

Researcher Profile - Professor Margreet Visser

In the middle of 2015, the Foundation was delighted to enter into a partnership with the NZ Breast Cancer Foundation, to fund Professor Margreet Visser from the University of Otago, to look at the role of Vitamin C in inhibiting breast cancer.

The Foundation is committed, in its five year Strategic Plan, to working more closely with other community funding partners to support important research such as this. Collaborations like this one, allow organisations and funders to combine their might to fund projects, which might otherwise not get off the ground.

Margreet tells us about her current project:

The use of vitamin C (ascorbate) as an option in cancer treatment is commonplace but highly controversial. For many years, proponents have claimed therapeutic benefits despite a lack of clinical evidence to support this practice. Investigations into the role of ascorbate in cancer have been hampered by a lack of a mechanism of action, which hinders credibility and study design for clinical studies. This situation has changed in recent years as new functions of ascorbate have been identified and there are now a number of plausible mechanisms by which ascorbate could influence tumour growth and patient survival.

Our previous laboratory studies, animal trials and the analysis of human cancer tissue samples all indicate that the more ascorbate there is in a tumour, the slower it will grow. We aim to investigate this phenomenon in human clinical studies, collecting tumour tissue from cancer patients before and after surgery. In these studies we will determine whether the vitamin C accumulates in the tumour tissue and whether this affects the biology of the tumour in a way that could slow the cancer growth and spread. This information is necessary to provide a proof of the mechanism of action that will allow for effective design of intervention studies. This is an unique opportunity to provide information in a possible relationship between breast cancer and patient vitamin C levels. Because of the wealth of information from the CTSC and an excellent collaboration with the Oncology Department, we will also be able to analyse patient outcomes. This information will be unique and important. If a relationship is apparent, then it may be reasonable to determine whether increasing ascorbate availability to breast cancer patients could decrease the HIF-1 response sufficiently to either affect tumour formation and growth, or overcome HIF-mediated chemo-resistance.

Margreet also heads up the CMRF Scientific Assessment Committee. This committee assesses and ranks all incoming research proposals for CMRF. The committee is made up of a cross-section of medical professionals from across the various specialities and institutions we provide funding for and as such, can provide unbiased, empirical evaluation and ensure we are getting the best outcomes for the research we fund. This is no small task with the Foundation now receiving more than fifty applications a year.



Professor Margreet Visser

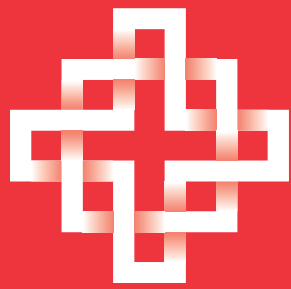
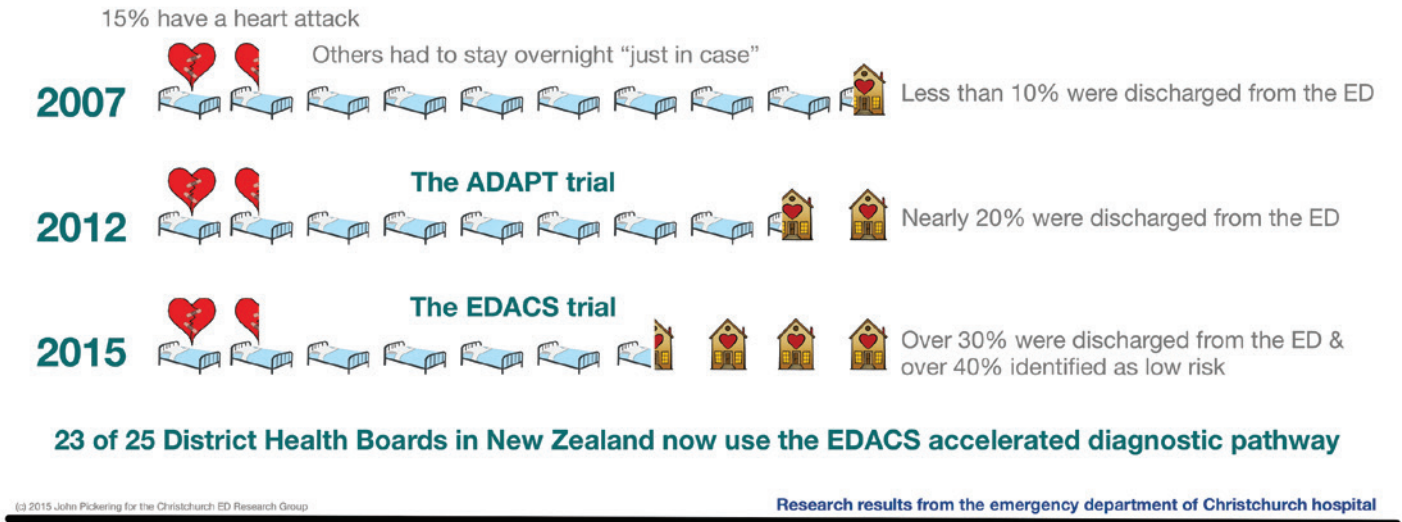
Update from Acute Care Fellow - Dr John Pickering

Science doesn't proceed at a steady pace, but by long periods of slow plodding interspersed by a few rapid sprints. This year seems to have been all about the sprints. We completed an analysis of our latest trial (EDACS) aimed at improving the assessment of chest pain in the Emergency Department. As the infographic shows, thanks to all the patients who volunteered to be part of our study, we have continued to increase the proportion of patients we can safely send home from the emergency department with the reassurance that they are not having a heart attack.

Last year the Ministry of Health said they want all the emergency departments in New Zealand to adopt an accelerated chest pain pathway along similar lines to that of Christchurch hospital. We've been involved in helping this happen throughout the country and we obtained some funding to monitor this major change of practice. My job is principally to pull all the data together and next year will involve analysing it to make sure that what each hospital puts in place works and that it is safe. It's flattering that in 23 out of 25 DHBs throughout the country that they will adopt as part of their accelerated chest pain pathway, the risk scoring system (EDACS) that was developed in Christchurch.

In the meantime, the sprint continues with the very real possibility that for some patients we may be able to rule out a heart attack within an hour of arriving at the emergency department door. A lot of my time goes into the analysis of data collected over the years in Christchurch and data exchanged with us by colleagues from all over the world to try and find the best algorithm to enable this to happen. This work is only possible because of the great support I get from CMRF. Thank you.

Patients presenting to the ED with chest pain



Canterbury Medical Research Foundation

Research Saves Lives

Research News February 2016

Wine and Art Auction

What a wonderful night on October 16th! With a lovely setting at the Rydges Latimer Christchurch, great food and the wine flowing, the scene was set for a great evening's bidding on the fine art and collectable wines on offer, alongside a dazzling array of general items, including an Eric Clapton signed guitar, US Masters Flag signed by the greats, jewellery, homewares and more.

The auctioneers soon had the room buzzing with bids and almost every table came away with something from the catalogue. We had wonderful music from the very talented Nick Lee and chamber music on arrival from the Aoraki String Quartet, which set a lovely tone as the guests sipped wine and looked over the auction items.

Prof Frank Frizelle spoke about his research into colorectal cancers and much of what he said was pretty sobering, giving us all something to think about in acting on any strange symptoms we have 'down there'.

\$100,000 was raised on the night, which will be a great injection of support for this very important research.

Our sincere thanks go to these generous people and businesses who helped make the night such a success:

- All our artists who donated work
- The many wineries that give us the best of their vintage
- Rydges Latimer Christchurch
- Charles Wiffen Wines
- Pegasus Bay Winery
- Mark McGoldrick & Ned Allison of Harcourts
- Matthew and Rachel Rose
- The Right Honorable John Key
- Multi Media
- Karen Purchas Floral Design and her team of florist volunteers
- Ivan Bulling Furniture & Interior Designers
- Kate Steele
- The many businesses that gave to the silent auction



Professor Frank Frizelle

A special thanks to the Wine Auction organising committee:

Caroline Wagteveld McKenzie • Janette Borthwick
Melinda Brew • Sue Stenhouse • Kimberley Ford
Ron Wright • Shona Ross • Julie Hutton

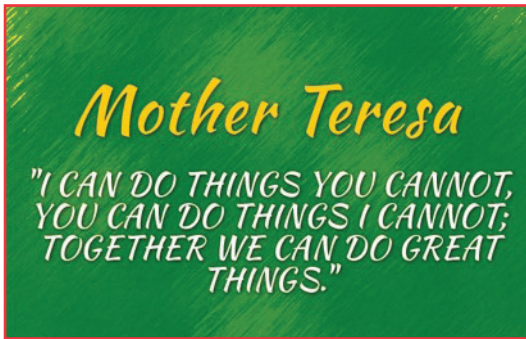
We will look forward to seeing everyone in 2016 on Saturday, October 29th. Anyone wishing to pre-book their table (remember we sold out this year!) should email caroline@cmrf.org.nz.



Joining Forces with the AMRF

In November, our team was invited to spend the day with the Auckland Medical Research Foundation.

CEO, Kim McWilliams and her team operate on an almost identical basis to us here at CMRF and it was a fascinating day where we exchanged experience and ideas for fundraising, managing grants and looking at where we can work together to support exciting research. Going forward, the AMRF have kindly offered to share their very sophisticated online grants management software with us, which we are keen to adopt and we will be looking at ways we can promote health research, nationally and use our joint success to attract new donors and sponsors to our cause. Thank you so much AMRF for a very fruitful visit.



YES, I WISH TO SUPPORT THE CANTERBURY MEDICAL RESEARCH FOUNDATION

I/we would like to donate: ☐ \$100 ☐ \$50 ☐ \$30 ☐ Other:

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Please return to the Canterbury Medical Research Foundation, Level 1, 230 Antigua Street, Christchurch 8011



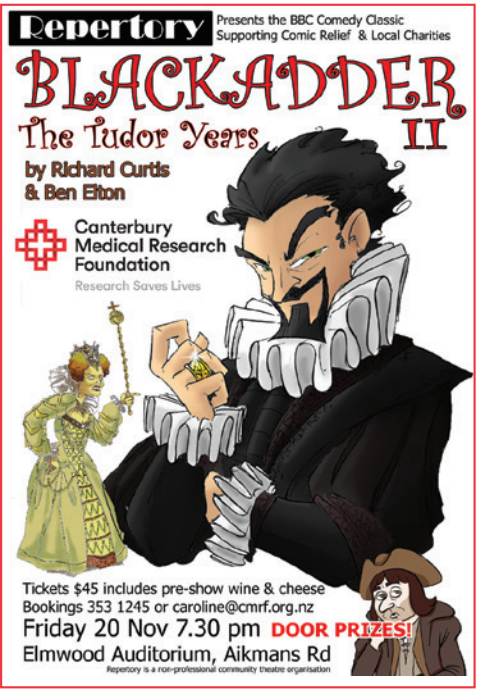
Canterbury Medical Research Foundation

Blackadder - A Jolly Good Show!

Our sincere thanks go to the good folk at the Christchurch Repertory Society who dedicated the proceeds from their opening night of “Blackadder” to our cause. We also want to thank everyone who came along to raise funds for the Foundation.

The Society was hard hit by the earthquakes, losing their beloved theatre on Kilmore St which will take millions to rebuild. This makes this act of generosity all the more special. They are getting back on their feet with new productions planned for the next year including their next production “A Street Car Named Desire”

A great night was had by all who enjoyed this hilarious play and also the lovely wine supplied by CMRF and cheese and nibbles sponsored by New World South City,



Researcher Profile - Dr Anna Pilbrow

Dr Anna Pilbrow, a Heart Foundation Senior Research Fellow, is one of the talented researchers who was successful in gaining a CMRF Major Project grant in 2015. Her work in heart disease is very valuable to the community as New Zealand still has high rates of coronary disease. Anna tells us a bit about her research.

Coronary artery disease (CAD) is a very common form of heart disease and is a leading cause of death in Canterbury. CAD develops when cholesterol-containing deposits (plaque) accumulate in the coronary arteries. As plaques build up, they decrease the flow of blood to the heart muscle, which can cause chest pain or a heart attack. The rate at which plaques build up varies between people making it difficult to identify those who may be at risk of a heart attack in the near future.

Our research aims to identify new blood biomarkers for the presence of coronary artery disease, to allow screening and early detection of those at risk. Specifically, we will use a high-throughput genomics technology called next generation sequencing to measure levels of a newly-discovered class of molecules called long noncoding RNAs in 12 patients with stable coronary artery disease and 12 healthy controls from Canterbury.

This in-depth screening study will help us identify candidate biomarkers to test in our existing, large cohorts of healthy volunteers and CAD patients in the future. Ultimately, our research may contribute to the development of new blood tests that will help predict those at impending risk of a heart attack.

As always, CMRF is very proud to support projects like Anna’s, which have the potential to provide better health outcomes for all New Zealanders.



(from left to right): Dr Anna Pilbrow, Prof Vicky Cameron, Prof Richard Troughton

Meet the Board

CMRF is governed by an exceptional group of skilled business and academic leaders. The Board is responsible for setting the strategic direction of the Foundation. In this issue we help you to get to know them a little better.

Patron - Sir Robert Stewart KNZM, ONZM

Sir Robert is the Founding Director of Christchurch-based, SKOPE Industries Ltd. Skope manufacture world-leading low energy commercial refrigerators. Sir Robert became President of CMRF 12 years ago and is most proud of the creation of the Van Der Veer Parkinson’s Research Centre in Christchurch which now the NZ Brain Research Institute. Sir Robert is married to Lady Barbara Stewart Q.S.O. who is very active in women’s affairs and was a local body politician for many years. They have three adult children Guy, Marcus and Alexandra.



Chairman - Mike Stenhouse

Mike’s extensive HR experience encompasses Executive Search and Selection, Board Appointments and Board Effectiveness Reviews, Remuneration Consulting and Organisational Development projects. Mike is heavily involved in governance in the Arts as well as for the Foundation and is a Fellow of the New Zealand Institute of Management and Accredited Director in the Institute of Directors, NZ. He is married to Sue, who is an active member of the Wine and Art Auction committee and has three children, Emma, Jack and Laura.



Treasurer – Simon Carey

Simon commenced his career with Grant Thornton in 2004 as a senior manager in the Business Advisory division. He progressed to Principal in 2006 and became a Partner in 2007. Simon specialises in capital raising, valuations, turnaround, re-structuring and consulting work. He advises on strategic planning for profit-oriented and charitable organisations. Simon is married to Jill and they have two children, Charlotte and Tom.



Bert Govan

Bert has been self employed since age 21yrs and is a director and shareholder of several companies primarily in the Finance and Property sectors. Bert also enjoys a number of non-executive Director and Chairman roles with companies in the Automotive, Timber & Forestry, Real Estate and Finance sectors, in both NZ and Australia. Bert is married to Annie, and they have three children Thomas, Sophia and Lucy.



Nichola Hiatt

Nichola is an experienced legal and compliance professional. Nichola is the Compliance Manager at Murray & Co, a merchant bank that provides financial and investment services. Previously, Nichola practiced as a senior corporate commercial lawyer in Christchurch. Nichola holds a Bachelor of Laws and Bachelor of Arts (English and Political Studies) from the University of Otago. Nichola is a member of the New Zealand Law Society and is admitted as a Solicitor of the High Court of New Zealand. Nichola is married to David and has two young children Henry and Louis.



Geoff Cranko

Geoff has been developing and managing companies for 30 years. As Strategy’s Group Managing Partner, he offers straight talking business experience to help clients align their business strategy, with compelling and effective communications. Geoff sits on several boards of private companies. He is also the Chair of the World Buskers Festival and a Trustee of the CPIT Foundation. He is happily married to Andrea with two daughters, Toni and Monique.



Our Co-opted Board members who provide us advice on specific areas, are:

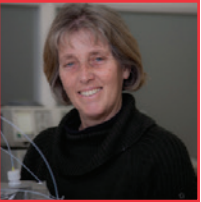
Investments Advisor - Ross Hutton

Ross Hutton joined Craigs Investment Partners in 2004. He has extensive experience in the finance industry, having been an investment adviser for over 29 years. Prior to joining Craigs Investment Partners, Ross had been a partner at Lawrence Millton and Howarth since 1986. In his free time, Ross supports several charities. He is married to Julie, who is an invaluable member of the Wine and Art Auction Committee.



Chairperson – Scientific Assessment Committee - Professor Margreet Visser

Margreet Visser is a Research Professor and Associate Dean Research at the University of Otago, Christchurch and is a principal investigator with the Centre for Free Radical Research. Margreet has 30+ years’ experience in biomedical research. She has research strengths in cell biology and biochemical analysis with a solid publication record and international reputation in the areas of inflammation, white blood cell-derived oxidants and cell responses to oxidant stress. Margreet has a strong record of successful grant funding from major funding agencies and has been supported on research funds throughout her career.



Professor Peter Joyce

Professor Peter Joyce has been Dean of the University of Otago, Christchurch since 2006, For the previous 20 years he had been Head of the Department of Psychological Medicine. Peter is due to retire in September of 2016. With his wife, Annabel, Peter runs the Tai Tapu Sculpture Exhibition and Peter has plans to assist with planting native bush across Canterbury from the Southern Alps to Banks Peninsula. Peter and Annabel have three daughters, Laura, Julia and Rosey.



Professor Steve Weaver

Steve Weaver has held the post of Deputy Vice-Chancellor Research, University of Canterbury, for the last four years and is a widely experienced science researcher and educationalist. Steve completed his PhD at the University of London, and came to New Zealand in 1978 to lead work on the southern Pacific Rim. Steve is a Fellow of the Royal Society of New Zealand, our national academy, and is currently a Director of GNS Science Ltd, Research & Education Advanced Network NZ Ltd, and Brain Research NZ. His partner, Margaux Hlavac, is Head of School at Cashmere High and they share a family of 5 talented children.



NZBRI Update

The NZBRI is, as always, teaming with students and researchers doing what they do best – finding answers to the complex questions we have about the brain!

The FBI held a dedicated night at the Court Theatre where patrons were treated to a ‘naughty but nice’ performance by the amazing Mark Hadlow. At the end of November they also held their annual golf tournament which was a sell out with 29 teams all vying for the great prizes on offer and being treated half way round the course, to a tippie of wonderful Pegasus Bay wines, thanks to Prof Ivan Donaldson and his team.

Dr Tracy Melzer has been helping the University of Pennsylvania by MRI scanning the brains of Antarctic Programme staff coming back from months on the ice, to see what effect being down there in the winter months has on the brain. Tracy was also successful in gaining one of the CMRF Major Project Grants for 2015 for his work with Parkinson’s patients.

Congratulations also to Megan Livingston who was awarded an NZBRI-UC PhD Scholarship and has commenced her studies in the CoRE Parkinson’s “enrichment” project with Prof. John Dalrymple Alford. John La Rocco successfully defended his PhD thesis (Department of Electrical and Computer Engineering, University of Canterbury).

Amy Wang successfully defended her PhD thesis (Department of Psychology, University of Canterbury) and Samantha Groves had her Masters thesis (Department of Psychological Medicine, University of Otago, Christchurch) awarded in early December.

Thanks to our friends at Activate Web Design, we now have a brand spanking new NZBRI website which is crammed full of interesting information for those interested in supporting research into the brain. The new website brings NZBRI into line with the new branding that occurred across the Canterbury Medical Research Foundation group early in 2015.

The new site gives donors the ability to give online and will be a great place to search articles, link in with what the FBI (Friends of the Brain Research Institute) are doing and keep up with latest research news. Our newsletters and Annual Reports will be available for download and we will list any upcoming events you can join us for.

If you want to learn more about the NZBRI, please visit the website at www.nzbri.org and if you would like to go on the mailing list for newsletters, email Kimberly@cmrf.org.nz