breakthrough

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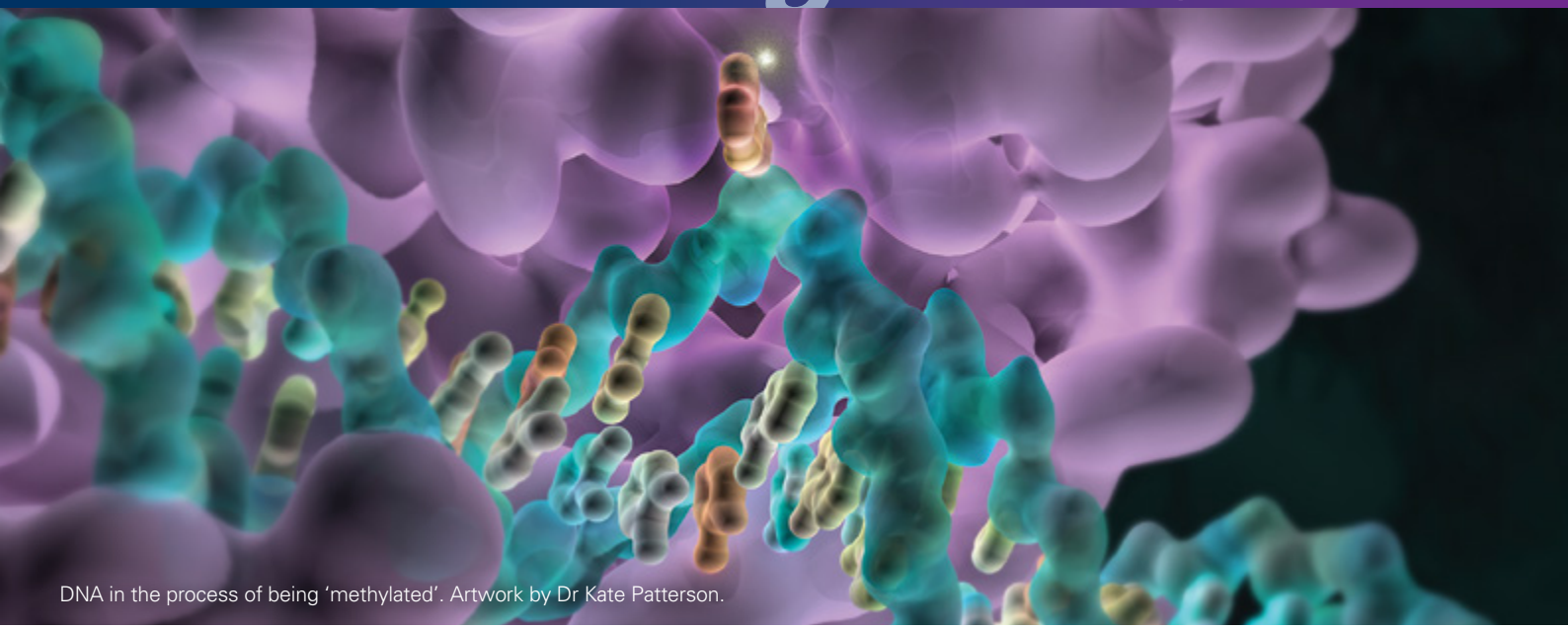


DNA in the process of being 'methylated'. Artwork by Dr Kate Patterson.

Making News

Epigenetic signatures could differentiate highly aggressive and benign forms of breast cancer

Epigenetic 'signatures' that could help clinicians tell the difference between highly aggressive and benign forms of triple-negative breast cancer have been identified by Garvan researchers. Triple-negative breast cancers make up 15-20% of all breast cancers and lack any of the three receptors (oestrogen, progesterone or HER2) that would make them responsive to targeted drugs. The first of its kind study used epigenetics (the study of information which determines how DNA is organised in the cell, which genes are expressed and how genes control development) to compare the DNA methylome (modifications in the genome) of breast cancer patients with that of healthy individuals. This study indicates that selected groups of patients could be tracked over time, monitoring how they respond to different treatments.

Most in-depth analysis to date identifies four pancreatic cancer genome sub-types

The most in-depth analysis of 100 pancreatic cancer genomes to date has revealed four subtypes that may help guide future patient treatment. The study, which was led by Garvan's Professor Andrew Biankin, was published in *Nature*. Using whole genome sequencing (utilising state-of-the-art technology at Garvan), the team revealed broad patterns of 'structural variation' or change, previously invisible when sequencing only protein-coding genes (around 2% of the genome). With the benefit of a global view, four kinds of genomic rearrangement were detected in the new study, including 'stable', 'locally rearranged', 'scattered' and 'unstable'. In some cases – notably 'unstable' genomes, which show defective DNA repair mechanisms – effective treatments suggested themselves.

Scientists create food additive that will make you feel fuller

A food-additive designed to make people feel fuller has been tested by UK and Australian clinicians, and shown to be effective at preventing weight gain in overweight volunteers. Known as 'inulin-propionate ester' (IPE), the additive combines 'inulin', a naturally occurring fibre, with propionate, a normal by-product of fibre fermentation by intestinal bacteria, and delivers much larger quantities of propionate than people can acquire with a normal diet. This is desirable because propionate stimulates the gut to release hormones that act on the brain to reduce hunger.

Inside this issue:

GARVAN INSTITUTE OF MEDICAL RESEARCH

From the CEO

The first few months of 2015 have been as busy as ever – particularly with the recent appointment of distinguished immunologist and molecular geneticist, Professor Chris Goodnow FAA FRS, as the Institute's Deputy Director.

As you will see from the profile in this issue of *Breakthrough*, Professor Goodnow has, throughout his career, been fascinated by how the immune system makes its decisions. In particular, how it distinguishes between 'self' and 'non-self'.

Such a major appointment has only been made possible thanks to the wonderful generosity of The Bill and Patricia Ritchie Foundation, a benefactor to Garvan for many years. In this case we are very grateful to sisters, Julia and Ruth Ritchie for a wonderful gift to endow a Chair in memory of their late parents, Bill and Patricia Ritchie.

As you will read, Professor Goodnow has been recognised as an international leader in his field, receiving many prestigious Australian and international awards and honours. Garvan has a reputation as a leading research institute, and this is reflected by the number of excellent scientists joining our ranks, as well as the continued local and international recognition our researchers receive.

For instance:

- Associate Professor Stuart Tangye, recently appointed head of Garvan's Immunology Division, has been awarded a prestigious scholarship by the Australian American Fulbright Commission, an educational and cultural exchange program underwritten by the Australian and US Governments.
- The American Association of Immunologists (AAI) has selected Garvan's Professor Jonathan Sprent FAA FRS to be the 2015 recipient of the AAI Lifetime Achievement Award.
- Head of Garvan's pancreatic cancer research, Professor Andrew Biankin was recently elected as a Fellow of the Royal Society of Edinburgh.

Garvan is proud to be home to so many gifted and visionary scientists. It is only with your help that we can continue to seek and retain the best-of-the-best, maintaining Garvan's tradition of research excellence.

I hope you enjoy reading about Professor Goodnow (and our other updates) in this issue.

Thank you for your ongoing support.

Andrew Giles, Chief Executive Officer Garvan Research Foundation

Professor Chris Goodnow

Garvan welcomes new Deputy Director, Professor Chris Goodnow FAA FRS

Garvan is delighted to announce that distinguished immunologist and molecular geneticist, Professor Chris Goodnow FAA FRS, has now taken up his position as the Institute's Deputy Director.

Professor Goodnow has also assumed The Bill and Patricia Ritchie Foundation Chair, and is setting up a lab in Immunogenomics to investigate the underlying genetic causes of immune disorders, particularly autoimmune diseases (which attack the 'self').

Goodnow is current President of the Australasian Society for Immunology. His research has been recognised by a number of awards and honours, including: American Association of Immunologists (AAI) Pharmingen Investigator Award; AAI Distinguished Lecturer; Australasian Society for Immunology Burnet Orator; Gottschalk Medal; Health Minister's Prize; Centenary Medal; Ramaciotti Medal; GSK Award for Research Excellence; Fellowship of the Australian Academy of Science; Fellowship of the Royal Society; and Membership of the US National Academy of Sciences.

Immediately prior to joining Garvan, Goodnow led the Division of Immunology at the John Curtin School of Medical Research, Australian National University (ANU). He joined ANU in 1997 as Professor and Director of the Medical Genome Centre, leading its development into a Major National Research Facility – the Australian Phenomics Facility.

Executive Director of Garvan, Professor John Mattick AO FAA FRCPA, is very pleased about the arrival of his new Deputy. "Professor Goodnow is one of Australia's most outstanding scientists, who will greatly strengthen Garvan's pre-eminence in human genomics," he said.

"PROFESSOR GOODNOW IS ONE OF AUSTRALIA'S MOST OUTSTANDING SCIENTISTS, WHO WILL GREATLY STRENGTHEN GARVAN'S PRE-EMINENCE IN HUMAN GENOMICS."

Respect and learning opportunities make Garvan stand out

Garvan supporter Ros McDonald-Luger believes that giving to Garvan is truly a unique experience. Apart from the benefit of feeling useful by helping to improve health outcomes for this, and future generations, Ros is impressed by the opportunities for learning that are available, as well as the respect shown by Garvan toward its donors.

Ms McDonald-Luger first became associated with Garvan through one of her doctors, Associate Professor Jacqueline Center. While speaking with Associate Professor Center, Ros was interested to hear about her research into the possible interaction of bone cells, the brain and anorexia. Associate Professor Center invited Ros to visit the laboratory at Garvan where she met with Dr Paul Baldock, as well as Carol O'Carroll and Gabriella Lang from the Garvan Research Foundation.

Ms McDonald-Luger says, "I was so spontaneous in my response because my whole interpretation of anorexia was that it was psychological. So, to hear there was another explanation – I became curious. I was so impressed with the time they took to meet with me, and how responsive they were to my interest. I immediately knew that I wanted to donate to Associate Professor Center's work. This is where I learned about 'Partners for the Future' and the possibility of leaving a bequest in my will. I am also very aware that maintaining a successful medical research program is costly, and that the need for funding will only continue to grow.

"Garvan has, what I consider to be a respectful approach. It sees someone interested in its work, and gives them as much information as they need so that they can decide if, when and how they want to donate to Garvan's work. It is so 'un-pushy' – I call it respect. That's how my commitment began."

In the beginning, Ms McDonald-Luger's association with Garvan was as a Partner for the Future. While maintaining this relationship, she later decided to become a current donor, making a significant donation towards Associate Professor Center's work. "I keep thinking of ways to help change people's attitudes toward giving. I firmly believe that all of us can make an impact if we truly understand the meaning of Garvan's work, and think about how we use, distribute and re-distribute our money."

From an early age, Ms McDonald-Luger was surrounded by those with a giving and supporting nature. Growing up in the depression, her family supported others, and to do so, they sometimes went without special items themselves. This ethos of giving was also demonstrated when the family took in a relative who had Multiple Sclerosis and Infantile Paralysis. Ros sees sharing information with our young as a way of drawing attention to giving, therefore ensuring we can do better in this generation, and the next.

"As individuals, we have a tradition to maintain – a tradition that began with James Patrick Garvan's daughter, Helen Mills who provided initial funding for the establishment of the Garvan Institute. This heritage of individual/family giving is invaluable.

"In all my experience, Garvan's approach to philanthropy stands out. Through giving, Garvan becomes a learning institution. The amount of information that is provided in fields as diverse as osteoporosis, immunology, neuroscience, obesity and cancer through public seminars, fact sheets, annual reports and special pamphlets is phenomenal. This is all provided to Garvan donors. If the individual really gets involved, they can then pass information on to family and friends, and they are inspired to give more to research. The opportunity to learn is a demonstration of respect. All of this is offered and you can make up your mind. You take ownership of your own money. The power of choice!"

For more information about how you can donate to Garvan's work, please contact the Garvan Research Foundation on **(02) 9295 8110**. Or, if you are interested in receiving information about leaving a gift in your will, please contact Carol O'Carroll on **(02) 9295 8117**.

"WRITTEN MATERIALS AND INFORMATION THAT CAN BE SHARED ENABLE AN UNDERSTANDING OF WHAT TO DO FOR ONE'S SELF AND OTHERS, AND THIS IS AN INTEGRAL PART OF HOW GARVAN OPERATES."

Ms Ros McDonald-Luger and Associate Professor Jacqueline Center

Dr Goli Samimi and Mr Andrew Giles

Ovarian Cancer Awareness Day Leader's Lunch – focusing attention on early detection

For the fourth year, Garvan recognised Ovarian Cancer Awareness Day (25 February) by rallying supporters, media and scientists working to improve the outcomes for women living with ovarian cancer.

The event was again hosted by The Hon Jillian Skinner MP, Minister for Health and Minister for Medical Research and the Rose family, and held in the impressive Strangers Dining Room at New South Wales Parliament House.

Garvan's 2015 Ovarian Cancer Awareness Day Leader's Lunch focussed on the importance of early detection and awareness. Dr Goli Samimi, head of Garvan's Ovarian Cancer Research group, gave an update on her team's world-class research into the development of an early detection test. Renowned media personality, Helen Kapalos shared her personal story as well as her passion for raising awareness about the importance of early detection, calling for women to be 'vigilant' and 'body aware'.

Thank you to those who attended this event, and support Garvan's ovarian cancer research program.

ProMis – finding a cure for advanced prostate cancer

Prostate cancer is the second most common cancer in men. It is often considered as a 'less aggressive' cancer, and good treatments are available for 'localised' or 'early' prostate cancer.

However, in 40 per cent of patients, the cancer will spread to other organs, mainly the skeleton. This is referred to as 'advanced' prostate cancer and is a lot more difficult to treat.

We don't know why, but some cancer cells spread to the bone and remain inactive for a very long time – months, or even many years. Understanding why dormant prostate cancer cells are hibernating and hiding away in the bone, and what triggers their activation is important.

Understanding how prostate cancers develop in the skeleton, and why inactive cells suddenly become active is important if we are to develop new approaches to treatment.

In this article, Professor Peter Croucher, head of Garvan's Osteoporosis and Bone Biology division explains the new ProMis (Prostate Cancer Metastasis) project, and what it hopes to achieve.

What is ProMis hoping to achieve?

Our main goal is to test the hypothesis that: 'Prostate cancer cells stay in an inactive state in the skeleton and can be released from inactivity to form tumours in the bone due to changes in the cell or the cell's surrounding'.

ProMis hopes to find the answer to three big questions.

1. Where do cancer cells go in the skeleton?
2. What is their genetic make-up when inactive and active?
3. How are they activated? By specific properties from within the cell, or by changes to the bone environment in which they reside?

The skeleton is a dynamic organ that is constantly renewing itself. Bone cells known as 'osteoblasts' help build new bone, while those known as 'osteoclasts' break down bone.

We believe that something changes within the bone microenvironment to activate the dormant cancer cells. That change may be driven by a cancer cell's interaction with bone-destroying osteoclasts, or its interaction with immune cells.

The ProMis team will be tracking the effects of bone-active drugs, such as bisphosphonates or the antibody 'denosumab', which prevent osteoclasts from breaking bone down. We suspect that blocking the action of osteoclasts might stop cancer cells from being activated. The most pertinent question for us is whether bone-active drugs can retain cells in a dormant state indefinitely, or for a long period of time, to stop them being activated and forming tumours.

What is the biggest challenge for ProMis?

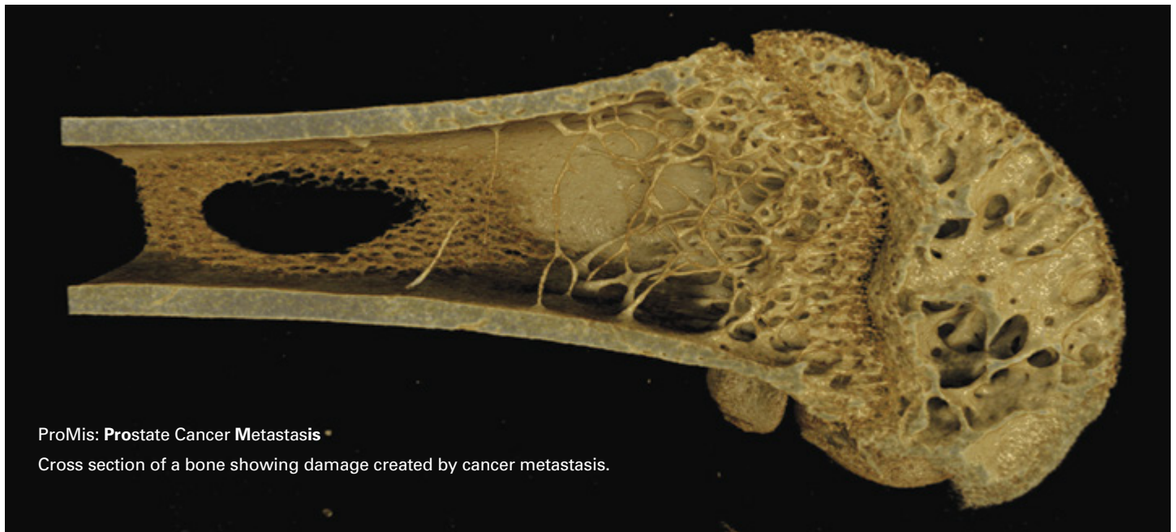
Understanding the conditions within the bone microenvironment that trigger metastasis has been technically impossible until now. Once a cancer spreads to bone, it becomes notoriously difficult to treat, so it's important for us to establish the exact course of critical molecular events between a cancer cell's arrival and its activation.

The difficulty we have encountered until now has been actually finding the cancer cells before they become active, because there tend to be so few, and they can lodge almost anywhere in the skeleton. We now have tools that allow us to find inactive cells in an experimental model system, and we're applying that technology to prostate cancer.

Bringing together researchers from different backgrounds, each with diverse skills and proven track records in their areas of expertise will make tackling this problem more achievable.

The ProMis team

ProMis is a unique international collaboration among highly-experienced prostate cancer investigators, as well as experts from other fields including bone biology, breast cancer, transcriptomics (the study of the complete set of RNA transcripts that are produced by the genome, under specific circumstances or in a specific cell) and genomics.



ProMis: **Pro**state Cancer **M**etastas**is**

Cross section of a bone showing damage created by cancer metastasis.

Organisations represented on the ProMis team include:

- The Garvan Institute of Medical Research including Garvan facilities:
  - The Kinghorn Cancer Centre
  - Kinghorn Centre for Clinical Genomics
  - Garvan Institute Small Animal Imaging Facility
- Department of Surgery, University of Melbourne, Royal Melbourne Hospital
- Department of Biochemistry, La Trobe University (Melbourne)
- J.Craig Venter Institute (San Diego, USA)
- Institute of Precision Medicine of New York, Presbyterian Hospital and Weill Cornell Medical College (New York, USA)
- University of California, San Diego Moores Cancer Center (San Diego, USA)
- The Mellanby Centre for Bone Research, University of Sheffield (Sheffield, UK)
- Nuffield Department of Surgical Sciences and Nuffield Department of Orthopaedics, Rheumatology and Surgical Sciences (Oxford, UK)
- Institute of Molecular Medicine, Hospital de Santa Maria (Lisbon, Portugal)
- Australian Prostate Cancer Research Centre – New South Wales and Victoria

Training the next generation of prostate cancer researchers

ProMis will also train the next generation of prostate cancer researchers. We will create an innovative, visionary and world-class training environment to develop junior investigators and mid-career researchers, both non-clinical and clinical, within the research program.

- A Training Scheme, involving the active participation of each centre via workshops, exchange visits and mentorships, will strengthen the research network, as well as fostering collaborations and furthering the long-term sustainability and likelihood of successful outcomes.
- Strong emphasis will be placed on mentoring co-Team Leaders, with the aim that they will develop more senior and independent (self-funded) research and assume leadership roles.
- PhD students working on ProMis will have added benefits, beyond their postgraduate training, including attending workshops and a conference, visiting partner laboratories and the chance to network with senior researchers in the field.
- The three centres in Australia will each host one training workshop, to which all members of ProMis will be invited. Each will be interdisciplinary in nature, addressing laboratory-based technologies as well as clinical issues.

The future of ProMis

We were the successful recipients of one of two 2014 Movember Revolutionary Team Awards from the Prostate Cancer Foundation of Australia. Without this funding, the ProMis project would not be possible.

This award will support the core of the ProMis project over a period of three years. However, it doesn't cover all the costs related to the ProMis study.

Further funds are needed to cover these additional costs, and to secure the future of the ProMis study beyond the initial three years.

Professor Peter Croucher BSc, PhD

Ask Garvan

Q: I know that Garvan attracts PhD student from around the world. How many overseas PhD students are currently at Garvan?

A: We currently have around 100 PhD students at Garvan. 24 of these students are international, and represent 21 different countries from all over the globe including China, Mexico, Nigeria and Finland, to name just a few. At Garvan we greatly value the importance of creating and fostering an internationally collaborative environment as it is without a doubt a driving force in the advancement of medical research.

Q: How do you recruit international PhD students?

A: We recruit international students usually via positions advertised on our website or through existing collaborations between their University and our researchers. We also host international undergraduate students who spend up to a year working with one of our research groups as part of their undergraduate degree.

Unfortunately, with fewer scholarships available, the application process for international students is extremely competitive. However, we would love to welcome more international students in the future as they have proven to be very talented and important contributors to the life of the Institute as a whole.

In Celebration

John Friend's 70th Birthday

Jock Montgomery's 90th Birthday

Barbara Solomon's 60th Birthday

Gillian Whan's 80th Birthday

Lisa Moncur

Staff Profile: Lisa Moncur

Can you give us a brief outline of your recent work history?

I have been fortunate to work in science most of my working life, beginning at age sixteen as a casual lab assistant for the University of Sydney while finishing school, then studying a degree in biological science. As a qualified microbiologist and biotechnologist, I worked for two Australian biotechnology companies involved with human therapeutics and animal vaccines. Before joining Garvan I was developing rapid diagnostic products for food pathogen testing, as well as coordinating health and safety for a small company.

What does your role at Garvan involve?

As the Work Health and Safety (WHS) Manager, it is my responsibility to have a thorough understanding of the legislative requirements and the risks in our unique workplace, in order to develop, implement and maintain a successful and practical WHS management system. Of most importance is ensuring that a positive safety culture always exists at Garvan, and good communication is key to this. The scope of work activities, size of the Institute and number of people coming and going within it means that my job has an enormous amount of variety. There is really no such thing as a typical day in WHS. Every week is stimulating and challenging and offers a chance to build on a working relationship or gain knowledge in something new.

What inspires you about Garvan's work?

I love working for an organisation that is so well-respected and recognised for its medical research achievements. Everyone has been personally touched in some way by a disease that Garvan is researching, and I get a real sense of job satisfaction from being part of the progress towards improving future health outcomes. I admire the great dedication and commitment that Garvan researchers have for their work, particularly in the current climate of funding uncertainty.

What do you enjoy doing in your spare time?

Any outdoor activities such as bike riding, bush walking and kayaking. I have also recently been scuba diving and jet skiing in Fiji. My adventurous parents took the family on a year-long world trip when I was a teenager and that began a great passion for travel and sightseeing. At the moment I am discovering South East Asia and more of Australia. In my down time I love to read and usually have two or three books on the go at once.

Dr Guy Barry

Researcher Profile: Dr Guy Barry

What is the current focus of your work?

I am currently trying to figure out how the human brain works! Fortunately, two new technologies during the past few years have allowed me to begin to sensibly tackle this daunting task.

First, the ability to generate human brain cells from skin cells (called induced pluripotent stem cell technology) allows an unprecedented view into dynamic brain function. Second, next generation sequencing has revealed startling complexity in the human genome opening up a whole new world of discovery for human-specific abilities. While at Garvan, I have found novel underlying mechanisms at work in normal human brain function and vulnerabilities in these processes that are associated with conditions such as schizophrenia and epilepsy.

What is the biggest challenge in your area of research?

Funding is very tough in the current political climate, but this will always be an ongoing pressure for academic scientists. On the research side, it is at times difficult to ensure that you spend your time working on ideas that could truly make a difference to the understanding of human biology. This needs to be complemented with the 'safer' options that you know will likely work and allow you to publish regularly, which is also the focus of the funding bodies. Although chasing the more 'out of the box' ideas could potentially have a far more significant impact in your field, it is finding the balance that I find challenging.

What inspires you about Garvan's work?

The researchers who work at Garvan are all leaders in their respective fields and generous with their time and ideas. This has fostered excellent collaborative opportunities and stimulated cross-disciplinary discussions that result in new ways to look at complex problems to find solutions. I have also been fortunate to participate in activities organised by the Garvan Research Foundation, involving members of the public, that constantly inspire and remind me of the responsibility we have to the public and the potential impact my research could have.

What do you enjoy doing away from the lab?

I am fortunate to have two healthy and happy boys, aged two and five, who ensure that I don't work too hard or lose focus as to the important things in life. We also have a seven year-old Staffordshire cross Labrador who requires walks to the local parks every day. Before children I played and coached sports, especially soccer and tennis. I look forward to retirement in a country club playing tennis and golf all day!

Garvan announced as 2015 charity partner for Tulip Time

The Garvan Research Foundation is the 2015 charity partner for the NSW Southern Highland's annual Tulip Time Festival. This year, the Festival will feature Garvan supporters, Samuel and Connie Johnson from the Love Your Sister campaign.

The partnership with the Tulip Time Festival was a natural fit, given Garvan's long association with the Southern Highlands through the Australian BioResources facility in Moss Vale.

Funds raised by the Foundation during Tulip Time will contribute to the Connie Johnson Breast Cancer Research Fellowship at Garvan. The 2015 Tulip Time Festival runs from 15th-27th September.

For more information about the Tulip Time Festival, visit **www.southern-highlands.com.au/events/tulip-time**

Left to right: Katrina Rathe (King & Wood Mallesons), Geoff Dixon (Chairman, Garvan Research Foundation), Amanda Ryding (CBP Lawyers), Megan Gourlay (Ridley Corporation), Simon Oaten (Young Garvan), Lara Bourguignon (MLC Community Foundation), Connie Johnson (Love Your Sister)

Inaugural Garvan Community Champion Awards

The inaugural Garvan Community Champion Awards recently celebrated the various community and corporate partnerships supporting Garvan's ground-breaking medical research.

Presented by Mr Geoff Dixon, Chairman of the Garvan Research Foundation, the Community Champion Awards recognise exceptional fundraising, volunteering and awareness raising efforts.

The recipients of the 2015 Community Champion Awards included:

- Ridley Corporation,
- CBP Lawyers,
- MLC Community Foundation,
- King & Wood Mallesons,
- Simon Oaten, Young Garvan Committee,
- Love Your Sister.

Congratulations to these dedicated corporate and community fundraisers for their continued support.

Places filling fast for Garvan's free public tours

The Garvan Research Foundation's tours of the Institute offer first-hand insight into Garvan's state-of-the-art scientific facilities and an understanding of how technology is enabling medical research to progress at an increasingly rapid rate.

Tours are offered to groups of 30 people (max) and, as they are extremely popular, bookings are essential.

For more information, visit **www.garvan.org.au/get-involved/tours**

Tour de Cure – get involved

Since 2007, Tour de Cure has raised in excess of $16 million and contributed funds to more than 180 cancer research, support and prevention projects. Recently, Tour de Cure donated $200,000 to support Dr Paul Timpson's project, 'Invasion and Metastasis: targeting the spread of cancer using advanced imaging and nanotechnology'.

This year, Robin from Ridley Corporation (one of Garvan's corporate partners) is taking part in the 2015 Signature Ride to raise funds for cancer research.

The 2015 Signature Ride is a scenic route between Melbourne and Adelaide from 24th April – 2nd May 2015.

If you'd like to support cancer research, you can sign up for Tour de Cure's 2015 Signature Ride, donate to Robin or volunteer in Tour de Cure's support crew.

For more information, visit **www.tourdecure.com.au**

In Memoriam November 2014 to January 2015. Donations have been made in memory of:

Eoanna Archondoulis
Bron Bell
Gail Burgin
Marie Bushell
Dave Catling
Peter Catt
Wan Cheong
Suann Croker
Deanne Davis, Gwen Bathols & Bryce Crow
Janet Currie
Simon Curtis
Janelle Kaye Davis
Lisa Demos
Margaret Jean Dobrzynski
Deb Dodson
Sue Dowlan
Sean Doyle
Bridget L Dunn
Philip Errington
Jim Evans
John & Jim Evans
Shirley Evans
Linden Fairbairn
Fran Ferguson
Susan Gamble
Mr Gandolfo
Josephine Gaylor
Rochelle Goulburn
Stewart Graham
Audrey May Green
John Hando
Joanne JJ Haney
Nancy June Heath
Carolina Hoecher Pizarro
Evi Joannou
Ludvik Kanturek
Maria Kenyon
Anne Kidman
Maggie King
Glen Stephen Kowalik
Engelbert Martin Kromwyk
Geoffrey Lane
Alyson Latter
Daryl L Levy
Grace Lewis
Julia May Linyard
Truong Luu
Moira K Lye
Tim & Andrew Lynch
Mrs Mackinnon
Margherita & Michele Maldarella
Kathleen McKenzie
Janet McKie
Anthony McLaughlin
Frances McNamara
Robert McWilliam
Elizabeth Metcalfe
Maureen Morrison
Alison Nation
Joseph N Nicol
Adrian Notley
Raimo Ensio Nuto
Kim O'Connor
John Patterson
Penelope Paul
Glenys Elaine Payne
Barry Peters
Patricia June Peters
Peter Poteri
Helen Psarakis
Mary Quinless
Colleen Rabu
Juan Ramirez
Robert John Rice
Alan Sansum
Ian Douglas Shailer
Jeffrey Shepherd
Kevin Simmons
Jose Simoes
Susan Sinclair
Charlie Smith
Donald Matthew Smith
Kate Welsh
Beryl Agnes Wilmot
Joan Margaret Wilson
Nick Wilson
John Wright
Danuta Zmitrowicz
Asmah
Shirley

Coming Up

Garvan public seminars

Friday 17 July – **Type 1 and type 2 diabetes**

Wednesday 9 September – **Genomics and the revolution in medical research**

Bookings for Garvan's free public seminars are essential. Please call 1300 73 66 77 (weekdays, 9am to 5pm), or visit www.garvan.org.au/get-involved/events

Young Garvan events

Thursday 16 April – Young Garvan Forum – **Not just surviving, thriving. To register, visit www.giving.garvan.org.au/young-garvan-forum**

Saturday 18 July – **Young Garvan All Ribbons Ball** – Check the Garvan website for details in the coming weeks.

Clinical Studies

Pre-diabetes study

We are looking for healthy male volunteers who have close relatives with type 2 diabetes for a study investigating the role of the autonomic nervous system activity in the development of the disease. The study involves visiting the Garvan Institute in Darlinghurst for one morning during working hours.

If you are willing, aged 50 to 60 years and healthy, please contact Lynne (02) 9295 8231 or Dorit (02) 9295 8309 or email crf@garvan.org.au (St Vincent's HREC Ref 12/102).

Brown fat and blood pressure study

Brown fat is a special kind of fat which burns fat in the body. We are looking for volunteers who have high blood pressure to participate in a trial investigating the effect of a medication on brown fat. Participants must be aged 18 to 45 years and currently on one blood pressure medication.

For further information please contact Dr Paul Lee (02) 9295 8416 or email p.lee@garvan.org.au (St Vincent's HREC Ref 14/SVH/105).

BE PART OF PROGRESS

Please use this coupon if you would like to make a donation to Garvan's breakthrough medical research, or if you would like further information. We would love to hear from you.

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Title First Name

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Garvan Supporter Number (if known)

Please Send Me Further Information About:

☐ Giving to Garvan in my will (strictly confidential)
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Yes! I want to help Garvan make progress with a gift of

☐ **$50** ☐ **$100** ☐ **$250** ☐ **$500** ☐ **$1000** ☐ Gift of choice $_____

☐ My cheque/money order made payable to Garvan Research Foundation is enclosed

OR Please deduct the above amount ☐ once ☐ monthly ☐ annually

from my ☐ **Visa** ☐ **MasterCard** ☐ **Amex** ☐ **Diners**

Card Number ☐☐☐☐ ☐☐☐☐ ☐☐☐☐ ☐☐☐☐

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Cardholder's Name

Signature

Donations of $2 and above are tax deductible.

Please complete this coupon and mail it to:

Garvan Research Foundation
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Call: **1300 73 66 77** (9am to 5pm)

Fax: **(02) 9295 8507**
(you can use this coupon)

Online: **www.garvan.org.au/support**

GARVAN INSTITUTE OF MEDICAL RESEARCH