

ASINEWS

September 2021



Women's Initiative
Update

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ASI Carer's Awards

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Editorial ASI Newsletter September 2021

Hello and welcome to a very special edition

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



In this edition we have a number of features which focus on the important but challenging issue of promoting gender equity within the Australian immunological community.

In particular, the highlight of this
September edition is the three wonderful
perspective pieces provided by three
brilliant immunologists, Lynn Corcoran,
Joanna Groom and Matthew Sweet,
exploring their different experiences,
perspectives and thoughts on the current
problems and how to further support
gender equity in Science. Gender
equity in science is without doubt a
very challenging issue. It's an issue that

Gender equity in science is without doubt a very challenging issue. It's an issue that our community, and all three of these individuals in particular, have made significant leaps towards improving, our community, and all three of these individuals in particular, have made significant leaps towards improving, however also undeniably one where further and ongoing efforts are needed. Lynn, Joanna and Matthew have taken the time to write three incredibly thought-provoking pieces, from the viewpoint of their different perspectives, highlighting both what they feel are the ongoing challenges within the field towards balancing gender equity and what more could be done. I hope that you can gain as much from reading these perspectives

I'd also like to draw your attention the article written by ASI's own Women's Initiative Coordinator, Kylie Quinn, focussed on the ongoing efforts and upcoming changes to the ASI Equity, Diversity and Inclusion Committee and how you can be involved.

Finally, ASI supports a number of awards that can help to support parents and carers. In this edition we have focused on the testimonials of several recipients

I'd also like to draw your attention the article written by ASI's own Women's Initiative Coordinator, Kylie Quinn, focussed on the ongoing efforts and upcoming changes to the ASI Equity, Diversity and Inclusion Committee and how you can be involved.

of these awards. These awardees have highlighted how these awards have helped them to balance their scientific and personal responsibilities.

If you have any additional perspectives on gender equity that you would like to share with the ASI community, by being published in the ASI newsletter, please feel free to email me at newsletter@immunology.org.au

Secretary Report ASI Newsletter September 2021

Secretary Report

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



ASI Awards Judging Panel

In recent years ASI has seen an increase in the number of award opportunities offered to members. The ASI Awards Judging Panel was setup in 2019 to act as assessors for scoring award applications. This is a great opportunity to contribute to ASI, learn about what makes a great application, get experience in reviewing applications and enhance your CV. Nominations to join the panel will open soon and please keep an eye out if you are interested in this opportunity.

Council positions

There are a number of council positions opening for appointment starting in 2022 (please see below). This is a great opportunity if yourself or someone you know is interested to join ASI council and nominations are open now.

- · Vice President
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- ACT Councillor
- FIMSA Coordinator
- IUIS Coordinator
- Annual Meeting Coordinator
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Perspectives in science - Gender diversity



Reflections on gender equity policy and practice

Joanna R. Groom, Laboratory Head and Co-chair for the Gender Equality Committee, WEHI.

Dr Groom completed her PhD at the Garvan Institute and her NHMRC CJ Martin postdoctoral fellowship at Harvard/Massachusetts General Hospital. She is currently a Laboratory Head in the Immunology Division at WEHI. Her research combines in vivo and 3D imaging methods with transcriptional analysis to discover how cellular interactions lead to protection against diverse pathogenic infections. Dr Groom's current work has revealed a pathogen-specific tailoring of T follicular helper responses and how the CXCR3 chemokine system balances T cell fate decisions between effector function and to establish long-term protective memory. By deciphering how distinct T cell interactions define their function, this knowledge can be harnessed to treat and prevent infectious disease and cancer.

I recently came across "The Training Experience", the presidential address of the American Association of Immunologists from April 10, 1974¹. It is a fantastic read. In his address, Baruj Benacerraf highlights a strength of immunology is its inherent diversity; diversity of disciplines, diversity of ideas, and the challenges of limited public funding on a field that was coming into its own. Benacerraf also

We know that women disadvantage does not suddenly appear at childbearing age, and that it occurs with or without children. However, some leveling of the playing field can be achieved for those raising young families, with a combination of targeted policy and financial support. This is an area that WEHI has tackled head on.

provides a manifesto of how to train Immunologists. Although the advice is sound, the pronouns are jarring; in 1974 Senior Immunologist were assumed to be 'he', their labs were 'his', and the next generation of leaders, men.

The expectation of what a laboratory head looks like has come a long way. This has been a combination of slow progress and hard-fought policy-driven wins. This progress is something to acknowledge, reflect on and celebrate. But a look at the top Immunology leadership positions shows we still have a long journey to gender equity. I don't believe progress is automatically made by exposing the biases of the past. Instead, the arc of progress needs to be pushed; pushed by continued meaningful and effective gender equity policy that forms part of wider culture change.

Using policy as a lever for change, some gender equity issues are easier to address than others. We know that women disadvantage does not suddenly appear at childbearing age, and that it occurs with or without children. However,

some leveling of the playing field can be achieved for those raising young families, with a combination of targeted policy and financial support. This is an area that WEHI has tackled head on.

Early child rearing often impedes career progression for women, at a time when maintaining momentum is essential. This is the time that the 'gender pipeline' leaks the most. At WEHI, two award schemes help support ongoing momentum and retention of talent at this critical stage. First, flexible financial support to provide 3 month (or 6 months part time) employment for a research technician to keep experiments going during leave, or as they return to work. Second, significant financial support for childcare for postdocs and faculty. Given the restrictive burden of childcare fees on students, this childcare support has recently been extended to provide PhD students this financial assistance.

These initiatives have been accompanied by policies that encourage a shift in gender stereotypes related to parenting, diversity in our workforce

and flexible working. Our policy of gender neutral parental leave along with increases in both primary and secondary leave has helped change the conversation of childrearing and career development from a 'women's issue' to a family issue. Importantly, this leave can be taken flexibly in a manner that best suits the Scientist. It has also been incredible (albeit due to a pandemic) to see the seismic shift on workplace flexibility. Once regarded as solely for women with caring responsibilities, there is now an awareness that flexibility benefits individuals, teams and organisations. Enabling flexibility without disadvantaging individuals is also essential. Even a relatively simple policy to schedule regular meetings during family-friendly hours, can ensure parents are included in important discussions.

A monumental achievement for gender equity at WEHI, was the opening of the purpose-built Professor Lynn Corcoran Early Learning Centre. Opened in 2019, this is the first onsite A few years after implementing an ASI 50% gender representation in speakers policy, this is now the new normal of what we all expect at conferences. Similarly, WEHI onsite and sponsored events adhere to a comparable policy.

childcare centre at an independent Australian Medical Research Institute. It is a tribute to ASI member (and 2017 Burnet Orator) Professor Lynn Corcoran, who worked tirelessly for years to see this realised. Although my children do not attend the Early Learning Centre, to me, this building and the children playing and learning within its walls, is a powerful representation of inclusion. Its visibility on the WEHI forecourt sends a message that child raising and scientific promotion co-exist.

Increasing visibility plays an essential



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PROFESSOR LYNN CORCORAN EARLY LEARNING, RUN BY FROEBEL, BOUTIQUE NOT-FOR-PROFIT PROVIDER OF BILINGUAL EARLY EDUCATION AND CARE SERVICES.

Importantly, increasing women in leadership, also increases the diversity of women in science; including women of colour, women with a disability, and trans and gender diverse people. In turn, these actions reinforce themselves to consistently broaden the view about what leadership and innovation qualities are valued.

role in promoting gender equity. ASI has led in this area. A few years after implementing an ASI 50% gender representation in speakers policy, this is now the new normal of what we all expect at conferences. Similarly, WEHI onsite and sponsored events adhere to a comparable policy. Visibility also manifests through increasing the number of women in scientific leadership to a level that establishes critical mass. Although WEHI leadership

is still progressing towards 50% (currently 36% across all leadership positions, laboratory head, division head, facility head through to director), women in faculty do have significant critical mass. This helps ensure that all voices are heard and diverse opinions are discussed openly at the faculty level. Importantly, increasing women in leadership, also increases the diversity of women in science; including women of colour, women with a disability, and trans and gender diverse people. In turn, these actions reinforce themselves to consistently broaden the view about what leadership and innovation qualities are valued. It is critical for renewal and promotion policies to reflect this diversity in recruitment. If not, authentic diverse leadership will be assessed by the traditional criteria of what a laboratory head looks and acts like. A concern is that the institutions that ultimately judge us, the NHMRC and ARC, do not appear as progressive as many of our Institutes or Universities. Therefore, it rests on us as reviewers, to challenge our beliefs and focus on

the science with an honest assessment of successes and outcomes relative to opportunity.

Systemic cultural change is needed to progress gender equity and some areas are particularly difficult to target through policy alone. Women often miss out on career progression opportunities

Women often miss out on career progression opportunities and sponsorship. WEHI has recently established a career planning process with the aim of initiating regular two-way discussions focused on career advancement.

and sponsorship. WEHI has recently established a career planning process with the aim of initiating regular twoway discussions focused on career advancement. While no policy can specify what these conversations look

Given the hierarchical structure of academic institutions, how we create a safe place for reporting is of critical importance. This process begins with transparent and open conversations and a whole of organisation responsibility to focus on prevention, accountability and bystander action.

like, this process hopes to identify paths for progression that are personalised for each staff and student².

Cultural change is also required to call out the "what-about-men?" responses that fundamentally misunderstand the need for gender equity action, or male colleagues that amplify junior women in science but are far less accommodating

to women at their own level. More than this, cultural change is required to tackle insidious sexual harassment. The Australian Human Rights Commission found that one in three workers in Australia had been sexually harassed at work3. They also discovered that only 17% of people who experience sexual harassment make a report or complaint. This tells us that no workplace is immune from sexism and sexual harassment. Given the hierarchical structure of academic institutions, how we create a safe place for reporting is of critical importance. This process begins with transparent and open conversations and a whole of organisation responsibility to focus on prevention, accountability and bystander action. WEHI is committed to taking these important steps to bring everyone along as essential advocates of change.

Finally, no gender equity policy or initiative can claim to be effective unless

it is backed up by evidence. This is central to the philosophy of the SAGE Athena SWAN initative⁴ in which WEHI has Bronze accreditation. This involves extensive data collection and evaluation to understand key barriers to gender equity and setting targeted actions to address these priorities. This cyclical process of measurement and evaluation and assessment of progress and impact is vital in ensuring sustainable and longlasting change on gender equity. ■

Footnotes

- Benacerraf, B. Presidential address to The American Association of Immunologists, delivered in Atlantic City, New Jersey, April 10, 1974. The training experience. J Immunol 113, 431-437 (1974).
- Groom, J.R. Diversity in science requires mentoring for all, by all. Nat Immunol (2021).
- http://humanrights.gov.au/about/news/ everyones-business-2018-sexualharassment-survey
- 4. http://www.sciencegenderequity.org.au/

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Challenges to gender equity in science

Matt Sweet, Group Leader and NHMRC Leadership Fellow at the Institute for Molecular Bioscience (IMB), The University of Queensland

Matt completed his PhD under the supervision of David Hume in 1996 at The University of Queensland. He then undertook an NHMRC CJ Martin post-doctoral training fellowship at the University of Glasgow (Scotland, UK) in the laboratory of Eddy Liew. After returning to Australia, he had a number of key roles within the Cooperative Research Centre for Chronic Inflammatory Diseases and was appointed to the position of Group Leader at the IMB in 2007. His laboratory studies innate immunity, particularly the roles of pattern recognition receptors, their signaling components and their downstream target genes in inflammatory, antimicrobial and metabolic pathways in macrophages.

Quid Pro Quo(ta)?

When I was asked to contribute an opinion piece relating to challenges to gender equity in science and/or how to promote gender equity in science, I was both chuffed and terrified. Mainly terrified – at the possibility of demonstrating my capacity for mansplaining¹ to the entire ASI community. Nonetheless, I do think it is important that we males are involved in the discussion, given that we are a major part of the problem. Since this is a very broad and far-reaching topic, I have

The inequality in grant funding means that female researchers are significantly disadvantaged in a sector that is (sadly) brutally competitive; that career progression for females has far more hurdles than are likely to be encountered by many men; and that each of these hurdles has the potential to end a career in scientific research.

focused my ramblings below on grant funding and the positive roles that males can play in gender equity.

What are the challenges?

Over the years, I have had several conversations with both male and female researchers - including those who I have great respect for - who do not believe that there are issues with gender equality in science that need to be addressed. So, this would be one challenge. I respectfully disagree with their views, given that I can see no reason to argue that our scientific demographic should not mirror that of our society. And if this is the case, the disparity in gender equality in grant funding and senior leadership represent two of the many examples of major - and connected - challenges to science. What are the impacts of these imbalances? The inequality in grant funding means that female researchers are significantly disadvantaged in a sector that is (sadly) brutally competitive; that career progression for females has far more hurdles than are likely to be encountered by many men; and that each of these hurdles has the potential to end a career in scientific research. Focusing on the inequality in senior leadership, it means that our senior leaders as a collective are not truly representative of our broader scientific community; that decisionmaking processes from our senior scientific leaders can lead to choices that tend to favour men over the more diverse scientific community that they represent; that we don't have nearly as many role models for female (and indeed all!) early and mid-career researchers as we should; that we are not performing as well as we could as a collective body of researchers, given that diversity consistently delivers better outcomes across different walks of life; and that many of the senior female researchers who have made it to the top have had a far tougher time than they should have had.

So how can gender equity be promoted to achieve gender equality in science?

Let me start with my views on how we might progress towards gender equality in science. The title of my short piece is both a reflection of my penchant for bad puns and of my opinion that an effective way to rapidly progress towards equality in any walk of life is to use quotas. And like most of my puns², "Quid Pro Quo(ta)" is not a very good one - quotas are not doing someone a "favour", they are just doing what's right. They reset the norm to say "this is where we should be, so this is what we are going to do to make sure we get there". I do of course appreciate that there are very strong views for and against quotas - I am in favour of them simply because I think there is convincing evidence to show that they can work.

Many of the senior female researchers who have made it to the top have had a far tougher time than they should have had.

So, to grant funding. For those of us who are in Australia, I know it's not the done thing to congratulate the NHMRC - but in this regard, I think congratulations are due for their efforts to correct imbalances in divvying up the dosh. The NHMRC's 2018-2021 Gender Equality Strategy³ set out to address and correct gender inequality in medical research, including in relation to grant funding. In 2017, the NHMRC used a separate pool of strategic funding for an additional 34 project grants led by females to reduce the gap in the percentage of successful project grants led by male versus female researchers - a gap that was apparent in every year since 2001 (and statistically significant for most of those years)³.

Since that time, substantial progress has been made – in both the 2019 and 2020 rounds, the NHMRC used structural priority funding to ensure that rates of successful Ideas grants were identical for males and females (sadly, they were also depressingly low for both males and females, but that's another conversation)⁴. What can we learn from this? A single policy initiative corrected one imbalance that had existed for

For those of us who are in Australia, I know it's not the done thing to congratulate the NHMRC - but in this regard, I think congratulations are due for their efforts to correct imbalances in divvying up the dosh.

decades. It used a separate pool of funds to bridge the gap. Organizations around Australia and New Zealand (other funding bodies, Universities, Medical Research Institutes) could enact positive change through similar policy decisions, for example with separate pots of money for internal funding schemes and appointments.

And now to the second part of the question above - how can gender equity be promoted? Well, given that we represent 50% of the population, we males can contribute by listening⁵; by becoming more educated about the many facets of gender inequality; by highlighting to others the very clear evidence that gender inequality exists in science; by pointing out why this is fundamentally wrong; by reinforcing the many benefits that will flow to all by correcting such imbalances; by providing a positive voice to the conversation; and by doing whatever we can within our circle of influence to contribute to gender equality. Regarding grant funding, for example, we can highlight the disparity that exists and lobby for additional policy changes and initiatives across organizations to correct imbalances – such as separate pools of funding to achieve gender equality

in funding rates, to fund part-time fellowships and/or to provide research support to those on parental leave.

What are some of the many challenges that remain and is there light at the end of the tunnel?

The Ideas Grants example above masks some important data. For the 2019 and 2020 rounds, substantially more applications were submitted by males. So even though gender equality was apparent in funded rates, the overall proportion of grants awarded was still biased towards male CIAs⁶. So, there are clearly more complex problems that cannot be addressed with the guick fix approach of quotas alone. Secondly, the Investigator Grants Outcomes for 2020 paint a much bleaker picture with respect to career progression and gender equality at senior leadership levels7. For example, the proportion of female applicants for investigator grants in 2020 fell from 54.5% at Emerging Leadership Level 1 (EL1) to 20.7% at Leadership Level 3 (L3). Thirdly, there is often an underlying assumption that gender is binary. Until institutions routinely capture and report on academia's diverse range of gender expressions, it will be unclear whether senior leadership groups and grant-funding recipients are reflective of our vibrant community. These represent long-term problems that can't be quickly solved with short-term solutions like quotas. But I still think that quotas can point us in the right direction, resetting the norm and speeding up change to progress towards gender equality. I am also of the view that the next generation of early to mid-career researchers coming through now, as a collective, are very aware of the challenges to

I am also of the view that the next generation of early to mid-career researchers coming through now, as a collective, are very aware of the challenges to gender equality and strongly advocate for positive change. gender equality and strongly advocate for positive change. Moreover, I am confident that they have the resourcefulness to devise and implement new strategies that will deliver further progress towards gender equality in the years ahead.

Footnotes

- I thank Bronwyn Marshall and Kate Schroder for mansplaining-checking of this opinion piece.
- According to my IMB colleagues, but I don't believe them.
- 3. https://www.nhmrc.gov.au/about-us/
 publications/nhmrcs-gender-equality-strategy-2018-2021
- Ideas Grants Outcomes 2020 Factsheet: 11.1% funded rate for both female- and male-led Ideas Grant applications (2019); 9.8% funded rate for both female- and maleled Ideas Grant applications (2020).
- I thank Jenny Martin, a champion of gender equity, for her patience many years ago in giving me very simple advice over a coffee about how to achieve gender equality when organizing conferences.
- 6. Ideas Grants Outcomes 2020 Factsheet: Data from the 2020 round show that 121 grants from 1,232 applications were awarded to a female CIA and 160 grants from 1,635 applications were awarded to a male CIA. Thus, funding rates for female-led and male-led applications were both 11.1%, but the overall proportion of grants awarded to a male CIA was 56.5% versus 42.8% to a female CIA.
- 7. Investigator Grants 2020 Outcomes
 Factsheet: Data from the 2020 round show
 that for EL1 grants there was a 12.8%
 funded rate for female CIA applications and a
 12.3% funded rate for male CIA applications,
 with 54.5% applications being submitted by
 female CIAs. Overall, 55.4% of successful
 EL1 grants were from a female CIA. For L3
 grants in the same round, there was a 42.1%
 funded rate for female CIA applications
 and a 50.7% funded rate for male CIA
 applications, with 20.7% applications being
 submitted by female CIAs. Overall, only
 17.8% of successful L3 grants were from a
 female CIA.



On the basis of 'merit'?

Lynn Corcoran, Professor Emeritus, The Walter and Eliza Hall Institute and The University of Melbourne; Adjunct Professor, Monash University.

Lynn Corcoran received her PhD from the Walter and Eliza Hall Institute (WEHI), University of Melbourne for studies on lymphoid malignancies. These studies implicated c-myc in B and T cell lymphomas and culminated in the generation of the Eµ-myc transgenic mouse, a model widely used in studies of lymphocyte transformation.

After a WEHI postdoctoral period focussing on the genetics of the malaria parasite, Lynn did a postdoctoral fellowship at the Whitehead Institute (MIT) with David Baltimore, where she began her interest in the molecular regulation of B cell development and function as a CJ Martin Fellow. As a member of the B Cell Program at WEHI, she contributed to studies defining the roles of key transcriptional regulators in plasma cell and effector T cell differentiation, and in transformation of lymphoid cells. Lynn has also actively worked for gender equality in science over many years.

On the basis of 'merit'?

Besides being a member of the faculty and part of the wonderful 'B Cell Program' of the Immunology Division at The Walter and Eliza Hall Institute, I coled or was a member of WEHI's Gender Equity in Science Committee from

The dictionary definition of 'merit' is "the quality of being good and of deserving praise or reward". Its synonym is "worth". Every time I hear the phase as a justification, it rings false.

2009 until I retired in 2019. Over many years, I heard this term (see title) a lot, in defence of the lopsided gender ratios at the senior levels of organisations

around the world, including in science. Most recently, it was during a private conversation with a senior colleague in defence of his public criticisms of recently appointed female faculty.

The dictionary definition of 'merit' is "the quality of being good and of deserving praise or reward". Its synonym is "worth". Every time I hear the phase as a justification, it rings false. We are scientists and we draw our conclusions from facts, not inuendo. If females are underrepresented in positions of authority broadly, with a few exceptions such as health services and education, and appointments or promotions are

So I conclude, from the evidence, that 'merit' has another, coded meaning. It's actually an acronym for Male Entrenched Regimen of Insider Training. 'Jobs for the boys' is a colloquial way of referring to the phenomenon.

based strictly on merit, then the speaker means that women are simply not as worthy as men are. But we all know this is not true. All of us know highly skilled, good, talented women. And all of us read the news, so we are constantly given examples of powerful men who do not exhibit merit – in politics, the corporate world, in sports or in religious institutions.

So I conclude, from the evidence, that 'merit' has another, coded meaning. It's actually an acronym for Male Entrenched Regimen of Insider Training. 'Jobs for the boys' is a colloquial way of referring to the phenomenon. It's the way things have been done for a long time, and we have not yet put it quite right. Things are actually very

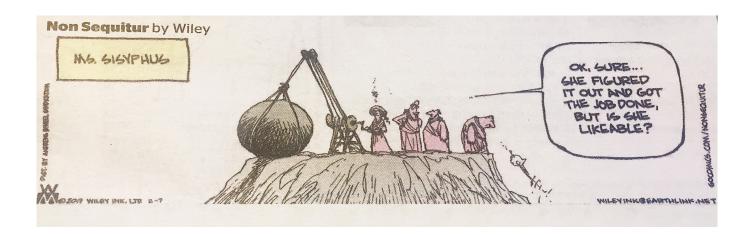
much better for women these days than they were in the last century. Governments around the world (all male, by definition) before 1902 made

In the past, well-meaning male colleagues have called with invitations to speak or chair at conferences, sometimes at the eleventh hour, by saying "Can you speak? We need more females!" This does little to build self-esteem.

it illegal for women to be elected or even vote in federal elections. The Australian Commonwealth Franchise Act 1902 was a world first, but it took until 1943 before a woman was elected to parliament. Until the Sex Disqualification Removal Act (yes, really) of 1919 was passed, married women were prohibited from working as teachers. And until 1966, women had to choose between marriage and a job in the Australian public service. The unions were strongly supportive of such bans, as they believed women would take men's jobs. Women were paid less. That is still true, by an average of ~16% overall.

I write this, not to point a finger of blame, but to make the point that women have intentionally been held back in the professions for a long time. It hasn't been about 'merit' by the dictionary definition. It's now a sort of habitual behaviour, and many of us, male and female, are trying hard to break the habit. But there are good and bad ways to change. In the past, well-meaning male colleagues have called with invitations to speak or chair at conferences, sometimes at the eleventh hour, by saying "Can you speak? We need more females!" This does little to

Lab Hacks ASI Newsletter September 2021



build self-esteem. More recently, other callers have pleaded with me to think of female speakers, as the organisers couldn't think of any appropriate female contributors. It saddened me that I was expected know the women in science better than my male colleagues did. I hope that all Australian scientists put a little more effort in getting to know one another and the work we each do, rather than remaining in our long-standing cliques. For the past few years, WEHI has asked conference organisers to assure that there is gender equity for speakers and chairs for meetings held at our institute. Conference quality has not suffered.

I am from a different generation to the bright young things now leading our research effort. I also see how different they are in terms of their attitudes toward gender fairness and shared family responsibility, when family is part of the equation. I hope, when next the phrase 'On the basis of merit' is about to be employed, that each person thinks hard about which definition of 'merit" they really mean.

I am from a different generation to the bright young things now leading our research effort. I also see how different they are in terms of their attitudes toward gender fairness and shared family responsibility, when family is part of the equation. I hope, when next the phrase 'On the basis of merit' is about to be employed, that each person thinks hard about which definition of 'merit" they really mean.



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Women's Initiative Update ASI Newsletter September 2021

Women's Initiative Update

Women's Initiative Coordinator

Kylie Quinn kylie.quinn@rmit.edu.au



In this issue of the newsletter, Debbie Burnett has done a great job spotlighting gender equity in immunology and in ASI. I've really appreciated reading the invited perspectives and seeing the carer award recipients highlighted. Seeing other people's thoughts and experiences with equity in the workplace definitely helps me to reflect on my own thoughts and experiences.

At the mid-year meeting, the ASI Council endorsed a broader scope for the Women's Initiative Coordinator, by transitioning it into the role of Chair of a formal Equity, Diversity and Inclusion (EDI) Committee. In this quarter's column, I wanted to highlight some changes for the Women's Initiative role. At the mid-year meeting, the ASI Council endorsed a broader scope for the Women's Initiative Coordinator, by transitioning it into the role of Chair of a formal Equity, Diversity and Inclusion (EDI) Committee.

The Women's Initiative Co-ordinator role was established in 2015 to support and promote women within ASI. The Women's Initiative has achieved some notable outcomes; establishing a Gender Equity and Inclusion Policy, a Women Speaker database, a mentoring scheme, talks at Annual Meetings and collated resources on gender equity. Transitioning to an EDI Chair aims to move this forward, consolidating these successes and increasing inclusivity for under-represented colleagues, while

The Women's Initiative has achieved some notable outcomes; establishing a Gender Equity and Inclusion Policy, a Women Speaker database, a mentoring scheme, talks at Annual Meetings and collated resources on gender equity.

retaining the Women's Initiative as an ASI flagship.

One key driver of this transition is that ASI's EDI initiatives need sustained input from people from all genders. The ASI Council supported the establishment of a Chair roles with a Deputy/Current/Immediate Past structure and a formal EDI Committee. This structure will support more handover between

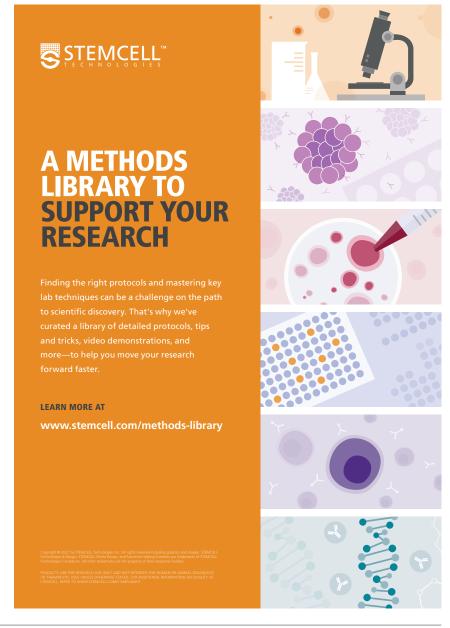
incoming and outgoing Chairs and provide more accessibility for people that are non-binary, gender-queer and men to participate in ASI EDI initiatives.

The new structure broadens the groups of people involved in EDI in ASI, enabling better inclusion of individuals from a broader range of groups and allies and supporting better representation during ASI decision-making processes.

Finally, if you are interested in contributing to the EDI Committee, ASI has made a call for expressions of interest which is open now. For more information on the scope of these roles, please check the ASI website or feel free to get in touch by email if you would like to discuss. kylie.quinn@rmit.edu.au.

For more information on the scope of these roles, please check the ASI website or feel free to get in touch by email if you would like to discuss.

Another driver is that many groups encounter additional barriers within immunological research and education: researchers that identify as LGBTQIA+, indigenous, people from ethnically, culturally or linguistically diverse backgrounds, that have a disability, are from regional areas, under or from conditions of financial hardship, and others. The new structure broadens the groups of people involved in EDI in ASI, enabling better inclusion of individuals from a broader range of groups and allies and supporting better representation during ASI decisionmaking processes.



ASI Carer's Award

ASI Newsletter September 2021

ASI Carer's Award



Dominguez Pilar

I am a Senior Research Officer at the Peter MacCallum Cancer Centre in the laboratory of Prof Ricky Johnstone. I completed my PhD in Molecular Biology by the Universidad Autonoma de Madrid (Madrid, Spain) in 2011 under the supervision of Prof Carlos Ardavin. My project focused on the function of dendritic cells generated during inflammatory conditions and bacterial infections. After graduation, I joined Weill Cornell Medicine (New York, USA) as a postdoctoral fellow in the group of Prof Ari Melnick, where I developed my interest in cancer biology

and translational-oriented science. My postdoctoral research focused on the study of the epigenetic mechanisms that contribute to lymphoma formation and I was awarded a fellowship from the Lymphoma Research Foundation. I moved to Australia in 2018 with my husband and my 6-month-old daughter, after accepting an offer from Prof. Ricky Johnstone to start a new position as a senior postdoctoral researcher at Peter Mac, as an intermediate step towards my goal of becoming a group leader. I am currently investigating new epigenetic and immunotherapy approaches against blood cancers, which can have a positive impact for patients.

I am currently investigating new epigenetic and immunotherapy approaches against blood cancers, which can have a positive impact for patients.

At the beginning of 2021 I gave birth to my second daughter and I took 10 weeks of parental leave. Thanks to the ASI Carer Award -which I have used to cover the child care fees- I have been able to work full time after maternity leave, significantly shortening the time required to complete the high load of experimental work associated

I would like to express my gratitude to the ASI for organizing this fantastic initiative that, beyond the obvious financial support, encourages women in science to pursue their professional goals without giving up their aspirations of having a family.

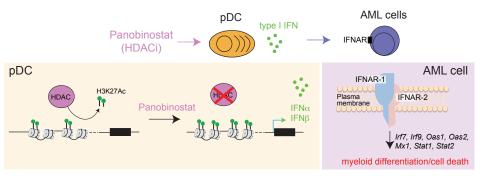
with my projects. As a result, I have successfully finished one project describing how the immune-modulatory properties of histone deacetylase inhibitors can be exploited to design better therapies against leukaemia. The manuscript summarising the main findings is currently under review and will hopefully be published in 2021 (Biorxiv 2020 Aug; doi: https://doi. org/10.1101/2020.08.23.235499). This is my first paper as co-senior author, which will impact positively and strengthen my future applications for fellowships and group leader positions, helping me to advance in my career and to achieve my goal of establishing my own research group. In addition, I am investigating the mechanisms of action and the translational potential of novel personalised therapies for lymphomas that have epigenetic alterations. Since returning from maternity leave, I have

ASI Carer's Award ASI Newsletter September 2021

generated enough preliminary data to submit an abstract for the 2022 New Directions in Leukaemia Research and for the next round of Ideas Grants and the Victorian Cancer Agency Fellowships.

I would like to express my gratitude to the ASI for organizing this fantastic initiative that, beyond the obvious financial support, encourages women in science to pursue their professional goals without giving up their aspirations of having a family. These awards are much needed to retain in Academia mid-career female researchers who have carer responsibilities. ■

These awards are much needed to retain in Academia mid-career female researchers who have carer responsibilities.



pDC: plasmacytoid dendritic cells AML: acute myeloid leukaemia HDACi: histone deacetylase inhibitor IFN: interferon

IFNAR: interferon receptor

H3K27Ac: histone 3 lysine 27 acetylation



I am extremely grateful to ASI for the Carers Award, as it came at the right time to help me through a very hectic phase in my life. I recently returned to the lab after maternity leave, and my husband just started a new job with rotating shifts. Having no family in Australia meant that I had little support to care for our toddler through lockdowns and daycare illnesses (Huge kudos to my lab mates, for keeping my cell cultures alive when

Having no family in Australia

I had to stay home on short notice!). The Carers Award allowed me to pick up some extra davcare davs to enable multi-day experiments and hire a casual babysitter for catching up on writing and admin bits on weekends. This gave me some much-needed help for continuing my research – and just knowing I had some support did wonders for my mental wellbeing, which we all know is crucial in these crazy times! ■

meant that I had little support to care for our toddler through lockdowns and daycare illnesses (Huge kudos to my lab mates, for keeping my cell cultures alive when I had to stay home on short notice!).



Kavita Bisht

I am a research officer at Stem Cell Biology group based at Mater Research Institute-The University of Queensland. I was awarded a PhD in Immunology in 2014 from Griffith University. During my PhD, I discovered anti-inflammatory effects and signalling of bile pigments. I joined Mater Research Institute in 2016 and since then I have been working on haematopoiesis and erythropoiesis. have published 14 peer reviewed research articles in top ranking journals. My current research focuses on understanding how inflammation causes anaemia to discover novel treatments to treat anaemia of inflammation and

Haiyin Liu

I am an early career postdoc (2 years post-PhD) at the Biochemistry and Pharmacology department at the University of Melbourne. Originally hailing from China/Germany, I completed my PhD in A/Prof Justine Mintern's lab at Bio21 and am now working to develop some of the projects coming out of that research. I am interested in how key immunoreceptors are degraded in different antigen presenting cells. Our focus has been on how the small protein ubiquitin controls MHC II and CD86 trafficking and function, and how this then affects T cell development and activation.

to discover new therapies to increase the mobilisation of blood stem cells from bone marrow to the blood so they can be transplanted to blood cancer patients. I Since joining Mater Research, I have made significant discoveries in haematology research. I discovered first time that endotoxins cause anaemia by disrupting the interaction of an immune cell (macrophage) with maturing red blood cells in the bone marrow (first author, Front Immunol 2020). I also devised and published the novel in-flight imaging flow cytometry to quantify erythroblastic islands (where red blood cells mature) (second author, Exp Hematol 2020). I also identified an extrinsic mechanism by which drugs

During my maternity leave, I was not only dealing with sleepless nights/sibling jealousy, but also with manuscript revisions and submission of a postdoctoral fellowship and NHMRC idea grant. Carer award was instrumental in lowering the stress and burden of my Carer responsibilities.

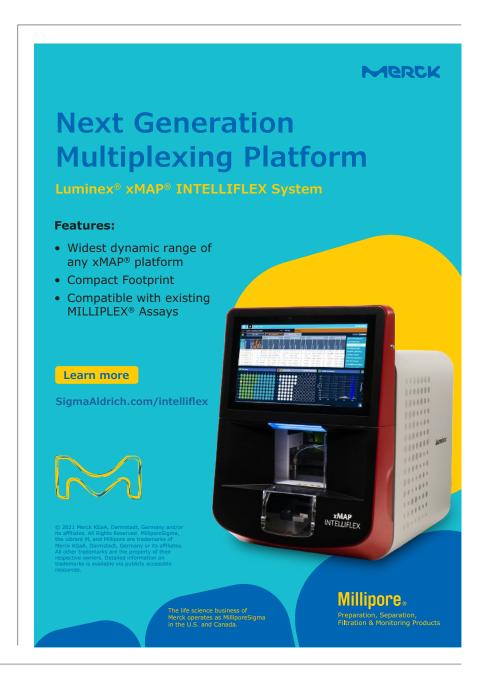
stabilising the oxygen-sensor Hypoxia Inducible factor-1 (HIF-1) enhance haematopoietic stem cell (HSC) mobilisation into the blood (first author, Blood Advances, 2019). My research on understanding how inflammatory cytokine (Oncostatin-M) regulates haematopoietic stem cell mobilisation in the bone marrow was awarded a 3-year NHMRC project grant in 2017 and the manuscript from this project has been reviewed by Leukaemia journal and requires modifications.

I am extremely grateful to receive Carer award by ASI. I am an early career researcher and mother of two young children (both are under five years old). Carer award was a great initiative by ASI to support parents during the difficult time of worldwide pandemic. The birth of my second child brought me lots of happiness during the Covid19 pandemic but the responsibilities of looking after two little children, mostly on my own, were very challenging and

I am currently finishing the revision of my manuscript in Leukaemia journal and leading a new research project in collaboration with our industry partner.

stressful. During my maternity leave, I was not only dealing with sleepless nights/sibling jealousy, but also with manuscript revisions and submission of a postdoctoral fellowship and NHMRC idea grant. Carer award was instrumental in lowering the stress and burden of my Carer responsibilities. Carer award allowed me to cover the

cost of childcare for my kids during my maternity leave. I am very glad to say that with the help of Carer award, I was able to continue childcare for my elder son and work on my manuscripts and grant application. I have now returned to work from maternity leave as part time. I am currently finishing the revision of my manuscript in Leukaemia journal and leading a new research project in collaboration with our industry partner. Thank you again ASI for the award and for the financial support this award provided during the challenging time of maternity leave and worldwide pandemic.



Gordon ADA Award

ASI Newsletter September 2021

Gordon Ada Award

A/Prof. Sumaira Z Hasnain

I lead the Immunopathology group at Mater Research Institute-The University of Queensland and I am the chair of the Equity, Diversity and Inclusion committee at the institute. I am an

I am an inventor on a PCT patent for modulating cellular stress in metabolic diseases for which I have secured an investment from a venture capitalist company, IP group in 2019.

inventor on a PCT patent for modulating cellular stress in metabolic diseases for which I have secured an investment from a venture capitalist company, IP group in 2019. I have been chief investigator on 14 grants, raising more than \$5 Million as CI. I have won 20 prestigious scientific awards, including QLD Premier's Health and Medical Research Award and a commendation from L'Oreal-UNESCO and most recently a career boost award from Children's Health Foundation. I have published 44 articles in leading and specialist journals (69% as first or last author), including in Nature Medicine, Gastroenterology, Clinical and Translational Immunology and Immunology Cell Biology.

Importance of diversity is instilled into us as immunologists, however, there is still a disparity of diversity in academia. On average only 20% of the 'above Level C' workforce in research institutes and Universities in Australia are female. With

women still being awarded only 40% of the total medical research funding budget and with women-led applications consistently scoring lower at panels. I am currently at a critical stage in my career (10 years post PhD), having

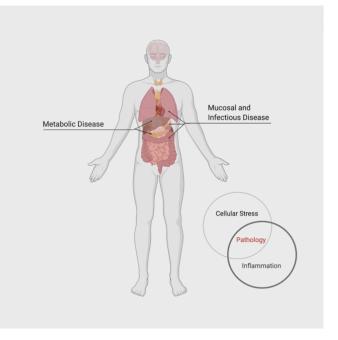
On average only 20% of the 'above Level C' workforce in research institutes and Universities in Australia are female. With women still being awarded only 40% of the total medical research funding budget and with women-led applications consistently scoring lower at panels.

Understanding the Intersect between the Immune System and Cellular Stress

Combining basic and clinically-focussed research to achieve translational outcomes

Immunopathology Lab led by A/Prof Sumaira Hasnain is interested in understanding the intersect between inflammation and cellular stress that is common in a range of chronic and acute diseases.

www.hasnainlab.com - COMING SOON



Gordon ADA Award

ASI Newsletter September 2021



build on my independent career. This was now even more important with the coronavirus crisis because scientists do not have the option of visiting a laboratory in person and might not in the near future. I am so grateful for this award which allowed me to build something for my career that I envisage will have a long-lasting impact on my research output.

I am so grateful for this award which allowed me to build something for my career that I envisage will have a long-lasting impact on my research output

established my independent laboratory in 2018, whilst juggling on-going carer responsibilities for two children <7 years of age. In addition to my career disruptions, I am facing several obstacles with gaining appropriate recognition for the work I lead, which are associated with my age, gender, diverse

The Gordon Ada Award from ASI are one of the few prestigious awards available that allow flexibility in the way funds are used. I leveraged these funds available to build a comprehensive laboratory website, which will be active from 01-01-2022 (www. HasnainLab.com), that will serve as an important vehicle to build on my independent career.

background and previous postdoctoral work within the same field.

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Enzyme

eEnzyme offers replication-deficient MLV-based Coronavirus Spike-pseudotyped particles for SARS-CoV-2 variants

- $1) \ \textbf{study the interactions} \ \ \text{between Spike and the host cell receptor} (s) \ \text{in specific conditions};$
- 2) validate the candidates that blocks the interaction between Spike and the host cell receptor(s);
- 3) screen convalescent serum samples for neutralizing antibodies, etc.

The current pseudoviral particles cover the spike proteins of variants of concerns and mutations:

- *the Wuhan strain PP
- *the Alpha/UK variant (B.1.1.7) PP key mutations: 69-70del, N501Y, D614G, P681H
- *the Beta/South Africa variant (B.1.351) PP key mutations: K417N, E484K, N501Y, D614G
- *the Gamma/Brazil variant (P.1) PP key mutations: K417T, E484K, N501Y, D614G
- *the Indian strain (B.1.617) PP key mutations: L452R, E484Q, D614G, P681R
- *the Delta/Indian strain (B.1.617.2) PP key mutations: L452R, T478K, D614G, P681R
- *the D614G mutation PP mutation: D614G
- *the A222V mutation PP mutations: A222V, D614G
- *the Y453F mutation PP mutations: Y453F, D5614G
- *the N501Y mutation PP mutations: N501Y, D614G

COVID-19 Research Tools

Recombinant Proteins Rabbit IgG for Coronaviruse Human or Mouse mAbs SARS-CoV-2 Pseudoviruses Receptors Stable Cell Lines



Influenza Virus Research Tools

Full-length cDNA clones Glycosylated full-length recombinant proteins Polyclonal & monoclonal antibodies

Neuraminidase assay kit (blue fluorescence)

Membrane Receptor Stable Cell Lines

GPCR Stable Cell Lines
PDE Stable Cell Lines
Stable Cell Lines for COVID19 Research

NSW Branch Report

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



Hi everyone,

I hope you are all keeping well and managing to keep busy during this lockdown. Just when NSW was doing so well we're again hit with an even more infectious strain of SARS-Cov2! Don't forget to [sanitize and] reach out to one another during these challenging times. It is the only way to keep us all afloat during this unprecedented era.

You may have received an email a while ago about the NSW-ACT ASI Joint Meeting to be held in September at the idyllic Peppers Craigieburn, Bowral. This meeting had always been a fantastic avenue for students and ECRs to present their latest work and to establish collaborations amongst their peers within the NSW network.

Don't forget to [sanitize and] reach out to one another during these challenging times.

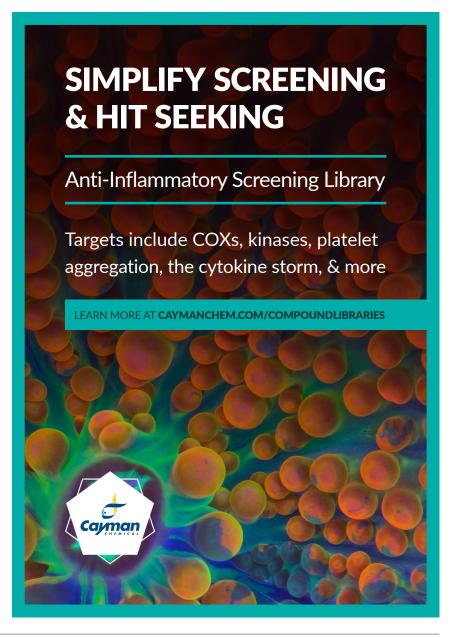
I am sure it's no surprise with the growing number of COVID-19 cases and travel restrictions affecting NSW/ACT that we have decided to postpone this meeting to 2nd-3rd December 2021. On the bright side we will hopefully be celebrating end of year at this meeting on a high note, given this rescheduled meeting can go ahead.

We have a wonderful line-up of keynote speakers including Prof. Jose Villadangos (Doherty Institute Melbourne), Dr. lain Comerford (University of Adelaide), Dr. Kylie James (Garvan Institute Sydney) and A/Prof. Fabeinne Brilot-Turville (University of Sydney). There will be wines, beers, food, company – but most important of all – the opportunity to present your work and engage in fantastic scientific discussions in person!

It is a not-to-be-missed opportunity so save the date now and look out for when registration open!

I always welcome great ideas on how we can encourage more collaboration within the ASI NSW network and promote events and to showcase fantastic news achievement of our ASI NSW members. Meanwhile, stay safe and I hope to see you at the branch meeting!

All the best to you all. ■



Day of Immunology



NSW-ACT Branch Meeting

2-3 December 2021
Peppers Craigieburn, Bowral

Registration & abstract submission open soon

Invited Speakers:



Jose Villadangos Doherty Institute



Kylie James Garvan Institute



Fabienne Brilot-Turville University of Sydney



lain Comerford
University of Adelaide



Australian and New Zealand
SOCIETY FOR IMMUNOLOGY INC.

News from the Education SIG

ASI Newsletter September 2021

News from the Education SIG

Semester 2 is well underway for members of our Education SIG with many of us needing to accommodate and switch between online and oncampus modes due to ever-changing restrictions. Nevertheless, we will do what is necessary to give our students the best possible learning experience in these challenging times!

On Friday 23rd July, we had the opportunity to meet as a SIG for our Winter Seminar and Workshop: Communicating Complex Science Creatively with Dr Ken Dutton-Regester from Excite Science. Over 40 members attended the seminar where Ken outlined a number of strategies we can

During the interactive workshop, we focussed on flow cytometry and ELISAs, identifying the most difficult concepts for students in these techniques.

adopt in our teaching to explain complex science; from using a historical context to gamification. During the interactive workshop, we focussed on flow cytometry and ELISAs, identifying the most difficult concepts for students in these techniques. In the near future, we will reconvene to continue our work from this session, where we apply one of the

strategies presented by Ken to develop a shared resource explaining these difficult concepts to our students. Thank you to Ken for this wonderful event!

Continuing our introductions of our state and regional representatives

In this issue, we have the pleasure of introducing you to Lisa and Guna, our representatives for NZ North Island and Tasmania, respectively.

Dr Lisa Connor is a Senior Lecturer in Immunology at Victoria University of Wellington and Research Associate of the Malaghan Institute of Medical Research. Lisa set up her research lab in 2018, which focuses on the immunology



A SLIDE FROM THE WORKSHOP SESSION

News from the Education SIG

ASI Newsletter September 2021



DR LISA CONNOR, EDUCATION SIG

of vaccination and investigates mucosal vaccines that promote effective immunity in the respiratory tract. Lisa teaches Immunology to undergraduates and Clinical Immunology to postgraduates. Lisa has had amazing mentors and supervisors who have been inspirational and encouraging - through Lisa's teaching role, she hopes to pay it forward to her students.

Lisa set up her research lab in 2018, which focuses on the immunology of vaccination and investigates mucosal vaccines that promote effective immunity in the respiratory tract.

Guna Karupiah (Guna) trained as a microbiologist (BSc Hons), completed an MSc degree in medical virology and viral epidemiology overseas, and obtained a PhD in viral immunology at the John Curtin School of Medical Research, Australian National University. His expertise is in the areas of pathogenesis of viral infections, immunity to viral infections, and immunopathology during respiratory viral infections.

Guna has extensive tertiary teaching experience in the forms of supervision of Honours, Higher Degree Research

Guna's expertise is in the areas of pathogenesis of viral infections, immunity to viral infections, and immunopathology during respiratory viral infections.



A/PROF GUNA KARUPIAH, EDUCATION SIG REPRESENTATIVE FOR TASMANIA

and postgraduate medical research students, undergraduate teaching and research supervision. He became a Senior Fellow of the Higher Education Academy, United Kingdom in 2014. He is currently an Associate Professor of Biomedicine at the Tasmanian School of Medicine, University of Tasmania.

Our SIG Annual Meeting will be held in February 2022 with planning underway and abstract submission to open in the coming months, so please keep an eye out for further information from us.

Finally, we are looking forward to being part of the 49th ASI Annual Scientific Meeting (8-9 December, 2021), where Professor Pamela Ohashi (University of Toronto) and Professor David Tarlinton (Monash University) will be the keynote speakers for our SIG. We hope to see you there!



WILEY Clinical & Translational **Immunology** 7.077 6.161 2-YEAR 5-YEAR SIMPACT SFACTOR SIMPACT SFACTOR Rapid Review Process Average Time to First Decision of 3 days Open Access – anyone can download and read your paper ASI Members receive a 20% discount off the cost of publishing in CTI Eligibility for CTI Publication of the Year & CTI Social Impact Awards Why submit to CTI?

The IUIS corner ASI Newsletter September 2021

The IUIS corner

J. Alejandro Lopez alejandro.lopez@qimrberghofer.edu.au





International Union of Immunological Societies

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

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

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

Given the current COVID-19 situation, there is too much uncertainty to ensure that it can be delivered as a safe and successful Congress in 2022

Stop the press. IUIS 2022 postponed

https://iuis2023.org/

The IUIS Executive Committee and the Congress Steering Committee, decided to postpone the IUIS 2022 Congress in Cape Town to 2023. Given the current COVID-19 situation, there is too much uncertainty to ensure that it can be delivered as a safe and successful Congress in 2022. Although we are 17 months away, mark down your calendars for November 27-December 2, 2023



WHERE IMMUNOLOGISTS MEET

18th International Congress of Immunology

27 November - 2 December 2023 | Cape Town, South Africa

UIS2023.or

The IUIS corner

ASI Newsletter September 2021

Day of Immunology 2021

Not surprisingly, amidst a pandemic that has brought Immunology to the forefront thoughts in the general population, this year Day of Immunology was a very sound success. It gathered interest from the broader society as never before and it reached further audiences in many countries. The website of the IUIS has compiled reports of the success and the promotional campaigns in various countries including Argentina,

Not surprisingly, amidst a pandemic that has brought Immunology to the forefront thoughts in the general population, this year Day of Immunology was a very sound success.

Brazil, Cuba, China, Canada, France, Portugal, Greece, Spain and several others. Immunological societies entered with their reports into the triennial competition of the 2020-2022 Day of Immunology Awards.

Check here for insights to their campaigns here: http://iuis.org/ news/2021-edition-day-of-immunology/

Day of Immunology IUIS-EFIS Webinar:

"Immunology in the time of COVID-19: achievements, challenges and opportunities"

Highlighting the central role Immunology plays in the current pandemic, a very successful Webinar broadcasted on April 09th celebrating Day of immunology attracted over 3,000 attendees from 105 countries. It included Antony Fauci, Faith Osier, Andreas Radbruch, Shane Crotty and Laurence Zitvogel amongst other keynote immunologists and a panel discussion which included our own Kylie Quinn and Joanna Kirman.

If you didn't watch it live, you can catch it here: http://www.youtube.com/ watch?v=pAcRu8WxEjw

Day of immunology attracted over 3,000 attendees from 105 countries.



Thank you, Immunology video campaign

Early career scientists were asked to share their views on immunology and its contribution. A compilation of videos with the interviews was made available as part of the celebration of the Day of Immunology on April 29th. You can have a look at some of the amazing videos produced in here:

http://iuis.org/events/2021-international-day-of-immunology/

IUIS Webinar Series

Other very interesting titles in the series of Webinars and available on demand, include:

- Lynn Morris: "HIV prevention: antibodies and vaccine development"
- Andrea Cossarizza: "Immunopathology of COVID-19: lessons from pregnancy and from ageing"
- Anita McElroy: "Mapping human immune responses to Ebola virus infection provides insight into viral pathogenesis"
- Details of all seminars available can be found in this link: http://iuis.org/ webinars/

Successful Immuno-Colombia online course

Amongst the positive outcomes of the pressure Covid19 has put on us, the fast adaptation to deliver our messages via online platforms is one that we will profit from into the future. The IUIS Education Committee and the local organising committee reported on an extraordinary success of the latest online immunology course that took place virtually between

5-16 of April. Using the resources established by Immunopaedia and with their support, there are now invaluable educational resources that can be deployed to various audiences. The success of this online course in Colombia demonstrates that the creation of those resources will rip benefits beyond the courses themselves and generate great opportunities for immunologists across the world.

The IUIS Education
Committee and the local
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immunology course that took
place virtually between 5-16
of April.

While originally planned as an inperson course, the 2021 IUIS-ALACI-ACAAI course "MECHANISMS AND APPROACHES TO IMMUNOTHERAPY FOR CANCER AND CHRONIC INFLAMMATORY DISEASES" took place virtually from April 5 to 16, organised by the Universidad de Antioquia in Medellin/ The course consisted of one 45-minute lecture by the international faculty, followed by questions and answers and five short presentations by participants each day.

Colombia (Luis F García, Gloria Vásquez, Gloria I. Sánchez) and the IUIS Education Committee (Rosana Pelayo, Michelle Letarte, Clive Gray, Dieter Kabelitz). Prior to the online course, the 49 selected participants from 19 countries (see charts) had to study pre-course material provided on the Immunopaedia platform. The course consisted of one 45-minute lecture by the international faculty, followed by questions and answers and five short presentations by participants each day. A novelty of the course was the post-course research projects where participants in groups of five or six had to work out a research proposal on a topic selected by a mentor (who were the faculty members). Three weeks later, each team presented the result of this joint effort in a final session.

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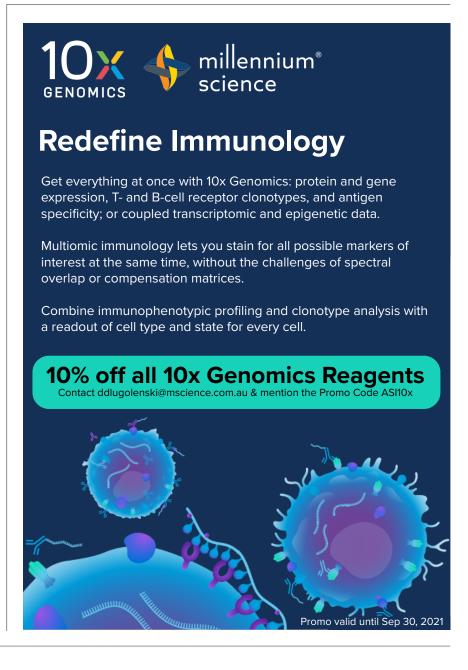
A full report of the course could be found here: http://s3-eu-west-1.amazonaws.com/wp-iuis/app/uploads/2021/06/15142743/lmmunoColombia-2021-Final-report_070621.pdf

Upcoming events

With the changing environment, several congresses and events have moved to a virtual modality, making them now more accessible world-wide. That includes the European Congress of immunology which will take place on Sept 1-4 (http://2021eci.org/).

Our regional FIMSA2021, will have a hybrid modality; hence, it will be more accessible for many immunologists world-wide. The congress will be hosted in Busan, Korea between Oct 31st and Nov 3rd and will offer full virtual options (http://www.fimsa2021.org/).

Please check the listing of oncoming events at the IUIS webpage: https://iuis.org/events/ ■



Publications of Interest

Our Sustaining Members



Citrullinated Histone H3 (Clone 11D3) ELISA Kit (https://www.caymanchem.com/product/501620/citrullinated-histone-h3-(clone-11d3)-elisa-kit) de Andrea et al. (2021). Heterogenous presence of Neutrophil Extracellular Traps in human solid tumours is partially dependent on Interleukin-8. Journal of Pathology.

doi: 10.1002/path.5753

Auranofin (https://www.caymanchem.com/product/15316/auranofin) and Dalcetrapib (JTT-705) (https://www.caymanchem.com/product/89450/dalcetrapib) Manček-Keber et al. (2021). Disruption of disulfides within RBD of SARS-CoV-2 spike protein prevents fusion and represents a target for viral entry inhibition by registered drugs. The FASEB Journal. doi: 10.1096/fj.202100560R

Lipoxin A4 (https://www.caymanchem.com/product/90410/lipoxin-a4) Troletti et al. (2021). Pro-resolving lipid mediator lipoxin A4 attenuates neuro-inflammation by modulating T cell responses and modifies the spinal cord lipidome. Cell Reports. doi: 10.1016/j.celrep.2021.109201



PD-L1/CD274 Monoclonal antibody (http://www.ptglab.com/products/PD-L1-CD274-Antibody-66248-1-lg.htm)

Wu, Y., Zhang, C., Liu, X. et al. ARIH1 signaling promotes anti-tumor immunity by targeting PD-L1 for proteasomal degradation. Nat Commun 12, 2346 (2021).

http://doi.org/10.1038/s41467-021-22467-8

IFN Gamma Polyclonal antibody (http://www.ptglab.com/products/IFNG-Antibody-15365-1-AP.htm)

Huang, D., Chen, X., Zeng, X. et al. Targeting regulator of G protein signaling 1 in tumor-specific T cells enhances their trafficking to breast cancer. Nat Immunol 22, 865–879 (2021).

http://doi.org/10.1038/s41590-021-00939-9

CD206 Monoclonal antibody (http://www.ptglab.com/products/MRC1-Antibody-60143-1-lg.htm)

Yeini, E., Ofek, P., Pozzi, S. et al. P-selectin axis plays a key role in microglia immunophenotype and glioblastoma progression. Nat Commun 12, 1912 (2021).

http://doi.org/10.1038/s41467-021-22186-0



EasySep™ Human CD138 Positive Selection Kit II

de Jong M. et al, 2021

The multiple myeloma microenvironment is defined by an inflammatory stromal cell landscape

Nature Immunology

DOI: 10.1038/s41590-021-00931-3

SepMate[™]

Lucas C. et al, 2021

Delayed production of neutralizing antibodies correlates with fatal COVID-19

Nature Medicine

DOI: 10.1038/s41591-021-01355-0

EasySep™ Human NK Cell Enrichment Kit

Moradi S. et al, 2021

Structural plasticity of KIR2DL2 and KIR2DL3 enables altered docking geometries atop HLA-C

Nature Communications

DOI: 10.1038/s41467-021-22359-x



 $SARS-CoV-2\ pseudoviral\ particles\ (\ \underline{http://www.eenzyme.com/search.aspx?find=SCV2-PsV-001}\)$

Zhang, B-Z.. et al. (May, 2021)

A novel linker-immunodominant site (LIS) vaccine targeting the SARS-CoV-2 spike protein protects against severe COVID-19 in Syrian hamsters

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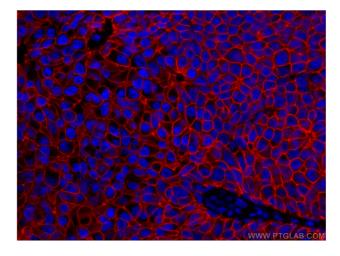
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BD Rhapsody™ WTA Amplification (Single-cell analysis reveals transcriptomic remodellings in distinct cell types that contribute to human prostate cancer progression | Nature Cell Biology)

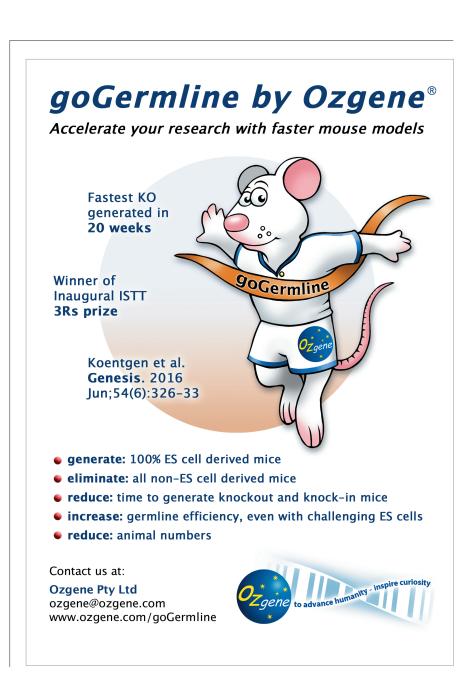
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