Australian and New Zealand
SOCIETY FOR IMMUNOLOGY INC.

ASI NEWS

DECEMBER 2020

P6 **2019 DERRICK ROWLEY MEDALLIST**

MEET SUSANNE HEINZEL

CONTACT US

AUSTRALIAN AND NEW ZEALAND SOCIETY FOR IMMUNOLOGY INC.

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BEST LIMERICK COMPETITION – WHO IS WORTHY OF THE BURSA?

Top limericks to the theme of "COVID"

FAREWELL 2020, WE'RE MOVING ON.

ANGELICA LAU, Outgoing Newsletter Editor
newsletter@immunology.org.au

What a year it has been! 2020 has been a year full of changes and uncertainties but ASI continues to find new ways to support our members who have been hit hard by this. Make sure to check out these grants on the awards page and make use of these resources!

In this edition, I am excited to present our Derrick Rowley Medallist, *Susanne Heinzel*, who has led an incredible journey as a role model woman in science and leadership – a great read for students and ECRs. I am also pleased to showcase some of the successes from our members and SIGs organisers as they soared through these challenging times. It is amazing how much we have progressed as a society and adapted to a new way of communication, a virtual lifestyle that is surely here to stay. Although there are still uncertain times ahead of us, I hope that bringing these good news from your fellow colleagues will encourage and inspire you as we move onto 2021.

Although there are still uncertain times ahead of us, I hope that bringing these good news from your fellow colleagues will encourage and inspire you as we move onto 2021.

We have been receiving entries for the *Best Limerick* competition, a much-loved tradition at ASI annual meetings (which clearly isn't happening this year). Thank you to those who submitted their best limericks. I am pleased to say that the ASI spirit was not lost because of COVID. The limerick competition was fierce as ever, with a few too many glasses of wine clearly involved in their production. It was very hard to pick a clear winner but instead we have selected the top limericks which we think might just be worthy of the Bursa! So be sure to check out the Best Limerick winners section and have a good laugh!

Finally, serving as your editor in ASI had been a rewarding journey. I am delighted to be passing this role onto your incoming editor Deborah Burnett who will surely have lots of exciting news to bring to you!

Finally, serving as your newsletter editor in ASI had been a rewarding journey. I am delighted to be passing this role onto your incoming editor Deborah Burnett who will surely have lots of exciting in news to bring to you!

Wishing you all the very best - farewell! ■

PRESIDENT'S COLUMN

JOHN FRASER, ASI President
president@immunology.org.au

It is fair to say that our society has been seriously tested through 2020, and from a personal perspective, I had no idea that I would be serving as President through such a challenging time. Covid-19 has temporarily halted all those face-to-face events that we are accustomed to and so much enjoy, challenged the purpose of our society. I am pleased to say however that ASI as a society remains stronger than ever and I want to thank everyone who have continued to support the society and our activities through their membership and participation in our on-line events. My warmest thanks go to my colleagues on the ASI Executive – Tyani Chan, Asolina Braun, Connie Jackaman and Steve Turner, who have worked tirelessly behind the scenes to keep ASI going through tough times, and think of new on-line events to keep ASI relevant- you're a great team!

My warmest thanks go to my colleagues on the ASI Executive – Tyani Chan, Asolina Braun, Connie Jackaman and Steve Turner, who have worked tirelessly behind the scenes to keep ASI going through tough times, and think of new on-line events to keep ASI relevant- you're a great team!

The annual conferences scheduled for both Auckland (2020) and Melbourne (2021) have been postponed and plans are to hold Melbourne in 2022 followed by Auckland in 2023. This was the most prudent decision given that it is unlikely there will be open international travel well into next year, and even an NZ – Australia bubble still seems a long way off, but perhaps by the middle of next year when both countries can show they clearly have community transmission well controlled, will we be able to travel across the ditch without quarantine. We have continued will all our awards, despite travel being a limiting factor, and responded to a call at last years AGM to increase the support for member speakers to attend our annual conference.

Congratulations to our Vic members who have had to endure the hardship of what is probably the longest total lockdown in the world - but have come through the other side with renewed freedom. My hat goes off to you all for your fantastic perseverance in getting your community transmissions under control.

On a positive note, I don't think anyone would disagree that immunology has been more relevant, and I know many of our members have been closely involved in efforts along with our infectious disease and epidemiologist colleagues to steer the right course in our respective countries. From a New Zealand perspective, we are blessed with a science friendly government that has listened closely to advice and acted upon it – even if politically unpalatable. The decision by NZ to pre-order the Pfizer BioNTech mRNA vaccine even before clinical trials were complete, was a bold move and driven very much by the scientific advice about the expected success of the new but unproven mRNA vaccines.

As I pass the presidency over to Steve Turner, I want to take this opportunity to say how much I have enjoyed the role over the past two years, despite the challenges wrought by this little piece of RNA, and thank all the members of ASI for your patience and perseverance through 2020. Like me, I am sure you all look forward to a near future when we will be meeting together and can look back on this time as a conquered challenge. We have learned a lot from this pandemic and hopefully are much better prepared.

Ka kite an , m te w .

Kia kaha

See you all again, we will meet soon

Stay strong. ■

MESSAGE FROM EXEC TEAM: "BE GONE 2020!"

CONNIE JACKAMAN, ASI Honorary Secretary
secretary@immunology.org.au

Finally made it to the end of the year: be gone 2020!

The end of the year also means that we have a changeover in councillors. Many thanks to outgoing councillors Helen McGuire (NSW branch councillor and Special Interest Group co-ordinator), Stuart Mannering (VSP co-ordinator) and Angelica Lau (Newsletter editor). Welcome to the incoming councillors and thanks for putting your hand up in what has been a very challenging year: Emma Grant (Deputy Treasurer), Angelica Lau (NSW branch councillor), Fernando Guimaraes (Special Interest Group co-ordinator), Martin Davey (VSP co-ordinator) and Debbie Burnett (Newsletter editor).

In any normal year ASI provides a number of different travel awards. However, this was not a normal year and as the pandemic evolved it became apparent that travel was highly unlikely. We initially delayed the first round of the ITAs and then as the year progressed converted the ITA funds towards new career advancement awards. These awards were designed with a broader scope/flexibility to apply for support as needed and assist members at a critical point in their career (similar to the Jared Purton award). Some *examples* included:

We initially delayed the first round of the ITAs and then as the year progressed converted the ITA funds towards new career advancement awards.

- PhD gap funding,
- repatriation flights,
- childcare support,
- publication costs and
- support to buy software or reagents which were otherwise not funded.

Other new initiatives this year also included a new Education Award (supported by the Education SIG), new Public Engagement award, the ASI ECR Support Network and in response to the pandemic students will receive free membership in 2021. Please keep an eye out for announcements for the ASI awards schedule in 2021 as we will keep a close eye on how things evolve and keep everyone posted.

Finally, ASI is continuing to welcome applications for the *Special Initiatives Fund* which are open all year and assessed every quarter. We would love to hear from you if you have a great idea on how to promote the discipline of immunology and support members. As always, we welcome any feedback on any ASI awards or programs as we move into 2021. Hopefully 2021 is better than 2020! ■

Please keep an eye out for announcements for the ASI awards schedule in 2021

2019 DERRICK ROWLEY MEDALLIST: MEET SUSANNE HEINZEL

CLAUDINE BONDER & PHIL HODGKIN

JOHN FRASER CURRENT ASI PRESIDENT (RIGHT) AND SUSANNE HEINZEL (RIGHT), DERRICK ROWLEY MEDALLIST 2019

For nearly fifty years, ASI has recognised and celebrated the scientific achievements of its members and acknowledged those who have made extraordinary contributions to the Society. Since 2005, the Derrick Rowley Medal has been awarded by ASI Council to those who have demonstrated years of outstanding service to the ASI and the discipline of Immunology. In 2019, Dr Suzanne Heinzel became the 12th recipient of this award and in this issue, we share with you some insight into Su's journey in science that led her to Australia, her contributions to ASI and the legacy she has created in the Society.

Since 2005, the Derrick Rowley Medal has been awarded by ASI Council to those who have demonstrated years of outstanding service to the ASI and the discipline of Immunology.

Claudine's story: Louis Pasteur once wrote "Science knows no country, because knowledge belongs to humanity and is the torch which illuminates the world" and I'll go further to add that it is the Aussie charm and scientific rigour that attracts enthusiastic and ambitious worldly immunologists Down Under. I also like to think that I can take some credit for Su's adoption of Australia and her lasting effect on ASI. We met by chance at the 10th International Congress of Immunology in New Delhi, India; where I'm sure my Aussie charm, youthful enthusiasm for immunologyand Bollywood moves on the dance floor caught Su's attention (and likely laughter). Su was attending the ICI meeting as a final year PhD student at the Eberhard-Karls University of Tübingen (Baden-Wurttemberg, Germany) where she was studying T cells and tumour specific MHC class II restricted responses with Graham Pawelec in the Faculty of Biology. Embracing her University motto of 'Attempto' (I dare), she was no stranger to international adventure and at ICI Su sought potential post-doctoral positions with congress delegates.

With five publications from her PhD, and on a promise of more Aussie charm, sunshine, humour and post-doctoral opportunities in world-leading immunology, newly graduated Dr Susanne Heinzel and her windsurfing enthusiast partner Jan (a physicist graduate, also from the University of Tübingen) moved to Adelaide, South Australia.

After ICI in New Delhi, Su and I explored India together in rustic

CLAUDINE BONDER (LEFT) & SUSANNE HEINZEL (RIGHT)

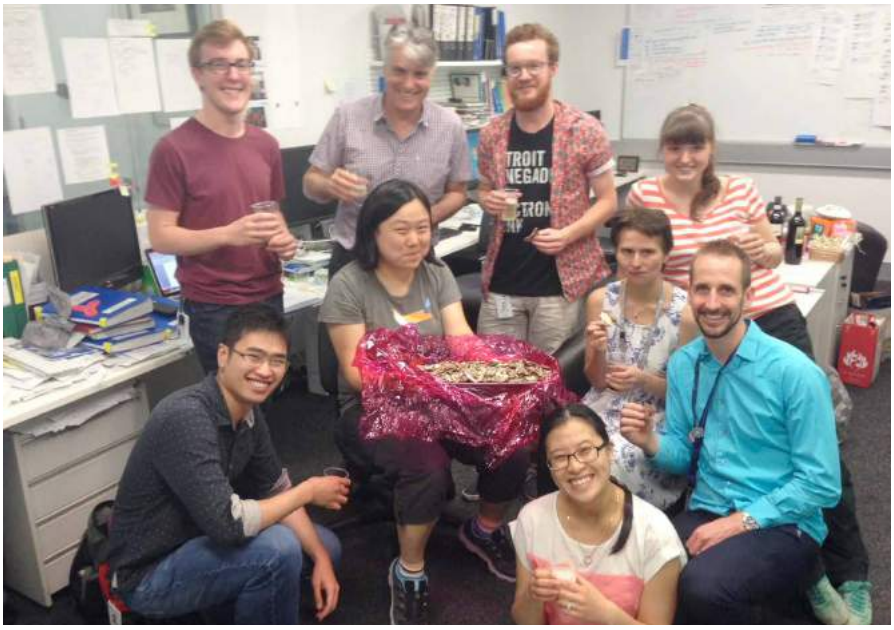
SUSANNE ON HER PHD GRADUATION DAY BACK IN 2000.

SU, ADELAIDE TO MELBOURNE.

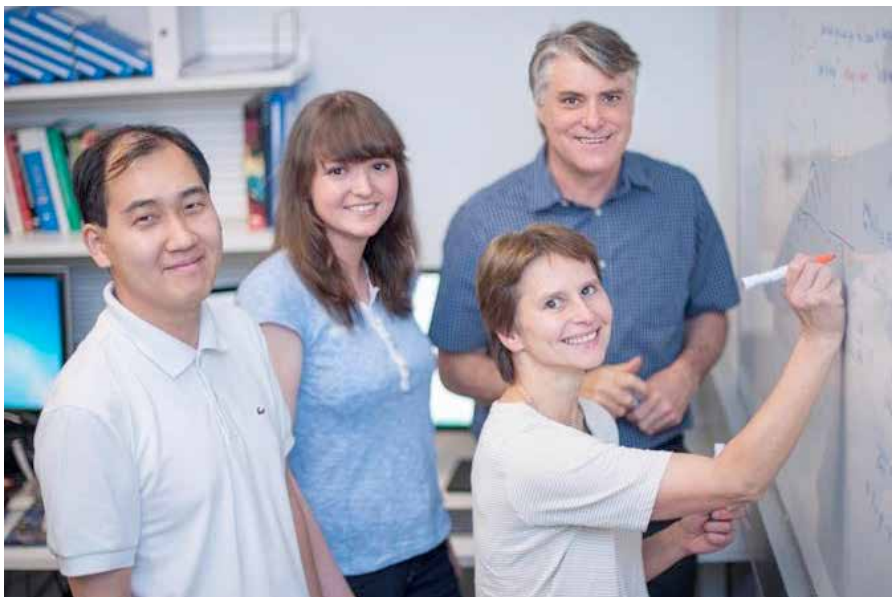
trains and death-defying tuk-tuks and bonded over beers, banana lassis, roti, wayward taxi drivers and a passion for science; an experience that has grounded our friendship for over twenty years. With five publications from her PhD, and on a promise of more Aussie charm, sunshine, humour and post-doctoral opportunities in world-leading immunology, newly graduated Dr Susanne Heinzel and her windsurfing enthusiast partner Jan (a physicist graduate, also from the University of Tübingen) moved to Adelaide, South Australia.

From 2000 to 2010, Su extended her training and knowledge in melanoma and T cell immunology with Adelaide based clinician scientists Michael Brown, Brendon Coventry and, took on clinical trials in a company Vaxine with Nik Petrovsky. Early on Su volunteered to promote local and national activities and successfully nominated for ASI state councillor for SA/NT in 2002. In this leadership role, Su drew on her many abilities and did an outstanding and memorable job, as she merged her passion for advancing immunology, with strong organisation skills to promote and enhance SA Immunology. While councillor, Su discovered an affinity for conference organisation when she successfully co-chaired the organising committee of the 2004 Annual scientific meeting in Adelaide. This was followed with another memorable initiative, inspired by an appreciation of good wine. I was also keen to bring good science and good wine together, so together, Su and I established a popular local ASI retreat. The inaugural Adelaide Immunology Retreat (AIR) was held in the town of Tanunda in the beautiful Barossa Valley in September 2005. This meeting was designed for students, as well as young and established scientists to get to know each other and the science being

she merged her passion for advancing immunology, with strong organisation skills to promote and enhance SA Immunology. While councillor, Su discovered an affinity for conference organisation when she successfully co-chaired the organising committee of the 2004 Annual scientific meeting in Adelaide.



THE SU-HODGKIN LAB



ANDREY KAN, JULIA MACHINGO, SUSANNE HEINZEL & PHIL HODGKIN

undertaken in Adelaide. This two-day, remote location event is now 15 years strong, has hosted many leading Australian immunologists and is a legacy of Su's drive for collegial scientific endeavours.

Having grown to love the work of the ASI and wanting to contribute even more, in 2009 Su nominated for the executive position of Honorary Secretary and was again elected for the 3 year term. This key position saw her manage the many activities of ASI across Australia and New Zealand. In 2010, just as the two new giant pandas began to call Adelaide home, Su moved to Melbourne to further her career at the Walter and Eliza Hall Institute of Medical Research. While there, her love affair with ASI has only gone from strength to strength as you will see in Phil's notes below. Through all these extraordinary contributions to ASI, Su has continued her friendship with her original SA 'crew' and shared so much as we grow and foster our wonderful discipline. I'm so pleased Su has made her home in Australia and brought her passion and formidable skills to our shores. We are all better off as a result.

Su is a fierce mentor and a large and growing number of students benefit from her expertise and guidance

Phil's story: Societies need dedicated members to thrive and make a difference, and Su Heinzel has made a massive difference to the ASI. As is clear from Claudine's description of her SA period, Su has continually put up her hand to serve the Society. That trend continued into her 'Melbourne period' from 2010 to now. I have been fortunate to have a front row seat to her dedication and contributions. Su has a senior position in our lab and we work closely together on studying B and T cell signal processing and model building. The collaboration is one of great importance to me and we have proudly succeeded in some excellent publications (e.g. Science, Nat Immunol, Nat Commun) and grants together. Su is a fierce mentor and a large and growing number of students benefit from her expertise and guidance. I've included some pictures of our lab time together to give you a flavour.

I doubt anyone can work with Su and not be impressed by her love of immunology, her selfless dedication to the discipline and her generous and lasting contributions. She is an inspiration to me and many others around Australia and New Zealand.

When Su arrived at WEHI I knew she had a passion for ASI. She was after all, Honorary secretary at the time. Not long after that role ended, she was approached by a delegation to nominate for President. I remember she ran

:SUSANNE ASI PAST PRESIDENT 2018-19.

SU AT THE 2019 ASI LAFFERTY DEBATE

PHIL HODGKIN, DAVID TARLINTON, SUSANNE HEINZEL & HANS-MARTIN JACK AT THE DGFL-ASI JOINT MEETING

this by her colleagues, including me, sheepishly, worried about the time commitment and the implications. Without exception there was no cause for concern, it all seemed so destined! Not surprisingly, Su, by now universally popular and respected, was duly elected. Su was overwhelmed by this vote of confidence and a bit daunted but, of course, she proved an outstanding President. Su implemented many far-sighted policies. Su's legacy included creation of an abundance of new travel awards, initiatives to support women travelling to meetings and successful completion of the Wiley contract for our journal ICB. This latter will have a lasting financial impact on the Society. During her tenure, Su also managed the deft Society name change from Australasian, always confusing, to the much more appropriate Australian and New Zealand Society. Su has also initiated and launched the ASI Advanced Immunology School (ASI-AIS), first held in 2019 in Rawson, Victoria. Su's vision was for the ASI-AIS to provide advanced training for immunology focused Early Career Researchers in a friendly and supportive environment and the success of this inaugural event has seen it scheduled for years to come. Other highlights include helping foster links with the strong German Society for Immunology and combining for some wonderful joint meetings. Just to round out filling all possible roles ASI has to offer, from 2012 to 2016 Su provided formal oversight to the ASI annual meetings and was the elected member of the General Assembly of the IUIS. I doubt anyone can work with Su and not be impressed by her love of immunology, her selfless dedication to the discipline and her generous and lasting contributions. She is an inspiration to me and many others around Australia and New Zealand.

For us this 'best' is undoubtedly the affirming of our extraordinary community of like-minded scientists, the endearing and steadfast friendships that we make along our scientific journey and therein the embodiment of collegiality that holds us together.

When Angelica asked us for our thoughts on Su, we couldn't avoid noting that this is an extraordinary year that reminded us of the words of 1986 Nobel prize winner Rita Levi-Montalcini who said: "Don't fear difficult moments. The best comes from them".

For us this 'best' is undoubtedly the affirming of our extraordinary community of like-minded scientists, the endearing and steadfast friendships that we make along our scientific journey and therein the embodiment of collegiality that holds us together. This, for us, exemplifies the Australian and New Zealand Society of Immunology (ASI) which has a long history of embracing experimental and clinical immunology underpinned by an extraordinary network of people who facilitate the exchange of information that advances immunology worldwide and has always fostered collaborations and friendships.

To us, Su Heinzel exemplifies this commitment and exemplary service. Undoubtedly, Su has made extraordinary and enduring contributions to ASI and is a worthy recipient of the Derrick Rowley Medal for her years of outstanding service to ASI and the discipline of Immunology; and, the best bit - she's not done yet! ■

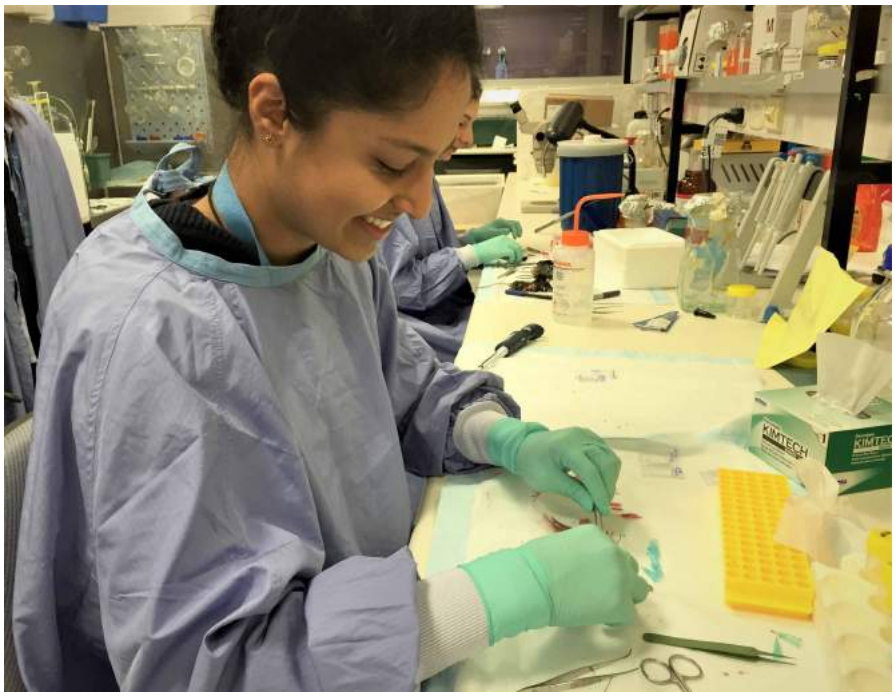
PRIZEWINNER FOR 2020 ROYAL SOCIETY OF VICTORIA YOUNG SCIENTIST RESEARCH IN BIOMEDICAL AND HEALTH SCIENCES

LAKSHANIE C. WICKRAMASINGHE
Department of Immunology and Pathology, Central Clinical School, Alfred Research Alliance, Monash University
Lakshanie.Wickramasinghe@monash.edu

Supervisor: A/Prof. Margaret Hibbs

Twitter: @LakshanieW;
LinkedIN: Lakshanie Wickramashinghe

I recently completed my PhD in the Department of Immunology and Pathology, at the Central Clinical School, Monash University. During my doctoral studies, the major research focus was on investigating immune mechanisms underlying a severe neonatal respiratory condition, Bronchopulmonary Dysplasia, in efforts to identify better disease targets for therapeutic intervention. I recently published some of this data, assessing the interplay between BPD and a retinal condition known as retinopathy of prematurity (ROP) which impacts on preterm infants concurrently with BPD. *[Wickramasinghe LC et al. Lung and Eye Disease Develop*



During my doctoral studies, the major research focus was on investigating immune mechanisms underlying a severe neonatal respiratory condition, Bronchopulmonary Dysplasia, in efforts to identify better disease targets for therapeutic intervention.

Concurrently in Supplemental Oxygen-Exposed Neonatal Mice. Am J Pathol. 2020 Sep;190(9):1801-1812. PMID: 32526165. DOI: 10.1016/j.ajpath.2020.05.016].

I also feel strongly about the responsibility as a medical researcher to effectively

I have strived to communicate my research where possible, leading to several achievements such as the opportunity to present my PhD research on the same platform as world experts in the respiratory field,

communicate research across different platforms. I am continuously inspired by passionate scientists such as Dr. Kylie Quinn, Dr. Jessica Borger, Dr. Catriona Ngyugen-Robertson and Dr. Xavier Sng, who also value science communication and can eloquently explain complex immunological mechanisms without diminishing its importance. During my PhD, I have strived to communicate my research where possible, leading to several achievements such as the opportunity to present my PhD research on the same platform as world experts in the respiratory field, as a speaker at the European Respiratory Society (ERS) Annual Congress in Spain, one of the largest, global conference in respiratory medicine.

In an attempt to 'demystify' public perception of what a scientist does and to connect the public to medical research taking place around the world, I interview researchers for the American Thoracic Society 'Ask the Scientist' podcasts series. Feel free to listen in – here!

Being a member of the Leukocyte Signalling Laboratory, which has expertise in the role of signalling pathways in adult respiratory and autoimmune diseases, means I get an interesting outlook on my own neonatal research by understanding other immunological diseases. My supervisors, A/Prof. Margaret Hibbs and Dr. Evelyn Tsantikos support my research by sharing their knowledge, providing research independence to test new ideas and experimental techniques and promoting discussion which allows for great brainstorming. Another key figure who must be mentioned is A/Prof Peter van Wijngaarden who is a close collaborator on the neonatal project and has provided invaluable clinical and experimental insight into this work over the years.

I collaborate with fantastic respiratory groups, including the Respiratory Immunology Laboratory lead by Prof. Benjamin Marsland who invited me to collaborate on a review on the role of the lung and gut microbiotas in respiratory health and disease. [Wypych TP, Wickramasinghe LC, Marsland BJ. The influence of the microbiome on respiratory health. Nature Immunology. 2019 Oct; 20(10):1279-90. PMID: 31501577. DOI:https://doi.org/10.1038/s41590-019-0451-9]. Dr. Atul Malhotra from the Monash Children's Hospital is another fantastic collaborator who

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provides an essential perspective of how my research outcomes align with the needs of the neonatal patients in the NICU.

Bronchopulmonary Dysplasia is severe neonatal condition which affects ~75% of extremely premature babies receiving respiratory support. Recently, we

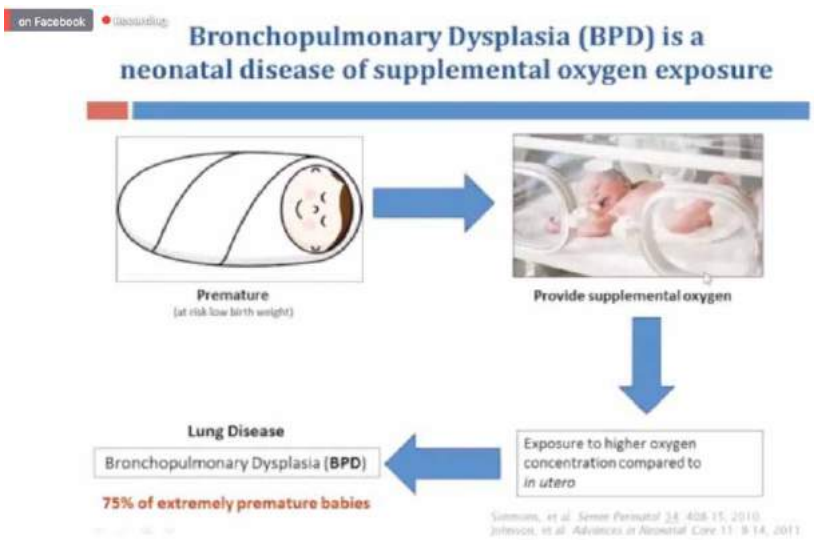


PHOTO FROM THE LIVE FACEBOOK RECORDING OF LAKSHANIE'S PRESENTATION OF HER PHD RESEARCH ON THE NEONATAL RESPIRATORY CONDITION, BRONCHOPULMONARY DYSPLASIA, DURING THE YOUNG SCIENTISTS RESEARCH PRIZE EVENING ON AUGUST 19TH 2020.

have found that an important immune cell growth factor, G-CSF, is produced in excess and is toxic, causing irreparable structural and functional damage to the developing lung. Our findings suggest targeting G-CSF in particular groups of premature infants may be of therapeutic value. These are exciting findings that we hope may lead to a new treatment for this neonatal lung disease that currently has a poor outcome with life-long debilitating consequences.

I was invited to participate in a 60 second video explaining my research on G-CSF for the Monash Visualise Your Thesis Competition, which might be of interest for anyone looking for a short, science-bite of this research. [https://bridges.monash.edu/articles/presentation/G-CSF_A_new_target_to_prevent_neonatal_lung_disease/12662528]

I hope to be able to continue contributing to medical research. I am currently exploring postdoctoral positions in Australia to advance my training as a scientist and to learn new skills and techniques, but also to gain exposure to different ways of thinking. I enjoy meeting researchers across diverse fields and being able to exchange ideas about our respective research areas. I am eager for opportunities to present my research at Universities and Medical Research Institutes across Australia.

I am very proud to have represented my fellow immunologists and ASI at the YSRP. Being inducted into the Royal Society of Victoria as a member provides me with an exclusive opportunity to participate in the Society's programs and access their professional networks for mentoring and collaboration.

I am very proud to have represented my fellow immunologists and ASI at the YSRP. Being inducted into the Royal Society of Victoria as a member provides me with an exclusive opportunity to participate in the Society's programs and access their professional networks for mentoring and collaboration.

I also hope this achievement is not just a reflection on my achievements but on all early career researchers conducting fundamental research. This research is fundamental for a reason – it provides the building blocks for future discoveries and innovation, and I hope this provides some awareness of the importance of supporting our ECRs by keeping our research funded.

- Video of Lakshanie's Young Scientist Research Prize presentation [https://www.youtube.com/watch?v=vlD-widFeIE&feature=youtu.be]
- Highlights of Evening, Royal Society of Victoria, Young Scientist Research Prize [https://rsv.org.au/ysrp-2020/]
- Wickramasinghe, Lakshanie and Harris, Christopher – American Thoracic Society, Ask the Scientist Series - Snapshot into the Career and Lives of Respiratory Scientists from Around the World Ep.1 [Breathe Easy] ■

UPDATES FROM IMMUNOLOGY & CELL BIOLOGY

ANNE LA FLAMME, Editor-in-Chief,
Immunology & Cell Biology

anne.laflamme@vuw.ac.nz

I believe everyone will agree that 2020 has been a year of unexpected change in many respects. Yet, despite this ever-changing environment, ICB has continued to perform well and maintain a steady publication of high quality, international, immunological research. This continued performance is due to the dedication of our Editorial Team (Ian Parish, Justine Mintern, Jim Harris, Kate Lawlor, Ash Haque, Jessica Borger, and Catriona Nguyen-Robertson), our spectacular Editorial Office (Simone Farrer) and our contributing authors, many of which are from ASI. I wish to thank all of you for your dedication, creativity, perseverance, and hard work over the past year, and look forward to another fantastic year in 2021.

But I get ahead of myself. The time has come to look back and celebrate the achievements from 2020 for our authors and the journal. Let's start with the awards.

AWARDS

2019 ICB Publication of the Year:

I congratulate our winners of the ICB Publication prizes. For more details on these prizes and the winners, please read the editorial in this month's issue of ICB (here) and the original articles.

Chris and Bhama Parish ICB Publication of the Year Award: **Katharine J Goodall**

"Multiple receptors converge on H2 Q10 to regulate NK and γδT cell development" imcb.12222

Thermo Fisher Scientific Publication Award: **Shannon C David**

"Enhanced safety and immunogenicity of a pneumococcal surface antigen A mutant whole–cell inactivated pneumococcal vaccine" imcb.12257

Annual Top 10 research articles

Earlier this year, Immunology & Cell Biology published a virtual issue celebrating the top 10 research articles published between July 2018 and June 2019 (here). We have just selected our top 10 research articles from July 2019 to June 2020 and will showcase them in a new virtual issue in January 2021. The senior authors from three of these articles were highlighted for a more in-depth and personal discussion in the November Expert Panel Series. While you will need to wait until January 2021 for the full list of our top 10, I am pleased to announce the following research articles, which were part of our Fireside Chat series.

Earlier this year, Immunology & Cell Biology published a virtual issue celebrating the top 10 research articles published between July 2018 and June 2019. We have just selected our top 10 research articles from July 2019 to June 2020 and will showcase them in a new virtual issue in January 2021.

Weisan Chen discussed "Host CD8α+ and CD103+ dendritic cells prime transplant antigen-specific CD8+ T cells via cross-dressing" imcb.12342

Meredith O'Keeffe discussed "Daptomycin resistant Staphylococcus aureus clinical isolates are poorly sensed by dendritic cells" imcb.12295

David Tarlinton discussed "BAFF, IL-4 and IL-21 separably program germinal centre-like phenotype acquisition, BCL6 expression, proliferation and survival of CD40L-activated B cells in vitro" imcb.12283

STANDARD COVER

SPECIAL FEATURE COVER

My congratulations and thanks to Nyanbol Kuol, Prof Vasso Apostolopoulos, and A/Prof Kulmira Nurgali (Victoria University) for their image "Gutterfly" for our standard cover and Arnolda Jakovija (Garvan Institute) for her image of dendritic epidermal T cells for our Special Feature cover. Feast your eyes on our beautiful new covers!

Cover Image Competition

Each year, the ICB editorial team selects the top image from our Cover Image Competition to become our standard journal cover and a second image for our Special Features. The top design winner receives $500 and the Special Feature image, $200. Both winners also receive eternal glory and adulation. This year, we received 10 fabulous images from ASI members, and after much furious debate, selected two for our 2021 covers. My congratulations and thanks to Nyanbol Kuol, Prof Vasso Apostolopoulos, and A/Prof Kulmira Nurgali (Victoria University) for their image "Gutterfly" for our standard cover and Arnolda Jakovija (Garvan Institute) for her image of dendritic epidermal T cells for our Special Feature cover. Feast your eyes on our beautiful new covers!

Reviewer Awards:

As with all peer-reviewed journals, *ICB* relies on the expertise and generosity of the immunological community to maintain our high standards in publication. These expert reviewers devote numerous hours to our journal reviewing manuscripts and we would like to recognize and thank all of our reviewers for their support of ICB. In particular, I would like to acknowledge our top 3 Editorial Board members for their devoted efforts in peer-review during 2019 as well as the top 3 reviewers from 2019. They are:

Dr Lisa Connor (Victoria University of Wellington)

Dr Alexandra Corrbett (the Doherty Institute)

Dr Joanna Groom (Walter and Eliza Hall Institute)

Prof Eugene Ponomarev (University of Hong Kong)

Dr Elodie Segura (Institut Curie)

Prof Matthew Sweet (University of Queensland)

If you are interested in reviewing for *ICB*, please contact me with a detailed description of you area of expertise. We are always looking to excellent reviewers.

Measures of impact

For research journals, our goal is to publish work that interests our readers, supports the advancement of knowledge, and has impact. While the first two aspects are relatively straightforward to assess, impact is not so easy especially if the measure relates to the whole journal as opposed to the individual articles. There are two major databases that have developed systems to evaluate the impact of individual journals: Clarivate's Web of Science and Elsevier's Scopus. Each system looks at research impact differently and so looking at one measure alone may not tell the whole story. Instead it is important to look at many factors to understand how journals perform and whether they will promote *your* research. Here is a brief summary of these systems and their individual assessment categories. My thanks to Michelle Head, our Journal Publishing Manager, for providing this information.

Clarivate's Web of Science: The Web of Science was formerly operated by Thomson Reuters and still uses the same measures under Clarivate. This system is currently the most popular, having devised the Journal Impact Factor. However, there are other measures used by the Web of Science that are also worth

If you are interested in reviewing for ICB, please contact me with a detailed description of you area of expertise. We are always looking to excellent reviewers.

considering including journal ranking, Eigenfactor, Article Influence, and % self-citation.

- Impact Factor (IF) - The Journal IF is a measure of the frequency with which the "average article" in a journal has been cited in a particular year or period. This measure is by far the most popular one used, but because of the narrow period of measure, can fluctuate significantly especially for smaller journals like *ICB*. The IF is calculated by dividing the number of current year citations to the source items published in that journal during the previous two years. The IF calculation also only counts citations for a narrow type of sources.
- Journal ranking – Using the IF, journals will be ranked within a specific field. Because reviews commonly receive more citations than primary research articles, journals that specialise in publishing only reviews often have high IF and are highly ranked. This ranking is useful when looking at journals of a similar standard although it is important to note that each journal will have its own unique personality.
- Eigenfactor (EF) – Like the IF, EF is a ratio between the number of citations in a year and the number of journal articles in the past five years. Self-citations are not counted and there is a weighting applied to each reference.
- Article Influence (AI) – The AI is calculated by dividing the EF with the number of articles published in the journal. The mean AI score is 1.0, and so an AI of 1.1 or above signals an above average influence.
- % Self-citation – This measures the % of the citations in a journal of articles in that journal.

Elsevier's Scopus: This system is less used than Clarivate's IF although some measures are gaining traction. Some of the key assessment measures in Scopus are CiteScore, journal ranking, and % of citations.

- CiteScore – Like IF, this measure is a ratio between citations and eligible articles. However, this measure captures citation from eligible articles over a four-year period. Additionally, it captures citations from a wider range of sources including books and conference papers. Because of the longer period to capture citations and articles, this score tends to be more stable. It also reflects a more *sustained* level of citation.
- Journal ranking – Scopus will rank journals in each field by their CiteScore. How each field of research is divided is different from Clarivate's Web of Science and so ranking will be different.
- % of citations – This measure evaluates the % of articles that were cited. It is often a good measure of how visible the journal content is such that it is more likely to be cited.

Are you ready to submit your work? We welcome you to consider ICB.

You may be asking at this point how ICB is doing, and in answer, I have pulled together some of these measures (with commentary!). In short, we have been doing very well thanks to the amazing work by the whole Editorial Team, Editorial Board, ASI council, ASI members, our reviewers, and most importantly our authors, who have chosen to publish in *ICB*. Are *you* ready to submit your work? We welcome you to consider *ICB*. ■

Impact measure	ICB 2019	Comments
Impact factor	3.745	Looking over the past few years, ICB has fluctuated around an IF of 4.
Article influence	1.247	A healthy indicator
% Self-citation	4.36%	This number is below the average for other society journals, but a high % self-citation rate is not looked upon favorably.
CiteScore	7.6	ICB has done well in the CiteScore compared to other society journals such as Frontiers in Immunology (5.4).
Journal ranking	#37/180	In the field of Immunology and Allergy
% Cited	87%	ICB has one of the best % Cited of the society journals such as Journal of Immunology (85%) and Frontiers in Immunology (74%).

Immunology & Cell Biology

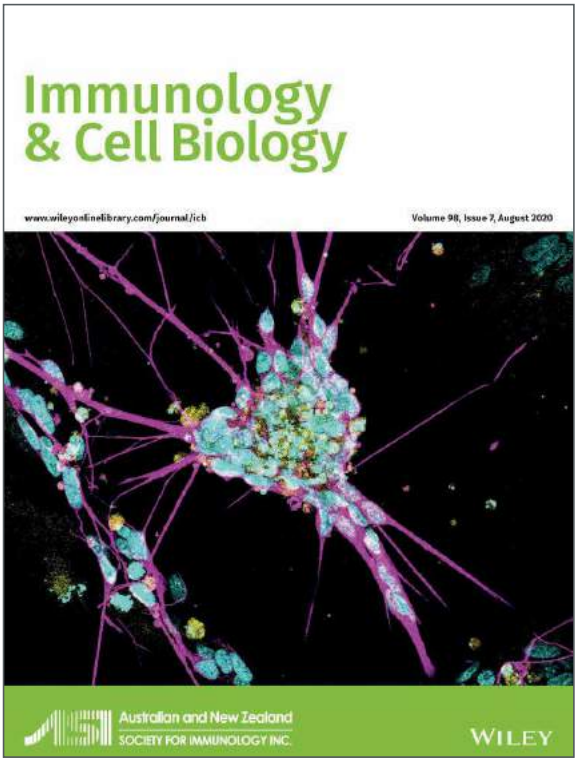
the flagship journal of the Australian and New Zealand Society for Immunology (ASI)

2019 Impact Factor 3.745

Immunology & Cell Biology is an international peer-reviewed journal, with a reputation built on more than 90 years of innovative publishing. Areas that are covered include but are not limited to:

- Cellular immunology
- Innate and adaptive immunity
- Immune responses to pathogens
- Tumour immunology
- Immunopathology
- Immunotherapy
- Immunogenetics
- Immunological studies in humans and model organisms

Submit your next manuscript to *Immunology & Cell Biology* and enjoy these benefits of publishing with Wiley



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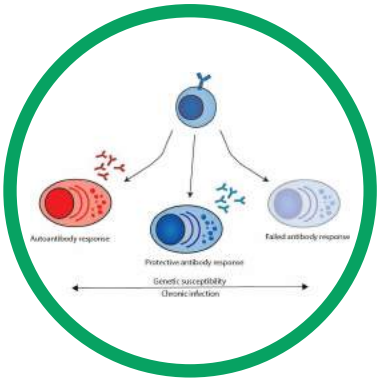
Immunology & Cell Biology

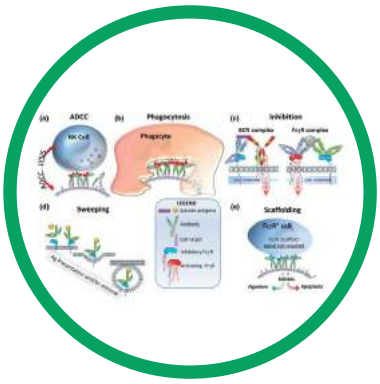
the flagship journal of the Australian
and New Zealand Society for Immunology (ASI)

Catch up on recent Special Features from *Immunology & Cell Biology*, including:



Special Feature on Regulation of humoral immunity in health and disease

The July 2020 issue of *Immunology & Cell Biology* contains a Special Feature on Regulation of humoral immunity in health and disease. The humoral immune response, that is, the production of antibodies by B cells, is a critical component of immunity to infection and underlies the protection provided by the majority of successful vaccines. Harnessing the power of B cells through immunisation has been one of the greatest medical advances for human health. However, we now understand that there are many ways in which B cell responses can go wrong – either failing to make a protective response or generating a response against self, resulting in autoimmunity. This Special Feature explores some of the latest advances in understanding B cell activation and differentiation, as well as how these processes can go wrong in disease. *Immunology & Cell Biology* sincerely thanks the coordinator of this Special Feature – Elissa Deenick– for her planning and input.



Special Feature on Multifaceted roles of antibody Fc effector functions

The April 2020 issue of *Immunology & Cell Biology* contains a Special Feature on Multifaceted roles of antibody Fc effector functions. Traditionally, antibody research has focused upon the recognition of antigens, in order to inhibit pathogens or block receptors. However, in recent years, there has been a growing appreciation for the critical value of the Fc region of antibodies. Despite the Fc region being designated as "constant," it is a surprisingly mutable region, regulated by genetics and post-translational modifications, which can result in structural changes that determine Fc functional capacity. This collection of Review articles covers the multifaceted functions of Fc antibodies for the control and protection against a range of infectious diseases including viral, parasitic and bacterial pathogens and examines the complexity behind the modulation of Fc effector functions in order to improve antibody-based vaccination or to enhance monoclonal antibody therapeutic interventions. However, these articles also emphasize the need for balanced antibody responses, caution against the pathogenic consequences of dysregulated Fc effector functions, while also highlighting the many unknowns and exciting avenues of research that are yet to be explored. *Immunology & Cell Biology* thanks the coordinator of this Special Feature – Amy Chung – for her planning and input.

Find out more by visiting the journal's homepage here:
www.wileyonlinelibrary.com/journal/icb
Or access it by scanning this code

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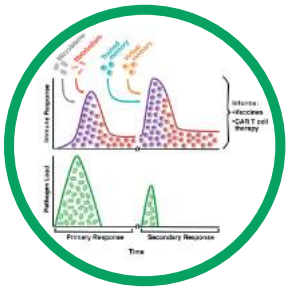
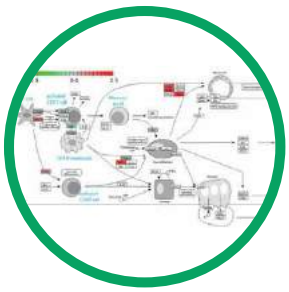
Immunology & Cell Biology

the flagship journal of the Australian
and New Zealand Society for Immunology (ASI)



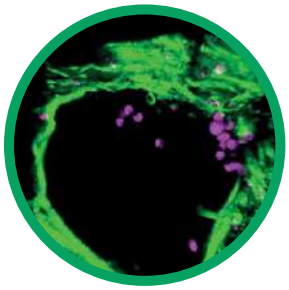
Special Feature on Immunological Memory

The August 2019 issue of *Immunology & Cell Biology* contains a Special Feature on Immunological Memory. The term "Immunological Memory" refers to the phenomenon that, after an initial exposure, immune mechanisms respond more vigorously to subsequent exposure to a pathogen. This is fundamental to the concept of immunity; it is a cornerstone many immune-based therapies and it has been documented in human history for thousands of years. However, there remains much to be learned about the basic biology underlying this phenomenon. This series of articles explores recent advances in immunological memory, by examining our current understanding of CD4 T cell memory differentiation pathways, evaluating the impact of the microbiome on developing B and T cell memory and exploring the role of metabolism in control of memory cell development. The articles also highlight how our understanding of the basic biology of immunological memory can be used to refine the design of immunotherapies, including vaccines and cell-based cancer therapies. Finally, several articles explore the broadening definition of immunological memory, with an exploration of trained immunity and virtual memory cells. *Immunology & Cell Biology* thanks the coordinators of this Special Feature – Joanna Kirman, Kylie Quinn and Robert Seder – for their planning and input.



Special Feature on Primary Immunodeficiencies

The April 2019 issue contains a Special Feature on Primary Immunodeficiencies. Inborn errors of immunity, or primary immunodeficiency disorders (PID), are monogenic diseases of the immune system. These affections give rise to complex diseases with a wide range of susceptibility to infections. The advent of next-generation sequencing has ushered in a Golden Age of PID research. The number of genes identified as responsible for PID has been rapidly rising, with a new PID gene identified on average every week for the past 10 years. Despite the recent explosion of knowledge, 90% of the estimated 3000 PID genes have yet to be studied. This Special Feature discusses recent advances in PID research, and what it means for our understanding of human immunology. *Immunology & Cell Biology* thanks the coordinators of this Special Feature – Adrian Liston & Stephanie Humblet-Baron – for their planning and input.



Special Feature on Macrophages in Tissue Repair

The March 2019 issue of Immunology & Cell Biology contains a Special Feature on Macrophages in tissue repair. In the late 18th century, Metchnikoff proposed the 'phagocytosis theory' in which he controversially placed the contribution of macrophages to organismal biology as being of even greater importance than their role in bactericidal defence. His view still prevails today, with macrophages appreciated as playing a fundamental role in the process of tissue repair. The present series of articles explores recent advances in this area, highlighting the importance of macrophage heterogeneity, plasticity, tissue specificity, activation status and cellular metabolism on the outcome of tissue repair. Finally, in a broader view of the repair process, the role of neutrophils as well as eicosanoids as supporting macrophage migration and polarisation is discussed. Immunology & Cell Biology thanks the coordinators of this Special Feature – Tiffany Bouchery and Nicola Harris – for their planning and input.

Find out more by visiting the journal's homepage here:
www.wileyonlinelibrary.com/journal/icb
Or access it by scanning this code

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DAY OF IMMUNOLOGY 2021

GABRIELA KHOURY,
Day of Immunology Coordinator
Gabriela.khoury@gmail.com

Love engaging with the public?

Would like to test out your science communication skills?

Or maybe you'd like to get some experience on a committee?

Our Day of Immunology celebrations are a fantastic way to get more involved in the ASI and share immunology with the public.

Each year we have a great mix of creative events including public lectures, laboratory tours, student workshops and museum exhibitions. If you are interested in contributing sign up to your local Day of Immunology 2021 committee via your local branch.

NB you must hold an individual ASI membership to participate. ■

For more information or if you have any questions contact Day of Immunology Coordinator Gabriela Khoury (gabriela.khoury@monash.edu).

If you are interested in contributing sign up to your local Day of Immunology 2021 committee via your local branch.

ASI ON SOCIALS: HIGHLIGHTS FROM THE TWITTERSPHERE!

GABRIELA KHOURY, Social Media
Gabriela.khoury@gmail.com

Enjoy our highlights from twitter!

I AM AN IMMUNOLOGIST AT NATIONAL SCIENCE WEEK.

During *National Science Week* we encouraged immunologists to post about their week, to give the public a window (or more accurately a #selfie) into what an immunologist does day to day. Thank you to everyone who contributed posts from their busy week! Here are some to enjoy!

The #IAmAnImmunologist hashtag is open all year round and is here to showcase immunologists to the public. If you feel like sharing your day on twitter use this hashtag and tag @ASImmunology to be retweeted. Remember to target the content to a lay audience.

Immunologists are a diverse group, we highly encourage everyone to participate and would love to hear from you all! ■

The #IAmAnImmunologist hashtag is open all year round and is here to showcase immunologists to the public. If you feel like sharing your day on twitter use this hashtag and tag @ASImmunology to be retweeted.

Taylah Bennett @TaylahJBennett · Aug 22

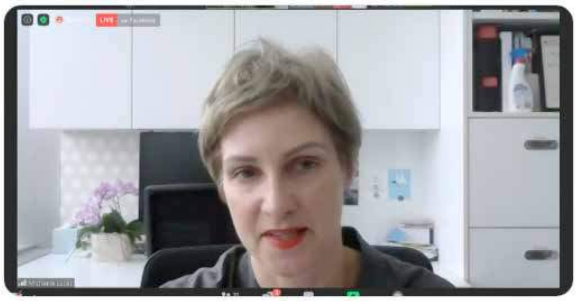
I love this selfie from a long but fun day in the lab last year taken by @TabiHussain #iamanimmunologist and during my PhD I'm investigating a molecular hurdle that killer T cells need to overcome to be activated and fight infection #scienceweek @Aus_ScienceWeek @ASImmunology

> **Australian and New Zealand Society for Immunology** @AS... · Aug 11
>
> 📢Share #immunology with the world during National Science Week this month! Share a selfie and in non-technical terms describe what you do as an immunologist. 🔬🧫🧪💉 Tag us and use #IAmAnImmunologist #Scienceweek. More info: ...
>
> Show this thread

3 18

Australian and New Zealand Society for Immunology @ASI... · Aug 21

We're live! Prof Michaela Lucas is discussing the genetics behind certain allergies like eczema, asthma and hayfever. #ASIFireside 🔥 #Allergies #IAmAnImmunologist #SciComm You can tune into the live stream on Facebook - facebook.com/watch/live/?v=...



3 7

Andy Flies @WildImmunity · Aug 15

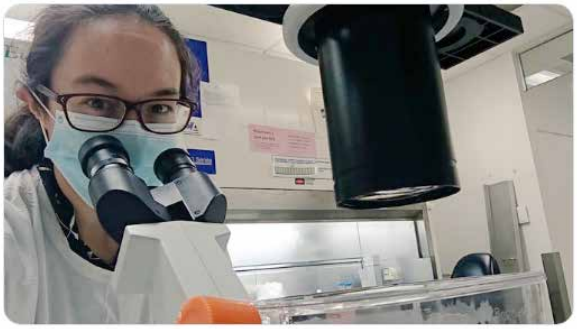
Explore Tasmania with Sci Art Walks start this week! #ScienceWeek
Get a preview Monday at 635am with @rykgoddard taking about
"In search of a Devil Facial Tumour Disease vaccine"
Cradle Mountain talk by Dr Andy Flies @WildImmunity
Music by Emily Sanzaro

> Explore Tasmania with Sci Art Walks
> Beaker Street is launching free immersive audio-walks across Tasmania. Tune in as Ryk Goddard shares his...
> abc.net.au

5 13

Catriona Vi Nguyen-Robertson @CatrionaNR · Aug 19

#IAmAnImmunologist I study immune cells that react to lipid (think fat/oil) molecules that come from bacteria (e.g. the #tuberculosis bacterium). Here, I'm keeping lab-grown cells healthy & alive. I'm also a #SciComm lecturer, making every day fun & different! Happy #ScienceWeek!



1 12 81

Kunal Pratap @kunalprats · Aug 19

I work on food allergies and I am trying to find better preventative or therapeutic options to tackle food allergies. 🔬🧫👨‍🔬

@ASImmunology @Aus_ScienceWeek
#immunology #IAmAnImmunologist #Scienceweek #SciComm

3 12

Nicola Principe @nicolaprincipe_ · Aug 21

#iamanimmunologist Instead of a selfie for @Aus_ScienceWeek @ASImmunology meet my team! Our research at @NCARD_research investigates changes in immune cells after #chemotherapy #immunotherapy and identify if they predict #cancer patient #outcomes @theimmunologist @Immuno_Beard

5 22

National Centre for Asbestos Related Diseases @N... · Aug 21

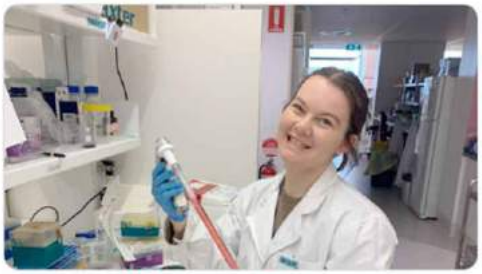
Replying to @NCARD_research

First up is Joel Kidman, whose research is looking to identify patterns in the immune system that define good responses to anti-cancer drugs #IAmAnImmunologist #ScienceWeek @ASImmunology

1 4 7

National Centre for Asbestos Related Diseases @N... · Aug 21

And @caitlintilsed who is looking at how we can make #chemotherapy more effective by activating the #immunesystem by using #immunotherapy @ASImmunology #IAmAnImmunologist #ScienceWeek #WomenInStem



1 7 6

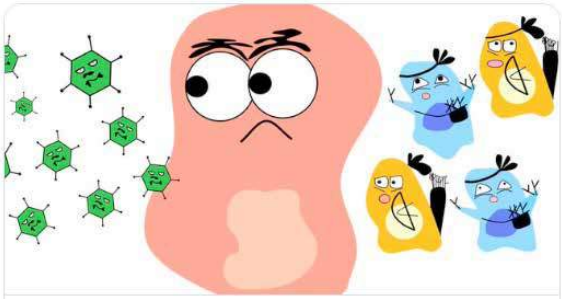
OTHER HIGHLIGHTS FROM TWITTER

Australian and New Zealand Society for Immunology @ASI... · Jun 26
Our President Prof John Fraser spoke on #COVID19 vaccine developments at the New Zealand Parliament this week. The event also featured other great researchers too! #Immunology #ASImmuno #IAmAnImmunologist

> **David Taylor** @DavidTaylorNZ · Jun 25
> Impressive presentations at Parliament by leading #NewZealand scientists on the race to find a #COVID19 vaccine. There's hope but challenges aplenty. Thx @royalsocietynz for organising. @MFATNZ @Malaghan_Inst @AucklandUni

9

Kylie Quinn @DrQuinn4realz · Oct 13
So this was fun @pall_mehta and I got to write a Curious Kids article for @ConversationEDU on "How vaccines kill viruses". Thanks Layla, aged 7, for the excellent question, @Phoebe_Roth for the great editing and @pall_mehta for the adorable images



Curious Kids: how do vaccines kill viruses?
Vaccines work by teaching your immune system about new viruses. Your immune cells are very clever – they will remember what they learnt, and...
theconversation.com

1 17 57

Monash Biomedicine Discovery Institute @MonashBDI · Sep 2
With #COVID19 new cases coming down in Victoria, what next? "We wouldn't be coming out of restrictions as quickly as we did last time," says Prof @sjturn, Co-Head of Monash BDI's Infection & Immunity and Vice President @ASImmunology to @abcnews

Read more:

Victoria's daily coronavirus cases have hit double digits. What has to ha...
Experts say it's likely we'll be looking at daily cases numbers below 50 before the current lockdowns end in Victoria.
abc.net.au

1 2 3

Sarah Sandford @SciWithSarah · 2h
Here's my #scienceonaserviette entry for #LGBTQSTEMDay! If you're a queer person in STEMM this competition is for you! @scigallerymel @QueersInScience #womeninstem #queersinscience #scicomm

1 5 12

Scott Mueller @SMuellerLab · Oct 15
Happy Birthday Peter Doherty! love the cake...! @ProfPCDoherty @TheDohertyInst

19 152 1K

Ashraful Haque @DrAshHaque · Oct 25
We stumbled on some Immunology during a lovely walk in Yarra Bend Park. Nice to walk in Sir Macfarlane Burnet's footsteps! @ASImmunology @NobelPrize @WEHI_research

1 2 25

Dr Gabriela Khoury @GabrielaKhoury · Jul 21
Excited to see @DrQuinn4realz live on the @abcnews discussing #COVID_19 vaccines! Fantastic discussion representing #WomenInSTEM and Immunologists! #scicomm #IAmAnImmunologist #ASIWomensInitiative #ASIFireside @ASImmunology

3 6 55

Australian and New Zealand Society for Immunology @ASI... · Jul 25
'Inside our microscopic war machine and the million dollar question' @liammannix Featuring Immunologists @scientist_JJ @sjturn @DrQuinn4realz @TheDohertyInst @MonashBDI @RmitSciences theage.com.au/national/insid... #Covid_19 #Immunesystem #IAmAnImmunologist #SciComm #ASIWomensInitiative

Inside our microscopic war machine and the million-dollar question
Futuristic ideas lead the race to find a coronavirus vaccine, but what about 90-year-old technology?
theage.com.au

2 12

Australian and New Zealand Society for Immunology @ASI... · Sep 16
A study on COVID-19 antibody screening lead by @ian_cockburn and Elizabeth Gardiner of @JCSMR has been featured in the @theage By @liammannix and colleagues. Read here 👇 #IAmAnImmunologist #Immunology #Scicomm #Covid_19

60,000 more people may have had COVID-19 than detected: study
Seven times as many Australians could have been infected with the coronavirus than official figures suggest, according to a new antibody ...
theage.com.au

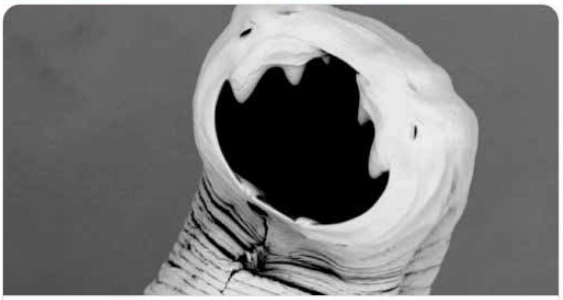
4 9

Day of Immunology @DayofImmunology · Nov 11
'Why you get hay fever and what you can do about it' Featuring immunology and allergy experts Robyn O'Hehir, Connie Katelaris, Jo Douglass and pollen expert Ed Newbigin. @AlfredHealth @ImmunologyMU @TheRMH @unimelb theage.com.au/national/why-y... #IAmAnImmunologist #Hayfever #allergy

What is hay fever and what can you do about it?
Nose twitching? How does hay fever relate to COVID-19 and why is it important to nip symptoms in the bud?
theage.com.au

2 8

Malaghan Institute @Malaghan_Inst · Sep 7
"We're using the power of our own bodies to make ourselves better," - @Malaghan_Inst Director Professor @Graham_LeGros.



Wellington scientists say human hookworms could be answer to autoi...
A trial will test if they can treat patients - although it's not for the squeamish.
newshub.co.nz

8 14

British Society for Immunology @britsocimm · Nov 3
In this Immunology News article, @jessborger @_KateLawlor & @DrQuinn4realz discuss the role of universities, funding bodies & professional societies in preserving gender equity in academia during the #COVID19 pandemic ➡️bit.ly/3n4RwHB

#WomenInImmunology #WomenInScience

3 12

Clinical & Translational Immunology @ClinTransImmuno · Jul 5
🎉We're excited to announce the launch of our #twitter account! CTI is #openaccess and devoted to publishing cutting-edge advances in biomedical research for scientists and physicians. Check out #ClinTransImmunol & read here: onlinelibrary.wiley.com/journal/205000... #Immunology @wileyinresearch

1 20 38

Share news with us!

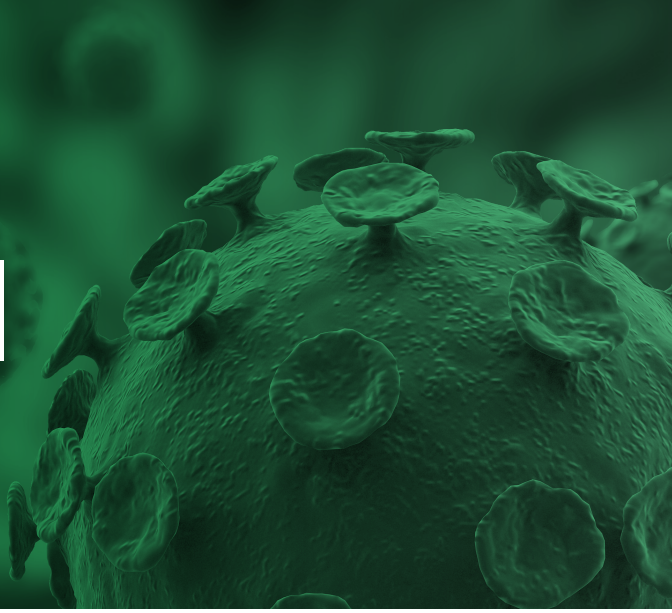
We're here to promote the achievements of our members online. If you have some news or are organising an event that you would like to share on social media send an email to Gabriela Khoury (Gabriela.Khoury@monash.edu) or tag @ASImmunology to be retweeted.

Follow us on social media

Whatever your preferred platform we have your social media needs covered! Follow ASI on Twitter, Facebook, Vimeo and Linkedin.

Don't forget to follow our official journals too 'Immunology and Cell Biology' and 'Clinical & Translational Immunology'.

Clinical & Translational Immunology



Impact Factor 6.464

Cutting-edge advances in biomedical research

Editor-in-Chief: Rajiv Khanna

Clinical & Translational Immunology is an open access, online-only journal, seeking to cover basic, translational and clinical studies in all aspects of human immunology, including experimental models specific to human diseases.

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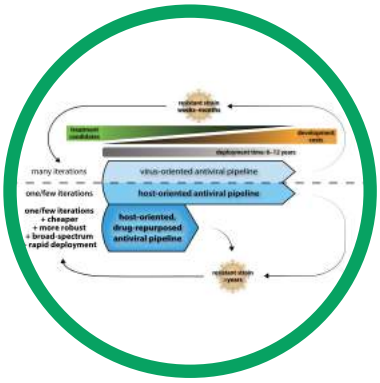
Clinical & Translational Immunology

Catch up on recent Special Features from *Clinical & Translational Immunology*, including:

CTI Special Feature on Regulation of Immunity and Infection by Pathways of Cellular Metabolism

Special Feature Coordinators: Katrina Binger and Justine Mintern

Immunometabolism is an ever-growing area of research with articles on this topic published in high-impact journals on a regular basis. The promise of this field is that increased understanding of how pathways of cellular metabolism influence the function of immune cells will open novel areas for the manipulation of immunity. However, this poses significant challenges for specificity and toxicity as metabolic pathways are shared by all cells, not only immune cells. This Special Feature highlights review articles that address the complexity and putative benefits of targeting immune cell metabolism to regulate immunity and infection. The Special Feature encompasses diverse areas of immunology, from the interplay between systemic metabolism, immune responses and haematopoiesis, to recent insight into cellular metabolic pathways and molecular processes that influence immune responses to infection.



CTI Special Feature on Frontiers in Antiviral Therapy and Immunotherapy

Special Feature Coordinator: Steven Heaton

Despite recent advances in the therapeutic control of immune function and viral infection, current therapies are often challenging to develop, expensive to deploy and readily select for resistance-conferring mutants. Shaped by the host–virus immunological 'arms race' and tempered in the forge of deep time, the biodiversity of our world is increasingly being harnessed for new biotechnologies and therapeutics. Simultaneously, a shift towards host-oriented antiviral therapies is currently underway. In this *Clinical & Translational Immunology* Special Feature, the articles outline a strategic vision integrating these themes to create a new generation of effective, economical and robust antiviral treatments and immunotherapies. Durable international cooperation over the coming decades is necessary to achieve this; therefore, in this CTI Special Feature, leading international experts discuss frontiers in host-oriented therapies, methods for modulating immune gene expression and applications of recent genome sequencing technologies, including an emerging research field.

Start reading at **www.wileyonlinelibrary.com/journal/cti**

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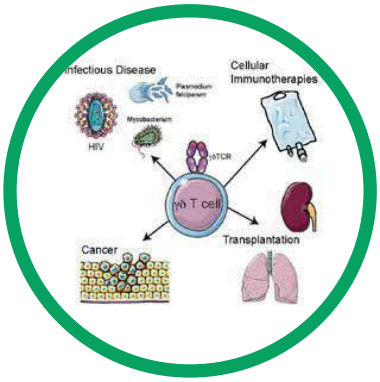
Clinical & Translational Immunology

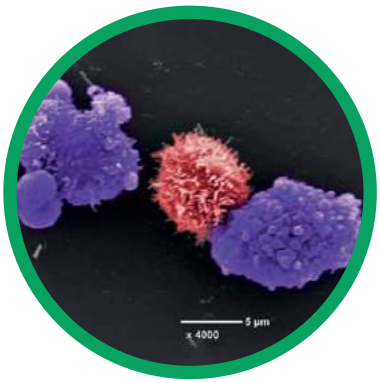


CTI Special Feature on Unconventional immunity: the role of γδT cells in host defense and disease

Special Feature Coordinators: Martin Davey and Emily Eriksson

γδ T cells have been preserved alongside αβ T cells and B cells for ~500 million years of vertebrate evolution. γδ T cells are increasingly recognised as having important roles in immune responses to both microbial and non-microbial challenges in mice and humans. In this Special Feature of *Clinical & Translational Immunology*, we highlight the role of γδ T cells in infectious disease, cancer, transplantation and the lasting contributions of a pioneer of γδ T cell research.

(July 2019)



CTI Special Feature on Cell and Gene Therapy

Special Feature Coordinators: Paul Beavis and Phillip Darcy

Adoptive cellular immunotherapy involving the transfer of autologous chimeric antigen receptor (CAR) T cells has resulted in remarkable responses in relapsed B cell malignancies such as acute lymphoid leukaemia (ALL), often resulting in long-term remission in these patients. These results have led to recent FDA approval of two CAR T cell products for the treatment of CD19+ ALL and non-Hodgkin lymphoma. However, the broad use of this type of therapy for other cancers, in particular solid tumors, has been precluded by both intrinsic and extrinsic factors. This includes the immunosuppressive tumor microenvironment, poor trafficking and infiltration of CAR T cells into the tumor site and heterogenous expression of antigen on the tumor cells. In this Special Feature of *Clinical & Translational Immunology*, we have invited leading experts in the adoptive immunotherapy field to discuss recent innovative developments for potentially increasing the function, trafficking and safety of CAR T cell therapy and for broadening the utility of this specialised form of immunotherapy for treatment of cancers that have failed conventional treatments.

(March 2019)

Start reading at **www.wileyonlinelibrary.com/journal/cti**

WILEY

BEST LIMERICK COMPETITION – WHO IS WORTHY OF THE BURSA?

TOP LIMERICKS TO THE THEME OF "COVID"

Who is worthy of the Bursa??

If you've been to an ASI Scientific Meeting you will know about our longstanding tradition held during the conference dinner. Each table is tasked with writing a limerick, with the winner determined by clap-o-meter or another equally scientific method.

While we cannot be together physically why not continue this tradition virtually?

Although it is not possible for us to be passing the highly-coveted "Bursa" trophy onto our winners, we have picked the top entries from our brilliant submissions whom we think might just be more than **worthy.**

So a massive thank you to all our members who submitted brilliant limericks – it was difficult to choose the best of the best, so we've picked our council's favourites to the theme of "COVID" to share with you, so you may all share the glory and a good laugh!

Enjoy! ■

THE HIGHLY COVETED BURSA TROPHY.

Top choice:

Stephen Proksch

All we think about now is the virus
Or how Uni's are going to fire us
Who cares what you did?
Relate it to COVID
And hope that somebody will hire us

Runner ups:

Kerry Mullan

twenty-twenty think we need to discuss
toilet paper panic and COVID plus
Were you drinking?
Planning is stinking
Not a fan, insincerely from Gus

Simon Barry

In the mythical poems of OVID
came a portent about the fake news of COVID
if you're a fan of the trump
don't get the hump
just drink bleach and keep your gun loaded

Andrea McAdam

Nature, Science and Cell all agree:
Jenner's right! Common colds may be key;
*viral spikes "ock" four three**
match some more from BLAST P
cross-reacting to stop SARS-Co-V

Stephen Proksch

It's virologists' day in the sun
Plagues are their idea of fun
The thought of corona
Just gives them a boner
As we envy the grants that they've won

QLD BRANCH REPORT

SEVERINE NAVARRO, QLD Councillor
severine.navarro@qimrberghofer.edu.au

What a year it has been! Very hard to believe that 2020 is coming to an end. In my first year as the new Qld branch Councillor, I was full of big ideas and plans, all of which came to an abrupt stop once COVID-19 made its way through our borders. Thankfully, Queenslanders managed the situation very well and Queenslander Immunologists even better! So here is a quick recap of what happened...

My first point of action as a Councillor was to create a Qld subcommittee, which I am proud of, is mainly composed of Early to Mid-career immunologists as well as Qld's rising stars (PhD students) from Brisbane all the way to the Far North!

I would like to briefly introduce myself. I am a Team Head at the QIMR Berghofer Medical Research Institute where I lead the Mucosal Immunology Group. I am also a Lead Researcher at the Centre for Childhood Nutrition Research and my research focuses on early life factors that impact on the onset of allergic and autoimmune diseases. Nutrition, diet and microbiome-host interaction are my favourite topics.

My first point of action as a Councillor was to create a Qld subcommittee, which I am proud of, is mainly composed of Early to Mid-career immunologists as well as Qld's rising stars (PhD students) from Brisbane all the way to the Far North! Through various programs (*Flying Scientists, Qld Science Museum, Qld Office of the Chief Scientist, Science Week, QIMR Regional Qld High School Lecture Series Roadshow, etc.*) public outreach and science communication to school-age children from rural communities has been a major focus of our members since the beginning of the year. Among others, Dr Andreas Kupz (James Cook University) developed a very timely resource material in the form of video and "how to" for children to learn about herd immunity (check it out here https://tinyurl.com/y3euamw9). Let us hope these outreach activities can resume full throttle next year!

While face-to-face meetings and symposium had to be postponed - especially our yearly well-anticipated event: Brisbane Immunology Group (BIG) meeting, where we were supposed to celebrate our 20th

While face-to-face meetings and symposium had to be postponed – especially our yearly well-anticipated event: Brisbane Immunology Group (BIG) meeting, where we were supposed to celebrate our 20th anniversary!

anniversary! Nevertheless, please do not fear, the meeting and celebrations will take place next year in August with many treats in store. A few virtual meetings have been organised very successfully: Special Interest Group Systems Immunology: Technology, Quantification and Application co-hosted the 2020 High Dimensional Data Analysis Homeshow (ASI/Australian Cytometry Society); Australian Vaccines and Immunotherapeutics Development Meeting AVID 2020; and finally an online webinar on the UQ COVID-19 Vaccine Development, just to name a few.

Finally, on the 9th and 10th of December we had a brand new and exciting Immunology Mini-Symposium Networking event which took place IN PERSON for Qld immunologists from all health disciplines

Finally, on the 9th and 10th of December we had a brand new and exciting Immunology Mini-Symposium Networking event which took place IN PERSON for Qld immunologists from all health disciplines (mucosal immunology, microbiome, autoimmunity, tumour immunity, immunotherapy, vaccines and infection). It was an excellent opportunity for researchers to catch-up and exchange research and skills. Held at the Translational Research Institute (Woolloongabba) followed by a casual dinner, we had a stellar line-up of 35 speakers from all over the state. A big thank you to our sponsor Brisbane Diamantina Health Partners.

It was an excellent opportunity for researchers to catch-up and exchange research and skills

Until next time! ■

NSW BRANCH REPORT

HELEN MCGUIRE, out-going NSW Councillor
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What a year! To say 2020 has been challenging would be an understatement. It was with a heavy heart we had to cancel our ACT/NSW branch retreat (and traditionally at this time of year we'd be reflecting on having held great event in this newsletter).

However as this is my last year as state councillor, I didn't want to pass up the opportunity to say thanks to everyone in the branch who has helped out with all the ASI events over the past 3 years. We've had some awesome Day of Immunology events and Visiting Speakers as well as Branch Retreats, and these events take lots of work to bring together!

Dr Angelica Lau (a.lau@garvan.org.au) will take over the role of NSW Councillor going forward, and I'll stay on as Branch Treasurer. I wish Angelica all the very best, and am certain she will do great!

Festive season's greetings and wishing everyone a much improved 2021!! ■

However as this is my last year as state councillor, I didn't want to pass up the opportunity to say thanks to everyone in the branch who has helped out with all the ASI events over the past 3 years. We've had some awesome Day of Immunology events and Visiting Speakers as well as Branch Retreats, and these events take lots of work to bring together!

IMMUNOLOGY GOES DIGITAL (IGD)

AN UPDATE FROM THE EDUCATION SIG

MARIA DEMARIA
maria.demaria@monash.edu

What a challenging year this has been and immunology education was no exception! Teaching and learning was flipped completely on its head, with many of us only on campus for one day before needing to adapt to providing an online education for our students with only a week to prepare. This was difficult not only for academic staff, but also our students, as many of us had little to no experience with teaching and learning online. There were highs and lows, particularly with the second lockdown experienced here in Victoria, however we have persevered and learnt many new skills along the way. Some of these changes to our curriculums will continue with us into next year, but I am sure I speak on behalf of all educators and students, when I say that we are looking forward to returning to campus for a COVID-Normal Semester 1, 2021 (and for some of us, over the upcoming summer period).

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There have also been changes within our Education SIG. We say thank you to, and acknowledge the efforts of our outgoing National Coordinator, Dr Kim Murphy (Monash University), who has been instrumental in the formation of our SIG. Part of our old committee remains in our new expanded committee. Dr Samy Sakkal (Victoria University) leaves his role as Secretary to become our new National Coordinator and Committee Chair, and I (Dr Maria Demaria, Monash University) remain on board as our Newsletter & Website Liaison. It is also my pleasure to introduce you to Dr Danica Hickey (Queensland University of Technology) as our new Secretary and A/Prof Odilia Wijburg (The University of Melbourne) as our new Annual Meeting Coordinator.

As we near the end of this unprecedented year, we wanted to take this opportunity to provide you with an Education SIG update. In between our frantic preparation and delivery of teaching during the year, we have been slowly working on organising events and new initiatives as we continue to advance our SIG. Details will be updated on the Education SIG page on the ASI website (https://www.immunology.org.au/asi-programs-and-opportunities/special-interest-groups/education/). If you would like to hear from us on a regular basis, please join our SIG mailing list through your member profile on the ASI website.

We would also like to invite you to our upcoming Annual Meeting (see flier), fitting with the theme "Immunology goes Digital" (IgD), which will be held virtually on Friday 5th February 2021. More information can also be found here: https://tinyurl.com/ASIEduSIG. We have some excellent invited speakers lined up for you, including the inaugural winner of the new ASI Education Award. This is also a great opportunity to hear from immunology educators about the online teaching and learning innovations implemented this year, and to network with colleagues.

We would also like to invite you to our upcoming Annual Meeting (see flier), fitting with the theme "Immunology goes Digital" (IgD), which will be held virtually on Friday 5th February 2021. More information can also be found here: https://tinyurl.com/ASIEduSIG. We have some excellent invited speakers lined up for you, including the inaugural winner of the new ASI Education Award.

Finally, we would like to announce A/Prof Scott Byrne (The University of Sydney) as the inaugural winner of the new ASI Education Award. Congratulations Scott!

We look forward to seeing you virtually at our 2nd Annual Meeting! ■

HIGH DIMENSIONAL DATA ANALYSIS STRATEGIES HOMESHOW 2020

SYSTEMS IMMUNOLOGY: TECHNOLOGY, QUANTIFICATION AND APPLICATION (SITQA) SIG

YANG YANG
Affiliation: Postdoctoral Research Fellow, T-cell Immune Mechanism, Monitoring and Modulation (TIM3),The University of Queensland Diamantina Institute

It was an excellent experience to attend the High Dimensional Data Analysis Strategies Homeshow 2020 co-organised by Australasian Cytometry Society (ACS) and ASI Special Interest Group for Systems Immunology: Technology, Quantification and Application (SITQA). This workshop from 17th – 21st August included both lectures and hands-on practical guidance in virtual formats. Various topics and strategies on HiDi data analysis greatly enhanced my understanding of processing HiDi data. The tutorial started with an introduction to basic operation with R, followed by the detailed illustration of HiDi data analysis involving data preparation, batch correction, clustering, and statistical analysis. Besides the comprehensive lectures, there were several hand-on practice sessions.

Among the topics, I was particularly interested in batch alignment and data clustering. Batch alignment is essential at the beginning of data analysis, which aims to remove the technical variation beforehand. The lectures taught batch correction strategies utilising data distribution comparison. Other approaches by considering reference genes and topological structures of data are also available to solve batch alignment problems.

One of the crucial tasks in HiDi analysis is data clustering. The lectures presented a thorough description of data clustering together with visualisation by dimensionality reduction. For the large-volume data generated by flow cytometry and RNA sequencing, data clustering

One of the crucial tasks in HiDi analysis is data clustering. The lectures presented a thorough description of data clustering together with visualisation by dimensionality reduction. For the large-volume data generated by flow cytometry and RNA sequencing, data clustering helped to generate clustering of samples in an unsupervised manner.

helped to generate clustering of samples in an unsupervised manner. Samples within the same clustering carry similar biological features. The tutorials taught various clustering methods such as k-means, hierarchical clustering and graph-based clustering (e.g., Louvain). Existing R packages like Seurat have encapsulated the clustering methods.

For visualising the data, the lectures illustrated several methods such as principal component analysis (PCA), t-distributed Stochastic Neighbour Embedding (t-SNE) and Uniform Manifold Approximation and Projection (UMAP) on different datasets. The conventional approach considers the method PCA to apply the dimensionality reduction to the HiDi data. The non-linear methods, t-SNE and UMAP perform better in visualising sample-to-sample interaction in low-dimensional plots. By utilising t-SNE or UMAP in data from flow cytometry or RNA sequencing, biological distinct clustering can be generated.

On the last day of the workshop, there was a session for lightning talks which encouraged participants to share their experience in HiDi analysis by presenting data, experiences, questions and opinions. I was fortunately selected to present in this session and shared results of my research project in understanding virus infection-induced disease severity using a mouse model. Dozens of variables generated by HiDi flow cytometry and other laboratory tests were analysed by PCA to group mice with mild v.s. severe disease. The relationships between immunological and clinical variables were analysed by hierarchical clustering. The results and analysis from this mouse model were used to validate the clinical observation indicating a relationship between soluble CD25 in patients' blood and COVID-19 severity.

The five-day workshop offered a comprehensive tutorial on high-dimensional data analysis regarding flow cytometry and RNA-sequencing. As a researcher from a computer science background, this workshop helped me to build a bioinformatics framework in the topic of HiDi analysis and inspired me a lot. I really appreciate the opportunity to attend this workshop and hope that there will more events of this kind in future. ■

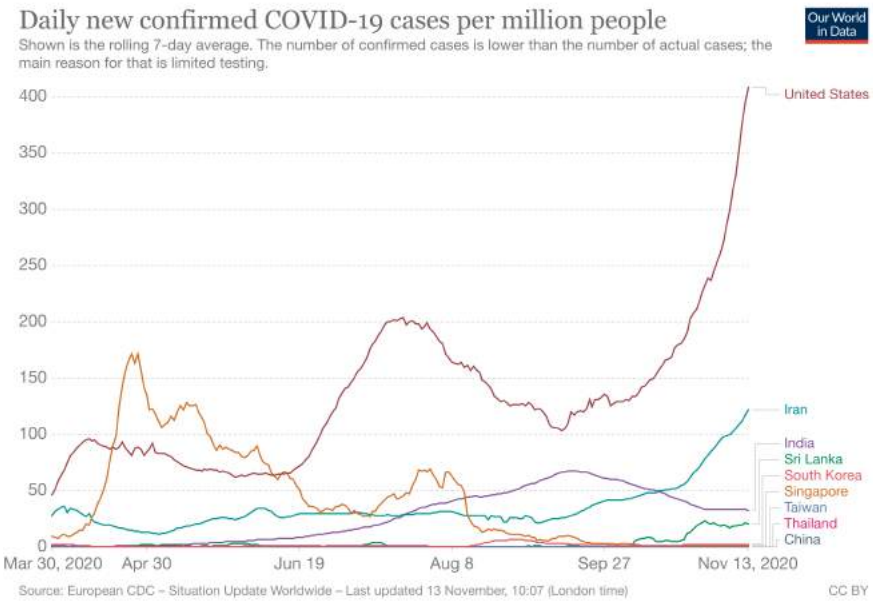
NEWS FROM FIMSA

JOANNA GROOM, FIMSA Representative
groom@wehi.edu.au

Many of the FIMSA nations have been hard hit by the COVID-19 pandemic. FIMSA islands Australia, New Zealand, Taiwan and Sri Lanka did exceptionally well to limit cases. Despite the large case numbers, our colleagues in India have said their hospitals have not been overwhelmed and this is reflected in the death rates. At the time of writing Iran was the only FIMSA nation with rising cases (see CDC data of cases for FIMSA nations with United States included as reference).

As for most societies, the 2020 has caused FIMSA to redirect and change plans for scheduled meetings. Due to the cancelled Japan course, the Indian members proposed and ran a successful online Immunology course.

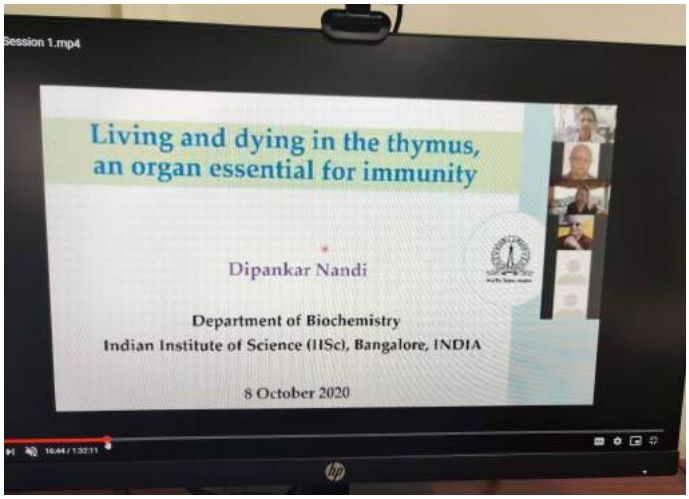
Many of the FIMSA nations have been hard hit by the COVID-19 pandemic. FIMSA islands Australia, New Zealand, Taiwan and Sri Lanka did exceptionally well to limit cases.



Virtual FIMSA Immunology Course, India.

The virtual course was conducted by Indian Immunology Society from 8th – 10th October 2020. The course was held on zoom virtual platform with Prof. Sunil Arora, President of Indian Immunology Society as the Course director. A total of 389 delegates registered for this course from various countries, mainly from India. The course faculty included stalwarts in the field of Immunology from USA, Australia, China, Japan, Taiwan and India. The course curriculum was designed to cover topics related to Innate Immune responses on Day-1, Adaptive Immune responses on Day-2 and clinical Immunology on Day-3.

There were over all 27 lectures divide in Nine scientific sessions and 4-keynote sessions including one special Keynote session on COVID-19. The course was well appreciated for its comprehensive coverage of Immunology from Basic fundamentals to recent advancements in the field with a particular focus on COVID-19 research. The final day sessions were made open for all and a huge number of scientists, clinicians



VIRTUAL FIMSA IMMUNOLOGY COURSE, INDIA.

There were over all 27 lectures divide in Nine scientific sessions and 4-keynote sessions including one special Keynote session on COVID-19.

and students participated and interacted with the learned speakers who deliberated on immunopathogenic mechanisms of various disease conditions like, vaccine against infections, autoimmunity and cancer. The feedback was obtained from all the participants through email and e-Certificate was issued to each one of the registered participants.

FIMSA events 2020 and beyond.

Unfortunately the 2020 Advanced Immunology Course in Chiba, Japan has been cancelled. Currently the next FIMSA congress is to be held in Korea in 2021.

A full summary from the FIMSA council meeting, along with details of upcoming meetings can be found on the new FIMSA.org website. ■

THE IUIS CORNER

J. ALEJANDRO LOPEZ
alejandro.lopez@griffith.edu.au

Here is a brief update of the news coming from IUIS. If you wish to follow the news coming directly from the IUIS, visit the www.iuisonline.org and/or register for the Newsletter through this link here.

You can also follow IUIS activities on Twitter: twitter.com/iuis_online

And/or Facebook: www.facebook.com/IUISorg/

IUIS
International Union of Immunological Societies

The IUIS Newsletter

The last edition (September, 2020) of the Newsletter (https://us10.campaign-archive.com/?u=b92a48d3ee8bd7233369c4b9a&id=d300f16dab) includes the IUIS Secretary-General Address 2020, by our very own Roslyn Kemp who is making a magnificent contribution to the executive. Ros highlights the progress of enhancing the contributions of IUIS to the World Health Organisation (WHO) and the International Science Council (ISO) where there are opportunities for members to contribute to current aspects such as vaccine development against COVID19.

The newsletter reports on various other themes including the Nature Reviews Immunology Viewpoint paper

Our very own Roslyn Kemp who is making a magnificent contribution to the executive. Ros highlights the progress of enhancing the contributions of IUIS to the World Health Organisation (WHO) and the International Science Council (ISO) where there are opportunities for members to contribute to current aspects such as vaccine development against COVID19.

"The global response to the COVID-19 pandemic: how have immunology societies contributed?" written by the IUIS President Faith Osier and Presidents of 15 other immunological societies including our own John Fraser for the ASI (https://www.nature.com/articles/s41577-020-00428-4).

IUIS Scientific Content Editor and Coordinator

IUIS continues to emphasise its projection to a more general audience and established a new position for that purpose.

CHELEKA MPANDE

Cheleka Mpande started her duties as Scientific Content Editor and Coordinator on September 1 and we will soon be seeing more of the scientific content members deal with, being shared with the broader community. The key objectives of the positions are:

- Increase the number of followers, views and clicks for the IUIS social media accounts

- Increase awareness of IUIS activities and role in global health
- Promote immunology and the development of immunological research scientists
- Increasing interaction with users on social media platforms
- Special focus on research that's relevant to low- and middle-income countries

IUIS-Frontiers Webinar Series on COVID-19 (SARS-CoV-2)

This very successful series concluded and here are some of the final statistics about it.

Beyond the webinars mentioned in the previous newsletter, the last of the seminar series is now available for viewing:

Alexis M. Kalergis (Millennium Institute on Immunology and Immunotherapy, University of Chile) Impairment of the

immunological and neurological synapses by respiratory viruses. Implications for vaccine design. https://www.youtube.com/watch?v=i0RfyMICtg4&feature=emb_title

Details of all other seminars are available in this link: https://iuis.org/webinars/

Global Science TV

The International Science Council (ISC) has launched a pilot program in partnership with the Australian Academy of Science called Global Science TV as one aspect of the Public Value of Science project in the ISC Action Plan. The project consists of 15-minute online TV programs, which aim to share scientific expertise directly from experts themselves, while educating, entertaining, and informing viewers on major issues of scientific relevance. The first episode of Global Science TV was aired on June 3rd 2020.

Episode 1: "Why can't we deal with climate change as urgently as COVID-19?" The coronavirus pandemic has shown that the world can act swiftly in a crisis. So, should that give us new hope in the fight against climate change? Australian media personality Nuala Hafner puts that question to ISC Patron Mary Robinson and ISC President Daya Reddy. https://youtu.be/A9hLy_BLjRc

There are now various episodes available and they cover a broad scope of scientific themes (https://council.science/globalsciencetv/). They include COVID-19 themes such as s SARS-CoV-2 (COVID-19) airborne via microdroplets? (https://youtu.be/_nCOrzHismM); Multivitamins and coronavirus | COVID-19 (https://youtu.be/vqFwqDTO84o)

There is a call to support this initiative and members could do so in various ways. They can nominate experts to be part of an upcoming episode, or by using the free content as a springboard to bring in local experts on similar subject matter for national audiences. You could suggest a speaker by completing the online form.

IUIS Events

The new IUIS website is now maintained timely and regularly and it includes current and up-to-date news of relevance to all immunologists. The section on the IUIS events is an extensive depository of interesting opportunities that may be of interest to many of our readers. Should you have information to share with the international community, contributions are very welcome. You can check it out in this link https://iuis.org/events/. ■

IUIS 2022 website is up and running and Congress organisation is progressing.

Further info in this link: https://iuis2022.org/ .

IUIS 2022 CAPE TOWN
18th International Congress of Immunology
August 15-20, 2022 | Cape Town, South Africa

PUBLICATIONS OF INTEREST

OUR SUSTAINING MEMBERS

abcam

InstantBlue® Coomassie Protein Stain (ab119211)

Benz et al. (2020). 'AKAP12 deficiency impairs VEGF-induced endothelial cell migration and sprouting', Acta Physiol (Oxf), DOI: 10.1111/apha.13325.

Anti-Caspase-1 antibody [EPR19672] (ab207802)

Wang K et al. (2020). 'Structural Mechanism for GSDMD Targeting by Autoprocessed Caspases in Pyroptosis', Cell, DOI: 10.1016/j.cell.2020.02.002

Anti-GSDMB antibody [EPR20841] (ab215729)

Zhou Z et al. (2020). 'Granzyme A from cytotoxic lymphocytes cleaves GSDMB to trigger pyroptosis in target cells', Science, DOI: 10.1126/science.aaz7548

STEMCELL™ TECHNOLOGIES

SepMate™ (https://www.stemcell.com/products.html?brand=SepMate&product_type=Cell+Isolation+Products)

Lymphoprep™ (https://www.stemcell.com/lymphoprep.html)
Divij M. et al. (2020). Deep immune profiling of COVID-19 patients reveals distinct immunotypes with therapeutic implications. Science. doi: 10.1126/science.abc8511

EasySep™ Direct Human Neutrophil Isolation Kit (https://www.stemcell.com/easysep-direct-human-neutrophil-isolation-kit.html)

Middleton E. et al. (2020). Neutrophil extracellular traps contribute to immunothrombosis in COVID-19 acute respiratory distress syndrome. Blood. doi: 10.1182/blood.2020007008

EasySep™ Mouse CD8+ T Cell Isolation Kit (https://www.stemcell.com/easysep-mouse-cd8-t-cell-isolation-kit.html)

EasySep™ Human CD8+ T Cell Isolation Kit (https://www.stemcell.com/easysep-human-cd8-t-cell-isolation-kit.html)

Lymphoprep™ (https://www.stemcell.com/lymphoprep.html)

EasySep™ Human CD8 Positive Selection Kit II (https://www.stemcell.com/products/easysep-human-cd8-positive-selection-kit-ii.html)

EasySep™ Mouse CD8a Positive Selection Kit II (https://www.stemcell.com/products/easysep-mouse-cd8a-positive-selection-kit-ii.html)

Bian Y. et al. (2020). Cancer SLC43A2 alters T cell methionine metabolism and histone methylation. Nature. 10.1126/science.abc8511

GenScript
Make Research Easy

Gene synthesis: https://www.genscript.com/gene_synthesis.html
Peptide Library Service: https://www.genscript.com/peptide-library.html
Ziyang Xu, et. Al. A DNA-launched nanoparticle vaccine elicits CD8+ T-cell immunity to promote in vivo tumor control. 2020. Cancer Immunol Research. DOI: 10.1158/2326-6066

SARS-CoV-2 Protein Reagents and Products (Rabbit antiSARS-CoV-2 RBD sera): https://www.genscript.com/covid-19-services-and-products.html#services
Author: Nina Le Bert, et. al. SARS-CoV-2-specific T cell immunity in cases of COVID-19 and SARS, and uninfected controls. 2020. Nature. DOI: https://doi.org/10.1038/s41586-020-2550-z
SARS-CoV-2 Protein Reagents and Products (Rabbit antiSARS-CoV-2 RBD sera): https://www.genscript.com/covid-19-services-and-products.html#services
Author: Chee Wah Tan, et.al. A SARS-CoV-2 surrogate virus neutralization test (sVNT) based on antibody-mediated blockage of ACE2-spike (RBD) protein-protein interaction. 2020. Nature Biotechnology. DOI: https://doi.org/10.1038/s41587-020-0631-z

MACS
Miltenyi Biotec

Clinical grade SARS-CoV-2 specific T cells (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7404427/)
Leung et al (2020). Rapid production of clinical grade SARS CoV 2 specific T cells Adv Cell Gene Ther. 2020 Jul 31 : e101.doi: 10.1002/acg2.101

Magnetic Separation, Antibodies, Flow Cytometers (https://www.nature.com/articles/s41586-020-2598-9)
Braun et al (2020). SARS-CoV-2-reactive T cells in healthy donors and COVID-19 patients Nature volume 587, pages270–274(2020)

Cell Sorter (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7402030/)
Roberts et al (2020). Validation of a Bench Top Cell Sorter in a BSL-3 containment setting Version 1. bioRxiv. Preprint. 2020 Jul 31.doi: 10.1101/2020.07.30.229146

BD

Anti-Human CCR7 BV421, clone 2-L1-A (https://www.bdbiosciences.com/anz/solrSearch?text=2-L1-A+BV421)
Carter et al. (2020). Peripheral immunophenotypes in children with multisystem inflammatory syndrome associated with SARS-CoV-2 infection. Nature Medicine.
doi: 10.1038/s41591-020-1054-6

BD iMag Cell Separation Products (https://www.bdbiosciences.com/anz/solrSearch?text=iMag)
Takahashi et al. (2020). Microbiota-derived butyrate limits the autoimmune response by promoting the differentiation of follicular regulatory T cells. EBioMedicine.
doi: 10.1016/j.ebiom.2020.102913

Human Th1/Th2/Th17 Cytometric Bead Array Kit (https://www.bdbiosciences.com/anz/solrSearch?text=560484)
Wang et al. (2020). Increased frequency of PD-1hiCXCR5- T cells and B cells in patients with newly diagnosed IgA nephropathy. Scientific Reports (Nature Research).
doi: 10.1038/s41598-019-57324-8

And many thanks to our sustaining members:

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Australian and New Zealand
SOCIETY FOR IMMUNOLOGY INC.

The aim of the ASI is to encourage and support the discipline of immunology in the Australia and New Zealand region.

The Australian and New Zealand 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. The aim of the Society is to encourage and support the discipline of immunology in the Australasian region.

It is a broadly based Society, embracing clinical and experimental, cellular and molecular immunology in humans and animals. The ASI 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
- ASI Member's benefits publishing in ASI Journals ICB and CTI
- Special offers from ASI's Sustaining Members
- Full access to the journals Immunology and Cell Biology, Clinical and Translational Immunology

ASI COUNCIL

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Past President – John Fraser j.fraser@auckland.ac.nz

Honorary Secretary – Connie Jackaman secretary@immunology.org.au

Treasurer – Asolina Braun treasurer@immunology.org.au

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QLD Councillor – Severine Navarro severine.navarro@qimrberghofer.edu.au

VIC/TAS Councillor - Scott Mueller smue@unimelb.edu.au

ACT Councillor – Anselm Enders anselm.enders@anu.edu.au

NZ Councillor - Ries Langley r.langley@auckland.ac.nz

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