Australasian Society for Immunology Inc.

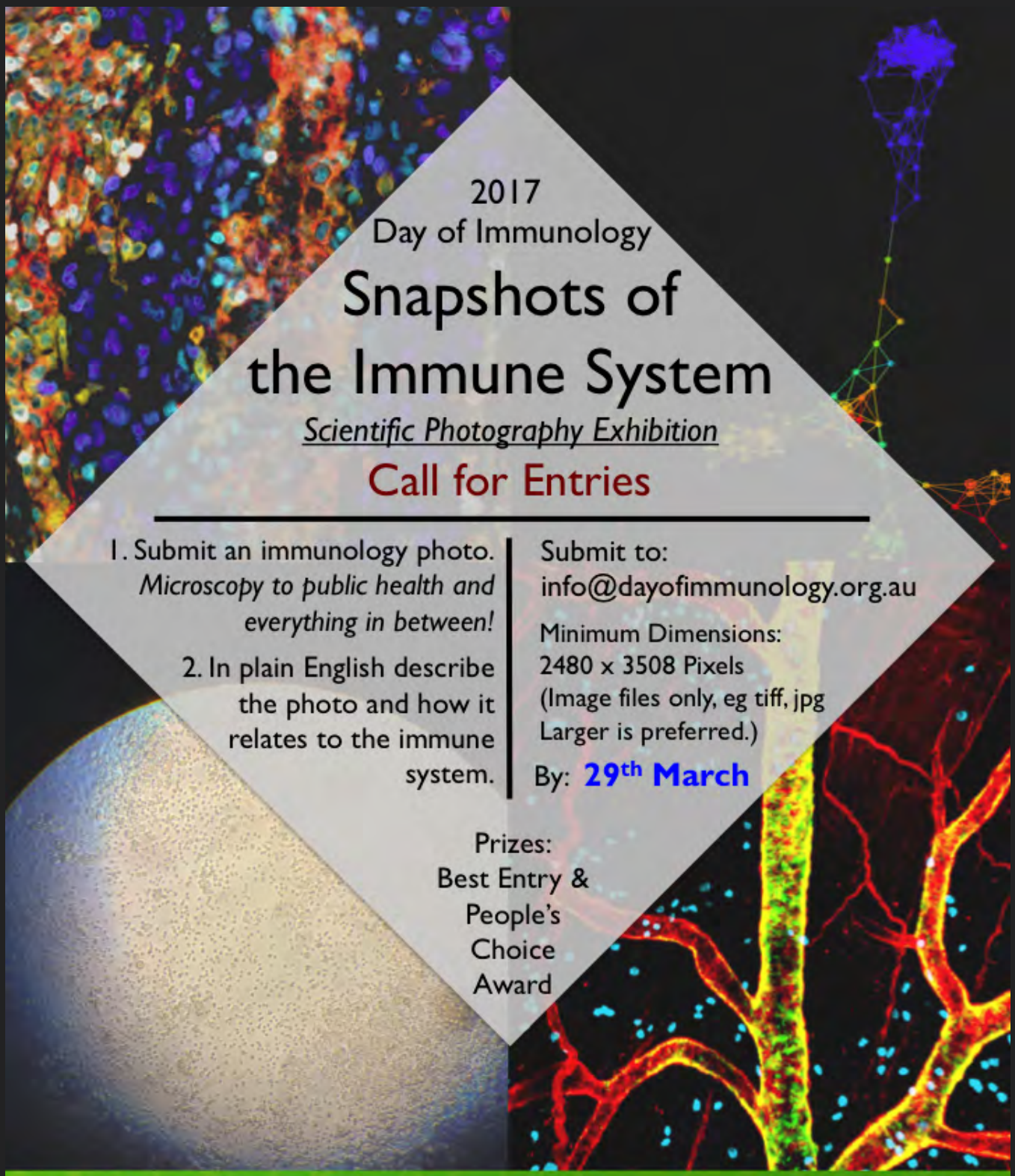
Change is constant

Recognising, remembering, looking to the future

In this issue

Contact Us

Australasian Society for Immunology Inc.
PO Box 7108, Upper Ferntree Gully VIC 3156
Australia
P: +61 3 9756 0128
E: immunologysecretariat@gmail.com



2017
Day of Immunology

Snapshots of the Immune System

Scientific Photography Exhibition

Call for Entries

1. Submit an immunology photo. *Microscopy to public health and everything in between!*
2. In plain English describe the photo and how it relates to the immune system.

Submit to:
info@dayofimmunology.org.au

Minimum Dimensions:
2480 x 3508 Pixels
(Image files only, eg tiff, jpg
Larger is preferred.)

By: **29th March**

Prizes:
Best Entry &
People's
Choice
Award

Top left by: Dani Tutuka
Bottom left by: Gemma Laws

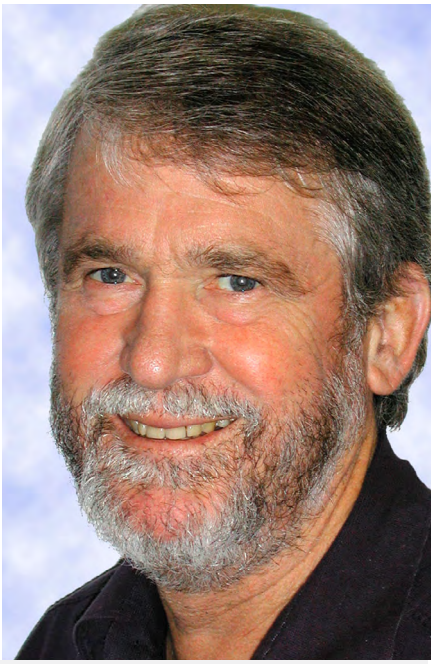
Top right by: Timothy Hinks
Bottom right by: Michaela Finsterbusch

Australasian Society for Immunology Inc.

www.dayofimmunology.org.au
@doiaus
@DayofImmunology
DayofImmunology

CENTRE FOR ADVANCED MOLECULAR IMAGING
AN ARC CENTRE OF EXCELLENCE

CONTENTS 3



Graham Mayrhofer's influence lives on in the lives of those he worked with and for. Remembering Graham on Page 5.

On the Cover

Pin-up boy, Tristan the T Rex stared at the 2nd EMBO ILC Conference Gala Dinner. Read more about the conference in Camille Guillerey's Travel Report on page 24.

Meet the President

There were some great choices for President made in 2016 - Susanne Heinzel takes on the role for the ASI. Find out more on page 12.

Kid me not

Six days, 13 000 delegates, Kim O'Sullivan traveled to Chicago for 'Kidney week' to present two posters on her work. See Page 28.

Editorial

Fake Truth

How about that challenge of communicating with people who have a viewpoint founded on ‘alternative facts’? How do you communicate with people who have a fundamentally different position to yours, which may also be wrong or misguided? Shouting matches with loads of adrenalin don’t change anything.

Life in provincial Manawatu is not always bursting with high brow debate on bio-medical matters. But much of this intellectual terrain has actual currency in real people’s lives. The front page of the local paper carried an article that got me thinking about this. Quoting a parent who did not vaccinate her children, the article read, “Mothers had a strong sense of responsibility and were capable of doing ‘sound medical research’ to decide [vaccination] was not for them. ‘They are doing their own research and not on dodgy online websites, like [vaccination advocates] would have you believe. We won’t be patronised into making uninformed choices.’” *Manawatu Standard*, February 28th 2017, Page 1

A powerful feature of the past 10 years of life in the modern world is the way in which the Internet helps us select our exposure to our own personal version of the truth. Those kids in Silicon Valley have found ways to get Google to feed us the answers to our web searches that we are most likely to approve. For pizza delivery, this is great because a top page hit for the store down the road - as opposed to the one in Johannesburg - is helpful. But this is a terrible bias-confirmer for many other things. Thus when we are face to face with people who have a polar opposite view, it is likely to have been wonderfully reinforced by screen time.

Joanna Roberts
Editor ASI Newsletter

www.flowjoanna.co.nz

joanna@flowjoanna.co.nz

With the Day of Immunology approaching (April 29th) and the March for Science (April 22nd) , there will be opportunities for conversation with people in our world/s who may not share our perspective on things like the value of vaccinating children and the importance of policy making for the world we live in based on scientific data to name but two.

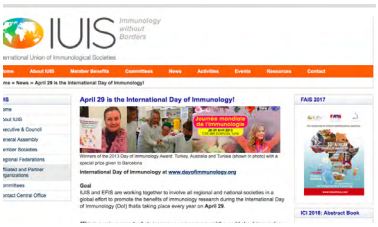
RNZ Interview, Sara Gorman, 30/1/17

I think it is essential to consider how to forge a place of safe conversation in this case. Banging out a pile of actual (as opposed to alternative) facts won’t help first up. I am giving thought to Sara Gorman’s (public health expert) suggestion in an interview on RNZ from 30th January “Why we ignore the facts that could save us”. She says we start first of all with empathy. Aiming to understand the other person’s underlying values - for instance, wanting safe and healthy kids - and connecting on this level is key. If you start with a common value that you can both share, the conversation after that about the facts around vaccination of children gets easier.

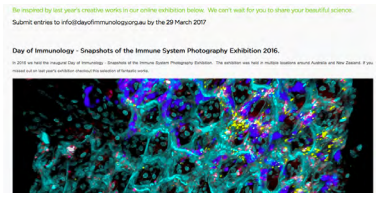
Being right is fine.

But making a difference with that knowledge is more important.

Day of Immunology IUIS



Day of Immunology, Australasia



March for Science Australia

March for Science NZ

Vale Graham Mayrhofer 14th April 1944 - 9th October 2016

Lindsay Dent

Graham Mayrhofer was a member of ASI over three decades, a Branch Councillor and integral to the organization of several Annual Scientific Meetings in Adelaide. He was a researcher and academic with a genuine sense of scientific curiosity and adventure. Graham exercised a rigor in his research, research training and teaching that was greatly respected by students and colleagues alike.

"I remember Graham as a stellar scientist pursuing interesting questions with courage, imagination and precision. He was also a great role model and mentor as a scientist and a stalwart of our community." (Phil Hodgkin, WEHI)

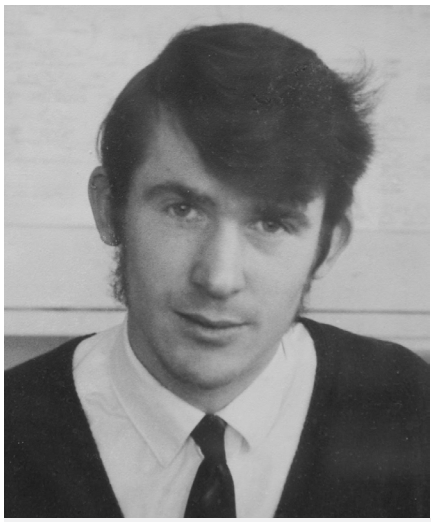
"I will be forever grateful to him. I saw the world in absolutes and he taught me to how to pick out every shade of possibility. I can only hope that his kindness and legacy lives in all of us that he taught." (Branka Grubor, former PhD student)

Graham Mayrhofer at University of Adelaide, c. 2005

Photo courtesy Chris Wong

Graham was born in Leonora, in the goldfields of Western Australia, where his father was a teacher. Later primary and high school years were spent in Perth and with three uncles in medicine, it is perhaps not surprising that Graham also enrolled in Medicine at the University of Western Australia. Graham's interests and talents in science emerged early, with his first publication arising from work done whilst a medical student in the Department of Physiology at UWA. His talent was further recognized in his third year of Medicine, with the offer of a University of Oxford Commonwealth Medical Scholarship, which in those days was given to a single awardee from Australia or New Zealand on biannual rotation.

Graham went to Oxford at the age of 21 in 1965 to complete his medical degrees, but pivotally, in the middle of his medical training, he also undertook an Honours year and Doctor of Philosophy over about 4 years. His Doctorate work was performed between 1967 and 1971 at the Sir William Dunn School of Pathology, which was a powerhouse of British science. The head of the Dunn School in the 1930s and 40s was the Australian Howard Florey who, with Ernst Chain and Alexander Fleming, won the Nobel Prize in 1945, for their work on penicillin. Landmark research was



Graham at the Dunn School, c. 1972

Photo courtesy Simon Hunt

published from the Dunn School. For example, Jim Gowans demonstrated the recirculation of lymphocytes from the blood to the lymph in the 1950s. In the early 1960s Edward Abraham and Guy Newton discovered a new class of antibiotics, the cephalosporins. Henry Harris, another Australian, who became Head in the 1960s, did his PhD with Florey, but went on to work on RNA metabolism, cell fusion and tumour suppression. George Brownlee expressed recombinant blood factor nine (IX) and established the reverse genetics for influenza virus that has underpinned flu vaccine production. Also at the Dunn School during this time were Neil Barclay, Alan Williams and Don Mason, who have given so much to the definition of molecules at the surfaces of leucocytes. This field has proven to be fundamental to cell biology and more specifically, immunology and has translated into important clinical applications.

Some of these people were very important for Graham and themes first explored at the Dunn School were elemental to his research career. In summarizing Graham's long-term and major research interests, one can see the early inspiration: leukocyte recirculation and mast cells (Gowans), cellular immunology and cell fusion in the production of monoclonal antibodies (Harris), leukocyte morphology and function (Barclay, Williams, Mason, Gowans, Harris).

Harris supervised Graham's D. Phil. studies in the metabolism of macrophages and other cells. Graham published with Gowans on mast cells and immunoglobulin E in the gut and worked on the first of several intestinal parasites. This was probably the beginning of his life-long interest in mucosal immunity and his fascination with mast cells. Graham finished his research studies and D. Phil. and then from 1971 to 1974, returned to being a medical student, followed by a stint as a resident house officer at the Radcliffe Infirmary. Graham went back to the Dunn School as an MRC Research Fellow from 1974-77 and again on a sabbatical in 1980.

With his new wife Adele, Graham returned to Western Australia in 1977, where he became a Research Fellow at the Princess Margaret Hospital in Perth in Keven Turner's laboratory. There he forged new research collaborations and friendships with Keven, Pat Holt, Geoff Shellam and his first PhD student, Willy Allan.

During this later period in Oxford and in Perth, Graham published on mast cells and interactions with T cells; the thymus-independent development of intraepithelial lymphocytes; regulation of the immune response by cells later known as dendritic cells; secretion of immunoglobulins in the gut mucosa and the non-secretory nature of immunoglobulin E. Some of the topics investigated early in Graham's career were to be major areas of study world-wide in the 1990s and 2000s.

What Graham was also doing at this stage was developing skills in immunohistochemistry and microsurgery that would be thematic to most of his subsequent research. He was an outstanding and exacting practitioner of immunohistochemistry and many people in our research

The Original Hipsters; A social occasion whilst at Princes Margaret Hospital, Perth, c. late 1970s/early 1980s. From left: Pat Holt, Geoff Stewart, Graham, Keven Turner (standing)

Photo courtesy Jane Allan

community knew him for it. Our undergraduates benefitted from his passion in this area and so too did most of his post-graduate students.

Graham and Adele came to Adelaide in 1983, with Graham taking up a position as Senior Lecturer at the University of Adelaide. In the first 10 years in Adelaide, Graham expanded his research interests to include another gastrointestinal parasite, the unicellular organism Giardia. With Peter Ey and many others, Graham characterized this very prevalent pathogen both at the cellular and molecular level. The molecular systematics or classification scheme that they developed has been adopted internationally. This work continued on into the mid-2000s.

Another research theme that really started to emerge at this time was the interplay between cells of the immune system and other cell types such as epithelial cells of reproductive tissues (with Sarah Robertson) and the gut (with Adrian Cummins and Fiona Thompson).

From the early 1990s another great collaboration really began to take off. With Les Cleland, Llew Spargo, Mahin Moghadammi and others, Graham embraced arthritis research over two decades.

Graham was an immunologist, perhaps sometimes he might call himself a pathologist, but really he was just downright curious. His scientific curiosity has been commented on by many and I offer you a couple of other examples of his work that came from this. Whilst chasing a cell surface molecule detected using monoclonal antibodies developed in our teaching lab (yes, that's right, the teaching lab), he began work on CD36 or fatty acid translocase. This work, done with Xingqi Zhang, Nick Eyre and Les Cleland and others has implications for fat metabolism and perhaps in obesity, Type II diabetes and liver damage. Another example of scientific curiosity flows from Graham's propensity to take on co-supervision of students. With Caroline Bull, Mike Fenech and their colleagues at CSIRO, Graham also found himself pondering DNA damage, cancer and cell death and this has led to several of his latest publications. Whilst this work has relevance for immunology, it extends into many other fields of research.

So what about teaching, that other major part of an academic's life? For most of his career Graham taught undergraduate Medical and Science students and contributed to curriculum development. He was a great mentor and cared for students and for his scientific and medical disciplines.

"He introduced me to immunology which has become my lifetime career. Graham was amongst the most honest, brilliant, insightful, high-integrity scientists and experimentalists I have ever known. He set the bar for how I should conduct myself as a scientist and I have tried always to live up to him." (Jonathon Sedgewick, Boehringer Ingelheim)

Graham was always presenting students with both the forefront of the science and an incredible depth of knowledge of how we had come to our present state of understanding. This contributed to a steady stream of very capable Honours and PhD students. All felt the lash of his red pen, of his hatred of split infinitives and his absolute commitment to good sentence structure. All experienced his clear thinking and sound lessons in good scientific method. All left his lab. and office the better for it.

"Respect but rigor, that's a good way to sum up Graham. I hadn't really appreciated how much of the general skill set I utilise at work had foundations with Graham." (Craig Murphy, former PhD student)

Graham in the lab in the early 1980s

Photo courtesy Jane Allan

"If you happened to bring an idea of your own to the table, however imperfect, he would like as not consider it, introduce the necessary rigor and support it. At the end of the day, once something had got past Graham, you knew it would hold its own in whatever audience it was headed for!" (Llew Spargo, former PhD student)

After he retired from his full-time post in 2008 Graham continued to teach part-time in the Medical Programme. He gave lectures and took tutorials and seemed to grow more enthusiastic about teaching over this period. He took on new technology and continued to revamp lecture material. It was clear that he enjoyed being with young people and helping in their intellectual and professional development.

Graham loved science and medicine but for many years he was no fan of

the administration that went with them. Nevertheless he grew into leadership roles and administrative processes. He was Head of the Department of Microbiology and Immunology between 1999-2000 and Deputy Head and then Interim Head of the new merger of Microbiology and Immunology with the departments of Biochemistry and Genetics into the Department of Molecular and Biomedical Science. These were three distinct and distinguished departments with a lot of history and Graham was instrumental in making the union work.

Outside of his working life, Graham had broad interests and his curiosity was always evident. He was a runner from an early age, canoeist and generally engaged with nature and the outdoors. He loved to walk and hike, had a keen interest in history and science in the broader context, but would happily engage people in conversations about books, films and theatre. As in the laboratory, he enjoyed having a go, to be in there, boots and all.

"It was such a privilege for me to accompany Graham on three bush walks into the Tasmanian mountains and on each trip for me to be sustained and enlightened by Graham's insight and knowledge. He was a most gifted and wise man with a great respect for humanity. We were both so taken with the serenity and solitude of the [Windermere Plateau and Lake McRae] that we decided to share this experience with others and a record of this trip is to be published [in 2017] in the wilderness magazine Wild. Perhaps this will be Graham's last formal publication and I am proud to be a co-author." (Peter Roberts-Thomson, Flinders University)

Graham died of a coronary artery occlusion in Ayvalik, Turkey, whilst on holiday with his wife Adele and friends. He had just returned from his morning walk and typically, was enjoying every aspect of a new culture and country – ever curious, ever exploring.

"In my interactions with him, he seemed only to want to know the truth and how best to get at it. And I liked him. I require no more of a scientist than that." (Nick King, University of Sydney)

….. and I liked him too. Farewell friend.

Lindsay Dent

Visiting Research Fellow

Department of Molecular and Cellular Biology

School of Biological Sciences

The University of Adelaide

Graham beside a Tasmanian highland lake, c. 2016

Photo courtesy Peter Roberts-Thomson

Day of Immunology Update April 29th 2017

Snapshots of the Immune System Competition, Discovery Tours Call for Volunteers, Gabriela Khoury

Snapshots of the Immune System Competition

Be inspired by the 2016 Snapshots of the Immune System. Are you in need of some inspiration for this year's Snapshots of the Immune System? Check out a selection of last year's creative works in our online gallery.

www.immunology.org.au/snapshots-of-the-immune-system

Submit your applications to info@dayofimmunology.org.au

Minimum Dimensions 2480x3508 pixels, image files only eg tiff, jpeg. Videos are also accepted. Include a plain English summary of the image and how it relates to the immune system.

Deadline 29 March 2017.

Your images will be presented around Australia and New Zealand in a variety of locations and formats as part of International Day of Immunology celebrations.

The 2017 Exhibition Launch night will be held in Melbourne on 6 April, all welcome.

We can't wait for you to share your beautiful science!

Discovery Tours - Volunteers wanted

Are you passionate about engaging the public on medical research and the immune system?

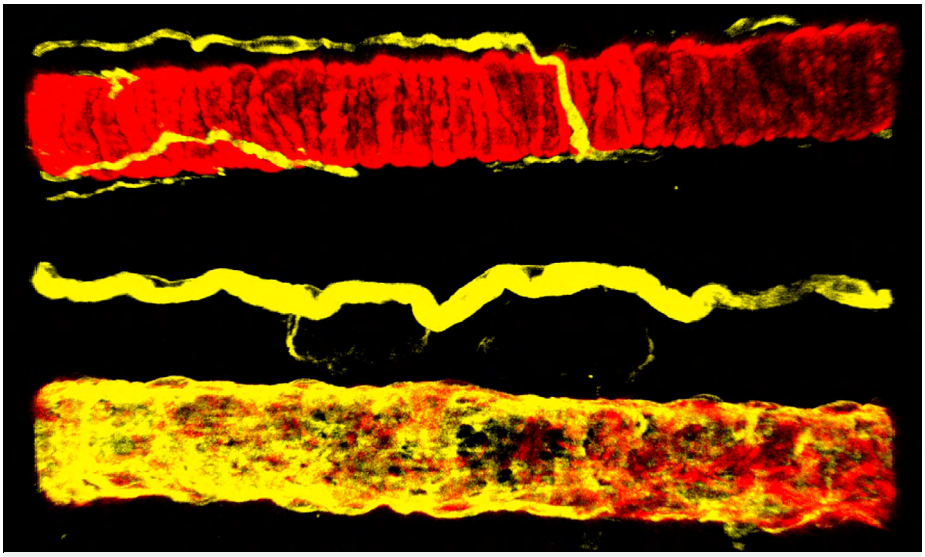
Maybe you simply would like to show your friends and family what you do every day!

As part of International Day of Immunology (29 April) we would like to open the doors of immunology research institutes around Australia and New Zealand to the public.

If you are interested in coordinating a behind the scenes discovery tour at your local institute contact Gabriela Khoury for more information and how to get in touch with your local organising committee.

Gabriela Khoury, DOI Coordinator

gabriela.khoury@monash.edu



Snakes and Ladders Nerves (shown as yellow streaks along blood vessels in red) highly interact with the immune system and play a role in regulating the body's defence system against disease.

Image courtesy of Michaela Finsterbusch, Monash University

Immunology & Cell Biology Publication of the Year Awards 2015

Gabrielle Belz

Dr Tim Johanson, Winner of the Chris and Bharma Parish ICB Publication of the Year Award 2015

The *Immunology & Cell Biology* Publication of the Year Awards have been established for outstanding studies submitted by first authors who are financial members of the Australasian Society for Immunology Inc. in the year of the article's publication. Articles vying for these awards can come from any of the journal categories including Original Article, Outstanding Observation, Perspective or Brief Communication. The ASI President together with members of the ASI Executive and *Immunology & Cell Biology* Editorial Board undertake rigorous review to identify the most outstanding original research articles based on scientific excellence. The winner of the Chris and Bhama Parish ICB Publication of the Year Award is awarded a AU$1000 scholarship provided by the Nature Publishing Group and the runner-up is awarded a AU$500 scholarship provided by Thermo Fisher Scientific.

Every year an outstanding series of papers are submitted for consideration for the prizes and 2015 was no different with an exceptional standard of science reported in the papers. It is a great pleasure to announce the winners of the awards for 2015 which are as follows:

Chris and Bhama Parish ICB Publication of the Year Award: Dr Tim Johanson, The Walter and Eliza Hall Institute of Medical Research, Department of Medical Biology, University of Melbourne and St Vincent's Institute of Medical Research, Melbourne, Victoria.

Thermo Fisher Scientific Publication Award: Dr Divya Ramnath, The Institute for Molecular Bioscience, the IMB Centre for Inflammation and Disease Research and Australian Infectious Diseases Research Centre, The University of Queensland, Brisbane.

The winning paper by Dr Tim Johanson is an Original Article entitled 'A microRNA expression atlas of mouse dendritic cell development' and was published in June 2015. In this study, Dr Johanson generated a comprehensive atlas of microRNAs (miRNAs) and miRNA biogenesis machinery found during dendritic cell development. Dendritic cells are sentinel cells in the immune system and undergo a complex series of steps to differentiate into a number of specialized subsets. Intriguingly, despite the different lineages diverging in their development to give rise to conventional and plasmacytoid dendritic cells, which have quite distinct functions, these

Dr Divya Ramnath, Winner of the Thermo Fisher Scientific Publication Award 2015

subsets were indistinguishable based on their whether they expressed a particular miRNA or not. Instead, the different subsets were shown to vary quite considerably in the level at which these miRNAs were expressed resulting in specific and dynamic patterns of miRNAs that delineated the different subsets and subsequently regulated their functions. Furthermore, Dr Johanson's work also described the first characterisation of a miRNA-independent role for the ribonuclease Drosha in the immune system. Collectively, this detailed analyses provide a valuable encyclopaedic resource for the research community.

Dr Ramnath's Outstanding Observation 'TLR3 drives IRF6- dependent IL-23p19 expression and p19/EBI3 heterodimer formation in keratinocytes', was published in October 2015, is the winner of the Thermo Fisher Scientific Publication Award for 2015. Dr Ramnath investigated the role of an epithelial cell-specific transcription factor, interferon regulatory factor 6 (IRF6), in host defense and inflammation. She discovered that IRF6 regulates a subset of TLR3 responses in human keratinocytes. Intriguingly, Dr Ramnath showed that silencing of IRF6 expression enhanced poly(IC)-inducible IFN-β mRNA levels and inhibited poly(IC)-inducible IL-23p19 mRNA expression in primary keratinocytes. As Dr Ramnath expected, co-transfection of IRF6 increased poly(IC)-inducible IL-23p19 promoter activity, but it was not anticipated that it did not regulate IL12p40 but rather inhibited poly(IC)-inducible IFN-β promoter activity in reporter assays. Thus, Dr Ramnath was able to show for the first time that IL23p19 actually interacted with EBI3 to form the novel IL-12 family heterodimer p19/EBI3 (which is now called IL-39) and that this could be induced through IRF6. This work has uncovered that the TLR3-IRF6-p19/EBI3 axis identified in this work is likely to be critical in keratinocyte-mediated control of immune cell functions to restrict cell damage and promote wound healing in the skin.

The award-winning papers of Drs Johanson and Ramnath highlight the outstanding quality of the work published in *Immunology & Cell Biology*. My very best congratulations are extended to the awardees on their success. I also thank our sponsors Nature Publishing and Thermo Fisher Scientific for their continued support of outstanding science and scientists and the journal. It is hoped that the outstanding quality of these awarded publications will also encourage others to consider *Immunology & Cell Biology* as a key journal for their cutting-edge research.

Gabrielle Belz: belz@wehi.edu.au

Reproduced with permission from *Immunology & Cell Biology* (2016) 94, 901–902; doi:10.1038/icb.2016.86

Presidentorial

Introducing Susanne Heinzel

This is my first newsletter report as ASI President. When I sat down to think about what to write, I realized that we as a society probably never had more exciting but also challenging times ahead of us.

I'd like to start off by thanking Chris Goodnow for handing over ASI in such a good shape. I think it is fair to say that we are currently in the strongest position yet, a position that will allow us to continue and strengthen our existing programs and to look into new initiatives to support our membership.

Hosting ICI2016 was an immense success for ASI on many levels. Of course there is the financial windfall, but even more importantly, we all profited for years to come from showcasing our science and culture, which was so much appreciated by the attendees we welcomed from all the different places around the world.

Steering ASI through the years leading up to ICI2016 was a nervous time and I thank Chris, his predecessors Dale Godfrey, David Tarlinton, Miles Davenport, Alan Baxter and Phil Hodgkin and the councils and committees they were working with for making this possible. The outcome couldn't have been any better.

It has been said before, but I do want to express our special thanks again to the LOC of ICI2016, who worked nonstop over several years to make this congress the success that it was. In recognition for their contribution to ASI Jose Villadangos, Andrew Lew, Ian Barr, Jenny Rowland and Dale Godfrey were awarded the Derrick Rowley Medal and Honorary Life Membership. Congratulations again!

It is now on us to ensure that the profit we received from ICI2016 will be used wisely so that ASI members will benefit for many years to come. We have formed a working group that is reviewing and discussing several options and are seeking advice about

Susanne Heinzel
Walter and Eliza Hall Institute

President of the Australasian Society for Immunology

heinzel@wehi.edu.au

investment strategies. These funds provide us with a real opportunity to strengthen existing programs but also to create new initiatives. On top of the support already provided, i.e. through the travel bursaries to attend our annual meeting, the International Travel Awards, the Visiting Speaker Program, just to name a few, we are now investigating additional ideas and proposals such as an Immunology training course, new and revitalised Special Interest Groups (potentially running small and focussed meetings) and many others.

Another main pillar carrying ASI financially and otherwise are our two journals, ICB and CTI. It is wonderful to see how these are going from strength to strength, with ICB's impact factor on a steady increase to now 4.5. This success is no coincidence, it is due to the hard work of the editorial teams (and of course the quality of the published articles, so please keep them coming). First and foremost I'd like to thank Gabrielle Belz, who guided ICB so capably over the past years. Gabrielle's term as Editor in Chief finished last year handing over to the new Editor in Chief, Anne La Flamme. Anne has a wealth of experience and you might remember her as former NZ Councillor and Chair of the LOC at the Wellington 2013 meeting. Welcome Anne! ICB's new online sister journal, Clinical & Translational Immunology, is also on a steady rise. Submission and publication rates have been steadily increasing, with 94 articles published in 2016! Special thanks to Rajiv Khanna, CTI's Editor in Chief who works tirelessly and successfully to keep CTI moving upwards!

Gabrielle Belz

Anne La Flamme

Rajiv Khanna

The success of the journals is also critically dependent on the publishing contract. Our current contract with Springer-Nature is up for renewal at the end of this year. ASI decided to market test the current contract and has invited several publishers (including Springer-Nature) to tender. The aim of this process is to optimise the service to the authors, reviewers and editors, to further promote our journals to the international community, maximise the IF and, of course, the financial return to the Society. The process is led and overseen by Mark Ware, a professional publishing broker. Mark has been extremely knowledgeable and helpful in this process. Reviewing the bids was eye-opening and educating and we are confident to be able to announce the new publishing deal mid year.

It is a special privilege for me to be able to announce the inaugural winner of the Jared Purton Prize. Jared was a thriving young Immunologist, whose life and career was tragically cut way too short in a car accident. This annual award was initiated in 2016 by Jared's parents who also kindly donate the prize money. Their aim is to support and help young and thriving Immunologists in their quest for scientific discoveries. The selection criteria include the potential benefit of the proposed use of the prize money to the career of the awardee, the CV relative to opportunity and the service to the Society and community engagement. I'm very pleased to congratulate Sumaira Hasnain from the Mater Research Institute as the recipient of the inaugural award. She will use the award to generate proof of principle data for a grant application helping her to establish herself as an independent investigator. Congratulations Sumaira!

The world is an unpredictable place and we are heading into an uncertain future. Despite that I hope you share my confidence in our fellow humans and scientists. Let's combine our strength to advance science and knowledge, oppose restrictions and let's hope we can do our bit to help make the world a better place! Good luck to all for 2017!

Sumaira Hasnain, Inaugural winner of the ASI Jared Purton Prize

Secretary's Report

Elissa Deenick

It's approaching a year since I took over the role of honorary secretary for ASI and it has been a good year. Some of the things that have happened in the last year include:

International Congress of Immunology

2016 saw Melbourne host the International Congress of Immunology, which was a big success both scientifically and financially. ASI central and the individual branches also gave out over 200 travel bursaries in total for ICI.

Travel Awards

Due to the ICI bursaries we decided to have only one round of travel awards last year for travel September 2016 to June 2017. For this extended round we gave out 6 postgrad and 6 postdoc awards as well as 2 Ada and 1 Miller award. The success rate for this round of applications was quite high – almost 40%, perhaps reflecting slightly fewer applications following ICI. A new round of travel awards for July 2017-Dec 2017 will be announced in March. Congratulations to all the successful recipients!

Miller Award

Gabrielle Belz

Ada Award

Antje Blumenthal

Scott Byrne

Postgrad Award

Yee Ann Leong

Paul Baker

Marice Alcantara

Kim O'Sullivan

Kerry Hilligan

Kirsten Hartstonge

Postdoc Award

Si Mang Man

Hamish McWilliam

Rebecca Coll

Sidonia Eckle

Camille Guillerey

Ajithkumar Vasanthakumar

Jared Purton Award

The call went out for the inaugural round of the Jared Purton award (see the December issue for more details about this award). We were encouraged by the large number of strong applications that we received for this as well as the breadth of potential plans that people had for use of the money. A call for the second round of the Jared Purton Award will be put out later this year.

AGM

Due to ICI there was no ASI annual meeting in 2016 so the AGM was held on the 25th of November at the NSW/ ACT combined branch meeting. Minutes and summarised reports are provided in this edition of the newsletter.

I also want to thank the ASI council members who finished their term last year for all the work that they did:

Ros Kemp (NZ)

Daniel Gray (VIC/TAS)

Kristin Radford (QLD)

Claerwen Jones (Day of Immunology Coordinator)

Ros of course has moved on to a role with IUIS and Kristin continues as meeting chair for the LOC of ASI 2017 in Brisbane.

Elissa Deenick
e.deenick@garvan.org.au

And welcome our new members of the council:

Ries Langley (NZ)

Scott Mueller (VIC/TAS)

Sumaira Hasnain (QLD)

Gabrielle Khoury (Day of Immunology Coordinator)

The IUIS Corner

Report from IUIS Councillor, Alejandro Lopez

Here is a brief update of the news coming from IUIS in the past three months. If you wish to follow the news coming directly from the IUIS, visit www.iuisonline.org

New Society member

The Immunology Society of Malawi has been welcomed to the IUIS as the newest member, bringing the total Society members to 79.

Day of Immunology 2017

The theme for this year's Day of Immunology on April 29th will be Allergy, given that this year will be the 50th anniversary of the discovery of IgE by two independent groups led by Kimishige "Kimi" Ishizaka in Denver, Colorado, USA and by S.G.O Johansson and Hans Bennich in Uppsala, Sweden.

Regular IUIS newsletter

Starting in 2017, IUIS will send out a regular IUIS newsletter to IUIS member societies each quarter; this information vehicle will be accessible via the ASI website.

Publications Committee (PUB)

The changing landscape of publishing and the need of effective communication require a diligent and current evaluation of the options immunologists could use. As IUIS enters into negotiations with its journal Frontiers in Immunology, a new Publications Committee has been elected. The mandate of the committee is summarised as:

1.To establish and maintain a working relationship with Frontiers in Immunology as the official journal of IUIS

2.To develop policies for publishing and handling of data within the field of immunology

3.To promote IUIS communication

4.To support publications related to IUIS meetings.

It will be chaired by Professor Eddie F.Y. Liew from University of Glasgow. Other members of the committee are Roslyn Kemp (University of Otago, New Zealand), Deborah Brown (University of Nebraska, USA), J. Alejandro Lopez (Griffith University/QIMR, Australia) and Luigi Notarangelo (ex officio as Editor of Frontiers in Immunology; USA)

As members, your ideas and input are

very welcome and I would be happy to hear from you should you have views you wish to share with us.

Honours to IUIS Executive members

President Alberto Mantovani has received the very prestigious 2016 Robert-Koch Prize for his work on innate immunity and its link with cancer. This prize was shared with Michel Nussensweig.

Vice-president Faith Osier received the 2016 Sofja Kovalevskaja Award from the Humbolt Foundation which includes the generous support of €1.65 million (A$2.33 million) for her work on Malaria. She will be using this funding to support for her work based in Heidelberg, Germany.

IUIS

Visiting Speakers Program (VSP) Report

Find out more about the VSP

Jo Kirman, VSP co-ordinator, University of Otago, Dunedin, NZ

Final call for nominations of 2017 ASI visiting speakers

Would you like an outstanding international immunologist to visit your institute or university? Nominations for 2017 ASI-sponsored visiting speakers opened on March 6th! The deadline for nominations is 5pm, Friday March 24th.

Any ASI member willing to host a visit can propose an invited speaker.

Simply email a description of the proposed speaker's contribution to the field (less than 500 words) and a short list of recent publications to: jo.kirman@otago.ac.nz. Up to four speakers will be selected for a tour from the nominated individuals. The speaker must visit at least three branches, or two branches if SA, WA, NT or NZ is visited, and must take up the offer within one year of approval. Please contact the nominee and ensure they are willing to participate.

Gender and ASI visiting speaker nominations

I strongly encourage you to keep gender in mind when nominating speakers. Supporting women through the ASI VSP enhances the ability of both female and male immunologists to achieve their potential. Here are some great international databases full of magnificent female immunologists to invite:

Prof Hiroshi Kiyono at the mini-symposium at AgResearch Ltd, Ruakura, Hamilton

www.dgfi.org/content/list-excellent-female-immunologists

www.efis.org/the-federation/women-in-immunology/about/index.html?nav=true

aai.org/cvweb_aai/cgi-bin/memberdll.dll/OpenPage?WRP+CSOW_speakerSearch.htm

Detailed guidelines of the process can be found at: http://www.immunology.org.au/events-calendar/the-asi-visiting-speaker-program-vsp/asi-visiting-speaker-program-guidelines/

ASI Visiting Speaker – Prof. Hiroshi Kiyono

In November 2016 Prof Hiroshi Kiyono visited Brisbane in Australia and then Wellington and Hamilton in New Zealand. Dr Julie Cakebread, who organized a mini-symposium for his visit to AgResearch Ruakura Hamilton, said, "This was an awesome experience, and I know that word is overused nowadays, but for me it really was awesome. It was lovely to be immersed in science (immunology) in such an informal setting.

"For the seminar Professor Kiyono delivered his work on Mucorice and Nanogels as a novel vaccine delivery system. The symposium started looking at the gut multi-ecosystem for symbiosis and protection. We then looked at the potential of milk (Brendan Haigh, Julie Cakebread, Ali Hodgkinson – AgResearch) and berryfruit (Odette Shaw – Plant and Food) as immune modifiers from the perspectives of both infection and allergy. We had a fascinating peek into modifying the fish immune system through diet with Steve Bird (University of Waikato) before being taken back to bacteria and vaccine delivery with Fiona Radcliff (University of Auckland). The potential for further discussions is huge and the consensus was 'we should do this sort of thing more often'."

Prof. Kiyono with Tony Robinson (Malaghan Institute of Medical Research) after a game of golf during his weekend in Wellington (from which he departed just hours before the big Kaikoura earthquake!)

Visiting speakers for 2017

Prof. Nancy Haigwood from Oregon Health and Science University is visiting Australia (Canberra, Lorne, Melbourne, Queensland) at the time of writing.

Other confirmed 2017 VSP speakers include:

Daniel Mucida (Rockefeller University)

10 March, Sydney (University of New South Wales)

13-14 March, Wellington (Malaghan Institute)

16-17 March, Melbourne (WEHI and University of Melbourne)

Adrian Liston (University of Leuven)

18 August, Adelaide (University of Adelaide)

21 August, Sydney (Garvan Institute)

23 August, Melbourne (Monash)

24-25 August, Victorian Annual Retreat

28 August, Wellington (Malaghan Institute)

Lars Nitschke (Erlangen University)

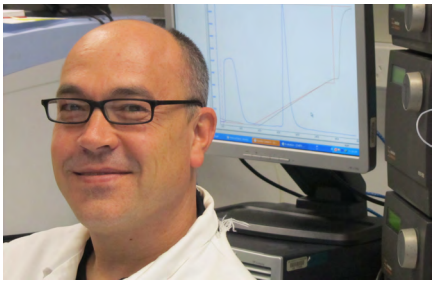
Visits between September and December tbc

Cezmi Akdis (Swiss Institute of Allergy and Asthma Research)

Visit in October tbc

New Zealand

Ries Langley



I am Ries Langley, the new NZ councillor. I'm looking forward to representing New Zealand over the next three years and welcome any ideas, suggestions, and comments from NZ-ASI members.

Firstly, I'd like to acknowledge and thank Roslyn Kemp for the fantastic job she has done representing NZ over the last three years and wish her all the best for her new role as Secretary-General of the IUIS Executive Committee.

The New Zealand Branch did not hold an annual scientific meeting in 2016 and chose to support students and post-docs attending ICI 2016 in Melbourne instead. Overall, the NZ branch was well represented at ICI 2016 with 57 delegates from all regions of the country attending and presenting. Congratulations to Braeden Donaldson, Kirsten Ward Hartstonge, Joanna Mathy, Brin Ryder, Emma Petley, Sarah Saunderson, and Lieke van den Elsen, who all received ICI travel awards. The following students and post-docs were supported by NZ-ASI to attend the ICI: Nicholas Shields, Pia Steigler, Morad-Remy Muhsin, Inken Kelch, Patricia Rubio Reyes, Daniel Verdon, Pirooz Zareie, Elyce du Mez, Keeho (Arnold) Lee, Hazel Poyntz, Megha Budhwani, Nicola King, Katrin Kramer, Jennifer Eom, Estelle Peyroux, Silke Neumann, Karmella Naidoo, Nikki Templeton, Shirley Shen, and Yasmin Sadrolodabai.

NZ ASI 2017

A highlight for 2017 will be our Branch meeting in Christchurch, on 4-5 July. The organizing committee is Margaret Currie (chair), Mark Hampton, Roslyn Kemp, Gabi Dachs, Bridget Robinson, Bailey Kennedy, and Abel Ang. Dr Laura Mackay from The Peter Doherty Institute for Infection and Immunity has been confirmed as a guest speaker. Further details of the NZ-ASI 2017 meeting are:

Meeting dates: 4/5 July, 2017

Venue: University of Otago, Christchurch

Dinner Venue: Great Hall, Christchurch Arts Centre

Registration opens: April 3 (online)

Abstract Submission opens April 17 (also online)

Registration and Abstract Submission close: May 5

ASI Visiting Speaker Assoc. Prof. Daniel Mucida

Assoc. Prof. Daniel Mucida will be visited the Malaghan Institute from 13-14 March for Seminars and Meetings. His talk title was `Tissue adaptation: implications for tolerance and immunity.' Remember that the NZ Branch funds members to travel to Visiting Speaker events, so contact me for further information.

The Royal Society of New Zealand (of which the NZ-ASI is a Constituent Organisation) is turning 150 years old in 2017. To celebrate, they will be running a series of activities between April and October. Details will be announced on their website. Dr Deepa Patel attended the Constituents Organisation meeting in November on behalf of the NZ-ASI. One point of interest for those in the Infection and Immunity field is the intention of the Society to establish a factsheet on antimicrobial resistance in New Zealand. Some of the other topics covered included diversity and gender equality, the evolving technologies of gene editing, the public's perceptions on animal use, and the establishment of an Early Career Researcher mentoring programme.

I look forward to seeing you all in Christchurch in July.

Ries Langley, NZ Councillor

Western Australia

Connie Jackaman

on behalf of the ASI WA committee

Welcome back to the start of the year! We have a few events planned in the next few months (please see below) and will update with further details throughout the year on the ASI website.

Start of year sundowner/networking session, end of March 2017: This is due to be held at the Harry Perkins Institute for Medical Research (north campus). This will feature presentations from PhD students across different immunology fields and institutes/ universities, followed by drinks and nibbles.

Day of Immunology, April 2017: Morning teas will be hosted at participating institutes/universities across WA with prizes on offer for the best immunology-themed cake/s.

SAVE THE DATE: Perth Immunology Group (PIG) meeting October 16th and 17th 2017, Flying Squadron Yacht Club, Nedlands: Preparations are underway for the two-day PIG meeting later on in the year. The PIG meeting provides a forum for Perth immunologists of all levels to present their latest research in a relaxed and informal environment. All participants will have opportunities

to present their work in relevant themed sessions and to network with our invited guests and immunologists from Perth. A happy hour (or two) will also be included in the program.

ASI annual scientific meeting in Perth, December 2018: Preparations are also underway for the ASI annual scientific meeting in 2018 with further details to come.

We always welcome any feedback/ suggestions and look forward to seeing you all soon!

Regards (on behalf of the ASI WA committee)

Connie Jackaman, WA Councillor

Victoria/Tasmania

Scott Mueller

Introducing Dr Scott Mueller, the new Vic/Tas ASI Councillor. Scott is an ARC Future Fellow in the Department of Microbiology and Immunology, at the Peter Doherty Institute for Infection and Immunity. Scott is a world leader in basic immunology research and advanced microscopy methods to visualise the cells of the immune system. He trained at Monash University and then The University of Melbourne where he completed a PhD, before heading to the USA where he completed post-doctoral training at Emory University, Atlanta, GA. He then spent time working at the National Institutes of Health before returning to Australia as an ARC Queen Elizabeth II fellow. Scott was integral in the development of a confocal and in vivo 2-photon imaging facility in the Department of Microbiology and Immunology. His laboratory is researching immune responses to acute and chronic viral infections.

ACT

Ian Cockburn

Immunology at the Coast: NSW-ACT Joint Branch Retreat, November 24-25, Wollongong, NSW

Last year our Branch Retreat took us to Wollongong for two packed days of immunology coupled with a healthy dose of beach time and socializing. For the last seven years the Retreat has taken place in the Southern Highlands town of Bowral in August. However due to ICI being held at that time of year, we moved the date to November and taking advantage of the warmer weather, moved the location to Wollongong.

We were worried that moving the date of the meeting would reduce attendance but in the end the meeting was a great success. We had four invited speakers, over 40 student talks, more than 80 delegates and 10 sponsor displays. Fabienne MacKay from Monash delivered keynote, speaking about Chronic Lymphocytic Leukemia. Tatyana Chtanova, Scott Byrne and Su Heinzel gave the remaining plenaries which were outstanding. What always stands out at this meeting is the quality of the talks from the Students and Post-docs. Anyone who has judged the student prizes at this meeting knows what a challenge it can be to pick the best of a very fine crop and this year was no exception.

We also took advantage of the location to change the program to a more “Keystone style” format with afternoon free time and an evening session. Those up early in the morning may have spotted the past president walking through the hotel lobby in a wetsuit, back from his morning surf. The beautiful weather gave us all a chance to head down to the beach in the afternoon and enjoy the waves and a bit of beach cricket and volleyball. Afterwards dinner on the deck was also a treat with lots of great food.

The meeting was a great showcase not only for our science, but also for the Society with great immunology being presented in a friendly and fun environment. We are all already looking forward to this year’s meeting!

Prize winners:

Best Honours Talks: Maros van den Bergh; Sophie Bouffler; Jarem Edwards.

Best PhD Talks: Brigette Boast; Tessa Campbell; Imogen Moran.

Best Post-doc Talk: Chris Sundling.

Ian Cockburn, ACT Councillor

(see photos on following page)

South Australia/ Northern Territory

Iain Comerford

12th Adelaide Immunology Retreat (AIR-12) 2016 Report

Now in its 12th year, the Adelaide Immunology Retreat (AIR) was another success, with 51 delegates attending the retreat at Wirrina Cove Resort on the Fleurieu Peninsula from 18-19 November 2016. The retreat was opened by our national invited speaker, Dr Laura Mackay (Doherty Institute, Melbourne University). Dr Mackay shared with us her inspiring personal scientific journey of her career to date in her presentation entitled 'Development and Function of Tissue-Resident Lymphocytes'. On the second day of the retreat our local speaker Dr Damon Tumes (SAHMRI) presented his work on 'Control of pro-inflammatory T cells and airway inflammation by the epigenetic regulator Ezh2' and also described his career path to date. I would like to thank both of our invited speakers for giving up their time for this event and for giving such fabulous

Immunology at the Coast: NSW-ACT Joint Branch Retreat, November 24-25, Wollongong, NSW

(from top L-R): Tatyana Chtanova opens the scientific sessions; Scott Byrne ; beach cricket; beach volleyball; great food; good company.

Photo courtesy Mainthan Palendira

Group photo from AIR-12

presentations.

The high calibre of presentations did not end there, with 30 excellent talks by Early Career Researchers, Honours students and PhD students throughout the two days covering a diverse range of topics which included reproductive immunology, immune cell migration, vaccination, cat allergies, cancer biology and sepsis to name just a few. Overall the standard of the presentations was exceptional and the judging panel found it extremely hard to select the best presentations for awards. Congratulations to the following award recipients: Carly Gregor (Best PhD presentation), Shamika Moore (2nd prize PhD presentation), Timona Tyliss (Best Honours presentation), Dian Puspitasari (Best Masters student presentation), Dr Preethi Eldi (Best Early Career Researcher presentation) and Dr Pablo Garcia Valtanen (Best submitted abstract). There was also plenty of opportunities for interaction between the delegates and invited speakers. This included a mini-golf and golf carting activities followed by a wine tasting, dinner and an after-dinner quiz at Wirrina Cove Resort.

I would especially like to thank the AIR-12 organizing committee members – Natasha Kolesnikoff, Carly

Laura Mackay Presentation

Gregor, Emma Thompson, Jasmine Wilson, Duncan McKenzie, Danushka Wijesundara, Joe Wrin, Ella Green, Preethi Eldi, Kristin Malatesta, Kay Myo Min, Chris Hope and Lih Tan – for all of their hard work and enthusiasm for the meeting. Events like this would not be possible without an active and committed local organising committee.

Also a HUGE thank you to all of our sponsors – The Hospital Research Foundation (QEH), BD Biosciences, Miltenyi Biotech, The University of Adelaide, The Robertson Institute, Centre for Cancer Biology, UniSA, AbCam, Stem Cell Technologies, In Vitro Technologies, Qiagen, Promega, Genesearch, Southern Cross Science, Astral Scientific, Adelab Scientific, Jomar Life Research, Australian Biosearch, ELISA Kits. Without the generous financial support of all of our sponsors, the event each year could not be held.

ICI 2016

The International Congress of Immunology in Melbourne was very well attended and well represented by students, ECRs and senior researchers from ASI in SA/NT. In part this was made possible by travel bursaries for students and ECRs provided by ASI and the SA/NT Branch to the following award recipients: Natalie Stevens, Ervin Kara, Ella Green, Andrew Stempel, Cameron Bastow, Duncan McKenzie, Danushka Wijesundara, Tessa Garget, Jade Foeng, Carly Gregor, Jasmine Wilson, Kevin Fenix, Shannon David, Kerrie Foyle, Annabelle Small and David Shields. It was terrific to have so many able to take part in ICI and a terrific week of stimulating immunology was had by all.

Planned branch activities for 2017

In 2017 we are planning to put on a local event for World Day of Immunology on April 29 and will run another Adelaide Immunology Retreat. If any ASI member in the branch would like to help organise these events then please get in touch (iain.comerford@adelaide.edu.au). We will be beginning to have local organising committee meetings for these events very soon.

Iain Comerford, SA/NT Councillor

Queensland

Sumaira Hasnain

It is very exciting to be appointed the new Queensland Councillor and I am looking forward to some of the exciting events we are planning this year. This includes the World Day of Immunology events and the ASI Annual Conference to be held in Brisbane in December 2017. We also have Prof. Nancy Haigwood, from the Oregon Health and Science University, USA, giving a seminar at the Translational Research Institute in Brisbane as part of the Visiting Speaker Program in late February.

I would like to take this opportunity to thank A/Prof. Kristen Radford who has done a phenomenal job as the ASI Queensland Councillor for the past three years. Thank you Kristen for your support in handing over the reins to me and for your ongoing advice.

Sumaira Z. Hasnain, **Queensland Councillor**

AIR-12

2nd EMBO Conference on Innate Lymphoid Cells

30th November - 2nd December 2016, Berlin

Camille Guillerey, QIMR Berghofer, Brisbane, Queensland

I received an ASI postdoctoral travel award to attend the 2nd EMBO conference on Innate Lymphoid Cells (ILCs) that took place in Germany from November the 30th to December the 2nd. The meeting was held in the historic Kalkscheune building, located in downtown Berlin. ILCs have recently emerged as a new relevant field in immunology, with a uniform nomenclature proposed only 4 years ago [1]. The organizers, Chiara Romagnani, Marco Colonna and Andreas Diefenbach had put together a wonderful scientific program with eminent scientists presenting exciting insights on this topic. For me, this conference demonstrated that the field of ILCs is still expanding as we have now discovered new functions of these cells that go beyond their immunological role.

The keynote lecture was given by Dan Littman who set the tone showing how microbiota and VIP-ergic neurons control IL-22 production by ILC3 in the gut. Moreover, Henrique Veiga-Fernandes demonstrated that glial cells secrete neurotrophic factors in response to TLR-ligands and alarmin; and the binding of these neurotrophic factors to RET, a transmembrane tyrosine kinase receptor expressed on ILC3, induces IL-22. Regarding the metabolic regulation of ILC, Andreas Diefenbach discussed the role of the aryl hydrocarbon receptor (AhR) that recognizes nutrient-derived ligands (e.g. glucosinolates, enriched in broccoli and brussel sprouts) in the maintenance of ILC3 and their secretion of IL-22. He showed that IL-22 directs the DNA damage response in intestinal epithelial cells and thus protects mice against carcinogen-induced or colitis-associated cancers.

Gala dinner at the Museum für Naturkunde, 2nd EMBO Conference on Innate Lymphoid Cells

Photo courtesy Francisca Almeida

Another interesting discussion point of this meeting was ILC function and their relative importance compared with other immune cells in maintaining body integrity and homeostasis. As pointed out by Eric Vivier, the immune function of ILCs may be redundant in the presence of adaptive immunity, an hypothesis supported by the absence of association between ILC-deficiency and susceptibility to disease in humans. However, although ILCs are not crucial in physiological conditions, the talk from Alan Hanash argues that ILCs may

be required in pathologic conditions such as intestinal damage induced by radiation followed by bone marrow transplantation. In this context, IL-22 production by ILC3 is necessary to maintain the intestinal stem cell compartment. Furthermore, a mouse model developed by Gerard Eberl allowing the specific ablation of ILC3 indicates that a sudden loss of ILC3 leads to septicaemia and has dramatic consequences on host metabolism. By generating mice that specifically lack MHC-II expression on ILC3, Gregory Sonnenberg showed that intestinal ILC3 regulate gut homeostasis by inducing the apoptosis of T cells that are specific for commensal bacteria. Interestingly, Daniela Finke suggested that splenic ILC3 are better activators of CD4 T cells than intestinal ILC3. Furthermore, even if ILCs belong to the innate branch of immunity, some of their members present adaptive features: as shown by Chiara Romagnani, human CD94/NKG2C+ NK cells recognize the unclassical MHC molecule HLA-E bound to human cytomegalovirus peptides. Romagnani demonstrated that high affinity peptides in the presence of IL-12 and IL-18 increase the expression of the anti-apoptotic molecule Mcl-1, thus promoting the survival of NKG2C+ NK cells. Finally, unconventional roles of ILCs were highlighted. Joseph Sun identified a role for adipose tissue-resident ILC1 to drive pro-inflammatory macrophage polarization in response to high fat diet and Ajay Chawla suggested a role for ILC2 in thermoregulation. Indeed, mice lacking IL-33 or its receptor (ST2) do not survive in a cold environment (4°C) as they fail to express the UCP1 protein required for the uncoupled respiration in brown and beige adipocytes.

Major advances in understanding ILC identity and diversity were discussed at this meeting. First, regarding ILC common origin, Gabrielle Belz and Pantao Liu reported that PD1 expression identifies ILC precursors in the bone marrow. James Di Santo pointed out that human CD117+ blood ILCs are precursors able to generate all ILCs including NK cells while Hergen Spits identified CD5 as a marker of immaturity in human ILCs. Additional insights on the determinants of the ILC fate were given by Barbara Kee who reported that the transcription factor ETS1 controls the fitness of the common helper ILC progenitor (CHILP) and is required for ILC2 generation in the bone marrow. Further, a better appreciation of ILC diversity was given by Ido Amit who had performed single cell RNA sequencing of CD127+ ILCs in the mouse small intestine and identified several subpopulations within the 3 main ILC groups. Finally, plasticity in human NK cells was emphasized by Marco Colonna who identified a ligand for NKp44 that induces ILC3 to secrete TNF, suggesting a conversion into ILC1.

To conclude, this 2nd EMBO conference devoted to ILCs was a fantastic meeting where a bigger picture of ILC function in the organism emerged. Work presented

(at right) Prehistoric dignitaries at Gala dinner at the Museum für Naturkunde, 2nd EMBO Conference on Innate Lymphoid Cells

Photo courtesy Francisca Almeida

at this meeting widened the role of ILCs beyond immunology as these cells perceive clues as diverse as cytokines, microbiota or neuronal signals and integrate them to regulate immune responses whilst also participating in tissue repair, metabolism, thermoregulation and control of the circadian clock. I really enjoyed the scientific interaction and was pleased to present my work at the poster session. My data demonstrated that in the murine bone marrow, the development of multiple myeloma is associated with alterations of ILC2 progenitors. The conference ended with a marvellous gala dinner in the middle of the dinosaur skeletons of the Museum für Naturkunde. I would like to thank ASI for giving me the opportunity to participate in this fabulous meeting and to visit the laboratory of my collaborator Dr Ludovic Martinet in Toulouse (France). This visit at the Cancer Research Centre of Toulouse was an opportunity to discuss ongoing collaborative projects on multiple myeloma but also to learn technical skills useful for my current research. Many thanks to ASI as this travel would not have been possible without the ASI postdoctoral travel award.

1. Spits, H., et al., Innate lymphoid cells--a proposal for uniform nomenclature. *Nat Rev Immunol*, 2013. 13(2): p. 145-9.

Tristan the *T. Rex* - looking cross about not having his ILCs acknowledged at Gala dinner, 2nd EMBO Conference on Innate Lymphoid Cells

Photo courtesy Francisca Almeida

ISAC
International Society for Advancement of Cytometry

Call for Applications for 'ISAC Lecture' program - $2,000 towards travel expences for an invited speaker

The Membership Services Committee of ISAC is proud to announce a call for applications for the 'ISAC Lecture' program. This program provides funding of up to $2,000 to cover travel expenses for a speaker at a cytometry or related scientific meeting. Meeting organizers are requested to provide, at their own expense, accommodation and free registration to the lecturer. Funding will be awarded three times a year with request application deadlines at the end of February, June, and October. The next deadline is 30th June 2017.

If you are organizing a cytometry or related meeting, your organization is eligible to apply for funding of a speaker of your choice (preferably, but not necessarily, an ISAC member). The speaker should be introduced as the ISAC Lecturer and included as such in the meeting program. ISAC requests that material about its membership services be either briefly presented or made available to meeting attendees.

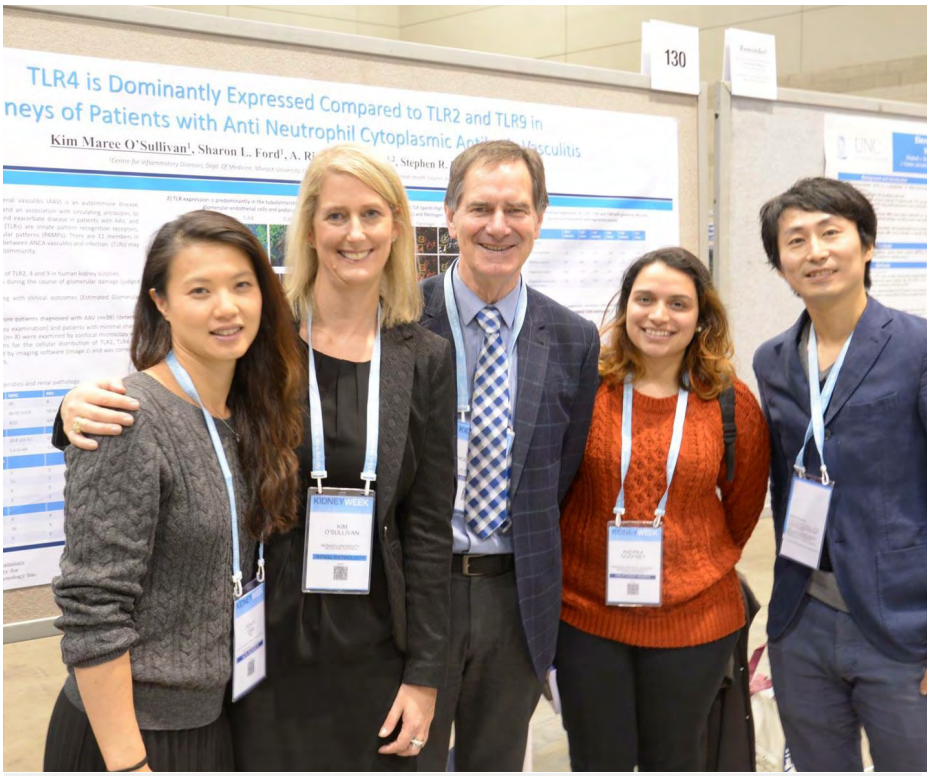
For more details and to download an application form, please visit: http://isac-net.org/Education-Resources/ISAC-Lecture-Program.aspx

Kidney Week

15-20 November 2016, Chicago, Illinois, USA

Kim O'Sullivan, Centre for Inflammatory Diseases, Monash University, Victoria

The annual American Society of Nephrology meeting celebrated its 50th year of meetings and was held in Chicago in November. This is the world's premier nephrology meeting, with an excess of 13,000 kidney clinicians/scientists attending from around the globe. The purpose of this meeting is to transform kidney research into treatments which can either prevent, treat or cure kidney diseases. My PhD thesis is based on investigating the potential pathological mechanisms of Anti Neutrophil Cytoplasmic Antibody Glomerulonephritis (ANCA-GN). ANCA-GN is an autoimmune disease in which 25% of patients with the current available therapy will have severe adverse reactions and 50% of patients in remission will relapse within five years. My particular focus is on the formation of Neutrophil Extracellular Traps (NETs), which deposit myeloperoxidase (MPO) the target autoantigen in this disease.



Standing in front of one of my posters, with colleagues, my PhD supervisor and past lab members. From right to left Dr Poh-Yi Gan, Kim O'Sullivan, Prof. Stephen Holdsworth, Andrea Godfrey, and Dr Takeshi Fujita

The conference ran over six days. The first two days contained courses to either extend your clinical knowledge in the treatment of renal diseases, or to learn the latest innovations in kidney research. I chose to do a Renal Pathology course which was taught by some of the world's most renowned renal pathologists. Completion of this course enhanced my skill base on identifying lesions within kidney biopsies, essential for my PhD, which is based on the histopathology of ANCA-GN patient biopsies. In addition, I now have an added wealth of knowledge on the pathology of many other kidney diseases.

Standing alongside the Chicago River with the big shiny Trump Tower in the background. Andrea Godfrey (left) and Kim O'Sullivan (right)

The convention centre in McCormick Place in Chicago is one of the largest convention centres in the USA. This allowed multiple plenary sessions and scientific sessions to occur simultaneously; it also catered for many opportunities for exercise and occasions to get lost! Sessions of note were the plenary on the advances in the treatment of ANCA vasculitis, and the basic science session on "Barbarians at the Gate: Inflammatory Cells in AKI" which featured two great talks on Neutrophil and Macrophages extracellular traps (NETs and METs respectively).

I was fortunate to have two abstracts accepted for presentation, which I presented over two days of poster presentations. The first of the two posters I presented was "Toll- Like Receptor 4 is dominantly expressed compared to Toll-Like Receptor 2 and 9 in Kidneys of Patients with Anti Neutrophil Cytoplasmic Antibody Associated Vasculitis ". The second of

Conferences and Meetings

the posters was "Deoxyribonuclease I Treatment attenuates NET formation, leukocyte infiltration and inflammation in experimental anti MPO glomerulonephritis". Both of the posters attracted attention from leaders in research on ANCA-Vasculitis. This gave me a great opportunity to present my work and engage with key players in my area of research.

Attendance at the ASN also gave me the rare opportunity to spend time with past lab members, and visiting Research Fellows, who now live in Japan and Germany. I would like to thank the Australasian Society of Immunology for awarding me a travel grant and giving me this great opportunity.

Publication List - Our Journals and Sustaining Members

1st November 2016 - 31st January 2017

Highly accessed articles from *IMMUNOLOGY & CELL BIOLOGY* and *CLINICAL & TRANSLATIONAL IMMUNOLOGY* and publications making use of tools, services or reagents supplied by our SUSTAINING MEMBERS.

Immunology & Cell Biology

Jenny Freitag, Luciana Berod, Thomas Kamradt and Tim Sparwasser. Immunometabolism and autoimmunity. doi:10.1038/icb.2016.77

Carmen S M Yong, Valerie Dardalhon, Christel Devaud, Naomi Taylor, Phillip K Darcy and Michael H Kershaw. CAR T-cell therapy of solid tumors doi:10.1038/icb.2016.128

Eoin F McKinney and Kenneth GC Smith. T-cell exhaustion: understanding the interface of chronic viral and autoinflammatory diseases.doi:10.1038/icb.2016.81

Clinical & Translational Immunology

Wilhelmina Maria Cornelia Timmermans, Jan Alexander Michael van Laar, Petrus Martinus van Hagen, Menno Cornelis van Zelm. Immunopathogenesis of granulomas in chronic autoinflammatory diseases. doi:10.1038/cti.2016.75

Lieke WJ van den Elsen, Hazel C Poyntz, Laura S Weyrich, Wayne Young and Elizabeth E Forbes-Blom. Embracing the gut microbiota: the new frontier for inflammatory and infectious diseases. doi:10.1038/cti.2016.91

Lauren M Paul, Eric R Carlin, Meagan M Jenkins, Amanda L Tan, Carolyn M Barcellona, Cindo O Nicholson, Scott F Michael and Sharon Isern. Dengue virus antibodies enhance Zika virus infection. doi:10.1038/cti.2016.72

STEMCELL™ TECHNOLOGIES

Scientists Helping Scientists™ | WWW.STEMCELL.COM

Systemic Immunity is Required for Effective Cancer Immunotherapy http://dx.doi.org/10.1016/j.cell.2016.12.022

EasySep Mouse T Cell Enrichment Kits

Immuno-engineered organoids for regulating the kinetics of B-cell development and antibody production http://dx.doi.org/10.1038/nprot.2016.157 EasySep Mouse B Cell Isolation Kit

Vagal regulation of group 3 innate lymphoid cells and the immunoresolvent PCTR1 controls infection resolution http://dx.doi.org/10.1016/j.immuni.2016.12.009 EasySep Human and Mouse NK Cell Enrichment Kits

abcam

Burikhanov, R. et al. Chloroquine-Inducible Par-4 Secretion Is Essential for Tumor Cell Apoptosis and Inhibition of Metastasis. *Cell Rep* 18, 508–519 (2017) doi:10.1016/j.celrep.2016.12.051. Anti-RAB8A antibody

Mauer, J. et al. Reversible methylation of m(6)Am in the 5' cap controls mRNA stability. *Nature* 541, 371–375 (2017). doi:10.1038/nature21022 Anti-FTO antibody

Günster, R. A., Matthews, S. A., Holden, D. W. & Thurston, T. L. SseK1 and SseK3 T3SS effectors inhibit NF-κB signalling and necroptotic cell death in Salmonella-infected macrophages. *Infect. Immun.* (2017). doi:10.1128/IAI.00010-17 Anti-Arginine (glcnac) antibody

Publication List - ASI Members

1st November 2016 - 31st January 2017

Due to technical issues beyond our control, the members publication list was unable to be completed for this edition (Citation Manager failure). All articles will be referenced in the next edition of the ASI Newsletter. The Editor apologises for any inconvenience caused.

ASI Financial Report Selected Highlights July 2016

Kim Jacobson, ASI Treasurer

THE AUSTRALASIAN SOCIETY FOR IMMUNOLOGY INC.
ABN 76 330 189 856

STATEMENT OF INCOME AND EXPENDITURE
FOR THE YEAR ENDED 31 JULY 2016

	Note	2016 $	2015 $
INCOME			
Conference income		68,558	86,622
ICB Royalty income		128,138	111,263
Interest		10,633	9,231
Newsletter advertising		1,325	838
Sponsorship income		46,471	35,780
Subscriptions		117,194	108,046
Total Income		**372,319**	**351,780**
EXPENDITURE			
Accounting and Auditing Fees		5,500	5,700
Bank Fees and Charges		3,931	4,476
Bookkeeping		1,477	1,686
Branch Conference		82,386	60,467
Bursary Awards		19,520	17,449
Conference & Travel Support - Central		-	5,243
Council Meetings		5,475	3,218
Day of Immunology		6,817	8,311
Development Officer		52,433	27,066
FIMSA Training Course Awards		6,000	1,500
Foreign Exchange (Gain)/Loss		(5,351)	3,559
Gifts		296	205
ICB Contract Negotiations		8,524	-
Insurance		3,574	988
Legal Fees		-	1,323
Newsletter Prize		200	200
Postage		1,471	2,336
Poster Prize		1,050	200
Printing, Photocopying and Stationery		1,505	465
Publication of the Year		1,000	-
Secretariat/Fax/Email		24,381	26,460
Society Memberships		1,686	3,999
Sponsorship		3,380	455
Student Prizes		6,176	6,068
Travel Awards (Junior/Senior/Ada/Jacques Miller)		36,361	40,257
Visiting Speakers Program		28,279	25,405
Web Support		1,407	742
Young Investigator Award		1,000	1,000
Total Expenditure		**298,479**	**248,780**

THE AUSTRALASIAN SOCIETY FOR IMMUNOLOGY INC.
ABN 76 330 189 856

STATEMENT OF INCOME AND EXPENDITURE
FOR THE YEAR ENDED 31 JULY 2016

	Note	2016 $	2015 $
Net Income/(Loss) before income tax		73,840	103,000
Income Tax Expense	1(c)	-	-
Net Income after income tax		73,840	103,000
Net Surplus attributable to members		73,840	103,000

The accompanying notes form part of these financial statements

THE AUSTRALASIAN SOCIETY FOR IMMUNOLOGY INC.
ABN 76 330 189 856

STATEMENT OF ASSETS AND LIABILITIES
AS AT 31 JULY 2016

	Note	2016 $	2015 $
ASSETS			
Current Assets			
Cash and Cash Equivalents	2	855,907	845,954
Trade and Other Receivables	3	78,627	22,445
Total Current Assets		**934,534**	**868,398**
Total Assets		**934,534**	**868,399**
LIABILITIES			
Current Liabilities			
Provisions and Other Payables	4	6,668	14,373
Total Current Liabilities		**6,668**	**14,373**
Total Liabilities		**6,668**	**14,373**
Net Assets		**927,866**	**854,026**
EQUITY			
Accumulated Surplus/Loss	5	927,866	854,026
Total Equity		**927,866**	**854,026**

The accompanying notes form part of these financial statements

THE AUSTRALASIAN SOCIETY FOR IMMUNOLOGY INC.
ABN 76 330 189 856

STATEMENT OF CHANGES IN EQUITY
FOR THE YEAR ENDED 31 JULY 2016

	Retained Profit/(Loss)	Total
	$	$
Balance at 1 August 2014	751,026	751,026
Net Income attributable to Members	103,000	103,000
Balance at 31 July 2015	**854,026**	**854,026**
Balance at 1 August 2015	854,026	854,026
Net Income attributable to Members	73,840	73,840
Balance at 31 July 2016	**927,866**	**927,866**

The accompanying notes form part of these financial statements

Minutes of ASI Annual General Meeting

Elissa Deenick, ASI Secretary

Australasian Society for Immunology Inc.

MINUTES OF ANNUAL GENERAL MEETING

Date	Friday 25th November 2016
Time	12.30 to 1.30pm
Location	Novotel Northbeach, Wollongong, NSW, Australia.

MINUTES

1. WELCOME AND APOLOGIES (CHRIS GOODNOW (CG))

Apologies: Joanna Roberts, Elissa Deenick

Present as per sign in sheet: Kirstie Bertram, David Tscharke, Harry Sutton, Alicia Wilson, Hayley McNamara, Mayura Wagle, Jaqueline Marshall, Felix Marsh-Wakefield, Benita Tse, Jake Rhodes, Francisco Vera, Jarrod Kennedy, David McDonald, Jarem Edwards, Nilesh Bokil, Rehana Hewavisenti, Jessica Pedersen, Ann Nisa, Tom Guy, Sam Adhikary, Nicholas Geraghty, Debbie Watson, Ronald Sluyter, Elahe Minaei, Simone Rizzetto, Cindy Ma, Catherine Lai, Hafsa Rana, Susanne Heinzel, Anselm Enders, Robert Brink, Ian Parish, Anne Bruestle, Scott Byrne, Kim Jacobson, Stuart Tangye, Mayan Amiezer, Fabienne Brilot, Tina Nguyen, Alicia Zou, Fiona Tea, Deepti Pilli, Chris Goodnow, Ian Cockburn, Mainthan Palendira, Julia Ellyard, James O'Connor, Sophie Bouffler, Matthew Whitney, Brigette Boast, Etienne Farquhar, Chris Sunderling, Danielle Priestley, Emily Edwards, Angelica Lau, Imogen Moran,
?? Benjamin Sparr, Cloudio Counoupos

Phone in: Rachel De Kluyuer

2. CONFIRMATION OF MINUTES AGM 2015

Resolution: The AGM approves as correct the minutes of the 2015 Annual General Meeting held on Tues 1st December 2015

Moved: Felix Marsh Wakefield. Second: Anselm Enders

3. RECEIPT AND APPROVAL OF REPORTS FROM COUNCIL

President's Report (CG)
Secretary's Report (CG)

Scott Byrne – what will be the due process before moving to a new publisher? Should also take into account the non-financial benefits from being with Nature-Springer.
Chris Goodnow – Tender has gone to 5 different publishers. This will be shortlisted to 2 publishers which will then be brought back for recommendation and Council's consideration ETA: March / April.

Resolution: The AGM approves the 2016 reports from President.
Moved: Stuart Tangye. Seconded Mainthain Palendira

Stuart Tangye – ASI should cover costs for national invited speakers at annual meeting. Recognition as member of society. Should some funds be put aside?

Australasian Society for Immunology Inc.

CG – Paying for invited speakers might come at the expense of higher meeting registration. Perhaps we can conduct an online survey what is more important to members - 20K will cover 22 registrations for speakers.

Resolution: The AGM approves the 2016 reports from Secretary.
Moved: Robert Brink. Seconded Fabienne Brilot -Turville

4. RECEIPT AND APPROVAL OF FINANCIAL STATEMENTS
Treasurer's Report (Kim Jacobson (KJ))
Scott Byrne – Travel award funds seems to drop over the years?

KJ – Possible this was due to ICI. For example, travel bursaries to ASI is usually 20K which was put towards ICI. Another change was senior travel awards were reduced from 10K per person.

Scott Byrne – Any prediction as to profit from the endowment of the profit?
KJ - None of yet.

Kristoff Wing: Any threats to the financial health of the society in the next financial year?
KJ: No.

There is a shift towards smaller branch meetings from big ASI national meetings.

Anselm Enders– there is a trend where there are so many extra meeting, and reduced registrations at ASI meetings since 2012. There is a need to think as a society and set a lower bar for attendance. Or set a realistic limit of attendance which could reduce costs of organisation.

Susanne Heinzel: The council is aware of this issue and is considering approaches.

Resolution: i) The AGM approves the Financial Statement of the 2016 financial year.
Moved: David Tscharke. Seconded: Scott Byrne

5. RECEIPT AND APPROVAL OF REPORTS FROM ICB AND CTI
ICB Report (CG)
CTI Report (CG)

Resolution: That the AGM approves the ICB/CTI report.
Moved: Robert Brink. Seconded: Stuart Tangye.

6. OTHER REPORTS
Meeting Reports (CG)
2016 ICI Melbourne
2017 QLD
2018 WA

Resolution: That the AGM approves the ICB/CTI report.
Moved: Cindy Ma. Seconded: Ian Cockburn

7. ANY OTHER BUSINESS

The Society

Immunology in Australasia

The aim of the ASI is to encourage and support the discipline of immunology in the Australasian region.

The Australasian Society for Immunology Incorporated (ASI) was created by the amalgamation in 1991 of the Australian Society for Immunology, formed in 1970, and the New Zealand Society for Immunology, formed in 1975. It is a broadly based society, embracing clinical and experimental, cellular and molecular immunology in humans and animals. The Society provides a network for the exchange of information and for collaboration within Australia, New Zealand and overseas. ASI members have been prominent in advancing biological and medical research worldwide. We seek to encourage the study of immunology in Australia and New Zealand and are active in introducing young scientists to the discipline.

ASI Member Benefits include:

- International Travel Awards
- Bursaries to attend ASI's Annual Meeting
- New Investigator and Student Awards at ASI Annual Meeting
- ASI Women's Initiative to support female scientists
- Special offers from ASI's Sustaining Members
- Full access to the journals *Immunology and Cell Biology*, *Nature Immunology*, and *Nature Reviews Immunology*

ASI Council

Executive and Council

Executive

President - Su Heinzel	heinzel@wehi.edu.au
Past President - Chris Goodnow	c.goodnow@garvan.org.au
Secretary - Elissa Deenick	e.deenick@garvan.org.au
Treasurer - Kim Jacobson	kim.jacobson@monash.edu
Deputy Treasurer - coming in 2018	

Voting Council

NSW Councillor - Mainthan Palendira	m.palendira@centenary.org.au
SA/NT Councillor - Iain Comerford	iain.comerford@adelaide.edu.au
QLD Councillor - Sumaira Hasnain	sumaira.hasnain@mater.uq.edu.au
VIC/TAS Councillor - Scott Mueller	smue@unimelb.edu.au
ACT Councillor - Ian Cockburn	ian.cockburn@anu.edu.au
NZ Councillor - Ries Langley	r.langley@auckland.ac.nz
WA Councillor - Connie Jackaman	connie.jackaman@curtin.edu.au

Non-voting council

Project Manager + Webmaster - Sarah Fardy	fardy.s@wehi.edu.au
Facebook + Twitter manager - Gabriela Khoury	gabriela.khoury@monash.edu
Newsletter Editor - Joanna Roberts	joanna@flowjoanna.co.nz
IUIS Representative - Alejandro Lopez	alejandro.lopez@qimrberghofer.edu.au
ICB and CTI Editor - Anne La Flamme	anne.laflamme@vuw.ac.nz
FIMSA Representative - Laura Mackay	lkmackay@unimelb.edu.au
Visiting Speaker Program - Jo Kirman	jo.kirman@otago.ac.nz
Women's Initiative Co-ordinator - Vanessa Bryant	bryant.v@wehi.edu.au
Meeting Co-ordinator - Meredith O'Keeffe	meredith.okeeffe@monash.edu
DoI coordinator - Gabriela Khoury	gabriela.khoury@monash.edu
Honorary Archivist - Judith Greer	j.greer@uq.edu.au
2017 LOC meeting chair - Kristen Radford	kradford@mmri.mater.org.au

The **ASI membership directory,** listing all financial members of the Society. is availalbe at http://www.immunology.org.au/asi-membership-directory/.To join the ASI or renew your subscription, go to http://www.immunology.org.au/membership/