

ASI NEWS JUNE 2017

VACCINATE ME CAFFEINATE ME QUIZ ME TEACH ME

Days of Immunology in Australia and Aotearoa



ANDREW LEW: ASI Life Member on the other side of ICI 2016

26

KEYSTONE SYMPOSIA on Viral Immunity and Tumor Immunology

CONTACT US

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

46TH ANNUAL SCIENTIFIC MEETING OF THE AUSTRALASIAN SOCIETY FOR IMMUNOLOGY

Invited speakers will include:

BURNET ORATOR

LYNN CORCORAN

WALTER AND ELIZA HALL INSTITUTE OF MEDICAL RESEARCH, VIC

FOUNDATION LECTURE

GRAHAM MITCHELL FOURSIGHT ASSOCIATES PTY LTD

PLENARY SPEAKERS

JUDITH ALLEN UNIVERSITY OF MANCHESTER, UK

JEAN-LAURENT CASANOVA THE ROCKEFELLER UNIVERSITY, USA

SHANE CROTTY LA JOLLA INSTITUTE FOR ALLERGY & IMMUNOLOGY, USA

MARIAPIA DEGLI-ESPOSTI THE LIONS EYE INSTITUTE, WA MICHAEL DUSTIN

UNIVERSITY OF OXFORD, UK

CAROLA VINUESA AUSTRALIAN NATIONAL UNIVERSITY, ACT

UNIVERSITY OF NEWCASTLE, NSW

PAUL HERTZOG HUDSON INSTITUTE OF MEDICAL RESEARCH, VIC

> SUSAN KAECH YALE UNIVERSITY, USA

PRESIDENT'S LECTURE CHRIS GOODNOW GARVAN INSTITUTE OF MEDICAL RESEARCH, SYDNEY

RAJIV KHANNA QIMR BERGHOFER, QLD

YUTING MA CHINESE ACADEMY OF MEDICAL SCIENCES, CHINA

FABIENNE MACKAY UNIVERSITY OF MELBOURNE, VIC

LAURA MACKAY UNIVERSITY OF MELBOURNE, VIC

MARIA RESCIGNO UNIVERSITY OF MILAN, ITALY

SARAH ROBERTSON UNIVERSITY OF ADELAIDE, SA

FEDERICA SALLUSTO UNIVERSITY OF LUGANO, SWITZERLAND

KEN SMITH CAMBRIDGE UNIVERSITY, UK MARK SMYTH OIMR BERGHOFER, OLD

BRISBANE CONVENTION & EXHIBITION CENTRE 27 NOVEMBER - 1 DECEMBER 2017

Registration and Abstract Submission now open

www.asi2017.org

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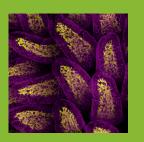
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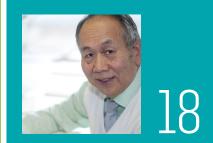
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SUMPTUOUS CELLS

in the 'Snapshots of the Immune System' are on show.



Q: What was comparable to the work of 10 NMRHC grants, occupied three years of his life, and was worthwhile enough that he'd probably do it again? Find out the answer...



WOOED BY BEIJING Three young immunologists report back on their experience at the Advanced Immunology Course in Beijing here.

CUTTING EDGE SO THAT THERE IS BLOOD ON THE FLOOR

JOANNA ROBERTS

"I call this 'Flow Cytometry for the Masses' and it will basically mean that you don't need a cytometer to create high dimensional single cell data. We'll see CyTOF technology (in use) for the next 3-4 years and then after that people will be doing this" Garry Nolan, May 2017, Stanford

Garry was describing a technology in his lab to label individual cells to generate gene data in a cell-bycell context which will generate data sets in a format that we can think of like FCS files but with massive amounts of sequence data per cell.

Hypothesis generating technologies get a fair bit of flack. Apparently grant reviewers hate them. But I like this quote from the wonderfully under-stated Wendy Fantl, Professor in the Dept of Gynaecology and Obstetrics at Stanford, 'Well, they can call it a fishing expedition if they like, but the fish are pretty good at the end'.

I recently read the 'The Emperor of all Maladies" by Siddhartha Mukherjee. Such a mix of hubris

and passion and compassion and fear and pain and death and hope all bound into one human story, the story of us and our species' cancers. Mukherjee writes the biography of cancer from its earliest known example (a bone cancer in a mummy) through to the start of the third millennium (hence no immunotherapy which we have to forgive him for). At one point in the book, Mukherjee tells the anecdote about the streetlight effect. A version of it goes: It is dark and a man is seen on the street, under the street light, hunkered down furiously searching the pavement for

'Well, they can call it a fishing expedition if they like, but the fish are pretty good at the end'.



something. Someone approaches him to ask him if she can help. He explains he has lost his keys and is trying to find them. She asks, where did you lose them? He says, over there, and gestures some way from where he is. She asks why he is looking here then? He explains that it is dark over there and this is where the light is.

The streetlight effect is such an apt description of the context scientists can find themselves working in. Our techniques and tools let us look right here, in the light of the beautiful illumination of our current technology or paradigm. But we may very well suspect that the answer, what ever it looks like, is not here in this light. It is over there, in the dark, where it is much harder to find. Here's to all of you who work outside the streetlight.

www.flowjoanna.co.nz joanna@flowjoanna.co.nz



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DAYS OF IMMUNOLOGY DOWN UNDER

DAY OF Immunology 2017

GABRIELA KHOURY

Day of Immunology National Coordinator and Social Media Manager

This year has been my first as Day of Immunology National Coordinator. It is encouraging to see so many researchers excited about engaging with the public and promoting immunology.

Every branch hosted a variety of events including public lectures, laboratory discovery tours, student workshops, a touring photography exhibition, a vaccination café and much more!

Enjoy the articles in this issue of the newsletter provided by the local organising committees.

Congratulations to all of the states, your hard work made for a successful Day of Immunology 2017. I can't wait to see what we have installed for next year!



COFFEE AND IMMUNITY - A FABULOUS COMBINATION. PHOTO COURTESY OF G KHOURY.

To see more posts on the event check out Day of Immunology and ASI on twitter (@dayofimmunology; @asimmunology) and Instagram (@doiaus).

SNAPSHOTS OF THE IMMUNE SYSTEM 2017

GABRIELA KHOURY

I have never seen so many selfies taken with immunological images at once!

It is only the second year of Snapshots of the Immune System exhibition and the responses to combining art and immunology continues to be phenomenal! This year the event dramatically expanded with a total of 76 entries submitted by 44 researchers (individual and also in collaboration) from around Australia and New Zealand. Fortyeight images were exhibited representing all 44 researchers. Multiple Day of Immunology events around Australia have displayed the photos.

The exhibition launch night was held at The Melbourne Meat Market, North Melbourne. As well



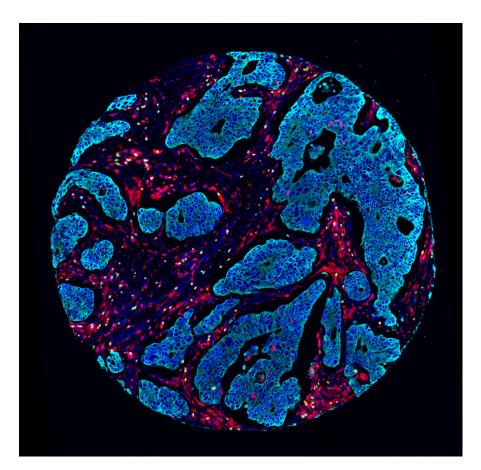
EXHIBITION AT THE MONASH IMMERSIVE VISUALISATION PLATFORM. PHOTO COURTESY OF GABRIELA KHOURY



THIS WAY FOR 'SNAPSHOTS'. PHOTO COURTESY OF G KHOURY



VENUE FOR SNAPSHOTS OF THE IMMUNE SYSTEM EXHIBITION AT THE MEAT MARKET. PHOTO COURTESY OF HUI FERN KOAY.



CSL 1ST PRIZE OF THE SCIENTIFIC PHOTOGRAPHY EXHIBITION 2017. MELANIE MCCOY, TRACEY LEE-PULLEN AND CHIDOZIE ANYAEGBU, CANCER RESEARCH GROUP, ST JOHN OF GOD SUBIACO HOSPITAL, WA. "THE WORLD OF TUMOUR IMMUNOLOGY" Melbourne) and the interaction between the immune and nervous systems with Samantha Dando (Monash University).

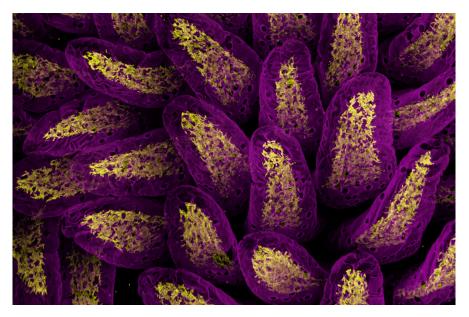
The exhibition travelled during April and May to the Peter Doherty Institute for Infection and Immunity, the Monash Biomedicine Discovery Institute, and the Translational Research Institute. It is currently on display at the Centre for Inflammatory Diseases at the Monash Medical Centre in Clayton; drop by if you haven't seen the exhibition.

This issue highlights some of the entries, including the four prize-winning images by Melanie McCoy, Tracey Lee-Pullen and Chidozie Anyaegbu (WA), Sivanjah Indumathy (VIC), Dave Goulding and Trevor Lithgow (VIC) and Caleb Dawson (VIC).

The exhibition wouldn't have been possible without the help of many volunteers. I would especially like to thank my fantastic organising committee Catarina dos Santos

as 44 photographs, there were 5 video projections and 3D printed models were exclusively featured from the Monash Biomedicine Discovery Institute.

This year we were fortunate to collaborate with the Monash Immersive Visualisation Platform. The "CAVE" platform consists of a 360 degree computer screen which gives the feeling that you are standing within the images. Fifty-three students from the John Monash Science School visited the CAVE and were immersed in the immune system. I have never seen so many selfies taken with immunological images at once! In the evening attendees from the public loved discussing T-cell graduation in the thymus with Darryl Johnson (University of



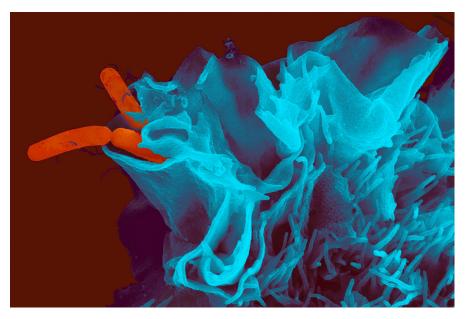
BD BIOSCIENCES PEOPLE'S CHOICE AWARD OF THE SCIENTIFIC PHOTOGRAPHY EXHIBITION 2017.

CALEB DAWSON, WALTER AND ELIZA HALL INSTITUTE, VICTORIA. "GUARDIANS OF THE GUT VILLI: MACROPHAGES ('BIG EATERS') IN YOUR GUT MONITOR FOR INFECTIONS, SUPPRESS INFLAMMATION AND REGULATE TOLERANCE TO MICROBIOTA.

Sa e Almeida, Catriona Nguyen-Robertson, Fernanda Ana Sosa, Angela Pizzolla, Christophe Macri, and Hui Fern Koay.

The committee would also like to thank the judges who attended the Melbourne Meat Market opening night: Su Heinzel (ASI President), Prof Jacques Miller (WEHI), Prof William Heath from event sponsor Centre for Advanced Molecular Imaging, and Nicolas Wong of BD Biosciences. A special thank you to Andreas Hamacher and the CAVE2 team from Monash Immersive Visualisation Platform for helping adapt the exhibition to the CAVE.

Be inspired by this year's entries featured in this issue because the team and I are eagerly awaiting your entries for 2018! ■



THE WALTER AND ELIZA HALL INSTITUTE PROF. JACQUES MILLER'S CHOICE AWARD OF THE SCIENTIFIC PHOTOGRAPHY EXHIBITION 2017.

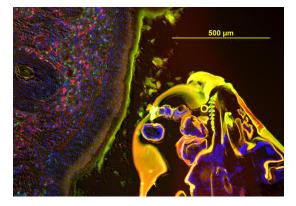
DAVE GOULDING AND TREVOR LITHGOW, MONASH BIOMEDICINE DISCOVERY INSTITUTE AND MONASH UNIVERSITY, VICTORIA "HUMAN CELLS DECEIVED BY SALMONELLA INTO PICKING IT UP"





MONASH UNIVERSITY DEPARTMENT OF IMMUNOLOGY AND PATHOLOGY AWARD OF THE SCIENTIFIC PHOTOGRAPHY EXHIBITION 2017.

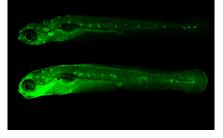
SIVANJAH INDUMATHY, HUDSON INSTITUTE OR MEDICAL RESEARCH AND MONASH UNIVERSITY, VICTORIA. "THE SPLEEN"



CONSTANTIN

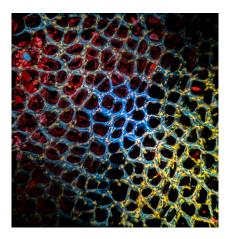
CONSTANTINOIU, COLLEGE OF PUBLIC HEALTH, MEDICAL AND VETERNARY SCIENCES, JAMES COOK UNIVERSITY, QLD.

"CATTLE TICK (RHIPICEPHALUS AUSTRALIS) MOULTING ON A COW AND THE HOST REACTION. T CELLS ARE IN RED AND MHC II CELLS IN RED"



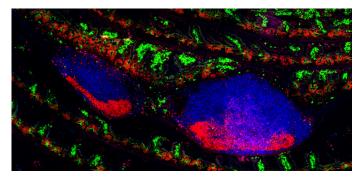
DANIELE CULTRONE, GARVAN INSTITUTE OF MEDICAL RESEARCH, NSW.

"PERFECT MOMENT IN TIME" THESE TRANSGENIC REPORTER ZEBRAFISH EXPRESS ENHANCED GREEN FLUORESCENT PROTEIN (EGFP) FUSED WITH NF-KB'S REGULATORY ELEMENTS. NF-KB IS A KEY TRANSCRIPTION FACTOR THAT REGULATES THE INFLAMMATORY RESPONSE. THE DIFFERENCE BETWEEN THE TOP FISH (DIM GREEN) AND THE BOTTOM FISH (BRIGHT GREEN) IS THAT THE BOTTOM ZEBRAFISH HAS BEEN STIMULATED WITH LIPOPOLYSACCHARIDES (LPS), WHICH ARE LARGE BACTERIAL MOLECULES THAT ELICIT A STRONG IMMUNE RESPONSE.



MICHAELA FINSTERBUSCH, CENTRE FOR INFLAMMATORY DISEASES, MONASH UNIVERSITY, VIC.

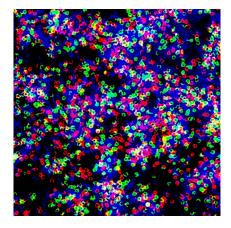
"THE GATE KEEPERS OF THE STOMACH"



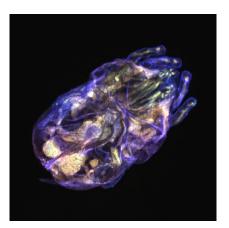
MAYAN AMIEZER, GARVAN INSTITUTE OF MEDICAL RESEARCH, NSW. "HERE WE DID NOT IMAGE THE ENTIRE GUT SWISS ROLL BUT ZOOMED IN ON A REGION SHOWCASING A SPECIAL IMMUNE TISSUE CALLED PEYER'S PATCHES."



LI EON KUEK, DEPARTMENT OF PHARMACOLOGY & THERAPEUTICS, THE UNIVERSITY OF MELBOURNE. "WAVING GOODBYE TO INFECTIONS AND POLLUTANTS: AIRWAY CILIA IN THE LUNGS."



DARRYL JOHNSON AND ROBYN SLATTERY, PETER DOHERTY INSTITUTE, THE UNIVERSITY OF MELBOURNE; MONASH UNIVERSITY. "IMMUNE CELL CONFETTI."



CONNIE JACKMAN, CURTIN HEALTH INNOVATION RESEARCH INSTITUTE, CURTIN UNIVERSITY, WA. "THE HOUSE DUST MITE: TINY ALLERGY-TRIGGERING BUGS."



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500+ VACCINATIONS AT DOI VACCINATION CAFÉ IN MELBOURNE

A great step towards 'Preventable Pandemics' KIM PHAM

Day of Immunology Melbourne has gone from strength to strength with well over 1500 school children and general members of the public attending various activities in Victoria. This year's theme was Preventable Pandemics.

The second exhibition of "Snapshots of the Immune System" photography exhibition was launched at Meat Market North Melbourne on Thursday 6th April. This exhibition also travelled to Monash University and the Peter Doherty Institute. Congratulations to our 2017 winners for their wonderful entries. (Please see article in this Newsletter by Gabi Khoury for a full report).

A free public lecture was held at the University of Melbourne, Peter Doherty Institute on Friday 28th April covering current pandemics such as influenza, HIV/AIDS, dengue and zika. The public were treated to lectures by Prof. Nicole La Gruta (Monash University), Prof. Sharon Lewin (The University of Melbourne) and Prof. Cameron Simmons (The University of Melbourne). This was a full house event hosted by the effervescent Nick Huntington.



ROBERT DOYLE, MAYOR OF MELBOURNE, AT THE VACCINATION CAFÉ

At the Melbourne Town Hall on Friday 28th April the Vaccination Café was opened by Lord Mayor Robert Doyle. Over 500 seasonal influenza vaccinations and whooping cough boosters were administered to the general public, eclipsing last year's 220 vaccinations! The vaccinated ones had the opportunity to discuss with local immunologists the science behind vaccination along with a free coffee courtesy of Bean to Market. We also had our first onsite infant clinic hosted by City of Melbourne. Thank-you to our vaccination partners Kerryn

Lajoie (Vaccin8 at work), Sharon Harris (City of Melbourne), Wendy Reid (Immunise Melbourne, Melbourne Primary Health Care Network), members from the Immunisation Coalition and the many volunteer nurses who donated their time on the day.

Full day immunology workshops were held for approximately 300 VCE Biology students and their teachers at the Gene Technology Access Centre in Parkville over April 27th and 28th, and Federation University in Ballarat on June 16th. Students listened to the immunology presented by



MELBOURNIANS SOAKING UP THE VACCINATION AMBIENCE AT THE DAY OF IMMUNOLOGY VACCINATION CAFÉ.

Prof. Phil Hodgkin, Sir Gus Nossall and Prof. Peter Doherty as well as attending a careers session over lunch from scientists of a variety of backgrounds.

Free Discovery Tours were offered at six of Melbourne's leading immunology research institutes. Collectively over 250 members of the general public visited Walter and Eliza Hall Institute, Burnet Institute, Doherty Institute, Hudson Institute, Monash Biomedicine Discovery Institute and Monash Centre for Inflammatory Diseases.

Thank-you to the ASI for their support and our significant sponsorship from CSL, The ARC Centre For Advanced Molecular Imaging, Monash Department for Immunology, Hudson, Walter and Eliza Hall Institute and BD Bioscience.

The success of Day of Immunology Melbourne is thanks to a team of over 60 scientists who volunteer their time to help spread the importance of our immune system. It has been a pleasure co-ordinating these events with the support of my Over 500 seasonal influenza vaccinations and whooping cough boosters were administered to the public subcommittee chairs Gabriela Khoury (publicity, photography exhibition), Dimitra Zotos (secondary school workshops), Jai Rautela (vaccination café), Daniel Pellici (public lecture) and Paul Whitney as well as Nicole Messina (discovery tours). Stay tuned for next year!



3D PRINTED MODELS FROM THE MONASH BIOMEDICINE DISCOVERY INSTITUTE AT THE 'SNAPSHOTS OF THE IMMUNE SYSTEM' EXHIBITION.



THE MELBOURNE 'DOI SNAPSHOTS' SUB COMMITTE AT THE OPENING OF THE EXHIBITION. (LEFT TO RIGHT) CHRISTOPHE MACRI, CATRIONA NGUYEN-ROBERTSON, CATARINA DOS SANTOS SA E ALMEIDA, GABRIELA KHOURY, HUI FERN KOAY, FERNANDA ANA SOSA. ABSENT: ANGELA PIZZOLLA.

PHOTOS COURTESY OF GABRIELA KHOURY

DAY OF IMMUNOLOGY, QUEENSLAND

SUMAIRA Z. HASNAIN

We have had very successful DOI events in Queensland, with major events being held in Townsville and Brisbane. A big thank you to the DOI-QId committee (Danielle Stanisic, Frances Pearson, Margaret Jordan, Kirsty Short, Saba Farnaghi and Burhan Khan) for making these events a success. Reports by the DOI leads follow.

'DAY IN THE LIFE OF AN IMMUNOLOGIST', VACCINATION CAFÉ, PUBLIC FORUM, AND DISEASE OUTBREAK WORKSHOP Translational Research Institute, Brisbane

DANIELLE STANISIC

This year we celebrated the Day of Immunology at the Translational Research Institute on the 27-28 April. On the Thursday, Grade 11-12 students attended the 'Day in the Life of an Immunologist" workshop at the SparQed facility. They listened to seminars from Graham Leggatt and Prof. Ian Frazer, participated in career chats and worked alongside scientists in the laboratory to identify "Patient O". In the evening we held our vaccination café and public forum. Prof. Ranjeny Thomas presented an update on the progress of a rheumatoid arthritis vaccine and Prof. Daniel Chambers with his patient Mr Meyers, discussed organ transplantation and immunotherapy. Six early career researchers impressed with their "3 minute research pitch" with the audience voting for the best presentations. Prizes were awarded to Jeremy Brooks (UQDI) and Kelly-Anne Masterman (MMRI) (pictured). On the Friday, for the first time, we hosted Grade 6-7 students in the SparQed facility for a "Disease

Outbreak" workshop. They had non-stop questions for all the speakers - Danielle Stanisic, Sandrine Roy, Burhan Khan, Prof. John Upham and Graham Leggatt. They also had a great time in the lab with the hand washing experiment, pipetting workshop and microscopy. We had great feedback from the students and parents (including "My son said it was his best learning day ever") and hope to hold this workshop for younger students again next year to help inspire the next generation of scientists. A big thank you to the Translational Research Institute Marketing Team (especially Carla Paterson and Ash Doyle) and Mater Research for sponsoring part of the event.





ABOVE: ORGANISER OF THE BRISBANE DAY OF IMMUNOLOGY EVENTS, DR. DANIELLE STANISIC, WITH THE ECR WINNERS FOR THE PUBLIC ENGAGEMENT AWARD LEFT: WATCH '3 MINUTE RESEARCH PITCH'

ASI NEWSLETTER JUNE 2017

USING THE IMMUNE SYSTEM TO TREAT CANCER PUBLIC LECTURE James Cook University, Townsville MARGARET JORDAN



ABOVE & RIGHT: HAND WASHING EXPERIMENT WITH 5-6TH GRADERS: SO HOW LONG DO YOU REALLY NEED TO WASH YOUR HANDS FOR? IN SCIENCE, WE DON'T GUESS! ONE OF THE FIRST SPARGED PROGRAMS FOR THIS AGE GROUP.

In celebration of the International Day of Immunology, a Public Lecture was organised at JCU, Townsville on 27th April by an ASI Queensland committee member, and staff member of Molecular & Cell Biology, JCU, Margaret Jordan. We were honoured to have Prof. Geoff Hill, an NHMRC Australia Fellow and leader in the fields of transplantation, from QIMR Berghofer, give us a most enlightening presentation on: "Using the immune system to treat cancer". Prof. Hill is a clinician whose immunology laboratory focuses on the interactions between cytokines, antigen presenting cells and regulatory T cells during transplantation. He gave a wonderful presentation, outlining the leaps and bounds of T therapy and the future of cancer therapeutics.

This was our first, of hopefully many, public events held in the new "Science Place". Participants could enjoy a glass of wine or a beer or soft-drink accompanied by hot and cold food, while browsing posters showing aspects of the immune system and its functions. Vaccination videos were screened on the communal TV, while CDs and booklets on "our incredible immune system" and "vaccinations" were freely available, as were stickers and badges. These all went down a treat. Following the presentation, the floor was opened for general questions and discussion. This was so well received that we had to wrap it up and leave the participants to chat to Geoff afterwards. The talk was most enjoyable and the event was an enormous success. A special thank-you to Geoff for giving up his precious time to come and talk to us. Thank you too, to Molecular & Cell Biology for the huge contribution in funds and to all those who helped make the day a success: Candi Lee, Benjamin Crowley, Letitia Smith, Adrian Gemiarto and Linda Barrie.













DOI ACTIVITIES IN TOWNSVILLE - APRIL 2017 - LED BY MARGARET JORDAN

DAY OF IMMUNOLOGY, SOUTH AUSTRALIA/ NORTHERN TERRITORIES BRANCH

Science in the Pub: Allergies 'Nothing to Sneeze at' IAIN COMERFORD

On Friday 5th of May the SA/NT branch of ASI teamed up with 'Science in the Pub' to celebrate the Day of Immunology at the Rob Roy Hotel in Adelaide. The theme of this year's event was, 'Allergies: Nothing to Sneeze At'. Our aim was to discuss with the lay audience the biology of allergy, showcasing local research in this area and answer questions from the public about allergy. We had a full house with over 160 members of the public snapping up tickets to the event. Our invited speakers were Preethi Eldi (UniSA) who spoke about her work on developing vaccines for food allergies; Damon Tumes (SAHMRI) who spoke about his work on T cells in asthma; and Merryn Netting (SAHMRI) who discussed food allergies in children. Excellent talks were given by all and there

was a stimulating Q+A session afterwards. A big thank you to our invited speakers for agreeing to give up their Friday night to come along and share their passion for immunology. We also displayed the Snapshots of the Immune System gallery, which looked spectacular. Thank you also to the Science in the Pub team, led by Stefan Caddy-Retalic and Nick Gellie, for facilitating the organisation and promotion of the event. I would also like to thank the organising committee, who have helped in the lead up to the event: Emma Thompson, Lih Tan and Danushka Wijesundara, Jasmine Wilson, Joe Wrin, Tim Tyliss, Todd Norton, Kerrie Foyle, Jade Foeng, Elena Cavallaro, Jake Treolar, James McEvoy, Ella Green, Andrew Stempel, Issac Sakala, Preethi Eldi and Carly Gregor.





ASI NEWSLETTER JUNE 2017



DAY OF IMMUNOLOGY, NEW ZEALAND Pub Quiz, University of Otago, Dunedin

RIES LANGLEY

A very successful Day of Immunology Pub Quiz was held at the University of Otago Staff club on 1st May. There was a full house of 18 teams made up of 4-6 members, from departments within the University of Otago and also from the public. Each multi-choice question in the quiz was preceded by a fact relating to basic immunology and allergy to keep with this year's theme. Members of the first place team won a "Giant microbes" antibody soft toy (with detachable antigen). Prizes were also awarded for 2nd and 3rd place, last place, and best team name ("Clean up on IL-3"). Many thanks to Sarah Sandford for organising this event.



A PACKED HOUSE AT THE OTAGO DAY OF IMMUNOLOGY PUB QUIZ.

DAY OF IMMUNOLOGY, WESTERN AUSTRALIA

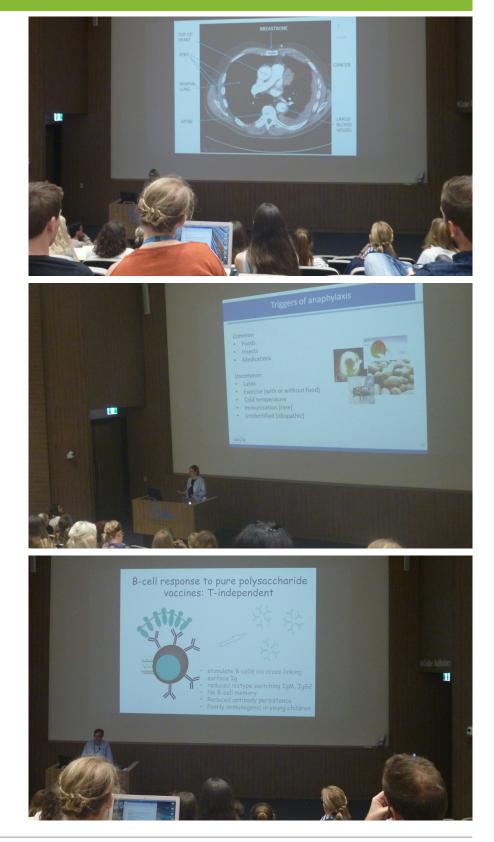
AFTERNOON OF IMMUNOLOGY PUBLIC SYMPOSIUM Harry Perkins Institute for Medical Research LELINH DUONG

As part of Day of Immunology, the ASI WA student committee (Wayne Aston, Amy Prosser, Laura Brooks and Lelinh Duong) organised an Afternoon of Immunology Public Symposium on 21st April held at the Harry Perkins Institute of Medical Research. This event proved to be very popular, attracting over 90 registrants. The program included talks from keynote speakers A/Prof. Michaela Lucas (PathWest) who spoke about allergy and transplantation, Dr Claire Sharp (Murdoch University) on veterinary immunology, A/ Prof. Peter Richmond (Telethon Kids Institute) on vaccines, and Prof. Anna Nowak (University of Western Australia) on cancer immunology. Other highlights of the day included presentations by WA's talented postgraduate students, followed by a sundowner and lab tours to finish off an exciting day of immunology.

TOP: PROF. ANNA NOWAK PRESENTING ON CANCER IMMUNOLOGY AT THE ASI WA STUDENT COMMITTEE AFTERNOON OF IMMUNOLOGY

MIDDLE: A/PROF. MICHAELA LUCAS SPEAKING ABOUT ALLERGY AND TRANSPLANTATION AT THE ASI WA STUDENT COMMITTEE AFTERNOON OF IMMUNOLOGY

BOTTOM: A/PROF. PETER RICHMOND EXPLAINS VACCINES AT THE ASI WA STUDENT COMMITTEE AFTERNOON OF IMMUNOLOGY



2ND ANNUAL DAY OF IMMUNOLOGY 5-A-SIDE SOCCER TOURNAMENT Curtin Health Innovation Research Institute (CHIRI), Curtin University

CONNIE JACKAMAN

Close to 40 staff and students at CHIRI competed in the 2nd Annual Day of Immunology 5-a-side soccer tournament organised by PhD student, Waheed Alrehaily, on 27th April. A number of other staff and students also came to support the "immune cells" in their fight for the ASI cup. We had great weather for the event and four teams were entered into the competition: dendritic cells. macrophages, T cells and B cells. Macrophages had undergone training prior to the event, however this did not appear to be long lasting as they lost all their matches. Dendritic cells also failed to process their losses following the round games, with the T cells and B cells left to fight for the ASI cup in the final. Some interesting lineages appeared as a few dendritic cells also became B cells for the final. Both the T and B cells displayed memory from last year's event and managed to mount a greater response this year. However, eventually the T cells were exhausted again leaving the B cells the winners on the day, 2-0 in the final. Overall the day was a great success and we are aiming for an even better response next year, with hopefully more teams entering the competition.





TOP: TEAM 'B CELLS' - WINNERS OF THE 2ND ANNUAL DAY OF IMMUNOLOGY SOCCER TOURNAMENT IN WA.

ABOVE: COMPETING TEAMS GET DOWN TO IT AT THE 2ND ANNUAL DAY OF IMMUNOLOGY SOCCER TOURNAMENT IN WA



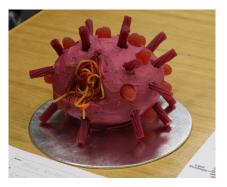
TISSUE CULTURE WELL JELLY CAKE -STEPHEN PROKSCH

MORNING TEAS Hosted at chiri

Curtin University and School of Pathology and Laboratory Medicine (PaLM), UWA

CONNIE JACKAMAN

For the Day of Immunology, staff and students at CHIRI (organised by Dr Connie Jackaman) and PaLM (organised by Dr Demelza Ireland) were invited to bring along their best immunologythemed morning tea. Images from the "Snapshots of the Immune System" exhibition (organised by Gabriela Khoury) were on display and more than a dozen creative cakes, biscuits, savoury dips and sushi were brought in to taste across the two sites. Some examples included a jelly tissue culture well, bone marrow pie, influenza virus particle, and reactive lymphocytes. Everyone was very enthusiastic and supportive of the entries! It was a great way to celebrate the International Day of Immunology and to bring staff and students together at CHIRI and PaLM. ■



GOING VIRAL - OLIVIA RUHEN

ANDREW LEW: ASI LIFE MEMBER AND ICI 2017 ORGANISING COMMITTEE MEMBER

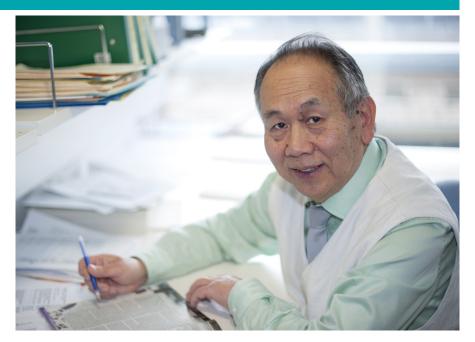
Colonial Cringe: Out, Sweet Smell of ICI2016 Success: In

KIM MCINTOSH

Andrew Lew, elected Life Member of the Australian Society of Immunology in 2016, advocates giving your time to ASI.

The joy of achieving something for the community that you belong to stays with you. As a Postdoc in the late 1980s, Andrew first attended an ASI conference not long after returning to Australia from the NIH after co-discovering the gamma-delta TCR. He was inspired by the late Geoff Shellam, who talked about his vision for ASI and his willingness to take risks, including financial ones. Andrew states "Geoff instilled that we are all responsible for promoting not just ASI but the industry that supports us." At the time, Andrew was also surprised by how few of the stars of Australian immunology community attended the annual scientific meeting, a trend he is pleased to note has now markedly changed. One of the more challenging issues he found was a substantial level of parochialism and colonial cringe. He notes that whilst this has not entirely disappeared over the years, it has definitely reduced.

Andrew's initial scientific training was as a Vet and he completed his PhD in Immunology in 1983 at the London School of Hygiene and Tropical Medicine and was awarded the Woodruff Medal. He first became interested in immunology when studying SCID



ANDREW AT THE WALTER AND ELIZA HALL INSTITUTE OF MEDICAL RESEARCH. PHOTO: COURTESY OF THE WALTER AND ELIZA HALL INSTITUTE OF MEDICAL RESEARCH.

in Arabian horses. Due to a short supply of reagents at the time, Andrew worked closely with Cliff Hosking at the Royal Children's Hospital in Melbourne. He found Cliff to be an inspiring, innovative, generous, self-effacing clinician scientist who trained with the larger-than-life John Soothill (London) one of the fathers of immunodeficiency.

Andrew's contribution to ASI has allowed him to meet colleagues from all over Australia and New Zealand. More often than not, these meetings have evolved to collaborations if not friendships. He has gained insight into differing points of view and differing values. Knowledge of this phenomenon helps one to write NHMRC grants with a broader view.

Andrew has clearly recognised the contributions of ASI's officebearers over the years. Andrew reflects; "I think essentially all the ASI Presidents in the last 20 years have added substantial initiatives to ASI. For example, Phil Hodgkin introduced the Derrick Rowley Award; Alan Baxter fostered the bid for the International Congress to be held in Australia." He notes that there are also challenges for voluntary ASI office-bearers. Andrew states; "They, in general, put in much effort for the good of the ASI and Immunology. They deserve gratitude (even though that is not why they bear office);

seldom is this gratitude realized in a palpable way."

Andrew Lew, was invited to join the organising committee of ICI2016 by Jose Villadangos. Little did he know then that he would end up as Convenor of the Scientific Program Committee. Andrew quickly realised the mammoth task he had agreed to, noting that the 'serious' business of organising ICI2016 in Melbourne commenced as soon as ICI2013, Milan, concluded. From ICI2013 the 2016 organising committee (Jose, Andrew, Dale Godfrey, Ian Barr, Jenny Rolland, Chris Goodnow) gained insight into what was useful (eg: automatic stops for talks) and what could be greatly improved (eg: offline app). This select small organising committee was structured so it could make final determinations quickly. The scientific program committee chose the 70 themes of the congress and determined the program structure, including the time allocations for each session and avoiding theme clashes. They also determined a maximum number of reminders for chairs and speakers (three).



ANDREW LEW AT ICI 2016. PHOTO: COURTESY OF ARINEX.

Andrew was delighted with the Lafferty Debate (organised by Shalin Naik and Nicole LaGruta). Andrew comments "The plenary room was a sea of laughter" and the sheer size was forbidding. Over 300 assessors for the expected 2000 abstracts (they ended up with 3,600 instead!) were recruited. From 2015-2016 there was something to do every day, luckily by then the committee was ably assisted by the team from PCO Arinex who were both experienced and enthusiastic.

The key moment for Andrew at ICI2016, and when he was certain it was going to be a fabulous success, was on the Tuesday night of the actual congress. Andrew recalls at the Speakers' dinner how generous the invited speakers and Michele Hogan (CEO of AAI) were with their praise on the success of the meeting, particularly highlighting the themes of gender and youth.

When asked if he would do it again Andrew said probably. However, this experience has clearly been insightful and if he did it again he would be more prepared for the immense workload, the continuous emotional burden of ensuring competent completion of every detail and dealing with issues that can arise from left of field. He would also enlist more secretarial support for the task. Andrew also compared the undertaking as worse than writing ten NHMRC project grants.

For ICI2019 Beijing, Andrew predicts that there will be more Chinese immunologists attending than American ones. Furthermore, he sees the current trend toward immunotherapy being a key focus with monoclonal antibodies dominating the global pharmaceutical market. Andrew also predicts their usefulness will extend beyond the treatment



ANDREW LEW AT ICI 2016. PHOTO: COURTESY OF ARINEX.

of cancer and inflammation, channelling the conclusions of Landsteiner in the 1920s that one can make an antibody to anything! On a cautionary note, Andrew wonders which of today's major paradigms will be shown to be fallacious in the next 10 years? Which will go the way of "CD8 suppressor T cells of the late 70s" and "Jerne's idiotype network theory"?

Andrew is a Laboratory Head within the Immunology Division at The Walter and Eliza Hall Institute of Medical Research. His current research centres on the control of life and death of dendritic cells and harnessing the immune response at the inflammatory parenchymal site in transplantation and autoimmunity. What Andrew enjoys most about his job is threefold; he enjoys collaborating with researchers who "love science more than their own egos"; interacting with members of the Immunology and Molecular Immunology Divisions at The Walter and Eliza Hall Institute of Medical Research; and last but not least, watching students and young researchers improve. Moreover, he adds "The Nature and Science papers are by-products of one's endeavour, albeit glorious ones".

PRESIDENTORIAL SUSANNE HEINZEL

When I got the reminder to submit the President's column I thought there must have been a mistake... and yet here we are, almost half way through 2017. My first thought was 'oh no, where has the year gone?' but then quickly realised what a busy time it has been.

The change that will probably have the most impact on the society is the new publishing agreement for our two journals. After 10 successful years with NPG we decided to put ICB and CTI into the very capable hands of Wiley. We are looking to a great relationship with Wiley and thank the NPG team for their support and great work over the past 10 years.

April 29th marks the World Day of Immunology and the Dol teams around Australia and NZ have once again excelled with their creativity putting together wonderful events. There were public lectures, lab tours, school workshops, photographic exhibitions, vaccine cafes, just to name a few. The events aimed to educate the public about the importance and the beauty of the immune system were bigger and better than ever and we had a record attendance at many of them. Thanks go out to all the countless volunteers throughout ASI and in particular, to Gabi Khoury who co-ordinated the events across the branches with a calm and steady hand.

FIMSA held their 2017 Advanced Training Course in Beijing in April in conjunction with the International Symposium on Autoimmunity. ASI was well represented with our current and past FIMSA councillors Laura McKay and Alan Baxter on the teaching faculty of the Training Course. And three of our student / early career members (Jonathan Chee, Delgertsetseg Chuluundorj, and Hui-Fern Koay) received a travel scholarship to attend the course and the Symposium on Autoimmunity, thanks to the generous support from FIMSA and the Chinese Society for Immunology. A report on their travels can be found in this newsletter.

We are extremely proud to be in the exceptional position that several of our members have been responsible for some of the biggest and most important discoveries in Immunology over the past few decades

Looking ahead, the organisation of the 2017 annual scientific meeting to be held in Brisbane is well underway. The program looks fantastic with a stellar selection of local and international speakers.

We are extremely proud to be in the exceptional position that several of our members have been responsible for some of the biggest and most important discoveries in Immunology over



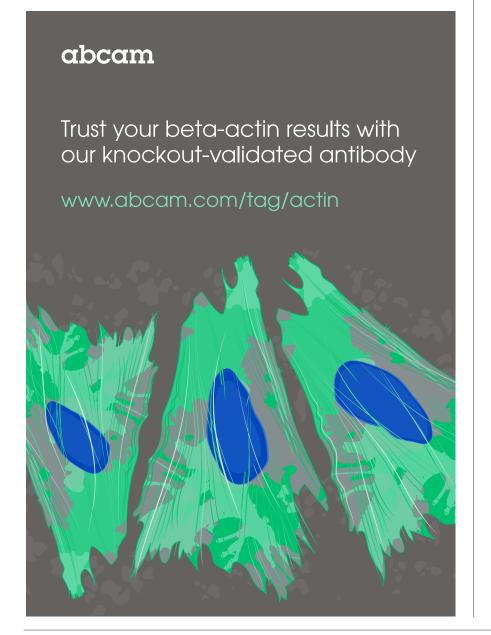
the past few decades. In 2015 we introduced the Foundation Lecture as an exciting new event at our annual meeting to celebrate the outstanding contributions by outstanding people and to give the new generations of immunologists the unique opportunity to hear about the discoveries from the people who made them. We are very pleased that Graham Mitchell accepted our invitation for 2017 and I am looking forward to hearing about the times before there were B and T cells.

The organisation of the local branch meetings is also in full swing in most branches. These are exciting opportunities to learn about the research going on around you and usually there are great prizes up for grabs for the students / early career scientists. Start thinking about your abstract for these, they might be the ticket to the annual meeting in Brisbane!

Last but not least, several positons on council, including Vice President, NSW Councillor and Newsletter Editor are coming up to be filled in 2018. Now is the time to start thinking about getting involved and to find out more. Please feel free to contact the current position holders who will be more than happy to provide more information and details. Watch this space and e-mail announcements for further information. I'd really like to encourage everybody considering to nominate.

SECRETARY'S REPORT

The last few months saw the call out for the International Travel Awards. These awards covered travel between July and December of 2017 for postgrads and postdocs and travel July 2017-June 2018 for the senior awards. The response was very good, and we hope to have the results out to people in the coming weeks.





For postgrads and postdocs looking to travel to conferences in the first half of 2018 keep an eye out for the call for the next round of awards in September/October of this year.

But the International Travel Awards are not the only awards that ASI gives out each year. Later in the year we will also have a second round of the Jared Purton Award and there will be a call for applications for the ASI Annual Award in Brisbane. And remember, as an ASI member if you publish a first author paper in Immunology & Cell Biology you're also eligible for the Immunology & Cell Publication of the Year award which not only gives you \$1000 in prize money but also a guaranteed speaker spot at the next ASI meeting along with free registration. Check out the ASI website for all the details.

Later in the year we will also have a second round of the Jared Purton Award and there will be a call for applications for the ASI Annual Award in Brisbane.

ASI VISITING SPEAKER PROGRAM

JO KIRMAN University of Otago, Dunedin, NZ

FINAL NOMINATION ROUND FOR 2017 ASI VISITING SPEAKERS

Many thanks to the six ASI members who have their speaker nominations in the final round for 2017. These nominations have been carefully considered by the branch councillors and ASI Exec will use branch rankings to make their selection. It was fantastic to see excellent gender diversity in this nomination round!

ASI VISITING SPEAKER - PRO-FESSOR NANCY HAIGWOOD

HIV vaccine researcher. Prof. Nancy Haigwood, was the first ASI visiting speaker for 2017, visiting Canberra, Melbourne and Brisbane in February, as well as attending the Lorne Infection and Immunity meeting as an international speaker. Andrea Johannessen expressed her gratitude to the ASI for sponsoring Nancy's visit to the Monash University Centre for Inflammatory Diseases. "Nancy presented 'Antibodies and Change Agents in HIV: Good News for Vaccines', which was a fantastic overview of the development of vaccines for HIV in her laboratory and the Oregon National Primate Research Center. Nancy met with several of our staff and students after the seminar including Dr Tony Korman, Head of Infectious

Diseases, Monash Health and Dr Ian Woolley, Director, Monash HIV. We were also excited to demonstrate the Monash University Immersive Visualisation Platform for Prof Haigwood."

ASI VISITING SPEAKER - ASSO-CIATE PROF DANIEL MUCIDA

The second ASI visiting speaker for 2017 was gut immunologist Assoc. Prof. Daniel Mucida of the Rockefeller University, New



York, who visited Sydney and Melbourne in Australia as well as Wellington in New Zealand. Scientists at the Malaghan Institute in Wellington were delighted by his visit. PhD student Olivia Burns was "very grateful for the opportunity to discuss our research with a scientist of Daniel Mucida's calibre" as he "was interested in all of our projects, providing many students with ideas for their future



PROF NANCY HAIGWOOD AND EARLY-CAREER RESEARCHERS, SAN LIM AND NOLLAIG BOURKE (BOTH HUDSON INSTITUTE OF MEDICAL RESEARCH), AT THE EARLY-RESEARCH CAREERS LUNCH AND NETWORKING EVENT OF THE 7TH LORNE INFECTION AND IMMUNITY CONFERENCE (FEBRUARY 15TH - 17TH, 2017)

research". PhD student Kerry Hilligan said that Daniel "gave an enlightening seminar on intestinal intra-epithelial lymphocytes and their behaviour in response to infection. Their multi-dimensional approach, using sophisticated imaging techniques to assess immune cells in space and time, was of particular interest and addressed previously unanswered questions regarding the physical action of immune surveillance. The innovative way in which the Mucida lab approach science was refreshing, and encouraged young researchers to think about immune function in a dynamic physiological context (something under-appreciated when looking at flow plots and heat maps!)."

UPCOMING VISITING SPEAKERS FOR 2017

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 (to be confirmed)

Cezmi Akdis (Swiss Institute of Allergy and Asthma Research)

• Visits in October to Perth, Adelaide, Melbourne, Newcastle and Wellington



PROF NANCY HAIGWOOD AND COLLEAGUES, INCLUDING A/PROF HEIDI DRUMMER (BURNET INSTITUTE), PROF MICHAEL BEARD (UNIVERSITY OF ADELAIDE), AND PROF STEPHEN KENT (PETER DOHERTY INSTITUTE FOR INFECTION AND IMMUNITY AT THE UNIVERSITY OF MELBOURNE), ENJOYING DINNER AT THE LORNE HOTEL DURING THE 7TH LORNE INFECTION AND IMMUNITY CONFERENCE (FEBRUARY 15TH - 17TH, 2017)

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BRANCH REPORTS

SOUTH AUSTRALIA/ NORTHERN TERRITORY

IAIN COMERFORD



Our next big ASI event for SA/NT will be the 13th Annual Adelaide Immunology Retreat (AIR-13) at

the Vine Inn in the Barossa Valley. Planning for the Retreat is well underway and we are delighted that Su Heinzel will be joining us as out invited Interstate Speaker and A/Prof David Lynn from SAHMRI will be our local speaker. The retreat, which is aimed at giving Early Career Researchers (ECRs), PhD students, Honours students and Research Assistants the opportunity to present their work and interact in a relaxed environment, will be held from the 11th to the 12th August. A 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 are prizes for the Best Presentations. For gueries or more information, I can be contacted by email at iain.comerford@adelaide. edu.au We look forward to seeing you there! See elsewere in this Newsletter for information about how the DOI was acknowledged by the SA/NT branch of the ASI. ■

NEW ZEALAND RIES LANGLEY



I am looking forward to the NZ Branch meeting which is to be held Christchurch (first time hosts) from 3rd -5th July. Our AGM will

be held during the meeting so please submit agenda items to me (r.langley@auckland.ac.nz).

The Malaghan Institute of Medical Research in Wellington hosted Daniel Mucida (Rockefeller University, New York) in March as part of the ASI Visiting Speaker series. A/Prof. Mucida gave an enlightening seminar on intestinal intra-epithelial lymphocytes and their behaviour in response to infection. PhD student Kerry Hilligan reported that the visit stimulated much scientific discussion and was thoroughly enjoyable.

NZ Branch members Joanna Kirman and Prof. Sarah Hook had an article published in the Otago Daily Times recently Their informative piece highlighted the importance of vaccination to a public who are increasingly basing their opinions on vaccination from the internet and film.

See the Day of Immunology section in this Newsletter for details on events held in NZ.

IqV - VICTORIA SCOTT MUELLER



The beginning of 2017 brought two ASI visiting speakers to Melbourne. with more great

speakers to come later in the year. Professor Nancy Haigwood (Oregon Health and Science University, Portland, Oregon, USA) spoke at the Doherty Institute as part of a combined Burnet/PDI combined seminar on February 20th, followed by a Monash Health Translation Precinct seminar on February 21st. On March 16th, A/ Professor Daniel Mucida from The Rockefeller University, New York spoke at WEHI and gave an engaging talk on immune responses in the gut.

Kim Pharm and Gabi Khoury report elsewhere in this issue on the fantastic Day of Immunology events that took place in Melbourne this year.

As we look towards the year ahead, IgV will once again be holding a Winter Seminar on June 23rd (venue TBA), and this year we are very lucky to have Prof. Chris Goodnow (Garvan Institute) headlining. In August, we will be holding the annual IgV Reteat (August 24-25) at Balgownie Estate in the Yarra Valley, with an extensive line-up of international and interstate speakers. Then we will have the 2017 IgV Masterclass

on October 13th at the Victorian Comprehensive Cancer Centre (VCCC). More information on speakers for these events and registration will be announced soon. ■

WESTERN AUSTRALIA

CONNIE JACKAMAN

SAVE THE DATES: Perth Immu-



nology Group (PIG) meeting 16 & 17 October, 2017, Flying Squadron Yacht Club, Nedlands. Invited national

speakers coming to Perth include A/Prof. Kate Schroder (Institute for Molecular Biosciences, University of Queensland) and Dr Nick Huntington (Walter and Eliza Hall Institute). 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 and many prizes are on offer with registration/abstract submission details to come!

QUEENSLAND

SUMAIRA Z. HASNAIN



SAVE THE DATE: 10th-14th July 2017 - Advanced Immunology Course

The University

of Queensland-Diamantina Institute has been running a highly successful advanced immunology course for the past three years. This year ASI will be providing 2 x ASI memberships to the best students at this course. Registrations and applications will be opening soon: www.di.uq.edu. au/advanced-immunology-course

SAVE THE DATE: 27th November - 1st December 2017 – ASI 46th Annual Scientific Meeting

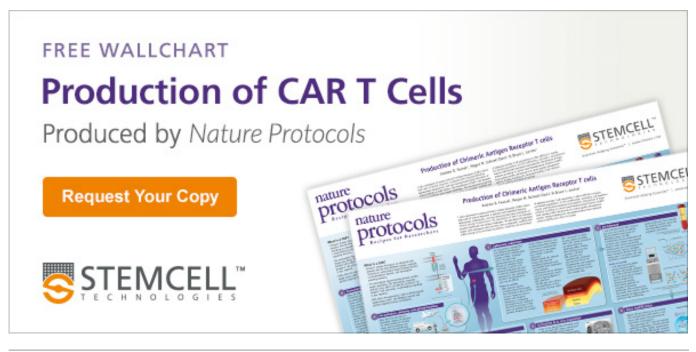
The organization of this year annual scientific meeting to be held at the Brisbane Convention and Exhibition Centre is well underway. We are delighted to confirm several high-calibre international and national speakers including, Prof. Judith Allen, University of Manchester and Prof. Richard Blumberg, Harvard University). The conference committee (led by A/ Prof. Antje Blumenthal and A/ Prof. Kristen Radford) are looking forward to welcoming everyone in Brisbane. www.asi2017.org

VISITING SPEAKER PROGRAM QUEENSLAND

In February 2017, we hosted Prof. Nancy Haigwood (Oregon Health and Science University, Portland, Oregon, USA) at the Translational Research Institute, Brisbane. Prof. Haigwood also visited the main campus of The University of Queensland and QIMR Berghofer Medical Research Institute. Thank you to Prof. Ranjeny Thomas, Prof. Mark Kendall, Prof. Riccardo Dolcetti, Dr Ashraful Haque, Prof. Michael McGuckin and Dr David Harrich for hosting Prof. Haigwood during her visit.

JOIN THE QUEENSLAND ASI COMMITTEE

If you are an early career researcher and interested in joining the Queensland ASI committee please contact the Qld ASI Councillor <u>sumaira.hasnain@</u> <u>mater.uq.edu.au</u>



TRAVEL REPORTS

KEYSTONE SYMPOSIUM TUMOR IMMUNOLOGY

Whistler, Canada

KIRSTEN WARD HARTSTONGE, University of Otago, New Zealand

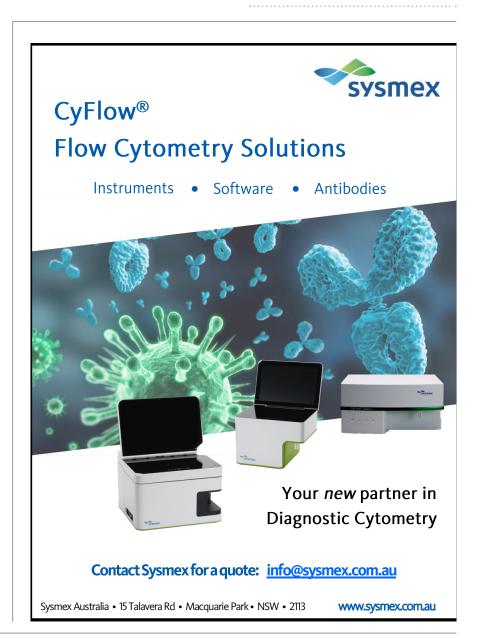
In March, I attended the Keystone conference: Tumour Immunology, in Whistler. The conference was filled with inspiring presentations and conversations (plus some great skiing). Garry Nolan presented some work from his lab exhibiting how epigenetic analysis can be incorporated into mass cytometry protocols for staining paraffin embedded tissue. This technique allows simultaneous detection of over 50 markers on human tissue. After the conference I travelled to San Francisco where I was lucky enough to visit Michael Angelo who collaborates with Nolan and designed the microscope that measures the immune infiltrates in paraffin embedded tissue.

I also visited Megan Levings' laboratory at the University of British Columbia, Vancouver. I spent the day with the Levings laboratory where I was able to meet all the members of the lab and learn about their groundbreaking research on human Tregs. This was a great experience as I was able to see how research is undertaken internationally and was able to discuss my work on Tregs in colorectal cancer with experts in the field.

As I am in my final year of my PhD, this trip was extremely valuable. I was able to visit laboratories where I am currently discussing Postdoctoral options. Meeting all the members of these labs was important to me, as I was able to get an insight into what my Postdoc experience might be like. I would not have been able to attend a conference so far away from New Zealand without the generous funding from the Australasian Society for Immunology Travel Award.



KIRSTEN SKIING IN WHISTLER BETWEEN CONFERENCE PRESENTATIONS.



KEYSTONE SYMPOSIUM ON VIRAL IMMUNITY New Mexico, USA, February 2017

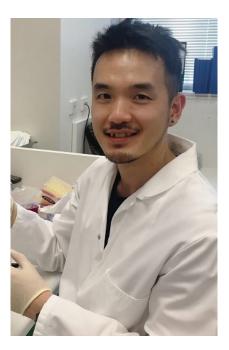
YEW ANN LEONG, Monash University, Victoria

As a recipient of an ASI postgraduate travel award, I was able to attend a Keystone Symposium on viral immunity that was held in New Mexico, USA for five days in February 2017. Unlike other conferences, Keystone Symposia consist of meetings that focus on highly specialized research fields. The meeting was relatively small with around 200 attendees, and there was only one session per day without any concurrent sessions. This was a unique meeting experience for me to learn cutting-edge advances in specialized areas, and to participate in the intense discussions among the experts in the field. Fortunately, with very limited availability, my abstract was selected for an Oral Presentation in a workshop that focused on adaptive immune response to viral infection. I was also awarded with one of the five scholarships provided by the Keystone Symposia organizers to subsidise part of the registration fee and lodging cost. Together with the support from the ASI postgraduate travel award, I was able to afford the expensive travel from Melbourne to New Mexico to disseminate my work to an audience who are highly regarded in the field of viral immunity.

The symposium was organized by Akiko Iwasaki, Daniel B Stetson and E John Wherry. It was extremely well organized and each session was put together in a well thought out and coherent manner, which facilitated constructive discussions at the end of each presentation and session. The discussions continued later on during the poster sessions as most oral presenters were also required to give poster presentations. The symposium covered a very diverse range of research on immune response to viral infections including innate and adaptive immunity, with many novel discoveries and presentation of unpublished data. The symposium also included very current issues such as Zika virus infection, as well as cutting-edge advancements on long-term problems such as the development of a universal influenza vaccine and cures for chronic viral infections. The symposium also showcased novel research techniques and technologies for in vitro research, in vivo animal models and human clinical studies. I highly recommend researchers from Australia to attend Keystone Symposia that are relevant to their research fields.

My oral presentation during the symposium was scheduled in the session focused on chronic infections. I presented my recently published original article in Nature Immunology involving a new subset of CD8+ T cells that target the HIV and Epstein-Barr virus (EBV) infection in B cell follicles. My presentation was well received and stimulated interest and discussion among the audience. Most importantly, because of

Unlike other conferences, Keystone Symposia consist of meetings that focus on highly specialized research fields.



YEW ANN LEONG

my presentation, I have found researchers who are willing to collaborate to further investigate this area. I have achieved two most important purposes in attending a meeting – first, to disseminate and receive feedback on my previous findings, and second, to foster collaboration for further studies.

In addition to attending the symposium, I also met with my prospective postdoctorate supervisor at the University of California, San Francisco. After an interview and hour-long discussion, he has agreed to take me on as a postdoctoral fellow in his lab for the next three years to study the role of innate immunity on the modulation of obesity and metabolic diseases. This represents the transition of my research career to a higher ground and again, represents one of the most fruitful outcomes from this trip. These would be impossible without the support from the Australasian Society for Immunology and for that I am grateful for receiving the postgraduate travel award.

2017 FIMSA ADVANCED COURSE; 2017 International symposium on autoimmunity

27 – 29 April 2017, Beijing, China DELGERTSETSEG CHULUUNDORJ, Brain Research Laboratory, University of the Humanities, Mongolia HUI-FERN KOAY GODFREY, Laboratory, Peter Doherty Institute, Melbourne

JONATHAN CHEE, School of Biomedical Sciences, University of Western Australia, Perth



FIMSA TRAVEL AWARD CEREMONY: FERN (2ND FROM LEFT), JONATHAN (6TH FROM LEFT) AND DEGEE (8TH FROM LEFT)

We were delighted to receive FIMSA (Federation of Immunological Societies of Asia-Oceania) travel awards to attend their Advanced Immunology Course, and International Symposium on Autoimmunity, that took place in Beijing from the 27th to 29th April. The meeting was held at the renowned Peking Union Medical College Hospital in downtown Beijing, and we were honoured to represent ASI at this meeting.

Beijing is a city rich in history and culture that has evolved into a modern, bustling megacity. The meeting aptly reflected this, as we learnt not only the history and advances made in autoimmunity, but also the groundbreaking therapeutic approaches. At the Advanced Immunology Course, we heard from a panel of distinguished local and international speakers, including ASI's own Laura Mackay and Alan Baxter. The speakers showcased their respective research in autoimmune inflammation, thymic selection, tissue resident memory T cells, T

follicular helper cells, B regulatory cells, NK cells, macrophages, and cellular microparticles.

The International Symposium on Autoimmunity followed, with a focus on "Epigenomics and Beyond". The talks highlighted interplays between gene regulations, epigenetics, and metabolic control in the etiopathogenesis of autoimmune disorders such as SLE, RA, MS, and T1D. A recurring point was the sex-bias in most autoimmune disorders, and the substantial effort made into understanding the epigenetic mechanisms of this bias. The need for preclinical models that accurately reflect the bias and pathology of autoimmune diseases was also highlighted. The take home message was an important reiteration that autoimmunity is almost always a multifactorial disorder rather than simplistically driven by genetics, and this ultimately encouraged participants to think globally whilst focused on their respective immunological niches.

Apart from illustrating the advancement of scientific knowledge by the faculty in China, these conferences provided an eye-opening observation on how culture can influence the dynamics of scientific meetings. Discussions with the locals come with added layers of formality compared to what we have been accustomed to. We appreciated the impressive hospitality extended by the Chinese Society of Immunology (CSI), and learnt that CSI itself boasts over 9000 members, and one can only imagine that using FIMSA as a platform to facilitate exchange between the immunological societies of Asia-Oceania would mean bigger and better things for all its members. The CSI/FIMSA committee concluded the symposium with success and we all left looking forward to more fruitful meetings in the future.

We were also able to experience the extravagant capital city with highlights like the cuisine (Peking duck and other interesting tidbits (see photo), the Forbidden Palace, Tiananmen Square, and a hike on the Great Wall. We are honoured to receive this travel award, and would like to sincerely thank our supervisors, mentors, and our respective institutions. We also express our gratitude to ASI, CSI and FIMSA for the award and this opportunity. This award and unique experience makes us proud to be part of this wonderful community.



LAURA (LEFT) AND FERN (RIGHT), WITH FERN'S INTERESTING CHOICE OF SNACK

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In situ programming of leukaemia-specific T cells using synthetic DNA nanocarriers doi:10.1038/nnano.2017.57 EasySep™ Mouse CD8+ T Cell Isolation Kit

Influenza vaccines differentially regulate the interferon response in human dendritic cell subsets doi: 10.1126/scitransImed.aaf9194. EasySep™ Human Monocyte Enrichment Kit without CD16 Depletion EasySep™ Human Pan-DC Pre-Enrichment Kit

Reactive oxygen species localization programs inflammation to clear microbes of different size doi: 10.1016/j.immuni.2017.02.013 EasySep™ Mouse Neutrophil Enrichment Kit EasySep™ Human Neutrophil Enrichment Kit

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Eraditcation of Tumors through Simultaenous Ablation of CD276/B7-H3-Positive Tumor Cells and Tumor Vasculature. Seaman S et al, Cancer Cell, April 2017

http://dx.doi.org/10.1016/j.ccell.2017.03.005

Anti-CD276 antibody Anti-P Glycoprotein antibody Rabbit IgG, Isotype Control

Loss of the Arp2/3 complex component ARPC1B causes platelet abnormalities and predisposes to inflammatory disease. Kahr WH et al Nature Communications, April 2017

http://dx.doi.org/10.1038/ncomms14816

Anti-Arp2 antibody and Anti-Arp3 antibody

Chemotherapy drugs induce pyroptosis through caspase-3 cleavage of a Gasdermin. Wang et al, Nature May 2017 http://dx.doi.org/10.1038/nature22393

Anti-Gasdermin-D antibody

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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.

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