



FROM THE ACVA LEADERSHIP

The ACvA acknowledges the Traditional Custodians of the lands on which we all live and work and recognises their continuing connections to land, waters and community. The ACvA members pay our respects to elders past, present and emerging.

*The year 2020 marks 20 years of shaping Australia's journey towards a more equitable, just and reconciled nation. This year's theme for National Reconciliation Week is **In this Together**. The theme holds special significance and resonance since the CoVID-19 crisis and serves to highlight the gap in life expectancy for Aboriginal and Torres Strait Islander Peoples and the role that cardiovascular disease plays in driving that gap as well the ACvA community's significant role in working to close that gap.*

National Reconciliation Week extends from 27 May until 3 June. Please click [here](#) for activities that you may be able to participate in.

The ACvA leadership has been active in working across the CVD sector, with a particular focus on:

- Establishing two industry working groups focussed on industry/academic collaboration and accelerator evidence and value-based care.
- Bringing together researchers who are undertaking or planning CoVID-19 related projects
- Partnering with the ISHR on an Australasian webinar series.
- Working with the National Heart Foundation and local cardiovascular researcher networks and alliance to share information, promote CVD researchers and ensure inclusiveness in member participation in ACvA initiatives.

New ACvA recruits

We are pleased to announce the appointment of Project Support Officer, Meng-Ping Hsu and Project Manager, Fiona Hearne.

Meng-Ping Hsu



Originally from Taiwan, Meng moved to Sydney in 2007 after growing up in Adelaide. Meng completed her Bachelor's degree at the University of Sydney before joining the School of Molecular Biosciences to do both Honours and a PhD in Neuroimmunology. Since then, Meng has diversified her areas of expertise through two Research Assistant positions in Translational Immunology and

Cancer Cell Biology. Meng is now the Project Support Officer from the Australian Cardiovascular Alliance (ACvA).

Meng sees that “this position is in a unique spot where [she is] able to keep in touch with biomedical science advances whilst providing support to the ACvA mission. Meng believes the invaluable skills that [she] learns here will help [her] pursue [her] goal of being a Project Manager in the future”. She is “most looking forward to interacting with and supporting a diverse network of people, learning new skills and taking on the challenges of driving the goals of the ACvA”. Meng’s work priorities will include supporting the Emerging Leaders Committee and Flagships, helping expand our communications, implementing the Research Catalyst Program and helping to develop a new suite of awards for excellence and innovation in cardiovascular research. Please welcome Meng to the ACvA.

Fiona Hearne



Fiona joins us after many years at The Warren Centre, a technology innovation think tank in the Faculty of Engineering, The University of Sydney where she held the roles of External Relations Manager and Events Manager.

Fiona says: "I'm excited to be working in a new area and looking forward to connecting all of the different stakeholders to help ensure Australia can be a world leading point of call for all Cardiovascular research". Fiona's work priorities include supporting our two Industry Working Group to deliver projects and activities to support their work and help drive integration between the flagships.

The two working groups will be focussed on a new vision for industry/academic partnerships and accelerating evidence and value-based care into the healthcare system.

Industry Roundtable Working Groups established

The third ACvA Industry Roundtable was held on 19 March 2020. The core purpose of the roundtable was to continue to build a strong platform of engagement between industry and the research community to tackle Australia’s biggest health burden, drive economic outcomes and agree on the need to establish two working groups to move a shared agenda forward. The working groups are focused on the following tasks, respectively:

- 1. Accelerating the delivery of evidence-based and value-based care driving equitable health outcomes for all Australians**
- 2. Implementing a new vision for industry/academic partnership, capturing our research and innovation potential for commercials, economic and patient outcomes.**

We are very pleased to receive over 30 expressions of interest for the two Working Groups. The Working Groups will be holding their first meetings in the first week of June. There is much work to be done, with both groups scheduled to provide reports to the ACvA Board in late September.

Spotlight on our Flagships – Biomedical Engineering

This month's spotlight is on our Bioengineering Flagship. This flagship is led by Associate Professor James Hudson and Professor Peter Barlis. The Flagship's mission is to deliver technologies that have clear and proven clinical relevance, which form a sustainable contribution to the science community and are potentially marketable. At its core will be a research culture that embraces discovery, innovation and entrepreneurship in everything its members do. The Flagship members feel that the interests of patients are best served by applying a business approach in device and technology development.

The Flagship consists of 4 research themes:



- **Tissue Engineering and Cellular Assays (led by A/P James Hudson and Dr Adam Hill)**

The Tissue Engineering and Cellular Assays theme is focused on the fundamental development and application of new models and therapeutics to improve cardiovascular health. New models of cardiovascular cell culture models *in vitro* combined with *in silico* modelling are being used to improve and accelerate genetic diagnosis, drug toxicology and drug discovery. Tissue engineering strategies are also being used to create replacement heart muscle and vessels.



- **Biomaterials (led by Dr Jelena Rjnak-Kovacina and Dr Yu Suk Choi)**

The Biomaterials theme is focused on the development, characterization, pre-clinical evaluation, and application of biomaterials in both the fundamental science and clinical application of biomaterials. This theme strongly interfaces with other disciplines, in particular drug delivery, tissue engineering and devices to providing new solutions for improvements in cardiovascular health.



- **Imaging and Analysis (led by Professor Martin Ugander and Professor Stuart Grieve)**

The Imaging theme spans clinical and pre-clinical imaging across non-invasive and invasive cardiovascular imaging modalities. The focus on technical development including image acquisition physics, image reconstruction, post-processing, and image analysis is improving cardiovascular imaging for diagnosis, risk-stratification, monitoring of therapeutic efficacy, and both clinical and pre-clinical mechanistic insight.



- **Devices and Diagnostics (led by Professor Peter Barlis, Dr Anand Ganesan and Dr Mohan Karunanithi)**

The Device and Diagnostics theme is focussed on improving the monitoring, clinical decision making and interventional management of cardiovascular health. This covers wearable devices, stents, in vivo diagnostic devices and pacemakers to improve both the efficiency of our health systems and patient cardiovascular health.

To learn more about the Biomedical Engineering Flagship, please click [here](#).

ACvA activities

Research Catalyst Grants Program - applications extended!

Bioplatforms Australia has partnered with the ACvA to support pilot discovery work to assist with national collaborative programs using state-of-the-art technology.

Bioplatforms Australia was established through the National Collaborative Research Infrastructure Strategy (NCRIS) to strategically coordinate and position Australia's biomolecular research infrastructure capability in support of Australia's research priorities. Bioplatforms Australia currently manages a national network of 'omics research infrastructure providers and the bioinformatics capacity needed to support these activities.

Collectively, Bioplatforms Australia provides the capability to support all aspects of product development, production, QC and market performance.

As part of the partnership, the Research Catalyst Grants Program was created to provide “vouchers” for access to “omics” technologies in the Bioplatforms Australia network of facilities, totalling \$250,000.

The vouchers aimed to:

1. Assist in the acquisition of pilot data for upcoming, significant collaborative grant applications.
2. Support development of collaborative grant applications, through tier-one grants administered by organisations such as NHMRC and the MRFF.

Due to popular demand, the applications for the Research Catalyst Program have been **extended until 5th June**. Please send your application to acva@yoursecretariat.com.au

National awards for cardiovascular research excellence- have your say!

- The proposed awards will be national in scale and will be developed and rolled out in partnership with the National Heart Foundation of Australia. The intention is to develop a contemporary suite of awards and to elevate the profile of the awards and cardiovascular research beyond the immediate reach of our two organisations.
- A working group to develop the suite of awards is being established and will be chaired by Professor Steve Nicholls.
- An online survey has been released and can be accessed by clicking [here](#). Please respond to the survey questions and help shape impactful and enduring awards.

EIU/Digital Health Roundtable

- The ACvA partnered with the Digital Health CRC and Amgen in a Digital Health Roundtable held 27 May 2020. The key purpose of the roundtable was to explore data and digital health opportunities and solutions to improve patient care pathways. A report will be published and made available on the ACvA website.

OZHEARTS Song Competition



We launched an exciting new competition on 11 May 2020, the OZHEARTS Song Contest: <https://www.ozheart.org/song-contest/>. The purpose of the contest is to raise awareness - in a fun and innovative way - of the fundamental role research has in helping to make cardiovascular disease

history. Greg Page, the original yellow Wiggle, has come on board to support us with a [little jingle](#) of his own. Entries close 26 June. We look forward to being able to circulate some fabulous songs!

COVID-19 AND CVD

As the CoVID-19 situation unfolds, the ACvA has taken advantage of its Flagships and ability to coordinate information to establish the COVID-19 Research Group. The group holds regular Zoom meetings to discuss current and prospective projects associated with COVID-19 and CVD and linking our researchers to other national and international efforts. Ultimately, the concerted effort across diverse fields of expertise aims to increase the impact of our studies and minimise duplication.

We are pleased to announce two new additions to the CoVID-19 Research Group:

Dr Shelly Gorman, Group Leader of Cardiometabolic Sunhealth at the Telethon Kids Institute and Dr Xiwen Simon Qin, Research Fellow from the Centre for Medication Use and Safety, Monash University.

- Dr Gorman's research team is interested in the potential for sun exposure and its induced mediators (e.g. vitamin D, nitric oxide) to improve our cardiometabolic health. They have demonstrated that there are indeed benefits of low-dose UV exposure in animal models and are now ready to pursue this further in public health and clinical studies. The group is also interested in investigating whether sun exposure and/or UV light has an effect on acute respiratory disease. This is particularly relevant right now as CoVID-19 symptoms are more severe in people with CVD, diabetes, and obesity, and there is evidence that vitamin D supplementation may prevent acute respiratory tract disease. Finally, another of the Group's interests is in the changes in behaviour for people living in social isolation, specifically in terms of its effects on sun exposure and levels of physical activity.
- Dr Qin's research interests lies in polypharmacy, using the 10% PBS sample published by the Australian Government. Dr Qin is interested in investigating the trajectories of cardiovascular medications used before and after CoVID-19.

Both Dr Gorman and Dr Qin are interested in hearing from others with similar research interests. For anyone interested in being involved and/or sharing ideas as part the COVID-19 Research Group, please contact meng.hsu@ozheart.org.

COVID-19 Critical Care Consortium incorporating ECMOCARD



The ECMOCARD (Extracorporeal Membrane Oxygenation for novel Coronavirus Acute Respiratory Disease) study was established in earlier in the year by the Extracorporeal Life Support Organisation, at the beginning of CoVID-19 and has expanded into the CoVID-19 Critical Care Consortium (CCCC).

The aim of the study is to collect data from patients from the time they are placed on a ventilator and to monitor disease progression based on patient management. Currently, there are 310 sites across 47 countries participating in the study, as well as collaborations with Amazon for easy data entry and IBM for data management and analysis. Numerous sub-committees have formed, including a cardiology working group. Interested individuals wishing to participate in this working group should contact Dr Elliot Worku, etworku@gmail.com.

The CCCC holds weekly Zoom meetings containing updates from the ECMOCARD team as well as regional updates from each of the participating countries. It is also a great opportunity to share and discuss any issues. The global efforts of the CCCC have also recently been published in an [article by JAMA](#).

We encourage anyone interested in the study and its sub-committees to attend the weekly Zoom meetings. Links to the meetings are provided weekly via email and will be sent out to all ACvA members.

ISHR/ACvA partnered Australasian webinar series

Call for speakers for the ISHR Asia-Pacific Cardiovascular Webinar Series

The ISHR in partnership with the ACvA has recently launched an Asia-Pacific Cardiovascular Webinar Series, which will run in parallel with the ISHR International Cardiovascular Webinar Series that started in April. The webinars will run weekly on **Wednesdays at 2pm AEST** (4pm New Zealand Standard Time; 12 noon China Standard Time; 9:30am India Standard Time), commencing 20th May.

The recent inaugural webinar on “Cardiovascular research in the time of CoVID-19” was a great success and attracted over 150 people across the Asia-Pacific region including Australia, New Zealand, China, Japan, Singapore and India.

We are currently calling for expressions interest from basic science and clinical researchers to give a talk as part of the series. There will be two speakers in each session (20-minute talk + 5-minute questions each). This is a **fantastic opportunity to connect with researchers throughout the Asia-Pacific region and to gain visibility for your research** during a time when scientific meetings and conferences are being postponed or cancelled. **If you wish to nominate yourself or a colleague to give a presentation as part of the series, please email your name and talk title to kate.weeks@baker.edu.au**. We encourage presentations from both senior and early career researchers (i.e. postdocs and final year PhD students). For a detailed program of upcoming speakers, please click [here](#). Recorded webinars are uploaded on the ISHR YouTube channel [here](#).

Showcasing ACvA

As a continuing effort from the ACvA to raise awareness and increase exposure of the wonderful work being done by our members, we are kindly asking members to let us know of anything they

would like to share on the ACvA website and twitter account. Examples include research articles that have been accepted/published, funding successes, awards and scholarships.

To start things off, ACvA would like to congratulate the following members on receiving the highly competitive NHMRC Investigator Grants:

- Associate Professor Andrew Murphy was awarded \$2.2 million for research into how the body makes blood and ways to manipulate this to slow heart disease progression.
- Professor Clara Chow was awarded \$1.3 million to explore preventative models of care and low-cost interventions that can be scaled and implemented to reduce the burden of CVD globally.
- Professor Bruce Neal was awarded \$1.7 million to evaluate interventions for CVD in clinical trials as well as developing and testing innovative solutions to the practicalities of doing large-scale studies.

We look forward to seeing all of your work and pushing CVD research forward for the benefit of all Australians.

Please contact meng.hsu@ozheart.org if you would like to share your accomplishments.

ACvA is now on LinkedIn!



ACvA has recently joined the LinkedIn bandwagon! Please show your support and follow our page and spread the word – the more the merrier! Find us by searching 'Australian Cardiovascular Alliance' in your profile.

Funding success and opportunities

NSW Office of Health and Medical Research (OHMR) – Cardiovascular Research Capacity Program

Over \$20m has been awarded to 34 senior and EMC researchers. The ACvA would like to congratulate all successful applicants and the NSW Government for its foresight in developing and implementing this initiative to fight cardiovascular disease. To read the full article, please visit the website on: <https://www.medicalresearch.nsw.gov.au/over-20-million-in-funding-awarded-to-34-nsw-cardiovascular-researchers/>.

The OHMR also has CoVID-related grants open, while these are not specific to CVD they will be relevant to many of our members - <https://www.medicalresearch.nsw.gov.au/covid-19-research/>. Round 1 closed on Wednesday 20 May. Get ready - Round 2 will open in June.