

# ASI NEWS

JUNE 2020



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# CONTACT US

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**IUIS CORNER** 

A brief update of the news coming from IUIS.

J. Alejandro Lopez

# A NEW NORMAL ANGELICA LAU, Newsletter Editor

newsletter@immunology.org.au

### Hi everyone!

I hope you are all doing well and staying healthy during these strange and unprecedented times. Since lockdown was put in place restricting non-essential travels across the nations, it surely feels like the March newsletter was published not too long ago. I hope this June edition reaches you on a happier and brighter note, knowing that Australia and New Zealand have done exceptionally well during the Covid19 crisis and we are now finally seeing the light at the end of a seemingly never-ending tunnel!

I am grateful to those in our ASI community who were able to continue working on the frontlines during this time, exercising their expertise by providing medical assistance, pastoral care, therapeutic development and much more. One of the useful scientific and clinical resources that has been established by our partner society is the IUIS-Frontier COVID19 Knowledge Hub. If it is within your power, interest and ability. I would highly recommend your contributions to this wonderful resource so that the efforts of our colleagues and collaborators may aid the fight against the pandemic, particularly in other parts of the world most severely affected.

# If it is within your power, interest and ability, I would highly recommend your contributions to this wonderful resource

The ASI council understands that during these times, many of our members' careers, productivity and job security have been significantly Editor rg.au impacted by these uncontrollable circumstances. Here's to remind you that you are all part of a

you that you are all part of a wonderful immunology community and we are all in the same boat! The ASI council is continuously trying to maximise our support for our ASI members during this time - you are not alone - so make sure you have a look at the recent updates and news from our various ASI councillors and keep up-todate with the upcoming initiatives, travel awards and opportunities available on the ASI website here.

Thinking back to the exciting 2019 Annual Meeting in Adelaide, it is with much regret that sadly, and with good reason, the ASI meeting in New Zealand scheduled for 2020 has been rescheduled to 2022, stay updated for future annual meetings here. At present, the 2021 ASI Meeting remains scheduled to be held in Melbourne.

Yes, many interruptions this year have made it an unforgettable



and unsettling time in our lives. However, it brings me great pride to know that many fellow colleagues and collaborators within the ASI community are continuing to work together in this difficult time, helping each other, guiding and mentoring one another while adapting to the new "normal". Perhaps face-toface meetings will still be a while away, but at least we can stay positive and be creative during our zoom meetings!

In fact, we recently called for submissions to our "Funniest Zoom Background Competition" and we have a winner! Congratulations to Diana Hansen from WEHI who was clearly rocking it with Elton John, disregarding all social distancing.

Thank you to everyone who entered this competition. Your chance for glory is not over! Watch this space - there will be more competitions coming!

On that note, I wish you all the very best for your grant applications and I look forward to telling you more about what has been happening in our next edition.



ZOOM BACKGROUND WINNER (JUNE EDITION) - DIANA HANSEN

# **ASI MATTERS, OPPORTUNITIES** PICKING UP FROM WHERE THE PANDEMIC LEFT US

CONNIE JACKAMAN, Honorary Secretary <u>secretary@immunology.org.au</u>



It seems like such a long time ago since I sat down with previous ASI secretary Elissa, at Adelaide ASI meeting in December 2019 to discuss the Secretary role and what to expect.

Side note: Elissa forgot to mention "global pandemic" in the job description....

When you look around the world, I think we have been relatively lucky in Australia and New Zealand. I also consider myself very lucky that I still have a job (for now). Although the long term impact of the pandemic and the uncertainty in job security in the research sector (particularly for

The pandemic is a challenging time for everyone in one way or the other and ASI will continue to support flexibility around all awards schemes. Please feel free to contact us if you have any suggestions/questions/feedback. students/EMCRs) is of major concern, at least one silver lining is that immunology is at the forefront.... The pandemic is a challenging time for everyone in one way or the other and ASI will continue to support flexibility around all awards schemes. Please feel free to contact us if you have any suggestions/ questions/feedback.

## International travel awards Application due 31st July for travel anytime Sept 2020 to December 31st 2021

Back in March as the pandemic was evolving and things changing rapidly, we made the decision to extend the deadline for the first round of ITAs to allow flexibility in case of either:

- a) international travel would be possible from September 2020, or
- b) if the situation did not improve and further restrictions were in place.

The Margaret Baird award provides an opportunity for an early-mid career immunologist to travel across New Zealand and Australia delivering guest lectures at a number of branches (similar to the visiting speaker program).

It looks like chances of international travel are slim this year and we are in the b) situation. We will also reassess later on in the year the deadlines for the second round ITA applications and keep everyone posted as things evolve.

## Margaret Baird award currently postponed, dates for applications to be announced soon

The Margaret Baird award provides an opportunity for an early-mid career immunologist to travel across New Zealand and Australia delivering guest lectures at a number of branches (similar to the visiting speaker program).



IN MEMORY OF PROFESSOR MARGARET BAIRD

Similar to the ITAs this is usually open for applications in March/ April, however with the pandemic we also decided to postpone applications for this until later on in the year (dates to be announced soon).

For more info on Margaret Baird and the award please check out Kylie Quinn's June 2019 newsletter report on page 10, or visit our ASI awards page <u>here.</u>

## Jared Purton award Application round July 20th - August 17th for research undertaken in 2021

The Jared Purton award looks to fund people at a critical point in their career and for strategies that are not necessarily covered under other ASI awards schemes. For example, support to purchase reagents or equipment which are not otherwise funded, student recruitment, setup a new

The Jared Purton award looks to fund people at a critical point in their career and for strategies that are not necessarily covered under other ASI awards schemes. collaboration or support for return from parental leave.

In the past, applications that are similar to an ITA application do not tend to be ranked well. Instead applications for travel to perform experiments/learn a new technique you would otherwise be unable to do would be better ranked. Given that this is not specifically a travel award, applications for this will go ahead as per the current schedule (opening July 20th 2020). For more info on Jared Purton and the award please check out Dale Godfrey's December 2016 newsletter report on page 6, or more information from our ASI awards page here.

# ASI ECR Support Network

With a number of events cancelled this year and limited opportunities to meet fellow students/ECRs, we thought to With a number of events cancelled this year and limited opportunities to meet fellow students/ECRs, we thought to setup a network to give students/ECRs the opportunity to meet folks from other branches across Australia/New Zealand (virtually!).

setup a network to give students/ ECRs the opportunity to meet folks from other branches across Australia/New Zealand (virtually!). To kick off we have held a couple of informal 'meet and greet sessions'. We have also allocated folks into a small team and once a month we will be holding "mini-challenges" across teams (e.g. virtual quiz evening etc). This is open to join at any time and as always we welcome any suggestions/feedback/questions.

# **JJJJJJ** DEADLINES

International Travel Awards Due 31/07

Jared Purton Award

# ASI DIGITAL RESOURCES & CONSTITUTION CHANGES

TYANI CHAN, ASI General Manager, generalmanager@immunology.org.au

# ASI Members now have special access to Digital Resources

Not that you need another reason to be an ASI Member... But, recently we launched our new initiative - ASI Digital Resources!

We've covered the topics:

- Publishing and Writing Skills
- Grant-writing Skills
- Fellowship-writing Skills

This is the start of a *great* collection of useful things to know, to survive in scientific research. They have been created by recording some of the postgraduate talks from ASI 2019 Adelaide - so if you missed them, here's your chance to brush up on these skills!

# Today we launch our new initiative - ASI Digital Resources!

Login to your ASI member profile, head to 'Documents' in the green bar, and filter on 'Digital Resources'.

For a step-by-step guide please

Login to your ASI member profile, head to 'Documents' in the green bar, and filter on 'Digital Resources'.

refer to the email sent to membership here. Creating this new ASI initiative would not have been possible without the help of the following ASI 2019 SA Local Organising Committee members:

- Timona Tyllis, ASI 2019 Postgraduate Symposium Co-organiser
- James McEvoy, ASI 2019 Postgraduate Symposium Co-organiser
- Nikki Lansdown, ASI 2019 Postgraduate Symposium Co-organiser
- Elena Cavallaro, ASI 2019 Postgraduate Symposium Co-organiser
- Iain Comerford, ASI 2019 Co-Chair
- Damon Tumes, ASI 2019 Co-Chair

To build this collection over time, we hope to add many more resources in the future so please email us if there's a specific topic you'd like covered, or if you can present on a topic.



## Many thanks to our contributors

- We would like to thank the following people for being our first contributors to the ASI Digital Resources:

- Michelle Head, Wiley, for our 'Publishing and Writing Skills' resource
- Shaun McColl, University of Adelaide, for our 'Grant-writing Skills' resource
- Allison Cowin, University of South Australia, for our 'Fellowships' resource

Stay tuned for more - To build this collection over time, we hope to add many more resources in the future so please <u>email us if there's</u> <u>a specific topic you'd like covered</u>, <u>or if you can present on a topic</u>.

### Important ASI Constitution Changes that may affect you

At our 2019 ASI AGM, we introduced a change in the ASI Constitution that may affect your membership if you have not renewed for 2020. Please disregard this notice if you have already renewed.

If you unsure whether you have renewed for 2020, login to your ASI member profile to see if '2020' appears as your financial year.

ASI Constitution Section 32.3

Formerly stated:

Membership of the Society shall automatically cease upon a member's subscription becoming more than two years in arrears.

This now reads:

Membership of the Society shall automatically cease upon a member's subscription being unpaid at the 30th day of June in any year.

Renewal invoices will remain available for payment until the end of the year, for those wish to become a member again.

After June 30th 2020, members will cease to receive member benefits including access to member-restricted areas of the website. Renewal invoices will remain available for payment until the end of the year, for those to wish to become a member again.

If you are no longer interested in ASI membership, please click <u>here</u> to let us know. ■







# Expedeon are part of Abcam

Abcam acquired Expedeon's proteomics & immunology business on 1st January 2020.

Now you can buy everything you need from Abcam, and you no longer need to go to Expedeon. You can search & buy from www.abcam.com

You can also contact and order by email or phone below,

Abcam Australia Ordering: au.orders@abcam.com Phone: 1800 960 553

abcam

# **WOMEN'S INITIATIVE NEWS**

KYLIE QUINN, Women's Initiative Coordinator kylie.quinn@monash.edu



# This newsletter finds us in quite a different place: Australia and Aotearoa/New Zealand are walking a fine line and aiming to control SARS-CoV-2 transmission in our populations.

This has had a massive impact on the immunological community. Our work is more important now than ever, as the world rushes to understand protective immunity to SARS-CoV-2 and develop new tests, therapies and vaccines. But our workplaces are rapidly recalibrating and financial resources are tight.

One major challenge for research and tertiary teaching communities has been the sudden shift to working from home. We have had to continue our work remotely, meeting each other on zoom/ skype/teams. But there have been additional challenges.

Some have had to manage caring for dependents while still maintaining full-time workloads, finding extra hours in the day for caring and homeschooling. Many researchers have had their research severely impacted, creating knock-on effects for grants, publications and job losses. Many educators have recreated a teaching curriculum entirely online on the fly. There is a sudden increase in demand for pastoral care of a community of students under significant stress. Some have had to prioritise the physical or mental health of themselves or their loved ones.

## RESOURCE 1: INEQUALITY IN RESEARCH

Australian Chief Scientist's Rapid Research Information Forum Report highlighting growing inequality with COVID-19 in research:

https://www.atse.org.au/ news-and-events/article/ rapid-research-informationforum-rrif/

For more resources, please refer to the Women's Initiative Resources page on the ASI website here.

Everyone has been impacted. One sentiment is that this has been a shared experience. While it is critical that we work together during this challenging time, clearly, the disruption has not been equally shared (Resource 1). Individual's experiences are also unlikely to be the same in the months and years to come, because crises tend to amplify existing inequality.

In the midst of all of this urgency and upheaval, it is essential that we continue to apply principles of equity, diversity and inclusion in our workplaces and personal lives.

Some have had to manage caring for dependents while still maintaining full-time workloads, finding extra hours in the day for caring and homeschooling. Many researchers have had their research severely impacted.

Institutions must act to minimise inequalities for their workforces. At the moment, workloads are being redistributed or staff are being redeployed to support the core business at our institutions. This should be performed alongside an assessment of equity, to avoid work being disproportionately assigned certain groups. Access to childcare and carer services should be prioritised and institutions should be monitoring their performance with regard to equity in real time.

## WOMEN'S INITIATIVE NEWS



So, what can we do about this looming inequality? For those in leadership roles, it is critical, now more than ever, to prioritise equity, diversity and inclusion. Diversity practices are not a luxury to enjoy during stable times in society- they should be central to decision-making and our actions right now. Essential actions include recruiting diversity, acting equitably, extending security to others, supporting their visibility and reconsidering our industry moving forward (**Resource 2**).

#### **RESOURCE 2: ACTIONS TO ADDRESS INEQUALITY DURING COVID-19**

**Recruit diversity for decision-making:** 

- Seek out the advice and opinions of highly qualified individuals from under-represented groups.
- There are expert databases on our website, on the Women in STEM website, the SciMex website, and there will be emerging leaders in your institution.

Combat inequality by acting equitably:

- · Give real weight to relative to opportunity statements.
- Support adjustments to tenure clocks, KPIs and contracts.
- Examine your unconscious biases during decision-making.

If you are secure, act to extend that security to others:

- Sponsor others by putting them forward for opportunities, such as roles on grants or in collaborations.
- Mentor others through career decisions.

Support the visibility of others:

• Put individuals from under-represented groups forward for consultation with policymakers, industry and media engagements.

Consider how our industry can be changed by this event for the better:

- Support flexible working arrangements now and going forward.
- Advocate for the interests of early career researchers and underrepresented groups within our community wherever possible.

One key factor driving amplification of equality is the loss of qualified, diverse voices during decision-making. In urgent times, leaders may start to make unilateral decisions, relying on a small circle of personal advisors without the advice of experts. However, we have seen the most successful decisionmaking during COVID-19 has been multilateral and evidence-based. When we actively recruit diversity and recruit experts rather than relying on a limited inner circle, our decisions are better suited for a wider section of the population and our decisions are therefore better.

When we actively recruit diversity and recruit experts rather than relying on a limited inner circle, our decisions are better suited for a wider section of the population and our decisions are therefore better.

We find ourselves in very unusual times with a range of new stressors. However, if we don't maintain our diversity practices now, we are undervaluing our most valuable tool in the fight against COVID-19: our collective knowledge and experience.

# OBITUARY: VALE PROFESSOR IAN REAY MACKAY (1922-2020) LEN HARRISON

It was with great sadness that we learnt of the death at the age of 98 on 24 March 2020 of the renowned clinician-scientist and immunologist, and alumnus of the Walter and Eliza Hall Institute (WEHI), Professor Ian Reay Mackay AM FAA FRACP FRCP FRCPA.

Ian was educated at the University of Melbourne, later training at Hammersmith Hospital, UK, with Dame Sheila Sherlock, a pioneer in the then-emerging field of hepatology. After working in the United States, in 1956 he was invited to work in Melbourne under Sir Ian Wood in the Clinical Research Unit, a joint initiative between WEHI and The Royal Melbourne Hospital.

Ian had laid foundations for the modern understanding of autoimmune diseases - conditions in which the body's immune system mistakenly attacks its own organs and tissues. His legendary research led to the recognition of autoimmune diseases such as autoimmune hepatitis, lupus, rheumatoid arthritis and Sjögren's syndrome, and to a new era of 'immunosuppressive' treatment for these diseases.

In the 1950s, the then Director of WEHI, and later Nobel Prize recipient, Sir Frank Macfarlane Burnet, had postulated that certain diseases might be caused by misdirected immunity to the body's tissues - autoimmunity. At the time this was controversial

 even derided – but Ian Mackay turned theory into practice. He observed that a laboratory test developed by Carlton Gajdusek (on sabbatical at WEHI) to demonstrate hepatitis A virus was actually detecting an autoimmune complement fixation reaction between human serum and liver. This test for autoantibodies in liver disease led to the description of autoimmune chronic active hepatitis. In 1957. Ian described another autoimmune liver disease, primary biliary cirrhosis, and 30 years later collaborated with Eric Gershwin and Ross Coppel to clone the gene for its autoantigen, mitochondrial M2.

lan's concepts about autoimmune disease in the 1950s and 60s were met with the usual scepticism (which I clearly remember as a medical student in the wilds of Sydney) - but lan was above all tenacious. Eventually, as per Schopenhauer's dictum that 'All truth passes through three stages: first, ridiculed; second, violently opposed; third, accepted as being self-evident', lan was vindicated. Virtually

His legendary research led to the recognition of autoimmune diseases such as autoimmune hepatitis, lupus, rheumatoid arthritis and Sjögren's syndrome, and to a new era of 'immunosuppressive' treatment for these diseases.



PROFESSOR IAN MACKAY IN THE 1960S. HIS LONG-TIME RESEARCH PARTNER, DR. SENGA WHITTINGHAM, IS STANDING IN THE BACKGROUND.

autoimmune diseases, and with Brian Tait and Peter Morris at the Royal Melbourne Hospital, was among the first to describe the associations between autoimmune diseases and HLA antigens. The Autoimmune Diseases was a landmark publication.

In 2012, the Medical Journal of Australia commemorated the 50th anniversary of the book, describing it as "a founding text" that "marked the beginning of autoimmunity as a clinical science. Its insightful concepts and novel ideas inspired a generation of clinical and basic immunological researchers.1" Only in the last year did Ian in his meticulous manner put the finishing touches on the latest 6th edition of The Autoimmune Diseases, which contains contributions from many of us whom he mentored over the

"lan was truly a scientific pioneer. We will remember his incisive mind, exacting standards and laser like focus on solving major clinical problems. He was a pioneer of the Institute's commitment to translational research and shaped the Institute we have today.

## years.

Ian headed the Clinical Research Unit from 1963 until his retirement in 1987, all this time making breakthroughs in the understanding and treatment of autoimmune diseases and publishing prolifically. He was a stellar role model for clinicianscientists and possessed a remarkable vigor and spirit of enquiry that we strive to emulate. After his retirement, he continued to mentor students and contribute to many productive research collaborations, from a research position at Monash University.

WEHI director Professor Doug Hilton AO paid tribute to Professor Mackay. "Ian was truly a scientific pioneer. We will remember his incisive mind, exacting standards and laser like focus on solving major clinical problems. He was a pioneer of the Institute's commitment to translational research and shaped the Institute we have today. He will be greatly missed by his colleagues and friends."

1. Roberts-Thomson, PJ, Jackson MW, Gordon TP. A seminal monograph: Mackay and Burnet's Autoimmune Diseases. Medical Journal of Australia, 2012, 196(1):74-76.

Len Harrison, Melbourne, March 2020

### A classic anecdote about Ian Mackay

by Dr. Brian Youl – former clinical Registrar

Being a unique individual, lan was the subject of many anecdotes.

Mackay caught me on the rebound from a disastrous first attempt at the Australasian College of Physicians Fellowship exam - I had confidently diagnosed cystic fibrosis in an elderly chap with chronic lung disease in the long case. I went on to spend a year as lan's senior registrar in the Clinical Research Unit.

Bizarrely, the highly talented Elsdon Storey was our junior registrar. Sandwiched between these marvellous intellects I couldn't help but improve. The Problem Oriented approach, while irritating in its rigour, as pursued relentlessly by Ian, nevertheless seemed to clarify my analysis of cases. Ian's ward rounds were more frightening than anything I was to encounter on my second and successful attempt at the Fellowship exam.

I will never forget the time on a Ward 3 East Round attended by, among others, two of the then authors of "Harrison's Textbook of Medicine", when, horrified at being asked to describe the mechanism of action of digoxin, I instantly dropped to the floor and underwent a grand mal convulsion. Ian, the consumate diagnostician, quite correctly recognised this to be a pseudoseizure, and stepped over me. He immediately turned to Storey and grilled him about the early works of Ovid. They went on to argue about the relative merits of Ovid's 'Tristia' and 'Epistulae ex Ponto', while I hurriedly recovered. On reaching the next bed, I audaciously chipped in with some Australian culture: "What about Patterson, Dr MacKay? You know, 'There was movement at the station, and the word had passed around". Ian glared at me and retorted, "The word had GOT around. Youl. We'll move on. thank you!"

This demonstrates no only lan's broad clinical skills, extending well beyond autoimmune diseases, but his broad knowledge of both the ancient and modern classics.

## THE TEN APHORISMS OF IAN MACKAY

(collected by Alan Ebringer, Professor of Immunology at King's College London and clinical registrar in ward 3 east, 1965)

1: Every chronic disease is autoimmune unless proved otherwise.

**2:** If you have done only 10 drafts of your paper, then you haven't really read it.

**3:** Once you have done 20 drafts, your paper is approaching the point of submission (my paper on "chloroquine neuromyopathy" went through 22 drafts.)

4: Do not quote a paper in your references that you have not read; sooner or later you will be found out.

**5:** An alcoholic patient is usually dominated by a strong willed mother or wife, and sometimes both.

**6:** There is no such thing as a routine case; every patient can teach you good medicine.

7: You have no right to play "god" with incurable diseases; you must do your best till the end.

8: When giving a research talk, remember there are only two or three people in the audience to whom your presentation is addressed; the others don't count.

### 9: The concept of

"euthanasia" interferes with clear medical thinking and has been banished from my ward.

**10:** Mouse immunologists usually have a poor grasp of medicine and inevitably will make fools of themselves during ward rounds.





# Name of image: Lilies

**Experimental details:** Multi-epitope-ligand cartography (MELC) is a high-throughput fluorescence microscopy-based method. A tissue section is analyzed through repeated cycling of incubation with a fluorophore-labeled antibody, fluorescence imaging, and soft bleaching. This method allows staining of the same tissue section with up to 100 fluorescent markers and to analyze their toponomic expression.

Green: Collagen type IV, Magenta: Propidium iodide, Yellow: CD44, Cyan: beta-catenin, Red: Rac1

Tissue sample: Colorectal cancer

**Created by:** Miriam Jasiulionis from Universidade Federal de São Paulo, Brazil



# WHAT'S NEW IN IMMUNOLOGY & CELL BIOLOGY

ANNE LA FLAMME, ICB Editor-in-Chief anne.laflamme@vuw.ac.nz

We are almost at the middle of 2020. Have you looked at Immunology & Cell Biology lately? If you have not visited our journal recently, let me update you on a few initiatives and changes.

Did you notice that from 1 January 2020, *ICB* has become an online-only journal?

# **On-line only: Free colour figures**

Did you notice that from 1 January 2020, *ICB* has become an onlineonly journal? While some of us mourn the loss of the print copy that we can flip through and proudly display on our coffee tables or in our tea rooms, many of us have come to realise the benefit of being electronic.

- First, colour figures are FREE! You no longer have to pay for colour figures in a Print version since there is no more print. You can now let loose that creative genie, who wishes to colour everything but has been held back by colour charges.
- Second, we have much greater flexibility in how we manage

our content and so we can incorporate content into issues more readily. This change should decrease the time from acceptance to final publication in an issue.

- Third, we have also become more adaptable in terms of our page count. Each year, we have 1000 pages over 10 issues of content. Did you ever stop to think why our articles have a maximum word count or number of references? In part it is so that we can use our pages wisely. Going online eases these constraints a little, and thus makes it much easier to manage our content and ensure that each manuscript is presented at its best.
- Last, we are much more sustainable. Need I say more?

## Editorial Team: Welcome our new members and a huge thank you for retiring members

I am extremely pleased to welcome Kate Lawlor and Catriona Nguyen-Robertson to the *ICB* Editorial team. Let me introduce you to them.





Kate Lawlor

Kate has just joined the editorial team as a Deputy Editor. She heads the Cell Death and Inflammatory Signalling Group at the Centre for Innate Immunity and Infectious Diseases in the Hudson Institute of Medical Research and Department of Molecular and Translational Sciences at Monash University. Kate's research focuses on the molecular dissection of cell death and inflammatory signalling pathways in innate immune cells, and her ongoing work explores how cell death causes inflammation, novel regulators of this process, and whether these

pathways can be manipulated to promote pathogen clearance or treat inflammatory disease.

## Catriona Nguyen-Robertson



In March, Cat took over from Jessica Borger as Associate Editor in charge of social media and promotion. She is currently a PhD candidate at Peter Doherty Institute for Infection and Immunity, studying "unconventional" T cells. Cat has a deep passion for science communication and outreach and has already been key to two fabulous initiatives for ICB including our Day of Immunology celebrations and our Trending Virtual issue on respiratory viruses (both detailed below).

At the same time, I would like to thank Colby Zaph, who has served as a News & Commentary Editor, and Sammy Bedoui, who has served as a Deputy Editor since 2016, for their exceptional work on the *ICB* team over the past few years.

At the same time, I would like to thank Colby Zaph, who has served as a News & Commentary Editor, and Sammy Bedoui, who has served as a Deputy Editor since 2016, for their exceptional work on the ICB team over the past few years.



is a video worth?

Additionally, this year, we have gone one step further to thank those researchers who have provided a large number of reviews during 2019. For those reviewers, we have gifted them a free Video Byte for any manuscript they submit to ICB in 2020. All journals rely on the good will of the scientific community to operate a robust peer-review system. We have all been asked to do it, and while it is sometimes fascinating and sometimes frustrating, reviewing manuscripts is always a lot of work. When was the last time you were thanked? If you reviewed for *ICB* in 2019, you will have received a reviewer certificate thanking you for your reviews.

Additionally, this year, we have gone one step further to thank those researchers who have provided a large number of reviews during 2019. For those reviewers, we have gifted them a free Video Byte for any manuscript they submit to *ICB* in 2020. These Video Bytes

are produced by Wiley and aim to extend the reach and visibility of the published research. They are short 1-min videos, typically overlaid with music. Curious? Please click this link (<u>here</u>) for more details.

Reviewer Recognition: If a picture is worth a thousand words, how much

To see some of the Video Bytes in action, we have recently produced a series for the Day of Immunology (see below).

### Day of Immunology: Immunology for everyday

This year to celebrate the impact of immunology on our lives, the *ICB* editorial team selected six recently published studies to showcase for the Day of Immunology 2020.

These studies highlight how research in immunology contributes to our everyday health and wellbeing with a particular focus on studies related to vaccine development and efficacy but also including studies that shed light on immune-associated diseases such as graft-versus-host disease and cystic fibrosis.

The authors kindly provided a summary of their research in plain language, and Wiley produced short video bytes based upon these abstracts. We invite you to enjoy and to share these videos (<u>click</u>



These studies highlight how research in immunology contributes to our everyday health and wellbeing

- David et al. Enhanced safety and immunogenicity of a pneumococcal surface antigen A mutant whole cell inactivated pneumococcal vaccine <u>Here</u>
- Robinson et al. BAFF, IL-4 and IL-21 separably program germinal center-like phenotype acquisition, BCL6 expression, proliferation and survival of CD40L-activated B cells in vitro Here
- Zimmermann et al. The immunomodulatory effects of measlesmumps-rubella vaccination on persistence of heterologous vaccine responses Here
- Geraghty et al. Pharmacological blockade of the CD39/CD73 pathway but not adenosine receptors augments disease in a humanized mouse model of graft-versus-host disease <u>Here</u>
- Mulcahy et al. Widespread alterations in the peripheral blood innate immune cell profile in cystic fibrosis reflect lung pathology <u>Here</u>
- Poyntz et al. Genetic regulation of antibody responsiveness to immunization in substrains of BALB/c mice <u>Here</u>

here) on the following articles.

## Trending virtual issue: Lessons learned

With the rapid spread of a new pathogen (SARS-CoV-2), we needed to find ways to battle this pandemic. To address this need, the *ICB* Editorial team pulled together a Virtual Issue on recently published articles exploring Respiratory Viruses. This trending issue presents a series of reviews and original articles that highlight key defence mechanisms that are employed against various respiratory viruses with an emphasis on influenza.

Innate immune cells, such as airway macrophages and dendritic cells (DCs), form part of the first line of defence in the respiratory tract. Previous infections or vaccinations support the development of specific adaptive immunity including mucosal antibodies and tissue-resident memory T (TRM) cells, which join the innate immune system in the frontline defences. These articles have been made freely available so that researchers around the world can use these studies and look for clues on how we can mobilise our immune system to fight respiratory viruses like SARS-CoV-2. Have we got you hooked yet? If so, click here.



# Immunology & Cell Biology



# Special Features: Fc effector functions are here now and B cells are on the way

During 2020, when you see this *ICB* cover, you know it is a Special Feature issue with exciting indepth reviews by international experts. In April, we published our first Special Feature for 2020 on "Multifaceted roles of antibody Fc effector functions: from protection to pathology". This collection of reviews covers how the constant region of antibody facilitates protection from pathogens, mediates the detrimental consequences of dysregulated Fc functions, and can be used therapeutically. Click here to read this new issue.

But let's face it, antibodies are near the end of the story. To understand the beginning, you need to wait for our July issue, which will be a Special Feature on B cells. For a sneak peek at these articles, you can always access our newest papers on the Early View page (here) for fully typeset and edited articles or the Accepted Articles page (here) for accepted but unedited articles.

Enjoy!

Anne La Flamme

Editor-in-Chief, Immunology & Cell Biology ■

# Immunology & Cell Biology

the flagship journal of the Australasian Society for Immunology (ASI)

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



# 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: http://www.wileyonlinelibrary.com/journal/icb Or access it by scanning this code



# THE IUIS CORNER J. ALEJANDRO LOPEZ alejandro.lopez@gimrberghofer.edu.au



International Union of Immunological Societie

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 <u>www.iuisonline.org</u> 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/

As we have all been affected by the new social environment where we suddenly landed this year, IUIS has been very active in the front of the COVID-19 emergency and has participated in the creation of very helpful tools for all to use and profit from. As we have all been affected by the new social environment where we suddenly landed this year, IUIS has been very active in the front of the COVID-19 emergency and has participated in the creation of very helpful tools for all to use and profit from. A very informative series of webinars and a knowledge hub are described below.

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### Call for Applications for an IUIS Scientific Content Editor and Coordinator

An exciting opportunity to contribute to the scientific content IUIS handles is opening for an immunologist interested in serving as a liaison person with media. The successful candidate will work remotely and receive annual stipend of U\$5000/year.

The key tasks of the job will be:

- Prepare and implement an annual communication schedule for all IUIS media channels
- Repost content for social media



#### platforms

- Publications Committee liaison for Frontiers in Immunology content (website, social media and newsletter)
- Oversight of Council, Committee Chairs, Regional Federations, National Societies and Other Partners - via social media

Application deadline is June 29th, 2020.

Full details of the positions can be found in:

https://iuis.org/careeropportunities/call-forapplications-for-an-iuis-scientificcontent-editor-and-coordinator/

# IUIS-Frontiers Webinar Series on COVID-19

IUIS via the publications committee and the president Faith Osier together with Frontiers have organised a series of weekly webinars with about the latest on COVID-19, from vaccine development, epidemiology and other immunological research. The webinars broadcasted so far have been very well subscribed and are available for viewing.

Details could be found in this link: https://iuis.org/webinars/

#### The list of webinars includes:

- Rino Rappuoli (Chief Scientist and Head of Research & Development at GlaxoSmithKline) on COVID-19 Vaccines
- Giuseppe Ippolito (Scientific Director at the National Institute for Infectious Diseases in Rome, Italy) on The Global Scientific Response to COVID-19
- Eleanor Fish (University of Toronto) on Global outbreaks Interferons as 1st responders
- Rachel Humphrey (Head of Research and Development for TIO Bioventures) on What cancer immunologists are doing about COVID-19
- Andreas Radbruch (Scientific Director of the DRFZ and Professor for Experimental Rheumatology at the Medical Faculty of the Humboldt University of Berli) on Adaptive Immunity in COVID-19
- Our own Sharon Lewin and Katherine Kedzierska (Director and Lab Head, respectively, at the Peter Doherty Institute) on COVID-19 in Australia: being prepared and understanding the role of cellular immune responses
- Mihai Netea (Experimental Medicine, Department of Internal Medicine, Nijmegen University Nijmegen Medical Center) on Trained immunity and BCG vaccination: a tool against COVID19?

### Frontiers Coronavirus Knowledge Hub

Frontiers have generated a website where it provides an up-todate source of trusted information and analysis on COVID-19 and coronaviruses, including the latest research articles, information, and commentary from our world-class scientific community. It is aimed at providing information for stake holders such as scientists, health workers, publishers, funders, policymakers, and government officials.

Visit the Hub via this link: https://coronavirus.frontiersin.org/?utm\_ source=xweb&utm\_medium=iuis&utm\_campaign=ba-cov-cco-gen-hp

#### Immunopaedia and COVID-19

Another useful source of information of daily scientific updates on COVID-19 and SARS-CoV-2 has been generated at Immunopaedia and could be accessed in this link: https://www.immunopaedia.org.za/

### "Menarini Prize for Outstanding Woman Immunologist"



Menarini Prize for Outstanding Woman Immunologist

On the occasion of the Day of Immunology on April 29th, IUIS and its Gender Equality Committee (GEC) proudly announce the "Menarini Prize for Outstanding Woman Immunologist" established thanks to the forward-looking vision and generous support of the Menarini Group.

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The USD 40,000 prize will be awarded for the first time at the 18th International Congress of Immunology (IUIS 2022) in Cape Town, South Africa in 2022 and at future IUIS congresses thereafter. This award is the first and only IUIS prize that specifically recognizes women immunologists and their outstanding research accomplishments. Rules for nominations and selection of awardees will be announced at a later stage.

#### **Travel grant for Expertise**

If you may be hosting a collaborator from a developing country working on COVID-19, you may wish to check this new grant. For further information, see our website: <u>https://iuis.org/ news/announcement-of-a-newtravel-for-expertise-travel-grantprogram/</u>

Three to five grants will be awarded to applicants from developing countries to travel internationally to laboratories fighting COVID-19 to learn special techniques or use special instrumentations for their ongoing or soon to begin COVID-19 projects.

# News from the Executive Committee

As newcomer to the femalestrong executive, the new IUIS vice-president Miriam Merad introduced herself in her IUIS Vice-Presidential Address 2020 below:

"I am truly honored for the opportunity to serve as Vice



President of the International Unionof Immunology Societies (IUIS). I am especially excited to be working with, and learning from, IUIS President Faith Osier, my good friend and colleague, Past IUIS President Alberto Mantovani, and the members of the Executive Committee and Member Council."

"I have lived, studied, and worked on three continents. I was raised in Algiers, Algeria, where I attended Algiers University Medical School. I moved to France, for a residency in Hematology/Oncology and subsequently to the United States to complete a PhD. and postdoctoral fellowship in Immunology at Stanford University. I have spent the past 15 years at the Icahn School of Medicine at Mount Sinai in New York, where since 2016. I have led the Mount Sinai Precision Immunology Institute."

"My interest in IUIS, and in promoting the highest possible

level of international collaboration among immunologists, is motivated by my realization that the disparity of knowledge between the three continents where I have lived never ceases to grow. Yet, the need for incisive knowledge of immunology has never been more vital. The current COVID-19 outbreak as well as the success of recent immunotherapy interventions in major human diseases highlight the urgent need to strengthen our understanding of immunological processes on a global scale, above all in developing countries."

"I hope to engage, through IUIS,

with colleagues worldwide to advance diversity in the scientific community; promote and champion the efforts of women scientists and enhance access to novel immunological tools and technologies in developing regions. Through concerted, collaborative efforts, I believe that we can achieve these goals."

"As a passionate immunologist, an Algerian-French American, and a woman scientist, it is my honor to contribute to and serve the IUIS mission."

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# **Clinical & Translational Immunology**

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



# CTI Special Feature on Unconventional immunity: the role of $y\delta T$ cells in host defense and disease

Special Feature Coordinators: Martin Davey and Emily Eriksson

 $\gamma\delta$  T cells have been preserved alongside  $\alpha\beta$  T cells and B cells for ~500 million years of vertebrate evolution.  $\gamma\delta$  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  $\gamma\delta$  T cells in infectious disease, cancer, transplantation and the lasting contributions of a pioneer of  $\gamma\delta$  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

**WII FY** 

# **ASI BRANCH REPORTS**

# **NEW ZEALAND BRANCH**

RIES LANGLEY, ASI NZ Councillor <a href="mailto:r.langley@auckland.ac.nz">r.langley@auckland.ac.nz</a>



Our daily lives over the last few months have been quite different to what we're used to. Lots of virtual

meetings and classes, and time at the computer. I sure have missed the lab!

As I write this branch report, we are in the process of moving back into Level 2 and all determining how we are going to function together out of isolation while still keeping our distance in the workplace. It'll be a challenge but I'm looking forward to the opportunity to get back in the lab with my colleagues. I'd like to acknowledge and thank all those Branch Members who have been involved in essential COVID-19related work.

The NZ Branch is running a competition for its members to design a new banner on the NZ Branch page of the ASI website that reflects NZ and our immunology.

Our AGM this year will most likely be another virtual meeting and I will send out details about it soon.



49th Annual Scientific Meeting | 29 Nov-3 Dec | Auckland

NZ will not be hosting the ASM this year due to the global pandemic. For information on upcoming ASI annual meetings, visit the ASI website here.

We will now be holding the 50th Annual Scientific meeting of the ASI in December 2022. The LOC are welcoming anyone who wishes to be involved in the organizing of this meeting. Please contact me.

The NZ branch was to be hosting Dr Stephanie Boisson-Dupis in July as part of the VSP. That visit has been postponed and a new date for her visit will be advised when known.

The NZ Branch is running a

competition for its members to design a new banner on the NZ Branch page of the ASI website that reflects NZ and our immunology.

Check out the top of the NZ Branch page here to see where the banner will sit!

The dimenions required are 1140px wide x 420 px length.

Send your entries to me at r.langley@auckland.ac.nz

There will be a prize for the winner and of course the prestige of having your creation across the top of the NZ Branch page.

Stay safe everyone,

Ries

# A NOTE FROM THE NSW COUNCILLOR

HELEN MCGUIRE, ASI NSW Councillor helen.mcguire@sydney.edu.au



# Hi everyone,

What a difference three months can make? Firstly, I hope that you and your families are

all safe and well.

In this time of physical distancing, we were pleased that our Garvan Institute initiated school kids reach out *Day of Immunology* event could proceed, featuring a number of volunteers at the Garvan through a series of webinars for regional schools across NSW.

In this time of physical distancing, we were pleased that our Garvan Institute initiated school kids reach out Day of Immunology event could proceed, featuring a number of volunteers at the Garvan through a series of webinars for regional schools across NSW.

Last newsletter we were excited to promote Carla Rothlin's upcoming NSW trip as part of ASI VSP. This has now been postponed, with future dates likely being reassessed on 6 months time.

We are looking forward to more opportunities for events to engage our ASI NSW membership, such as *hopefully* some version of a retreat later in the year or early next year.

If you have any great ideas you would like to put forward, get in touch (<u>helen.mcguire@sydney.</u> <u>edu.au</u>) - as always, I'm always keen to hear suggestions.







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# UPDATE ON ASI VISITING SPEAKER PROGRAM

STUART MANNERING, VSP Coordinator smannering@svi.edu.au

Health concerns, travel restrictions and uncertainty have meant that all the currently scheduled ASI Visiting speakers visit dates are uncertain. Most have already postponed their visits for 2020, while others are hoping to come later in 2020. Nonetheless, we're all hoping that these speakers will be able to visit Australia when the current Covid-19 crisis has passed.

Below is a list of the scheduled speakers and the current status of their visits.

Please note, that all dates are provisional at this time.

## **Prof Paul Kubes**



Hosted by Anne Bruestle (ANU) and Michael Hickey (Monash, Melbourne).

Paul has cancelled his trip. An alternative date has yet to be arranged.

Health concerns, travel restrictions and uncertainty have meant that all the currently scheduled ASI Visiting speakers visit dates are uncertain.





## A/Prof Carla Rothlin



Hosted by Ian Parish (Peter Mac, Melbourne).

Carla has rescheduled she is now tentatively planning to visit in late 2021.

## Prof Hai-Hui Xue



Hosted by Lisa Mielke of the (ONJI, Melbourne). Howard is hoping to come to Australia later this year, but a final decision will be made by the end of August 2021.

## **Prof Andre Veillette**



Hosted by Fernando Guimaraes (University of Queensland, Brisbane)

Andre was planning to come in November-December 2020 and visit Vic, NSW, QLD, WA and NZ, this may be postponed, but a final decision hasn't been made at this time.

## Prof Shabaana Khader



Hosted by Brin Ryder (Otago University, NZ). Shabaana and Brin are still planning for a visit in visit in Jan/Feb 2021.

### Dr Stephanie Boisson-Dupis



Hosted by Stuart Tange (Garvan Institute, Sydney).

Stephanie has postponed until 2021.

Many thanks to all the speakers, hosts, ASI volunteers and members who continue to support the ASI Visiting Speaker Program during this time of great uncertainty.

Many thanks to all the speakers, hosts, ASI volunteers and members who continue to support the ASI Visiting Speaker Program during this time of great uncertainity.



# **ASI INTERNATIONAL TRAVEL AWARD** 17th International congress of immunology, october 19-23 2019, beijing, china

MD ANAYET HASNAN, The University of Queensland Diamantina Institute, Translational Research Institute Social Media: <u>Linkedin</u> Email: <u>anayet.hasan@uq.edu.au</u> Supervisor: Associate Professor Ray Stept<u>oe</u>

I was extremely fortunate to receive the ASI International Travel Award (postgraduate) to attend The 17th International Congress of immunology (IUIS 2019) held in Beijing, China during 19-23 October 2019. This was the key meeting for the world's leading immunologists which covered a wide range of immunological topics including innate and adaptive immunity, disease and therapies. This meeting featured a number of renowned international speakers including at least 3 Nobel laureates and showcased recent advances in immunological research. I was personally excited to hear the keynotes lectures from Professor Doherty (Australia), Professor Hoffman (France) and Professor Honjo (Japan). Each of these lectures were encouraging and answered some of the big questions.

Some of the talks I enjoyed most were from Harvey Cantor from Harvard Medical School on control of autoimmunity by CD8+ regulatory T cells, on up or downregulation of Tregs to control immune responses from Shimon Sakaguchi from Kyoto University and from Xiao-Kang Li about manipulation of dendritic cells as an approach for induction



PRESENTING MY POSTER AT THE IUIS 2019



VISITING THE GREAT WALL OF CHINA ONE OF THE SEVEN WONDERS OF THE WORLDS. BADALING POINT, BEIJING, CHINA

.....

## ASI INTERNATIONAL TRAVEL AWARD

This meeting featured a number of renowned international speakers including at least 3 Nobel laureates and showcased recent advances in immunological research.

of transplantation tolerance. I presented my work on nongenotoxic recipient conditioning to induce antigen specific T-cell tolerance in the poster session, this poster presentation resulted interesting discussions with researchers from diverse immunology background and I got some valuable feedback.

In addition to attending this meeting I had the opportunity to visit the Great Wall of China, one of the Seven Wonders of the World and Forbidden City also known as Palace museum built in 14th centuries and has more than 8700 rooms. It was a great experience to visit those widely known historic places.

After the congress, I had the opportunity to visit couple of laboratories in the Institute of Medical Sciences at The University of Tokyo (IMSUT), Japan. I was hosted by Professor Arinobu Tojo and Professor Tokiko Nagamura-Inoue and had a chance to visit institutes core facilities and to present my work in ISMUT weekly seminar.

I also had the opportunity to learn about Japanese cultures such as Kabuki- a classical Japanese dance-drama. I tried some authentic Japanese sushi, wasabi kitkat and Japanese green tea. Professor Tojo was a wonderful host and it was a great experience to visit his lab and build a research connections with him.

Finally I am honoured to have received ASI International Travel Award and would like to thank ASI for their funding support to attend IUIS 2019 and to make new research connections. This was an invaluable experience. Thanks ASI.



WITH JAPANESE LAB MATES.



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# **ASI INTERNATIONAL TRAVEL AWARD** 17th International Congress of Immunology,

OCTOBER 19-23 2019, BEIJING, CHINA

GANG LIU, Head of fibrosis program, Centre for Inflammation, Centenary Institute, Sydney

Email: gang.liu@uts.edu.au Twitter: @Dr\_GangLiu

Supervisor: Prof. Phil Hansbro www.centenary.org.au/cen\_author/professor-philip-hansbro Email philip.hansbro@uts.edu.au Twitter @HansbroResearch

I am a lecturer at University of Technology Sydney and a leader of fibrosis program at Centre for Inflammation at Centenary Institute, Sydney, Australia. In 2008, I completed a science degree in China and obtained a Master of Science in Biotechnology at University of Wollongong in 2011. Following, I pursuit a PhD in the field of immunology and microbiology at University of Newcastle on a project that extensively explored on airway remodelling/fibrosis in lung diseases and was awarded my doctorate degree in 2016.

My interest has been on investigating bacterial and immune system in inflammatory bowel disease under supervised by A/Prof. Simon Keely. Since 2019, I joined the Centre for Inflammation at Centenary Institute and University of Technology Sydney, which was led by Prof. Phil Hansbro I started my first postdoc training at Priority Research Centre for Healthy Lung, University of Newcastle in 2016-2017, with the aim to understand the role of mast cells regulate inflammation in lung diseases. Followed on from this, I extended my research with a focus on gut diseases and worked as a postdoctoral fellow at Priority Research Centre for Digestive Health and Neurogastroenterology at the Hunter Medical Research Institute and University of Newcastle in 2017-2019.



CONFERENCE VENUE: CHINA NATIONAL CONVENTION CENTRE

My interest has been on investigating bacterial and immune system in inflammatory bowel disease under supervised by A/Prof. Simon Keely. Since 2019, I joined the Centre for Inflammation at Centenary Institute and University of Technology Sydney, which was led by Prof. Phil Hansbro (an internationally renowned research leader in the field of immunology and respiratory diseases). Phil's research focuses on understanding the process of fibrosis/remodeling in lung and gastrointestinal tract diseases and in other organs, including liver, kidney and skins. His research is also to extend the knowledge of immune response and fibrosis crosstalk between different organs, such as lung-gut axis.

I have drawn some highlights from attending this big scale conference and found my international reputation has grown significantly ever since I was given the opportunity to give an oral presentation on platelet activating factor receptor regulates colitis-induced pulmonary inflammation through the NLRP3 inflammasome at this meeting.

The 17th International Congress of Immunology (ICI) 2019 in Beijing, China is a high-profile, international conference comprised of more than 6,500 scientists from 80 different countries. ICI covers in the field of immunology in different disorders, including lung, gut, liver, kidney and skin. This ICI also invited three keynote speakers who have awarded Nobel prize, and they gave lectures on past, current and future immunology research.

I was delighted to have attended



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random integration of a foreign gene into the genome Ref: Piszczek et al., Mamm Genome 30(11-12):319-328, 2019

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Chappaz et al., Blood Adv. 14:4(7):1270-1283, 2020

the ICI 2019, which provided me with a new insight into therapeutic target studies across different diseases. A great thing about ICI 2019 was that it covered almost every disease in different organs. I have drawn some highlights from attending this big scale conference and found my international reputation has grown significantly ever since I was given the opportunity to give an oral presentation on platelet activating factor receptor regulates colitis-induced pulmonary inflammation through the NLRP3 inflammasome at this meeting. Positive feedback from audiences have given me valuable new ideas for further research in the field of immunology in gutlung axis.

This conference has provided me the opportunities to establish national and international collaborations, in which I met with several potential collaborators and expertise that strongly links with my current projects and several other projects for my external grant applications. In addition, three students have expressed their interests of conducting a PhD study under my supervision at the Centre for Inflammation, Centenary Institute, Sydney, Australia.

The ASI travel award was a major support for me in attending this ICI conference. This award has helped me significantly, in particular allowing me the opportunity to build national and international network in gut and lung research. This ICI conference 2019 had given me the opportunity to disseminate my research to global leaders and researchers and further my career development to become a global leader in the field of immunology and fibrosis. ■



WITH INTERNATIONAL RECOGNISED SCIENTISTS AT CONGRESS DINNER

# IMMUNO ASSAY TOOLS FOR YOUR RESEARCH

Immuno oncology is a rapidly expanding area of personalised medicine. Researchers are exploring the complex relationship between tumor cells and the immune system within the tumor microenvironment to discover new immuno oncology targets and therapies.

A recent paper by von Scheidt et al

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PNAS examined how Enterotoxins can support CAR T cells against solid tumors \_\_\_\_\_org/10.1073/pnas.1904618116

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# **PUBLICATIONS OF INTEREST**

**OUR SUSTAINING MEMBERS** 

# abcam

# Recombinant Anti-Cytokeratin 5 antibody [EP1601Y] - Cytoskeleton Marker (ab52635)

Wagner J et al., 2020. A Single-Cell Atlas of the Tumor and Immune Ecosystem of Human Breast Cancer Cell. 10.1016/j.cell.2019.03.005

# Recombinant Anti-Liver Arginase antibody [EPR6671(B)] (ab124917)

Seifert L et al., 2020. The necrosome promotes pancreatic oncogenesis via CXCL1 and Mincle-induced immune suppression. Nature. 10.1038/nature17403

# Recombinant Anti-CDX2 antibody [EPR2764Y] (ab76541)

Choi YJ et al., 2020. Science Deficiency of microRNA miR-34a expands cell fate potential in pluripotent stem cells. Science. 10.1126/science.aag1927



# EasySep™ Mouse B Cell Isolation Kit and EasySep™ Human Naïve B Cell Enrichment Kit

Sanchez H. et al, 2020. B cell-intrinsic epigenetic modulation of antibody responses by dietary fiber-derived short-chain fatty acids. Nature Communications Doi: 10.1038/s41467-019-13603-6

## EasySep<sup>™</sup> Mouse T Cell Isolation Kit

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# 🍪 BD

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