

HEART FACTS



JOURNEY OF THE BLOOD



FIRST SINGLE LUNG TRANSPLANT

FIRST BILATERAL LUNG TRANSPLANT

HEART BEATS PER MINUTE



HEART FAILURE IS HIGHER IN WOMEN

NUMBER OF AUSTRALIAN WOMEN WHO DIED FROM CVD IN 2007



ESTIMATED AMOUNT OF AUSTRALIANS WITH A LONG TERM CARDIOVASCULAR CONDITION PEOPLE WAITING FOR HEART TRANSPLANTS HEART DISEASE DOESN'T DISCRIMINATE A HEART IS VIABLE OUTSIDE THE BODY AFTER OUR RECENT DISCOVERY FIRST ORGAN TO BEGIN FUNCTIONING PEOPLE WHO DIE OF (CVD) IN AUSTRALIA ML'S OF BLOOD PUMPED EACH BEAT







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OUR INSTITUTE

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With donated funds, St. Vincent's Hospital established the Victor Chang • Cardiac Research Institute, which was launched on February 14, 1994.

Victor Change DEVELOPMENTAL BIOLOGY **MOLECULAR CARDIOLOGY &** BIOPHYSICS MOLECULAR GENETICS STRUCTURAL & 05 COMPUTATIONAL BIOLOGY **ADMINISTRATION & FINANCE RECEPTION. STORES.** LOADING DOCK & CRYOGENICS **BIOCORE FACILITY & AOUARIUM**

A MESSAGE FROM THE MARY AIKENHEAD MINISTRIES

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Richard Harpham Chairman, Trustees of Mary Aikenhead Ministries

Foreword

On 1 July 2009, Mary Aikenhead Ministries was established by the Congregation of the Religious Sisters of Charity of Australia, to assume the governance role previously held by the Congregation in relation to various health and aged care, research, education and welfare ministries, including the Victor Chang Cardiac Research Institute.

The name Mary Aikenhead Ministries is both a tribute to, and reminder of, the extraordinary work and ministry of Mary Aikenhead, the Foundress of the Sisters of Charity, who dedicated her life to service of the poor.

The Trustees of Mary Aikenhead Ministries would like to congratulate both Steven Lowy and Bob Graham on the continued success of the Institute. The contribution it continues to make to the health and research communities is extraordinary. The Trustees are very grateful that people of great commitment and ability (both Directors and staff) have contributed so much to ensure that the Institute continues to excel, notwithstanding the many challenges it faces.

On behalf of the Trustees of Mary Aikenhead Ministries, I am pleased to commend to you the 2010 Annual Report of Victor Chang Cardiac Research Institute.

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Richard Harpham Chairman, Trustees of Mary Aikenhead Ministries

2010 CHAIRMAN'S REPORT

...



Steven Lowy Chairman

Each year this report provides me with an opportunity to put the many activities of the Institute into some context – to explain, at a high level, what we do, why we do it, and what have been the results.

It's also an opportunity to recognise the outstanding contribution so many people make to help us achieve those results.

So let me begin with the big picture.

The Victor Chang Institute is a research institute. We exist to do the hard, grinding work of better understanding the causes of heart disease and to bridge the gap between that understanding and a clinical application that will make a material difference for patients.

I want to emphasise the hard work aspect of the Institute because it is the reality. Big breakthroughs are rare. When they do come, they are usually the result of literally years of toil by dedicated researchers– like building a massive building brick by brick. It's an enormous challenge but one this Institute was inspired to undertake by the man whose name it bears the renowned heart surgeon Victor Chang, 2011 marks the 20th anniversary of Victor's passing and I think it's fair to say that his ambition to establish a centre for excellence in this field is being more than honoured through the work that is carried out every day in the new building which is now home to the Institute.

The case to do more and more research into heart disease is a compelling one for two reasons. The first is that it is an enormous problem - cardiovascular disease (CVD) is Australia's biggest killer, resulting in more than 50,000 deaths each year.

The second is that we can prove that the sort of research being done by this Institute is going a long way in overcoming the problem.

Yes, the problem is enormous. But answers are being found. Fewer people are dying.

More people are living longer lives, happier lives thanks to the kind of work that happens here.

In Australia the death rate for all major types of CVD has fallen by 80% since the 1960s – an advance due directly to advances in medical research. In 2010, advances like these achieved by the Victor Chang Institute were reported in leading international journals such as Nature and Nature Structural Biology. In addition to excellence in research the Institute also fulfils an important role in raising awareness of heart disease. In 2010 we launched the Victor Chang Health Check Booth. The booth is designed to encourage people to have their blood pressure, cholesterol and blood sugar levels tested to increase their awareness of cardiovascular risk factors. The booth has been trialled at a number of venues in and around Sydney. This is just one example of how we are continually taking our message to the wider community.

Of course, to undertake our research and community programs the Institute faces an ongoing challenge to carefully manage its budget and undertake a range of fundraising activities.

This challenge is made all the harder by a self-perpetuating problem inherent in the current system of funding for medical research institutes like the Victor Chang. Fundamentally, there is an ever-widening gap between the federal grants received for research and the limited funding available for indirect costs that are necessary to undertake that research. When we receive a much-needed grant to pursue an important research project, we then have to generate new income to fund the essential items to actually carry it out not just scientific equipment and administrative and legal expenses, but also mundane but equally essential services like lighting and telephones.

Our efforts to meet this challenge are ably led by the board's Appeals Committee, now chaired by new board member, Louise Di Francesco, who took over from John McGuigan who served in this role for many years.

One of the major fundraising events each year is our traditional 'Heart-to-Heart Ball' and last year we were honoured that the Prime Minister, Julia Gillard, made a special effort to attend.

She spoke about the lasting impact Victor Chang has had on the lives of many Australians and her presence also provided an opportunity to raise some important issues, like the fundraising challenge I just mentioned.

In 2010 the Institute welcomed a generous new supporter -Priceline. Priceline donated a proportion of the sale price of every bottle of *Nature's Own* and Blackmore's Fish Oil to heart disease research. Our partnership with Priceline will continue in 2011 when they launch their new 'Sisterhood' initiative that will focus on the heart health of women.

We also thank KIA for including the VCCRI in their Ambassador's Program. Each of their Ambassadors is given the use of a KIA for at least one year and, in our case, we have been able to use it to transport our Health Check Booth from venue to venue. KIA also



chose the VCCRI to be their charity partner in a promotion launching their new car. The Commonwealth Bank

generously agreed to print our message about the warning signs of heart attacks, and what to do until help arrives, on the back of their envelopes during 2010.

Another successful event was this year's Crabfest charity lunch organised by VCCRI Ambassador Cameron Irving and his committee, and the Victor Chang Award for Excellence in Cardiovascular Journalism that was launched at the VCCRI ball in 2010. Today Tonight Perth reporter Mark Gibson received the Award for Excellence in Cardiovascular Journalism for his story about Perth radio announcer lan Blackley who suffered a heart attack during his live radio show. Fred Witsenhuysen received the regional award for his article that appeared in the Sunshine Coast Daily on his own experience with bypass surgery, and Ms Janet Hawley received an honourable mention for her

article 'Could it Happen to You' in the SMH Good Weekend magazine. The journalism awards are an initiative of the Marketing and Communication Committee formed during the year and led by board member Ms Jill Margo.

On Mothers' Day last year we urged Australian women to recognise the early warning signs for heart attack by having their risk factors checked regularly. This campaign has a special significance for the VCCRI as our friend and colleague. finance manager Monica O'Loughlin died suddenly of a heart attack. A 51-yearold mother of five. Monica delaved seeing a doctor about her condition despite having some classic symptoms of a coronary artery disease. It is hoped that 2011 will see the start of a yearly lunch to honour Monica, called 'Women and Heart Disease'. which aims to further raise awareness that cardiovascular disease affects not just men but women too. Four times more women die from heart disease than breast cancer.

2010 CHAIRMAN'S REPORT

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I'd like to take this opportunity to acknowledge and thank our longterm friend and supporter, Aldo Santamaria, who staged a very successful Sportsman's Lunch for the Institute, and to Sharon and Andrew Cooper who are donating part of the proceeds of their book *How to Grow Superfoods* to the Institute.

Despite the difficulties we face to continually win research grants and then find the funds to carry out that research, the VCCRI financial position remains sustainable. We had budgeted for a loss in 2010 of about \$2.1 million. However, I am pleased to announce we completed the year with a loss of only \$808,596.

This performance was driven by better-than- budgeted grant and other income and stringent cost control. I would like to acknowledge the leadership of the chair of the board's finance committee, John Kean, who has been a tireless contributor to the Institute over many years.

It is not possible to thank every organisation and individual that supports our work but it is important for them to know how much we value their contribution. Quite simply, without it the Institute would not be here doing the life-saving work that it does. This support is provided through financial assistance, but also through the provision of services, such as that provided by Anne-Marie Allgrove and Ms Mary Saywell and their team at Baker McKenzie who offer pro bono legal advice to the Institute.

Finally, I would like to acknowledge the ongoing commitment, support and advice provided by the Trustees of the Mary Aikenhead Ministries, Board Member Sr Anthea Groves and Appeals Committee Member, Sr Clare Nolan.

It has been another successful year for Victor Chang, one in which we have made further inroads into better understanding one of the greatest health challenges of our times.We continue to find answers that make a real difference to people's lives and this gives us hope and inspiration to continue the work.

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On behalf of the board, I would like to extend our thanks to the many people and organisations that help us continue our work. All of us at the Institute – the board, our executive team, and research and support staff – value this enormously, and we look forward to working with you into the future.

Steven Lowy AM, BComm (Hons)

2010 EXECUTIVE DIRECTOR'S REPORT



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Professor Robert M. Graham Executive Director

I am pleased to share with you my enthusiasm and excitement about our current research and the many accomplishments over the past year. In addition to launching our major community health initiative, the Victor Chang Health Check Booth, this year was also a record year in terms of new grant funding. A total of \$13 million in new NHMRC grant funding was awarded to the Institute over a fiveyear period, which included the renewal of our NHMRC program grant (over \$9 million) to study how defects in the development and function of heart muscle cells can lead to structural heart malformations. We also published 3 book chapters and 57 journal papers, many of these in the highest-ranking journals including Nature and Nature Medicine. Amongst our many important discoveries this year, I would like to highlight three:

Dr Daniela Stock and her postdoctoral fellow, Dr Lawrence Lee, discovered the secrets behind one of nature's most extraordinary biological machines. The researchers have discovered the mechanism behind the tiny motors in the tail of bacteria that allow them to swim towards nutrients. These motors are the most energy efficient motors known and are used to spread bacterial infection.

This discovery solves a riddle that has been perplexing scientists for decades and could have important practical implications through the development of unique new therapies for the treatment of some of our most serious diseases, including bacterial endocarditis that destroys heart valves and rheumatic fever that causes inflammation of heart muscle.

This discovery solves a riddle that has been perplexing scientists for decades.

Associate Professor Diane Fatkin and her team found that, contrary to accepted dogma, a regular exercise program in addition to treatment with the beta-blocking drug carvedilol, retards rather than accelerates the development of dilated cardiomyopathy, a serious genetic condition of heart muscle that commonly leads to the need for a heart transplant.

Associate Professor Thomas Preiss, in collaboration with Garvan Medical Research Institute and international researchers, discovered a new way of potentially reversing certain cancers using a new class of genes known as 'microRNAs'— work that is at the cutting edge of genetic research.

Early in 2010, the Institute's progress was evaluated by our 'blue ribbon' international Scientific Advisory Board which provided a verv favourable report on our progress over the last five vears. The Board also provided important recommendations for the Institute to progress to the next stage, which led to the recruitment of new faculty member Dr Kazu Kikuchi, an international expert on heart muscle regeneration. Currently, in the US, he will be moving to Australia to start working at the Institute early 2011.

I would like to most sincerely thank all VCCRI donors and supporters, as well as our Board and Appeals Committee for their continued recognition and unflagging support of our work-without their hard work and extraordinary generosity none of our achievements would be possible. I would also like to acknowledge the extraordinary work done by Britt Granath, our Science Policy Officer, during my tenure as President of the Association of Australian Medical Research Institute from 2008 to 2010.

Finally, it is of note that 2011 will be a very special one for the Institute and its supporters, as we will be commemorating the 20th anniversary of the untimely death of Victor Chang. I hope you will join me in taking the time to commemorate Dr Chang as we continue his work in eradicating heart disease.

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Professor Robert M. Graham AO, FAA, MBBS (Hons), MD, FRACP, FACP, FAHA

SCIENTIFIC ADVISORY BOARD

Every five years the VCCRI undergoes a rigorous and stringent review by an international panel of experts in medical research. These valued consultants exhaustively evaluate our research programs and provide advice on our future research directions and strategy. We sincerely thank our panel for their generous time and advice which ensures our research can continue to be counted amongst the best in the world.

Scientific Advisory Board Members

Professor Doug Hilton,

(Chair), Director Walter & Eliza Hall Institute, Melbourne, Research Professor of Medical Biology and Head, Dept of Medical Biology, University of Melbourne, and a fellow Australian Academy of Science.

Professor Witold Filipowicz, Friedrich Miescher Institute Basel, Switzerland. Professor of Biochemistry, member of the European Molecular Biology Organisation and the Academia Europea.

Professor Lily Jan,

Dept of Physiology & Biophysics, University of California, San Francisco, USA. Professor Jan is the Jack and DeLoris Lange



Professor Physiology & Biophysics, University of California, a member of the Howard Hughes Medical Institute and of the National Academy of Sciences, USA.

Professor Janet Rossant,

The Hospital for Sick Children, Toronto, Canada, Professor, Departments of Molecular Genetics, Obstetrics/ Gynaecology & Paediatrics, University of Toronto, Chief of Research, Research Institute, Distinguished Investigator, Canadian Institutes of Healthv Research. Member of the American Academy of Arts & Sciences, USA & Foreign Associate, National Academy of Sciences, USA.

Professor Stephen Vatner,

Chairman, Dept Cell Biology & Molecular Medicine at University of Medicine & Dentistry, New Jersey Medical School.

Findings

The Board's major findings were that: "The Institute has developed to be one of the best known and most highly respected medical research institutes in Australia and has an international reputation for its cardiac research. The VCCRI has an excellent faculty, and support of younger



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- 01 Associate Professor Diane Fatkin and Liz Yeo
- 02 Dr. Daniela Stock and Dr. Lawrence Lee with the X-Ray crystallography machine

investigators in independent positions is exemplary. The staff and the students of the VCCRI have established a highly collegial research atmosphere, in which there is uniform excitement about being part of an outstanding Institute. Given the challenges that many institutions around the world face in building a translational research program, the VCCRI is doing an outstanding job. In short, the VCCRI has developed admirably and is at the most exciting point in its fifteen-year journey. Major recommendations included recruitment of additional research groups, increasing the Institute's endowment and enhancing support of core facilities and additional translational research efforts "



BOARD OF DIRECTORS

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The successful operations of the VCCRI are heavily reliant upon the dedication, commitment and vision provided by the Board of Directors and subsidiary committees.



Mr. Steven Lowy

Chairman AM, BComm (Hons)

- Life Governor VCCRI
- Joint Chief Executive Officer Westfield Group
- President of the Board of Trustees Art Gallery, NSW
- Director, Lowy Institute for International Policy
- Member Prime Minister's Business Government Advisory Group on National Security
- Chairman, Board of Management for the Associate Degree of Policing Practice(ADPP).



Mrs. Barbara Ell

- Life Governor, Member of the VCCRI Appeal Committee
- Chair, Victor Chang Annual Ball



Mr. John Kean FCA, FAICD

- Life Member VCCRI
- Executive Chairman Pinpoint Pty Ltd.
- Founding Partner of WHK Greenwoods, Chartered Accountants
- Independent Business Advisor and Director of various businesses

Professor Robert M. Graham

AO, FAA, MBBS (Hons), MD, FRACP, FACP, FAHA

- Executive Director, VCCRI

Chairman Finance Committee

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Mr. David Craig

- Chief Financial Officer.

Commonwealth Bank

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- Member of the Congregation of the Sisters of Charity
- Patient Liaison Officer, St Vincent's Hospital Sydney





BA, FFin, FAICD

- Chief Executive Officer, Deutsche Bank Aust & NZ
- Council Member, Business Council of Australia

 Board Member, Wilson HTM. AFMA, Centre for Independent Studies, Australian Theatre for Young People & Others



Ms. Jill Margo

AM, BA (Hons)

- Medical Journalist, Australian Financial Review
- Best Selling Author and Biographer



Mr. John McGuigan LLB

- Life Member VCCRI
- Co-founder Hunter Bay Partners
- Chairman, White Energy



Professor Leslie D Field

BSc, PhD

- Deputy Vice Chancellor (Research) University NSW
- Director New South Innovations, Australian Technology Park Innovations
- The Cooperative Research Centre for Spatial Information
- Smart Internet Technology Cooperative Research Centre
- Member Australian Institute of Population Ageing Research Leaders Forum



LLB (Hons), JSD

- Director Ariadne Australia Ltd, Tag
- Pacific Ltd. Premier Investments Ltd
- Chairman of Coats plc

Mrs. Louise Di Francesco

- Chair, Victor Chang Appeals Committee
- Director Verve Communications
- Specialist in PR, Media
- Communications, Issues & Crisis Management



Mr. Angelos Frangopoulos BA (Comm), MAICD, JP

- CEO Australian News Channel
- Member of the Council of Charles Sturt University
- Chairman, Australia Day NSW Council

10. VCCRI ANNUAL REPORT 2010

VCCRI HONOUREES

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The Heart and Soul of the VCCRI

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Our voluntary Committee Members, Patrons, Life Governors, Ambassadors, Life Members, Donors and Supporters are the heart and soul of the VCCRI. Their dedication, commitment and encouragement of our research is unconditional. We thank them for their generosity, enormous time and the expertise they provide so willingly and freely.

Patrons

- Mrs. Ann Chang
- The Hon Neville Wran, AC, QC

Past Patron

- The late Mr. Kerry Packer, AC

Honorary Life Governor

 Her Royal Highness Crown Princess Mary of Denmark





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 Steven Lowy with VCCRILife Governor Lionel Lee, wife Lisa Lee & mother Yenda Lee.
Steven Lowy with VCCRILife Governors Gerry & Wendy Commerford.

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- Mr. Lionel Lee

Ambassadors

- Baker & McKenzie
- The Crane Group
- The late Mr. Alan David
- The late Amana Finley
- Mr. John Laws, CBE
- Mr. Ken Laing, AM
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- LK Jewellery
- Mr. Cameron Irving
- Deutsche Bank

Honorary Life Members

- Ms. Fiona Coote, AM
- Mr. Kerry James, AM
- Mr. John Kean
- Mr. John McGuigan

Young Ambassador Award

- Mr. Mark Vincent

HIGHLIGHTS 2010

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New methods found to combat common heart muscle condition

Associate Professor Diane Fatkin and her team in the Molecular Cardiology Division, found two new approaches that could be used to prevent dilated cardiomyopathy (DCM), a common disease of the heart muscle that reduces the pumping action of the heart.

The research revealed that regular moderate exercise from a young age could help prevent rather than contribute to the common genetic heart condition, that can lead to heart failure and sudden death.

As well as a regular exercise program, the beta blocking drug carvedilol, commonly used to treat patients with symptomatic heart failure, was also found to reduce the development of DCM, if taken from a young age.

A/Professor Diane Fatkin, said the results of the study are exciting.

"Rather than dealing with the end stage of heart failure, which places an enormous economic and social burden on our community, we can recommend patient therapies and exercise programs that will slow down the progression of the disease from an early age."

The study was published in the international journal *Circulation Research* in February 2010.

Putting the brakes on bacterial infection

Drs Daniela Stock and Lawrence Lee, in the Structural and Computational Biology Division, made an important discovery that may help stop bacterial infection in its tracks, by revealing the first clear picture of how the tiny motors that drive bacteria operate.

The tiny motors, called flagellar, are the most energy efficient motors known, and allow bacteria to manouvre quickly towards nutrients and away from toxins, which is crucial to the spread of bacterial infection.

Scientists around the world have been trying to determine how these tiny motors worked for around 30 years, making the discovery a massive coup for Victor Chang scientists, led by Dr Stock. The study was published in the prestigious scientific journal *Nature*, in August 2010.

The finding could have significant implications for the treatment of potentially life-threatening diseases such as bacterial endocarditis that destroys heart valves, and rheumatic fever that causes inflammation of heart muscle.

Professor Bob Graham said of the research:

"This work really unifies the results of decades of international scientific study, and is a coup for Australian science. The fact we can now understand how these bacteria generate movement and change direction is of critical importance, not only for biologists around the world, but for the future design of nano-machines as well."





HIGHLIGHTS 2010

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Busy mums urged to 'take heart'

On the first anniversary of the passing of former colleague and finance manager Monica O'Loughlin in May, Australian women were urged to recognise the early warning signs for heart attack and have their risk factors checked regularly.

On average, heart disease kills almost 30 Australian women each day or around 204 women each week. Putting this in perspective, Australian women are 4 times more likely to die of heart disease than breast cancer.

Spokesperson Associate Professor Diane Fatkin, said that educating women about the warning signs of heart attack and getting regular blood pressure and cholesterol tests, is just as important as getting a regular mammogram or pap smear, particularly if you have a family history of heart disease.

"We need to change the perception that only old, overweight men die of heart attacks. The reality is, just as many women die of heart disease, and they are often tragically taken at the prime of their life, leaving behind husbands, children and families."

In 2011, the Monica O'Loughlin Women and Heart Disease Women's Lunch will be inaugurated.

 2010 VCCRI Journalism Award Winner Mark Gibson (right) with his subject, Perth radio announcer Ian Blackley, who suffered a heart attack on air.
A/Professor Diane Fatkin & team

03 Monique Ohanian (left)

Victor Chang Awards for Excellence in Cardiovascular Journalism

These awards are the first in Australia to reward excellence in reporting and raising awareness about heart disease. The inaugural awards were presented in 2010 at the Victor Chang Annual Ball and despite being the first year, a large number of entries were received. The Regional Media Award was presented to 85 year old Fred Witsenhuysen for his article published in Queensland's Sunshine Coast Daily, "Facing up to heart disease". The Metropolitan Media Award was presented to 7 Perth Today Tonight's Mark Gibson for his story on MIX FM announcer lan Blackley's heart attack on air. An honourable mention went to Fairfax Journalist Ms Janet Hawley for her article "Could it Happen to You?" which appeared in the Good Weekend.







PUBLICATIONS 2010

•••

Beilharz TH, Humphreys DT, Preiss T. miRNA effects on mRNA closed-loop formation during translation initiation. Prog Mol Subcell Biol. 2010; 50:99-112.

Börngen K, Battle AR, Möker N, Morbach S, Marin K, **Martinac B,** Krämer R. The properties and contribution of the Corynebacterium glutamicum MscS variant to fine-tuning of osmotic adaptation. Biochim Biophys Acta. 2010; 1798:2141-9.

Butler TL, Esposito G, Blue GM, Cole AD, Costa MW, Waddell LB, Walizada G, Sholler GF, Kirk EP, **Harvey RP**, Winlaw DS. GATA4 mutations in 357 unrelated patients with congenital heart malformation. Genet Test Mol Biomarkers. 2010;14:797-802.

Chandar S, Yeo LS, Leimena C, Tan JC, Xiao XH, Nikolova-Krstevski V, Yasuoka Y, Gardiner-Garden M, Wu J, Kesteven S, Karlsdotter L, Natarajan S, Carlton A, Rainer S, Feneley MP, Fatkin D. Effects of mechanical stress and carvedilol in lamin A/C-deficient dilated cardiomyopathy. Circ Res. 2010; 1063:573-582.

Chih S, Macdonald PS, Feneley MP, Law M, Graham RM,

McCrohon JA. Reproducibility of adenosine stress cardiovascular magnetic resonance in multi-vessel symptomatic coronary artery disease. J Cardiovasc Magn Reson. 2010; 12:42.

Chiu J, Tactacan CM, Tan SX, Lin RC, **Wouters MA**, Dawes IW. Cell cycle sensing of oxidative stress in Saccharmoyces cerevisiae by oxidation of a specific cysteine residue in the transcription factor Swi6p. J Biol Chem.2010; 286:5204-5214 Clarke OB, Caputo AT, **Hill AP**, **Vandenberg JI**, Smith BJ, Gulbis JM. Domain reorientation and rotation of an intracellular assembly regulate conduction in Kir potassium channels. Cell 2010; 141:1018-29.

Combes AN, Spiller CM, Harley VR, Sinclair AH, **Dunwoodie SL**, Wilhelm D, Koopman P. Gonadal defects in Cited2-mutant mice indicate a role for SF1 in both testis and ovary differentiation. Int J Dev Biol. 2010; 54:683-689.

Corry B, Hurst AC, Pal P, Nomura T, Rigby P, **Martinac B**. An improved open-channel structure of MscL determined from FRET confocal microscopy and simulation. J Gen Physiol. 2010; 136:483-94.

Corte TJ, Wells AU, Gatzoulis MA, Cramer D, Ward S, **Macdonald PS**, Dimopoulos K, Wort SJ. Noninvasive assessment of pulmonary blood flow using an inert gas rebreathing device in fibrotic lung disease. Thorax. 2010; 65:341-345.

Cropley JE, Suter CM, Beckman KB, Martin DI. CpG methylation of a silent controlling element in the murine Avy allele is incomplete and uresponsive to methyl donor supplementation. PLoS One. 2010; 5:e9055.

Davidson PM, **Macdonald PS**, Newtown PJ, Currow DC. End stage heart failure patients – palliative care in general practice. Aust Fam Physician. 2010, 39:916-920.

Diehl F, Brown MA, van Amerongen MJ, Novoyatleva T, Wietelmann A, Harriss J, Ferrazzi F, Böttger T, **Harvey RP**, Tucker PW, Engel FB. Cardiac deletion of smyd2 is dispensable for mouse heart development. PLoS One. 2010: 5:e9748. Du H, Davidson PM, Everett B, Salamonson Y, Zecchin R, Rolley JX, Newton PJ, **Macdonald PS**. Assessment of a self-administered adapted 6-minute walk test. J Cardiopulm Rehabil Prev. 2010; 30:116-120.

Granados-Riveron JT, Ghosh TK, Pope M, Bu'Lock F, Thornborough C, Eason J, Kirk EP, **Fatkin D**, **Feneley MP, Harvey RP**, Armour JA, David Brook J. Alpha-cardiac myosin heavy chain (MYH6) mutations affecting myofibril formation are associated with congenital heart defects. Hum Mol Genet. 2010;19(20):4007-16.

Gucev ZS, Tasic V, Pop-Jordanova N, **Sparrow DB, Dunwoodie SL**, Ellard S, Young E, Turnpenny PD. Autosomal Dominant Spondylocostal Dysostosis in Three Generations of a Macedonian Family: Negative Mutation Analysis of DLL3, MESP2, HES7, and LFNG. Am J Med Genet 2010; Part A 152A:1378–1382.

Hayward CS, Peters WS, Merry AF, Ruygrok PN, Jansz P, O'Driscoll G, Larbalestier RI, Smith JA, Ho B, Legget ME, Milsom FP. Chronic extra-aortic balloon counterpulsation: First-in-human pilot study in end-stage heart failure. J Heart Lung Transplant. 2010; 29:1427-32.

Hentze MW, **Preiss T.** The REM phase of gene regulation. Trends Biochem Sci. 2010; 35:423-6.

Hildenbrand ZL, Molugu SK, **Stock D**, Bernal RA. The C-H Peripheral Stalk Base: A Novel Component in V1-ATPase Assembly. PLoS ONE 2010; 5: e12588.

PUBLICATIONS 2010

...

Jabbour A, Macdonald PS,

Keogh AM, Kotlyar E, Mellemkjaer S, Coleman CF, Elsik M, Krum H, Hayward CS. Differences between beta-blockers in patients with chronic heart failure and chronic obstructive pulmonary disease: a randomized crossover trial. J Am Coll Cardiol. 2010; 55:1780-1787.

Kung C, **Martinac B**, Sukharev S. Mechanosensitive channels in microbes. Annu Rev Microbiol. 2010; 64:313-29.

Lai D, Liu X, Forrai A, Wolstein O, Michalicek J, Ahmed I, Garratt AN, Birchmeier C, Zhou M, Hartley L, Robb L, **Feneley MP, Fatkin D, Harvey RP**. Neuregulin 1 sustains the gene regulatory network in both trabecular and nontrabecular myocardium. Circ Res. 2010; 107:715-27.

Larance M, Rowland AF, Hoehn K, **Humphreys DT, Preiss T,** Guilhaus M, James DE. Global phosphoproteomics identifies a major role for akt and 14-3-3 in regulating Edc3. Mol Cell Proteomics. 2010; 9:682-694.

Lee LK, Stewart AG, Donohoe M, Bernal RA, **Stock D**. The structure of the peripheral stalk of Thermus thermophilus H+-ATPase/synthase. Nat Struct Mol Biol. 2010 3:373-8.

Lee, LK, Ginsburg M, Crovace C, Donohoe M, Stock D. The structure of the torque ring of the flagellar motor and the molecular basis for rotational switching. Nature 2010; 466:996-1000. McConoughey SJ, Basso M, Niatsetskaya ZV, Sleiman SF, Smirnova NA, Langley BC, Mahishi L, Cooper AJ, Antonyak MA, Cerione RA, Li B, Starkov A, Chaturvedi RK, Beal MF, Coppola G, Geschwind DH, Ryu H, Xia L, **Iismaa SE**, Pallos J, Pasternack R, Hils M, Fan J, Raymond LA, Marsh JL, Thompson LM, Ratan RB. Inhibition of transglutaminase 2 mitigates transcriptional dyregulation in models of Huntington disease. EMBO Mol Med. 2010: 2:349-70.

Medioni C, Bertrand N, Mesbah K, Hudry B, Dupays L, **Wolstein O,** Washkowitz AJ, Papaioannou VE, Mohun TJ, **Harvey RP**, Zaffran S. Expression of Slit and Robo genes in the developing mouse heart. Dev Dyn. 2010; 239:3303-11.

O'Rourke MF, Safar ME, Dzau V. The Cardiovascular Continuum extended: Aging effects on the aorta and microvasculature. Vasc Med. 2010; 15:461-8.

O'Tuathaigh CM, Harte M, O'Leary C, O'Sullivan GJ, Blau C, Lai D, **Harvey RP**, Tighe O, Fagan AJ, Kerskens C, Reynolds GP, Waddington JL. Schizophreniarelated endophenotypes in heterozygous neuregulin-1 'knockout' mice. Eur J Neurosci. 2010: 31:349-58.

Posch MG, Gramlich M, Sunde M, Schmitt K, Richter S, Perrot A, Panek AN, AI Khatib I, Nemer G, Megarbane A, Dietz R, Stiller B, Berger F, Harvey RP, Ozcelik C. A gain-of-function TBX20 mutation causes congenital atrial septal defects, patent foramen ovale and cardiac valve defects. J Med Genet. 2010; 47:2350-235.

Romantsov T, Battle AR, Hendel JL, **Martinac B,** Wood JM. Protein localization in Escherichia coli cells: comparison of cytoplasmic membrane proteins ProP, LacY, ProW, AqpZ, MscS, and MscL. J Bacteriol. 2010; 192:912-24. Schonrock N, Ke YD, **Humphreys** DT, Staufenbiel M, Ittner LM, **Preiss T**, Götz J. Neuronal microRNA deregulation in response to Alzheimer's disease amyloidbeta. PLoS One. 2010; 11;5:e11070.

Sparrow DB, Sillence D, Wouters MA, Turnpenny PD, Dunwoodie SL. Two novel missense mutations in HAIRY-AND-ENHANCER-OF-SPLIT-7 in a family with spondylocostal dysostosis. Eur J Hum Genet. 2010; 18:674-679.

Squires JE, Preiss T. Function and detection of 5-methylcytosine in RNA. *Epigenomics*, 2010; 2:709-715. [Special report]

Suter CM, Martin DI.

Paramutation: the tip of an epigenetic iceberg? Trends Genet. 2010; 26:9-14.

Swarbrick A, Woods SL, Shaw A, Balakrishnan A, Phua Y, Nguyen A, Chanthery Y, Lim L, Ashton LJ, Judson RL, Huskey N, Blelloch R, Haber M, Norris MD, Lengyel P, Hackett CS, **Preiss T**, Chetcuti A, Sullivan CS, Marcusson EG, Weiss W, L'etoile N, Goga A. miR-380-5p represses p53 to control cellular survival and is associated with poor outcome in MYCN-amplified neuroblastoma. Nat Med. 2010; 16:1134-1140.

Tee AE, Marshall GM, Liu PY, Xu N, Haber M, Norris MD, **lismaa SE**, Liu T. Opposing effects of two tissue transglutaminase protein isoforms in neuroblastoma cell differentiation. J Biol Chem. 2010; 285:3561-7.

Vlachopoulos C, Aznaouridis K, **O'Rourke MF**, Safar ME, Baou K, Stefanadis C. Prediction of cardiovascular events and all-cause mortality with central haemodynamics: a systematic review and meta-analysis. Eur Heart J. 2010; 31:1865-71.

Weber T, O'Rourke MF,

Lassnig E, Porodko M, Ammer M, Rammer M, Eber B. Pulse waveform characteristics predict cardiovascular events and mortality in patients undergoing coronary angiography. J Hypertens. 2010; 4:797-805.

Williams H, Pease RJ, Newell LM, Cordell PA, **Graham RM**, Kearney MT, Jackson CL, Grant PJ. Effect of transglutaminase 2 (TG2) deficiency on atherosclerotic plaque stability in the apolipoprotein E deficient mouse. Atherosclerosis 2010; 210:94-9.

Yuasa S, Onizuka T, Shimoji K, Ohno Y, Kageyama T, Yoon SH, Egashira T, Seki T, Hashimoto H, Nishiyama T, Kaneda R, Murata M, Hattori F, Makino S, Sano M, Ogawa S, Prall OW, **Harvey RP**, Fukuda K. Zac1 is an essential transcription factor for cardiac morphogenesis. Circ Res. 2010; 106:1083-91.

Zhang S, Rattanatray L, Maclaughlin SM, **Cropley JE, Suter CM**,

Molloy L, Kleemann D, Walker SK, Muhlhausler BS, Morrison JL, McMillen IC. Periconceptional undernutrition in normal and overweight ewes leads to increased adrenal growth and epigenetic changes in adrenal IGF2/H19 gene in offspring. FASEB J. 2010; 24:2772-82.

Books & Book Chapters

Beilharz TH, Humphreys DT, Preiss T. miRNA Effects on mRNA Closed-Loop Formation During Translation Initiation. In: Rhoads RE, ed. miRNA regulation of the translational machinery. 2009/10/21 ed. Berlin, Heidelberg, New York, London, Paris, Tokyo: Springer-Verlag 2010:99-112.

Harvey RP and Rosenthal N (Eds). Heart Development and Regeneration. Academic Press 2010, San Diego, CA. [ISBN 978-0-12-3813329].

Martinac B, Rohde PR, Battle AR,

Petrov E, Pal P, Foo AFW, Vasquez V, Huynh T. and Kloda A, Studying mechanosensitive ion channels using liposomes. Methods Mol. Biol. 2010; 606:31-53.

Commentaries & Editorials

Macdonald PS. Heart failure with preserved ejection fraction - coming to terms with an oxymoron. Med J Aust. 2010; 192:4-5.

Vandenberg JI. Oxidative stress fine-tunes the dance of hERG K+ channels. J Physiol. 2010; 588:2975.

Reviews

Fatkin D, Otway R, Richmond Z. Genetics of dilated cardiomyopathy. Heart Fail Clin. 2010; 6:129-140.

Harvey RP and Rosenthal N (Eds). Heart Development and Regeneration. Academic Press 2010, San Diego, CA. [ISBN 978-0-12-3813329].

O'Rourke MF, Adji A. Clinical use of applanation tonometry: hope remains in Pandora's Box. J Hypertens. 2010; 28:229-233.

Wouters MA, Fan SW, Haworth

NL. Disulfides as redox switches: from molecular mechanisms to functional significance. Antioxid Redox Signal. 2010; 12:53-91.

Letters to the Editor

Hirata K, Momomura S, **O'Rourke MF**. Carotid flow augmentation as a risk for small vessel disease of the brain. Am J Hypertens. 2010; 23:932. [author reply 933].

Namasivayam M, Adji A, **O'Rourke MF.** Aortic augmentation index and aging: mathematical resolution of a physiological dilemma. Hypertension. 2010; 56:e9-e10. **O'Rourke MF,** Adji A. Central pressure and pulse wave amplification in the upper limb. Hypertension. 2010; 55:e1-2. [author reply e3].

O'Rourke MF. The CHARM of a Paradox. J Am Coll Cardiol. 2010; 55:257.

O'Rourke MF, Nichols WW. Microvascular angina or "vis a tergo". J Am Coll Cardiol. 2010; 55:611.

O'Rourke MF, Weber T, Adji A. Aortic stiffness in hypertrophic cardiomyopathy. J Am Coll Cardiol. 2010; 55:504-505.

O'Rourke MF, Avolio A, Safar M, Nichols W. Changes in the central arterial pressure pulse with aging. J Am Coll Cardiol. 2010; 55:2183. [author reply 2184].

Otton J, Hayward C, Macdonald PS. Gene-expression profiling after cardiac transplantation. N Engl J Med 2010; 363:1374.

Towers KA, Bardsley KA, **Macdonald PS.** Nebulised frusemide for the symptomatic treatment of end-stage congestive heart failure. Med J Aust. 2010; 193:555.

O'Rourke MF, Safar ME, Roman MJ. Letter by O'Rourke et Al regarding article, "Arterial stiffness and cardiovascular events: the framingham heart study". Circulation. 2010; 122:e512. [author reply 515]

AWARDS & ACHIEVEMENTS 2010

...

Leah Cannon

Awarded a Travel grant to attend the ISHR XXth World Congress, Kyoto, Japan.

Professor Bob Graham

Elected as a foreign member of the Royal Danish Academy of Sciences and Letters in their Natural Sciences Class.

David Ma

Awarded the David Walsh Memorial Scholarship, Faculty of Medicine, UNSW.

Natalie Stunnell

Will attend the 2010 AALAS National meeting.

Professor Richard Harvev

Awarded the Lemberg Medal and Oration. Australian Society for Biochemistry and Molecular Biology.

Dr Romaric Bouveret

Awarded the Australian and New Zealand Society of Cell and Developmental Biology Postdoctoral Award.

Dr James Chong

3 minute thesis

Research Student

Dr Lawrence Lee

and Mater Health

a post-doc.

Leah Cannon

Awarded the St

Health Research

Presentation by a

Alastair Stewart

Vincent's and Mater

Awarded the St

Health Research

Symposium Best

Dr Guanglan Guo

Research has been

presentation at the

Society of Human

Genetics.

accepted for a poster

prestigious American

student poster

presentation.

student.

Vincent's and Mater

Symposium Best Oral

Research Symposium

Best Oral Presentation by

competition

Li Sze Yeo

UNSW.

Inaugural winner of the Awarded a full travel Fulbright New South grant by the Journal Wales Scholarship and of Cell Science at the Representing the UNSW University of Oxford. Faculty of Medicine

Li Sze Yeo

Received a Postgraduate Research Student Poster Prize at the UNSW Awarded a Postgraduate Faculty of Medicine Research Day. Support Travel Grant,

Dr Lawrence Lee

David Wang

Awarded a 2010 Dean's List Award for his BSc Awarded the St Vincent's (Med) Hons work.

David Ma

Awarded the best ILP/ Honours Student Grand Rounds Presentation. St Vincent's Clinical School, UNSW Faculty of Medicine.

Dr Lawrence Lee

Awarded the NARE (National Association of Research) Young Investigator Award.

Professor Jamie Vandenberg

Promoted to Conjoint Professor, UNSW Faculty of Medicine. Elected President, Australian Society for Biophysics.

David Szekely

Awarded the Australian Society for Biophysics Young Biophysicist award.

Juliane Heide

Awarded the Student's Poster Award Runner-up prize for the Australian Physiological Society.

Jennifer Cropley

Awarded the Outstanding Postdoctoral Presentation Award for her talk at the inaugural NSW Epigenetics Alliance meeting

Paul Korner Seminar Series

Alistair Stewart Winner. Liz Yeo and Chu-Kong Liew, Joint Runners Up and the Paul and Staff Choice Winner David Szekely.

Degrees 2010

Sharon Chih

Awarded a PhD, UNSW

Andrew Jabbour

Awarded a PhD, UNSW

Mark Perrin

Awarded a PhD, UNSW

SYMPOSIA AND LECTURE SERIES

...

International Symposium

To stay at the forefront of

cutting-edge research, the VCCRI hosts an annual international symposium, incorporating the Princesses' Lecture - named after the late Diana, Princess of Wales and Crown Princess Mary of Denmark.

In 2010, we were extremely fortunate to have Professor Matthias Hentze, Associate Director of the European Molecular Biology Laboratory (EMBL) Germany, and a recipient of Germany's highest research award, as our Princesses' Lecturer. along with 10 other acclaimed keynote speakers from all corners of the globe and around Australia.





Barabara Ell Seminar Series 2010

This seminar series is named after Mrs Barbara Ell, an avid supporter of the VCCRI, a Life Governor and a hard working member of both the Board and Appeals Committee.

Each month the VCCRI invites a renowned Australian scientist to present a lecture as part of

Prof Marilyn Renfree

Laureate Professor Director of ARC Centre of Excellence for Kangaroo Genomics

Ian Potter Chair of Zoology The University of Melbourne "Life in the Pouch: Womb with a view"

Prof Sam Berkovic

Director Epilepsy Research Centre Molecular genetics of epilepsy

"Epilepsy, ion channels and the heart-from family studies to basic mechanisms"

Prof Lea Delbridge

Head of Laboratory University of **Melbourne Cardiac Phenomics**

"Linking the developmental origins of genetic cardiac hypertrophy with perinatal autphagy excess"

the Barbara Ell Seminar Series.



Prof Roland Stocker

Professor of Biochemistry in Vascular Medicine

University of Sydney Pathology, School of Medical Sciences

"How heme oxygenase-1 protects against atherosclerosis and related disease"

Prof Jane McCrohon

Cardiology St Vincent's Hospital

"Assessing the myocardium using Cardiac Magnetic Resonance techniques-current and future directions"

Prof Frances Separovic

Professor University of Melbourne

NMR and Structural Studies of Membrane Proteins

"Resolving antimicrobial and amyloid peptides in model membranes"

Prof Merlin Crosslev

Dean of the Faculty of Science University of New South Wales "The Klf Family of Mammalian

Transcription Factors"

A/Prof Sam El-Osta

Epigenetics in Human Health and Disease Laboratory

The Alfred Medical Research and Education Precinct (AMREP)

"The Legacy of Hyperglycemic Memory Associated with Epigenetic Changes"

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SYMPOSIA AND LECTURE SERIES

...

Paul Korner Seminar Series 2010

The Paul Korner Seminar Series is presented weekly, giving young scientists within the VCCRI the opportunity to present some of the groundbreaking work they are carrying out within their individual research programs.

Jennifer Clancy

'How microRNAs repress gene expression'

Jane Yu

'Simple or complex mechanisms involved in induction of hypertrophy in response to pressure overload'

Evgeny Petrov

'Mechanosensitive ion channels as a biophysical tool'

Amita Limaye

'Role of SATB1L a 'chromatin organizer' in T cell differentiation and development'

Ming Li

'Mast cell chymase limits the cardiac efficacy of Ang 1-converting enzyme inhibitor therapy'

Martin Oti

Evaluating disease gene candidacy using shared protein domains

Duncan Sparrow

'Scoliotic spines and holey hearts: Why acute gestational hypoxia is bad news

Alastair Stewart 'Thermus thermophilus

H+-ATPase/synthase'

Alex James

'Defining the role of Notch4 in Angiogenesis'

Simon Keam

'Piwi and piRNAs" A role in somatic gene silencing?'

Dhakshinari Hulugalle

'Computational investigation of the genotypes: how it adds association between Zinc sites and redox active disulfides in proteins'

loci affecting patent

'Epigentic programming

foramen ovale'

Mardi Moradi 'Building Transcriptional

Regulatory Networks for 'Using advances Heart Development' intercross line for high Mark Aplin resolution mapping of quantitative trait

'The role of

Stefan Mann

Tram Doan

'In silico modelina

of cardiac disease

up to clinical insight

Transolutaminase 2 (TG2) in tissue injury and remodeling'

Peter Riek

GPCRs?'

Chris Maloney

'Illuminating the

Arie Jacoby

Jason Liu

'Fish and SNPs:

in atrial fibrillation'

for candidate disease

aene prediction

channel activators

in response to maternal 'Is rhodopsin a suitable nutrition' template for modeling Leah Cannon

Cheryl Li

'Mechanisms of Left Ventricular Hypertrophy and Regression' Sara Ballouz

Complex Diseases' Peter Tan mechanism of hERG

'Epigenetic Origins of

'Computing, complexity and commonality: a holistic approach to understanding the molecular mechanisms of complex diseases'

Transgenic analysis of Liz Yeo non-coding risk variants

'Evaluation of mechanisms of contractile dysfunction in Lamin A/C-deficient 'Gentrepid: A Webserver mice'

Gavin Chapman

'Ligand-induced trafficking of the Notch1 receptor'

Jessica Chaston

'Structural investigation of the TF55 Chaperonin from Sulfolobus solfataraicus'

Inken Martin

'Do fish fibrillate? Modelling human cardiac arrhythmias in zebrafish'

Stuart Archer

'Investigating the mechanisms of eukarvotic translation initiation'.

Chu-Kong Liew

'Towards the structure of a serpentine receptor: A game of snakes and ladders'

Orit Wolstein

'Dosage of sensitivity of T-box transcription factors and congenital heart defects'

Andy Ng

'Structure and function of hERG N-terminal tail and

David Szekely

'The Virtual Heart: Efficient and Interactive Simulations of Cardiac Electrical Eunction'

Naisana Asli

'Cell Cycle Regulatory Networks in Adult Cardiac Stem Cells

Carly Hynes

'Investigating the complexities of MicroRNA target interactions in Cardiac Biology

FINANCIALS

...

Income	2010 (\$)	2009 (\$)
Grants	11,842,463	10,592,617
Fundraising	2,268,958	1,952,111
Bequests	1,243,885	2,406,638
Other	1,929,797	2,268,181
Total Income	17,285,103	17,219,547

Expenses

Fundraising Events Expenses	638,907*	425,289
Salaries and related expenses	10,954,504	9,788,699
Research Consumables	1,989,251	1,946,559
Repairs and Maintenance	304,348	60,511
Other	2,189,478	3,049,821
Total Expenses	16,076,488	15,270,879
Surplus/(Deficit) before Depreciation	1,208,615	1,948,668
Depreciation	1,570,528	1,331,146
Net Operating Surplus/(Deficit)	(361,913)	617,522
Non Operating Income/Expenses		
Change in market value of investments	(72,573)	11.430
Depreciation on building	519,256	513,820
Surplus/(Deficit) after non-operating items	(808.596)	92.272
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*Includes the cost of 2 cars purchased on behalf of the Freshest Group which they used to fundraise for the VCCRI at their Annual Ball

PAS domain'

VCCRI HEALTH CHECK BOOTH

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In 2010 the VCCRI introduced a Health Check Booth–its mission:

To encourage employers to invest in the Heart Health of their employees and enhance their well-being by providing a service to increase awareness of the modifiable risk factors for Cardiovascular Disease.



- 01
- 01 The Victor Chang Health Check Booth in action
- 02 The Victor Chang Health Check Booth & car, generously donated by Kia, & supported by Sydney Markets

Purpose

The nature of occupational illness and workplace legal liability is changing. Health conditions, stress, fatigue and the increased incidence of heart disease present new challenges to work health practices.

The Victor Chang Health Check Booth has been created to:

- Increase the understanding of cardiovascular disease risk factors
- Promote healthy lifestyles and reduce obesity and other risk factors
- Enhance employee well-being and reduce work related fatigue and stress
- Invest in the heart health of employees
- Raise awareness of the VCCRI and its research



The Health Check Booth Service, available for hire during office hours from Monday to Friday, provides:

- confidential assessment testing
- information of immediate risk factors
- blood pressure measurements
- blood sugar measurements
- cholesterol measurements

Tests are conducted by a NSW Registered nurse in a private, branded and fully equipped booth.

Tests take 10 minutes and results are provided directly to the participant.

Cardiovascular Disease (CVD) Facts

The health and economic burden of Cardiovascular Disease exceeds that of any other disease-more than 3.7 million Australians have a long term cardiovascular condition.

- Heart disease is an Australia wide issue; it is our number 1 killer, responsible for 1 in 3 deaths or more than 48,000 people every year.
- CVD does not discriminate, it strikes young, old, male, female and directly affects 2 in 3 families.
- Women are 4 times more likely to die of CVD than cancer. It is Australia's greatest yet least highlighted health concern.

For further information about the Health Check Booth, please contact the Fund Development Office on (02) 9295 8600.

Cardiovascular Risk Factors

AUSTRALIAN ADULTS ...

HAVE ONE OR MORE RISK FACTORS HAVE HIGH BLOOD CHOLESTEROL



HAVE HIGH BLOOD PRESSURE

HAVE DIABETES



ARE OVERWEIGHT

ARE NOT SUFFICIENTLY ACTIVE

60% 54%

SMOKING DAILY

DRINK AT HARMFUL LEVELS



RESEARCH DIVISIONS

...



DEVELOPMENTAL Biology

Professor Richard Harvey Division Head

A/Professor Sally Dunwoodie Lab Head



Professor Robert M. Graham AO Division Head

Professor Boris Martinac Lab Head

Professor Jamie Vandenberg Lab Head

A/Professor Diane Fatkin Lab Head

CARDIAC PHYSIOLOGY & TRANSPLANTATION

Professor Michael Feneley Division Head

Professor Anne Keogh Lab Head

Professor Peter Macdonald Lab Head

A/Professor David Muller Lab Head

Professor Michael O'Rourke Lab Head



• STRUCTURAL & Computational biology

Dr. Daniela Stock Acting Division Head

Dr. Merridee Wouters Group Leader



A/Professor Thomas Preiss Acting Division Head

Dr Catherine Suter Lab Head



SCHOOL SCIENCE AWARDS

...

The Victor Chang Cardiac Research Institute School Science Award has been developed to foster and encourage an interest in science among secondary school students with a view to promoting science as a profession that provides a worthy and interesting career path.

Year 11 students from over 100 schools were awarded the Victor Chang School Science Award in 2010. From Cambelltown and Bankstown, Penrith, Blacktown, and new in 2010, the Illawarra and South-East regions, students were presented the award at special ceremonies throughout November.

Awardees are nominated by their teachers as demonstrating the highest achievement in scientific studies throughout the year. With a dramatic decline in the number of school students pursuing science as a tertiary education option, as well as pursuing science as a career path, the Awards were created to foster and encourage an interest in science among secondary students.

Associate Professor Sally Dunwoodie, who attended the inaugural ceremony in the Illawarra Region, said the Awards give great hope for the future of Australian scientific research. "The Victor Chang School Science Awards are about recognising our brightest young minds for their commitment, passion, and achievement in science throughout the year.

"Time and time again words such as 'motivated', 'enthusiastic' and 'dedicated' have come up to describe these students. These are all words that resonate strongly with the legacy of Dr Victor Chang himself, so it's exciting to think that our next Dr Chang could be right here amongst us."

Each recipient was presented with a framed certificate, and given the opportunity to attend a 'hands-on' work experience day in December with researchers at the VCCRI.



Time and time again words such as 'motivated', 'enthusiastic' and 'dedicated' have come up to describe these students. These are all words that resonate strongly with the legacy of Dr Victor Chang himself, so it's exciting to think that our next Dr Chang could be right here amongst us.

> 01 Mrs Ann Chang, with recipients of the 2010 Victor Chang School Science Awards, Campbeltown/Bankstown region (right)



FUNDRAISING

...

From Masterchefs getting 'Mudcrabby' at the Crabfest, to sporting glory at the Golf Day and Sportman's Lunch, to 'Pulse' the steer stealing the limelight at Sydney's Royal Easter Show - The Chang fundraisers in 2010 were not only fun, but fabulous!

A special thank you to the wonderful members of the Victor Chang Appeals Committee, led enthusiastically by Louise Di Francesco and her predecessor John McGuigan, as Chairs in 2010.

The VCCRI is incredibly fortunate to have the support and generosity of so many talented and dedicated supporters who work tirelessly to bring a calendar of fundraising events to the Institute each year.





- 01 'Pulse' the steer, with Murrumburrah High School students & Mrs Ann Chang at the Sydney Royal Easter Show
- 02 Marcus Chang & group playing at the Victor Chang Golf Day at Terrey Hills Golf Course













Boetze getting 'mudcrabby' at the Victor Chang 'Crabfest' 06 The Delltones at the Victor Chang Annual Ball

03 Pee Wee Wilson at the Victor Chang "Heart to Heart" Ball

- 07 Prime Minister Julia Gillard and partner Tim Mathieson at the Victor Chang Annual Ball
- 08 Guests at the Victor Chang 'Heart to Heart' Ball at the Sydney Convention Centre
- 09 Victor Chang Young Ambassador, Mr Mark Vincent, singing at the Victor Chang Ball





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FUNDRAISING

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Fundraising and Donations

Whether you belong to the corporate or private sector of our community the VCCRI needs your support.

If you would like to help the VCCRI win its fight against heart disease there are a number of ways in which you can help.

Attend/support VCCRI fundraisers

02

Make a donation to the VCCRI

- **13** Leave a Bequest to the VCCRI in your Will
- 14 Instead of sending flowers, ask for donations to the VCCRI
- Instead of presents at a party, be it a birthday, anniversary or some other celebration give a donation to the VCCRI in that person's name

Hold your own fundraising event

Sponsor someone in a fun run or marathon







01 Steve Quinn and the Paceline' crew, who raised over \$45,000 in 2010 for the VCCRI, exhausted but smiling on top of Lavers Hill, en route in October 2010.

02 The Westfield Team, who cycled around Lake Taupo, New Zealand, raised over \$80,000 for the VCCRI in 2010.

BEQUESTS

•••

Today, bequests are becoming a more important source of funding. However small or generous a bequest may be, you can be confident that it will assist the VCCRI in its quest to solve the mystery of heart muscle disease.

The following is a guideline as to how you can leave a legacy to the VCCRI.

What is my estate?

A first step is to list all the possessions that you own. Your property (home, car, furniture, collections, etc.) savings, pension and annuities. All of these things make up your 'Estate'.

Then add up the estimated present value of these things you own. Subtract what you owe in the way of mortgage and debts. The net amount is your Estate.

Who will benefit?

This is up to you. You need to decide to whom you wish to leave your assets – your family, and/or friends. These people are called the Beneficiaries of your Estate.

You may also wish to leave money to a charity(s), once all your family and friends are cared for. We hope that you will consider the VCCRI.

Who should prepare my Will?

Your solicitor or a trustee company. This is the best way to make sure your Will is legal, and does what you want it to do.

The best way to ensure that your Will remains valid is to have it checked by your solicitor or trustee company every few years. Any change in your personal circumstances may make a change in your Will necessary or desirable.

What is an executor?

An executor is someone you appoint in your Will to see that your wishes and instructions are carried out after your death. Many people choose a family member, a friend or a solicitor.

How can I add to or change my existing Will?

If you have a limited change to make to your Will – to add a bequest to a charity for example, you don't need to start all over again. You can do so quickly and easily by adding a codicil. A codicil is an instruction which becomes part of the Will. Your solicitor or trust officer should advise you.

What wording should a solicitor use?

If you are considering a bequest to the VCCRI, the following forms of wording, depending on the type of bequest, are as follows:

"I give to The Victor Chang Cardiac Research Institute, (ABN 61 068 363 235) 405 Liverpool Street, Darlinghurst, NSW,

The sum of \$... or

R

...% of my estate or

residue of my estate

(insert a, b or c) to be used for the purposes of research and I direct that the receipt of the Executive Director of the VCCRI shall be sufficient discharge to my Executor(s)."

For further information you can telephone The Fund Development Office on: (02) 9295 8600 or 1300 VICTOR.



DISTANCE PER DAY THAT THE BLOOD TRAVELS AROUND THE BODY



Stop.Edit. Designed and produced by Stop.Edit.

