on the *pulse*

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CSANZ Inaugural Indigenous Cardiovascular Health Conference

Report by Dr Alex Brown and Professor Len Kritharides

The Inaugural Indigenous Cardiovascular Health Conference, hosted by the Cardiac Society of Australia and New Zealand, represented a unique attempt on behalf of the Society to draw attention to the appalling rates of cardiovascular disease (CVD) among Indigenous peoples. The conference brought together leading clinical and research expertise from Australia and New Zealand, representatives of government, health services and Aboriginal communities to collectively plan for improved CVD outcomes for Indigenous people. The aims of the conference were to foster open debate on issues contributing to CVD in Indigenous people, to showcase successful programs across Australia and New Zealand, and to identify key priorities for advocacy and system development that would improve outcomes.

The plenary sessions included: discussion of CVD in Indigenous communities (locally and on an international perspective); the social, environmental and political determinants of CVD; rheumatic heart disease (RHD) and acute rheumatic fever (ARF); improving access to cardiovascular services and therapies; the patterns, outcomes, investigation, management and prevention of acute coronary heart disease (CHD); and long-term chronic disease management approaches to CVD.

Prof Len Kritharides

The conference included notable presentations from Maori colleagues and the opening address from international speakers Richard Horton (Editor of The Lancet) and James Galloway (former Director of Native American Cardiology Program, Indian Health Service USA). We were reminded of the enormity of the gap in cardio-vascular health between Indigenous and non-Indigenous peoples and of the need to demonstrate a health and humans rights framework to guide our collective activities. Delegates heard that the rigidity of our current health systems needs to be overcome, and health care re-orientated towards access for the patient. This is nowhere more important than for Indigenous populations.

The conference delivered a strong message on the need to better understand and respond to the ***social determinants*** of Indigenous people's health. Indigenous people experience a clustering of adverse, inter-dependent social factors with pernicious impacts on health across the life-course. Correction of the social patterning of illness

Dr Alex Brown

and disease, disproportionately effecting Indigenous peoples, cannot be alleviated without better articulating and correcting these social factors. Because significant heterogeneity in environments exists across and within Indigenous communities, solutions must reflect the differing needs of individual communities. The conference also heard about the intergenerational impact of disadvantage, which predispose Indigenous children to developing CVD. The inescapable implications of these data are that the effects of social disadvantage today will be felt for generations to come.

The incidence of **Acute Rheumatic Fever and Rheumatic Heart Disease (RHD)** in Indigenous peoples of Australia and New Zealand is equivalent to or higher than that recorded anywhere in the world. We have failed to deliver adequate primary or secondary prevention of RHD, or adequate tertiary management of RHD. The secondary prevention

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Report by Dr Alex Brown and Professor Len Kritharides

(Continued from page 1)
of recurrent and disabling disease in those with prior ARF remains the most cost-effective and achievable option. The outcomes of surgical intervention, particularly among Indigenous Australians, remain poor, and guidelines for optimal management are variably adhered to. Our capacity to monitor and evaluate outcomes is limited by the lack of standardised clinical and surgical registries – a critical deficiency.

The conference also discussed the need to **improve the accessibility and quality of CVD care** available to all people according to need, rather than according to geography, ethnicity or socioeconomic status. This requires major improvements in integration across all levels of the health system and greater focus on the needs of the patient and their immediate carers. Stories of significant success in improving access were highlighted. These typically involved Indigenous people as agents of change, and adaptable delivery of health care.

Growing rates of obesity, persisting high rates of smoking and worrying population levels of renal impairment indicate that the burden of CHD experienced by Indigenous peoples will increase into the coming decades. Despite an extensive evidence base, the gaps between evidence and practice remain. Gaps in the identification of risk sit alongside inadequate levels of prescribing effective therapies, inadequate follow-up of individuals with known elevated risk, and sub-optimal management of acute and chronic CVD.

Discussion of revascularisation services for Indigenous people experiencing acute cardiac events identified a critical mal-distribution of essential cardiovascular workforce and infrastructure. Regional diagnostic services can significantly improve the delivery of investigation and therapy to Indigenous people. This requires not only on-site workforce and infrastructure, but strategies to ensure the smooth transition of patients along defined referral pathways to tertiary care. Deficits in staff, infrastructure, and clinical resources to support those in regional centres all contribute to gaps in service delivery to Indigenous communities. Clinical systems that augment the delivery of evidence-based care, ensure the transition of patients across frequently disconnected sectors of care, and electronically recorded complete and standardised clinical and outcome data are yet to be developed and are critical. Enhanced utilisation of PBS and MBS funding, and reduced financial barriers to pharmaceuticals hold promise to improve treatment deficits.

It remains impossible to ignore the pressing **workforce shortages** that are threatening the sustainability of our health systems. In many respects, an ideal Indigenous CVD workforce may not resemble the existing workforce structures or professional classifications that currently exist.

With this in mind, the conference offered a number of recommendations for a way forward in mitigating the risk of CVD among Indigenous peoples, and these will be published as specific recommendations of the CSANZ in the near future. The conference concluded that those of us who are stewards of health systems must accept a leadership role in laying the foundations for system reform. The full program of the CSANZ Indigenous CV Health Conference and the list of speakers can be found at www.csanz.edu.au.

This is an edited version of an article by Dr Alex Brown and Professor Len Kritharides that appeared in RACP News, Vol. 29, No. 6, December 2009

CSANZ is planning a second Indigenous Cardiovascular Health Conference in June 20011

Further details will be available in the June edition of *On the pulse*. We encourage members to attend this Conference.

CSANZ 2010

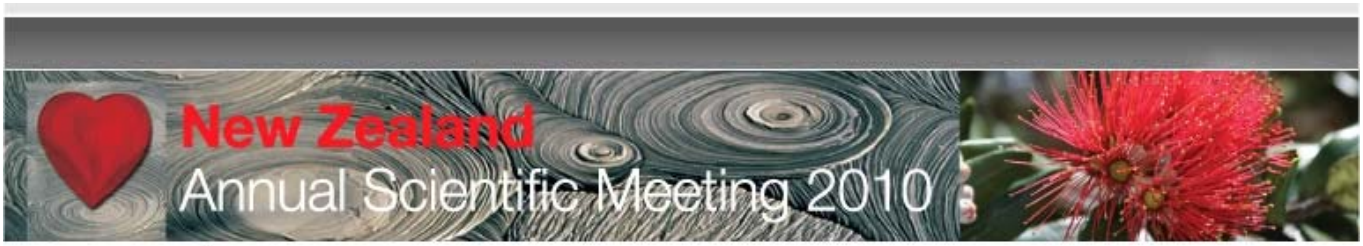
The Cardiac Society of Australia and New Zealand

ISHR International Society for Heart Research Australasian Section

RT Hall Lecturer	**Kenneth Chien**, Harvard Stem Cell Institute, Massachusetts General Hospital, Mass., USA
Kempson Maddox Lecturer	**Michael Feneley**, St Vincent's Hospital, NSW
Victor Chang Memorial Lecturer	**Antonio Calafiore**, University of Catania, Italy
Cardiovascular Nursing Lecturer	**Andrew McLachlan**, Middlemore Hospital, New Zealand
Basic Science Lecturer	**Shaun Jackson**, Monash University, VIC
Gaston Bauer Lecturer	**Louise Burrell**, University of Melbourne, VIC

Key Dates

Deadline for Receipt of Abstracts	**15 March 2010**
Authors Notified of Acceptance	**May 2010**
Registration Opens	**25 March 2010**
Early Discount Closes	**26 June 2010**



THE CARDIAC SOCIETY OF AUSTRALIA AND NEW ZEALAND

ROTORUA CONVENTION CENTRE
Friday 25 June to Sunday 27 June 2010

www.sixhats.co.nz/csanz10

Speakers:

Dr Robert S Schwartz, Translational Research, Minneapolis Heart Institute Foundation, Minneapolis USA
Professor Prashanthan Sanders, University of Adelaide and Royal Adelaide Hospital, SA
Professor Patricia Davidson, Curtin University of Technology and St Vincent's Hospital, Sydney, NSW
Dr Derek Chew, Southern Adelaide Health Service, SA

Antonio Colombo	San Raffaele Scientific Institute Milan, Italy
Spencer King	Saint Joseph's Heart & Vascular Institute, Atlanta, GA, USA
Jeff Popma	Beth Israel Deaconess Medical Centre Boston, MA, USA
Carlos Ruiz	Lenox Hill Heart & Vascular Institute New York, NY, USA
Barry Rutherford	University of Kansas School of Medicine And Director of Interventional Research St Luke's Mid America Heart Institute, KA, USA
Patrick Serruys	Erasmus Medical Center Thoraxcenter, Rotterdam The Netherlands
Renu Virmani	CV Path Institute Gaithersburg, MD, USA

4th Annual Australia & New Zealand Endovascular Therapies Meeting

04-05 August 2010
Adelaide Convention Centre

Registration Opens 25 March 2010

www.anzet.com.au

WORLD HEART FEDERATION

Heart Beat

JANUARY 2010

World Heart Federation has released its January newsletter. Features include:

- Commonwealth leaders issue landmark statement on non-communicable diseases
- WHF joints powerful world alliance of health researchers
- Red Alert on Women's Hearts
- Smoking bans and heart health: new tools for action

For resources, latest reports or available scholarships visit their website.

The Review of *The NHMRC/ASBT Clinical Practice Guidelines on Fresh Blood Components (2001)* is currently being undertaken under the auspices of the Australian & New Zealand Society of Blood Transfusion (ANZSBT) and the National Health and Medical Research Council (NHMRC) with funding, project management, and secretariat services provided by the National Blood Authority (NBA) on behalf of all governments.

The JANUARY 2010 Update is now available. The view the update please visit the NBA website (http://www.nba.gov.au/guidelines/updates.html). Any questions regarding this updates can be sent to the NBA at guidelines@nba.gov.au

Guidelines for the diagnosis and management of Familial Dilated Cardiomyopathy

1. Clinical Characteristics

1.1 Definition and prevalence

Dilated cardiomyopathy (DCM) is a myocardial disorder characterised by dilatation and contractile dysfunction of the left ± right ventricles. DCM may be caused by a diverse range of conditions that promote cardiomyocyte injury or loss, eg. coronary artery disease, viral myocarditis, alcohol excess. In approximately 50% cases, an underlying cause is unable to be identified. This group has traditionally been termed "idiopathic" DCM. It is now recognised that approximately one-third to one-half of cases of "idiopathic" DCM have a positive family history, suggesting that an inherited gene defect might be the cause of the disorder ("familial DCM").

1.2 Clinical presentation

Familial DCM may be inherited as an autosomal dominant, autosomal recessive, maternal or X-linked trait; autosomal dominant inheritance is present most commonly. In autosomal dominant inheritance, each child of an affected parent has a 50% chance of inheriting a disease-causing gene mutation, with males and females equally at risk. Clinically affected individuals generally present with symptoms and signs of heart failure or arrhythmias. Some families have a clinical presentation (phenotype) that is characterised by DCM alone, while in others, DCM may be associated with additional cardiac manifestations eg. conduction-system disorders, valve defects, atrial/ventricular septal defects, left ventricular non-compaction, or with non-cardiac manifestations eg. skeletal myopathy, partial lipodystrophy, sensorineural deafness.

1.3 Clinical diagnosis

The diagnosis of familial DCM is made when DCM (with or without associated features) is present in the setting of a positive family history (at least 2 family members affected). There are no specific clinical features that reliably distinguish familial from non-familial DCM.

Family history: A detailed family history and a high level of clinical suspicion are essential. While inherited gene defects alone may be sufficient to cause disease, some individuals in families may have concurrent risk factors for DCM that may confound the recognition of familial disease. In addition, familial clustering may not be immediately apparent if the clinical presentation differs between members of the same family. For example, in DCM with conduction-system disease, some individuals may present with heart failure, while others may have a history of arrhythmia symptoms, pacemaker implantation or sudden death. The severity of disease, and the age of onset, may differ between families and within members of the same family. While familial DCM generally shows high penetrance, some individuals may remain non-penetrant (ie. genotype-positive but with no clinical manifestations of disease) throughout life.

Family screening: It is currently recommended that all first-degree family members of individuals with "idiopathic" DCM, and of individuals with suspected familial DCM on the basis of a positive family history, should undergo clinical screening with physical examination, 12-lead ECG and transthoracic echocardiography to identify familial disease and to determine the number of affected individuals within families. Measurement of CK levels is useful to identify subclinical skeletal muscle abnormalities and provides supportive evidence for the presence of an inherited myopathic disorder. Exercise treadmill testing and/or coronary angiography may be indicated in family members aged over 50 years who are found to have a new diagnosis of DCM, to distinguish a familial from a non-familial cause.

2. Molecular Genetics

2.1 Familial DCM disease genes

Familial DCM is a genetically-heterogeneous disorder. To date, nearly 40 chromosomal loci have been associated with various forms of autosomal dominant DCM, with the disease-causing genes identified in $\geq$ 30 of these loci. These disease genes encode a variety of proteins in the cardiomyocyte sarcomere, cytoskeleton, sarcolemma, and nucleus. These findings indicate that diverse molecular mechanisms may underlie familial DCM.

2.2 Genetic testing

Indications for genetic testing: Despite the relatively large number of genes identified, mutations in the majority of these genes are uncommon and collectively account for a minority of cases of familial DCM. Furthermore, families with DCM generally have unique mutations. Hence, screening for mutations in the known disease genes would require evaluation of the entire coding sequence of a large numbers of genes. This approach is time-consuming, expensive, and is likely to have a low yield. In general, mutation screening in families with DCM is mainly performed on a research basis, with an emphasis on discovery of new disease genes. Some research groups and commercial laboratories currently perform mutation

(Continued from page 6)
screening of a limited number of known disease genes. This is most likely to be useful in cases in which there is a distinct genotype-phenotype correlation, for example, *LMNA* testing in families with DCM and conduction-system disease. Further gene discovery studies in large and small families are required to acquire a comprehensive list of familial DCM disease genes and family member involvement in genetics research programs should be strongly encouraged. The development of large-scale, rapid and inexpensive methods for mutation screening will also be needed before genetic testing in individual families can become part of routine patient management in this disorder.

Costs/reimbursement for genetic testing: Research groups generally do not charge families for genetic testing performed as part of a research protocol. Genetic testing for familial DCM performed by commercial laboratories does not yet attract any Medicare rebate and is generally charged to family members. In some cases, reimbursement from hospital or Area Health Service Funds may be possible and will need to be explored on an individual basis.

Who should order genetic tests and pre-test counselling: Genetic testing should ideally be performed using a family-based approach in the setting of a cardiovascular genetics clinic that involves a range of genetics professionals (cardiologists with experience in the management of inherited heart diseases, clinical geneticists and genetics counsellors). Pre-test counselling to discuss the medical, psychosocial and insurance implications of a positive or negative result is highly desirable.

Interpretation of results: The interpretation of DNA sequence variants identified in individual patient samples is not straightforward. In particular, the discovery of a DNA sequence variant *per se* does not imply pathogenicity since the vast majority of variants identified will be benign. Factors that need to be considered include whether the variant segregates with disease-status in families, its presence/absence in control subjects, whether it is a novel or known variant in a novel or known disease gene, and whether there are predicted or experimentally validated functional consequences.

3. Management

3.1 Affected individuals

Clinically-affected family members with DCM should receive standard pharmacological management as indicated by the severity of symptoms and signs of heart failure. In families with DCM and conduction-system disease, young family members who present with conduction-system disturbances (sinus bradycardia, atrioventricular conduction block, ± atrial fibrillation) should be followed for arrhythmias that might necessitate pacemaker implantation and for the onset of DCM in later life. Electrophysiological studies ± AICD implantation should be considered in individuals with syncopal episodes, and/or a strong family history of sudden death. The natural history of familial DCM can vary within families and between members of the same family. It is likely that family genotype will be a very important determinant of prognosis. Genotype-phenotype correlations in large populations of family members will be a useful guide in the future for patient therapy and counselling.

3.2 Asymptomatic family members

Longitudinal follow-up: Periodic cardiac screening (ECG and transthoracic echocardiography) of family members of probands with familial DCM is recommended, to identify arrhythmias and asymptomatic abnormalities of left ventricular size and function. The frequency of follow-up assessments should be determined in each individual case by factors such as the typical age of onset of disease in symptomatic family members, and "suspicious" echocardiographic changes (eg. borderline normal, or suggestive of early disease [see below]), and may range from 6-12 months to 5 years. Familial DCM exhibits age-related penetrance, ie. family members who are born with a gene defect may not develop manifestations of disease until later in life. The age of onset of disease in families is variable, with clinical signs appearing from the second to ninth decades. Young family members with a normal ECG and echo, particularly offspring of an affected parent, should not be dismissed as "unaffected" and require ongoing medical surveillance.

Early disease: As part of clinical screening for molecular genetics studies, a previously unrecognised subgroup of family members with asymptomatic echocardiographic changes (left ventricular dilation and/or mild impairment of contractile function) has been identified. Although left ventricular dilatation is not specific for early disease and may result from unrelated pathologies, or physiological variation, particularly in young, fit individuals engaged in competitive sporting activity, several studies have suggested that at least one third of these individuals have latent cardiomyopathy, indicated by the presence of myocardial histological changes, reduced maximal exercise oxygen consumption, or cardiac autoantibodies. Detailed characterisation of left ventricular function using a range of echocardiographic techniques and/or magnetic resonance imaging may help to better differentiate individuals with early cardiomyopathy, but sensitive and specific markers of early disease have yet to be established. Longitudinal studies have shown that approximately 10% of individuals with left ventricular dilation and/or mild impairment of

(Continued from page 7)
contractile function will develop DCM over a 5-year period. The development of risk stratification algorithms to reliably identify those individuals at greatest risk of disease progression is still required. The ability to recognise early disease has important management implications, since early intervention may prevent, or attenuate progression to symptomatic heart failure. Large-scale clinical trials with long-term follow-up are needed to evaluate the role of pharmacologic intervention in this subgroup of family members. Such trials would ideally be performed in genotyped familial DCM populations.

3.3 Counselling

All family members potentially at risk of disease should receive lifestyle modification advice, eg. avoidance of alcohol excess, regular moderate exercise, etc. Female family members who are considering pregnancy should have initial cardiological review and regular follow-up during pregnancy, since familial DCM may be unmasked or accelerated in the peri partum period, especially in the last trimester and first 6 months postpartum. The diagnosis of a genetic disorder in a family and the possibility of testing for the disorder raises a number of issues that are best addressed by experienced cardiovascular genetics counsellors.

4. Further Information

For further information about these guidelines, please contact A/Prof Diane Fatkin, Molecular Cardiology Division, Victor Chang Cardiac Research Institute, PO Box 699, Darlinghurst NSW 2010.

Key References

Fatkin D, Graham RM. Molecular mechanisms of inherited cardiomyopathies. Physiol Rev 2002;82:945-980.

Mahon NG, Murphy RT, MacRae CA, Caforio ALP, Elliott PM, McKenna WJ. Echocardiographic evaluation in asymptomatic relatives of patients with dilated cardiomyopathy reveals preclinical disease. Ann Intern Med 2005;143:108-15.

Fatkin D, Otway R, Richmond Z. Genetics of dilated cardiomyopathy. Heart Failure Clinics (in press).

Congratulations

The Society extends congratulations to ***Dr Paul Andrew Brooks (VIC)***, who was awarded the **Eric Burnard Fellowship** and the **Robert and Elizabeth Albert Study Grant** to research fetal cardiovascular programming in maternal and placental disease: exploring the Barker Hypothesis from the rodent to human, at the University of Alberta and Division of Cardiology, The Stollery Children's Hospital, Edmonton, Canada.

And to ***Dr Joseph Chiha (NSW***), who is the recipient of a **McCaughey Research Entry Scholarship** for his project "Do retinal microvascular signs predict ischaemic heart disease subtype? The Australian Heart Eye Study" at the Westmead Hospital, University of Sydney.

The Foundation for High Blood Pressure Research Fellowship was awarded to ***Dr Benjamin Dundon (SA)*** for his project "Evaluation of myocardial delayed contrast enhancement by 320-slice cardiac computer tomography for the prediction of myocardial viability prior to coronary revascularisation" at the University of Manitoba, Canada.

Also to ***Dr Andrew Jabbour (NSW)*** who was awarded a **Vincent Fairfax Family Foundation Fellowship** for his project "Contrast cardiovascular magnetic resonance in the assessment of diffuse cardiac fibrosis at The Royal Brompton Hospital, London (in collaboration with the Imperial College, London).

Dr Christine Jellis (Qld) also received a **Vincent Fairfax Family Foundation Research Entry Scholarship** for research in non-invasive cardiac imaging in the detection and assessment of subclinical cardiac dysfunction and myocardial fibrosis at The University of Queensland.

Dr Dennis Lau (SA) was awarded a **CRB Blackburn RACP Overseas Travelling Fellowship** for his project "A three-dimensional evaluation of the electro-pathological atrial fibrillation substrate" at Maastricht University, The Netherlands.

Also to ***Dr Sanjay Patel (NSW)*** who is the recipient of the **Bushell Travelling Fellowship** to research the use of induced pluripotential stem cells to augment in vivo angiogenesis at Stanford University, Cardiovascular Research Centre, California.

The Marjorie Hooper Scholarship was awarded to ***Dr Peter Psaltis (SA)*** for his study of the myelopoietic of vascular adventitial progenitor cells (APCx) and their role in atherosclerosis, at The Mayo Medical School in Rochester, Minnesota.

From the Chair

Patricia Davidson
Curtin University &
St Vincent's Hospital, Sydney

Dear Colleagues

The CNC Executive hope you enjoy our latest *"On the Pulse"* column. In this edition we have profiled some of our members and also want to update you on some of the activities of the CNC on behalf of members. Please do not hesitate to contact a member of the CNC Executive if you have any questions, comments or suggestions for the Council.

- The Executive and working groups continue to work on the competency statements for cardiovascular nurses. We hope to have these finalised and launch them at CSANZ 2010 following approval by Council.

- The CNC has also had the opportunity to contribute to the development of guidelines for coronary care units. This is a project being led by Associate Professor Andrew MacIsacc. Within the context of health care redesign and reform this will be a critical document in ensuring the quality and consistency of cardiovascular care.

- Following from the strategic directions proposed by the CSANZ to improve Indigenous cardiovascular health, we have started to develop a work plan to improve Indigenous health in Australia and New Zealand. As part of this process we plan to work closely with The Congress of Aboriginal and Torres Strait Islander Nurses http://www.indiginet.com.au/catsin/ and the Council of Deans of Nursing and Midwifery Australia and New Zealand. http://www.cdnm.edu.au/. We are also grateful for the mentorship and support of Vicki Wade in advancing this work plan.

- The CNC has also continued to consolidate its links with the Australasian Cardiovascular Nursing Council (ACNC) and we will co-sponsor a session on cardiovascular nursing workforce issues at the ACNC Meeting in Brisbane in March 2010.

- Recognising the activities in health reform in Australia, the CNC has begun discussions with Belinda Caldwell, CEO of the Australian Practice Nurses Association http://www.apna.asn.au/ to see how we can engage in activities to increase the synergy between cardiovascular nurses and general practice.

- The CNC has had preliminary discussions with Professor Richmond Jeremy about increasing the profile of Cardiovascular Nursing in *Heart, Lung and Circulation*, the official journal of CSANZ. We are delighted by his enthusiasm for our involvement and will continue these discussions.

- The CNC has been working with the Heart Foundation on their position statement for the multidisciplinary care for individuals with chronic heart failure. Thank you to all of you who have taken the time to provide comments and suggestions. The position statement will be released in June 2010.

- Under the leadership of Professor Linda Worrall-Carter and team the nursing program in CSANZ looks exciting. The International Nursing Speaker for 2010 is Dr Ian Jones from the University of Salford in the United Kingdom. The Cardiovascular Nursing Lecture for 2010 is Andrew McLaughlin from New Zealand. The CNC strongly encourage you to submit abstracts for the CSANZ 2010 Meeting. We would also like to thank Professor Jon Kalman and his Committee for the support of cardio-vascular nursing in 2010.

Member Profiles

June Poole, New Zealand

Congratulations June Poole has just been registered as the latest New Zealand Nurse Practitioner Cardiology based in Counties Manukau District Health Board. Her scope of practice focuses on heart failure. This role will be used to meet future changes in primary and secondary care by developing a cardiology outreach service. The major focus of her work will be on the care of adult cardiac patients who are being discharged from hospital after an admission with decompensated heart failure. Patients can be unstable at this time due to the effects of new medications, inadequate social support or sub-optimal discharge planning. The patients most at risk are the group of heart failure patients with low incomes, lower health literacy and who may have English as a second language. These individuals are less likely to see a medical practitioner until they become seriously unwell.

The aim is to improve access to health care and increase engagement with a primary health care provider. Working with general practitioners, cardiologists and other health providers will be an opportunity to share skills and resources, and improve links across primary and secondary care.

Jan Cameron, Victoria, Australia

We would also like to congratulate Jan Cameron, who recently completed her PhD at the Australian Catholic University, supervised by Professor Linda Worrall-Carter, Dr Karen Page (ACU) and Professor Simon Stewart (Baker IDI). Professor Barbara Riegel from the University of Pennsylvania was also a collaborator on her PhD studies.

In Jan's study patients admitted with chronic heart failure (CHF), with and without cognitive impairment were assessed for self-care (Self-Care of Heart Failure Index), and mild cognitive impairment (MCI) with the Mini Mental State Examination (score <27) and the Montreal Cognitive Assessment (score <26) and depressive symptoms (scores <83 on Cardiac Depression Scale). These factors along with demographic and clinical characteristics (age, gender, social isolation, education level, new diagnosis and co-morbid illnesses) were tested in multiple regression models for self-care. Patients with MCI had significantly lower self-care management ($p<0.01$) and self-confidence scores ($p<0.05$). MCI, co-morbidity, NYHA class III-IV explained 20% of the variance in self-care management ($p<0.01$); MCI made the largest contribution to the model explaining 10% of the variance. Experience with CHF diagnosis (>2 months) was the most significant factor in predicting self-care maintenance ($p<0.01$). When self-confidence was regressed, age and depression explained 13% of the variance in self-care confidence scores ($p<0.01$). Jan's study concluded that cognitive impairment is a hidden co-morbidity in patients with CHF and should be a consideration for cardiovascular nurses.

Stephen Bloomer is the Western Australian representative on the CSANZ Cardiovascular Nurses Council

Stephen is a Lead on the Cardiovascular Health Network of Western Australia and Project Manager, Clinical Governance Management System (CGMS), Best Practice Guidelines. Stephen has identified some articles that may be of interest to you.

Dierick- van Daele ATM et al. Economic evaluation of nurse practitioners versus GPs in treating common conditions: British Journal of General Practice 2010; 60 (570): e28-e35(1) . In this Dutch randomised controlled trial, by involving nurse practitioners as the first point of contact, economic savings were achieved.

Griffiths P. et al. Nurse staffing and quality of care in UK general practice: cross-sectional study using routinely collected data. British Journal of General Practice 2010; 60 (570): e36-e48(1). In this study from the United Kingdom, general practices that employ more nurses perform better in performance indicators in obstructive pulmonary disease, coronary heart disease, hypertension and diabetes.

Allied Health Affiliates Update

It is with great pleasure that I commence my term as the Allied Health Affiliates Representative on the CSANZ Board. I follow in the footsteps of Diane Jackson to whom we are all indebted. I thank Di for her fabulous contribution and for her ongoing support of Allied Health Professionals and the important role they play within the Society.

I am very pleased to report that following the recommendation of Carolyn Astley and Di Jackson, Affiliates are now represented on the CSANZ Scientific Committee. The Allied Health and Nursing Representatives will rotate annually (commencing with myself in 2010) and will be in close communication regarding any issues relevant to the Scientific Committee. Please feel free to communicate directly with Trish or myself if you have anything to raise. Trish and I thank the Society together with Professor Len Kritharides and the Scientific Committee for embracing the role of Affiliate members.

I am also pleased to let you know that Carolyn Astley led the development of an Affiliates compendium for the Organising Committees of Annual Scientific Meetings. The compendium has now been ratified by the Board and is being used for the 2010 meeting. The compendium is very comprehensive and will ensure the needs to Affiliates (both Allied Health and Nursing) continue to be met at Annual Meetings.

Prizes and Awards

Please keep a close eye on the website for relevant Prizes and Awards. In 2010, the society will again be offering separate Allied Health and Nursing Clinical Development Awards and Research Prizes. As well as providing substantial financial support, all these awards are great for career development and peer recognition of your hard work.

The Clinical Development Awards are specifically designed to recognise the achievements of Affiliates and assist career development by providing financial support to attend the Annual Scientific Meeting.

These awards are available to members who may or may not have an abstract submitted so I strongly encourage you all to consider applying. Check the website for information on eligibility, how to apply and to ensure you don't miss the closing date.

The Research Prizes are awarded based on oral presentations at the Annual Scientific Meeting. Top ranking Affiliate abstracts are allocated an oral presentation in the relevant final session (Allied Health or Nursing) at the meeting so prepare your abstracts and tick the relevant box when you submit. Good luck to all of you who are preparing to submit an abstract for these prestigious prizes.

Finally, don't forget that Affiliates are eligible for a range of other prestigious CSANZ Scholarships and Travelling Fellowships so please check the website for more information.

I hope you are all finalising your abstracts for CSANZ 2010. It promises to be yet another great meeting with a broad and comprehensive program for Affiliates. See you all in Adelaide. Remember to keep an eye on the CSANZ 2010 program for the Allied Health Affiliates AGM!

Please email me (julieredfern@dodo.com.au) if you have any comments, questions or concerns. Once again, I encourage you to apply for relevant awards and support our colleagues by attending the Prize sessions in Adelaide.

Julie Redfern
Allied Health Representative on the Board of CSANZ

Clinical Development Award (CDA)

Applications are called for the **Clinical Development Award** to enable Affiliate Members of the CSANZ to attend the 2010 Annual Scientific Meeting (ASM) to be held in Adelaide, South Australia, from 5 to 8 August. The Awards are intended to further develop the successful candidate through an increase in their clinical knowledge and expertise, an increased awareness of research and evidence-based practice and will also allow the successful candidate to build on their professional network. In particular this strategy addresses succession planning for leadership positions in cardiovascular practice, research, education and management.

Candidates applying for a CDA are not required to have an abstract accepted for presentation at the ASM.

The Awards:

- The Awards are valued at AU$1,000 each to assist in defraying the costs of travel, accommodation etc. Five Awards will be made.
- There will be 3 Awards to nursing and 2 to non-nursing applicants.
- Preference will be given on an equal basis to:
  a) first time applicants for a CDA;
  b) applicants who have not previously attended a CSANZ conference;
- Should the recipient of a CDA subsequently be awarded a CSANZ ASM Travelling Fellowship in the same year, **the CDA will become void**.

Selection criteria:

- The applicant must have held CSANZ Affiliate Membership for at least 1 year and be currently financial.
- Working or studying in a clinical area of cardiology or cardiothoracic surgery or working in an area where there is a large caseload of patients with cardiac conditions.
- Applicants must reside outside of the State or Region in which the ASM is being held.

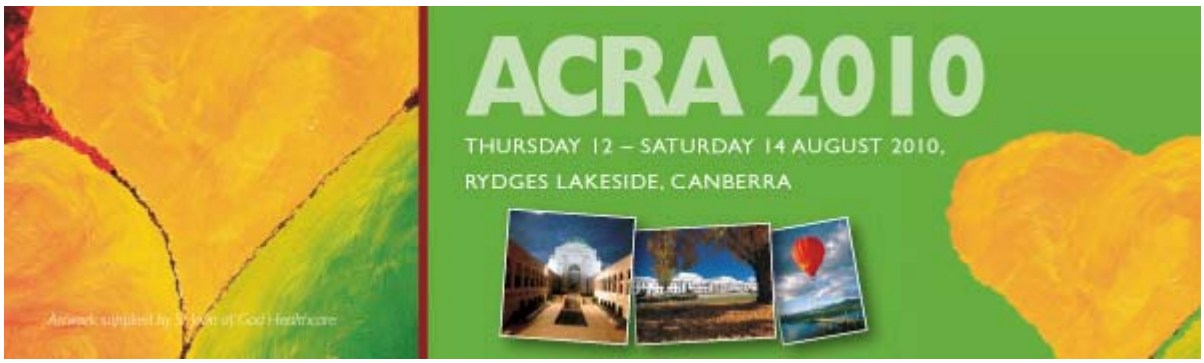
How to apply:

- Applicants should submit a 1 page document describing their interest in cardiovascular health and stating what outcomes they anticipate from the conference. For example, how it will add to the applicant's knowledge base and career, how it will benefit their workplace and how the applicant can contribute to the CSANZ Affiliates;
- Include the names of two referees with whom you have worked closely and who have been involved in your career development i.e. mentor, supervisor, manager;
- Successful candidates will be required to write a report for the On The Pulse newsletter;
- Applications should be forwarded to the Honorary Secretary (CSANZ, 145 Macquarie Street, Sydney NSW 2000 AUSTRLIA)

Closing Date:

4 June 2010

at 5 pm



www.cdesign.com.au/acra2010

Call for Applications / Meetings

CSANZ Travelling Fellowship to the ESC Congress 2010

Applications are called for the **CSANZ Travelling Fellowships** for travel grants to enable five investigators to attend the **European Society of Cardiology Congress 2010** to be held in Stockholm, Sweden, August 28 - September 1, 2010. The Fellowships are intended to provide an opportunity for investigators in the early stage of their research career, to present at a major international conference.

The conditions are:

1. The Fellowships are valued at AU$3,000 each.
2. Applicants must be FCSANZ, Associate Members or Affiliate Members of the Cardiac Society or researchers in cardiology or cardiac surgery and related disciplines with preference given to those attending their first meeting.
3. The work must have emanated from Australia or New Zealand.
4. Applicants must have an abstract accepted for presentation at the ESC meeting.
5. Applications must be accompanied by a letter from the supervisor or Director of the laboratory or service from which the work has emanated, clearly detailing the specific contribution made by the applicant towards the work being presented.
6. Preference will be given to those who have not previously been awarded CSANZ travelling scholarships.
7. Conditions apply to successful applicants **not domiciled in Australia or New Zealand**.*
8. Late applications will NOT be considered.

Applications should be sent to the Honorary Secretary, **together with**:

(1) copy of submitted abstract(s) and ESC notification of acceptance (should this arrive after you have forwarded your application, please fax to +61 2 9247 7916)

(2) brief curriculum vitae

(3) supporting letter from the supervisor or Director

Closing Date:

31 MAY, 2010

At 5 PM

* Contact the Sydney Secretariat to obtain a copy of the conditions (info@csanz.edu.au)

Heart Foundation

QCRA

Challenges in cardiology

2010

Prevention and management of cardiovascular disease

9 - 10 April 2010

Go to the Heart Foundation website for more information.

Travelling Fellowship Updates

Dr Christine Jellis, University of Queensland, was the recipient of a CSANZ Travelling Fellowship to attend the Scientific Sessions of the American Heart Association held in Orlando, Florida in November 2009.

I am currently undertaking my PhD in the Cardiovascular Imaging Research Centre of the University of Queensland under the supervision of Professor Tom Marwick. The focus of my research involves using non-invasive cardiac imaging (echocardiography and cardiac MRI) to detect and assess subclinical diabetic heart disease. Recently I had the opportunity to present an abstract entitled 'Reduced Pressure-Volume Response to Exercise: A Marker of Subclinical Myocardial Disease in Type 2 Diabetes' at an oral session of the American Heart Association Scientific Sessions held in Orlando, Florida. As a young clinical researcher, this was an invaluable experience to present to an audience of interested international experts. The positive feedback I received both personally and for Australian research was very encouraging.

Our research focused on the reduced pressure-volume ratio response seen with exercise in Type 2 diabetes which has been found to be of prognostic significance. We sought to examine the association between this response and markers of myocardial dysfunction. With the use of stress echocardiography we were able to demonstrate that a blunted change in pressure-volume ratio with exercise is associated with established features of subclinical diabetic heart disease including systolic and diastolic dysfunction, impaired exercise capacity and blunted peak haemodynamic response. These associations likely explain the prognostic significance of the pressure-volume ratio.

I would like to express my sincerest thanks to the Cardiac Society for my travelling fellowship which facilitated this wonderful opportunity.

Travelling Fellowship Updates

Dr Aaron Sverdlov, University of Adelaide, also received a CSANZ Travelling Fellowship to attend the Scientific Sessions of the American Heart Association held in Orlando, Florida in November 2009.

I presented a study entitled "Plasma concentrations of asymmetric dimethylarginine (ADMA) predict LV mass independent of afterload" at an oral session at the American Heart Association Scientific Sessions. For this study we recruited 'healthy' aging members of community without any cardiovascular disease and not treated with any anti-hypertensives. We calculated their LV mass from cardiac MRI and assessed the measures of nitric oxide genereation/effect both biochemically (ADMA concentrations, a marker/mediator of endothelial dysfunction) and physiologically (vascular responses to salbutamol and GTN). While none of the subjects had definite left ventricular hypertrophy according to normal clinical definition, increases in LV mass index in this ageing, normotensive population, free of established cardiovascular disease, were directly correlated with ADMA concentrations, suggesting a potential link between impaired NO formation and initiation of left ventricular hypertrophy. Furthermore, this relationship was at least partially independent of afterload. This study provides evidence of the important control of nitric oxide in regulation of LV mass prior to development of overt hypertrophy.

I would like to thank the Society for its kind support in providing this fellowship.

ProActive Heart Study

A 'Real World' Implementation Trial of a Telephone Delivered Secondary Prevention Program for Myocardial Infarction Patients 'ProActive Heart'

Chief Investigators: Prof Brian Oldenburg (Monash University), A/Prof Anna Hawkes (The Cancer Council Queensland), Prof Barr Taylor (Stanford University), A/Prof John Atherton (Queensland Health)

Associate Investigators: A/Prof Karam Kostner (QLD Health), Prof Nick Bett (QLD Health), Prof Paul Scuffham (Griffith Uni), Prof Kerrie Mengersen (QUT), Ms Nancy Houston-Miller (Stanford Uni), Ms Rachelle Foreman (Heart Foundation)

Project Manager: Kathy Eadie

Why are we conducting this study?
Coronary heart disease (CHD) is a significant cause of health and economic burden. Secondary prevention programs play a pivotal role in the treatment and management of those affected by CHD although participation rates are poor due to patient, provider, health system and societal-level barriers. As such, there is a need to develop innovative secondary prevention programs to address the treatment gap. Telephone-delivered care is convenient, flexible and has been shown to improve behavioural and clinical outcomes following myocardial infarction (MI). As such, a research team from Australia and the United States are conducting a randomised controlled trial to evaluate the efficacy of an innovative six-month telephone-delivered secondary prevention program for MI patients (ProActive Heart).

The aims of this study are:

i. To investigate the effects of the program on health outcomes [primary outcome variables include quality of life (QOL) and physical activity] post-intervention (Time 2), and at 12 months follow-up (Time 3) for longer term effects.

ii. To examine the cost-effectiveness of the program.

What did the study involve?
Over the past 14 months (December 2007 to January 2009) we have recruited n=430 adult MI patients through two Brisbane metropolitan hospitals, and randomised them to an intervention or control group (n=215 per group). The intervention commenced within two weeks of hospital discharge and was delivered by study-trained health professionals ('health coaches') during up to 10 x 30 minute telephone health coaching sessions. Participants also received a ProActive Heart handbook and an educational resource to use during the health coaching sessions. The intervention focused on appropriate modification of CHD risk factors, compliance with pharmacological management, and management of psychosocial issues. The control group continued to receive their usual medical care. Data collection occurred at baseline or prior to commencement of the intervention (Time 1), six months follow-up or the completion of the intervention (Time 2), and at 12 months follow-up for longer term outcomes (Time 3). Primary outcome measures included quality of life (Short Form-36) and physical activity (Active Australia Survey). A cost-effective analysis of the costs and outcomes for patients in the intervention and control groups was also conducted from the perspective of health care costs to the government.

What have we found?
We had an excellent response to the study with 85% of eligible participants consenting to be involved, 90% of patients completing the intervention, and 83% remaining in the study post-intervention. The most common topics covered in the health coaching calls were emotional wellbeing, physical activity, healthy eating and medications. Overall 100% of participants stated that they were satisfied with the intervention, and 98% were satisfied with the handbook and the health coaching sessions. Ninety-eight percent of participants stated that the intervention met their needs.

The majority of participants were aged 45-74 (78%), male (75%), with at least year 10 high school education (82%), and either employed full time (40%) or retired (37%). The total sample was characterised as overweight (70%), non-smoking (69%), insufficiently active (72%), with an insufficient intake of fruit (55%) and vegetables (76%), and a high intake of saturated fats (94%).

Full study results will be available 2010/2011.

Where to from here?
Building on the success of ProActive Heart the research team have developed a new study investigating the effectiveness of a telephone-delivered depression management and secondary prevention program for depressed myocardial infarction patients. The intervention will be delivered by qualified psychologists and will aim to reduce symptoms of depression, as well as improve CHD risk factors and overall quality of life. Participants will be recruited from four study sites (two in Melbourne and two in Brisbane) early 2010.

For Further Information Contact:
Prof Brian Oldenburg
brian.oldenburg@med.monash.edu.au

A/Prof Anna Hawkes
Anna.Hawkes@gmail.com
or 07 3634 5305)

Forthcoming Meetings

NORTH AMERICA

ACC Scientific Sessions 2010
March 14-16, 2010
Atlanta, Georgia
Web: www.acc.org

TCT2010
September 21-25, 2010
Washington, DC
Web www.tctconference.com

AHA Scientific Sessions 2010
November 13-17, 2010
Chicago, Illinois
Web: www.americanheart.org

EUROPE

Imaging in Cardiovascular Interventions
July 7, 2010
Frankfurt, Germany
Web: www.ici-congress.org

Congenital & Structural Interventions 2010
July 8-10, 2010
Frankfurt, Germany
Web: www.csi-congress.org

ESC Congress 2010
August 28-September 1, 2010
Stockholm, Sweden
Email: congress@escardio.org
Web: www.escardio.org

ASIA PACIFIC

20th World Congress of the ISHR 2010
May 13-16 May 2010
Kyoto, Japan
Web: www.ishr2010.com

World Congress of Cardiology
June 16-19, 2010
Beijing, China
Web: www.world-heart-federation.org/congress-and-events/WCC2010

CSANZ NZ Regional ASM 2010
June 25-27, 2010
Rotorua, New Zealand
Secretariat:
Six Hats Limited
Web: www.sixhats.co.nz/csanz10

ANZET10
August 4-5, 2010
Adelaide, South Australia
Secretariat:
The Conference Company
Phone: 64 9 360 1240
Web: www.csanz.edu.au

CSANZ ASM
August 5-8, 2010
Adelaide, South Australia
Secretariat:
The Conference Company
Phone: 64 9 360 1240
Web: www.csanz.edu.au

2011 ISCVID (11th International Symposium on Modern Concepts in Endocarditis and Cardiovascular Infections
July 24-26, 2011
Cairns, Queensland
Secretariat:
ISCVIC 2011 Symposium
info@iscvid2011.com
Web: www.iscvid2011.com

A more comprehensive list of meeting and events can be viewed on the Society's website

For more information telephone 61 02 9965 4328

Australian & New Zealand Society of Palliative Medicine
14 - 17 September 2010, Adelaide, SA
www.willorganise.com.au/anzspm2010