

ASINEWS March 2021



11

Hear from the newly formed ASI Special **Interest Groups**

Fernando Fonseca Guimaraes

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Launch of the Clinical & Translational Immunology COVID-19 collection

Contact Us

Australian and New Zealand Society for Immunology Inc. ASI Inc. Secretariat

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ASI Advanced Immunology School



Public Engagment Award

Winner Catriona Nguyen-Robertson



IUIS Corner

A brief update of the news coming from IUIS. J. Alejandro Lopez

Hello and welcome to 2021

Debbie Burnett, Newsletter Editor newsletter@immunology.org.au

Hello and welcome to 2021 for what looks to be an extremely exciting year for the immunological community.

In keeping with this theme of fresh starts I'd like to introduce myself as incoming newsletter editor for the next three years and thank the previous newsletter Angelica Lau for the absolutely outstanding job for the last three years. Thankfully Angelica is remaining heavily involved in the ASI community and you'll still be hearing from her in her new role as NSW Branch Coordinator.

There's no denying that 2020 was a difficult year for many of us, with border closers and lockdowns taking a toll and separating us from loved ones. It's also been a challenging year for many from a professional standpoint, with the loss of international and national conferences making it more challenging to establish collaborations, and lockdowns and social distancing limiting our experimental productivity. At the same time 2020 will be remembered as the year that brought immunology to the forefront of the public mind and has served the role of highlighting the amazing research done by members of this community. In addition, throughout 2020 ASI immunologists have shown their remarkable resilience in the face of challenges and been able to rapidly establish new techniques, collaborations and publish some truly ground breaking research. 2021 is looking to be a year of hope. Although we are in some ways still affected by uncertainty surrounding border closures, this community has found ways to evolve and establish new methods of connection.

Throughout 2021 ASI is offering a number of new initiatives to help you remain connected to your immunology peers. In this edition of the newsletter we have the opportunity to introduce you the organising committee of a number of new Special Interest Groups you'll be hearing a lot from over the next year. Don't forget to subscribe to the latest updates from these or other SIGs on the ASI website now!

Also we have the pleasure of opening up a very special promotion by the ASI journals. For the first time ever, if you sign up for ASI journal content alerts you can have the opportunity to win an extremely

We're running a special column in next quarter's newsletter of simple and fun lab hacks you've discovered and would like to share

rare and relevant prize- a signed copy of Peter Doherty "Pandemics" book.

Throughout 2021 ASI will allow us to remain connected through a number of online seminars and workshops. Excitingly, in mid-late 2021, we are resuming face to face gatherings in a COVID-Safe manner, with the second Advanced Immunology School taking place in Sydney from the 3rd-6th of August, so keep an eye out for more information.

It's also a great time to remind everyone to **renew** their membership now, because April 1st is the deadline for renewal to be eligible for most of our ASI awards and opportunities. Take a few minutes to



login and renew now.

In the meantime, to keep you thinking of ways to help each other out and stay connected, we're running a special column in next quarter's newsletter of simple and **fun lab hacks** you've discovered and would like to share with the ASI community. Have you been using a glove cuff as a hair tie when you've forgotten yours? Or maybe you've been using textbooks to create a cheap but effective laptop stand? If so **send me an email** at <u>newsletter@immunology.org.au</u> and we'll publish your fun lab hacks in the next edition. I'd love to hear from you.

Lastly, don't forget to check our '<u>ASI</u> <u>Events</u>' page regularly and bookmark our '<u>Latest News</u>' page to make sure you don't miss a thing. ■





Secretary Report

Welcome to 2021!

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

Welcome to 2021 and what will hopefully be happy vaccination year! The pandemic has continued to bring immunology to the forefront. Moving forward in 2021, ASI can hopefully go from strength to strength as we aim to continue to support members during these challenging times. Below are details on some of the different awards/initiatives for 2021 and please also note that member renewals are due March 31st.

ASI can hopefully go from strength to strength as we aim to continue to support members during these challenging times

Award information and dates

As the pandemic evolved in 2020 we introduced changes to some of the ASI awards to allow for broader scope/flexibility, including the new Career Advancement Awards scheme as an alternative to the conventional International Travel Awards. In 2021, we will continue with these awards as per 2020. 2020 also saw the release of two new ASI awards, the Cheers-Buchan Education Award and Public Engagement Award. Please see the 2021 schedule below for each of the award application rounds and we hope this will help to give advance notice for when applications are due. Further details on the different awards can also be found on the ASI website and in the member portal. Don't forget to renew your membership before April 1st to be eligible for these awards.

- Career Advancement Awards, round one: March 1st to March 29th
- COVID Carer Awards, round one: March 1st to March 29th
- Public Engagement Award: 3rd May to 21st May
- Education Award: June 7th to July 5th
- Jared Purton Award: July 19th to August 16th
- Career Advanced Awards, round two: August 30th to September 20th
- COVID Carer Awards, round two: August 30th to September 20th
- Margaret Baird Award: October 4th to October 25th

Given we are in the midst of a global pandemic these are challenging times for everyone in one way or another. If you are unsure of your eligibility for a particular award scheme and wish to request an eligibility extension (e.g. due to financial



Given we are in the midst of a global pandemic these are challenging times for everyone in one way or another.

hardship, personal circumstances, maternity leave, carer's leave etc) please contact ASI in advance of the application deadline. This will allow time to assess your request and so that we can adjust the automatic Netranger portal for you to upload your application if required.

Special Initiatives Fund

ASI is continuing to welcome applications for the Special Initiatives Fund which are open all year and assessed every quarter. Two Special Initiative Fund applications were recently supported in 2020, a new mentoring scheme (Kylie Quinn) and an International Advanced Course in Translational Immunology (Gabrielle Belz). Please stay tuned for further information on these from their respective organisers. We would love to hear from you if you have a great idea on how to promote the discipline of immunology and support members. The 2021 dates for when applications are due are May 17th, August 16th and November 15th. ■

2020 Treasurer's Report

Weathering a turbulent year

Asolina Braun, Treasurer treasurer@immunology.org.au

Whilst the turbulent year of 2020 has disrupted almost every aspect of our lives, ASI's finances have weathered the past year well. The membership numbers and income from ASI's journals have remained steady, which has allowed the executive to adapt traditional travel awards and roll out COVID-appropriate career advancement awards as well as other support measures.

ASI's finances have weathered the past year well. The membership numbers and income from ASI's journals have remained steady, which has allowed the executive to adapt traditional travel awards and roll out COVID-appropriate career advancement awards as well as other support measures.

Unfortunately, one of the consequences of COVID was that the ASI 2021 annual conference in Melbourne had to be cancelled over one year in advance due to a major negative financial impact on the society, should the conference have been cancelled after November 2020. The unpredictably fluent travel ban situation for international and interstate conference attendees has left the organisers and executive committee with little choice but to postpone the Melbourne annual meeting and to host a digital meeting format for 2021 instead to reconnect later this year.

Last year marked the first anniversary of ASI's recently established investment portfolio. Swift rebalancing at the beginning of the pandemic and a fastpaced recovery of the equity markets have allowed the portfolio to produce an overall positive return for the 2020 calendar year (1.25%) in spite of all turbulences.

At the last annual general meeting, membership voted for the introduction of a permanent fifth member on the executive committee, allowing the Treasurer role to be filled with two executive committee members at all times – Treasurer and Deputy/Immediate Past Treasurer. This will ensure the transfer of historical knowledge between Treasurers and allows for the possibility to allocate day to day financial



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dealings of the growing funds under management to two members of the executive committee.

I would like to use this opportunity to extend special thanks to the executive and investment committees as well as Tyani Chan for their ongoing engagement for the benefit of the society and their admirable adaptability throughout 2020.

The full 2020 Treasurer's Report will be available soon in your ASI member profile. Please direct related inquiries to treasurer@immunology.org.au

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ASI Advanced Immunology School

Second AIS to be held from 3rd-6th August 2021

AIS Organising Committee: Susanne Heinzel, Joanne Reed, Tyani Chan, Ee Shan Pang and Deborah Burnett

ADVANCED IMMUNOLOGY SCHOOL

After the great success of the first ASI Advanced Immunology School we are excited to announce that the second ASI Advanced Immunology School will be held from 3rd-6th August 2021 at Long Point Conference Centre, Long Point, Sydney, NSW. The theme for the 2021 AIS will be 'Immune Challenges'.

The ASI-AIS is designed for early career researchers and RAs with a sound background knowledge in the principles of immunology. All teaching faculty and delegates will live on site. This format and the small size (45 participants max) provide the platform to foster communication between the participants and teaching faculty and for establishing new collaborations and professional networks. Discuss your burning research question with your peers and the teaching faculty over breakfast, lunch or dinner, enjoy a drink with the expert in your field, compete with your next lab head at trivia, and learn about cutting edge research and advances in basic and clinical immunology.

Confirmed members of the teaching faculty at ASI-AIS 2021 include Carola Vinuesa (ANU), Rob Brink (Garvan), Shalin Naik (WEHI), Bruce Lyons (UTas), Chris Engwerda (QIMR), Katherine Kedzierska (Doherty), Lisa Ebert (UniSA), Ros Kemp (UniOtago), Kate Schroder (UQ), Michelle Wykes (QIMR), Iain Comerford (AdelU), Vanessa Bryant (WEHI), Michaela Lucas (UWA), Connie Jackaman (Curtin), Georgina Clark (Uni Sydney), Joanne Reed (Garvan) and Susanne Heinzel (WEHI). Participants will also have the opportunity to present their own research.

The registration costs for participants will be approximately \$250 per person. This fee includes participation at all scheduled activities at the School, accommodation (shared rooms), food and drinks. A COVIDsafe plan will be in place for the event.

Applications to attend the 2021 ASI-AIS will open early May 2021 so please keep an eye out for an email.

For more information visit our Advanced Immunology School webpage by clicking <u>here</u>.

Check out our photo gallery from the 2019 AIS by clicking <u>here</u>.

Testimonials from the first AIS:

"The inaugural ASI Advanced Immunology School was a huge success, providing an exceptional opportunity for learning, networking, and taking a break from the lab to enjoy great immunology in the company of fantastic immunologists. I would highly recommend attendance to this great event, I fully expect to return next year! This was a lot of fun and a great opportunity for networking both with my peers as well as higher level researchers."

"AIS 2019 gave me a good kick start to my Immunology research career "

"It was brilliant to get an update of the current questions and topics that drive the different fields of immunology. I met a lot of inspiring, very approachable people that gave great scientific advice but also talked openly about how they got to where they are now."

"There was a wonderful open and friendly culture, with lots of time to meet and network with fellow ECRs and faculty"

"This was a lot of fun and a great opportunity for networking both with my peers as well as higher level researchers."

Applications to attend the 2021 ASI-AIS open early May 2021, keep an eye out for an email.

We are looking forward to welcoming an enthusiastic group of early career Immunologists to the ASI-AIS.

2019 Advanced Immunology School











Writing and Reviewing:

Grant Applications

Brigette Boast prize winner from the 2019 AIS



In 2019 I attended the inaugural ASI Advanced Immunology School held in the beautiful area of the Mornington Peninsula, Victoria. The school was the perfect environment to meet a broad and diverse range of new people, from PhD students to junior and senior lab heads. The organising committee did a really great job at getting lab heads from completely diverse fields, that use different techniques, with a wealth of experience across the immunological landscape. With a mix of sessions including lectures from lab heads, workshop style sessions, and short talks from the participants, there was always something to keep you engaged and the sessions never felt like they dragged on. It was a fantastic opportunity to delve back into the basics of immunology and then build on that to understand the more recent data that's currently emerging. I discovered there was a lot of basic immunology that I took for granted as "knowing" because the background is usually skipped over during presentations and seminars but running sessions like this made me realise how much of my understanding was still guite rudimentary. I also liked that that I heard from people who I would otherwise not have heard from before as their field did not overlap with my own and I would have most likely not prioritised their talks at other conferences and meetings. Being held away from the city meant that we were able to interact with

all of the participants and the lab heads in an intimate and extended setting. Social activities at night-time really cemented these interactions and made for a particularly enjoyable experience all round. I was also lucky-enough to

The organising committee did a really great job at getting lab heads from completely diverse fields, that use different techniques, with a wealth of experience across the immunological landscape. receive an award for my participation in the ASI AIS, which provided me with a \$250 prize to be used for travel to attend conferences and meetings in 2020. With how 2020 panned out, that award has been sitting on my desk for the last 12 months mocking my inability to travel anywhere. Maybe I can ask ASI if I can cash it in for some coffee vouchers to fuel my caffeine addiction instead.

Brigette Boast is currently working in the Lab of Anselm Enders at the John Curtin School of Medical Research about to undertake a postdoc at the NIH in the lab of Sergio Rosenzweig. ■

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Non-toxic and easily disposed of	√	~	×	×

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A message from SIG Coordinator

Fernando Fonseca Guimaraes, SIG Coordinator f.guimaraes@uq.edu.au

Given the longstanding history of ASI, I'm excited to have been appointed the newly created Council position of ASI Special Interest Groups (SIG) Coordinator. I sincerely thank Dr. Helen McGuire for standing in as the acting SIG Coordinator. Helen successfully managed to revigorated our SIG program by introducing new SIGs, and importantly establishing streamlined processes for efficient communication between SIG Chairs and the new SIG Coordinator role. This role is responsible for managing the ASI SIGs and acts as the point of contact between ASI Council and SIG Chairs. As your SIG Coordinator, I will bring enthusiasm, pro-activity and passion for immunology.

For those of you who don't know me, let me introduce myself. I completed my doctoral degree as the first graduate from the International PhD Program at Institute Pasteur (Paris, France) in 2012. During my PhD, I laid strong foundations for my academic career and became a key researcher in the field of Natural Killer (NK) cell response

This year I hope to hold regular meetings with SIG Chairs to discuss new ways to improve the program and also welcome feedback from members. It is exciting that in addition to the current 9 SIGs, we now have the creation of 2 new SIGs in 2021. to systemic inflammatory response syndrome and sepsis in animal models and intensive care unit (ICU) patients. In Australia, to extend my knowledge in the areas of NK cell signalling and innate immunotherapy I joined QIMR and WEHI for my postdoctoral training, where I obtained an extensive track record of publications in top tier journals including Blood, Cell Death Dis, JEM, PNAS, Nat Comms and Nat Immunol, and was awarded the 2019 Researcher of the Year by CCA, 2020 QLD Young Tall Poppy Science Award and a 2020 UQDI Rising Star Award. I started to gain independence by attracting peerreviewed funding as e.g.: NHMRC ECF, an NHMRC New Investigator Project Grant, a NBCF Fellowship, 3 CCA PdCCRS Project Grants, and a US Department of Defence Award. My work in the identification of new regulators of optimal in vivo NK cell function has earned me peer recognition as an emerging leader in this field. My current projects at the University of Queensland Diamantina Institute aim to identify and translate the role of NK cells and develop novel immunotherapy approaches for different diseases. I am also recruiting talented PhD students to join his group in Brisbane to explore my vision that "awakening the cure inside us is possible through research" (E-Mail:_ f.guimaraes@uq.edu.au / Twitter: @ Fer_NK_nando)

This year I hope to hold regular meetings with SIG Chairs to discuss new ways to improve the program and also welcome



feedback from members. It is exciting that in addition to the current 9 SIGs, we now have the creation of 2 new SIGs in 2021 (Autoimmunity, and Wild Immunology), and I look forward to coordinating them all.

Just a couple of reminders before signing off. To join an ASI SIG, please log in to your ASI member profile and simply tick which Special Interests you have – this will automatically add you to the relevant SIG email list. In addition, don't forget all members have the opportunity twice yearly to propose a new SIG to ASI council. For more information about our ASI SIGs, please click here.

Current ASI SIGs:

- Clinical Immunology
- Education
- Immunometabolism
- Infection and Immunity
- Innate Immunity
- Mucosal Immunity
- Stromal Immunity
- Systems Immunology: Technology, Quantification and Application
- Tumour Immunology
- Wild and Comparative
 Immunology

Autoimmunity and Tolerance SIG

This year we are starting a brand-new special interest group for all those with an interest in autoimmune disease, transplantation tolerance and immune therapies to restore tolerance.

The idea for this new SIG stemmed from the long running Australasian Autoimmunity Workshops. These popular workshops were started in 1994 by Prof Kevin Lafferty and ran annually until 2011. As a way to re-connect the autoimmunity and tolerance community in Australia and New Zealand, we have formed this SIG.

Our goal is to provide a forum for likeminded ASI members to connect, form collaborations and to promote the latest research in this field both locally and internationally. We aim to run an annual workshop, support visiting speakers along with other activities.

The idea for this new SIG stemmed from the long running Australasian Autoimmunity Workshops. These popular workshops were started in 1994 by Prof Kevin Lafferty and ran annually until 2011.



THE FIRST BOOK DEDICATED TO AUTOIMMUNITY PUBLISHED IN 1962 BY IAN MACKAY AND MACFARLANE BURNET The Autoimmunity and Tolerance SIG chair is A/Prof Emma Hamilton-Williams and co-chair is A/Prof Stuart Mannering. If you are interested in this SIG you can register your interest via your ASI profile and if you are interested in joining the organising committee please email e.hamiltonwilliams@uq.edu.

We aim to run an annual workshop, support visiting speakers along with other activities.



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Wild and Comparative Immunology (WACI) SIG

Australia is one of the most biodiverse countries in the world, with many animal species found nowhere else in the world. However, Australia is at the midst of an animal extinction crisis whereby a number of devastating diseases are affecting the most iconic native Australian species. For example, the Tasmanian devil facial tumour disease, chlamydia in koalas, and mucormycosis in platypus, and mange in wombats pose threats to these species. These diseases all pose interesting immunological questions. Marsupials also present interesting opportunities to study immunological tolerance at the maternalfoetal interface due to the short period placental attachment and longer period in the mother's pouch. Fundamental scientific knowledge gained from studying these natural disease models may not only impact wildlife conservation for many generations but could also advance human medicine.

This effort has been gaining momentum for several years, with a special "Wild Immunology - The answers are out there" research topic in 2016. The idea for a Wild and Comparative (WACI) consortium was formalised with an eLetter response to an article in Science. The first WACI workshop in Hobart in December 2019 was organised by Jerome Le Nours, Andrew Flies (UTAS - Menzies), and Michelle Baker (CSIRO - ACDP). The workshop was a great success and resulted in Perspective article in Science titled Rewilding Immunology co-authored by 18 people from the workshop. The article generated a strong response and follow media included an article in Der Spiegel (Germany) and a great comic and

outreach tool from <u>Science in Pictures</u>. With help from Travis Beddoe (La Trobe) and Amanda Patchett (UTAS – Menzies), the <u>WACI 2020 conference</u> was fully online, with 150 registered participants

from more than 10 countries and times zones. Each session has over 70 people zooming in for the talks and discussion.

We are excited for our Wild and Comparative Immunology consortium to become and ASI SIG and looking forward to our first WACI SIG event in 2021. We hope that our WACI SIG can provide a bridge for the amazing immunologists in ASI to work with veterinarians, ecologists, and wildlife biologists to generate new insight into multidisciplinary problems.

If you are interested in the WACI SIG you can register your interest via your ASI profile (https://www.immunology.org. au/members/) . For more information, please visit our website <u>wacimmuno.</u> <u>com</u>, contact members of the organising committee directly, or email <u>info@</u> <u>wacimmuno.com</u>. Follow us on Twitter @ WACImmuno

Organising committee:

<u>Jerome Le Nours</u> - Biomedicine Discovery Institute, Monash Andrew Flies @WildImmunity – Menzies Institute for Medical Research, UTAS

Michelle Baker @MLBaker4 – Australian Centre for Disease Preparedness, CSIRO

Travis Beddoe @BeddoeLab –

Centre for Livestock Interactions with Pathogens, La Trobe

Amanda Patchett @Amanda_Patchett -





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CD3	CD14	CD44	CD69	CD303
CD4	CD16	CD45	CD71	CD304
CD5	CD19	CD45RA	CD83	FceRla
CD7	CD22	CD45RO	CD90	HLA-DR
CD8	CD25	CD49d	CD117	IgG1 control
CD10	CD30	CD56	CD123	IgG2a control
CD11b	CD33	CD62L	CD138	lgG2b control



"Rewilding Immunology" by Jared Adelman

News from the Education SIG

The Education SIG kicked off the year with our successful 2nd Annual Meeting on February 5th – Immunology goes Digital (IgD). Over 60 participants from all over Australia and New Zealand joined our virtual meeting to share their passion for immunology education, their teaching experiences, and how to advance their careers in the education space.

In our first session, the Teaching and Research Nexus, our keynote speaker A/Prof Tony Kenna (QUT) presented his insights and experiences as a research-focussed academic into how immunology teaching is changing, and the challenges that we need to consider as we move forward into online and blended education models. Next, ASI IUIS Representative, Prof J. Alejandro Lopez (QIMR/Griffith Uni) introduced us the IUIS resource Immunopaedia, outlining how we can use it in our teaching and how we can contribute to the content.

Dr Dianne Sika-Paotonu (Uni of Otago) started off our second session on Digital transformation and Tips for teaching difficult concepts in immunology. In her keynote presentation, she outlined her journey from her Masters to PhD to a teaching and research academic, with an emphasis on issues of equity and how these can be addressed. Dianne highlighted how, for medical students, she uses Acute Rheumatic Fever as an example to connect immunology theory, to the clinical and community setting in Pacific Health related teaching. We finished the session with a robust discussion surrounding our lighting presentations selected from abstract

submissions. Our presenters covered topics from transforming practicals from face-to-face to online, to different technologies to enhance the online teaching environment, and challenges and equity issues related to online teaching. These lighting presentations are available to all ASI members to watch via the Education SIG page on the ASI website (https://www.immunology.org. au/Programs/Special-Interest-Groups/ Education/education-sig-2nd-annualmeeting-videos/).

Our third session focussed on Professional development for the next generation of educators. We began with A/Prof Christina Cheers (ASI Honorary Life member) presenting the Cheers-Buchan Education Award to the Inaugural winner, Professor Scott Byrne (USyd). Scott outlined his excellent activity involving balloons to engage students in practicals and to help with understanding antigen-antibody interactions. Next, we heard from Dr Anuj Sehgal (Mater Research Institute) with some striking statistics about the career pathways of life science PhD graduates, with most leaving science and academia altogether and trying to understand the reasons behind this. We ended the session with valuable advice from A/Prof Odilia Wijburg (Uni Melb) on how to build a CV in teaching and learning, followed by Dr Samy Sakkal (VU) and A/ Prof Maurizio Costabile (Uni SA), both previous winners of national Office of Learning and Teaching (OLT) citations amongst others, with their 12 tips to help us successfully apply for teaching awards.

In our fourth and final session, A/Prof Maurizio Costabile (Uni SA), Dr Dodie Pouniotis (RMIT), and Prof Gabrielle Belz (UQ) outlined their visions for, and presented opportunities for members to participate in standardising the Australian and New Zealand immunology undergraduate curriculum, working towards an Assessment Framework which is part of a National Biomedical Assessment Collaboration, and shaping an International Advanced Course in Translational Immunology, respectively. If you would like more information on any of these initiatives, or would like to be involved, then please be in contact.

We wrapped up the day with a presentation from our sponsor, GenScript (ASI Sustaining Members), and the awarding of the GenScript Best Speaker Award (from the submitted abstracts) to Dr Anuj Sehgal. Congratulations Anuj!

Finally, the Education SIG committee would like to thank all of the speakers, session chairs, and attendees for presenting, facilitating, and participating in the discussions – it was great to have so many immunology educators all in one place sharing their insights and experiences. Thank you to GenScript for generously sponsoring our event. Thank you to Odilia, our Annual Meeting Coordinator, for all of her hard work in the organisation of this meeting, and to Tyani Chan from ASI for all of her assistance along the way. We look forward to seeing you all at our next annual meeting!



OUR KEYNOTE SPEAKERS, TONY KENNA AND DIANNE SIKA-PAOTONU. CHRISTINA CHEERS PRESENTING THE CHEERS-BUCHAN EDUCATION AWARD TO SCOTT BYRNE

Introducing our state and regional representatives for the **Education SIG**

Over the next couple of newsletters, we will be introducing our state and regional representatives. In their twoyear appointment, their role is to be champions of our Education SIG; which includes distributing key information to local Education SIG members and reporting any achievements or news from their state and region back to me to showcase in this newsletter. If you are interested in immunology education, and would like to join our SIG, then please do so via your profile on the ASI website so that you can receive updates from your representative.

If you are interested in immunology education, and would like to join our SIG, then please do so via your profile on the ASI website so that you can receive updates from your representative.

Our state and regional representatives are:

Australian Capital Territory: Associate Professor Aude Fahrer (Australian National University)

New South Wales: Professor Natkunam Ketheesan (University of New England)

Northern Territory: Dr Gabriela Minigo (Charles Darwin University)

New Zealand North Island: Dr Lisa Connor (Victoria University of Wellington)

New Zealand South Island: Dr Andrew Highton (University of Otago)

Queensland: Associate Professor Graham Leggatt (University of Queensland)

South Australia: Associate Professor Maurizio Costabile (University of South Australia)

Tasmania: Associate Professor Guna Karupiah (University of Tasmania)

Victoria: Dr Jessica Borger (Monash University)

Western Australia: Dr Sonia Fernandez (University of Western Australia)

In this issue, we have the pleasure of introducing you to Jessica, Sonia, Andrew, Ketheesan, and Graham.



SIG representative for Victoria Dr Jess Borger, PhD, BMedPharmBiotech

(Hons), GradCertPubPol is a T cell immunologist, Lecturer and Graduate Course Coordinator in Translational Research at the Central Clinical School in Monash University. Prior to joining Monash University in mid-2017 Jess had spent 10 years overseas at the National Institute of Medical Research and The University of Edinburgh, where her interests were founded in T cell signaling and

addressing the early T cell receptor signaling pathways that direct T cell development, activation and function. Since returning to Australia she received funding to investigate targeting intracellular T cell checkpoint blockade in cancer. Jess is also News and Commentary editor at ICB. As part of her continuing advocacy for the support of women in STEM, she currently serves as the Chair of the Central Clinical School Gender Equity Diversity and Inclusion Committee and is a committee member of the Equity for Medical Research Alliance. Dr Borger is an Inaugural veski Inspiring women fellow & STEM sideby-side emerging leader and inaugural winner of the Australian and New Zealand Society for Immunology Margaret Baird Women in STEM Lectureship.



SIG representative for WA

Dr Sonia Fernandez, PhD is a biomedical scientist and teachingintensive academic at the University of Western Australia. She specialises in the teaching of clinical immunology to post-graduate students and general human disease principles to undergraduate students. She has an extensive research background in the immunology of HIV disease with a developing interest in the scholarship of learning and teaching.

SIG representative for NZ South Island

Dr Andy Highton, PhD is a Postdoctoral Fellow working at the University of Otago. He has recently returned to New Zealand after postdoctoral positions in both the United Kingdom and Germany. Andy is looking forward to reacquainting himself with teaching and research in Australia and New Zealand and hopes to translate some of his overseas experience back home. His current research interests are organoid culture technologies and natural killer cells.



SIG representative for NSW

Natkunam Ketheesan MD, PhD is currently a Professor in Biomedical Science (Infection and Immunity) at the University of New England in NSW. He has held Research and Academic positions with universities of Leeds, Western Australia, Queensland and at James Cook University. His interest in teaching is in developing integrated immunology curricula for professional programmes. During his tenure at Australian regional universities,

he has educated approximately 4,500 Science, Allied Health, Medical and Veterinary graduates. His research primarily focusses on investigating the interactions between selected clinically relevant bacterial pathogens and the host, resulting in 125 peer reviewed journal articles and book chapters with multidisciplinary teams of over 220 coauthors. He has supervised to completion over 45 research students.



SIG representative for Queensland Associate Professor Graham Leggatt, Bsc(Hons), PhD is a teaching and research academic

based at the University of Queensland (UQ) Diamantina Institute within the Translational Research Institute, Brisbane. He has a long standing research interest in immunotherapy for skin cancers while his teaching encompasses coordination and lecturing within undergraduate and postgraduate immunology courses at UQ since 2002. A/Prof Leggatt is actively engaged in providing opportunities for medical students to sample research and is currently a postgraduate coordinator within the Faculty of Medicine.

For many of us, we are also looking forward to a relative return to normal in our teaching through a blended approach of both face-to-face and online classes.

The committee now move onto planning our upcoming events for this year, including our 3rd Annual Meeting, so we look forward to seeing you again soon. For many of us, we are also looking forward to a relative return to normal in our teaching through a blended approach of both face-to-face and online classes. Wishing everyone a smooth transition into a COVID-Normal Semester 1, 2021! ■

Achievements corner

Every newsletter, we will be showcasing and celebrating the achievements of our SIG members. Please email me (<u>maria.demaria@monash.edu</u>), or your state and regional regional representative, before the next newsletter deadline if you have any achievements that you would like us to celebrate.

Congratulations to the following members on their recent promotions and fellowships!

- Professor Scott Byrne (University of Sydney) on his promotion
- Associate Professor Maurizio Costabile (University of South Australia) on his promotion
- Dr Danica Hickey (Queensland University of Technology) on becoming a Senior Fellow of the Higher Education Academy (HEA)
- Associate Professor Tony Kenna (Queensland University of Technology) on becoming a Fellow of the HEA



Predesigned multicolour panels for immunological research

BD Biosciences have published an interactive data eBook with a curated collection of 15 validated multicolour panels ranging from 4-18 colours with the experimental information you need to replicate the assay.

We have also included valuable "Tips & Tricks" on sample preparation, cell staining and other important protocols. This is a must-have resource for both experienced and budding flow cytometrists. Download your copy today!

5-Laser Panel Reagents

Laser Line	Marker	Fluorochrome	Clone	Volume Per Test	Catalog Number
Ultraviolet 355 nm	CD3	BUV395	SK7	5 µL	564001
	CD4	BUV496	SK3	5 µL	612936
	CD27	BUV615	M-T271	1.25 μL	751135
Violet 405 nm	CD279 (PD-1)	BV421	EH12.1	5 μL	562516
	CD45RA	BV480	HI100	5 μL	566114
	CD8	BV750	RPA-T8	1.25 µL	747385
Blue 488 nm	CD57	FITC	NK-1	2.5 μL	555619
Yellow-Green 561 nm	CD95	PE	DX2	20 µl.	555674
	CD28	PE-Cy7	CD28.2	5 µL	560684
Red 640 nm	CD197 (CCR7)	APC	2-L1-A	SμL	566762

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Systems Immunology: Technology, Quantification and Application

Some of the systems immunology research that committee members are conducting

- Investigations of the various components of the immune system using rapidly advancing technologies.
- The scientific approaches to immunology that recognize both the forest and the trees.
- The ultimate game of joining the dots.
- Analysis of RNA at all levels, from single cells, small RNAs, mRNA splicing to conventional transcriptomics.
- A multidisciplinary integration of computational biology, mathematics and statistics to properly resolve and model complex immunological processes.
- The development and application of computational methods to analyse and interpret this data.
- Utilizing machine learning algorithms to explore the immunological data and uncover the biological relationship.
- Understanding the divergence of individual immune systems.



Co-Chair - Dr. Di Yu The University of Queensland Dimantina Institute (Mechanism, Monitoring and Modulation of CD4⁺ and CD8⁺ T cells in health and disease)



Tech Rep. for systems microscopy - Dr. Sarah Russell Peter MacCallum Cancer Centre (Fate decisions during T cell development, activation and transformation, with a strong reliance on imaging and computer science)

WA Rep. - Dr. Anthony Bosco Telethon Kids Institute (Employ network graph theory and computational systems biology to work backwards from genomic profiles of immune responses to reconstruct the wiring diagram of the underlying gene networks.)



SA Rep. - Dr. David Lynn SA Health and Medical Research Institute & Flinders University (Computational and experimental systems immunology; vaccine immunology; host-microbiota interactions; Scientific Director SA Genomics Centre)



VIC Rep. - Dr. Ashraful Haque The University of Melbourne (CD4 T helper cells)



Co-Chair - Dr. Mark Chong St. Vincent's Institute of Medical Research (Gene regulatory mechanisms that control lineage decisions during T cell and dendritic cell development)



Quantification Rep. – Dr. Vanessa Venturi The University of New South Wales (Computational approaches to better understand the immune recognition and control of infectious diseases.)



Quantification Rep. - Dr. Fabio Luciani The University of New South Wales (The application of single cell technologies and multi-omics to study T cell responses in the context of viral infections, autoimmunity, and cellular immunotherapies.)



Application Rep. - Dr. Cindy Ma Garvan Institute of Medical Research (Human immunology, in particular the underlying gene defects that result in primary immunodeficiencies and CD4⁺ T cell differentiation and function.)



Application Rep. - Dr. Helen McGuire The University of Sydney (Comprehensively immunophenotyping across diverse patient cohorts)



QLD Rep. - Dr. Yang Yang The University of Queensland Dimantina Institute (Transcriptomic analysis by deep learning)

> NSW Rep./Systems Cytometry Rep. - Dr. Thomas Ashhust The University of Sydney (Developing and applying a range of singlecell cytometry technologies and computational analysis tools to map dynamic immune responses over time, space, and disease)



NZ Rep. - Dr. Anna Brooks The University of Auckland (Cellular immunologist and the Director of Auckland Cytometry)



NZ Rep. - Dr. Roslyn Kemp The University of Otago (T cell heterogeneity in human disease, focussing on gut immune responses.)



☆

VIC Rep. /Single-cell Rep. - Dr. Shalin Naik Walter & Eliza Hall Institute (Haematopoiesis and immune cell differentiation involves integrating single cell fate and gene expression to uncover the mechanisms.



Announcing the launch of the Clinical & Translational Immunology COVID-19 collection

Gabriela Khoury and Rajiv Khanna



There has been a remarkable amount of immunological research conducted in the first 12 months of the COVID-19 pandemic. At CTI we have created a COVID-19 collection to showcase our high quality research and reviews published on COVID-19. The collection includes articles quantifying and characterizing the immune response to SARS-CoV2; clinical trials assessing novel therapeutic strategies to reduce hyperinflammatory responses; and If you're researching COVID-19 why not submit your next manuscript to Clinical & Translational Immunology.

explores the mechanisms behind the potential protective effects of the Bacillus Calmette–Guérin (BCG) vaccine. New articles on COVID-19 will be frequently added to this <u>evolving</u> <u>collection</u>.

If you're researching COVID-19 why not submit your next manuscript to Clinical & Translational Immunology and remember ASI members receive a 20% discount off the costs of publishing.

For more updates on Clinical & Translational Immunology sign up to <u>content alerts</u>, follow us on <u>Twitter</u> and check out <u>#ClinTransImmunol</u> and <u>#CTICOVIDCollection</u>.



Original Article: Influenza, but not SARS-CoV-2, infection induces a rapid interferon response that wanes with age and diminished tissue-resident memory CD8+ T cells. Nguyen et al, 2019. Click here to read. {hyperlink image and "click hear to read" to: https://onlinelibrary.wiley.com/ doi/10.1002/cti2.1242}





Original article: Increased IL-10-producing regulatory T cells are characteristic of severe cases of COVID-19 by Neumann et al, 2019. Click hear to read. ■





Original article: *Detection of IgM and IgG antibodies in patients with coronavirus disease* by Hou et al, 2019. <u>Click hear to read</u>



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Public Engagement Award

Catriona Nguyen-Robertson Winner of the ASI Public Engagement Award

When was the last time you had a song stuck in your head? What if it were educational?

I have always loved music. In high school, if I wasn't in class, you would find me in the music suite. (Sometimes I would be there instead of in class – with permission of course.) As music captain, I would organise a musical performance for weekly school assemblies, and if it was a special week, I would compose a short song for the occasion (e.g. I wrote I Am A Woman for International Women's Day and I'm Scotnamese for Multicultural Week).

It seemed odd to be moving away from music when I started university. But the more I pursued science, the more I felt as though I was letting go of music.

During my PhD, I picked music back up again, joining two choirs. The first time I brought my two passions together was for the FameLab Australia Finals in 2019.

It seemed odd to be moving away from music when I started university. But the more I pursued science, the more I felt as though I was letting go of music.



CATRIONA IS A FINAL YEAR PHD STUDENT IN DALE GODFREY'S LABORATORY AT THE UNIVERSITY OF MELBOURNE AND PETER DOHERTY INSTITUTE FOR INFECTION AND IMMUNITY.

I changed the words to When I Grow Up/Naughty Reprise from Matilda to tell the story of my research in exercise immunology.

A few months later, I spoke at a Science Gallery Melbourne event on the gut microbiome, digestion and human waste. Science Gallery is all about being creative, and I was therefore inspired to add a bit of artistic flare to the science. I ended my talk with two songs: A Song in the Key of Pee and Poos Blues. I then had the fortune of being supported by a Monash Sustainability Development Institute scholarship to attend the Australian Science Communicator's 2020 conference to pitch my idea of Scientific Earworms. My pitch was wellreceived and having received support from mentors, as well as people I had never met, I decided that it was time to really give it a go.

I launched my YouTube channel, Nyuroscientist, in May 2020 with my first song, <u>Solving COVID-19</u>, followed by <u>SARS-CoV-2</u>. These songs were about informing people about the science of the virus the immune response in an engaging way: cytokine storm, B and T cell responses, and viral replication and transmission. Since then, I've also written songs about <u>MAIT cells and</u> NKT cells, and I now plan to delve into

I launched my YouTube channel, Nyuroscientist, in May 2020 with my first song, Solving COVID-19, followed by SARS-CoV-2. These songs were about informing people about the science of the virus the immune response in an engaging way: cytokine storm, B and T cell responses, and viral replication and transmission.

macrophages, NK cells, and other immune cell types.

This is a relatively unique form of science communication. As academics, we tend to see what the literature has to say: Gregory Crowther <u>reviewed</u> a number of studies that use songs in science education, which so far suggest increased recall capacity and better performance in tests/assessments if students listen to songs about the subject matter. This is all preliminary, but there is definitely an opening.

We remember information with more associations attached (more pathways/ connections leading in an out to the memory versus one route). Information in music would have many more pathways than reading something in we read because we also think of the associated tune, rhythm, instrument(s), etc. There are some songs that everyone knows the words to – so why not aim to add lyrics about science to the mix?

My goal is to write a series of songs that teach different aspects of immunology. The immune system is complex, intricate and has many characters – that's a lot of scope for an entire album!

I'm glad that I didn't abandon music. My parents certainly never thought I could pursue a career in music and pushed me towards science and language, but they seem to have all come together in the end. I can be a Singing Scientist.

I'm glad that I didn't abandon music. My parents certainly never thought I could pursue a career in music and pushed me towards science and language, but they seem to have all come together in the end. I can be a Singing Scientist.



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Jared Purton Award

Recipients Camille Guillery and Junyun Lai



Camille Guillery

I am a Senior Research Officer and Career Track Fellow working in A/Prof Kristen Radford's laboratory at Mater Research. I lead a small team aiming to better understand natural killer cell responses to blood cancers and to apply this knowledge to design new immunotherapies. I published 27 articles in high-impact journals including Blood, Nature Immunology, the Journal of Clinical Investigation and Immunity. My work has attracted >1700 citations. I have received > \$1M research funding. I was recently been awarded an ARC Discovery Early Career Award to investigate bi-directional interactions between new subsets of natural killer cells and dendritic cells.

As my team is expending, I aim to improve my leadership and team management skills. Although these skills are essential to the success of any scientific team, they are not taught as part of the scientific curriculum. Thanks to the ASI Jared Purton Award, I was able to register to the Leading Edge leadership course from Women & Leadership Australia. Delivered parttime over four months, this course is designed to enable the transition of aspiring and early career female managers into confident, capable and motivated leaders. The program equips participants with the knowledge and behavioural insights required for successful leadership, embedding and functionalising new learnings as real-world behaviour and action. Due to Covid19 restrictions, this course will be delivered online. I am infinitely grateful to the Jared Purton family as this Award will

As my team is expending, I aim to improve my leadership and team management skills. Although these skills are essential to the success of any scientific team, they are not taught as part of the scientific curriculum.

help me achieve my dream of becoming a group leader and establish a firstclass Immunology research program in Australia.



Jared Purton Award

ASI Newsletter March 2021



Junyun Lai

I am a postdoctoral scientist currently working in the research groups of Prof Phillip K. Darcy and Dr Paul A. Beavis at the Peter MacCallum Cancer Centre. A little background about myself, I developed an early interest in immunology and obtained my PhD in 2016 from the National University of Singapore with Associate Prof Paul A. MacAry, where I studied TCR-like antibodies in targeting EBVassociated cancers. During my PhD, I was particularly drawn to translational research and cancer immunotherapy, eventually deciding that I wanted to develop this area as my primary research focus. This motivated me to perform a one-year postdoctoral stint with the cancer immunotherapy start-up company Tessa Therapeutics/ Euchloe Bio in Singapore, before relocating to Melbourne in 2018 to join the Peter MacCallum Cancer Centre, where my current research focuses on the development of strategies to enhance chimeric antigen receptor (CAR) T cell therapy in treating solid cancers. Recently, we have reported exciting new findings that host immunity can be

The prize award will be used to explore the establishment of a new approach for the discovery of better CAR T cell candidates

harnessed to improve the efficacy of CAR T cells in tackling tumour antigen heterogeneity, which we believe will help to address the clinical issue of antigen-negative tumour relapse, and the limitations associated with the monospecific nature of adoptive T cell therapies (check out our study here:



https://www.nature.com/articles/s41590-020-0676-7).

I am extremely delighted to be a recipient of the Jared Purton prize and would like to thank the ASI for their support. The prize award will be used to explore the establishment of a new approach for the discovery of better CAR T cell candidates. This will go towards realising an exciting development of my new research idea that further contributes to our teams' overall research direction. ■



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John Marbrook Obituary

John Marbrook FRSNZ, ASI Life Member 1931-2020

John Fraser, University of Auckland



John Marbrook, Emeritus Professor University of Auckland, celebrated immunologist, and life member of the ASI passed away 15th December 2020 at the age of 89. John was well known to many members of our society and during a career spanning nearly five decades, he made many fundamental contributions to the advance of immunology. Without question his most important contribution was the development of the culture technique for mouse lymphoid cells that enabled the study of antibody production (Marbrook J. 1967 Primary Immune Responses in Cultures of Spleen Cells. Lancet 290 7529, 1279-1281 Citation Classic). This elegant work was

John was well known to many members of our society and during a career spanning nearly five decades, he made many fundamental contributions to the advance of immunology. Without question his most important contribution was the development of the culture technique for mouse lymphoid cells that enabled the study of antibody production performed at the Walter and Eliza Hall Institute in the late 60s working with Jacques Miller and was the culmination of many failed attempts to show that isolated mouse lymphocytes did anything in culture. Modifying the soft agar methods that had been developed by Metcalf to study bone marrow cells, John developed the Marbrook flask, or "Jam pots" as he liked to call them, that

John's career began in the UK at King's College in the 1950s as a research technician for Prof Eric Barnard in the underground Zoology department that was an extension of a WWII bomb crater. His first paper was in Nature on the use of radioactive cytochemical reagents.

utilized a dialysis membrane suspended in culture to grow antibody forming lymphoid clusters. This became the established method for studying the function of many different lymphoid cell types. Ken Shortman and Steve Haskill, also at WEHI had at the same time developed elegant methods to separate different lymphoid populations and John, Ken and Steve teamed up to show that many of these populations could be stimulated to produce antibody and by mixing them together, they could show both positive and negative effects on antibody production (J. Exp. Med. 131 57-76 1970). This was long before cytokines were understood, but the method became a powerful tool to study the production of soluble mediators that controlled lymphocyte development.

John's career began in the UK at King's College in the 1950s as a research technician for Prof Eric Barnard in the underground Zoology department that was an extension of a WWII bomb crater. His first paper was in Nature on the use of radioactive cytochemical reagents. John's decision to take a year to visit his wife Pam's family in New Zealand turned into a lifelong move. He met Dick Mathews FRS at the DSIR in Auckland and began work as Mathew's technician on sporodesmin a fungal toxin that causes facial eczema in sheep. When Matthews moved to Auckland University and the Chair of Microbiology in the early 1960s, John began work on Turnip Yellow Mosaic Virus and decided to look at the immune response to this virus in animals – thus beginning his immunological career. He was tasked with building a mouse colony for this work at Auckland. Matthews then suggested he spend some time at the Walter and Eliza Hall Institute to learn some mouse immunology.

After his very productive time at WEHI, John returned to Auckland to establish a laboratory that allowed him to examine the important question of how many precursors were required to form an antibody response. He devised a system that could measure the number of clones and their kinetics of expansion. In 1969 John joined Steve Haskill in Canada and together they published a series of papers showing discrete populations of cells that were formed on the differentiation pathway from precursor to antibody producing cell. On returning to Auckland, John was awarded an MRC Fellowship and joined the Cell **Biology Department at the University** of Auckland where his work focused on regulatory factors, thymus development and the cytotoxic response. In the mid-1980s, John teamed with Jim Watson who had recently returned from the US to establish the Department of Immunobiology, which later became the Department of Molecular Medicine.

After his very productive time at WEHI, John returned to Auckland to establish a laboratory that allowed him to examine the important question of how many precursors were required to form an antibody response. He devised a system that could measure the number of clones and their kinetics of expansion.

I first met John when I returned to this department from the US in 1988 and we quickly became good friends and

John was the supervisor of many very successful graduate students and postdocs and is remembered fondly by many of his colleagues in both Auckland,

colleagues - he was the master cellular immunologist and I was the brash young molecular biologist fresh from the molecular immunology revolution of the 1980s. We would discuss many ideas and of course I would always talk in terms of genes and molecules. On many occasions I would describe my cleaver ideas that might explain certain immune phenomenon. John would just smile, wait a while and then quietly tell me that this had been done before using cells - and produce the papers in evidence. I think John was always slightly skeptical of the reductionist approach to immunology and was much more interested in showing how things worked at the multi-cellular level. This was an apocryphal view.

My wife Tam and I were good friends of John and Pam and we spent many hours at their house with our two young daughters or over at their Waiheke Island retreat. John was a true English gentleman. Modest, quietly spoken and self-deprecating, he had a wonderfully wry sense of humour that could be easily missed if you were not quite in tune his thoughts. I remember being in fits of laughter with his dry description of a particularly prickly professor at Auckland University. John quietly said - "oh yes ... is actually a very balanced person, he has a chip on both shoulders". He also had a fine artistic bent and would love to draw ideas on paper with just a few elegant strokes.

John was the supervisor of many very successful graduate students and postdocs and is remembered fondly by many of his colleagues in both Auckland, Australia and around the globe. We are all coming together with Jim and Anna his two children at the University of Auckland on February 18th to share in our memories of this wonderful man, outstanding scientist and much-loved father. ■

NSW Branch Report

New Branch Councillor

Angelica Lau, NSW Branch Councillor a.lau@garvan.org.au

I am humbled to take on the NSW councillor position from Helen McGuire. She has done such an amazing job for the past three years I only hope I can continue her good work!

Just to introduce myself, I am a postdoc in the B Cell Biology lab at Garvan Institute, with a fond interest in germinal centre B cell biology and antibody production during autoimmunity. You may have met me as your previous ASI newsletter editor but I'm glad to have this new opportunity to continue serving the ASI community as your NSW branch councillor.

I'm glad to have this new opportunity to continue serving the ASI community as your NSW branch councillor.

2020 has been anything but easy - a very challenging year shadowed by the pandemic, border restrictions and lockdown. This lack of travel opportunities and physical meetings has particularly affected our students and ECR members in their career development. With the easing restrictions in NSW/ACT I am glad to announce that the planning for a joint NSW/ACT retreat is well underway! We are hopeful to host a physical meeting this year. This would surely be a valuable opportunity for all our students and ECRs to meet new mentors and present their work - so watch this space.

Just a friendly reminder that Day of Immunology falls on 29th April - not too late to start planning! It has never been more important to communicate the science and educate immunology to the public at this day and age! I am always open to any great ideas and suggestion or to promote events benefiting the ASI NSW network, so welcome to email me at <u>a.lau@garvan.</u> org.au! All the best. ■ I am glad to announce that the planning for a joint NSW/ACT retreat is well underway!





Women's Initiative Update

Women's initiative coordinator

Kylie Quinn kylie.quinn@rmit.edu.au

Since the last Newsletter, there have been several developments that I'd like highlight.

At the end of year, we announced the winner of the 2020 Margaret Baird award. I'd like to thank everyone who submitted applications- it is so encouraging to see the efforts being made by members of the ASI community towards gender equity. I'd also like to congratulate the winner for 2020- Michelle Boyle, a malarial immunologist and Group Leader at QIMR Berghofer, exploring humoral and cellular responses to malarial infection. She's a dynamic leader in gender equity and a powerful advocate for broader inclusion in STEM. Michelle spoke about her work at our Margaret Baird Online Lecture in celebration of International Women's Day on the 9th of March, along with our 2019 winner, Jess Borger. Check out the recording of this event on the ASI website.

Another new feature of the Women's Initiative is our interim Equity, Diversity and Inclusion (EDI) committee. With the help of this experienced, engaged group of folks, we are drafting a proposal for a formal EDI Committee. At the end of year, we also announced the ASI Carer's Awards. COVID-19 has had a significant impact on carers and, in response to that, ASI ran these awards open to people of all genders in our community whose carer responsibilities during COVID-19 have impacted or will impact on their work in immunology. I'd like to thank everyone for their submissions and congratulate the awardees for 2020: Lynette Beattie, Kavita Bisht, Maria del Pilar Dominguez Rodriguez, Weidong Jing, Haiyin Liu, Laura Masters, Hamutal Mazrier, Lucy Sullivan and Niamh Troy.

In 2021, we will have two rounds of ASI Carer's Awards- the first round opened on March the 1st and will run until March 29th. There will be another round in the second half of this year. We have tried to keep the application form very accessible and simple, because no one needs more work right now! Awards are assessed based on the degree to which funds will support work responsibilities and support caring responsibilities and we try to prioritise funding based on the degree of impact by COVID-19.

Another new feature of the Women's Initiative is our interim Equity, Diversity and Inclusion (EDI) committee. With the help of this experienced, engaged group of folks, we are drafting a proposal for a formal EDI Committee. I'd like to thank Anne Fletcher, Catriona Vi Nguyen-



MICHELLE BOYLE THE WINNER OF THE 2020 MARGARET BAIRD AWARD

Robertson, Jess Borger, Larisa Labzin, Michelle Boyle, Angelica Lau, Samantha Davis, Sarah Sandford and Anouk Von Borstel for their contributions and advice on developing a structure and direction for this committee. Looking forward to our work together!

Importantly, we would welcome additional members. Everyone's input would be valuable- if you do or don't identify with an under-represented group in immunology, there is a role for everyone in ensuring diversity and inclusion are practiced in our society. Register your interest by emailing me on kylie.quinn@rmit.edu.au.

The IUIS corner

J. Alejandro Lopez alejandro.lopez@qimrberghofer.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 <u>www.iuisonline.</u> org and/or register for the Newsletter through this <u>link</u> <u>here</u>.

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

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

The online meeting lasted only 4 hours and it managed to cover all relevant issues for discussion. While a very different experience, there was a very warm feeling of camaraderie at the end of a very difficult year for most of us.

Highlights from the 70th IUIS Council meeting (November 28th 2020)

The first ever online Council meeting followed the trend of transformation. As opposed to the usual whole day meeting, this online meeting lasted only 4 hours and it managed to cover all relevant issues for discussion. While a very different experience, there was a very warm feeling of camaraderie at the end of a very difficult year for most of us. Here are some of the themes covered.

The *Nature Reviews Immunology* publication by Immunological societies about the response to Covid19 has been highly accessed

Viewpoint | Published: 10 September 2020

The global response to the COVID-19 pandemic: how have immunology societies contributed?

Faith Osier 🔍 Jenny P. Y. Ting 🔍 John Fraser 🔍 Bart N. Lambrecht 🖾, Marta Romano, Ricardo T. Gazzinelli 💭, Karina R. Bortoluci, Dario S. Zamboni, Arne N. Akbar 🖳 Jennie Evans, Doug E. Brown, Kamala D. Patel 🖾, Yuzhang Wu Ž, Ana B. Perez 🖾, Oliver Pérez, Thomas Kamradt 🖾, Christine Falk, Mira Barda Saad Q, Amiram Ariel, Angela Santoni 🖾, Francesco Annunziato, Marco A. Cassatella, Hiroshi Kiyoona Q, Valeriy Chereshnev 🖾, Alioune Dieye Q, Moustapha Mbow, Babacar Mbengue, Maguette D. S. Niang & Melinda Suchard 🖾 -Show fewer authors



Nature Reviews Immunology 20, 594–602(2020) Cite this article 7780 Accesses 1 Citations 47 Altmetric Metrics

The Beijing UIIS 2019 Congress generated a final income of U\$547,986 for IUIS.

IUIS Finances

Due to various investment manoeuvring, and extra income of U\$500,000 was received in 2020. The Beijing UIIS 2019 Congress generated a final income of U\$547,986 for IUIS.

The current financial situation of IUIS is very solid. This is the normal cycle of the finances where, after the triennial meeting, the coffers receive a healthy injection that should support IUIS until the next Congress. Given the uncertainty of the future and how IUIS2022 may play out, these reserves are very needed. The balance of IUIS moneys in the bank by Nov 2020 was: *U\$ 1.779,734 plus €1.552,077*.



House keeping

A very methodical and comprehensive work by our own Ros Kempf, IUIS Secretary, led to a modification of the constitution and by-

laws, matching wording, and definitions.

The IUIS Newsletter

The December edition of the newsletter includes the review of the year by President Faith Osier. She highlighted the various successes and tribulations of a challenging year, reported elsewhere. Amongst the positives, she remarked on gender balance at IUIS: "We are committed to gender equity in all our activities. Our Executive Committee, Council and Committee Chairs now have a healthy female:male ratio of 3:2, 9:7 and 4:6, respectively. Let's keep up the progress!".

She also highlighted the FAIS Legacy Project (FLP), as it *"bore fruit with a*

Our Executive Committee, Council and Committee Chairs now have a healthy female:male ratio of 3:2, 9:7 and 4:6, respectively. Let's keep up the progress!".

28-fold investment of 1.4M Euro from the Education, Audiovisual and Culture Executive Agency (EACEA) of the European Union. The FLP will run for ten years, aims to train 1,000 African immunologists and will draw on the momentum of the upcoming and historic IUIS Cape Town 2025 congress. The EU funding will support intra-African mobility between six African universities for 78 trainees over the next five years. "

(https://us10.campaign-archive.com/?u= b92a48d3ee8bd7233369c4b9a&id=3a 757ef5c3)

Newsletter, increase in subscriptions and visits from 2019

Social media presence, increased







IUIS-Immunopaedia Frontiers Webinar Series

Inspired by the success of this seminar series, a new Webinar series coordinated with *Immunopaedia* will commence in 2021. It will be called *Immunology without Borders* and will cover a wide array of themes.

Some of the recent seminars available online include



Eric Vivier, "Harnessing innate immunity in cancer therapy and beyond"



Pamela Ohashi "Immunoregulation and the tumor microenvironment"

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

International Day of Immunology (DOI, April 29)

Theme for 2021: COVID-19

Awards are given once every three years for the four best public relations campaigns:

- International Day of Immunology Award – 2000 euros for the best campaign
- European Day of Immunology Award

 2000 euros for the best campaign in Europe
- Best Newcomer Campaign Award 1000 euros for the best campaign by a candidate participating in the Dol Awards for the first time
- Best Day of Immunology Theme Award

 1 000 euros for the best campaign which corresponds to one of the year's themes:

https://iuis.org/activities/internationalday-of-immunology/

Highlights from IUIS Committees

Inborn Errors of Immunity Committee (Chaired by Stuart Tangye, Sydney)

inalied by Stuart rangye, S

Publications:

- "Coronavirus Disease 2019 in patients with inborn errors of immunity: an international study ". J Allergy Clin Immunol. September 2020. doi:10.1016/j.jaci.2020.09.010
- "Human Inborn Errors of Immunity: 2021 plan to capitalise on the developed mobile app "PID Phenotypical Diagnosis" freely available.

2019 update on the classification from the International Union of Immunological Societies Expert Committee". J. Clin Immunol

 "Human Inborn Errors of Immunity: 2019 Update of the IUIS Phenotypical Classification". J. Clin Immunol

2020 update of the "PID classification' mobile app, freely available.

2021 plan to capitalise on the developed mobile app "PID Phenotypical Diagnosis" freely available.

Education Committee (EDU)

Most of the educational activities of the IUIS have not turned into online courses or meetings and it is a scheme that is likely to continue in the foreseeable future. This move provides a challenge/opportunity as the cost of the organisation for each activity is reduced in the online format, will provide opportunities for novel activities. A major emphasis will be given to strengthening Immunopaedia resources to support online courses. These are some of the activities supported by the committee.

Most of the educational activities of the IUIS have not turned into online courses or meetings and it is a scheme that is likely to continue in the foreseeable future.

- IUIS-FAIS IMMUNO-ETHIOPIA (Bahir Dar, Ethiopia). "Neglected Tropical Diseases and Malaria Challenges in Sub-Saharan Africa". Onsite. February 23-29, 2020
- IUIS-FAIS-SAI-AAA IMMUNO-ALGERIA (On-line). "Challenge of Allergy in the Molecular Era". June 1-12, 2020 (with on-line pre-course May 11-29)
- AAI INTRODUCTORY COURSE, Los Angeles, CA, USA. Switched to online course
- AAI ADVANCED COURSE, Boston, MA, USA. Switched to online course
- FIMSA Immunology Course-2020 (Online). Organized by the Indian Society of Immunology; 8-10th October 2020.
- IUIS-ALACI-ICGEB-ASCAI2 IMMUNO-ARGENTINA (Córdoba, Argentina).
 "Immunological Memory in Infection and Vaccination" planned for September 2020, postponed to 11-14 May 2021
- IUIS-ALACI-LAMIG-ASOCHIN (Concon, Chile). "Inflammation, Cancer and Mucosal Immunity". Planned for

November 2020, postponed to 15-19 November 2021

 16th Dgfl Spring School on Immunology, Ettal, Germany: scheduled for March, postponed to October 2020. 2 travel awards: Rodrigue Kamga Wouambo (Cameroon), Arpad Kovacs (Hungary); 3rd travel award (Milad Moloudizargari, Iran) postponed to 2021

Veterinary Immunology Committee (VIC)

Two Publications in addition to contributions to the IUIS Newsletter

- "The Veterinary Immunological toolbox. Past, Present and Future". Frontiers in Immunology
- "The UK Veterinary Immunological Toolbox Website: promoting vaccine research by facilitating communication and removing reagent barriers". Immunology

Plan for 2021, Prepare a position paper on COVID vaccination strategy plans in countries of IUIS members. Australian input wanted.

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- *Nomenclature* (Chaired by Menno C. van Zelm, Melbourne)
- Frontiers in Immunology research Topic: "Nomenclature: Avoiding Babylonian Speech Confusion in Present Day Immunology". Including 12 papers
- CD nomenclature: 11th HLDA workshop experiments ongoing – 112 mAbs, potentially 22 new CD markers; CD Maps 2 studies ongoing – revisiting expression of CD1-CD372
- Allergen nomenclature: >1000 defined allergens; Extensive website (Allergen. org); Updates to nomenclature
- Complement Nomenclature: Update to nomenclature; Renaming C2 cleavage products C2a and C2b
- IG_TR_MH nomenclature: Standardized Nomenclature of Salmonidae IGH Genes; Updated V-Quest program for IG/TR alignments
- Revival of subcommittees: Cytokine/ chemokine;
 - MALT chair: Ana Caetano

Establishment of the Menarini Prize for Outstanding Woman Immunologist". USD 40,000 prize will be awarded for the first time at the 18th International Congress of Immunology in Cape Town, South Africa in 2022 and at future IUIS congresses thereafter.

Gender Equality (GEC)

- Establishment of the Menarini Prize for Outstanding Woman Immunologist". USD 40,000 prize will be awarded for the first time at the 18th International Congress of Immunology in Cape Town, South Africa in 2022 and at future IUIS congresses thereafter. Award winner election is proposed to be as follows:
- 1. An open mailing list of about 130 outstanding immunologists will be created (NC: Nomination Committee) and used to ask for Award nominations. One nomination will be expected from

Two grants have been 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

each NC member and should include the candidate's CV, the list of publications, the letter of justification for the nomination, and one letter in support of the nomination. In case the NC member feels that she could be a candidate, "self-nomination" are accepted by providing CV, letter of justification and 2 letters in support of her nomination.

- 2. The Selection Committee will be formed with 12 outstanding immunologists, including Past Chair of the GEC committee. Every 3 years the Selection committee should be renewed. The selection Committee will select 3 names from the nominated candidates that will be given to the GEC committee and IUIS President for the final selection of the winner.
- Travel Award 2020: The 4 GEC Travel Awards
- IUIS-AAI travel fellowships 2020. The awards were allocated but AAI cancelled the in-person 2020 AAI courses.
- Travel for Expertise. Two grants have been 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

Vaccines (VAC)

Published the Special Research topic (Frontiers in Immunology) *"Challenges in Vaccinology*"

Plan for 2021, Prepare a position paper on *COVID vaccination strategy plans in countries* of IUIS members. Australian input wanted.

Quality Assessment and Standardization (QAS)

Subcommittees

- Allergen Standardization Stefan Vieths – Germany
- Autoantibodies in Rheumatic and Related Diseases – Edward Chan - USA
- Complement Michael Kirschfink Germany
- Leukocytes Pablo Engel Spain
- Cytokines Menu Wadha (NIBSC -London)
- Serology in Infectious Diseases Syria Laperche (Institut Hemotransfusion, Paris)
- Big Data in Immunology Jamie Scott - USA

Publication: "Contemporary Challenges in Immunologic Testing in Clinical and Research Laboratories". Research Topic in Frontiers of Immunology

ASC -> International Consensus on ANA Patterns (ICAP); an initiative of the Autoantibody Standardization Committee. Website (<u>www.anapatterns.</u> org); over 3,000 subscribed members, over 174,292 visits in the last 12 months, 156 countries, translation into 14 languages

Societies and Regional federations are encouraged to plan their meeting in a hybrid form that allows for the potential of a broader participation and save guarding for potential disruption derived from Covid19-related lockdowns.

Planned IUIS meetings

As part of the changing world landscape, most of the planned meeting will take the hybrid form. That includes the planning for IUIS2022 in Cape Town. Societies and Regional federations are encouraged to plan their meeting in a hybrid form that allows for the potential of a broader participation and save guarding for potential disruption derived from Covid19-related lockdowns.



18th International Congress of Immunology

August 15-20, 2022 | Cape Town, South Africa

IUIS 2022. Cape Town, August 15-20. www.iuis2022.org Organization is under way. It will be a hybrid online/onsite meeting.

This is the organizing committee **Congress President: Clive Gray** Congress Vice President 1: Henry Mwandumba Congress Vice President 2: Rita Carsetti President IUIS: Faith Osier SPC Chair: Mark Davis Co-Chair: Miriam Merad Further info in this link: https://iuis2022.org/

IUIS Meetings

FAIS 2021, August 1-5, Lilongwe, Malawi

EFIS 2021, September 1-4, Belgrade, Serbia

IUIS Council, October 29-31, Varadero, Cuba

ALACI 2021, November 1-5, Varadero, Cuba

FIMSA 2021. October 31 - November 3, Busan, Korea.

IUIS 2025. Vienna, Austria, August 17-22, 2025

For further information on oncoming events, visit https://iuis.org/events/



High-throughput screening (HTS) offers an opportunity to rapidly screen large libraries of lead compounds for downstream drug discovery and development.

In the race for therapeutics a recent paper by Gorshkov et. al. developed a homogeneous cell-based HTS system using <u>AlphaLISA®</u> detection technology for the SARS-CoV-2 nucleocapsid protein (NP) which measures both recombinant and endogenous NP from viral lysates and tissue culture supernatants. The results demonstrate how a rapid, homogeneous SARS-CoV-2 NP-based immunoassay was used to identify compounds that inhibit SARS-CoV-2 infection and viral replication in live cells. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7553038/

No wash AlphaLISA technology can be used to replace ELISA assays that require multiple plate-washing steps for the quantitative detection of analytes, reducing labour and enabling a more automation friendly workflow. The conjugation of antibodies to biotin and streptavidin aids in the creation of a screening system that can be used as a competitive assay or sandwich assay format





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Publications of Interest

Our Sustaining Members

abcam

Recombinant Anti-MUC1 antibody [EP1024Y] (ab45167) Liu, Y., Lv, J., et al. 2020 Mucus production stimulated by IFN-AhR signaling triggers hypoxia of COVID-19. Cell Research https://doi.org/10.1038/s41422-020-00435-z

Recombinant Anti-ACE2 antibody [EPR4435(2)] (ab108252) Franco, R., Lillo, A., et al. 2020 Functional Complexes of Angiotensin-Converting Enzyme 2 and Renin-Angiotensin System Receptors: Expression in Adult but Not Fetal Lung Tissue. In International Journal of Molecular Sciences https://doi.org/10.3390/ijms21249602

Recombinant Anti-TMPRSS2 antibody [EPR3861] (ab92323) Yee, M., David Cohen, E., et al. 2020 Neonatal hyperoxia enhances age-dependent expression of SARS-CoV-2 receptors in mice. Scientific Reports https://doi.org/10.1038/S41598-020-79595-2



TotalSeq[™]-C Human Universal Cocktail, V1.0 (https://www.biolegend.com/en-us/products/totalseq-c-human-universal-cocktail-v1-0-19736) Su et al. 2020 Multi-Omics Resolves a Sharp Disease-State Shift between Mild and Moderate COVID-19 Cell DOI: https://doi.org/10.1016/j.cell.2020.10.037

TotalSeq[™]-C anti-human Hashtag antibodies for multiplexing (Hashtag 1 to 10) (https://www.biolegend.com/en-us/products/totalseq-c0251-anti-human-hashtag-1-antibody-17162) Su et al. 2020 Multi-Omics Resolves a Sharp Disease-State Shift between Mild and Moderate COVID-19 Cell DOI: https://doi.org/10.1016/j.cell.2020.10.037

TotalSeq[™]-A Human Universal Cocktail, V1.0

(https://www.biolegend.com/en-us/products/totalseq-a-human-universal-cocktail-v1-0-20321) Vanuytsel K, et al. 2020 Multi-Modal Profiling of Human Fetal Liver-Derived Hematopoietic Stem Cells Reveals the Molecular Signature of Engraftment Potential bioRxiv POI: https://doi.org/10.1101/2020.11.11.278620

DOI: https://doi.org/10.1101/2020.11.11.378620



Mouse anti-Human TCF-1 antibodies

Rutishauser et al. 2020 TCF-1 regulates HIV-specific CD8+ T cell expansion capacity. JCI Insight. doi: 10.1172/jci.insight.136648

BD FACSymphony™ A5 High Parameter Flow Cytometry Analyser

Frutoso et al. 2020 OMIP-070: NKp46-Based 27-Color Phenotyping to Define Natural Killer Cells Isolated From Human Tumor Tissues. Cytometry Part A. doi: 10.1002/cyto.a.24230

BD Rhapsody™ Single-Cell Analysis System

De Domenico et al. 2020 Optimized workflow for single-cell transcriptomics on infectious diseases including COVID-19. STAR Protocols. doi: 10.1016/j.xpro.2020.100233

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SARS-CoV/SARS-CoV-2 Spike Antibody,Chimeric Mab: https://jlresearch.com.au/sars-cov-sars-cov-2-spike-antibody-chimeric-mab-931615.html Scott B. Biering et al, 2020. Screening a library of FDA-approved and bioactive compounds for antiviral activity against SARS-CoV-2 BioRxiv Doi: https://doi.org/10.1101/2020.12.30.424862

GenScript's SARS-CoV-2 Surrogate Virus Neutralization Test (sVNT) Kit (cat# L00847). <u>https://jlresearch.com.au/sars-cov-2-surrogate-virus-neutralization-test-kit.html</u> Chee Wah Tanet al. 2020 A SARS-CoV-2 surrogate virus neutralization test based on antibody-mediated blockage of ACE2–spike protein–protein interaction Nature Biotechnology DOI: https://doi.org/10.1038/s41587-020-0631-z

Primocin <u>https://jlresearch.com.au/catalogsearch/result/?q=primocin</u> or <u>https://www.invivogen.com/primocin</u> Hendriks D. et al. 2020 Establishment of human fetal hepatocyte organoids and CRISPR–Cas9-based gene knockin and knockout in organoid cultures from human liver. Nature Protocols DOI: 10.1038/s41596-020-00411-2



Validation and Application of a Bench Top Cell Sorter in a BSL-3 Containment Setting https://pubmed.ncbi.nlm.nih.gov/32766573/

Bacher et al. 2020 Low-Avidity CD4+ T Cell Responses to SARS-CoV-2 in Unexposed Individuals and Humans with Severe COVID-19 Immunity doi.org/10.1016/j.immuni.2020.11.016

Zaeck, L. M. et al. 2020 bioRxiv. 3D reconstruction of SARS-CoV-2 infection in ferrets emphasizes focal infection pattern in the upper respiratory tract. doi.org/10.1101/2020.10.17.339051,



goGermline embryos https://www.ozgene.com/goGermline McGrath et al., 2020 Defective lysosome reformation during autophagy causes skeletal muscle disease. J Clin Invest. doi: 10.1172/JCl135124

Knock-in mouse model <u>https://www.ozgene.com/services/knock-in-mice</u> Lee et al., 2020 Mutation of regulatory phosphorylation sites in PFKFB2 worsen renal fibrosis. Sci Rep. doi: 10.1038/s41598-020-71475-z

Knockout mouse model https://www.ozgene.com/services/knockout-mice Aguilar-Valles et al. 2020 Antidepressant actions of ketamine engage cell-specific translation via elF4E. Nature. doi: 10.1038/s41586-020-03047-0



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EasySep™ Human CD34 Positive Selection Kit II <u>https://www.stemcell.com/products/easysep-human-cd34-positive-selection-kit-ii.html</u> Chagraoui J et al 2021 UM171 Preserves Epigenetic Marks that Are Reduced in Ex Vivo Culture of Human HSCs via Potentiation of the CLR3-KBTBD4 Complex Cell Stem Cell doi: 10.1016/j.stem.2020.12.002

Robosep-S <u>https://www.stemcell.com/products/robosep-s.html</u> RosetteSep™ Human B Cell Enrichment Cocktail <u>https://www.stemcell.com/products/rosettesep-human-b-cell-enrichment-cocktail.html</u> EasySep™ Human T Cell Enrichment Kit <u>https://www.stemcell.com/products/easysep-human-t-cell-enrichment-kit.html</u> Doolin K et al. 2021 A versatile platform for generating engineered extracellular vesicles with defined therapeutic properties Molecular Therapy Doi: 10.1016/j.ymthe.2021.01.020



An Omalizumab Biobetter Antibody With Improved Stability and Efficacy for the Treatment of Allergic Diseases
<u>https://www.frontiersin.org/articles/10.3389/fimmu.2020.596908/full</u>
Liu P et al. 2020.
An Omalizumab Biobetter Antibody With Improved Stability and Efficacy for the Treatment of Allergic Diseases
Frontiers in Immunology
Doi: 10.3389/fimmu.2020.596908

eBlot™ L1 Fast Wet Transfer System <u>https://www.genscript.com/eBlot-L1-protein-transfer-system.html</u> Xie et al. 2020 Inhibition of PP2A enhances the osteogenic differentiation of human aortic valvular interstitial cells via ERK and p38 MAPK pathways Life Sciences Doi: https://doi.org/10.1016/j.lfs.2020.118086

eStain[™] L1 Protein Staining System <u>https://www.genscript.com/eStain-L1-protein-staining-system.html?src=pullmenu</u> <u>https://www.sciencedirect.com/science/article/abs/pii/S0308814620326133?via%3Dihub</u> Zhou et al. 2020 Effects of ultrasound emulsification on the properties of pork myofibrillar protein-fat mixed gel Food Chemistry Doi: https://doi.org/10.1016/j.foodchem.2020.128751

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GeoMx® Digital Spatial Profiler (DSP) <u>https://www.nanostring.com/products/geomx-digital-spatial-profiler/geomx-dsp-overview/</u> Christina U Blank. 2020 Comprehensive analysis of cutaneous and uveal melanoma liver metastases Journal for ImmunoTherapy of Cancer DOI: 10.1136/jitc-2020-001501

nCounter® miRNA Expression Panels <u>https://www.nanostring.com/products/ncounter-assays-panels/immunology/mirna/</u> Hilka Rauert-Wunderlich. 2020 Identification of a miRNA based model to detect prognostic subgroups in patients with aggressive B-cell lymphoma Leukemia Lymphoma DOI: 10.1080/10428194.2020.1861268

Name of product: GeoMx® Cancer Transcriptome Atlas <u>https://www.nanostring.com/products/geomx-digital-spatial-profiler/geomx-rna-assays/geomx-cancer-transcriptome-atlas/</u> David Ting, 2020 Temporal and spatial heterogeneity of host response to SARS-CoV-2 pulmonary infection Nature Communication DOI: 10.1038/s41467-020-20139-7

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 <u>Australian and New Zealand Society</u> 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

Executive

President – Stephen Turner <u>Stephen.j.turner@monash.edu</u> Vice President – John Fraser <u>president@immunology.org.au</u> Honorary Secretary – Connie Jackaman <u>secretary@immunology.org.au</u> Treasurer – Asolina Braun <u>treasurer@immunology.org.au</u> Deputy Treasurer – Emma Grant

Voting Council

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Remember 2021 membership renewals are due by the 1st of April!