

# ACRA NEWSLETTER

SEPTEMBER 2016



Australian Cardiovascular Health  
and Rehabilitation Association

## CONFERENCE SPECIAL

DSA winner

Conference report

Conference photos

Award winners



AUSTRALIAN CARDIOVASCULAR HEALTH AND REHABILITATION ASSOCIATION

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**CHALLENGE...CHANGE...ACHIEVE**

# EDITOR'S NOTE



Well another conference has come and gone and what an “awesome event” (to quote Robyn Clarke) and super success. Each year just seems to get better and better – it’s almost like the Olympics with each subsequent host city trying to outdo the previous. Yet it is friendly competition but the ‘bar has been set high’ and the gauntlet thrown down for Perth. But with this year’s co-convenor, Helen McLean taking over the reins in WA I’m absolutely certain the challenge will be met – what a mouth-watering ‘taste’ she gave us at the end of this year’s conference!

I must admit I thoroughly enjoyed every aspect of the event – from the great AF workshop beforehand (an absolutely fabulous idea that I hope will be repeated at future conferences) to the last presentation from a patient’s perspective. It is certainly grounding to hear from patients – the breakfast panel was a great start as we were challenged to not fail our patients – and from Simon Taylor, a health professional who experienced a cardiac event from the other side (so to speak) and Rodney Martin, in closing.

There was so much packed into the 2 days – covering so many aspects of our work as cardiac rehabilitation professionals, yet I was never bored or tempted to ‘dodge’ a session – I might have missed a very important and valuable point. There was no one highlight – all the speakers were

excellent and the presentations were complementary. Dianna Lynch, Robyn Clarke and their teams are to be congratulated on their achievements with this conference. I particularly liked the ‘tongue-in-cheek’ idea of having the first talk the morning after the dinner about alcoholic cardiomyopathy!



ACRA and a driving force and a strong advocate for heart health in South Australia. A particularly special moment for her was when her family joined her immediately following the presentation of the award by Lis Neubeck. They had been invited as guests for the moment and to enjoy the rest of night with Sabine.

There were some excellent presentations in the prize sections of the conference and well done to all the winners. Abstracts and photos are elsewhere in this edition. Cardiac rehabilitation is rapidly catching up with technology and it was very exciting to see and hear about new apps and avatars becoming available to give more options to our patients and further support us in our work. I look forward to hearing more in Perth.

I hope you enjoy the snapshots of the social side of the conference. If anyone would like copies of photos please email me.

**Happy re-habbing  
Sue Sanderson**

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# PRESIDENT'S REPORT



After another fabulous ACRA conference, I again feel so proud and pleased to be part of this wonderful organisation. From all the hard work of Dianna Lynch, Robyn Clark and their colleagues, ACRA 2016 emerged as the best conference yet. When I reflect on the full-day pre-conference workshop, to the exceptional scientific program, and including the outstanding social activities, I offer my heartfelt thanks to the team in Adelaide who pulled this off. I had many people approach me and tell me how much they enjoyed the conference, not just for the outstanding program, but also for the opportunities they had to network with leading experts in the field and to engage with their peers. Our sponsors also really valued the conference, which is really important to us as we continue to plan these events in to the future. Helen McLean and her team for Perth 2017 have got a serious challenge ahead of them

- but Helen assures me they are going to raise the bar even higher still.

On that note, Quentin, the ACRA 2017 mascot, accompanied me to Rome to attend the European Society of Cardiology (ESC) meeting.



The ESC meeting is now the largest cardiology conference in the world, with an estimated 34,000 delegates in attendance. It was held in the Fiora di Roma, a major convention centre on the outskirts of Rome. The program is exceptional, with major trials being released here. Of interest were presentations about using exer-games to improve health in people with heart failure, and a study which showed nurses can safely independently undertake angiograms. The talking point of the conference was, unfortunately,

the travel to and from the conference venue, with people taking up to 3 hours to get there in 35c heat!

I'm now reflecting wistfully on warmer weather as I sit in my new office in Edinburgh. I have been made to feel most welcome here, and my new colleagues are all looking forward to visiting Australia and enjoying the ACRA hospitality in due course. I was lucky to have Professor Robyn Gallagher as my first international visitor just after I arrived here. Robyn was able to enjoy the best of the Scottish weather, and see a bit of the Edinburgh festival while she was here.

I will soon be back in Australia for the Face-to-Face meeting of the ACRA EMC. The November meeting is one where we review our key progress areas and make plans for the next 12 months. Our committees are now operating effectively, with increased outputs in every area. We will also have some changes to our EMC as the state presidents and reps change over. To those who have served on the EMC until now, I give my heartfelt thanks. To those who will be joining us soon, welcome on board!

**Best wishes,  
Lis Neubeck  
L.Neubeck@napier.ac.uk  
ACRA President 2015-2017**

## VICE PRESIDENT-PRESIDENT ELECT



At the AGM held at the recent annual conference, Prof Robyn Gallagher was elected unanimously to the above position. She will be in the V-P role for the next 12 months then assume the President position at the next AGM in Perth, 2017.

Congratulations Robyn.

As per the passing of the special resolution at this years' AGM, nominations for the position of V-P/President elect will again be called for in March 2017 where the successful nominee will be V-P for 2 years being mentored by the incumbent president.

## ALAN GLOBE DISTINGUISHED SERVICE AWARD NOMINEE: SABINE DRILLING



**Early in her career in cardiovascular nursing Sabine recognised the importance of providing supportive counselling to patients and support in their recovery from a heart condition. She was one of the first specialist cardiac rehabilitation nurses in South Australia, establishing one of the early cardiac rehabilitation programs at the Flinders Medical Centre.**

Sabine was also a founding member of the Australian Cardiovascular Rehabilitation Association attending the inaugural meeting with Alan Goble. She was a Conference Convenor for ACRA in the early 90s and has presented at the World Congress of Cardiology and CSANZ meetings. She is a great keeper of documents and still has her abstract on 'Discharge on Day 6 post MI - is it safe?' which she presented at CSANZ in 1993. This compared to the post MI mobilisation

regime developed by the Heart Foundation in 1998 makes for an interesting read and reflection on how practice has changed!

Following the temporary abolishment of cardiac rehab nurses whilst she was on maternity leave Sabine joined the Heart Foundation in the newly established Health Information Service. Here Sabine was able to continue her passion of providing high quality education to patients and other health professionals, this time via the phone and then via email communication.

In her current role Sabine works in the Cardiovascular Health Project team in the SA Division of the Heart Foundation. She leads the training on secondary prevention of heart disease for the state. She provides in-service training for nurses in hospitals and student nurses in undergraduate and post-graduate programs. Sabine loves to keep up with technology and also provides training via videoconferencing and is just looking into a whiteboard animation type training clip. Sabine is a co-author of the 'My heart my life' e-learning training resource designed for nurses and other health professionals to increase their knowledge and therefore confidence to educate patients.

Sabine's role also takes her into the Aboriginal Community, working with both health organisations and health workers. In recent years she has worked with the communities in the APY lands to improve their heart health, and continues to be a part of the 'Lighthouse Project' in SA. She provides annual cardiovascular training to Aboriginal Health Worker Cert 3 and 4 students through her relationship with the Aboriginal Health Council of SA. She is a much valued resource by them.

Sabine has been committed to improving the care of cardiac patients for over 30 years. She has been active in learning about new technology and techniques of treating and managing heart disease. Sabine has never wavered from her belief in the importance of cardiac rehabilitation and the key role it plays in the recovery of cardiac patients. She has always spoken encouragingly to others about their need to learn more about cardiac rehabilitation - trying to demystify it to the average health professional and patient. She has been an active supporter of ACRA and its role in driving best practice across Australia.

Sabine has a way of explaining cardiovascular disease like no one else. She uses analogies and terms that make understanding and therefore explaining the condition to others easy. This is why she is sought after for her training across hospitals, universities and the Aboriginal Health Sector. Sabine's legacy appears in many publications from the Heart Foundation.

Sabine is nearing the end of her professional working career, one where she has dedicated many years to supporting patients with or at risk of cardiovascular disease. She has spent the last years working to educate all nurses on the role they can play in providing education to their patients about CVD (Phase 1 CR) and ensuring they make a referral to a Phase 2 program. This is an essential first step for cardiac rehabilitation.

## SABINE DRILLING – ALAN GOBLE DISTINGUISHED SERVICE AWARD RECIPIENT

I am honored to be the recipient of the 2016 Alan Goble Distinguished Service Award. Looking at you all from the stage and acknowledging the great work you all do, I was humbled to have received the award and to be amongst such distinguished recipients. It was a total surprise, followed by the unexpected appearance of my husband and daughters - a night I will cherish forever. Thank you to my colleagues for nominating me and keeping it a secret!

My passion for cardiac nursing and cardiac rehabilitation started in 1980 when as a 3rd year student nurse I was given a placement in A6 –the Cardiology Ward at the Royal Adelaide Hospital (RAH). I continued to work there until I undertook the Critical Care Course at the RAH in 1983.

In 1987, I commenced in a newly developed role as Cardiac Rehabilitation Nurse at Flinders Medical Centre (FMC). At that time patients were in hospital for at least 8-10 days and were able to attend two in-hospital talks about their heart condition and recovery.

I attended the 4th World Congress of Cardiac Rehabilitation in 1988. It was there that ACRA and state Cardiac Rehabilitation Associations were founded. I was the founding president of SACRA and on the founding ACRA committee. At the Congress I heard about a Phase 2 program at the Austin Hospital in Melbourne and also met Dr Alan Goble who I regard as the “Father” of Cardiac Rehabilitation in Australia.

With the support of Dr Goble and nursing and medical staff at FMC, I visited the Austin Hospital to observe their Phase 2 program on which we modelled our own new Phase 2 program and that other hospitals then adopted.

The hospital stay post MI was shortened to 6 days at FMC in 1992. I presented a paper

at the 1993 CSANZ meeting in Christchurch titled “Discharge on Day 6 post myocardial infarction-is it safe?”

I loved my role and could see the difference attending cardiac rehabilitation made to patients and their families. During this time, I made many new friendships with patients who would come back to see me and the other cardiac rehab staff long after they had finished rehab.

In 1995, while on maternity leave all specialist nurse positions at FMC were made redundant due to funding constraints. However, another door opened when I was offered a position in the newly established Heart Foundation “Heartline” telephone service. Rather than face to face contact, I was able to talk to people over the phone. This was very rewarding and I could hear that people were grateful for the advice. Calls included discussing nutrition, blood pressure, medication, treatments and just listening to and supporting people who were in shock after coming out of hospital after a cardiac event. My colleagues in the ‘Heart Foundation Health Information Service’ continue to provide this amazing service.

In my current role as a Project Officer in the Heart Foundation SA Cardiovascular Health Team I lead the training on secondary prevention of heart disease. This includes providing in-service face to face training for nurses in hospitals, student nurses in undergraduate and post-graduate programs and Aboriginal Health Workers. I am a co-author of the Heart Foundation My heart, my life e-learning training resource which was produced in response to feedback from nurses. It is designed to increase their knowledge and confidence to educate patients and refer them to cardiac rehabilitation. I also

have input into the content that is included in Heart Foundation printed resources to support patients. As a cardiac rehab nurse I was able to talk to a few hundred patients each year, now my work helps thousands of patients and health professionals across Australia.

Those working in cardiac rehabilitation should not assume that all nurses really understand what cardiac rehabilitation is, or the benefits and importance of attendance. It is up to us to “sell” cardiac rehabilitation to all health professionals, invite them to observe a program and to talk to the patients attending to get a proper appreciation of its value. We all need to advocate for funding to meet the changing patient population who are often younger, in hospital for a short time and return to work sooner. Other models of cardiac rehabilitation delivery need to be considered such as via telephone and after hours services.

Every year 55,000 Australians have a heart attack, yet only around 13,000 of survivors will attend a life-saving cardiac rehabilitation program. I am passionate about helping to turn this alarming trend around.

Patients who participate in a cardiac rehabilitation program are 40% less likely to be readmitted to hospital within 12 months and 25% less likely to die from another heart attack. Cardiac rehabilitation can also dramatically increase their quality of life. Never underestimate the impact you have on your patients - it does make such a difference to be informed and supported at such a frightening time and saves lives.

**Thank you all  
Sabine Drilling**

# ACRA 2016 Conference Convenor Report

Adelaide was the host of the 26th Annual Scientific Meeting which was held at The Grand Chancellor Hotel from 1-3rd August 2016.

The theme for this conference was “Transforming into the Future” which was a reference to one of our first conferences held in Adelaide almost 20 years ago, the current health climate of South Australia’s ‘transforming health’ project and the building of the new Royal Adelaide Hospital.

As this was all about moving into the future, we implemented a new “app” therefore making this conference the greenest and most technologically savvy conference to date. This gave us the ability to get instant feedback from sessions, and for speakers to interact with the audience by way of live polling, questions relating to their presentations, and collating of votes for our Peoples’ Choice Award. We also used reusable shopping bags as our conference satchels to reduce our carbon footprint.

The official conference was preceded by an Atrial Fibrillation workshop, at which several experts in AF gave presentations, including Professor Ben Freedman, who was the keynote speaker.



Professor Lis Neubeck launched the AF workshop, and with other experts including Dr Dennis Lau, Dr Nicole Lowes, Associate Professor Chantal Ski, Dr Caleb Ferguson and Dr Jeroen Hendriks provided insights into this issue. The workshop was a resounding success from the feedback received, with 83% of respondents rating it a 4 or above, with many saying that this was the most valuable part of the meeting. It was also an

opportunity to promote the Atrial Fibrillation Special Interest Group.

The official Conference commenced with the Members Forum, and the succession plan for the Executive Committee was robustly debated as this was going to be an item voted on at the AGM.

The cocktail style Welcome Reception was designed as an opportunity for the delegates to meet and greet with fellow delegates over canapés and drinks whilst listening to the finalists of the moderated poster presentations. We took on feedback from previous years regarding this session and only the finalists were presented and then judged. This format seemed to flow much easier this year and the only drawback was the size of the room used as it was a little too small for all the delegates. Robyn Clark and Jacinta McCartney were the moderators. We were absolutely delighted with the quality and quantity of posters that were submitted and we congratulate Jane Kerr and Susan Dawkes from Edinburgh University, who were the winners of the clinical and scientific poster presentations respectively.

Tuesday morning started with an early morning walk around the river Torrens led by Sindy Millington (a yoga session was planned if the weather was too inclement). Those that went on the walk around the beautiful river precinct really enjoyed this start to the day.

Dr Amanda Rischbieth, from the South Australian Division of the Heart Foundation who sponsored the Breakfast Session, moderated as the panel explored the question “Are Patients failing cardiac rehabilitation or are we failing our patients?” This session was a Q&A style session with a good cross section of panellists including Associate Professor Julie Redfern, Dr Alistair Begg, Jenny Finan, Lyn Dimer, and husband and wife consumers, Russ and Janett Jackson.



This session was full of so many questions and suggestions and probably could’ve run for a good deal longer however; it was a fantastic opportunity to

question our own practices, in line with the consumer's requirements.

Professor Stephan Nicholls from SAHMRI (South Australian Health & Medical Research Institute) officially opened and welcomed the delegates, followed by a traditional Welcome to Country performed by Jack Buckskin which was highly rated with 83% of respondents giving the session a 5 star rating.



We have started a new tradition dedicated to the late Dr Alan Goble. Marian Worcester gave us a dedication speech to his work and introduced the Inaugural Alan Goble Oration. This oration is to be given to a keynote speaker for the conference. It was our pleasure to share this special moment with Alan's children David and Ann who were present for this recognition for their father's work. Professor Manny Noakes was the first speaker given this honour with her very provocative presentation on "Is sugar and Salt more deadly than heroin?" This was a brilliant start to our Plenary Sessions which had the theme of 7 deadly risk factors – future management in cardiac rehabilitation and secondary prevention.

The first speaker in this opening session was Professor Gary Whittert presenting on "It's not about weight: Lifestyle changes in a world of obesity". After morning tea we heard from Dr Doug McEvoy presenting on Sleep, Professor David Colquhoun on Depression, Dr Margaret Ardstall presenting on being a woman, and Dr Colin Mendlesohn who presented on smoking and we congratulate him for winning the People's choice award.

Our international speaker, Professor Mark Haykowsky generously gave two presentations, "Pathophysiology of exercise intolerance in heart failure and preserved ejection fraction", and later in the program "Upper limits of human performance post – cardiac transplant". A

special mention should be given to him for endurance and dedication as he and his family were victims of a food poisoning outbreak at another hotel that he was staying at. We do hope this is not a lasting memory of his visit to Australia.

The Research Prize Session was well received. From an organiser's point of view we made changes to the running of these sessions based on feedback from the last year's conference, and this had a positive impact on this session also noted by the delegates in their feedback this year. We congratulate Dr Doa El Ansary on winning this prize with her presentation on 'Motor vehicle driving after cardiac surgery via median sternotomy: Mechanical and cognitive considerations.'

The clinical prize session, the following day, was as equally diverse, with Pam Marshman and Jo Carroll winning this category with their paper "The Wimmera Hub and Spoke telehealth mode: Improving access to cardiac rehabilitation for rural people".

The concurrent workshops were another highlight of the conference, and all the speakers and chairs received positive feedback. This year we asked the delegates to pre-select their topic of choice to enable the right amount of space for each workshop. Many thanks should be given to each of the chairs for their dedication and hard work to make these workshops such a success after a long plenary session.

The Gala dinner was as popular as ever, and was held at the spectacular Adelaide oval, and the food was amazing. The delegates were encouraged to dress in a decade of their choice. It was so much fun seeing how many people embraced this with some truly amazing outfits and nearly all the decades were represented.

The band for the evening, Kopy Catz summoned the delegates up to dance the night away and people were on the dance floor even before the main meal was served!!! I don't think anyone wanted the night to end with a very loud encore call until the band gave in and gave us an energised last set. We also had a photo booth there which many people used making some amusing photos with all the props provided.

The Alan Goble Distinguished Award, announced at the dinner, was won by Sabine Drilling, who has worked in cardiac health for many years and was at the inaugural meeting held with Dr Alan Goble. Sabine continues to work in cardiac health and currently works for the Heart foundation in Adelaide. Sabine is responsible for starting the first cardiac rehabilitation program in South Australia and even assisted with designing the logo we still currently use. We were delighted to surprise her with her family slipping in to be there with when she received her award. (See Sabine's nomination and response).



The last day of the conference plenary session was themed “When bad things happen to good hearts: what will future cardiac rehabilitation and secondary programs need to consider”.

Associate Professor Carmine De Pasquale presented on alcoholic cardiomyopathy, Dr Aaron Sverdlow presented on chemotherapy-induced cardiotoxicity, and Professor Ann Roche gave a very insightful presentation on Cocaine and ICE and its effects on the cardiovascular system.

We had 27 free paper discussions which were streamed into five areas: technology and apps, risk factor strategies, culture and ethnicity, education, exercise and healthy activity – all of which were well received. There is an exciting future in how we provide cardiac rehab to our patients in the coming years.

We are pleased to announce that this has been a very successful conference in terms of financial outcome, networking opportunities and sponsorship support. We had 216 total registrations, including sponsors/exhibitors, of which 114 were early bird registrations from members and 14 non-members.

We are also delighted to have received more sponsorship than last year, and those sponsors were surprised at the attendance and quality of our program, and we hope they will continue with their sponsorship in Perth 2017. We are also proud to produce a healthy surplus for ACRA and South Australia, which will be reported when finalised.

An online survey was distributed to all delegates, asking them to rate their satisfaction on a 1-5 scale (1= below expectation and 5 = above expectation). At the time of this report we have had very positive feedback regarding the overall conference program. Respondents liked the varying nature of the program with the mix of international and national keynote speakers, plenary and concurrent sessions and workshops, and 98% of respondents felt the overall scientific content met their expectations. The majority of the attendees found that the venue met their expectations with 78% rating it 4 or above, however there was some negative feedback to be considered for next year, such as the venue being in an undesirable section of Adelaide!!!, a more desirable location for the future, the venue being a little crowded and could have benefitted from more space, and also more time for networking with colleagues, and to have the walk and the gala held on separate days.

We listened to feedback from last year, and addressed the way the sessions were planned and executed, and included more fruit platters and healthy sweet dishes to compliment the main courses. We included more areas to assist with eating plated foods, and this year there was no negative feedback or comments regarding the catering.

As convener, I would not have been able to do all this work alone and would like to recognise The Association Specialists who assisted with the conference management, especially Peta Freeman, my co-convener, Helen McLean, who will be the convener for the Perth Conference, and who delivered a wonderful promotional presentation which was really well received with 64% of survey respondents planning to attend next year.

I would sincerely like to acknowledge the tireless work of the Scientific Committee chairperson, Robyn Clark, who made all our dreams come true with getting speakers to discuss the topics that we as a committee had on our wish list.



I would like to acknowledge Natalie Simpson, Jenny Finan, Sabine Drilling, Vanessa Poulsen, Jeroen Hendriks, Louise De Prinse, who brought such diversity, skills and knowledge to the scientific committee and program.

I would to sincerely thank the sponsors for enabling us to make this the magnificent conference that it was, and also to you the members and delegates for making this year's conference such a success with your attendance, your feedback which we encourage and appreciate to continue to improve and evolve the conferences to meet your expectations and interests.

Thank you to all those people who have sent me personal emails and letters of encouragement and gratitude for the conference, I really was touched by them.

We can now look forward to next year's conference in beautiful Perth from Monday 7th – 9th August, where they will focus on the “Waves of Change – Oceans of opportunity”.

Thank you and yours sincerely,

**Dianna Lynch**  
**ACRA 2016 Convener**





# Dinner & welcome reception



# BEST RESEARCH PAPER AWARD

## **“Motor Vehicle Driving After Cardiac Surgery Via A Median Sternotomy: Mechanical and Cognitive Considerations”**

Dr Doa El-Ansary, Physiotherapy Department, Faculty of Medicine, Dentistry and Health Sciences, The University of Melbourne; Professor Colin Royse, Department of Anaesthesia and Pain Management, The Royal Melbourne Hospital; Professor Alistair Royse- Cardiothoracic Surgery Department, The Royal Melbourne Hospital; Cardiothoracic Surgery Department, Melbourne Private Hospital; Melbourne School of Medicine, The University of Melbourne; Professor Linda Denehy, Department of Physiotherapy, The University of Melbourne; Dr Johan Heiberg, HeartWeb, Department of Anaesthesia and Pain Management, The Royal Melbourne Hospital; Associate Professor Adam Bryant, Department of Physiotherapy, The University of Melbourne; Dr Mark Howard, Department of Respiratory and Sleep Medicine, Austin Health; Dr Melinda Jackson, Melbourne School of Psychological Sciences, The University of Melbourne

**Purpose/Hypothesis:** Over 1 million cardiac surgery operations are performed worldwide annually. The demands of surgery include anaesthesia, incision and rewiring of the sternum and mechanical heart-lung

perfusion. Individuals are required to restrict the use of their arms and cease driving from 4 weeks up to 3 months post-operatively in order to prevent wound and bone breakdown, ensure road safety and prevent road trauma. However these restrictions have no evidence, are marked by discrepancy and are not consistent. Controlling a motor vehicle is a complex task that requires advanced psychomotor skills, neuromotor co-ordination and motion of the arms and trunk. The purpose of this study was to evaluate the effects of cardiac surgery on driving performance; psychomotor vigilance; and neurocognitive function.

**Number of Subjects:** twenty-seven patients.

**Method:** A prospective, longitudinal, observational study was conducted at two cardiac centres. Twenty-seven individuals who had elective cardiac surgery participated in the study. Measures were taken pre-operatively, pre-hospital discharge, 4 weeks and 3 months post-operatively. Outcome measures were sternal micromotion (Real-time Ultrasound), and driving performance over a 20 minute period (lane and speed variability, braking reaction time) using a driving simulator (AusEd software). The Neurocognitive tests included were: Psychomotor Vigilance (PVT), PostopQRS (Postoperative Quality of Recovery Scale), and the Digit Symbol Substitution Test (DSST).

**Results:** Sternal micromotion decreased significantly for all driving tasks overtime ( $p < 0.05$ ) with bone consolidation evident at 4 weeks in 15% and at 3 months in 55% of participants. All patients had a clinically stable sternum at 4 weeks postoperatively (Sternal Instability Scale-SIS). The assessed

driving tasks (reverse parking, placing a seatbelt on and driving on a dual carriage way) resulted in a mean sternal micromotion of less than 2mm and this is reported to be within safety limits for bone healing.

Those patients that had demonstrated a return to their preoperative driving performance demonstrated a neuromotor recovery (PostopQRS) of 22% at 4 weeks and 50% at 12 weeks postoperatively. Patients that did not return to their pre-operative driving performance had a neuromotor recovery (postopQRS) of 22% at 4 weeks and 25% at 12 weeks postoperatively. The difference between the two groups may be accounted for by emotive recovery which significantly differed between the two groups. In addition, persistent post-operative pain was reported in 20% of all patients at 3 months. Neurocognitive measures examining executive functioning were significantly reduced prior to hospital discharge and improved over time ( $p < 0.05$ ). There was a significant co-relation between all components of driving performance and the neurocognitive tests ( $r = 0.06$  to  $0.07$ )

**Conclusion:** It may be warranted to apply a reduced timeline of 4 weeks from the time of surgery in select patients to the resumption of driving following cardiac surgery. Pre-operative assessment of neurocognition may be predictive of driving performance and safety. A larger trial is needed to determine if a battery of cognitive tests are reflective of driving performance and safety.

**Clinical relevance:** A battery of neurocognitive tests (PVT, PostopQRS, DSST) may be an accurate reflection of driving performance in the absence of a driving test. Cognitive training

tasks initiated immediately after surgery may play a role in facilitating recovery of executive function at hospital discharge. The outcomes of this research may inform health professionals and driving authorities in developing guidelines to ensure an optimal return to community role that involves safe driving and prevention of road trauma.

**References:**

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**Figure 1:** Driving Simulation (AusEd)



**Figure 2:** Measurement of sternal micromotion by real-time Ultrasound during simulated driving- AusEd (left) and the Ultrasound (Sonosite Turbo) captured image of sternal micromotion (right)



*Thank you to all the team and the patients of the Royal Melbourne Hospital and Melbourne Private Hospital. In particular, Ms June Ramsay and Ms Robyn English.*

# BEST CLINICAL PAPER AWARD

*“The Wimmera Hub & Spoke telehealth model, improving access to cardiac rehabilitation for rural people”.*



Jo Carroll <sup>1</sup>, Pam Marshman <sup>1</sup>, Pawel Czupryn <sup>2</sup>, Elizabeth Maxwell<sup>3</sup>, Donna Bridge<sup>4</sup>

<sup>1</sup> Wimmera Health Care Group, Baillie St, Horsham, VIC, 3400

<sup>2</sup> West Wimmera Health Service, 45-49 Nelson St, Nhill, VIC, 3418

<sup>3</sup> Rural Northwest Health, 18 Dimboola Rd, Warracknabeal, VIC, 3393

<sup>4</sup> Wimmera Primary Care Partnership, 25 David St, Horsham, VIC, 3400

A sub-regional alliance of healthcare organisations has developed a Hub & Spoke cardiac Rehabilitation Model of Care, aiming to provide innovative community focused cardiac rehabilitation that improves rural community client access to secondary prevention of cardiac diseases in the Wimmera. Prior to the pilot program, cardiac rehabilitation as an eight week multi-disciplinary program was only available at Wimmera Health Care Group in Horsham.

Many clients in the region may not have accessed or completed such a program due to the burden of travel. Economy of scale has dictated that smaller health services are unable to provide multi-disciplinary cardiac rehabilitation. The geographical area is ~28,000 sq km with a population of ~38,000.

The pilot project began in April 2015, and the model used the multi-disciplinary team in Horsham ('Hub') providing the educational component via telehealth to Rural Northwest Health and West Wimmera Health Service ('Spokes'). The physical activity component is provided by each local service. This has allowed a wider range of clients to successfully access a high quality, best practice program with improved peer support.

This model has:

- Provided access to rural community members who may have limited or no access to rehabilitation
- Saved thousands of dollars in travel costs and time spent travelling
- Provided opportunities for peer support
- Supported staff and enhanced telehealth skills
- Has embraced the model with enthusiasm by practitioners and consumers
- Piloted a replicable model for delivery of specialised interventions to remote populations

# BEST RESEARCH POSTER – SUSAN DAWKES

## “Keep taking the tablets: PCI patients don’t!”

Associate Prof. Susan Dawkes<sup>a</sup>, Prof. Graeme Smith<sup>a</sup>, Prof. Robert Raeside<sup>a</sup>, Prof. Jayne Donaldson<sup>b</sup>, Prof. Lawrie Elliott<sup>c</sup>

<sup>a</sup> Edinburgh Napier University, United Kingdom (UK); <sup>b</sup>University of Stirling, UK; <sup>c</sup>Glasgow Caledonian University, UK

**Background and aim:** In the global pandemic that is coronary heart disease (CHD), millions of people suffer from angina and percutaneous coronary intervention (PCI) is commonly used to alleviate this. Although PCI will help to relieve symptoms, the underlying CHD remains and recommendations are that patients take secondary prevention medicines. Evidence suggests that patients after PCI have good adherence to secondary prevention medicines (i.e. they take their medicines as prescribed) but anecdotal evidence from clinical practice in the UK suggested otherwise. This study aimed to explore patients’ adherence to secondary prevention medication after elective PCI.

**Methods:** This mixed methods study used an explanatory, sequential design. In phase one quantitative data were collected from a convenience sample (n=93) approximately three months after elective PCI using a validated self-administered survey tool. Quantitative data were subject to univariate and bivariate

analysis. Phase one findings were used to purposively select ten participants from the original sample for interview in phase two of the study. Thematic analysis was used to analyse qualitative data.

**Results:** Participants had a mean age of 66.25 years (SE±10.56), were mostly male (n=70/75.3%) and Caucasian (n=80/86%). After PCI, 91.4% (n=85) of participants reported that they took their medications as prescribed. Further exploration though revealed that non-adherence was an issue and this was categorised as either unintentional or intentional. Many perceived medication to be of little benefit or even detrimental to health.

*“I stopped taking the statin... Simvastatin has not got very good press for muscles...I don’t want it to go to muscle degeneration or anything like that.” (P57)*

Participants reported that they were confident that they knew how to take the medicines but qualitative findings suggested that many patients did not know the actions of medicines and the lack of knowledge seemed to result in non-adherence.

*“I always thought it was strange because my idea of the pills was that they all did the same job. They all kind of thinned the blood.” (P88)*

**Conclusion and recommendations:** Despite seemingly good adherence to medicines for secondary prevention of CHD, non-adherence is an issue, either intentional or non-intentional. Patients who develop a habit of taking their medicines were more likely to adhere. Perceived side effects of medicines, particularly Statins, and a belief that the medicines were not beneficial to health were the main reasons for intentional non-adherence.

As adherence to secondary prevention medicines after elective PCI seems sub-optimal, it is recommended that a co-production model be used to encourage, educate and support patients’ adherence so that their risk of CHD progression is lessened. Further research is needed to explore the extent of non-adherence to medicines in an elective PCI patient group and to determine which strategies are best for healthcare professional to use to support these patients.



# BEST CLINICAL POSTER AWARD

***“Transforming Rehabilitation: Flexibility, Sensitivity and Patient-centredness, not just a Promise”***



Presenter: Jane Kerr, Chronic Disease Network Manager, Hunter New England Local Health District, Locked Bag 9783, Tamworth NEMSC NSW 2348, jane.kerr@hnehealth.nsw.gov.au

Co-authors: Dawn Mcivor, Clinical Nurse Consultant & Peter Ivey, CNC Cardiac Rehabilitation, Hunter New England Local Health District

As Redfern et al describe in their seminal paper (2010), poor participation (15 – 30% of all eligible cardiac patients) in traditional models of evidence based cardiac rehabilitation has led to a plethora of management strategies and models of care. How can the core elements of cardiac rehabilitation be delivered in a way that is smart, measurable, achievable and repeatable to improve access to evidence

based care?

With the CORE values of NSW Health (Collaboration, Openness, Respect & Empowerment) underpinning service delivery, it is appropriate that Secondary prevention for all in need (SPAN, Redfern et al) is the chosen service framework. It enables flexibility, sensitivity and a patient-centred approach whilst building equity of access to secondary prevention support services to achieve a primary goal of cardiac rehabilitation. With District executive leadership promoting the change, key champions are slowly taking cardiac rehabilitation service providers on a journey of change, clinician by clinician, manager by manager and site by site, all 30 of them: ➤

## Mr B’s story – the transformed model (flexible, sensitive & patient-centred)

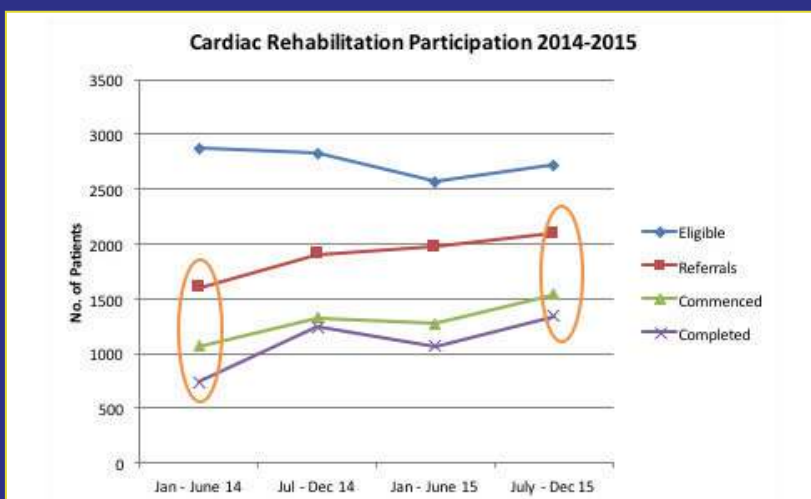
Mr B is an active semi-retired 81 year old with no history of heart disease. He started to get angina, had a positive stress test & elective angiogram with stent at the nearest treating hospital a couple of hours away. He was referred to secondary prevention services locally and was seen for assessment within the week.

Mr B was offered 7 flexible options to reduce his risk and improve his self-management:

1. Education seminar only
2. Rolling twice weekly exercise program
3. Cardiac coaching
4. Local Aboriginal chronic disease program run by Aboriginal Medical Service
5. Individual consults for information
6. Partnership with GP practice for information & local exercise service provider for exercise
7. A blend of the above.

Mr B chose the education seminar but whilst attending reported ongoing symptoms, treated locally. He was however still anxious and couldn’t understand why he was experiencing these symptoms. A consult with his cardiologist was arranged. An angiogram indicated medical management. His medications were reviewed and Mr B experienced a reduction in the severity and frequency of the symptoms. The following week he started the exercise program – his goal was to attend twice weekly x 12 sessions and complete the education seminar.

Mr B’s choice enabled him to attend and complete evidence based rehabilitation.



- Sharing the evidence (local data and the literature) to explain why
- Partnering with patients & other staff (internal & external)
- Listening & responding to what staff had to say so that staff feel supported
- Standardising processes/ documentation/guidelines
- Standardising communication tools/processes/resources
- Establishing a referral path for all: rural/regional/urban, Aboriginal/non-Aboriginal
- Structuring professional development/mentoring/ networking.

Rehab coordinators within HNE recognise the quality improvement journey is a continuous cycle and change is achievable.

## PEOPLE'S CHOICE AWARD

### *“Smoking and cardiovascular disease”*

Associate Professor Colin Mendelsohn



Cigarette smoking is one of the most important modifiable risk factors for cardiovascular disease (CVD); however it is often neglected in clinical practice.

Smoking increases cardiovascular risk by inducing a hypercoagulable state and accelerating atheroma formation. Being a current smoker triples the risk of acute myocardial infarction and smoking increases mortality from all CVD, including stroke, peripheral arterial disease and sudden death, by a factor of 2-3.

In patients with pre-existing CVD, smoking cessation reduces total mortality by 36% compared with continuing to smoke. The risk of

acute myocardial infarction falls to the level of a non-smoker after about 3 years for a light smoker. Moderate to heavy smokers reduce their excess risk by 75% after 3-5y.

Chemicals in cigarette smoke accelerate the metabolism of a number of cardiovascular medications by inducing the hepatic enzyme CYP1A2. Warfarin levels rise after quitting and a dose reduction may be required. Smoking inhibits the antiplatelet effects of aspirin and paradoxically increases the effectiveness of clopidogrel.

A diagnosis of a cardiovascular condition is a teachable moment when the smoker is more motivated to quit. Smoking cessation treatment or referral should be integrated into routine care. Even brief advice of less than a minute can substantially increase the chance of quitting. Higher quit rates are achieved when more time is spent on counselling and when follow-up visits are provided.

However, if time is limited, patients should be advised to quit and referred to the GP, Quitline (137 848) or a tobacco treatment specialist ([www.aascp.org.au](http://www.aascp.org.au)) for ongoing care. Optimal treatment consists of a combination of counselling and pharmacotherapy.

Smokers with CVD are likely to be more nicotine dependent and may need more intensive treatment and support. Only one in two smokers quits after an acute

myocardial infarction or coronary bypass surgery.

The safety of nicotine replacement therapies (NRT) in smokers with stable cardiovascular disease has been firmly established. There is also growing evidence for the safety of NRT in smokers with acute coronary syndromes. It is important to explain to patients that NRT is always safer than smoking.

It is vital to give clear instructions for NRT as compliance is poor. Patients should take a full course of 8-12 weeks and sufficient nicotine to relieve cravings and withdrawal symptoms. Starting the nicotine patch 2 weeks before quit day increases success rates compared to starting patch treatment on quit day. Combining a nicotine patch with an oral form of NRT (such as nicotine gum, mouth spray or lozenges) can increase quit rates further and is now standard care for most patients.

Varenicline is also safe and effective in smokers with CVD.

Interventions commenced in hospital are only effective if support is provided for at least one month after discharge. It is important to arrange follow-up care before discharge.

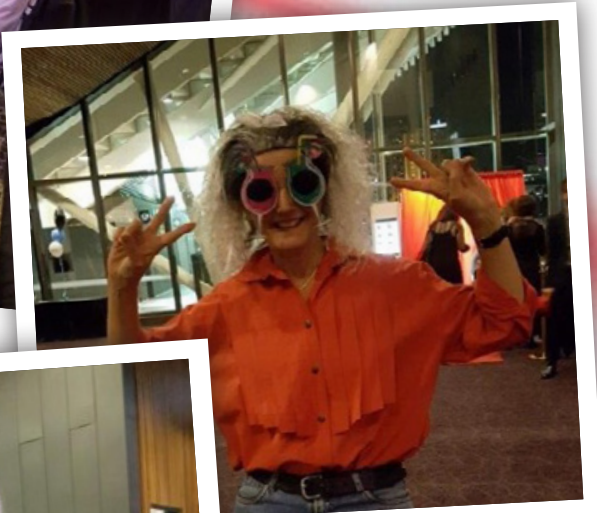
Conjoint Associate Professor Colin Mendelsohn

School of Public Health and Community Medicine

The University of New South Wales, Sydney Australia

Tobacco Treatment Specialist

# WHO'S WHO?? DO YOU RECOGNISE THESE PEOPLE???





## TRAVEL GRANT RECIPIENT - ACRA REPORT

### **DENISE ESCREET**

Cardiac and Pulmonary  
Rehabilitation Coordinator

#### **Bass Coast Health. Vic.**

Thank you for the grant to enable me to attend this years' Cardiac Rehabilitation Conference in Adelaide.

The pre-conference education workshop on Atrial Fibrillation was very informative, and it was a sobering thought to know that 25% of people that reach the age of 40 will develop this condition, and that the mortality rate is the highest within the first 4 months of diagnosis. The take home message for me was that clients need to be treated early with anticoagulation and that clients reduce the risk of CVA if they take anti-coagulant therapy indefinitely.

The conference began with an optional early morning walk along the Torrens River and followed by the Heart Foundation (SA) breakfast meeting with a panel of speakers discussing the topic 'Are patients failing cardiac rehabilitation or are we failing our patients?'

Opening the conference was a patient's story - a health professional and his journey through his cardiac event. As a Cardiac Rehabilitation nurse it is one that I could relate to hearing many times, particularly the initial denial that it could be a heart attack taking place. It was great to hear that he had a positive outlook and has made many healthy behaviour changes.

The 'Welcome to Country' by Jack 'Vincent' Buckskin was fabulous, a very talented man.

7 deadly risk factors and future management in cardiac rehabilitation and secondary prevention were the focus of the first day. The importance of good quality sleep, NRT and the use of e-cigarettes in heart disease were discussed and the importance of increasing physical activity and reducing body weight. The conference dress-up dinner at the Adelaide Oval was a delightful conclusion to the first day.

The second day commenced with 'what bad things can happen to good hearts and what will future cardiac rehab and secondary prevention programs will need to consider'. This discussed heart transplantation, alcoholic cardiomyopathy and the effect of illicit drugs on the heart to mention a few.

As a rural Cardiac Rehabilitation coordinator, attending Cardiac Rehab conferences, networking with other delegates, getting information on new ideas and current best practice and practical advice to help your patients to get better outcomes and reducing secondary prevention is invaluable.

Looking forward to the conference in Perth next year.

### **MUADDI ALHARBI**

Charles Perkins Centre, University  
of Sydney, Australia

I was privileged to receive a travel grant to attend the ACRA annual conference which brought together national and international experts including postgraduate students, researchers, healthcare professionals, and policy makers. The many workshops and presentations provided valuable insights into the latest innovations and developments in the prevention and management of cardiovascular disease and rehabilitation including technology and apps, atrial fibrillation, exercise and healthy activity, culture and ethnicity, risk factor strategies, and education. As such, attending the conference helped me to gain a more in-depth understanding on how scientific research relates to current clinical settings. There were also several posters presented at the conference. I found the poster session to be well-organised and a positive experience overall as it enabled me to communicate directly with the people who had actually conducted the research study.

My own oral presentation was on 'Exercise barriers and the relationship to self-efficacy for exercise over 12 months of a lifestyle-change program for overweight or obese people with heart disease and diabetes'. The primary benefit to come from presenting at the conference is that it allowed me to discuss and disseminate the recent findings of our study to a diverse audience. Furthermore, the opportunity to

## TRAVEL GRANT RECIPIENT - ACRA REPORT Cont.

receive positive and constructive feedback from an international audience was also excellent, and I was very pleased with the interest in our study shown by other attendees.

My participation at the conference also meant that I was able to develop relationships, exchange ideas, and network with colleagues working in similar research fields. In particular, I had the opportunity to discuss my research work with Dr. Nicole Freene, who is currently working in the field of cardiac rehabilitation. We spoke about Fitbit as a valid and reliable wearable activity device to measure free-living physical activity in cardiac rehabilitation patients and Dr. Freene agreed to meet our research team at the Charles Perkins Centre, Sydney University to collaborate on promoting and measuring physical activity in cardiac rehabilitation.

Attending the ACRA 2016 was extremely rewarding. I am very grateful for the travel grant from ACRA and I extend sincere thanks to Association for the opportunity to share my research findings, to network with national and international researcher colleagues, and to acquire knowledge from experts who are dedicated to improving the management of cardiovascular health and rehabilitation.

### **SUSIE CARTLEDGE**

RN, PhD Candidate  
Monash University, Melbourne

I was fortunate enough to attend my third consecutive ACRA ASM and this year as a recipient of a travel grant. Three years ago, my wise PhD supervisor said "you should probably go to that cardiac rehab conference" and so off I went. I arrived at the Welcome Reception not knowing a soul but was soon greeted by friendly faces who had the same passion as I did - looking after cardiac patients. Fast forward three years and I now look forward to seeing friends and meeting many new ones. And, as I'm sure you will agree with me, the ASM's just keep getting better.

This year we also had the added bonus of all the Atrial Fibrillation experts provide us with a pre-conference workshop. Throughout the day and the conference online polling for questions was used - it was a great way to interact with the audience. My highlights from this session were Dr Dennis Lau adding risk factor management as the fourth pillar for AF management and the shock realisation that it is women who have worse health literacy skills, not men as the audience all thought (think the polling on that question was slightly confounded by the high proportion of women in the audience!). From there we moved to a packed moderated poster session (both with posters and attendees!) where the quality was extremely high.

The other highlights for me were both the Research and the Clinical Prize sessions,

which were of increasingly high standard this year - I was very happy to be on the chairing end of duties and not the judging! All finalists are to be commended on their excellent and engaging presentations. The breadth of topics presented kept everyone's interest and spanned in the research prize session from AF care; driving with a median sternotomy; technology use; establishing a minimum dataset. The Clinical Prize session presented innovative care and strategies for Aboriginal and Torres Strait Islanders and the Greek community; online interventions for patient self-management and delivering programs via telehealth.

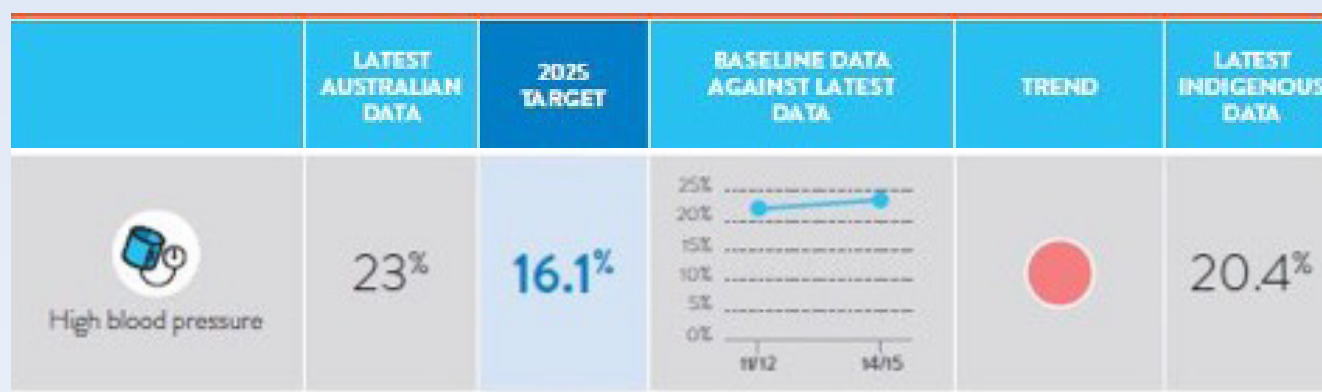
Congratulations to the Organising and Scientific Committees on another fabulous conference. The travel grant is much appreciated, along with your friendship, support of my own research and of course wicked dance floor skills. I look forward to attending my fourth ACRA ASM next year.

# ACRA ATTENDS AHPC CHRONIC DISEASE FORUM IN MELBOURNE

The Australian Health Policy Collaboration (AHPC) was established at Victoria University in 2015. It is “an independent think tank that aims to attract much required attention to the critical need for substantial and urgent health policy reform focused on addressing chronic disease on a national scale”.

This was the third forum held by the AHPC, where the 2016 Australia’s Health Tracker was released - the first comprehensive assessment of how Australia’s population is faring when measured against health targets set for 2025. With this data in mind the focus of this forum was on action and accountability.

An example of one risk factor presented in the health tracker is provided below:



Over the course of the day, public health leaders responded to the data from the Health Tracker and Professor Graham MacGregor presented a keynote presentation on “Unhealthy Food. The biggest cause of death in Australia and the UK”.

Attendees were encouraged to discuss the data and presentations and were assigned the task of ranking interventions and future policies that would have a broad impact on chronic disease, followed by potential actions - no mean feat!

The AHPC are to be commended on this body of work and for bringing together a broad group of health professionals and public health leaders to discuss these issues at length. As a wise man once said - “if you don’t measure it, you can’t improve it” and Australia’s Health Tracker certainly provides data on the current state of our health for which we can strive to improve.

Access to the Australian Health Tracker:

<https://www.vu.edu.au/sites/default/files/AHPC/pdfs/australias-health-tracker.pdf>

**Susie Cartledge**

**RN, Phd Candidate**

**Monash University, Melbourne**

# Annual Scientific Meeting

Monday, 24th October 2016

## Stages in the Patients journey

Hosted by the Cardiovascular Health and Rehabilitation Association of NSW and ACT Inc. (CRA NSW/ACT) and Heart Foundation (NSW Division)

**Venue:** University of Sydney – Charles Perkins Centre, Sydney, NSW



### Secondary Prevention in Cardiology Conference

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#### Ideas, Innovation & Inspiration from the Coalface

Planning for the next **VACR** event is well under way and will be held at:

**Venue:** The Oaks On Collins

**Date:** Friday, 14th October 2016

**Theme:** “Motivational Cardiac Rehabilitation”

More information will be emailed to you as soon as we have it available! Note that the booking system will be via the previous “**Try Booking**” site format and will be coordinated by the **VACR Committee**.

**NEW DATES FOR ACRA 27th ANNUAL SCIENTIFIC MEETING - Monday 7 to Wednesday 9 August 2017**



## **DELIVERY OF CARDIOVASCULAR PREVENTION: HOW CAN WE ENSURE PATIENTS' NEEDS ARE BEING MET?**

**Friday November 4th**

Registration: 12:30 – 13:00

World Café: 13:00 – 16:30

WACRA Christmas dinner: 17:00 at Raffles Hotel, Applecross



...and as the sun sets in the west may you truly reflect and realise the *Oceans of Opportunity* that the *Waves of Change* bring to you.