of Japan.

In 1989, Tomio established *International Immunology* as a founder and a deputy editor. This journal was the first international scientific peer reviewed journal established in Japan. He served as the editor until 2000.

In addition to his tremendous achievements as an immunologist, Tomio was a Renaissance man. Despite a stroke that left him partially paralyzed and without speech, Tomio wrote several plays in the classical Japanese theatrical art of Noh drama. These were modern plays, often dealing with sensitive and sometimes controversial issues. Among them were, *The Well of Ignorance*, on the topic of brain death and heart transplantation, *Resenting Lament*, addressing issues of Japanese militarism in Korea, and *The Hermit Isseki*, a play with Einstein as the main character. Tomio was the author of several books, such as *Semantics of the Immune System* which was awarded the Osaragi Jiro Prize (1993), and a frequent contributor to the lay press on issues of science and society in Japan. Furthermore, in 2007, Tomio started a nonprofit social group, Integration of Natural Sciences and Liberal Arts

(INSLA), which was meant to provide an interaction space for people in the specialized, and often discordant, fields of Science and Art.

Tomio Tada is survived by his wife, Norie Tada, MD; son, Kuris Tada, MD; daughters Ko Iwabe and Aya Mori (all living in Tokyo), and five grandchildren. His life and work continue to inspire those who knew him.

Sustaining Membership

ASI Inc acknowledges the support of the following sustaining member:

- Jomar Bioscience

ASI online immunology quiz

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

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

An invitation and a request to all ASI members

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

- We invite our student membership to voice their views on issues that interest or directly concern them.
- It's our newsletter, so let's support it and strive to make it even better.
- The ASI newsletter comes out 4 times a year and we welcome your contributions.
- **AND NOW YOU COULD WIN \$200 FOR THE BEST ARTICLE PUBLISHED IN THE NEWSLETTER!**



Employment Opportunities with Vaxine, an Award-Winning Australian Biotech Leader

Vaxine is a rapidly growing vaccine development company based in Adelaide, with major funding from the US National Institutes of Health and US Department of Health and Human Services. Vaxine works closely with a range of international partners on development of vaccines against hepatitis B, seasonal and pandemic influenza, Japanese encephalitis, shigella, malaria, allergy, Alzheimer's, atherosclerosis and cancer. Last year it won global recognition for its breakthrough clinical trials of an egg-free recombinant vaccine against swine flu.

Vaxine invites applications from interested postdoctoral scientists for research positions within the company.

For expressions of Interest please submit your CV to jobs@vaxine.net



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ASI Councillors' News

N.Z. News

NZ ASI/Immunet Meeting July 1 & 2

Registration for the NZ ASI meeting has now closed, and we have an exciting two day meeting planned. Visit: <http://www.malaghan.org.nz/newsevents/NZASImeeting/>

As part of the *ASI Women's Initiative*, we have three round table discussion groups planned during one lunch hour of the NZ ASI Meeting. These are:

- *Early career: moving from Postdoc to Faculty* (with Erika Pearce, Trudeau Institute and Roslyn Kemp, University of Otago)
- *Parenthood and Immunology* (with Anne La Flamme, Victoria University of Wellington and Sarah Young, University of Otago)
- *Grant Writing* (with Carola Vinuesa, John Curtin School of Medical Research, ANU and Franca Ronchese, Malaghan Institute)

Male colleagues are also invited, as some issues will be relevant to both sexes and will help raise awareness of particular issues that face women as they progress through their careers.

Day of Immunology event around NZ Wellington (report by Jo Kirman and Debbie Scarlett)

It was a dark and stormy night. Which of course didn't stop more than 140 hardy Wellingtonians who were drawn up to Victoria University to hear Prof Ian Frazer's public lecture: "You and your immune system: a partnership to prevent disease".

Jo Kirman began the evening by screening the short film, *The Immunology Knight*, (sponsored by the European Federation of Immunological Sciences) before introducing Ian. In fine form, Ian gave an entertaining and informative talk, which included a brief overview of the history of biomedical research that highlighted vaccination as a practical benefit of immunology, before describing how his group developed the HPV vaccine. We were delighted to have many members of the public comment on how much they enjoyed Ian's talk. After a question and answer session chaired by Anne La Flamme, the evening concluded with attendees invited to view a selection of posters by local immunologists while enjoying refreshments.

Dunedin (report by Alex McLellan)

About 75 people turned out to hear three

speakers at Otago University's WDI evening entitled: "The Immune System and Organ Transplantation", held at the Colquhoun Lecture Theatre, Dunedin Hospital. Dr Alex McLellan introduced the evolution of MHC molecules and tissue incompatibility before renal physician Prof. Rob Walker (Dunedin Hospital) took the stage to give the crowd the history of kidney transplantation in NZ, emphasising the changing success rates with the introduction of new immunosuppressants. Pioneering NZ liver transplant surgeon Prof. John McCall finished the evening with the history of liver transplantation in NZ, including 'split liver' transplantation and his work on costimulator molecule blockage. John reminded us that, prior to the establishment of the NZ Liver Transplantation Unit in 1998, fundraising was required to send NZ patients to Australia for liver transplantation. Speakers then mixed with the crowd over drinks and nibbles and the local immunologists began planning the next WDI.

ASI Visiting speakers

Wellington is planning to host Gregory Bancroft in December.

Joanna Kirman,
NZ Councillor



Wellington Day of Immunology Event (clockwise from left): Jo Kirman welcoming guests to the lecture, Immunology Superhero Ian Frazer delivering the lecture, Fenella Rich describing her Tb research, Elizabeth Forbes discussing her research with David Heath, attendees enjoying refreshments and the chance to meet local immunologists after the lecture, Ian Frazer and Franca Ronchese. Photographer: Federico Iglesias

N.S.W. News

Immunologists in NSW have had, and will continue to have, several opportunities to hear about exciting research being done from all points of the globe (well, a few anyway).

ASI NSW recently hosted visits by Dr Jack Bennink, from the NIH, and Dr Janko Nikolich-Zugich from the University of Arizona. Their presentations on their latest findings relating to host immune responses to influenza, and the effect of aging on the immune system, respectively, were well received.

The ASI International Visiting Speaker Program continues into the second half of 2010. Garvan Institute will present a seminar by Prof Chen Dong from MD Anderson Cancer/University of Texas on Friday 13th August; Chen Dong is an extraordinarily prolific immunologist and has made major contributions to our understanding of CD4 T cell differentiation/lineages. Then on Friday 26th November 2010, Dr Greg Bancroft from the London School of Hygiene and Tropical Medicine will give a seminar at Centenary Institute. Dr Bancroft's research interests lie in understanding host-pathogen interactions.

The second half of 2010 will also see the commencement of a local ASI NSW-sponsored national visiting speaker program. Several notable national immunologists have kindly accepted our invitation to come to Sydney to give seminars, which will be held at the Garvan Institute. The schedule for this program is as follows:

- Monday July 19th: Prof Joe Trapani, Peter MacCallum Cancer Centre, Melbourne (Structure and function of perforin)
- Monday September 27th: Dr Steve Nutt, Walter & Eliza Hall Institute, Melbourne (Transcriptional regulation of lymphocyte development and effector function)
- Monday November 1st: Dr Gabrielle Belz, Walter & Eliza Hall Institute, Melbourne (CD8 T cell differentiation and anti-viral immunity).

Lastly, organisation for the annual ASI NSW retreat is well underway. Again this

will be a joint event shared with ASI ACT and will be held at the Craigieburn Resort and Conference Centre in Bowral on Thursday 9th and Friday 10th September 2010. The meeting will follow a similar format as last year, however we hope to have more presentations by early career scientists this time around. Special invited speakers who will give the opening and closing keynote presentations will be announced soon - watch this space for more details at the date draws closer.

So make a note of all of these dates in your diaries now!

*Stuart Tangye
Councillor*

S.A./N.T. News

It has now been five months since I donned the cap of SA/NT State Councillor. Claudine Bonder was the past Councillor and she left some big shoes to fill (Claudine is much taller than me!). In 1997, I joined ASI as a member and have continued to strongly support the aim of the Society which is to encourage, promote and support the discipline of Immunology in the Australasian region. I am looking forward to my new role as SA/NT State Councillor and hope to continue in the SA/NT tradition of actively introducing young scientists to the discipline of immunology through planned events such as the Adelaide Immunology Retreat (to be held in late August 2010).

So far this year we have had some noteworthy events. On February 2nd we held an Honorary Lecture for Prof Heddy Zola, Research Director of SA Pathology, who received an Award of Honorary Life Membership of ASI for his outstanding contribution to immunology in Australia. Prof Derek Hart provided a brief history of Heddy's achievements over his career, along with some humorous stories and pictures of a very young Heddy. This award was announced in December at the ASI Annual Scientific Meeting held on the Gold Coast. I would like to thank all those who helped organize this event, especially Claudine Bonder and Su Heinzl (who has now defected from SA, the "Heaps Good" state, to Victoria "the place to be" and has taken up residency at WEHI). On a more serious note, I would like to thank Su for all her efforts of support and organization of ASI events in South Australia over the last 8-10 years. We will miss you!

Also congratulations to Ms Kimberley Harris who received the ASI Prize for having the highest overall mark in the course of Immunology, in the School of Pharmacy and Medical Sciences, University of South Australia. Ms Harris was presented with this award at a special ceremony held on 30th March 2010.

Finally, preparations for the 41st ASI annual meeting to be held in Adelaide, 11-15 December 2011 are now underway. We have formed an organizing committee of the following members: Claudine Bonder (Chair), Lindsay Dent, Tony Ferrante, Cara Frazer, Erin Lousberg, Gabriela Minigo (NT member), Lachlan Moldenhauer, Maurizio Costabile, Boris Fedoric, Claire Jessup, Toby Coates and Simon Barry. The venue has been selected and seven international keynote speakers have already accepted invitations to present at ASI 2011. Our team is looking forward to hosting this exciting event in December next year.

One last postscript: As noted above, the Adelaide Immunology Retreat (AIR) for PhD students, Honours students and research assistants will be held in late August this year. An advertisement of the exact date and call for abstracts will be sent out by email to all SA/NT ASI members in June. Please support this event if you are a supervisor by encouraging your students and staff to attend as it is a great opportunity for them to give an oral presentation to their peers in a relaxed environment. Another incentive is that there will be three prizes conferred for the Best Presentations given by a PhD Student, Honours Student and Research Assistant (one in each category).

*Michele Grimbaldeston
Councillor*

ICB Online Manuscript Submission

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

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

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

W.A. News

The Western Australian branch of the ASI held its Global Day of Immunology event, "Immunity and You" at Scitech in Perth this year on April 29. The event was organised in large part by Delia Nelson, the DoI coordinator (who we are lucky enough to have based here in Perth), and the PhD students who serve on the local student committee. We had talks from Delia Nelson and Andrew Currie who introduced the audience to the adaptive and the innate immune systems respectively. Our invited speakers were Martyn French – *HIV and viral evasion of host immunity*; Pru Hart – *The sun, vitamin D, immunity and cancer*; and Peter Richmond – *Vaccines and influenza*. The talks were well received with Peter Richmond's talk being very topical given the recent media focus on responses to the influenza vaccine.

The PhD students set up booths focused on infectious diseases, tumour immunology and allergy and vaccines. Audience members were encouraged to meet and talk with the PhD students about why they are doing a PhD, about their work and of course about immunology. Bribes in the form of prizes were given to audience members who correctly answered questions on an immunology quiz.

We had over 75 people attend from a diverse range of backgrounds including high school students and teachers, university students and the general public. Given the number of people talking to the speakers after the talks, I think the event was a success. Thanks go to the organisers, the invited speakers, the fantastic SciTech staff and last but not least to Jomar Biosciences who helped fund the food.

*Alec Redwood
Councillor*

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

A.C.T. News

Following the Footprints of Flu

Professor Anne Kelso reviewed the 2009 H1N1 "swine flu" outbreak in Australia and around the world at a public lecture in the ACT.

With fresh memories of Australia's first flu pandemic in many years and amidst a nation-wide embargo on the seasonal flu vaccine for under-5s, Prof. Kelso painted a picture of global flu surveillance for Canberrans at an event to mark the World Day of Immunology.

Prof. Kelso deftly made a complex topic accessible to all, based on her experience as Director of the WHO Collaborating Centre for Reference and Research on Influenza in Melbourne, one of four such centres around the globe.

The talk was received enthusiastically with a Q&A session that lasted 20 minutes and touched on issues as diverse as predicting the virulence of a future pandemic flu virus and public attitudes to annual vaccination.

Interestingly, a comparison with Australia's 2007 Equine Influenza outbreak was made, with a member of the audience reporting seroconversion in 90% of at-risk horses; by contrast, the still emerging data

suggest that seroconversion to the 2009 H1N1 amongst middle-aged and older Australians was much lower.

Although that comparison is like comparing apples with watermelons, it was noted that immunological memory may be at the heart of this contrast, with older Australians possibly being protected by cross-reactive antibodies or T cells, which might also explain why in our epidemic people in their teens and twenties got sicker than older people and, in the southern hemisphere, transmission ended so quickly.

Another interesting point was the tendency of flu viruses to displace each other when they are closely-related whereas they tend to coexist when more distantly related.

Will a return of H1N1, which is predicted as we head into winter, see the demise of competing flus that we've been living with longer?

Only time, and the global network of WHO Collaborating Centres, will tell.

*Stephen Daley
Councillor*



Professor Ann Kelso

Travel Award Conference Report

Keystone Symposia: Molecular and Cellular Biology of Immune Escape in Cancer

Nicole Brooks, Burnet Institute, Melbourne

In February 2010, I travelled to Keystone Resort, Keystone, Colorado, for the Molecular and Cellular Biology of Immune Escape in Cancer symposia, incorporating the meeting on the role of inflammation in oncogenesis. The conference covered the mechanisms of inflammation-induced carcinogenesis, in particular the dysregulation of the innate immune system along with immune escape and tumour-induced immunosuppression. Sessions included:

- Regulation of Immune Escape by Microenvironments
- Antigen-Specific Mechanisms of Tumour Escape
- Myeloid Cells in Immune Suppression & Tumour Progression
- Regulatory T & NKT Cells in Immune Escape
- Transcriptional Regulation of Immune Escape
- Tumour Recruitment of Immune Cells: Roles in Tumour Progression & Immune Escape
- Immune Inhibitory Receptors in Cancer
- Metabolic Pathways Involved in Immune Escape

- Novel Strategies to Reverse Immune Escape in Cancer

This meeting brought together researchers from diverse backgrounds including immunology, cancer and molecular therapeutics to address immune escape and tumour-induced immune suppression as a multifaceted problem.

A keynote address from Dr Francis Balkwill from Queen Mary University of London, UK, discussed inflammatory cytokines and chemokines in promoting tumour growth, metastasis and apoptosis. Studies in ovarian cancer have revealed the cytokines TNF- α and IL-6, chemokine CXCR4 and its ligand CXCL12 as well as the receptor Notch3 and its Jagged1 ligand, are co-expressed and co-regulated in ovarian cancer cell lines and human ovarian cancer biopsies. Initial results from phase I/II clinical trial investigating the use of anti-TNF- α or anti-IL-6 neutralizing antibody treatment were also discussed showing promising results.

Of particular interest was the workshop addressing novel strategies to reverse immune escape in cancer including a



presentation by Dr Lui Xiangdong from Incyte Corporation, USA. Work in their laboratory has investigated the use of indoleamine 2,3-dioxygenase (IDO1) as a selective inhibitor for cancer immunotherapy revealing IDO1 reduces the generation of regulatory T cells and IDO1 alone or in combination with chemotherapeutic agents controls tumour growth.

Overall this conference provided a unique opportunity for networking and gaining invaluable feedback. I would like to thank ASI for giving me the opportunity to attend this conference, and allowing me to visit a number of laboratories to investigate potential post-doctoral positions.

UPCOMING LECTURES & CONFERENCES

40th Annual Meeting of the German Society of Immunology (DGfI)
September 22–25, 2010
Leipzig, Germany
immunologie2010@conventus.de
www.immunologie2010.de

OzBio2010 (12th IUBMB, 21st FAO-BMB & 12th ComBio)
26 September–1 October 2010
Melbourne, Victoria
info@ozbio2010.com
<http://www.asbmb.org.au/ozbio2010>

2010 Australasian Sexual Health Conference
October 18–20, 2010
Sydney, New South Wales
www.sexualhealthconference.com.au

12th Congress of the MESOT (Middle East for Organ Transplantation)
October 18–21, 2010
Gammarth, Tunisia
The congress will be followed by the 2nd Maghrebian Championship and the 3rd MESOT Transplant Games: October 22–24, 2010
www.mesot2010-tunis.org.tn

ASHM Australasian HIV/AIDS Conference 2010
October 20–22, 2010
Sydney, New South Wales
www.hivaidsconference.com.au

8th Asia Pacific Congress of Allergy, Asthma and Clinical Immunology 2010 (APCAACI 2010) – From Bench to Bedside: Evidence-based Practice
November 6–9, 2010
Singapore
admin@apcaaci2010.org
<http://www.apcaaci2010.org/>

10th World Congress on Inflammation
June 25–29, 2011
Paris, France
www.inflammation2011.com

ASI Student Page

It turns out that one of the biggest dilemmas I face as a PhD student in a social setting is what to say to the common conversation starter—"So... what do you do?" By the time I've stumbled my way over phrases including "postgraduate studies", "medical research", "I work with viruses", eyes have glazed over and an awkward lull has settled. These experiences have persuaded me that broad categorisations, such as "scientist", are far more efficient than accuracy. I assure myself that if someone is really interested they will pursue the conversation (this is rare).

We recently held the WA version of the Day of Immunology (DoI) event at Scitech, the main attraction being invited speakers detailing to the public their recent research. This year we decided to include information booths to complement the talks. The PhD students that form the student committee were responsible for the contents of these booths and interacting with members of the public attending the event. The booths were scheduled to start at 4pm. By 3:45 pm, we had run out of posters to hand out. Even an

ELISPOT plate on display was not safe. We were peppered with questions and the talks generated much discussion after.

The most memorable moment was when we were packing up, and I was talking to a first year undergraduate student. She was inquiring when an event like this would be held again, to which I told her this was an annual event and explained the purpose of the DoI. I mentioned something in passing about how immunologists can get bogged down by the specifics of their research and subsequently lose sight of its applicability to the general public. She told me that in her opinion, most members of the public would consider immunology as the most accessible and relatable research area. This simple statement resonated for me. I am the first to admit that I am guilty of underselling what I do, of thinking that most people would not be interested in what I am doing. In reality, the public is very interested, and why wouldn't they be? We all have an immune response, and we are all intrigued by how it works and why it may not be functioning optimally.

I recently bumped into a friend I hadn't seen for several years. When I mentioned the word "virus", she immediately perked up and proceeded to grill me about vaccines, presenting to me the arguments for both pro and con. This is one of many examples I encountered recently that reflects the increasing mindfulness of health in the community. I felt inspired by these moments and felt it was a timely reminder for why I chose this career path in the first place.

At the first party I attended after the DoI inspiration, an inquiry was made about my profession. Upon the conclusion of my enthusiastic response, she nodded in understanding, and immediately said, "Oh, so you're a nerd!" Internal turmoil aside, I'll definitely try that one out next time.

Yours truly, on a soapbox

Baca Chan

ASI student representative 2010



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