



**Why we do it.**

## **Christopher Loudovaris had a stomach ache.**

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**N**OTHING UNUSUAL FOR A KID, his parents thought. But when it persisted, they decided to take him to the emergency department. At the hospital, as they waited to be seen by a doctor, a nurse performed some standard tests. And while his stomach-ache went away, the tests revealed that Christopher had type 1 diabetes. Today, 18 months later, Christopher has to inject himself daily with insulin to keep his blood sugar levels under control. He's healthy and active, happily marauding on



*Christopher and  
Melanie, children  
of Tom Loudovaris  
(Islet Transplant  
Manager, SVI).*

the forward line of the Doncaster Heights Under 12's footy team. But like any parents of a diabetic child, Christopher's mum and dad worry about his dependence on insulin injections. What if he has a hypo and there isn't anyone around? What if the supply of insulin is interrupted? Their minds tick over a thousand possible situations and a thousand possible outcomes.



Don Purton has been treated since his early 40s to deter development of the type of heart conditions which killed both of his parents prematurely. Heart disease is Australia's number one killer. *Don Purton, father of Louise Purton (Co-Head, Stem Cell Regulation Unit, SVI), with his mother Thirza.*

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**A**N AUSTRALIAN IS DIAGNOSED with type 1 diabetes every four hours. The condition is not unusual: 140,000 Australians live with it. What is unusual is the fact that Christopher's father, Tom, is a medical researcher at St Vincent's Institute. Even less usual is the fact that Tom works on diabetes – he manages the Institute's Islet Transplantation Program. In 2007 Tom was part of the team that carried out the first Victorian transplant of insulin-producing islet cells into a woman suffering from type 1 diabetes.



Sophia Johnston was diagnosed with breast cancer 23 years ago. Thanks to early intervention, she is cancer free. Despite new therapies, 2,700 Australian women die from breast cancer every year.

*Sophia Johnston, mother of Anne Johnston (Communications Manager, SVI), with her grandson Noah.*

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Christopher's father, more than anyone, knows the importance of the research he does every day at SVI. Each time he watches Christopher bravely inject himself with a needle, finding a spot that isn't too bruised or sore, he wonders when his son will be able to dispense with injections. Tom also wonders if Australia and Australians take medical research for granted. And then he gets back to work, more resolved than ever.



Gabrielle Murphy was born thanks to IVF. Since the first test tube baby in 1978, more than 100,000 babies have been born in Australia and New Zealand with help from reproductive technologies. *Gabrielle Murphy, with her brother Jack and mother Helen Thomas (Lab Head, Immunology and Diabetes Unit, SVI).*

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**T**HREE AND A HALF MILLION Australians suffer from long-term heart conditions. Three million more suffer some kind of diabetes. A hundred thousand new cases of cancer are diagnosed each year, more than 270 every day.

There isn't an Australian who hasn't been touched by disease, either directly or through a family member or friend. And it is the hope of the researchers at SVI that we can all be touched by the benefits of medical research.



David Mann succumbed to chronic myeloid leukaemia just 2 months after his wedding in 1991. Since that time, survival rates for this type of leukaemia have increased from 55% to 90%, thanks to the development of new therapies. Despite this, around 1,500 Australians still die from leukaemia every year.

*David Mann with his wife Wendy, sister of Stuart Mannering (Lab Head, Immunology and Diabetes Unit, SVI).*

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Australian research alone has resulted in the development of the heart pacemaker, humidicrib, medical ultrasound, bionic ear and the cervical cancer vaccine. Just to name a few. Yet despite the limitless benefits of the work, the life of the medical researcher is not an easy one. The hours are long, the pay modest and funding dependent on an extremely competitive and oversubscribed system of grants and fellowships. (Just ask a researcher raising a young family and trying to commit to something as mundane and everyday as a mortgage.)



Olive Sims was affected by the very bone diseases that her granddaughter Natalie Sims now researches – arthritis and osteoporosis. One in two Australian women over 60 suffer from osteoporosis. *Natalie Sims (Head, Bone Cell Biology and Disease Unit, SVI) with her grandmothers at her graduation from university.*

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Yet SVI's researchers come to work every day, with a sense of excitement and hope. Because they know the work they do has the ability to quite literally change the world.

This is why it's so important to maintain funding for medical research, both through grants and private donations.

It gets necessary projects off the ground and keeps existing ones going.

It helps junior researchers become experienced ones, and experienced researchers become ground-breaking ones.





Harvey Mudge spent the first 4 weeks of his life in the Neonatal Intensive Care Unit at the Royal Children's Hospital, where he underwent intensive therapy for meningitis and thrombocytopenia. *Harvey Mudge, son of Rachel Mudge (Grants Officer, SVI).*

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Our country's finest minds are working exhausting hours in labs trying to find the next medical breakthrough. A breakthrough that one day we, or someone close to us, might come to rely on.

**T**O MAKE A DONATION or for a personal tour of the SVI research labs, contact Madeleine Whiting, our Director of Development, on 03 9288 2480

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## **THIS IS SVI**

SVI is an independent institute conducting medical research into the cause, prevention and treatment of diseases that are common and have serious effects on health. We strive, through our research, to help alleviate the enormous financial, emotional and physical impacts of these diseases on individuals, their families and the community.

## **DISEASES STUDIED**

Type 1 diabetes, obesity and type 2 diabetes, heart disease, bone diseases such as arthritis and osteoporosis, cancer, infectious diseases, Alzheimer's disease and other neurological disorders.

## **OUR VALUES**

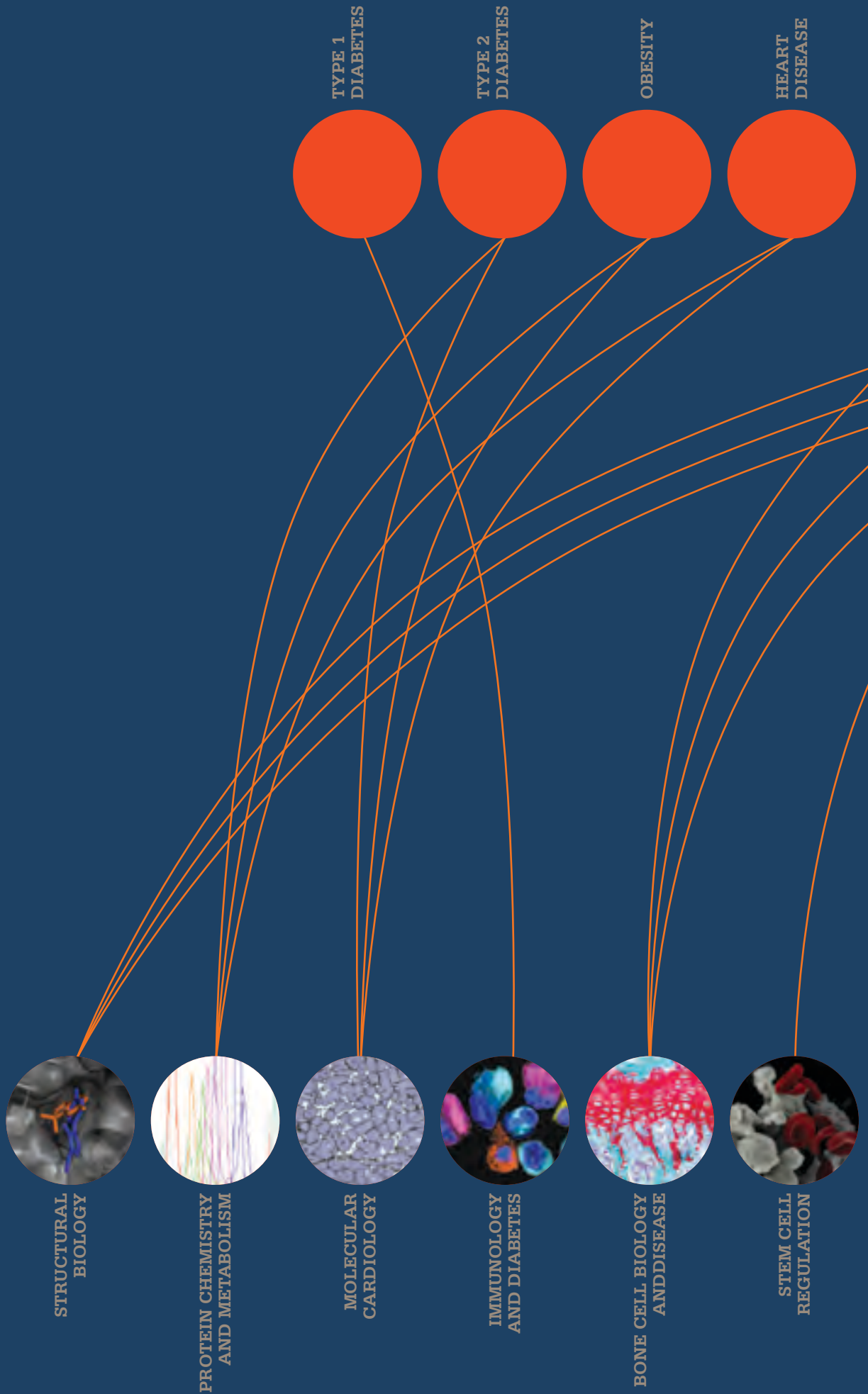
We value excellence, integrity, creativity, collaboration, individual drive, persistence, and the challenging of dogma.

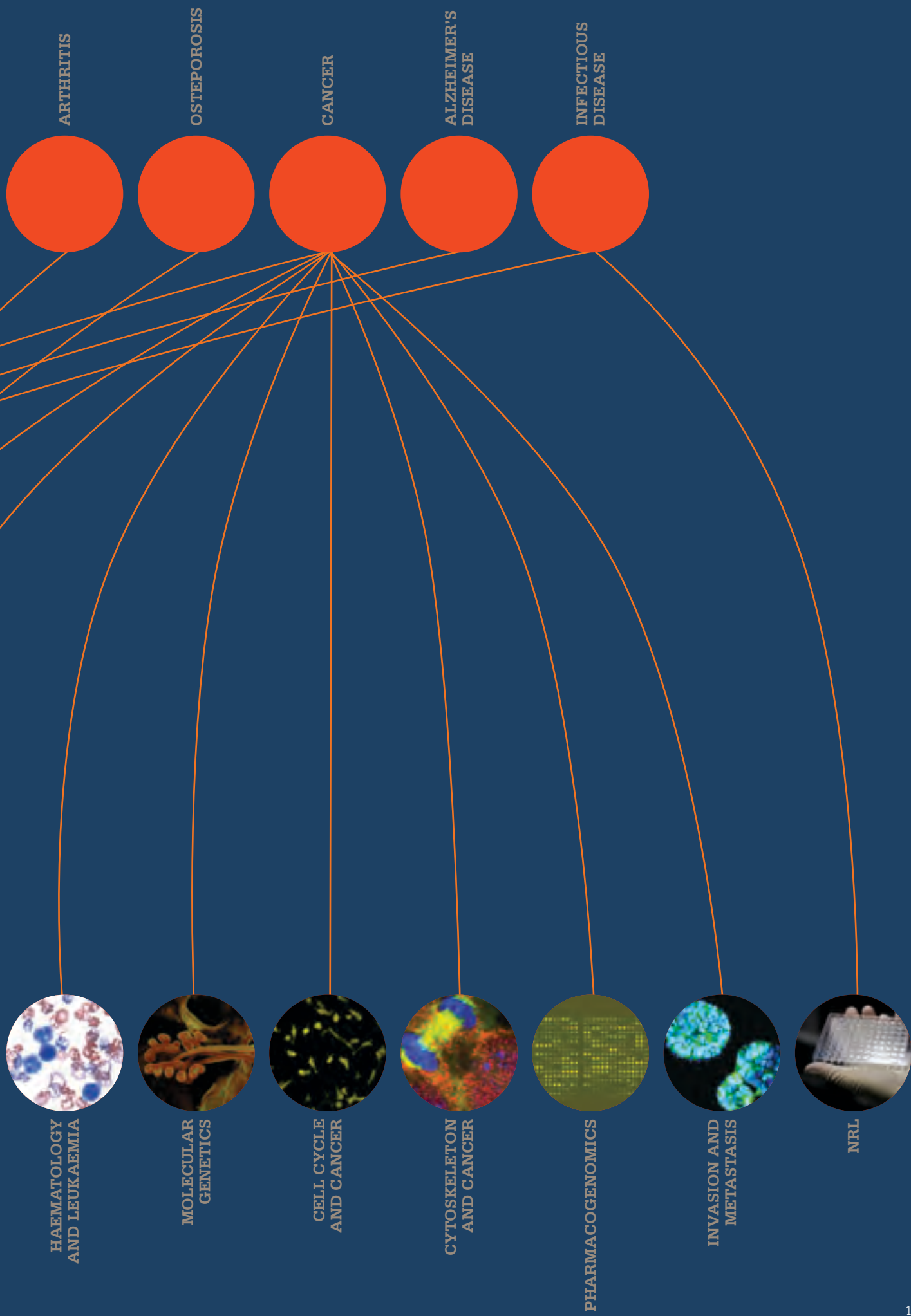
## **OUR MISSION**

To carry out high-quality biomedical research in order to make discoveries that will improve the health of the community by prevention or better treatment of common diseases that cause premature death or reduced quality of life.

Diseases studied

Current research programs





**Immunology and Diabetes Unit** ● On January the 11th 1922, 14-year old Leonard Thompson lay dying at Toronto General Hospital. Diagnosed with type 1 diabetes, weighing only 29 kilograms, and with no known treatment, Leonard awaited inevitable death.

Just hours from slipping into coma, he was selected for an experimental treatment, the injection of a protein called insulin, purified from the pancreas of cattle. Following a remarkable recovery, the treatment became the new standard of care for people with type 1 diabetes world-wide.

Ninety years after this landmark, type 1 diabetes remains a serious disease, which is difficult to control and can lead to devastating complications. The goal of researchers at SVI is to develop more effective treatments for people with the disease, by determining how and why the beta cells that produce insulin are killed by the body's own immune system, and finding ways to prevent this from happening.

● **CELL DEATH MOLECULES IN HUMAN ISLETS**  
**Human islets are subjected to a number of stresses before and during their isolation that may influence their survival after transplantation. The death of beta cells is controlled by members of the Bcl-2 family of proteins. We performed a comprehensive analysis of expression levels of Bcl-2 family members in isolated human islets. We found that pro-survival proteins are expressed at high levels in human islets, while molecules that induce cell killing were observed at much lower levels.**

**Three molecules that were particularly highly expressed, BNIP3, BNIP3L and Beclin-1, are involved in a cell's response to low levels of oxygen and nutrients, suggesting that islets are experiencing these stresses during isolation. Knowledge of which molecules are expressed will guide future research to understand the cell death pathways activated during islet isolation or after transplantation. This is crucial for the design of methods to achieve improved transplantation outcomes.**

**SEARCHING FOR THE KILLER CELL**  
**Cytotoxic CD8+ T cells must directly contact pancreatic beta cells to be able to kill them. Another type of T cell, the CD4+ T cell, is also able to kill beta cells but because it is not able to directly contact beta cells, it may use another cell type as the actual killer cell. Natural Killer, or NK cells, could play this role but it is uncertain whether they are able to kill beta cells. We therefore examined the requirement for NK cells in beta cell killing in a mouse model of type 1 diabetes. NK cells failed to kill beta cells in vitro, even when we removed inhibitory**

**molecules from the surface of beta cells. We also did not observe any evidence to suggest that NK cells were able to kill beta cells in vivo. However, when we depleted NK cells, we observed reduced diabetes, suggesting that NK cells may help to maintain the right environment for other cytotoxic cells to kill beta cells.**

# 1

## TYPE 1 DIABETES

**IMAGE**  
A collage of different immunofluorescent stains of single cells obtained from human islets and islet-derived progenitor cells.



### RESEARCH UNIT

- Thomas Kay (Unit Head)
- Helen Thomas (Lab Head)
- Janette Allison (Lab Head)
- Alex Avery
- Rochelle Ayala-Perez
- Peter Campbell
- Jonathan Chee
- Lorraine Elkerbout
- Sarah Emmett
- Stacey Fynch
- Kate Graham
- Allison Irvin
- Gaurang Jhala
- Mugcha Joglekar
- Cameron Kos
- Balashubramanian
- Krishnamurthy
- Thomas Loudovaris
- Lina Mariana
- Zia Mollah
- Pravin Rajasekaran
- Natalie Sanders
- Nirupa Sachithanandan
- Anne Thorburn
- Jibril Wali
- Yuxing Zhao

## ● GENE SHUFFLING

Type 1 diabetes is a complex genetic disease. Because the human population is diverse, we used selective mating of mice that develop diabetes to map one of 25 genomic regions associated with this disease. Notably, a unique chromosome feature, called a recombination hotspot, resulted in an unusual shuffling of DNA segments in these mice and pinpointed a novel gene for which

genetic variants were associated with increased risk for type 1 diabetes. Although the function of this gene is currently unknown, it is turned on in immune cells that participate in the destruction of insulin-producing beta cells. Ongoing studies aim to determine the function of this gene and how it contributes to type 1 diabetes in humans.

## THE SCENE OF THE CRIME

Type 1 diabetes is caused by the autoimmune destruction of the insulin-producing beta cells that are found in clusters of cells, called islets, in the pancreas. Type 1 diabetes develops when T-cells specific for beta-cell antigens infiltrate the islets and kill the beta cells. However, the beta-cell antigens recognised by pathogenic T cells in type 1 diabetes are poorly understood. Identifying these antigens is of vital

importance because it will lead to new antigen-based therapies for type 1 diabetes; better assays to measure beta-cell specific T cells in blood; and a deeper understanding of the pathogenesis of human autoimmune diseases. We are the first in the world to isolate T-cell clones from the residual islets of people with type 1 diabetes. We are now using these clones to identify the beta-cell antigens recognised by the T cells that cause type 1 diabetes.

## Islet transplantation success

Islet transplantation is used to treat a subset of people with type 1 diabetes who live with severe and uncontrollable blood glucose fluctuations, making day-to-day living almost impossible. Since late 2007, a team involving researchers at St Vincent's Institute and Hospital have carried out 14 transplants of islets into seven patients with difficult-to-control diabetes. Four of the seven patients no longer need to take insulin at

all. Islet transplant recipient Margaret Harrigan says, "Type 1 diabetes is a debilitating disease that can rob you not only of the lifestyle choices which come with full health, but also your self worth, independence and self esteem. The scientists at SVI are committed and passionate about finding ways to help people with type 1 diabetes, and their research has real results."



# 1

## TYPE 1 DIABETES

IMAGE  
Pancreatic islets  
in culture.



### RESEARCH UNIT

Tom Brodnicki (Lab Head)  
Stuart Mannering (Lab Head)  
Michelle Ashton  
Rocha Chand  
Edward Chu  
Joseph Ciantar  
Colleen Elso  
Maria Felgendreher  
Sean Ivory  
Max Joffe  
Leanne Mackin  
Hayley Moon  
John Politis  
Iris Tan  
Nancy Wang

**Structural Biology Unit** ● Proteins are the body's most essential building blocks. In addition to contributing to the structure of the cell, proteins also act as molecular engines, controlling all of the body's functions. Their actions are diverse and complex and are dictated by their precise three-dimensional (3D) structure.

Determining the structure of a protein can help us to understand its function. Protein crystallography allows us to 'see' the 3-D structure of proteins at the atomic level. The protein's 3-D structure can then be used to help design new drugs for the treatment of disease.

The major areas of research in the Structural Biology Unit, incorporating the Biota Structural Biology Laboratory and the ACRF Rational Drug Discovery Facility, involve proteins implicated in cancer, brain disease and bacterial and viral infection.

● **NEW WAYS TO TREAT HIV-AIDS**  
The genome of HIV encodes three enzymes essential for viral replication. Of these, the integrase (IN) enzyme is underexploited as a therapeutic target. The first IN inhibitor approved for clinical use is raltegravir; other inhibitors in advanced clinical development act via the same mechanism. However, strains of HIV-1 that are resistant to raltegravir are also resistant to some of the preclinical drug candidates. For this reason there is significant interest in targeting other sites on IN. Through a combination of

fragment-based drug discovery and structure determination we have identified a novel binding site on HIV-IN and structure-based elaboration of our initial hits has produced a compound with micromolar affinity. Our results provide a basis for the design of more potent compounds that bind to IN. This work is in collaboration with Drs D. Rhodes and J. Deadman of Avexa Ltd and Dr D. Chalmers and A/Prof M. Scanlon of Monash Institute of Pharmaceutical Sciences.

**TARGETING RARE INFECTIOUS DISEASES**  
Leishmania parasites cause diseases that range in severity from skin lesions to fatal systemic infection. The WHO estimates that there are at least 2 million new cases of leishmaniasis each year. Trypanosoma parasites are responsible for African sleeping sickness and Chagas disease, accounting for tens of thousands of cases per year. Existing drugs suffer from toxicity, variable efficacy, high costs and resistance, prompting the search for new drugs. Our collaborators have identified a mitochondrial protein,

**MIX, that occurs exclusively in the above-mentioned parasites. MIX appears necessary for parasite viability. We have determined the crystal structure of the Leishmania major mitochondrial protein MIX, revealing a fold that is similar to modules involved in protein-protein interactions. This provides the basis for the development of new drugs. This work is in collaboration with Dr A. Uboldi and Prof E. Handman of WEHI.**

## Top honours

In 2010 Michael Parker was awarded one of Australian science's top honours – as one of 17 scientists elected to the Australian Academy of Science. This honour recognises Michael's career in protein crystallography, in particular, in determining the structure of membrane-associated proteins. Work in Michael's laboratory has resulted in the resolution of more than 100

crystal structures. Michael says, "By determining three dimensional structures of medically important proteins we can improve our understanding of how each protein works and contributes to disease. It is a great honour to be elected to the Academy and this recognition highlights the impact of structural biology in Australian science, and in particular medicine."

# 2

## DRUG DISCOVERY

**IMAGE**  
An overlay of two crystal structures of HIV-1 integrase with compounds bound, collected at the Australian Synchrotron. These compounds were identified using a technique called fragment based lead discovery in collaboration with A/Prof Martin Scanlon, Dr David Chalmers and Avexa Ltd. This information is being used to design new drugs against HIV/AIDS.



### RESEARCH UNIT

- Michael Parker
- David Ascher
- Brett Bennetts
- Sophie Broughton
- Matthew Chung
- Gabriela Crespi
- Susanne Feil
- Chen Gao
- Michael Gorman
- Nancy Hancock
- Jessica Holien
- Sara Lawrence
- Dene Littler
- Belinda Michell
- Luke Miles
- Craig Morton
- Craig Nero
- Tracy Nero
- Julian Tang
- Jerome Wielens

**Protein Chemistry and Metabolism Unit** ● Our ancestors couldn't get enough fat. The scarcity of food through much of history meant that our genomes evolved to store the maximum amount of calories available. Today, with the next meal only as far away as a trip to the corner takeaway, these genes have become a liability, and are helping to fuel the obesity epidemic.

The body's ancient energy sensing pathway is controlled by an enzyme called AMP-activated protein kinase (AMPK). Simply put, AMPK passes a "make more energy" message to the cell when needed. By doing so, it regulates the burning and storage of fats and sugars, and affects the level of sugars and cholesterol in the blood stream.

AMPK is the focus of research in the Protein Chemistry and Metabolism Unit, where researchers are investigating how it is regulated, how its structure influences its function and its physiological effects at a whole body level.

● **ACTIVATING AMPK**  
AMPK has attracted global attention because of its potential role in metabolic diseases. Weight loss and insulin-sensitising hormones stimulate AMPK activity in skeletal muscle to burn off fat. AMPK is also activated by some common glucose lowering drugs used for patients with type 2 diabetes, such as metformin. AMPK regulates the burning and storage of fats and sugars, and affects the level of sugars, fats and cholesterol in the blood stream, with the potential to offset the effects of obesity, heart disease, diabetes and other age onset

diseases. AMPK can also suppress the growth of cancers. AMPK is an  $\alpha\beta\gamma$  heterotrimer with an  $\alpha$  catalytic subunit and  $\beta$  and  $\gamma$  regulatory subunits. AMPK activation depends on phosphorylation of its  $\alpha$  subunit on Thr-172 by either upstream kinase LKB1 or Calmodulin dependent kinase kinase  $\beta$ . During exercise ATP is consumed and ADP and AMP levels rise. We have now shown that AMP binds to the  $\gamma$  subunit at the AMP binding sites 1 and 3 and this stimulates Thr-172 phosphorylation by the upstream kinases and activation of AMPK. As previously

reported, this form of regulation depends on the N-terminal myristoylation of the  $\beta$ -subunit. AMP also inhibits dephosphorylation of Thr-172 and inactivation of AMPK by protein phosphatases but this effect is independent of  $\beta$  subunit myristoylation.

#### AMPK AND EXERCISE CAPACITY

One of the important goals of our research is to understand the importance of AMPK in mediating the health benefits of diet and exercise. Previously we reported that germline deletion of either

AMPK  $\beta$  subunits 1 or 2 in mice resulted in reduced trabecular bone density and mass. We have now found that AMPK  $\beta 2$  null mice have reduced AMPK activity in skeletal muscle, gain more weight when fed a high-fat diet and have 30% reduced exercise tolerance. They have normal rates of contraction stimulated-glucose uptake and fatty acid oxidation but this could be due to the  $\beta 1$  subunit. We plan to extend these studies by generating AMPK  $\beta 1\beta 2$  muscle-specific deletion and investigating their exercise capacity.

## New tools

In 2010, SVI sought funding for an upgrade to its Mass Spectrometry Facility, which was nearing obsolescence. Thanks to support from a number of Trusts and Foundations, St Vincent's Hospital and The University of Melbourne, more than \$1 million was raised and two new instruments were purchased at the end of 2010. The Facility now

houses two brand new, cutting edge ABI-SCIEX mass spectrometers: a TripleTOF 5600 and a QTRAP 5500. Bruce Kemp is delighted with the new Facility, "These new instruments will be an integral part of our commitment to medical research with clinical applications."

# 3

## OBESITY AND TYPE 2 DIABETES

**IMAGE**  
Mass and retention times of peptides that have been sequenced from a protein digest as analysed by mass spectrometry.



### RESEARCH UNIT

- Bruce Kemp
- Zhiping Chen
- Sandra Galic
- Kimberley Hewitt
- Jane Honeyman
- Froisa Katsis
- Naomi Ling
- Jonathon Oakhill
- Hayley O'Neill
- John Scott
- Rohan Steel
- Gregory Steinberg
- Shanna Tam

**Molecular Cardiology Unit** ● Heart disease is Australia's number one killer, with one in five people developing it in their lifetime. The problem is that some of these people will not know it until it is too late.

The heart is continuously working, pumping blood around the body to provide cells with nutrients and oxygen. However, just as with any pump, things can go wrong. The blood vessels delivering blood to the heart muscle can become narrowed or blocked, disrupting flow through the system (coronary artery disease); the valves within the pump can malfunction (valvular heart disease); or the heart muscle may become weak, so that it is unable to pump sufficient nutrients and oxygen for normal daily activities (heart failure).

Researchers in SVI's Molecular Cardiology Unit are working to improve the cardiovascular health of the community.

● **WHY DO PEOPLE GET HEART DISEASE?**

Women are four times more likely to die from heart disease than from breast cancer, but many are not aware of their risk. Women investigated for chest pain are less likely to have narrowing of the coronary arteries than men. However, despite being less likely to have coronary artery disease, women with chest pain are more likely to die from the condition.

In collaboration with cardiologists and surgeons at St Vincent's Health we established the St Vincent's Health Cardiac Tissue Bank.

With patient consent, surgeons take small pieces of heart muscle during open heart surgery. Our studies using heart muscle from the Bank have shown that there are differences between women and men. We found that the small blood vessels in women's heart muscle are thicker than those in men. We know from other studies that blood vessels with thicker walls are more likely to constrict and limit blood flow. Thus, the blood vessels in the heart muscle of women may, because of their thicker walls, reduce the supply of oxygen and nutrients to the heart muscle,

causing chest pain and heart attacks, even though the coronary arteries may appear to be free of disease. These results indicate that we may have to change the way we test and treat women for heart disease.

**SCREENING FOR DISEASE**

SCREEN-HF is a community-based investigation to discover whether a blood test (for a protein called NT-proBNP) can identify people at increased risk of heart failure. SCREEN-HF is a collaboration with cardiologists at St Vincent's Health, and Melbourne and

Monash Universities. We have recruited 4000 people from the community and measured their blood levels of NT-proBNP. We are now performing echocardiographic tests to assess how well their heart muscle is working, and we will follow-up these individuals over 5 years to see which ones develop heart failure. Identifying people before or at the earliest stages of heart failure will help us ensure they receive currently available treatments for the prevention and treatment of heart failure.

## A woman's heart

A study published by our group in 2010 showed, surprisingly, that heart muscle of women is different from that of men, in that the small blood vessels in women's hearts are thicker. These thicker blood vessel walls may affect

the vulnerability of women to heart attacks. These findings may allow us to develop new strategies to reduce the rate of death from heart disease in both men and women.

# 4

## HEART DISEASE

**IMAGE**  
A silver stain showing heart muscle cells in a patient cardiac biopsy.



### RESEARCH UNIT

- Duncan Campbell
- David Prior
- Aileen Lim
- Francoise Campbell
- Gladys Rodriguez
- Jennifer Collier
- Laura Mocioaca
- Robyn Kelly

## Bone Cell Biology and Disease Unit

● From extinct animals to forensic investigations, bones continue to tell their stories long after we're gone. Researchers in the Bone Cell Biology and Disease Unit are using bones to tell another story – they are looking at events occurring inside living bones in order to disclose the secrets of diseases such as osteoporosis, arthritis and of cancers of the bone.

The group investigates the ways in which cells of bone communicate with each other to determine how much bone is formed and broken down. This process continues throughout life, and it needs to be very closely managed or diseases such as osteoporosis and arthritis can ensue. Understanding the process will also help to develop new treatments for bone cancer (osteosarcoma) and for certain cancers prone to grow as secondary deposits in bone.

● **NEW PATHWAYS**  
Our major aim is to understand how cells of bone communicate with each other to control bone remodelling, a process by which a small amount of bone is resorbed by osteoclasts and the space refilled by osteoblasts which form the same amount of bone. At any one time remodelling takes place at many sites distributed asynchronously throughout the skeleton. The purpose of remodelling is to remove old bone, repair damaged bone, to respond to pressure changes, and to control the body's calcium metabolism.

Understanding this process of intercellular communication will help us to discover novel pathways that contribute to the development of skeletal disease, and find novel ways of treating these disorders.

In 2010, we discovered that the hormone calcitonin, which is used therapeutically for osteoporosis, influences gene expression by osteocytes, cells deeply embedded in the calcified bone matrix. Specifically, expression of sclerostin, a bone formation inhibitory protein produced by osteocytes, is

stimulated by calcitonin. Although it has previously been understood that the only cells in the skeleton that respond to calcitonin are the bone-destroying osteocytes, we found that the osteocyte, freshly isolated from bone samples, expresses calcitonin receptor. This reveals a new pathway by which this hormone and therapeutic agent may influence bone mass.

#### NEW PROTEINS

We also discovered a new role for a protein known as Zinc finger protein 467 (Zfp467). This protein is produced by skeletal stem cells and its

expression is inhibited by parathyroid hormone and oncostatin M, two factors that stimulate bone formation. Careful work by Julie Quach showed that this protein acts on pluripotent stem cells to promote their differentiation into adipocytes (fat cells) at the expense of the formation of osteoblasts (bone forming cells). This helps us to understand the action of therapeutic agents for osteoporosis, including currently available PTH-based therapies, and may also be of relevance for the use of adipose-derived stem cells for tissue engineering.

## New grants

In 2010, Nicole Walsh, Postdoctoral Fellow in the Bone Cell Biology and Disease Unit, was awarded her first NHMRC Project Grant. Nicole is working in collaboration with Natalie Sims and Evange Romas from St Vincent's Hospital to identify the signalling pathways that are involved in the

progression of osteoarthritis. Her aim is to design new therapies to stop the joint damage that occurs in osteoarthritis, with the ultimate goal of easing the burden on the 1.62 million Australians who live with the disease.



# 5

## ARTHRITIS, OSTEOPOROSIS AND CANCER

IMAGE  
Histological section  
of a growth  
plate in bone.



### RESEARCH UNIT

- Jack Martin
- Natalie Sims
- Emma Baker
- Holly Brennan
- Ling Yeong Chia
- Blessing Crimeen-Irwin
- Pat Ho
- Pece Kokovski
- Benoit Le Goff
- Narelle McGregor
- Kong Wah Ng
- Suei Pompolo
- Ingrid Poulton
- Julie Quach
- Evange Romas
- Farzin Takyar
- Brett Tonkin
- Emma Walker
- Nicole Walsh

## Stem Cell Regulation Unit

The first human bone marrow transplants were performed in 1959 on six Yugoslavian nuclear workers whose bone marrow had been damaged in a radiation accident. The stem cells contained within bone marrow fulfilled their promise in 1968, when the first successful non-twin transplant into a leukaemia patient was performed.

Since that time, stem cells have been touted as a cure-all for conditions as diverse as heart disease and male pattern baldness. However, their most successful implementation has remained as a treatment for disorders of the blood and immune systems.

Adult stem cells are the focus of research in SVI's Stem Cell Regulation Unit, headed by Drs Louise Purton and Carl Walkley. Research in the Unit aims at understanding stem cells and their influence on diseases of the blood and bone, including cancers such as leukaemia and osteosarcoma.

### ROLES OF VITAMIN A RECEPTORS

Our research has pioneered the different effects of the vitamin A receptors in blood cell production. We have shown that vitamin A enhances blood stem cell self-renewal and that this requires one of the vitamin A receptors, retinoic acid receptor (RAR) gamma. We have also shown that the other receptor predominantly expressed by blood

cells, RAR alpha, has the opposite effects on blood stem cells, enhancing their differentiation. We now have evidence that the RARs have different effects in the production of bone cells. We are further exploring the roles of vitamin A and its receptors in blood cell and bone production.

### A NEW MODEL OF BLOOD CELL DISEASE

We have developed and characterised a new model of a blood cell disease that is similar to the human disease known as refractory anaemia. We are now using this model to further our understanding of the development of this disease about which little is known. One exciting finding from this model is that there is a link to the development of these diseases and mitochondrial function.

## Secrets inside our bones

In 2010, Carl Walkley was awarded a \$1 million grant to investigate the cause of leukaemia, Australia's second biggest cancer killer. The Leukaemia Foundation's inaugural Phillip Desbrow Senior Research Fellowship provides \$200,000 a year over five years. "My research focuses on how blood cells develop from bone

marrow and the genetic factors that trigger them," said Carl. "Once we understand more about how blood cell production goes wrong, we can focus on new targeted therapies to stop these diseases in their tracks." Carl's work is also expected to have applications to improve the success rate of bone marrow transplants.

# 6

## CANCER

**IMAGE**  
Scanning electron micrograph of bone marrow showing red blood cells, white blood cells and platelets.



### RESEARCH UNIT

- Louise Purton
- Carl Walkley
- Alanna Green
- Ankita Gupte
- Brian Liddicoat
- Emma Baker
- Jean Hendy
- Julie Quach
- Kirby White
- Maria Askmyr
- Megan Russell
- Meryn Chalmers
- Pece Kocovski
- Sofie Singbrant
- Soderberg
- Tanja Jovic
- Tony Mutsaers

**Haematology and Leukaemia Unit** ● In 1960, a four-year old diagnosed with the most common type of childhood leukaemia had a less than 5% chance of survival. Today, about 85% of children with this type of leukemia live more than five years. This amazing improvement in survival is one of the great success stories of medical research. However, around 1,400 Australians still die of leukaemia every year.

The different types of blood cells are all derived from a primitive cell, called a stem cell. There is a complex series of steps that must occur in order for a stem cell to be able to differentiate into the different blood cells. If this process goes wrong, leukaemia can develop. The Haematology and Leukaemia Unit focuses on understanding how blood cells mature and how leukaemia disrupts normal blood cell maturation.

● **THE GUILTY GENES**  
**T cell leukaemia cells resemble normal developing T cell precursors. Consequently, the study of how T cell precursors develop in the thymus critical is important to elucidate the molecular mechanisms of leukaemogenesis. We are attempting to identify new T cell oncogenes by using a retroviral cDNA library screening method in primary mouse cells.**

**Additionally, we are creating leukaemia/lymphoma mouse models of T cell and other blood cell lineages using retroviral overexpression. We use multiparameter flow cytometry and cell sorting to analyse these models.**

**THE RESPONSIBLE CELL**  
**With the advent of specific monoclonal antibodies and high speed flow cytometry, it has now become possible to isolate very small subsets of bone marrow subpopulations that are responsible for development of all the different blood lineages. We are using this technology to ultimately identify the leukaemic stem cell (LSC) in mouse models of lymphoma and**

**myeloid leukaemia. Once identified, the LSC will be molecularly compared to its normal counterpart to identify the genes which allow the LSC to self-renew and propagate disease. These genes can ultimately be used as targets to design drugs which are more specific and have less side effects than current therapies.**

## Cellular clues

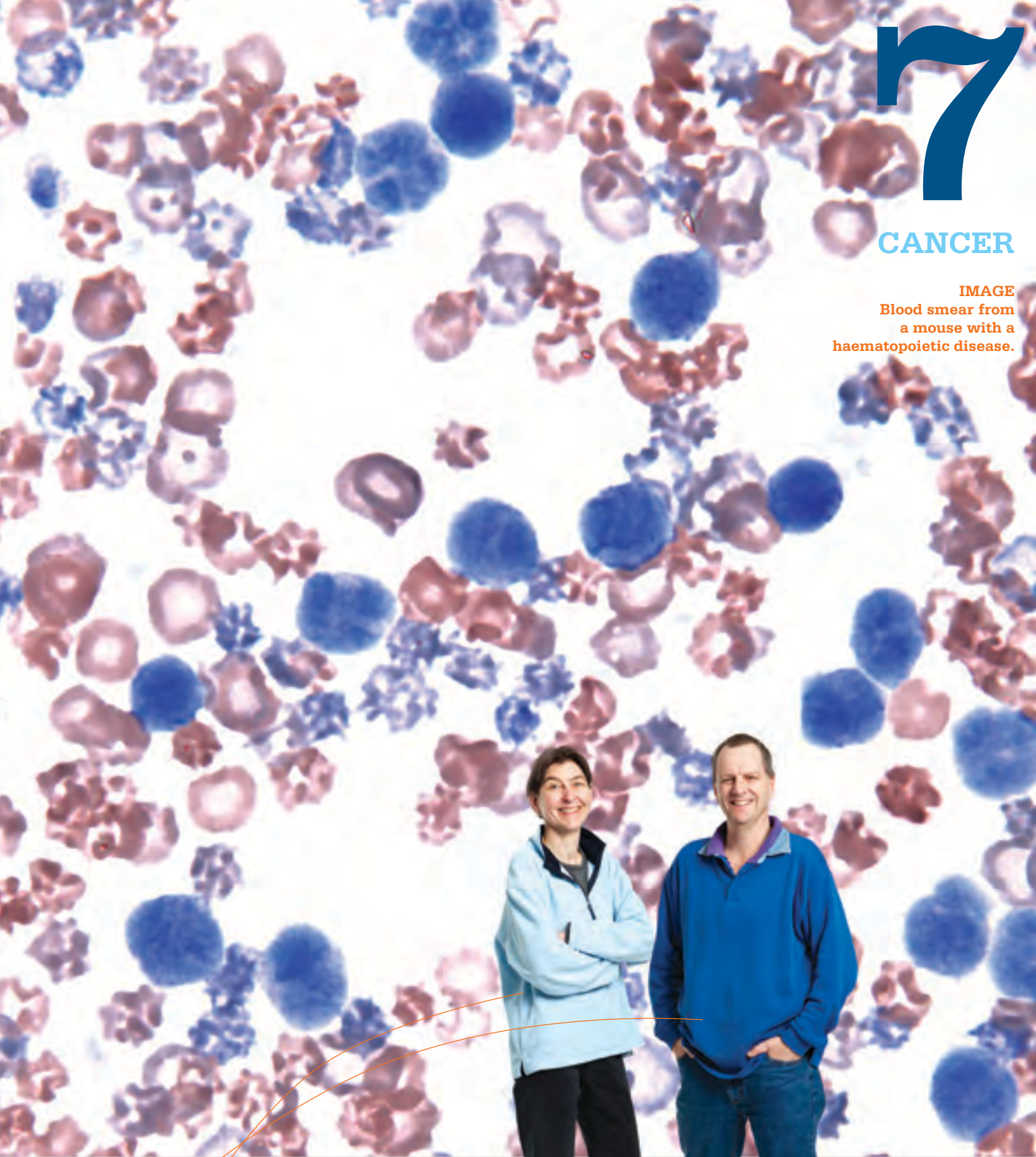
The traditional model of blood cell maturation envisages a simple “either/or” decision making process as cells mature from the blood stem cell. However, David Izon and his group have found evidence that cells retain the ability to shift across blood lineages at a much later stage than

previously thought. This has important implications for how blood cells really mature, but more importantly, will give crucial clues as to how leukaemias arise and how we may more successfully treat them.

# 7

## CANCER

**IMAGE**  
Blood smear from  
a mouse with a  
haematopoietic disease.



### RESEARCH UNIT

David Izon  
Charley Mackenzie-Kludas  
Monique Smeets

**Molecular Genetics Unit** ● The DNA of our genes acts as the instruction manual for our cells – it tells them when to divide, what sort of cell they should become and when they should die. However, our DNA is under constant bombardment – from UV radiation in sunlight, environmental toxins, even from the chemical reactions that take place naturally in our cells. For this reason, it is important that the cell can detect and repair any damage as soon as it can.

Although our cells are good at repairing DNA damage, over time it can cause the cellular instructions to be misread, resulting in cancer. Researchers in the Molecular Genetics Unit are trying to understand how the cell senses DNA damage and repairs it. Their study of the DNA damage response in human, mouse and yeast cells has led to the discovery of new proteins with important roles in these processes.

● **KNOCKING OUT ASCIZ**  
ASCIZ was originally cloned in our laboratory as a novel DNA base damage response protein. We have now generated a “knock out” mouse line that lacks the ASCIZ gene in the germ line. Homozygous ASCIZ null embryos are growth retarded and die during late gestation. As expected from our previous in vitro studies in human and chicken cells, primary fibroblasts from *Asciz*-null embryos exhibit a mildly accelerated senescence phenotype and notable hypersensitivity

to oxidative and methylating DNA base damage. However, the most striking phenotype is that all *Asciz*-null embryos also lack lungs and contain severely underdeveloped tracheas. This phenotype is reminiscent of mutants in the Wnt/ $\beta$ -catenin and FGF10/FGFR2 signaling pathways. Our data indicate that this phenotype is due to a separate DNA damage-independent function of ASCIZ as a transcription factor.

**REPAIRING DAMAGE**  
It is widely believed that DNA damage response factors also play critical roles during normal replication of undamaged DNA, but how they do this remains poorly understood. We have identified mutations in the gene for the yeast Rad53 kinase (similar to the human cancer-associated Chk2 kinase) that lead to impaired S phase progression and increased spontaneous DNA damage in the absence of exogenous DNA damaging agents. Interestingly, replication defects of

our new *rad53* alleles are more severe than those of catalytically impaired *rad53* mutants. The results suggest that Rad53 has a previously unsuspected non-catalytic scaffold function that is required for DNA replication in unperturbed cell cycles.

## Breathtaking research

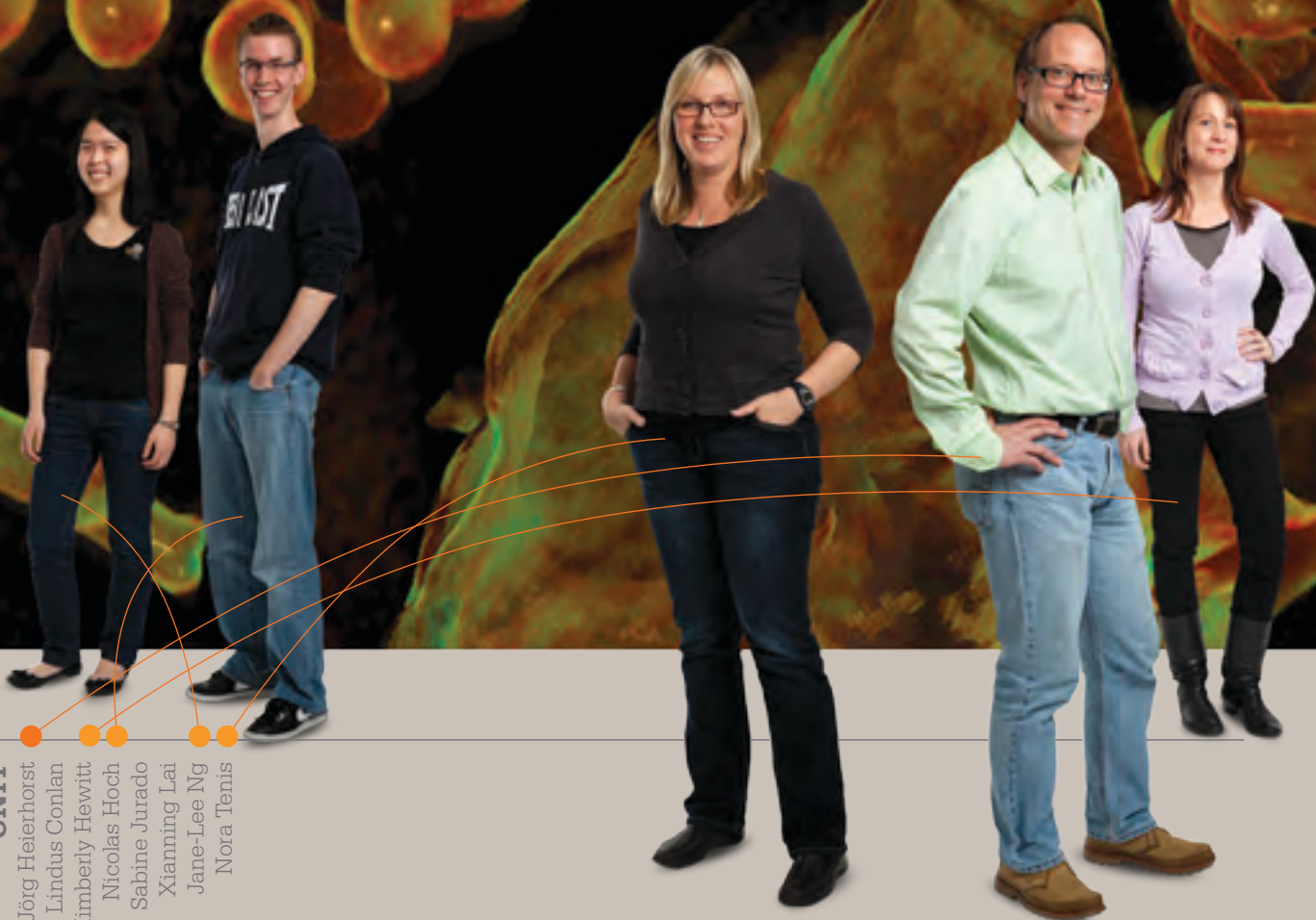
Researchers in the Molecular Genetics Unit first discovered a protein they called ASCIZ while looking for genes that responded to DNA damage in yeast. Since then, research in the group has focused on ASCIZ's potential for improving cancer therapies. The group recently showed that the protein is also essential for lung development in

mice. Jörg says that the importance of the protein for lung development was entirely unexpected. “We had been working on this gene for more than 5 years when we made the startling discovery that it has a second life as a key regulator of lung development.” The work was published in 2010 in the journal *PLoS Genetics*.

# 8

## CANCER

**IMAGE**  
Developing lung of a 12.5 day old mouse embryo (Ian Smyth, Monash University).



### RESEARCH UNIT

- Jörg Heierhorst
- Lindus Conlan
- Kimberly Hewitt
- Nicolas Hoch
- Sabine Jurado
- Xianning Lai
- Jane-Lee Ng
- Nora Tennis

## Cell Cycle and Cancer Unit

● We could not survive or for that matter, develop in the first place, if our cells were not capable of multiplying and dividing. Cell division occurs in an orderly and highly regimented way, following a defined sequence of events. Simply put, cells grow in size, duplicate their contents, and then divide in two. This process of duplication and division is called the cell cycle. When it goes awry, normal cell growth and behaviour is disrupted and cancer can develop.

The cell cycle is a major focus for SVI's Cell Cycle and Cancer Unit. Understanding how this complicated and highly regulated process is controlled, and how it can go wrong gives us a good chance of finding new ways to treat cancer.

● **IDENTIFYING NEW SUBSTRATES**  
**Cyclin-dependent kinases (CDKs) promote cell cycle progression by phosphorylation of cell cycle regulators. Deregulated CDK activity results in the development of many human cancers due to increased cell division. We have isolated a protein called SAP180, which is phosphorylated by CDKs. SAP180 is related to the tumour suppressor, retinoblastoma binding protein (RBP1). RBP1 recruits histone deacetylases (HDACs) to pRb to inhibit transcription and cell cycle progression. We have**

**demonstrated that RBP1 binds to mSIN3A and HDAC1. RBP1 is phosphorylated by cyclin/CDKs in vitro and on the same sites in cells during cell cycle progression. This phosphorylation disrupts RBP1 association with pRb. These results show that phosphorylation of RBP1 and pRb disrupts their association to activate transcription and cell cycle progression.**

**CONTROLLING THE CELL CYCLE**  
**The ubiquitination pathway involves the covalent binding of ubiquitin to proteins, resulting in their proteasomal degradation. This pathway accounts for 80% of cellular protein turnover. Ubiquitin-conjugating enzymes (UBCs or E2s) and ubiquitin ligases (E3s) are pivotal in the ubiquitination pathway and are implicated in human cancer. Our laboratory has unveiled critical regions in E2s and E3s, which regulate the activity of these enzymes and cell cycle progression. We have also shown that these regions**

**control which type of ubiquitin chain is attached to proteins. This is important, since linkage of different ubiquitin chains onto proteins influences their fate. Structure-function studies will characterise the importance of regulatory sites for E2 and E3 function at a molecular level in vitro and determine their importance in cell cycle progression in genetic studies. Ultimately, these regulatory regions may represent new drug target sites that may be used to modulate the activity of different E2s and E3s for cancer treatment.**

## Finding the path

During 2010, Boris and his group published a paper in the prestigious journal *Molecular and Cellular Biology*. The paper brought together years of work by the group, which culminated in their description of a way in which the ubiquitin

pathway is controlled. This finding is important for a greater understanding of how cancer occurs, as the ubiquitin pathway controls the growth of cells, and when perturbed, is known to contribute to the growth of cancer cells.



# 9

## CANCER

### IMAGE

**BT-549 breast cancer cells.**  
The stained cells represent migratory cells. Breast cancer cell migration is a feature of metastatic breast cancer, which leads to spread of the cancer cells from breast tissue to vital organs, such as the lung, liver and brain.

### RESEARCH UNIT

Boris Sarcevic  
Randy Suryadinata  
Leander Timothy



**Cytoskeleton and Cancer Unit** ● The most dangerous event for a person with cancer arguably occurs when cancer cells break off from the primary tumour and travel through the circulation to a new site, seeding a secondary tumour, an event known as metastasis.

SVI's Cytoskeleton and Cancer Unit focuses on the cellular cytoskeleton, which provides a scaffold for a cell's inner workings, and is also involved in cancer metastasis.

Researchers in the Unit are studying the role of a family of proteins known as LIM kinase (LIMK) 1 and 2, which have effects on the cytoskeleton, with the aim of identifying small molecules that can inhibit these enzymes and possibly cancer metastasis.

● **THE ROLE OF LIMK2**

Obesity is an important factor in insulin resistance and type 2 diabetes. Adipocytes (fat cells) become dysfunctional with obesity; however, the mechanisms linking obesity to insulin resistance are still poorly defined. We have generated mice lacking one of the LIMK2 isoforms (LIMK2a). The mice are obese, have enlarged adipocytes and are insulin resistant. Importantly, the insulin resistance is evident in vivo, but not in isolated tissues, indicating that LIMK2a deletion influences systemic metabolism.

Furthermore, because enlarged adipocytes are an independent predictor of type 2 diabetes, understanding how LIMK2 regulates adipocyte function is important in order to better understand obesity-induced insulin resistance. LIMKs are important regulators of the cytoskeleton. It is well established that alterations of the actin cytoskeleton and decreased tubulin and vimentin synthesis are important in the regulation of adipogenesis. We are currently assessing the role of LIMK2a in adipose tissue development, cytoskeleton

remodelling and secretory function and are exploring the cellular mechanisms and pathways by which LIMK2a controls obesity through the identification of new LIMK2 substrates in adipose tissue.

**LIMK1 AND 2  
IN CHILDHOOD  
TUMOURS**

We are studying the involvement of LIMK1 and LIMK2 in childhood cancers by measuring their expression in frozen tumours and in cell lines derived from childhood tumours (neuroblastoma and astrocytoma). We have recently identified several compounds

capable of inhibiting LIMK1 and LIMK2 activity in vitro and in cell lines. We use these compounds to study their effect on neuroblastoma cell line resistance to microtubule-destabilizing drugs as we have shown that down-regulation of LIMK2 by siRNA increases the sensitivity of these cell lines to the drugs. These compounds may be used for combination treatment of neuroblastoma and possibly other childhood tumours. We have also tested the involvement of LIMK2 in other childhood tumours.

## Boost for cancer research

In 2010 Ora Bernard was awarded a \$100,000 grant from the Oncology Children's Foundation to further her research into how the cell's cytoskeleton contributes to the onset and spread of cancer. Ora says that the support is invaluable to her quest to discover how and why cancers

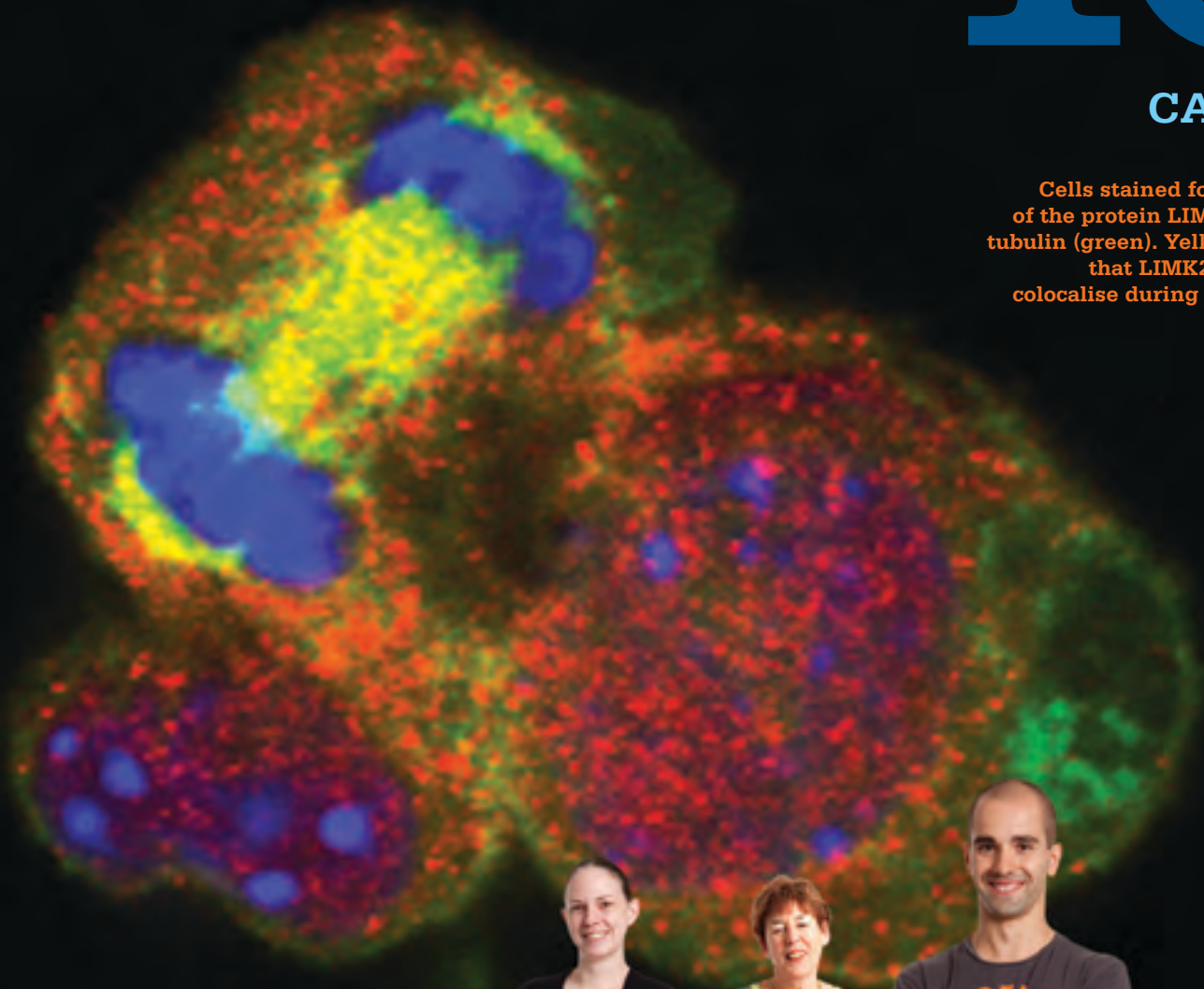
spread. "Support from sources such as the Oncology Children's Foundation helps to expedite our research. In my case, it has provided resources to help fund a talented postdoctoral fellow who is investigating the role that the LIMK protein family plays in cancer progression."

# 10

## CANCER

### IMAGE

Cells stained for expression of the protein LIMK2 (red) and tubulin (green). Yellow indicates that LIMK2 and tubulin colocalise during cell division.



### RESEARCH UNIT

- Ora Bernard
- Juliana Antonipollai
- Cristina Gamell-fulia
- Kevin Mittlestaedt
- Alice Schofield

**Pharmacogenomics Unit** ● The Greek physician Hippocrates (ca. 460 BC–370 BC) was the first to use the word ‘karkinos’ (meaning crab) to describe a tumour. He chose this word because the blood vessels that surrounded tumours were crab-like in shape. It is from this description that our words ‘cancer’ and ‘carcinoma’ are derived.

Hippocrates believed that the body was composed of four fluids: blood, phlegm, yellow bile and black bile. He thought that an excess of black bile was the cause of cancer: this belief held true for the next 1400 years.

While the modern understanding of cancer is considerably more advanced, today’s researchers continue to delve into the mysteries of the disease. In SVI’s Pharmacogenomics Unit, researchers are interested in how the combination of genes and environment affect a person’s ability to fight disease.

● **INHIBITING BREAST TO BONE METASTASIS**

**Metastasis is the primary cause of mortality associated with cancer, yet the molecular mechanisms leading to metastatic spread are poorly understood. Over the past several years our laboratory has studied a number of cell-culture and animal based models of metastasis using a range of genomic profiling technologies in order to identify ‘culprit genes’ that contribute to metastasis. Using specialized genomic profiling techniques, we have established a ‘gene-fingerprint’ of metastasis which is being refined for**

**potential application in clinical diagnosis. We have also been using a combined genomic and drug-response profiling technique to identify drugs that block the process of metastasis. Thus far, we have identified two drug molecules that are capable of inhibiting breast-to-bone metastasis in our mouse models. We are in the process of further testing these agents using our preclinical models of the disease in order to facilitate clinical trials in breast cancer patients.**

**NEW DRUG TARGETS**  
**Diabetes often leads to the development of a form of kidney damage known as diabetic nephropathy. Kidney damage in this condition is characterised by an increased accumulation of extracellular matrix (e.g., collagen) brought about by a high glucose environment. We have identified several genes that appear to play a critical role in the generation and subsequent pathological consequences of accumulated extracellular matrix. The expression of these genes may also play a role in**

**other disease states, and potentially modulate drug activity within specific tissues that are the target of current therapies. We are collaborating with the SVI’s Structural Biology Unit to elucidate the crystal structure of one of these gene products and design specific inhibitors to block its detrimental biological activity.**

## Working towards new treatments

Our laboratory identified a specific gene that is involved in the progression of diabetes, as well as adversely affecting anti-cancer therapies. Other researchers now report similar findings, firmly establishing this gene, and its protein product, as a potential drug target. Collaborating with the SVI Structural Biology Unit, we are

working to determine the three-dimensional structure of the protein. This is the first step we need to take in order to identify chemical compounds that we can use to stop the activity of this protein. With further work and refinement, these chemicals will eventually be tested as drugs to treat diseases such as diabetes and cancer.

# 11

## CANCER

**IMAGE**  
High-density microarray  
profiling detects altered gene  
expression in cancer specimens.



### RESEARCH UNIT

Mark Waltham  
Annabel Southy  
Mina Rizk  
Sam Rudstein  
Timothy Tan  
Walter Pfister

**Invasion and Metastasis Unit** ● An ancient Egyptian papyrus dating sometime between 3000 and 1500 BC contains the first written description of breast cancer. The document also acknowledged that there was no treatment for the disease and recommended cauterisation of the tumour as a palliative measure.

Things are considerably different in the modern age. New treatments mean that a woman's risk of dying from breast cancer is ever decreasing: from 1 in 29 Australian women in 1982, to 1 in 37 in 2007. However, despite these advances, around 2,700 Australian women die every year from the disease.

Researchers in the Invasion and Metastasis Unit work to understand why and how, in about 25% of breast cancer patients, cancer cells spread to other parts of the body to form a secondary tumour.

● **CELLULAR PLASTICITY IN BREAST CANCER**

**Epithelial-mesenchymal plasticity (EMP), a spectrum of changes in the shape, behaviour and motility of cells, can be regulated by growth factors such as epithelial growth factor (EGF) or hypoxia in different human breast cancer cell lines. Our studies of EMP in these cells have identified candidate effector molecules that we are now examining in clinical breast cancer specimens using immunohistochemistry and multiplex tandem PCR (MT-PCR). MT-PCR, which can measure RNA levels**

**of various EMP-related genes in a single archival section, is particularly suited to the study of circulating (CTC) and disseminated (DTC) tumour cells found in the blood stream and bone marrow, respectively. CTC and DTC have prognostic importance, and are likely to seed metastasis and recurrence. Ongoing studies aim to determine the role of EMP in CTC and DTC and, in conjunction with the NBCF-funded EMPathy Breast Cancer Network, identify new diagnostic, prognostic and therapeutic targets for breast cancer.**

**HALTING BREAST CANCER**

**MMP13 is upregulated in breast cancer and is also involved in the bone remodelling that occurs in breast to bone metastases. Inhibitors of MMP13 appear to lack most of the undesirable side effects seen with inhibitors of other MMPs and do not perturb those beneficial effects of MMPs that help the body fight cancer. Using MMP13 knockout mice we have confirmed that MMP13 is involved in both primary and secondary breast cancer. We have also found that the 'designer' MMP13 inhibitor, Cmpd-1,**

**delays both the growth of the primary tumour and the onset of associated bone lesions in breast cancer models. Ongoing studies aim to determine whether this inhibitor can complement current therapies to provide better outcomes in breast cancer models, and the role that MMP13 plays in breast cancer progression. Also under study are the processes associated with new blood vessel formation, known as angiogenesis, and MMP13-associated biomarkers.**

## A risk factor for breast cancer

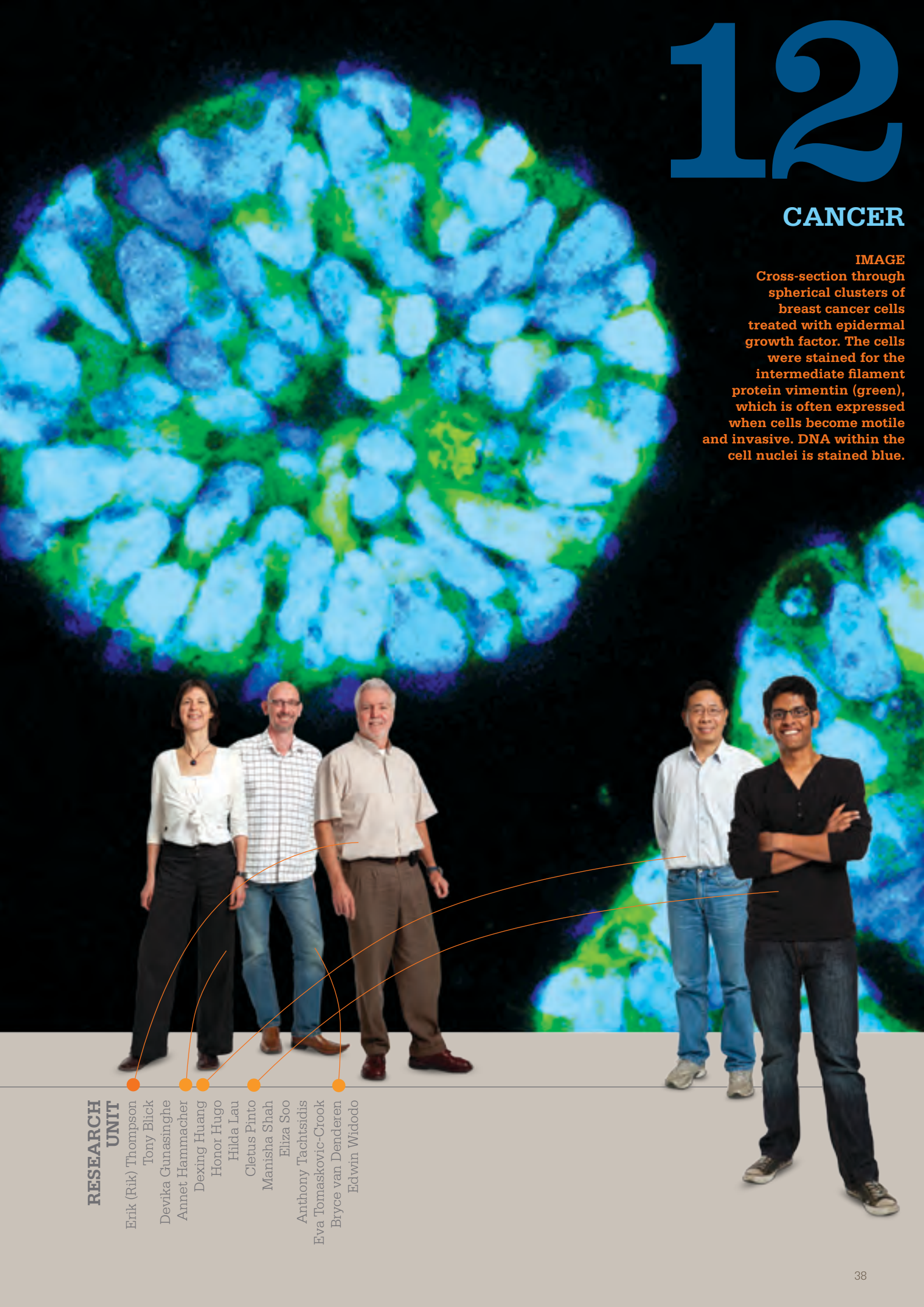
One of the highlights of 2010 was our study on the increased breast cancer risk associated with mammographic density. This unexplained familial trait can confer a staggering 4-6 fold increased risk of breast cancer. Our studies form part of a large collaborative network including researchers, surgeons, pathologists and radiologists, as well as

imaging experts in Sydney and at the Australian Synchrotron. We have coordinated a precise collection of material from mastectomies at St Vincent's Hospital for analysis at many levels. Our studies have led to the identification of a number of promising molecular candidates, which we are now testing further.

# 12

## CANCER

**IMAGE**  
Cross-section through spherical clusters of breast cancer cells treated with epidermal growth factor. The cells were stained for the intermediate filament protein vimentin (green), which is often expressed when cells become motile and invasive. DNA within the cell nuclei is stained blue.



### RESEARCH UNIT

Erik (Rik) Thompson  
Tony Blick  
Devika Gunasinghe  
Annet Hammacher  
Dexing Huang  
Honor Hugo  
Hilda Lau  
Cletus Pinto  
Manisha Shah  
Eliza Soo  
Anthony Tachtsidis  
Eva Tomaskovic-Crook  
Bryce van Denderen  
Edwin Widodo

**National Serology Reference Laboratory** ● The National Serology Reference Laboratory, Australia (NRL™) is committed to helping curb the spread of blood-borne and other infections by assuring quality and confidence in laboratory results. We deliver comprehensive quality assurance (QA) programmes for a range of blood-borne infectious and sexually transmitted diseases. NRL is designated a WHO Collaborating Centre for Diagnostics and Laboratory Support for HIV and AIDS and other Blood-borne Infections.

● **HIV INFECTION**  
**HIV testing in Pacific Island Countries (PICs) is performed by screening in a single rapid test. Reactive samples are referred overseas for confirmatory testing. With low HIV prevalence, the majority of samples initially reactive are confirmed as false positive. The lack of timely confirmatory testing presents a major barrier to delivery of appropriate care.**

**A taskforce was formed to oversee a three phased HIV testing algorithm validation. During the validation, NRL tested more than**

**700 samples in five rapid tests. Based on those results, the proposed algorithm uses three of the rapid tests in combination to yield a new testing algorithm. NRL and the Secretariat of the Pacific Community have now conducted comprehensive training in seven PICs. NRL will continue to validate and evaluate the performance of the new algorithm. Implementation of the rapid-test-based algorithm in PICs will eliminate the need for shipping samples internationally, reduce turn-around times and improve quality of patient care and management.**

**NRL IN MONGOLIA**  
**NRL was invited by the World Health Organisation (WHO) to conduct a two-week consultancy in 2010 on behalf of the Global Fund, Mongolia. The Terms of Reference were to conduct a situation analysis of sexually transmitted infection (STI)/HIV and tuberculosis (TB) laboratories of the National Centre for Communicable Diseases, District Health Departments and National Blood Centre, perform a desk review of current quality assurance and quality control guidelines, design internal and external quality assurance programs for STI/HIV**

**laboratories at all levels, and assist in the development of guidelines on QA for STI/HIV laboratories. This consultancy provided NRL an opportunity to trial the initial steps of our "Twinning Approach". NRL developed and published the "Twinning Approach" – a method of strengthening quality of laboratory testing in a region. Implementing the Twinning Approach in Mongolia over a 3–5 year period will produce the best outcomes to ensure adequate levels of resourcing and support from the Ministry of Health.**

## Eradicating AIDS

NRL is one of nine members of Australian HIV organisations that make up the HIV Consortium for Partnerships in Asia and the Pacific (HIV Consortium, <http://www.hivconsortium.org.au>). The HIV Consortium is implementing the Regional HIV Capacity Building Program (2008–2011) funded by the Australian Agency for International Development (AusAID).

The purpose of the Program is to foster strategic partnerships and linkages between Australian and the Asia-Pacific region in order to increase the capacity of partners in the healthcare, research and community sectors to contribute to effective HIV responses. As a member of the HIV Consortium, NRL is working with partners in Indonesia and in the Asia Pacific Region.



# 13

## INFECTIOUS DISEASE



### RESEARCH UNIT

- Susan Best
- Nitukshi Arachchi
- Thein Thein Aye
- Penny Buxton
- Liza Cabuang
- Chris Chiu
- Roderick Chappel
- Stirling Dick
- Wayne Dimech
- Cathy Dunkley
- Rosanna Fahmy
- Barbara Francis
- Helen Hasler
- Marina Karakaltsas
- Geraldine Kong
- Sally Land
- Mark Lanigan
- Tamara McDonald
- Dale McPhee
- Alison Natoli
- Louie Opasimov
- Lena Panagiotopoulos
- Megan Pate
- Thu-Anh Pham
- Kim Richards
- Terri Sahin
- Kathy Simeh
- John Tomasov
- Frank Torzillo
- Joe Vincini
- Robert Vinoya
- Sandy Walker
- Kim Wilson

This year's annual report focuses on the impact of disease on individuals. Good health is incredibly important to every member of the community but it is inevitable that we will all be confronted with illness in our family, friends and ourselves. Part of our investment in protecting ourselves from disease is in improving prevention and treatment through research. This connection between research and better disease outcomes is an essential part of our case for support for SVI. It is also why we continue to bring our research close together with clinical medicine and teaching through the Aikenhead Centre, which we are developing with our campus partners.

Our focus is on research into common conditions: diseases with which many Australian families have direct experience, including diabetes, heart failure, cancer and Alzheimer's disease. While the timelines between research and its application in the community can be long, most of us will have benefited from research done by Australians, including vaccine

development, devices such as the cochlear implant and treatments for infections including influenza or stomach ulcers. Australian medical research, including that done at SVI, has an inspiring story to tell.

During 2010, SVI was honoured and delighted to invite the Prime Minister of Australia, the Hon Julia Gillard MP, to launch our Childhood Diabetes Appeal. Our thanks to Dr Susan Alberti for facilitating the PM's visit. At the luncheon, the PM had the opportunity to meet three of our islet transplant recipients and talk with SVI scientists about the Program, which showcases many of our strengths and priorities.

The Islet Transplantation Program brings new technology to treatment of severe hypoglycemia, an important health problem for many people with type 1 diabetes. It is highly collaborative, involving dozens of scientists and health professionals in Melbourne as well as close collaboration with teams in Sydney and Adelaide. It also brings scientists

and clinicians together, as a joint program of SVI and St. Vincent's Hospital. The Program could not have been a success without the contribution of the very strong islet biology researchers at SVI led by Drs Helen Thomas and Tom Loudovaris. While the numbers of transplants remains small – the consortium has carried out about 30 transplants since 2007 – their impact on the quality of life of the recipients has been dramatic. We are currently working hard to secure new funding for the Program.

The SVI Forum in 2010 on Prevention of Disease was a great success thanks to our excellent speakers, Professor Rob Moodie, Dr Andrew Wilson, Ms Stephanie Alexander and Mr J T Macfarlane and, of course, our moderator and SVI patron Sir Gus Nossal. Prevention is an enormous topic and we have decided to make it the theme of the SVI Forum in future years. Primary prevention depends on a thorough understanding of disease obtained via research. But it also requires many aspects of government

# SVI Director and Chair Report

and community effort including education, the built environment and the workplace.

In 2010, our scientists continued to achieve high rates of success in NHMRC and other competitive grant mechanisms. We congratulate them for their hard work and success. However, funding for research from government and elsewhere has become a significant concern. The pressures of the economy broadly and the need to reduce government spending mean that no increase in the NHMRC budget is in view and the sector needs to mount a strong case to resume its growth. This is also true of support for indirect costs including utilities, maintenance and administration. SVI is very grateful for the support for our indirect costs from the State Government's Operational Infrastructure Support Program and from the NHMRC. However, this backing falls short of the true costs and we continue to make up the gap with other scarce resources.

During the year we upgraded the SVI Mass Spectrometry Facility, with the purchase of two cutting edge mass spectrometers which are used to analyse proteins and protein modifications. These are being employed to measure molecules in blood that may be able to predict future heart attack. We received support from many sources for this including from the John T Reid Charitable Trusts, the University of Melbourne Faculty of Medicine, Dentistry and Health Sciences, and St Vincent's Hospital. The SVI Foundation continued its outstanding work in 2010. For the Foundation, the year ended with the departure of Mr Robin Berry, its CEO, after 4 successful years in the role.

It is with sadness that we report the death late in 2010 of our former Board member and supporter Jeff Clifton. Jeff was a terrific friend of SVI as well as an outstanding sportsman and businessman and our sympathy goes to his wife Susie and their children. We also thank Douglas Wright for his

service to the Board, including in his role as Deputy Chair from 2003 to 2010. Thanks also to our current Board members and Foundation Board members. We would also like to thank the Trustees of The Mary Aikenhead Ministries for their ongoing support and guidance, which continues to help us reach our goal of improving the health of the Australian community.



BM Shanahan  
SVI Chair



TWH Kay  
SVI Director



“This connection between research and better disease outcomes is an essential part of our case for support...”

The year 2010 saw the award of a number of prestigious grants, prizes and appointments to SVI researchers. Early in the year the Leukaemia Foundation announced the award of its inaugural \$1 million Phillip Desbrow Senior Research Fellowship to Dr Carl Walkley to support his research into blood cancers and related disorders. The year continued with the election of Professor Michael Parker into the Australian Academy of Science – one of Australia’s top scientific honours – and Associate Professor Natalie Sims received the prestigious Fuller Albright Award from the American Society for Bone and Mineral Research.

During the year the National Breast Cancer Foundation awarded a \$5 million collaborative grant to Professor Erik Thompson to investigate breast cancer recurrence. The announcement of the successful National Health and Medical Research Council (NHMRC) Project Grant applications in October gave a number of SVI researchers a reason to celebrate, with ten SVI grants funded (a success rate of 37%, compared to the nationwide success rate of 23%). Notable was the award to Jörg Heierhorst, Bruce Kemp and Natalie Sims of two Project Grants each as Chief Investigator, and to Dr Nicole Walsh of her first NHMRC Project Grant. Dr Louise Purton was also awarded a Fellowship from the NHMRC to further her research into the uses of vitamin A products to improve the treatment of patients with blood cell disorders.

In May, SVI supporters gathered for the 12th Annual SVI Forum to hear speakers Professor Rob Moodie, Chair of the National Preventative Task Force, food icon Ms Stephanie Alexander, cardiologist Dr Andrew Wilson and Mr JT Macfarlane, head of Deutsche Bank, Australia, share their opinions on the topic ‘Prevention or Cure?’

In July, then Leader of the Opposition, Ted Baillieu toured the Institute with the then Shadow Minister for Health, David Davis and the Shadow Minister for Innovation, Nick Kotsiras.

Type 1 diabetes research at the Institute was given a boost by the December visit of Prime Minister, Julia Gillard, to launch SVI’s Childhood Diabetes Appeal, which aims to raise \$2.2 million. The first donation to the Appeal was a \$500,000 pledge from Sue Alberti, chair of the SVI Foundation, a longtime supporter of the Institute.



Then Leader of the Opposition, Ted Baillieu, with SVI Chair, Brenda Shanahan, Director, Professor Tom Kay, then Shadow Minister for Health, David Davis and the Shadow Minister for Innovation, Nick Kotsiras.



Ms Brenda Shanahan, Chair of SVI, with Mr JT Macfarlane, Professor Rob Moodie, Ms Stephanie Alexander, Sir Gustav Nossal and SVI Director, Professor Tom Kay.



Michael Parker was elected a member of the Australian Academy of Science.



Carl Walkley was awarded the Leukaemia Foundation’s inaugural Phillip Desbrow Fellowship.



Natalie Sims was awarded the American Society for Bone and Mineral Research’s prestigious Fuller Albright Award.

# 2010 Institute Highlights



“We may not recognize the names  
of those who devote their lives to  
research, but their work resonates  
far beyond the laboratory walls”

St Vincent's Institute is a centre of excellence for research into diseases that have a high impact on the community, including type 1 diabetes, obesity and type 2 diabetes, heart disease, arthritis, osteoporosis, cancer and Alzheimer's disease.

SVI offers undergraduate and postgraduate training in cell biology, protein structural biology, biochemistry, immunology and cell signalling, as well as clinical research into diseases including cancer, diabetes and bone disease.

### **St Vincent's Student Society**

The Student Society is run by students who organise both social and career development events throughout the year, including journal clubs, BBQs, ice skating, trivia nights, movie evenings and the Postgraduate Ball. The annual Student Retreat provides great educational and socialising opportunities for students. See the student society page <http://www.medstv.unimelb.edu.au/StudentSociety/StudentSociety.html> for more details.

### **Undergraduate Education**

An Honours year at St Vincent's Institute offers you the chance to explore a stimulating area of research guided by leading scientists. Prospective students should contact the leaders of the individual research groups to discuss potential projects.

### **SVI Honours Programs**

More information:  
Dr Louise Purton,  
Student Coordinator, SVI

Tel: 9288 2480 or email:  
[enquiries@svi.edu.au](mailto:enquiries@svi.edu.au)  
[www.medstv.unimelb.edu.au/info/honours.html](http://www.medstv.unimelb.edu.au/info/honours.html)

Applications close on 30th November each year

### **Undergraduate Research Opportunities Program (UROP)**

UROP gives undergraduate students the opportunity to undertake paid work in a research laboratory one day a week during semester and full-time during the holidays to gain an insight into a medical research career.

More information:  
[www.bio21.com.au/urop.asp](http://www.bio21.com.au/urop.asp)

Applications open in April and September and should be lodged directly with Bio21.

### **Postgraduate Education**

Studying for your PhD at SVI will give you the opportunity to carry out research into major diseases under the supervision of leading Australian scientists. There are options to enrol through the University of Melbourne, Department of Biochemistry and the University of Melbourne Departments of Medicine and Surgery at St Vincent's Hospital. Prospective students should contact the leaders of the individual research groups to discuss potential projects.

### **SVI PhD Programs**

More information:  
Dr Louise Purton,  
Student Coordinator, SVI

Tel: 9288 2480 or email:  
[enquiries@svi.edu.au](mailto:enquiries@svi.edu.au)



## External Scholarships

There are several scholarship options available through the University of Melbourne, NHMRC and SVI:

Australian Postgraduate Awards (APA)

University of Melbourne, Melbourne Research Scholarships (MRS)

University of Melbourne, Melbourne International Research Scholarships (MRS)

[cms.services.unimelb.edu.au/scholarships/pgrad](http://cms.services.unimelb.edu.au/scholarships/pgrad)

NHMRC Dora Lush Biomedical Postgraduate Research Scholarships

[www.nhmrc.gov.au/fellows/apply/granttype/scholars/lush.htm](http://www.nhmrc.gov.au/fellows/apply/granttype/scholars/lush.htm)

## SVI PhD & Honours Student Awards

Students commencing full-time research at SVI are invited to apply for top-up PhD or Honours awards. Successful applicants will receive a \$5,000 p.a. top-up stipend for 3 years (PhD) or 1 year (Hons).

More information:  
SVI Foundation Student Awards Coordinator

Tel: 9288 2480 or email:  
[enquiries@svi.edu.au](mailto:enquiries@svi.edu.au)

PhD applications due: 31 December each year

Honours applications due: 31 December each year

## Radical research – antioxidants in the fight against breast cancer

PhD student Walter Pfister was awarded an SVI Foundation Student Award in 2009, to support his PhD studies into breast cancer.

“I am doing my PhD in the SVI Invasion and Metastasis Unit with Rik Thompson and Mark Waltham. The aim of my project is to investigate the therapeutic potential of antioxidants in the suppression of breast cancer metastasis and cancer-induced bone destruction, as well as to study the effects of antioxidants in combination with conventional chemotherapy.

In my time at SVI, I have come to appreciate the collaboration between the different labs and the approachability of every scientist in the Institute – big or small. More than anything, I value the extensive program to foster the development of research students, and in particular the SVI Foundation Honours Scholarship and the SVI Foundation Postgraduate Student award.

Results don't come easily. Research is hard work and it requires dedication and the patience of an angel. The generous support of the SVI Foundation gives students at SVI the best chance of developing into top researchers, and together it takes us closer to new insights and new solutions to fight diseases that affect all of us.”

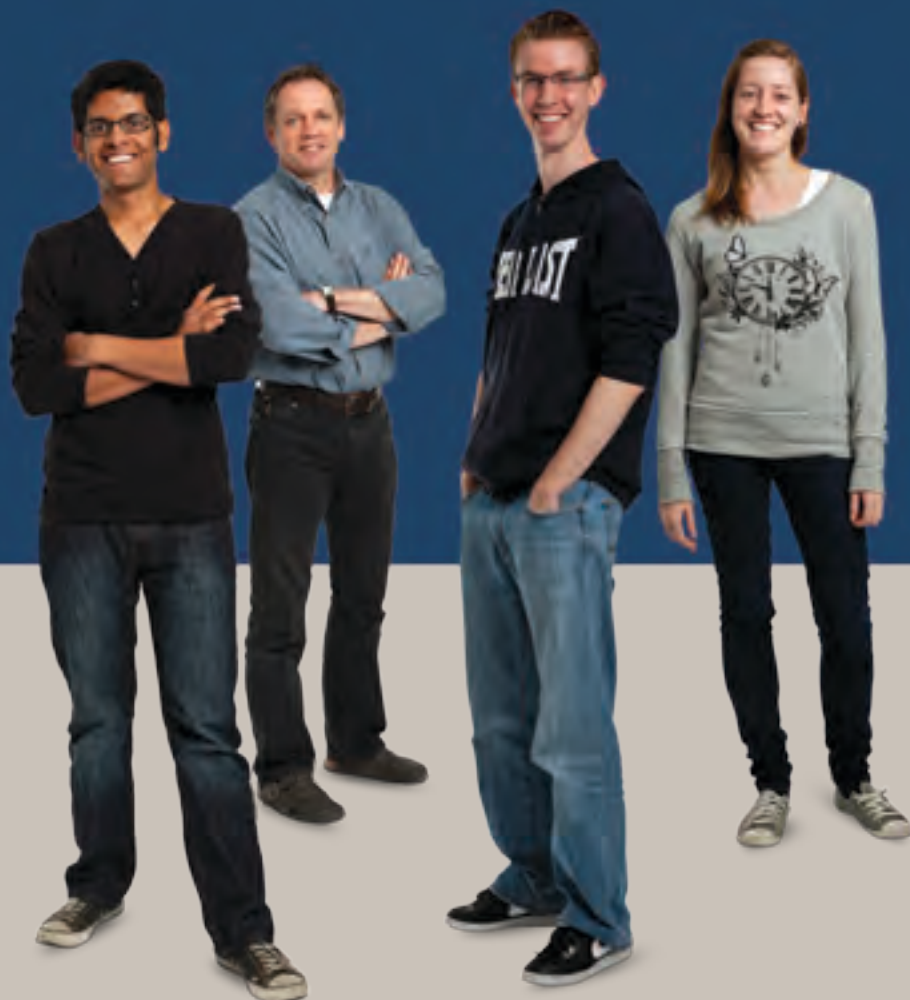
Congratulations to the students undertaking their studies at SVI, who were recipients of SVI Foundation Student Awards in 2010, sponsored by the SVI Support Group and the SVI 1000 Club:

Holly Brennan (Honours)

Hilda Hui Lin Lau (Honours)

Jan-Lee Ng (Honours)

Jonathan Chee (PhD)



“...the extensive program to foster the development of research students”

**Ms Brenda M Shanahan**

BEc BComm  
Chair, SVI Board  
Ms Shanahan has a research background in finance in Australian and overseas economies and share markets. She is Chair of Challenger Listed Investments and a non-Executive Director of Clinuvel Pharmaceuticals Ltd; DMP Asset Management Ltd and Kimberley Foundation of Australia Ltd. She is a former Chairman of St. Vincent's Health Ltd, former member of the Australian Stock Exchange, and former Executive Director of a stockbroking firm, a fund management company and an actuarial company.

**Dr Susan M Alberti AO**

HonLLD  
Dr Alberti is co-founder and Managing Director of DANSU Group and associated companies. She has a strong commitment

to fundraising and promotion of juvenile diabetes and is the National President of the Juvenile Diabetes Research Foundation Australia and also International Patron and member of the Board of Chancellors of JDRF International. Dr Alberti is Chair of the SVI Foundation, Victoria University Foundation Board member and also a Board member of the Western Bulldogs and Co-Chair of the Western Bulldogs Forever Foundation.

**Mr Paul Holyoake**

BEngMech (Hons) MEngSci  
Mr Holyoake is currently Executive Chairman, Oakton Limited, an ASX listed, information technology services company. From June 1988 to June 2005, Mr Holyoake was Managing Director and Chief Executive Officer, Oakton Limited.

**Professor Thomas WH Kay**

BMedSc MBBS PhD Melb FRACP FRCPA  
Professor Kay is Director of SVI. He holds a Professorial appointment within the Department of Medicine, St. Vincent's Hospital and The University of Melbourne. He also holds the position of Honorary Endocrinologist at St. Vincent's Hospital. Professor Kay's research interests are in the area of autoimmunity, particularly of type 1 (juvenile) diabetes.

**Mr John T Macfarlane**

MComm  
Mr Macfarlane is Chairman of Deutsche Bank Group, Australia & New Zealand following seven years as President & CEO of Deutsche Bank, Japan. An economist by training, Mr Macfarlane held senior positions with Bankers Trust in Sydney, New York and New Zealand until its acquisition by Deutsche Bank

in 1999. He has served as: Director of the NZFE; member of the Global Markets Executive Committee, the Global Banking Executive Committee and the Global Regional Management Committee of Deutsche Bank; and Co-Chair of the Asia Pacific Deutsche Bank Executive Management Committee.

**Professor James McCluskey**

MBBS B Med Sci MD FRACP FRCPA  
Professor McCluskey is Associate Dean (Research), Faculty of Medicine Dentistry and Health Sciences and past Head, Department of Microbiology and Immunology at The University of Melbourne. He is also a Consultant Immunologist to the Victorian Transplantation and Immunogenetics Service, Australian Red Cross Blood Service.



# SVI Board of Directors



**Mr Michael McGinniss**

BComm (Hons) MEc  
Mr McGinniss retired from a senior position as a partner with PricewaterhouseCoopers, Chartered Accountants in 2000. Since then he has taken up a number of Board positions in the not-for-profit and commercial sectors and also serves as a Trustee of The Marian and E.H. Flack Trust.

**Professor Patricia O'Rourke**

RN Grad Dip App Sc (Nursing)  
GAICD  
Professor O'Rourke was appointed St. Vincent's Chief Executive Officer in April 2009. She has more than 20 years experience in the healthcare industry, including nursing and senior management roles. In her previous role as Chief of Clinical Operations and Chief Nursing Officer at St. Vincent's her duties included leading regional and national projects, representing St. Vincent's on a

number of Department of Human Services committees, providing strategic and operational advice to the CEO and clinical leadership to the Executive. Until October 2008 she was a member of the Board of Southern Health.

**Ms Ruth O'Shannassy**

BComm  
Ms O'Shannassy worked in economic research in the finance industry in Melbourne before moving overseas. She spent seven years living and working offshore, primarily as a stockbroker in London and Asia before returning to Australia. She is a Board member of the Victorian Prostate Cancer Research Consortium.

**Mr John Pizzey**

BE(Chem) Fell Dip (Management)  
FTSE FAICD FAIM  
Mr Pizzey retired from Alcoa in December 2003 where he was Executive Vice President of Alcoa Inc (USA) and Group President,

Primary Products. He was Chairman of the London Metal Exchange Ltd (UK) in 2003. Mr Pizzey is currently a Director of Alumina Ltd, Amcor Ltd and Iluka Resources Ltd. He is also a member of the Board of Governors at Ivanhoe Grammar School.

**Mr Gregory Robinson**

BSc(Hons) MBA (Columbia)  
Mr Robinson is Finance Director, Newcrest Mining, responsible for the group's finance function and for leading strategy, planning and business development activities. Prior to joining Newcrest, Mr Robinson was with the BHP Billiton Group for the period 2001 to 2006 where he held the positions of Project Director of the Corporation Alignment Project, Chief Finance and Chief Development Officer, Energy and Chief Financial Officer, Petroleum. He was also a member of the Energy Executive Committee and Group Executive Committee.

Before joining BHP Billiton, Mr Robinson was Director of Investment Banking at Merrill Lynch & Co and headed the Asia Pacific Metals and Mining Group.

**Mr Douglas A Wright**

FAICD FPRIA  
Until May 2010  
Mr Wright is a public relations consultant and a founder and Chair of Wrights. He is a director of Olympic Park Sports Medicine Centre. Mr Wright is Vice Chair of Worldcom, the largest global network of independent public relations firms and a member of the Australian Bankers' Association Small Business Forum. He is a Fellow of the Public Relations Institute of Australia, an Associate Fellow of the Australian Marketing Institute and a member of the Counsellors' Academy of the Public Relations Society of America and the Institute of Chartered Public Relations (UK).



The year 2010 had a number of highlights for the researchers at SVI, including their success in the NHMRC grant funding round. There was also an exciting increase in research capacity at the Institute, with the upgrade of SVI's Mass Spectrometry Facility. The SVI Foundation is proud to be able to help researchers at SVI in their fight against common diseases that affect the Australian community, by raising funds to support activities such as the new Mass Spectrometry Facility.

The Foundation ran a number of fundraising events throughout the year, including our annual Discovery Day event at the MCG, seamlessly pulled off by the members of the Discovery Day Committee, and with great help from our friends at the Collingwood and St Kilda Football Clubs. We are already in the full swing of preparations for the 2011 function. The year continued with the SVI Charity Golf Day, which, thanks again to the support of our Golf Day Committee, raised \$50,000 towards heart research at SVI, in addition to being great fun for the participants.

Our grateful acknowledgments should go, as ever, to the members of the SVI Support Group, chaired by Foundation Board member Claire O'Callaghan. The Group capped off their 21st year

of support with a dinner at The Athenaeum Club, raising funds for the Institute's Student Scholarship Program. The Group has now raised an impressive sum of more than \$140,000.

The year also ended with a bang, with the visit of the Prime Minister Julia Gillard to launch the Institute's Childhood Diabetes Appeal. This will be a major focus of fundraising activities in the year to come, in which my fellow Foundation Board members and I will continue to strive to support the researchers at SVI in every way we can.

I would like to take this opportunity to thank all of our loyal supporters, volunteers, donors, particularly members of the \$10,000 Discovery Fund, and of course my fellow Foundation Board members, for their dedication to the cause, helping to offer hope to all those in the community who have been touched by disease.

God bless,



Sue Alberti AO HonLLD  
SVI Foundation Chair



“...helping to offer hope to all those in the community who have been touched by disease”

## SVI Foundation Chair Report

## May

At a dinner held at Movida AQUI in support of the SVI Heart Saver Appeal, guests were told of the need for cutting edge equipment for SVI's Mass Spectrometry Facility, to facilitate research into heart disease. With generous support from a number of private donors, as well as Trusts and Foundations, the target of \$1.2 million was reached and the equipment was installed at the Institute during the year.

## July

Collingwood and St Kilda clashed in a match at the MCG on the 17th of July, helping to raise more than \$60,000 in support of SVI's third annual Discovery Day. Thank you to committee members: Brian Cooney (Chair), Benni Aroni, Jeni Coutts, Suzan Morlacci, Misty Warren (CFC), Wayne Jarred (SKFC), Christine Collins (Stageright), James Hatzimosis, Renton Carlyle-Taylor, Robin Berry and Clare Lacey.



Kids with type 1 diabetes form a guard of honour for Collingwood players entering the ground.

## October

### Charity Golf Day

SVI's third Annual Charity Golf Day at the Albert Park Golf Course raised \$50,000 in support of heart disease research at the Institute. Thank you to committee members: Michael Dwyer, Leon Wiegard, Michael Kay, Barry Holbrook, Mark Kerr, Charlie Happell, Robin Berry and Clare Lacey.



SVI Charity Golf Day in support of heart research at SVI.

### SVI Support Group Dinner

The SVI Support Group, led by Claire O'Callaghan, continued their support of students at SVI by raising \$30,000 at their annual dinner at The Athenaeum Club. Thank you to the Support Group members.



The SVI Support Group.

## December

SVI's Childhood Diabetes Appeal was launched by the Prime Minister at The Langham Hotel on the 8th of December. The first donation to the Appeal, which aims to raise \$2.2 million to support diabetes research at the Institute, was a \$500,000 pledge from Sue Alberti, Chair of the SVI Foundation.



Sue Alberti and Tom Kay with the Prime Minister at the Launch of the Childhood Diabetes Appeal.

## Trusts and Foundations

Thank you to the following Trusts and Foundations for their support in 2010:

LEW Carty Charitable Fund

Harold and Cora Brennen Benevolent Trust administered by Equity Trustees

H&L Hecht Trust administered by Perpetual Trustees

The Percy Baxter Charitable Trust and the Alan (AGL) Shaw Trust administered by Perpetual Trustees

E.J. Whitten Foundation

The Angior Family Foundation

The Marian and E.H. Flack Trust

JO & JR Wicking Trust, managed by ANZ Trustees

Prostate Cancer Foundation of Australia

Rebecca L Cooper Medical Research Foundation

Cancer Research Trusts as administered by Equity Trustees

Lynne Quayle Charitable Trust Fund as administered by Equity Trustees

Harold Mitchell Foundation

Leukaemia Foundation

John T Reid Charitable Trusts

We would like to thank the 1000 Club subscribers for 2010

**Dr Susan M Alberti**

Chair, SVI Foundation Board  
 Dr Alberti AO is co-founder and Managing Director of DANSU Group and associated companies. She has a strong commitment to fundraising and promotion of juvenile diabetes and is the National President of the Juvenile Diabetes Research Foundation Australia and also International Patron and member of the Board of Chancellors of JDRF International. She is an SVI Board Member, Victoria University Foundation Board member and also the Patron and Board member of the Western Bulldogs and Co-Chair of the Western Bulldogs Forever Foundation.

**Mr Benni Aroni**

Co-Vice Chair, SVI Foundation Board  
 Mr Aroni is a qualified legal practitioner having been the managing partner of his own legal firm between 1982 and 1998. He has been a developer of Eureka Tower from 1998 to date. He now chairs Stralliance Developments, a property development and construction group. He was Vice President of JDRF Victoria between 1993 and 1998 and National Vice President from 1995. Subsequently he has focused his charity work on the SVI Foundation. He is and has been a Board member of several companies, listed and unlisted.

**Mr Robin Berry**

CEO, SVI Foundation Board  
 Until November 2010  
 Mr Berry has a background in the sports, health and leisure industry. He has extensive experience in corporate management, marketing of premium brands, sponsorship,

manufacturing and the importing of sporting and leisure products. He has successfully launched businesses which design and market branded surf apparel, footwear, aqua and fitness products. Mr Berry stepped back into the corporate world and is now the CEO of Crocs Australia.

**Mr Anthony Burgess**

Co-Vice Chair, SVI Foundation Board  
 Mr Burgess is Chief Executive Officer of Flagstaff Partners, an independent corporate finance advisory firm based in Melbourne. He has 30 years experience in corporate finance in Melbourne, London, and New York, and has advised on many major M&A and ECM transactions. Mr Burgess holds an MBA (with Distinction) from Harvard Business School (1985) and a Bachelor of Commerce (with First Class Honours) from the University of Melbourne (1981). He is a member of CPA Australia and the Financial Services Institute of Australia. He is a Director of the listed investment company, Diversified United Investments Limited, and is a member of the Advisory Board to the Faculty of Business and Economics, University of Melbourne.

**Ms Simone Carson**

From March 2010  
 Ms Carson helped to found a dynamic not-for-profit called SecondBite 5 years ago. She remains on the Board of SecondBite with a special interest in volunteers and the relationships between Donors and Recipients. She is a member of AICD having completed a Company Directors' Course in 2009. After leaving school Simone completed her

Nursing training at The Royal Children's Hospital, gained a certificate in Paediatric Intensive Care and a Bachelor of Education at La Trobe University. Apart from her work in PICU at RCH, she also undertook part-time work helping to co-ordinate a research project for the Infectious Diseases Department.

**Mr Brian Cooney**

Mr Cooney is a leading member of the Australian sports marketing industry. Specialising in sponsorship and event management, Mr Cooney has been responsible for some of the biggest commercial arrangements in Australian sport. As Senior Vice President of the world's largest sports marketing company, IMG, he has vast experience in dealing with senior figures from Government and corporate Australia.

**Ms Jeni Coutts**

Prior to starting her own Corporate Affairs consultancy in 2003, Ms Coutts held senior positions in Corporate Affairs with some of Australia's leading corporations including Transurban, Siemens, Hoechst and CitiPower. Her experience is wide ranging and has covered all facets of corporate affairs from issues, crisis and media management through to Government, Stakeholder, Community and Investor Relations. She holds degrees in Public Relations/Politics and Law.

**Mrs Maria Foti**

During the past 20 years Mrs Foti has been the co-founder and Managing Director of National Educational Advancement Programs (Neap) Pty Ltd and its associated companies. Neap is

an education services provider and educational publisher to the senior secondary school market. With a background in teaching and design, she has also been involved in a number of family-owned businesses, most notably owning, operating and designing garments for a wholesale ladies' high fashion label and boutique.

**Mr Bruce Guthrie**

Mr Guthrie has been a journalist and editor for more than 35 years, occupying some of the most senior positions in the Australian print media in that time. He has edited both of Melbourne's major daily newspapers, The Age and the Herald Sun, and co-founded then later edited The Sunday Age. He has been a reporter and writer in Australia and the United States, a regular commentator and broadcaster on 774ABC and is the author of a memoir, Man Bites Murdoch. Mr Guthrie has also worked in senior positions in the magazine industry here and abroad. His publications have won prestigious PANPA Newspaper of the Year and MPA Magazine of the Year awards. Educated at La Trobe University and RMIT, he is married with two teenage children and lives in the Melbourne suburb of Hawthorn.

**Mr James Hatzimoisis**

Mr Hatzimoisis is a Licensed Estate Agent and Accredited Auctioneer. He is a Director of 8 Offices within the Barry Plant Real Estate Network and has been instrumental in the growth of the Network particularly throughout Melbourne's Western Suburbs. His primary focus is training, mentoring and skill development of Sales Teams within the group. Outside of work, his interests



# SVI Foundation Board

include conducting many Charity Auction events annually; he has been actively involved with the Bluey Day Foundation, Convoy For Kids, the MS Society and most schools in Melbourne's Western suburbs and is a foundation Shareholder of the Melbourne Victory Football Club.

**Professor Thomas WH Kay**

Professor Kay is Director of SVI. He holds a Professorial appointment within the Department of Medicine, St. Vincent's Hospital and The University of Melbourne. He also holds the position of Honorary Endocrinologist at St. Vincent's Hospital. Professor Kay's research interests are in the area of autoimmunity, particularly of type 1 (juvenile) diabetes.

**Ms Suzan Morlacci**

Ms Morlacci has spent the better part of her life involved in her family business. She has put her hand and mind to all aspects of the business from Concrete Batching to Shipping. She currently manages the Credit and Personnel departments of the business. Ms Morlacci has managed to find time to not only attain a diploma as a Spa Therapist and a degree in the Arts Legal Studies, but is also involved in event management, fundraising activities. During 2008, prior to becoming a board member of SVI Foundation, she was a committee member of YSVI. She has experienced first hand the miracles that the specialists and doctors of St. Vincent's Hospital can achieve.

**Mrs Claire O'Callaghan**

Chair, SVI Support Group  
A St. Vincent's Hospital trainee, Mrs O'Callaghan returned to part-time nursing once her five children were in full-time education. She has chaired a number of fundraising and educational organisations including the original Noah's Ark Toy Library for Handicapped Children and is currently Chair of the SVI Support Group.

**Mrs Karen Plant**

Co-Vice Chair, SVI Foundation Board  
Mrs Plant is a qualified interior decorator. With her husband, she helped establish Barry Plant Real Estate which has over 70 offices throughout Victoria and Southern Queensland. They also ran their own construction company Birchbank Homes. Her foray into charity work was the refurbishing of the cancer ward at The Royal Children's Hospital. She is a board member of The Deakin Foundation, for Deakin University, as well as a member of the REIV Charity Foundation Board. She enjoys family life with her husband Barry and children Nicholas and Ayleisha.

**Mr Peter Riley**

From March 2010  
Mr Riley was a Senior Partner/ Executive Director in the Tax Consulting Division of Pitcher Partners Melbourne for approximately 19 years until 30 June 2010. In that role he had considerable experience in advising high wealth individuals, their families and their businesses, on investing in and outside of Australia, specialising in taxation and business advisory issues in

relation to property development, corporate advisory, funds management, high wealth families and estate planning. He has current and past appointments with a number of professional bodies. On 1 July 2010 Peter founded Alandal Consulting Pty Ltd, a boutique firm advising high wealth families and their business arms. In addition to his role with SVI, he has a large number of roles in the not-for-profit sector.

**Ms Brenda M Shanahan**

Ms Shanahan has a research background in finance in Australian and overseas economies and share markets. She is Chair of Challenger Listed Investments and a non-Executive Director of Clinuvel Pharmaceuticals Ltd; DMP Asset Management Ltd and Kimberley Foundation of Australia Ltd. She is a former Chairman of St. Vincent's Health Ltd, former member of the Australian Stock Exchange, and former Executive Director of a stockbroking firm, a fund management company and an actuarial company.

**Dame Janet Spooner D.S.J.**

For over 40 years Dame Janet has supported a number of charities and her dedication was acknowledged in 2004 when she was made a Dame of the Order of St John of Jerusalem (International Order Award). She has been involved with the following organisations in various roles: Royal Women's Hospital - for mothers and babies (made Life Governor), SIDS, Queen Elizabeth Hospital, Lady Mayoress' Committee (made Honorary Life Member), Cabrini Special Events Committee, Bone Marrow Donor Institute, and Women at the Alfred

(for prostate cancer). She is also a member of the auxiliary board of the Royal Children's Hospital and a Hummingbird Ambassador for the Bernard O'Brien Institute, acting as Honorary Treasurer.

**Mrs Christine Tarascio**

Co-Vice Chair, SVI Foundation Board  
Mrs Tarascio's family company is Salta Properties Ltd. She has been a very active fundraiser over a long period of time for various causes, including the Lady Mayoress' Charitable Fund, the Queen Elizabeth Centre, PMB (raising funds for prostate cancer research), and Pampering Patients. Mrs Tarascio is currently assisting her family company with the redevelopment of the former Mercy Hospital.

**Mr Sam Tarascio Jnr**

Mr Tarascio has more than 10 years formal hands-on experience in the property industry. Following a brief stint at corporate advisory firm Coopers & Lybrand, he started his career in property at Jones Lang LaSalle, gaining experience in their property management and then sales and leasing divisions. In 1999, he joined the family company, Salta Properties, first in the group's asset management business, before moving on to take an active role in the company's largest development at the time, the Victoria Gardens mixed use residential, commercial, and retail precinct. Mr Tarascio is now Managing Director of Salta Properties.



## Fellowships, prizes and grants

### Bone Cell Biology and Disease

#### Fellowships and Prizes

- Natalie Sims was awarded a Fuller Albright Award from the American Society for Bone and Mineral Research
- Emma Walker was awarded an Outstanding Abstract Award from the Australia and New Zealand Bone and Mineral Society
- Emma Walker and Benoit Le Goff each received a Travel Grant from the Australia and New Zealand Bone and Mineral Society
- TJ Martin was made an Honorary Doctor of the Australian Catholic University

#### Grants

- Nicole Walsh, Evange Romas, Natalie Sims. Oncostatin M signalling and bone remodelling in arthritis. Barbara Cameron Memorial Award, Arthritis Australia
- Nicole Walsh. Bone Cell Function in OA. Perpetual Trusts (The Percy Baxter Charitable Trust and The Alan (AGL) Shaw Trust)
- TJ Martin, Natalie Sims. Role of ephrin/EPH signalling in the formation phase of bone remodelling NHMRC Project Grant
- TJ Martin, Carl Walkley. Osteosarcoma. NHMRC Project Grant

### Cell Cycle and Cancer

#### Grants

- Boris Sarcevic. Understanding the mechanisms of substrate and ubiquitin lysine specificity during ubiquitination. NHMRC Project Grant

### Cytoskeleton and Cancer

#### Fellowships and Prizes

- Kevin Mittelstaedt was awarded a SVI Foundation Student Scholarship
- Alice Schofield was awarded a SVI Foundation Student Scholarship
- Cristina Gamell-Fulla was awarded a Fellowship from the Oncology Children's Foundation (NSW)

#### Grants

- Ora Bernard, Michael Parker, Boris Sarcevic, Bruce Kemp. Mass spectrometry facility. Prostate Cancer Foundation of Australia

### Immunology and Diabetes

#### Fellowships and Prizes

- Thomas Kay received a Wellcome Trust grant
- Helen Thomas became an NHMRC Career Development Fellow (CDA2)
- Yuxing Zhao was awarded a Juvenile Diabetes Research Foundation Postdoctoral Award
- Gaurang Jhala was awarded an NHMRC Biomedical Postgraduate Scholarship

- Jonathan Chee was awarded a Melbourne International Fee Remission Scholarship
- Thomas Brodnicki was awarded the Best Moderated Poster Presentation at St. Vincent's Hospital Research Week
- Colleen Elso was awarded a Senior Investigator Presentation at St. Vincent's Hospital Research Week
- Mark McKenzie received a commendation in the Victorian Government Premier's Award for Health and Medical Research for work he undertook at St Vincent's Institute
- Iris Tan received an award for her oral presentation at the Australian Society for Medical Research Student Symposium
- Sean Ivory was awarded the Dean's Honours Award from the University of Melbourne, Faculty of Science for his Honours work in 2009

### Invasion and Metastasis

#### Fellowships and Prizes

- Honor Hugo was awarded a Cancer Therapeutics CRC Post-doctoral Travel Award to attend the MRS-AACR Joint Conference on Metastasis and the Tumor Microenvironment Conference
- Honor Hugo received a Lorne Cancer Conference Poster Award.

#### Grants

- EW Thompson, G Goodall, C Saunders, R Anderson, A Yap, I Street, A Dobrovic, A Dowling. Targeting Breast Cancer Recurrence through Epithelial Mesenchymal Plasticity. National Breast Cancer Foundation National Collaborative Research Program Grant
- EW Thompson, M Henderson, A Dowling, A Dobrovic. Cellular Changes in Circulating and Disseminated Breast Cancer Cells. St Vincent's Hospital Research Endowment Fund S.C. Dickensen Bequest
- EW Thompson, A Fabra Fres, G Goodall. Novel MicroRNA Regulators in the Breast Cancer EMT. National Breast Cancer Foundation / Cancer Australia (Project Grant administered through the University of Melbourne Department of Surgery)
- EW Thompson, M Waltham. MMP13 as a therapeutic target in breast cancer. NHMRC Project Grant
- EW Thompson, P Choong, P Hill, M Henderson, K Pantel. Exploring epithelial-mesenchymal interconversions in the breast cancer metastatic cascade. Cancer Council Victoria Project Grant
- EW Thompson, I Haviv, M Waltham. A functional genomic screen for tumorigenicity relative to epithelial-mesenchymal transition, breast cancer stem

- cell biology and therapeutic efficacy. US- DOD IDEA grant
- L Soon, F Braert, EW Thompson, P Valloton. A New Model for 3D Migration Involving Claw Structures and Metalloproteinases. ARC Discovery Project Grant
- M Southey, EW Thompson, I Haviv, P Hill, J Cawson, I Campbell. Molecular determinants of mammographic density. Victorian Breast Cancer Research Consortium Translational Research Grant
- WA Morrison, A O'Connor, AJ Penington, EW Thompson. Tissue distraction: a novel approach to enhance tissue growth for soft tissue engineering purpose. Australian Research Council Discovery Project Grant
- Honor Hugo. Interplay between hypoxia, C-myc and Snail2 during epithelial mesenchymal interconversions in human breast cancer. National Breast Cancer Foundation Postdoctoral Training Fellowship
- Honor Hugo. Purchase of a Countess Automated Cell Counter. Angior Family Foundation

### Molecular Cardiology

#### Grants

- Duncan Campbell. Aliskiren: cardioprotection by increased bradykinin levels? NHMRC Project Grant

### Molecular Genetics

#### Fellowships and Prizes

- Sabine Jurado won the AGT Student Award, Lorne Genome Conference
- Sabine Jurado won the ANZSCDB Symposium Student Presentation Award

### Pharmacogenomics

#### Fellowships and Prizes

- Walter Pfister was awarded a Cancer Therapeutics CRC PhD scholarship

### Protein Chemistry

#### Fellowships and Prizes

- Bruce Kemp was awarded an NHMRC Fellowship (SPRF)

### Stem Cell Regulation

#### Fellowships and Prizes

- Carl Walkey was awarded the Phillip Desbrow Senior Research Fellowship from the Leukaemia Foundation

#### Grants

- Louise Purton. Roles of retinoic acid receptors in bone and haemopoiesis. Cancer Council Victoria Grant- in- Aid

### Structural Biology

#### Fellowships and Prizes

- Michael Parker was elected a Fellow of the Australian Academy of Science
- Chen Gao was awarded an Australian Postgraduate Award
- Matthew Chung was awarded a Cooperative Research Centre

for Cancer Therapeutics Travel Grant to attend the "Advances in Protein Crystallography" Conference, Florence, Italy

- Julian Tang was awarded a Student travel scholarship jointly funded by the International Union of Crystallography and International Union of Biochemistry & Molecular Biology to attend the 42nd International School of Crystallography in Erice, Italy
- Julian Tang was awarded a Student Travel Scholarship from the Cancer Therapeutics CRC Pty Ltd Australia to attend the 42nd International School of Crystallography in Erice, Italy
- Julian Tang was awarded a Transcontinental Travel Grant for Young Scientists by the Federation of the Societies of Biochemistry and Molecular Biology to attend Biocrys2010 in Oeiras, Portugal

#### Grants

- Gooley, PR, Parker, MW, Stapleton, DI, Park, KH, Murphy, R.M. Explaining the differences in affinity and of carbohydrate binding of the glycogen-sensing enzyme, AMP-protein activated kinase (AMPK). ARC Discovery Grant
- MW Parker. Enhancement of a virtual drug screening facility. H. & L. Hecht Trust administered by Perpetual Trustees
- MW Parker. Structures of the human telomerase enzyme complex. Harold and Cora Brennen Benovolent Trust administered by Equity Trustees
- Michael Parker. Structure of the human telomerase enzyme complex. Cancer Research Trusts administered by Equity Trustees
- David Ascher. Using virtual drug screening to find new therapies targeting dementia. The JO & JR Wicking Trust, managed by ANZ Trustees

## Service to the community

### David Ascher

- Vice-President, Royal Australian Chemical Institute, Victorian Branch
- Committee Member, Victorian Medical Research Week, Australian Society for Medical Research (ASMR)
- Committee Member (Founding Member), Victorian Research Symposium Organising Committee

### Emma Baker

- Associate Faculty Member, Faculty of 1000, Non-haematopoietic Stem Cell Section

### Ora Bernard

- Member, Research Training Committee, Department of Medicine, St. Vincent's Hospital
- Member, PhD Confirmation Committee, Department of Medicine, St. Vincent's Hospital

### Thomas Brodnicki

- Stage 1 Expert Reviewer, NIH- USA RC4 Grants
- Member, Medical and Scientific Advisory Committee, Juvenile Diabetes Research Foundation International
- Member, Professional Advisory Panel, Juvenile Diabetes Research Foundation Australia
- Member, Equipment Committee, SVI
- Member, Mouse Management Committee, SVI

### Duncan Campbell

- Member, Scientific Advisory Boards of the International Academy of Cardiology and of the World Congress on Heart Disease
- Member, Editorial Board, Integrated Blood Pressure Control
- Member, Editorial Board, Cardiology Research

### Roderick Chappel

- Elected Member, Representative on the NATA Council
- Member, NATA Proficiency Testing Providers Accreditation Advisory Committee
- President of the International Leptospirosis Society
- Member, Taxonomic Subcommittee for Leptospira

### Wayne Dimech

- National Examination Council Member, Australian Institute of Medical Scientists (AIMS)
- State Convener/ National Secretary, Clinical Serology and Molecular Special Interest Group, Australian Society for Microbiology (ASM)
- Member, ASM SIG Working Group
- Member, AIMS Working Committee on Point-of-care Testing for Infectious diseases and drugs of abuse

### Kate Graham

- Member, Undergraduate Research Opportunity Program (UROP) Committee

### Jörg Heierhorst

- Member, Cancer Council Victoria Medical & Scientific Committee
- Member, SVI Senior Scientist Committee
- Member, SVI Executive Committee
- Member, SVI/Department of Medicine Seminar Committee
- Member, SVI Mass Spec Committee
- Member, SVI Student Committee
- Member, SVI Occupational Health and Safety Committee
- Member of Council, Cancer Council Victoria
- Organising Committee, Lorne Genome Conference 2010, Lorne, 2010
- Organising Committee, Australian Telomere and DNA Repair Workshop, Sydney, 2010
- Organising Committee, Lorne Genome Conference 2011, Lorne, 2011
- Program Committee, Lorne Genome Conference 2011, Lorne, 2011

### Thomas Kay

- Regional Editor, Autoimmunity
- Member, SVI Board of Directors
- Member, SVI Foundation Board
- Member, SVI Commercialisation & Intellectual Property Committee
- Member, SVI Audit & Finance Committee
- Chair, SVI Faculty Executive Committee
- Chair, SVI Faculty Committee
- Chair, St. Vincent's Hospital BioResources Oversight Committee
- Member, St. Vincent's Hospital Executive Committee Research Council
- Member, St. Vincent's Hospital BioResources Centre Users Group
- Member, St. Vincent's Hospital Aikenhead Centre for Medical Discovery Steering Committee
- Member, University of Melbourne/St. Vincent's Hospital Cluster Executive Committee
- Member, St. Vincent's Hospital Medical Executive Committee
- Member, NHMRC Centre of Clinical Research Excellence in Clinical Science in Diabetes Scientific Committee
- Member, Bio21 Scientific Advisory Committee
- Member, Victoria Breast Cancer Research Consortium (VBCRC) Scientific Committee
- Member, Medical and Scientific Advisory Committee, Juvenile Diabetes Research Foundation

### Bruce Kemp

- Member, Scientific Advisory Board, Mercury Therapeutics, Boston
- Editorial Board, Cellular Signalling
- Editorial Board, Journal of Molecular and Genetic Medicine
- Editorial Advisory Board,

The Open Enzyme Inhibition Journal

- Lorne Protein Conference Organising Committee

### Stuart Mannering

- Member IgV Committee
- Associate Editor, Clinical and Developmental Immunology
- Associate Editor, Journal of Immunoassay and Immunohistochemistry
- Member of ASI 2012 Organizing Committee

### Jack (TJ) Martin

- Member, Scientific Advisory Board, Botnar Research Centre, Nuffield Orthopaedic Centre, University of Oxford, UK
- Member, Human Genetics Advisory Committee (NHMRC)
- Board Member, International Society, Cancer and Bone Society.
- Member, Medical Research Advisory Committee, Australian Cancer Research Foundation.
- Member, Scientific Advisory Committee, Victorian Breast Cancer Research Consortium
- Board Member, Victorian Breast Cancer Research Consortium
- Associate Editor and Reviews Editor, Bone
- Associate Editor, Endocrinology
- Editorial Board, Journal of Clinical Investigation
- Editorial Board, Arthritis Research and Treatment
- Editorial Board, Trends in Endocrinology and Metabolism
- Editorial Board, BoneKey

### Dale McPhee

- Member, Academic Advisory Committee, School of Biological and Chemical Sciences, Deakin University
- Member, National Centre in HIV Epidemiology and Clinical Research Working Group, Sydney
- Member, Executive Committee, Immunovirology Research Network

### Michael Parker

- OzReader, Australian Research Council Grants
- Chair, SVI Equipment Committee
- Member, SVI Commercialisation Committee
- Member, Australian Synchrotron Science Consultative Group
- Member, Bio21 Institute Management Committee
- Member, Cooperative Research Centre for Cancer Therapeutics, CTx Operational Group
- Member, Cooperative Research Centre for Cancer Therapeutics, Project Management Group
- President, Organising Committee, Lorne Conference on Protein Structure and Function
- Member, Scientific Programme Advisory Committee and Theme Leader for OzBio2010

### Louise Purton

- Member, NHMRC Training

Fellowships Grant Review Committee

- Member, Leukaemia Foundation Fellowships and Scholarships Review Committee
- Member, Animal Ethics Committee (AEC), St. Vincent's Hospital Melbourne
- Faculty Member, Faculty of 1000, Non-haematopoietic Stem Cell Section
- Board of Directors, ISEH Society for Hematology and Stem Cells

### Julie Quach

- Associate Faculty Member, Faculty of 1000, Non-haematopoietic Stem Cell Section

### Natalie Sims

- Council Member, Australian and New Zealand Bone and Mineral Society
- Chair, St. Vincent's Cluster Research Technology Committee
- Member, Education Committee, American Society for Bone and Mineral Research
- Member, NHMRC Fellowship Review Panel
- Editorial Board, Bone
- Editorial Board, BoneKey
- Board Member, International Society for Bone Morphometry
- Board Member, International Bone and Mineral Society

### Helen Thomas

- Editorial Board, Diabetes
- Organizer of Immunology Special Interest Group, Australian Diabetes Society Annual Scientific Meeting, Sydney, 2010

### Erik Thompson

- President, Metastasis Research Society (International)
- Treasurer, The EMT International Association (TEMTIA)
- Board Member, Metastasis Research Society International
- Committee Member, Australasian Microarray and Associated Technologies Association (AMATA)
- Member, Research Advisory Committee, National Breast Cancer Foundation, Australia
- Co-Guest Editor, the Journal of Mammary Gland Biology, Special Issue on Epithelial Mesenchymal Transition in Mammary Development and Cancer
- Principal Guest Editor, Cells Tissues Organs, Issue "Epithelial Mesenchymal Transitions: New Advances in Development, Fibrosis and Cancer"
- Co-Guest Editor, Cancer Microenvironment, Special Issue on Microenvironment and Epithelial Mesenchymal Transition
- Associate Editor, Cells Tissues Organs
- Editorial Board Member, Clinical and Experimental Metastasis
- Editorial Board Member, The Breast Journal

## Service to the community

- Member, Program Committee, Inaugural Biomarker Discovery Conference, Shoal Bay, NSW, 2010
- Co-convenor TEMTIA 2011, the 5th International EMT Meeting, Singapore, 2011
- Member, Local Organizing Committee, 5th Pacific Rim Breast and Prostate Cancer Conference, Kingscliff, NSW, 2011
- Member, National Breast Cancer Foundation Review Panels for Scholarships, Fellowships and Career Awards
- Member, NSW Cancer Institute Review Panel
- Member, O'Brien Institute Scientific Oversight Committee
- Member, Tissue Resource Management Committee, Shared St. Vincent's Hospital/ Peter MacCallum Cancer Centre
- Member, University of Melbourne Working Group for the St. Vincent's International Research Centre
- Member, St. Vincent's Hospital Bioresource Centre Users Committee
- Member, Victorian Functional Genomics Centre Steering Committee, Peter MacCallum Cancer Centre (AMATA Representative)
- Member, St. Vincent's Hospital Research Training Committee

### **Carl Walkley**

- Member, NHMRC Grant Review Panel
- Abstract Reviewer, International Society of Stem Cell Research (ISSCR) Annual Meeting
- Deputy Chair, Institutional Biosafety Committee (IBC), St. Vincent's Hospital Melbourne
- Member, Cancer Australia Grant Review Panel

### **Nicole Walsh**

- Member (Category B), St. Vincent's Health Animal Ethics Committee

### **Mark Waltham**

- Editorial Board, Journal of Cancer Therapy



## Collaborations

### Bone Cell Biology and Disease

- Dr P Pivonka, The University of Western Australia. Mathematical modelling of bone turnover
- Dr JMW Quinn, Prince Henry's Institute. Cytokine actions on bone formation and resorption
- Prof G Nicholson, The University of Melbourne, Barwon Health. Oncostatin M effect in human osteoblasts
- Prof N Nicola and Dr Jian-guo Zhang, The Walter and Eliza Hall Institute. Oncostatin M mode of action in osteoblasts
- Dr V Krasnoperov, Vasgene Therapeutics. Ephrin effects on osteoblasts
- Prof P Ebeling, and Dr Claudia Gagnon, Western Hospital, Melbourne. Hypophosphatasia
- A/Prof E Gardiner, Diamantina Institute. NPY actions on bone
- Drs J Sterling and S Guelcher, Vanderbilt University, Nashville, USA. Effects of bone on cancer cell phenotype
- Prof. E Gravallesse University of Massachusetts Medical School, Worcester, MA, USA. Regulation of bone formation in rheumatoid arthritis
- Dr I Kalazjic, University of Connecticut. Osteocyte models
- Dr MA Karsdal and Dr K Henriksen, Nordic Biosciences. Bone anti- resorptives
- A/Prof JP Levesque and Dr K Winkler, Biotherapy Program, Mater Medical Research Institute, University of Queensland. Effect of stem cell mobilization on bone formation
- Dr K Matsuo, Keio University, Japan. Eph and Ephrin interactions in bone
- Dr N Morrison, Griffith University. PTH and MCP1 interactions
- Dr J Onyia, Dr N Kulkarni and Dr S McAhren, Eli Lilly and Company. Gene-regulation by Calcitonin
- A/Prof J Price, Department of Biochemistry, Monash University. Stress proteins and anti-oxident effects in breast cancer bone metastasis
- Dr S Richardson, LaTrobe University. Bone phenotype of transthyretin knockout mice
- Prof M Rogers, University of Aberdeen, GPR55 and bone metabolism
- Dr T Tiganis, Monash University. T-cell PTP in bone metabolism
- Prof J Wark, Royal Melbourne Hospital. Anti-Epileptic Drug- induced bone disease
- Dr M Kneissel, Novartis Pharmaceuticals. Regulation of sclerostin expression and action
- A/Prof S Gronthos, Department of Haematology, IMVS / Hanson Institute. Ephrin regulation of stem cells

- Dr A Zannettino, Department of Haematology, IMVS / Hanson Institute. Effect of dasatinib on bone metabolism
- Prof S Kato, The University of Tokyo, Japan. Zfp467 regulation of osteoblast and adipocyte formation
- Prof C Kovacs, Memorial University of Newfoundland. Effects of pregnancy and lactation on the skeleton
- Dr E Dimitriadis, Prince Henry's Institute. Use of LIF antagonist as a contraceptive agent
- Prof H Kronenberg, Harvard University/Massachusetts General Hospital. G-protein signalling in osteoblasts

### Cell Cycle and Cancer

- Dr H Richardson, Peter MacCallum Cancer Institute. Regulation of cell cycle progression by CDK-mediated phosphorylation of the Brahma SWI/SNF chromatin- remodeling complex
- Dr O Bernard, SVI. Regulation of LIMK activity and microtubule dynamics by phosphorylation
- A/Prof J Heierhorst, SVI. Control of ubiquitin-conjugating enzymes

### Cytoskeleton and Cancer

- Dr L Lafanechère, Albert Bonniot Institute. Grenoble France. LIMK inhibitors
- Dr R Anderson, Peter MacCallum Cancer Centre. The role of LIMK1 in cancer metastasis
- Dr D Rice, Lexicon, USA. LIMK inhibitors
- Dr M Watt, Monash University. The role of LIMK2 in controlling obesity
- Dr M Kavallaris, Children's Cancer Institute. NSW, LIMK2 and drug resistance

### Immunology and Diabetes

- Prof P Cowan, St. Vincent's Hospital, Melbourne. Overexpression of antioxidant proteins in pancreatic beta cells
- Dr S Grey, Garvan Institute. The mechanism by which A20 promotes allograft survival
- Prof L Harrison, The Walter and Eliza Hall Institute. Prevention and cure of type 1 diabetes: CD8+ T cells in diabetes pathogenesis
- A/Prof A Lew, The Walter and Eliza Hall Institute. Cell death pathways in pancreatic beta cells
- Dr R Sutherland, The Walter and Eliza Hall Institute. Pancreatic islet transplantation
- Dr B Marsh, Institute of Molecular Bioscience, Brisbane. Characterisation and modulation of beta cell-macrophage interactions
- Prof C Parish and Dr C Simeonovic, Australian National University. The role of heparanase and heparin sulphate in islet destruction

- A/Prof P O'Connell, Westmead Millennium Institute. Clinical islet transplantation
- Dr P Santamaria, The University of Calgary. Mechanisms of pancreatic beta cell death in TCR transgenic mouse models of type 1 diabetes
- Prof A Strasser, The Walter and Eliza Hall Institute. T-cell mechanisms of beta cell destruction
- Prof R Thomas, The University of Queensland. Clinical trial of Anakinra in type 1 diabetes mellitus
- Prof J Trapani, Peter MacCallum Cancer Institute. T-cell mechanisms of beta cell destruction
- Prof K Shortman, The Walter and Eliza Hall Institute. Identification and characterization of mouse diabetes susceptibility genes
- Dr G Belz, The Walter and Eliza Hall Institute. How does bacterial infection affect susceptibility to type 1 diabetes?
- Dr M O'Keeffe, The Burnet Institute. Genomic and functional analyses of a novel gene implicated in type 1 diabetes
- Prof R Strugnell, The University of Melbourne. How does bacterial infection affect susceptibility to type 1 diabetes?
- Dr O Wijburg, The University of Melbourne. How does bacterial infection affect susceptibility to type 1 diabetes?
- Dr M Murphy, The University of Melbourne. Genetics of stress response
- Dr P Verma, Monash Institute of Medical Research. Generating induced pluripotent stem cells from the NOD mouse
- Dr D Goodman, St. Vincent's Hospital. Immune responses following islet transplantation
- A/Prof Tony Purcell. Bio21, University of Melbourne. Epitope mapping in human type 1 diabetes.
- Dr N O'Brien-Simpson, Bio21, University of Melbourne. Epitope mapping in human type 1 diabetes
- Dr J Gunton, Garvan Institute. Insulin secretion and gene expression in human pancreatic islets
- Dr K Dwyer, St. Vincent's Hospital, Melbourne. Adenoviral transduction of human islets
- Dr M von Herrath, San Diego, California. Staining of human pancreata in situ with MHC class I and II tetramers

### Haematology and Leukaemia

- Dr C Walkey, SVI. Erythropoietin effects on haemopoiesis and bone
- Dr L Purton SVI. The effect of retinoid signalling on T cell development
- Dr S Russell, The Peter MacCallum Cancer Institute.

- Cell polarity in T cells
- Dr A Wei, Alfred Hospital. Modelling human leukaemia in mice

### Invasion and Metastasis Unit

- Prof L Ackland, Deakin University, Melbourne. Epithelial Mesenchymal Transition (EMT) in breast cancer
- Dr N Ahmed, Dept. of Obstetrics and Gynecology, University of Melbourne. EMT in ovarian cancer spheroids
- A/Prof R Anderson, Peter MacCallum Cancer Centre, Melbourne. MMPs in mouse mammary metastasis models; Targeting breast cancer recurrence through EMP
- Prof I Campbell, Peter MacCallum Cancer Centre. Molecular and cellular attributes of mammographic density
- Prof P Choong, EMP analysis in CTC and DTC from patients with bone- metastatic breast cancer
- A/Prof A Dobrovic, Peter MacCallum Cancer Centre. EMP analysis in CTC and DTC from breast cancer, Epigenetic regulation of EMP, Targeting breast cancer recurrence through EMP
- Dr A Dowling, St. Vincent's Hospital, Melbourne. Targeting breast cancer recurrence through EMP
- Prof A Fabra Fres. IDIBELL, Barcelona, Spain. Novel microRNA regulators in the breast cancer EMP
- A/Prof G Goodall, Centre for Cancer Biology, Adelaide. Novel microRNA regulators in the breast cancer EMP; Targeting breast cancer recurrence through EMP
- Dr I Haviv, Baker IDI Heart and Diabetes Institute, Melbourne. Tumour stromal interactions; Functional genomics for EMP; Novel microRNA regulators in the breast cancer EMP; Targeting breast cancer recurrence through EMP
- A/Prof M Henderson, Department of Surgery, University of Melbourne. Novel microRNA regulators in the breast cancer EMP; Targeting breast cancer recurrence through EMP
- Prof R Henry, Monash University, Melbourne. SAXS analysis for mammographic density
- A/Prof P Hill, St Vincent's Hospital, Melbourne. EMT markers in archival breast cancer, Molecular and cellular attributes of mammographic density
- Prof J Hopper, Centre for MEGA Epidemiology, University of Melbourne. Molecular and cellular attributes of mammographic density
- Prof WA Morrison, O'Brien Institute, Melbourne. Molecular and cellular attributes of mammographic density

## Collaborations

- Dr D Newgreen, Murdoch Children's Research Institute, Melbourne. EMT in breast cancer
- Dr J Price, Dept. of Biochemistry, Monash University, Melbourne. HSPs and EMT; Molecular determinants of bone metastasis
- Prof C Saunders, School of Surgery and Pathology, the University of WA, Perth. Targeting breast cancer recurrence through EMP
- Dr K Siu, Monash University, Melbourne. SAXS analysis for mammographic density
- Dr L Soon, Australian Key Centre for Microscopy and Microanalysis, AMMRF, University of Sydney. Breast cancer cell migration in 3D; Molecular and cellular attributes of mammographic density; Targeting breast cancer recurrence through EMP
- A/Prof M Southey, Dept. of Pathology, University of Melbourne. Mammographic density
- Prof K Stanley, AusDiagnostics, Sydney. Multiplex tandem PCR for paraffin-embedded archival material and EMT; Targeting breast cancer recurrence through EMP
- Dr I Street, CRC for Cancer Therapeutics and WEHI, Melbourne. Targeting breast cancer recurrence through EMP
- Dr M Waltham, SVI. MMP inhibition studies; EMP studies
- Prof Z Werb, Dept. of Anatomy, University of California, San Francisco, USA. MMP-13 in breast cancer progression
- Dr E Williams, Monash Institute for Medical Research, Melbourne. EMT; bladder and prostate cancer bone metastasis
- Prof A Yap, IMB, the University of Queensland, Brisbane. Targeting breast cancer recurrence through EMP

### Molecular Cardiology

- A/Prof D Kelly and Prof R Gilbert, The University of Melbourne, Department of Medicine, St. Vincent's Hospital. The effect of renin inhibition in the diabetic TGR(Ren-2) rat
- Mr M Yui, Mr J Kenny and Mr Andrew Newcomb, Cardiothoracic surgery, St. Vincent's Hospital. Establishment of SVHM Cardiac Tissue Bank
- Dr D Prior, Cardiology, St. Vincent's Hospital. Investigation of the pathogenesis of diastolic dysfunction
- Dr B Dixon and A/Prof J Santamaria, Intensive Care Unit, St. Vincent's Hospital, Melbourne. Investigation of new strategies for the treatment of acute lung injury
- Dr MJ Black, Department of Anatomy, Monash University. Investigation of the pathogenesis of diastolic dysfunction

- Prof H Krum and A/Prof C Reid, Department of Epidemiology and Preventive Medicine, Monash University. Strategies for the detection of heart failure in the community
- Prof K Bernstein, Emory University and Pierre Corvol, INSERM U36. Study of genetic models of ACE gene expression
- A/Prof J Wilkinson-Berka, Department of Immunology, Monash University. Study of the role of prorenin in retinopathy

### Molecular Genetics

- Prof Ming-Daw Tsai, Academia Sinica. Rad53 regulation
- Prof S Takeda, Kyoto University. Analyses of novel DNA repair pathways
- Prof B Andrews, University of Toronto. Robotic synthetic genetic array analysis of the yeast MDT1 gene
- Dr M Basrai, NIH. Robotic genetic analyses of the yeast ESL genes
- A/Prof T Preiss and Dr T Beilharz, Victor Chang Institute. Transcriptome analyses of ESL genes
- A/Prof P Most, Jefferson University Philadelphia. S100A1 functions in the heart
- Dr Ian Smyth and A/Prof Tim Cole, Monash University. Lung development in ASCIZ KO mice
- Prof Martin Lavin, University of Queensland. ATM/ASCIZ interactions

### NRL

- Pacific Island Countries (PICs) Taskforce consisting of Centers for Disease Control (CDC) Atlanta, World Health Organization (WHO) Manila, Secretariat of the Pacific Community (SPC) Noumea, United Nations International Children's Emergency Fund (UNICEF) Suva, United Nations Fund for Population Affairs (UNFPA) Suva, Pacific Counselling and Social Services (PCSS) Lautoka and Pacific Paramedical Training Center (PPTC) Wellington. Development and Validation of an HIV Confirmatory Testing Strategy for use in Pacific Island Countries
- Dr L Einsiedel, Faculty of Medicine, Northern Territory Rural Clinical School/Flinders University. HTLV-1 among indigenous Australians
- Dr R Griffiths, Department of Preventive and Social Medicine University of Otago (Auckland-based) New Zealand. HIV Prevalence, New Zealand
- Dr J Rowe, Centre for Applied Social Research, School of Global Studies, Social Science and Planning RMIT University Melbourne. HIV Prevalence in the unregulated sex industry
- A/Prof M Hellard and Dr M Stoové, The Centre for Population Health, The Burnet Institute. Identifying

unrecognised HIV infection among Australian gay men

### Pharmacogenomics

- Prof EW Thompson, SVI. MMP inhibition studies in breast cancer systems and gene array analysis of epithelial-mesenchymal transition
- A/Prof R Anderson, Peter MacCallum Cancer Centre. Mouse models of cancer metastasis
- Dr J Kennedy, ENT Department, St Vincent's Hospital. Gene expression analysis of acoustic neuromas

### Protein Chemistry and Metabolism

- Dr L Macaulay, CSIRO Molecular Health Technologies. Lipid metabolism, obesity
- Dr L Witters, Darnmouth Medical College. AMPK structure and function
- Dr D Power, Austin Research Institute. AMPK and kidney function
- Dr G McConell, Department of Physiology, University of Melbourne. AMPK and exercise
- Dr D Allen, Department of Physiology, University of Sydney. AMPK and ion transport
- Dr A Means, Duke University Medical Centre. CaMKK  $\beta$  structure and function
- Dr J Hawley, RMIT University. AMPK in exercise and type 2 diabetes
- Dr J Camakaris, Department of Genetics, University of Melbourne. Regulation of copper transport
- Dr M Birnbaum, Howard Hughes Medical Institute. Skeletal muscle AMPK physiological functions
- Dr M Ernst, Ludwig Institute of Cancer Research. gp130 signalling and metabolism
- Dr B Kingwell, Baker Heart Research Institute. Lipoprotein regulation of AMPK
- Prof M Hargreaves, Department of Physiology, University of Melbourne. AMPK and skeletal muscle during exercise
- Dr G Lynch, Department of Physiology, University of Melbourne. Regulation of AMPK by muscle contraction
- Dr A Hevener, Department of Endocrinology, University of California. Inflammation and insulin resistance
- Dr A Wilson, St. Vincent's Hospital. Insulin resistance, adipocyte biology and cardiovascular disease

### Stem Cell Regulation

- Prof S Orkin, Dana-Farber Cancer Institute. Osteosarcoma, erythroid differentiation
- Dr V Sankaran, Dana-Farber Cancer Institute. Erythroid differentiation
- Dr J Danks, RMIT Bundoora. Osteosarcoma
- Dr M Dray, Middlemore Hospital

- Auckland. Osteosarcoma
- A/Prof JP Levesque, Mater Medical Research Institute. Haemopoietic stem cell studies
- Prof P Gill, University of Southern California. Osteosarcoma
- A/Prof G MacArthur, Peter MacCallum Cancer Centre. Leukaemia studies
- Prof L Gudas, Weill Cornell University, New York, USA. Leukaemia studies
- Prof M Parker, SVI. Leukaemia studies
- Prof P Chambon, IGBMC, France. Retinoid studies
- Dr R Chandraratna, IO Therapeutics, USA. Retinoid studies

### Structural Biology

- Dr D Rhodes, Avexa, Victoria. HIV
- Dr S Tucker, Biota, Victoria. Viral respiratory diseases
- Dr O Bernard, SVI. LIM kinase
- Prof P Board, John Curtin School of Medical Research, Australian National University. Glutathione transferases
- Prof D Bowtell, Peter MacCallum Cancer Institute. Proteins involved in ubiquitination
- Prof A Frauman, Department of Medicine, Austin Health, The University of Melbourne. Prostate cancer proteins
- Prof B Kemp, SVI. Protein kinase regulation
- Prof A Lopez, Hanson Centre for Cancer Research. Cytokine receptor
- Prof J Martin, SVI. Phosphodiesterases
- Prof E Simpson, Prince Henry's Institute of Medical Research. Steroid receptors
- Dr C Clyne, Prince Henry's Institute of Medical Research. Steroid receptors
- Dr D Stapleton, Bio21 Institute. Protein kinase regulation
- Prof M Vadas, Centenary Institute for Cancer Research. Protein kinases
- Dr M Waters, IMB, University of Queensland. Growth hormone receptor
- Dr A Albiston, Howard Florey Institute. IRAP
- Dr K Barnham, Department of Pathology, The University of Melbourne. Proteins implicated in Alzheimer's disease
- Dr S Y Chai, Howard Florey Institute. IRAP
- Prof C Masters, Department of Pathology, The University of Melbourne. Proteins implicated in Alzheimer's disease
- Dr S Petrou, Department of Physiology, University of Melbourne. Ion channels
- Dr S Bottomley, Department of Biochemistry and Molecular Biology, Monash University. Serpins
- Dr J Gamble, Centenary Institute for Cancer Research. Protein kinases

## Collaborations

- Dr R Pace, Department of Chemistry, Australian National University. Photosystem II
- Dr P Thompson, Department of Medicinal Chemistry, Victorian College of Pharmacy. Phosphodiesterase inhibitors
- Dr R Tweten, Department of Microbiology and Immunology, University of Oklahoma. Pore-forming toxins and receptors
- Prof P Dyson, Ecole Polytechnique Federale de Lausanne. Cisplatin drugs
- Prof M Lo Bello, Department of Biology, University of Rome "Tor Vergata". Glutathione transferases
- Dr L Garcia-Fuentes, University of Almeria. Glutathione transferases
- Dr G Stenberg, Department of Biochemistry, Uppsala University. Glutathione transferases
- Dr M Scanlon, Department of Medicinal Chemistry, Victorian College of Pharmacy. HIV integrase
- Dr S Pitson, Hanson Institute. Sphingosine Kinase
- Dr M Perugini, Bio21 Institute, Melbourne University. Bacterial virulence factors
- Prof P Batterham, Bio21 Institute, Melbourne University. Insecticide targets
- Dr T Bryan, Children's Medical Research Institute, Sydney, Telomerase
- Dr S Cohen, Children's Medical Research Institute, Sydney, Telomerase
- Prof P Robinson, Children's Medical Research Institute, Sydney, Brain proteins
- Dr Adam Ratner, Columbia University, New York. Toxins
- Dr G Nie, Prince Henry's Institute of Medical Research. PC6
- Dr C Harrison, Prince Henry's Institute of Medical Research. PC6
- Prof E Reynolds, Department of Dentistry, Melbourne University. Gum disease
- Dr E Dimitriadis, Prince Henry's Institute of Medical Research. LIF
- Prof G Marshall, Centre for Children's Cancer and Blood Disorders, Sydney Children's Hospital. EBBP
- Prof K Kirk, Research School of Biology, Australian National University; Malaria
- Prof M McConville, Bio21 Institute, Melbourne University. Tropical diseases
- A/Prof P Ekert, Murdoch Children's Research Institute. Cytokine signalling
- Prof S McColl, Department of Biochemistry, University of Adelaide. Cytokine signalling
- Dr S Ralph, Bio21 Institute, Melbourne University. Malaria
- Dr T Mulhern, Bio21 Institute, Melbourne University. SAXS
- Dr P Gooley, Bio21 Institute. Protein kinase regulation
- Prof S Krilis, St. Georges Hospital, UNSW, Sydney, NSW. Antiphospholipid syndrome
- Dr H Harris, Department of Chemistry, Adelaide University, South Australia. EXAFS
- Dr K Dwyer, St. Vincent's Hospital. Adenosine receptors
- Dr C Walkley, SVI. ADARs
- Dr L Purton, SVI. Hox
- Prof T Hughes, Royal Adelaide Hospital. BCR- ABL
- Dr A Hurt, WHO Melbourne. Influenza
- Dr K Peter, Baker IDI. Elastin
- Dr A Wei, Alfred Hospital. Kinases

## Presentations

### David Ascher

- NHMRC H1N1 Workshop, Canberra. Invited speaker

### Michelle Ashton

- Australian Society for Medical Research Student Symposium, Melbourne. Speaker

### Maria Askmyr

- New Directions in Leukaemia Research Conference, Sunshine Coast. Poster presentation

### Ora Bernard

- Gordon Conference on Phosphorylation and G-Proteins mediate signalling networks, University of New-England. Speaker

- The Wiezmann Institute of Science. Invited speaker

- Johns Hopkins University Department of Biology. Invited speaker

- Albert Bonniot Institute, Grenoble France. Invited speaker

### Susan Best

- Australasian Tissue and Biotherapeutics Forum, Melbourne. Invited speaker

- 4th National Conference on HIV AIDS in Vietnam, Hanoi, Vietnam. Invited speaker

- Regional Workshop "LabNet 2010", Suva, Fiji. Invited speaker

- Sub-Regional Workshop on Prevention of Parent to Child Transmission of HIV, Nadi, Fiji. Invited speaker

### Thomas Brodnicki

- 24th International Mammalian Genome Conference, Crete, Greece. Speaker

- Australian Diabetes Society Annual Scientific Meeting, Sydney. Invited Speaker

- Murdoch Children's Research Institute, Melbourne. Invited Speaker

- 8th Australasian Mutation Detection Meeting, Tasmania. Speaker

### Duncan Campbell

- "The RAS Club: An Expanding System", Monash University, Clayton. Invited speaker

- Cardiac Society of Australia and New Zealand, Adelaide. Speaker

- High Blood Pressure Research Council of Australia, Melbourne. Speaker

### Lindus Conlan

- Australian RNAi Global Initiative Symposium, Park Hyatt, Melbourne. Speaker

### Stirling Dick

- 27th Annual NRL Workshop on Serology, Melbourne. Speaker

- Australian Society of Microbiology Annual Scientific Meeting & Exhibition, Sydney. Speaker

### Wayne Dimech

- 27th Annual NRL Workshop on Serology, Melbourne. Speaker

### Colleen Elso

- 8th Australasian Mutation Detection Meeting, Tasmania. Speaker

### Kate Graham

- Australian Diabetes Association Annual Scientific Meeting, Sydney. Speaker

- International Congress of Immunology in Kobe, Japan. Speaker

- Vanderbilt University, Tennessee, USA. Invited speaker

### Jörg Heierhorst

- Massey University Symposium on Fungal and Yeast Cell Biology in Auckland, New Zealand. Speaker

- 13th Australian Cell Cycle Workshop, Katoomba, NSW. Speaker

- Hanson Institute, Adelaide. Seminar Speaker

- Bio21 Institute, Melbourne. Seminar Speaker

### Jean Hendy

- ISEH 39th Annual Scientific Meeting, Melbourne. Oral presentation

### Nicolas Hoch

- CTx Annual Postgraduate Student Symposium, PeterMac. Speaker

- 13th Australian Cell Cycle Workshop, Katoomba, NSW. Speaker

### Honor Hugo

- Australasian Health and Medical Research Congress, Melbourne (MBANZ society). Oral presentation

### Sabine Jurado

- 31st Lorne Genome Conference, Lorne. Speaker

- 3rd Australian and New Zealand Society for Cell and Developmental Biology Symposium, Melbourne. Speaker

### Thomas Kay

- 11th International Congress of the Immunology of Diabetes Society, Korea. Speaker

- Australian Islet Study Group Meeting, Canberra. Speaker

### Bruce Kemp

- Department of Chemistry & Biochemistry Boise State University Boise Idaho USA. Invited speaker

- Krebs & Fischer Symposium April 8-9 University of Washington, Seattle Washington USA. Invited speaker

- Kroc Lecture Diabetes Research Unit Boston Medical Center, Boston Massachusetts USA. Invited speaker

- Division of Endocrinology, Department of Medicine McMaster University, Hamilton Ontario Canada. Invited speaker

- Metabolic Efficiency 2010 Symposium, CSIRO-MSE, Parkville, Vic Australia. Invited speaker

- FASEB Summer Research Conference AMPK: Central

Regulatory System In Metabolism & Growth 2010 Kyoto, Japan. Invited speaker

### Geraldine Kong

- 27th Annual NRL Workshop on Serology, Melbourne. Speaker

### Balasubramanian

### Krishnamurthy

- American Association of Immunologists Meeting, USA. Speaker

### Xianning Lai

- Australian Telomere and DNA Repair Workshop, Sydney, NSW. 2010. Speaker

### Sally Land

- TAOAS Steering Committee Meeting, Bangkok, Thailand. Speaker

### Mark Lanigan

- World Health Organisation Technical Working Group Meeting on Product Dossier Assessment for Prequalification of Diagnostics, Geneva. Invited speaker

### Benoit Le Goff

- Australian Rheumatology Association Annual Meeting. Speaker

- Victorian Branch of the Australian Rheumatology Association Annual Meeting. Speaker

### Stuart Mantering

- 11th International Congress of the Immunology of Diabetes Society, Korea. Speaker

- JDRF Workshop 'Posttranslational Modifications in type 1 diabetes', New York, USA

### TJ (Jack) Martin

- 14th International Congress of Endocrinology, Kyoto, Japan. Invited Speaker

- ANZBMS Annual Scientific Meeting, Adelaide, SA. Invited Speaker

- Gregory Mundy Memorial Lecture, ANZBMS, Adelaide, SA

- IOF Course, Pathophysiology of Osteoporosis and Metabolic Bone Disease Melbourne. Invited Speaker

### Jonathon Oakhill

- FASEB Summer Research Conference AMPK: Central Regulatory System In Metabolism & Growth 2010 Kyoto, Japan. Invited speaker

### Michael Parker

- Australian Academy of Science "Science at the Shine Dome", Canberra. Invited speaker

- The Lowy Symposium on "Discovering Cancer Therapeutics", University of New South Wales, Sydney. Invited speaker

- 5th Garvan Signalling Symposium, Sydney. Invited speaker

- CRC CTx seminar, WEHI, Melbourne. Seminar speaker

- CRC CTx seminar, Griffith University, Brisbane. Seminar

speaker

- ICT for Life Sciences Forum, Melbourne. Invited speaker

- Biosciences and Infection and Immunity Domains Research Forum, University of Melbourne Medical Faculty Symposium, Melbourne. Invited speaker

### Ingrid Poulton

- Adelaide, Australia and New Zealand Bone and Mineral Society Joint Meeting. Speaker

### Louise Purton

- FASEB Retinoids Meeting 2010, Carefree AZ, USA. Invited speaker

- International Society of Experimental Hematology (ISEH) 39th Annual Scientific Meeting, Melbourne. Oral presentation

- ANZBMS Annual Meeting, Adelaide. Session Co- Chair

- Leukaemia Foundation National Myeloma Day, Melbourne. Invited speaker

- The Alfred/Australian Centre for Blood Diseases Scientific Basis of Haematology Breakfast Meeting. Invited speaker

### Boris Sarcevic

- Lorne Protein Conference. Invited speaker

- OzBio, Melbourne, Australia. Invited speaker

- Annual Australian Cell Cycle Meeting. Katoomba, NSW. Speaker

- Children's Medical Research Institute, Westmead NSW. Seminar speaker

- Victor Chang Cardiac Research Institute, Darlinghurst NSW. Seminar speaker

- Cancer Research UK, Cambridge Research Institute, Cambridge UK. Seminar speaker

### Natalie Sims

- The University of Melbourne Faculty of Medicine Dentistry and Health Sciences Research and Technology update. Invited speaker

- Diabetes, Obesity and Endocrinology Domain Launch, The University of Melbourne, Invited speaker

- 4th Annual Excitable Cells Scientific Meeting. Invited speaker

- Melbourne, Rheumatology 2010 - The Science and Practice of Rheumatology. Invited speaker

- Toronto, Canada, American Society for Bone and Mineral Research Annual Meeting. Speaker

- Shenzhen, China. International Conference on Osteoporosis and Bone Research 2010. Invited Speaker

- Toronto, Canada, American Society for Bone and Mineral Research Annual Meeting, Invited speaker

- Kyoto, Japan. 14th International Congress of Endocrinology. Invited Speaker

## Presentations

### **Sofie Singbrant- Soderberg**

- ISEH 39th Annual Scientific Meeting, Melbourne. Oral presentation
- International Society for Stem Cell Research (ISSCR) Annual Meeting, San Francisco. Poster Presentation

### **Gregory Steinberg**

- Astra Zeneca, Monail Sweden. Invited speaker
- University of Copenhagen, D. Invited speaker
- Novo Nordisk, Copenhagen, DK. Invited speaker
- FASEB Summer Conference on AMPK. Kyoto Japan, Invited speaker
- University of Kyoto, Kyoto, Japan. Invited speaker
- University of Guelph, Guelph, Ontario. Invited speaker.
- McMaster University, Department of Biochemistry and Biomedical Sciences. Invited speaker
- McMaster University, Department of Kinesiology. Invited speaker
- Canadian Society for Exercise Physiology. Invited speaker
- McMaster University, Nutrition and Metabolism Seminar Series. Invited speaker
- University of Alberta, Alberta Diabetes Institute and Cardiovascular Centre. Invited speaker

### **Farzin Takyar**

- Melbourne, Australian Health and Medical Research Congress, Speaker

### **Iris Kwee Ling Tan**

- Australian Society for Medical Research Student Symposium, Melbourne. Speaker

### **Helen Thomas**

- 11th International Congress of the Immunology of Diabetes Society, Korea. Speaker
- Australian Diabetes Association Annual Scientific Meeting, Sydney. Speaker
- Diabetes, Obesity and Endocrinology Research Domain symposium. Speaker

### **Erik Thompson**

- The 16th International Colloquium on Lung and Airway Fibrosis, Busselton, WA. Invited speaker
- Australian Health & Medical Research Conference, Melbourne, VIC. Oral presentation
- Diamantina Institute for Cancer, Immunology and Metabolic Medicine, Woolloongabba, QLD. Seminar speaker
- 19th Annual Meeting of the Japanese Association of Metastasis Research, Kanazawa, Japan. International Symposium Co-chair
- AACR Special Conference on EMT and Cancer Progression and Treatment, Arlington, VA, USA. Invited speaker

- Whitehead Institute, MIT, Boston, USA. Seminar speaker
- Princeton University, NJ, USA. Seminar speaker
- Kanazawa University Cancer Research Institute, Kanazawa, Japan. Seminar speaker

### **Emma Walker**

- Adelaide, Australia and New Zealand Bone and Mineral Society Joint Meeting. Speaker

### **Carl Walkley**

- New Directions in Leukaemia Research 2010. Sunshine Coast Qld. Invited speaker
- 1st Japanese Society Hematology International Symposium 2010 in Akita City, Japan. Invited speaker
- 19th Annual Royal Brisbane & Women's Hospital Health Care Symposium, New Targets in Haematology Session. Invited speaker
- 1st Japanese Society Hematology International Symposium 2010
- ISEH 39th Annual Scientific Meeting, Melbourne
- Department of Cellular and Molecular Medicine, Chiba University, Japan. Invited seminar
- The Alfred Hospital/Australian Centre for Blood Diseases Scientific Basis of Haematology Breakfast Meeting. Invited seminar
- Austin Hospital, Department of Medicine, University of Melbourne. Invited seminar

### **Nicole Walsh**

- European League Against Rheumatism (EULAR) Annual Meeting, Rome, Italy. Invited speaker
- S.A. Australian and New Zealand Bone and Mineral Society Annual Meeting, Adelaide. Invited speaker
- Dept of Medicine, Austin Hospital, Melbourne. Seminar speaker

### **Nancy Wang**

- BiomedLink Conference, Melbourne. Speaker
- Victorian Infection and Immunity Network Student Symposium, Melbourne. Speaker

### **Kirby White**

- ISEH 39th Annual Scientific Meeting, Melbourne. Oral presentation

### **Kim Wilson**

- Australasian HIV/AIDS Conference, Sydney. Speaker
- 27th Annual NRL Workshop on Serology, Melbourne. Speaker
- Treataware Short Course in HIV Medicine for Community Workers and Volunteers. NAPWA, Melbourne. Invited Speaker

## Publications

- Albiston, A.L., V. Pham, S.Y. Ye, L. Ng, R.A. Lew, P.E. Thompson, J.K. Holien, C.J. Morton, M.W. Parker, and S.Y. Chai. Phenylalanine-544 lays a Key Role in Substrate and Inhibitor Binding by Providing a Hydrophobic Packing Point at the Active Site of Insulin- Regulated Aminopeptidase. *Molecular Pharmacology* 78:600-607.
- Arnott, A., D. Jardine, K. Wilson, P.R. Gorry, K. Merlin, P. Grey, M.G. Law, E.M. Dax, A.D. Kelleher, D.E. Smith, D.A. McPhee, and T. Pulse Study. High Viral Fitness during Acute HIV-1 Infection. *PLoS One* 5:
- Askmyr, M., T. Jovic, K.E. White, E.K. Baker, J. Ouach, N. Walsh, and L.E. Purton. Myeloablative therapies damage and alter the composition of the cells of the bone marrow microenvironment. *Experimental Hematology* 38:054.
- Asselin- Labat, M.L., F. Vaillant, J.M. Sheridan, B. Pal, D. Wu, E.R. Simpson, H. Yasuda, G.K. Smyth, T.J. Martin, G.J. Lindeman, and J.E. Visvader. Control of mammary stem cell function by steroid hormone signalling. *Nature* 465:798-802.
- Baker, E., C. Walkley, N. Sims, L. Purton, and T.J. Martin. Identifying epigenetic targets in osteosarcoma and differentiating osteoblasts. *Bone* 46:96.
- Bayles, R., E. Baker, N. Eikelis, A. El-Osta, and G. Lambert. Histone modifications regulate the norepinephrine transporter gene. *Cell Cycle* 9:4600-4601.
- Bertin- Maghit, S., B. O'Sullivan, S. Best, E. Duggan, D.M. Pang, H. Thomas, T. Kay, L. Harrison, R. Steptoe, and R. Thomas. IL- 1 beta Produced in Response to Islet Autoantigen Presentation Differentiates T- helper-17 Cells at the Expense of Regulatory T cells: Implications for the Timing of Tolerizing Immunotherapy. *Clinical Immunology* 135:S98-S98.
- Blick, T., H. Hugo, E. Widodo, M. Waltham, C. Pinto, S.A. Mani, R.A. Weinberg, R.M. Neve, M.E. Lenburg, and E.W. Thompson. Epithelial Mesenchymal Transition Traits in Human Breast Cancer Cell Lines Parallel the CD44(hi)/CD24(lo/-) Stem Cell Phenotype in Human Breast Cancer. *Journal of Mammary Gland Biology and Neoplasia* 15:235-252.
- Bonewald, L.F., G.D. Roodman, B.F. Boyce, G.E. Gutierrez, T. Yoneda, T.A. Guise, and T.J. Martin. Gregory Robert Mundy 1942- 2010 IN MEMORIAM. *Journal of Bone and Mineral Research* 25:931-933.
- Bonnomet, A., A. Brysse, A. Tachsidis, M. Waltham, E. Thompson, M. Polette, and C. Gilles. Epithelial-to-Mesenchymal Transitions and Circulating Tumor Cells. *Journal of Mammary Gland Biology and Neoplasia* 15:261- 273.
- Burt, R.A., L. Watkins, I.K.L. Tan, N. Wang, F. Quirk, L. Mackin, P. Morgan, J.G. Zhang, S.P. Berzins, G. Morahan, and T.C. Brodnicki. An NZW-Derived Interval on Chromosome 7 Moderates Sialadenitis, But Not Insulinitis in Congenic Nonobese Diabetic Mice. *Journal of Immunology* 184:859-868.
- Campbell, D.J., H. Karam, P. Bruneval, J.J. Mullins, and J. Menard. Increased dietary NaCl potentiates the effects of elevated prorenin levels on blood pressure and organ disease. *Journal of Hypertension* 28:1429-1437.
- Campbell, D.J., A. Kladis, Y. Zhang, A.J. Jenkins, D.L. Prior, M. Yui, J.F. Kenny, M.J. Black, and D.J. Kelly. INCREASED TISSUE KALLIKREIN EXPRESSION IN HUMAN TYPE 2 DIABETES. *Hypertension* 55:016.
- Campbell, D.J., A. Kladis, Y. Zhang, A.J. Jenkins, D.L. Prior, M. Yui, J.F. Kenny, M.J. Black, and D.J. Kelly. Increased tissue kallikrein levels in type 2 diabetes. *Diabetologia* 53:779-785.
- Chand, A.L., K.A. Herridge, E.W. Thompson, and C.D. Clyne. The orphan nuclear receptor LRH-1 promotes breast cancer motility and invasion. *Endocrine-Related Cancer* 17:965-975.
- Cheng, K., K. Ho, R. Stokes, C. Scott, S.M. Lau, W.J. Hawthorne, P.J. O'Connell, T. Loudovaris, T.W. Kay, R.N. Kulkarni, T. Okada, X.H.L. Wang, S.H. Yim, Y. Shah, S.T. Grey, A.V. Biankin, J.G. Kench, D.R. Laybutt, F.J. Gonzalez, C.R. Kahn, and J.E. Gunton. Hypoxia-inducible factor-1 alpha regulates beta cell function in mouse and human islets. *Journal of Clinical Investigation* 120:2171-2183.
- Cooley, L.S., M.M. Handsley, M.A. Lafleur, Z. Zhou, E. Poschl, C.J. Pennington, E.W. Thompson, and D.R. Edwards. Reversible trans-differentiation of blood vascular endothelial cells to a lymphatic-like phenotype in vitro. *International Journal of Experimental Pathology* 91:A10-A10.
- Cooley, L.S., M.M. Handsley, Z.G. Zhou, M.A. Lafleur, C.J. Pennington, E.W. Thompson, E. Poschl, and D.R. Edwards. Reversible transdifferentiation of blood vascular endothelial cells to a lymphatic-like phenotype in vitro. *Journal of Cell Science* 123:3808- 3816.
- Dixon, B., M.J. Schultz, J.J. Hofstra, D.J. Campbell, and J.D. Santamaria. Nebulized heparin reduces levels of pulmonary coagulation activation in acute lung injury. *Critical Care* 14:
- Dixon, B., M.J. Schultz, R. Smith, J.B. Fink, J.D. Santamaria, and D.J. Campbell. Nebulized heparin is associated with fewer days of mechanical ventilation in critically ill patients: a randomized controlled trial. *Critical Care* 14:
- Dommaraju, S., M.A. Gorman, C. Dogovski, F.G. Pearce, J.A. Gerrard, R.C.J. Dobson, M.W. Parker, and M.A. Perugini. Cloning, expression and crystallization of dihydrodipicolinate reductase from methicillin-resistant *Staphylococcus aureus*. *Acta Crystallographica Section F-Structural Biology and Crystallization Communications* 66:57-60.
- Dzambo, N., B.J.W. van Denderen, A.L. Hevener, S.B. Jorgensen, J. Honeyman, S. Galic, Z.P. Chen, M.J. Watt, D.J. Campbell, G.R. Steinberg, and B.E. Kemp. AMPK beta 1 Deletion Reduces Appetite, Preventing Obesity and Hepatic Insulin Resistance. *Journal of Biological Chemistry* 285:115-122.
- Feil, S.C., G. Polekhina, M.A. Gorman, and M.W. Parker. Proteins Membrane Binding and Pore Formation Introduction. In *Proteins: Membrane Binding and Pore Formation*. 1-13.
- Ford, H.L., and E.W. Thompson. Mammary Gland Studies as Important Contributors to the Cause of Epithelial Mesenchymal Plasticity in Malignancy. *Journal of Mammary Gland Biology and Neoplasia* 15:113-115.
- Gagnon, C., N.A. Sims, S. Mumm, S.A. McAuley, C. Jung, I.J. Poulton, K.W. Ng, and P.R. Ebeling. Lack of Sustained Response to Teriparatide in a Patient with Adult Hypophosphatasia. *Journal of Clinical Endocrinology & Metabolism* 95:1007-1012.
- Galic, S., J.S. Oakhill, and G.R. Steinberg. Adipose tissue as an endocrine organ. *Molecular and Cellular Endocrinology* 316:129-139.
- Giraud, A.S., C. Dumesny, J.C. Whitley, L.M. Parker, I. Jennings, B. Kemp, T.W. Moody, V. Sancho, R.T. Jensen, and A. Shulkes. Isolation, identification and biological activity of gastrin- releasing peptide 1-46 (oGRP(1-46)), the primary GRP gene- derived peptide product of the pregnant ovine endometrium. *Peptides* 31:284- 290.
- Gooi, J.H., S. Pompolo, M.A. Karsdal, N.H. Kulkarni, I. Kalajzic, S.H.M. McAhren, B. Han, J.E. Onyia, P.W.M. Ho, M.T. Gillespie, N.C. Walsh, L.Y. Chia, J.M.W. Quinn, T.J. Martin, and N.A. Sims. Calcitonin impairs the anabolic effect of PTH in young rats and stimulates expression of sclerostin by osteocytes. *Bone* 46:1486-1497.
- Gothert, J.R., S. Weber, U. Duhrsen, and D.J. Izon. Preleukemic thymic changes induced by aberrant SCL activation phenocopy alterations induced by EB and E2A loss. *Experimental Hematology* 38:207.
- Hendy, J., S.A. Fabb, M. Wall, P.J. Simmons, L. Gudas, G.A. McArthur, and L.E. Purton. Overexpression of full length HOXA1 Can develop into myeloproliferative syndromes and leukemia when the naturally occurring truncated form of HOXA1 is inactive. *Experimental Hematology* 38:052.
- Herr, A., L. McKenzie, R. Suryadinata, M. Sadowski, L.M. Parsons, B. Sarcevic, and H.E. Richardson. Geminin and Brahma act antagonistically to regulate EGFR-Ras-MAPK signaling in *Drosophila*. *Developmental Biology* 344:36-51.
- Janeway, K.A., and C.R. Walkley. Modeling human osteosarcoma in the mouse: From bedside to bench. *Bone* 47:859-865.
- Jurado, S., I. Smyth, B. van Denderen, N. Tennis, A. Hammet, K. Hewitt, J.L. Ng, C.J. McNeese, S.V. Kozlov, H. Oka, M. Kobayashi, L.A. Conlan, T.J. Cole, K. Yamamoto, Y. Taniguchi, S. Takeda, M.F. Lavin, and J. Heierhorst. Dual Functions of ASCIZ in the DNA Base Damage Response and Pulmonary Organogenesis. *Plos Genetics* 6:
- Kalender, A., A. Selvaraj, S.Y. Kim, P. Gulati, S. Brule, B. Viollet, B.E. Kemp, N. Bardeesy, P. Dennis, J.J. Schlager, A. Marette, S.C. Kozma, and G. Thomas. Metformin, Independent of AMPK, inhibits mTORC1 in a Rag GTPase-Dependent Manner. *Cell Metabolism* 11:390- 401.
- Katerelos, M., S.J. Mudge, D. Stapleton, R.B. Auwardt, S.A. Fraser, C.G. Chen, B.E. Kemp, and D.A. Power. 5-aminoimidazole-4-carboxamide ribonucleoside and AMP-activated protein kinase inhibit signalling through NF-kappa B. *Immunology and Cell Biology* 88:754-760.
- Kokkinos, M.I., P. Murthi, R. Wafai, E.W. Thompson, and D.P. Newgreen. Cadherins in the human placenta -epithelial-mesenchymal transition (EMT) and placental development. *Placenta* 31:747-755.
- Le Goff, B., J.M. Berthelot, Y. Maugars, and E. Romas. Alternative Use of Bisphosphonate Therapy for Rheumatic Disease. *Current Pharmaceutical Design* 16:3045-3052.
- Le Goff, B., P. Guillot, J. Glemarec, J.M. Berthelot, and Y. Maugars. A Comparison Between Bisphosphonates and Other Treatments for Osteoporosis. *Current Pharmaceutical Design* 16:3037-3044.
- Lopez, A.F., T.R. Hercus, P. Ekert, D.R. Littler, M. Guthridge, D. Thomas, H.S. Ramshaw, F. Stomski, M. Perugini, R. D'Andrea, M. Grimbaldston, and M.W. Parker. Molecular Basis of Cytokine Receptor Activation. *Iubmb Life* 62:509-518.
- Low, W.Y., S.C. Feil, H.L. Ng, M.A. Gorman, C.J. Morton, J. Pyke, M.J. McConville, M. Bieri, Y.F. Mok, C. Robin, P.R. Gooley, M.W. Parker, and P. Batterham. Recognition and Detoxification of the Insecticide DDT by *Drosophila melanogaster* Glutathione S-Transferase D1. *Journal of Molecular Biology* 399:358-366.
- Manning, S.I., F.S. Wong, I. Durinovic-Bello, B. Brooks-Worrell, T.I. Tree, C.M. Cilio, N.C. Schlot,

## Publications

- R. Mallone, and S. Immunology Diabet. Current approaches to measuring human islet-antigen specific T cell function in type 1 diabetes. *Clinical and Experimental Immunology* 162:197-209.
- Martin, T.J. PTH mechanisms in anabolic action. *Endocrine Journal* 57:S244-S244.
- Martin, T.J., E.H. Allan, P.W.M. Ho, J.H. Gooi, J.M.W. Quinn, M.T. Gillespie, V. Krasnoperov, and N.A. Sims. Communication Between EphrinB2 and EphB4 Within the Osteoblast Lineage. In *Osteoimmunology: Interactions of the Immune and Skeletal Systems* li. Y. Choi, editor 51-60.
- Martin, T.J., and L.G. Raisz. Gregory Robert Mundy MD 16 June 1942-25 February 2010. *Osteoporosis International* 21:1117-1119.
- Martin, T.J., and L.G. Raisz. Gregory Robert Mundy MD, June 23, 1942-February 25, 2010 In *Memoriam. Bone* 46:1473-1474.
- Matsumoto, T. ETSURO OGATA, MD, PhD January 5, 1932 to November 1, 2009 In *Memoriam. Bone* 46:257- 258.
- Matsumoto, T., and T.J. Martin. In *Memoriam: ETSURO OGATA, MD, PhD January 5, 1932 to November 1, 2009 (vol 46, pg 257, 2010). Bone* 46:1672-1672.
- McGregor, N.E., I.J. Poulton, E.C. Walker, S. Pompolo, J.M.W. Quinn, T.J. Martin, and N.A. Sims. Ciliary Neurotrophic Factor Inhibits Bone Formation and Plays a Sex-Specific Role in Bone Growth and Remodeling. *Calcified Tissue International* 86:261-270.
- McKenzie, M.D., E. Jamieson, E.S. Jansen, C.L. Scott, D.C.S. Huang, P. Bouillet, J. Allison, T.W.H. Kay, A. Strasser, and H.E. Thomas. Glucose Induces Pancreatic Islet Cell Apoptosis That Requires the BH3-Only Proteins Bim and Puma and Multi-BH Domain Protein Bax. *Diabetes* 59:644-652.
- Menkhorst, E., J.G. Zhang, P.O. Morgan, I.J. Poulton, D. Metcalf, L.A. Salamonsen, N.A. Sims, N.A. Nicola, and E. Dimitriadis. Development of a vaginally applied, non-hormonal contraceptive: the contraceptive efficacy and impact on bone turnover of PEGLA, a long-acting LIF antagonist. *Journal of Reproductive Immunology* 86:33-34.
- Moon, H.C., M. Joffe, H.E. Thomas, T.W.H. Kay, and S.I. Mannering. A method for extracting tissue proteins for use in lymphocyte function assays. *Journal of Immunological Methods* 95:56-60.
- Neutzsky-Wulff, A.V., N.A. Sims, C. Supanchart, U. Kornak, D. Felsenberg, I.J. Poulton, T.J. Martin, M.A. Karsdal, and K. Henriksen. Severe developmental bone phenotype in CIC-7 deficient mice. *Developmental Biology* 344:1001-1010.
- Oakhill, J.S., Z.P. Chen, J.W. Scott, R. Steel, L.A. Castelli, N.M. Ling, S.L. Macaulay, and B.E. Kemp. beta-Subunit myristoylation is the gatekeeper for initiating metabolic stress sensing by AMP- activated protein kinase (AMPK). *Proceedings of the National Academy of Sciences of the United States of America* 107:19237-19241.
- Oates, J.A., and T.J. Martin. Gregory Robert Mundy, MD (1942-2010) IN MEMORIAM. *American Journal of the Medical Sciences* 339:502- 503.
- Oliaro, J., V. Van Ham, F. Sacirbegovic, A. Pasam, Z. Bomzon, K. Pham, M.J. Ludford-Menting, N.J. Waterhouse, M. Bots, E.D. Hawkins, S.V. Watt, L.A. Cluse, C.J.P. Clarke, D.J. Izon, J.T. Chang, N. Thompson, M. Gu, R.W. Johnstone, M.J. Smyth, P.O. Humbert, S.L. Reiner, and S.M. Russell. Asymmetric Cell Division of T Cells upon Antigen Presentation Uses Multiple Conserved Mechanisms. *Journal of Immunology* 185:367-375.
- Pearce, M.C., G.A. Powers, S.C. Feil, G. Hansen, M.W. Parker, and S.P. Bottomley. Identification and Characterization of a Misfolded Monomeric Serpin Formed at Physiological Temperature. *Journal of Molecular Biology* 403:459-467.
- Pivonka, P., J. Zimac, D.W. Smith, B.S. Gardiner, C.R. Dunstan, N.A. Sims, T.J. Martin, and G.R. Mundy. Theoretical investigation of the role of the RANK-RANKL-OPG system in bone remodeling. *Journal of Theoretical Biology* 262:306-316.
- Po'uha, S.T., M.S.Y. Shum, A. Goebel, O. Bernard, and M. Kavallaris. LIM-kinase 2, a regulator of actin dynamics, is involved in mitotic spindle integrity and sensitivity to microtubule-destabilizing drugs. *Oncogene* 29:597-607.
- Quinn, J.M.W., S. Tam, N.A. Sims, H. Saleh, N.E. McGregor, I.J. Poulton, J.W. Scott, M.T. Gillespie, B.E. Kemp, and B.J.W. van Denderen. Germline deletion of AMP-activated protein kinase beta subunits reduces bone mass without altering osteoclast differentiation or function. *Faseb Journal* 24:275-285.
- Ruppender, N.S., A.R. Merkel, T.J. Martin, G.R. Mundy, J.A. Sterling, and S.A. Guelcher. Matrix Rigidity Induces Osteolytic Gene Expression of Metastatic Breast Cancer Cells. *PLoS One* 5: Sachithanandan, N., B.C. Fam, S. Fynch, N. Dzamko, M.J. Watt, S. Wormald, J. Honeyman, S. Galic, J. Proietto, S. Andrikopoulos, A.L. Hevener, T.W.H. Kay, and G.R. Steinberg. Liver-Specific Suppressor of Cytokine Signaling-3 Deletion in Mice Enhances Hepatic Insulin Sensitivity and Lipogenesis Resulting in Fatty Liver and Obesity. *Hepatology* 52:1632-1642.
- Sadowski, M., and B. Sarcevic. Mechanisms of mono-and poly-ubiquitination: Ubiquitination specificity depends on compatibility between the E2 catalytic core and amino acid residues proximal to the lysine. *Cell Division* 5: Sadowski, M., R. Suryadinata, X.N. Lai, J. Heierhorst, and B. Sarcevic. Molecular Basis for Lysine Specificity in the Yeast Ubiquitin-Conjugating Enzyme Cdc34. *Molecular and Cellular Biology* 30:2316-2329.
- Senn, S.M., S. Kantor, I.J. Poulton, M.J. Morris, N.A. Sims, T.J. O'Brien, and J.D. Wark. Adverse effects of valproate on bone: Defining a model to investigate the pathophysiology. *Epilepsia* 51:984-993.
- Shen, Y., V. Barbier, I. Winkler, N. Sims, J. Hendy, and J.P. Levesque. The role of tissue inhibitor of metalloproteinase-3 (TIMP-3) in hematopoiesis. *Experimental Hematology* 38:012.
- Shen, Y., I.G. Winkler, V. Barbier, N.A. Sims, J. Hendy, and J.P. Levesque. Tissue Inhibitor of Metalloproteinase-3 (TIMP-3) Regulates Hematopoiesis and Bone Formation In Vivo. *PLoS One* 5: Sibarani, N.E., M.A. Gorman, C. Dogovski, M.W. Parker, and M.A. Perugini. Crystallization of dihydrodipicolinate synthase from a clinical isolate of *Streptococcus pneumoniae*. *Acta Crystallographica Section F-Structural Biology and Crystallization Communications* 66:32-36.
- Sims, N.A. Endocrine and paracrine regulation of osteoblasts, osteoclasts and osteocytes. *Endocrine Journal* 57:S246-S246.
- Sims, N.A. Building Bone With a SOST-PTH Partnership. *Journal of Bone and Mineral Research* 25:175-177.
- Sims, N.A., and N.C. Walsh. GP130 cytokines and bone remodelling in health and disease. *Bmb Reports* 43:513- 523.
- Soderberg, S.S. Novel effect of erythropoietin (EPO): coupling the regulation of erythropoiesis, B-lymphopoiesis and the BM microenvironment. *Experimental Hematology* 38:033.
- Sopjani, M., I. Alesutan, M. Dermaku-Sopjani, S. Fraser, B.E. Kemp, M. Foller, and F. Lang. Down-regulation of Na<sup>+</sup> coupled glutamate transporter EAAT3 and EAAT4 by AMP-activated protein kinase. *Journal of Neurochemistry* 113:1426-1435.
- Sopjani, M., S.K. Bhavsar, S. Fraser, B.E. Kemp, M. Foller, and F. Lang. Regulation of Na<sup>+</sup>-coupled glucose carrier SGLT1 by AMP- activated protein kinase. *Molecular Membrane Biology* 27:137-144.
- Steinberg, G.R., H.M. O'Neill, N.L. Dzamko, S. Galic, T. Naim, R. Koopman, S.B. Jorgensen, J. Honeyman, K. Hewitt, Z.P. Chen, J.D. Schertzer, J.W. Scott, F. Koentgen, G.S. Lynch, M.J. Watt, B.J.W. van Denderen, D.J. Campbell, and B.E. Kemp. Whole Body Deletion of AMP-activated Protein Kinase beta 2 Reduces Muscle AMPK Activity and Exercise Capacity. *Journal of Biological Chemistry* 285:37198-37209.
- Suryadinata, R., M. Sadowski, and B. Sarcevic. Control of cell cycle progression by phosphorylation of cyclin-dependent kinase (CDK) substrates. *Bioscience Reports* 30:243-255.
- Tan, I.K.L., L. Mackin, N. Wang, A.T. Papenfuss, C.M. Elso, M.P. Ashton, F. Quirk, B. Phipson, M. Bahlo, T.P. Speed, G.K. Smyth, G. Morahan, and T.C. Brodnicki. A recombination hotspot leads to sequence variability within a novel gene (AK005651) and contributes to type 1 diabetes susceptibility. *Genome Research* 20:1629-1638.
- Tan, S.M., Y. Zhang, K.A. Connelly, R.E. Gilbert, and D.J. Kelly. Targeted inhibition of activin receptor-like kinase 5 signaling attenuates cardiac dysfunction following myocardial infarction. *American Journal of Physiology-Heart and Circulatory Physiology* 298:H1415-H1425.
- Thomas, H.E., J.A. Trapani, and T.W.H. Kay. The role of perforin and granzymes in diabetes. *Cell Death and Differentiation* 17:577-585.
- Thompson, E.W., K. Warton, T. Blick, R. Wafai, P. Hill, and K. Stanley. Multiplexed tandem polymerase chain reaction identifies strong expression of oestrogen receptor and Her-2 from single, formalin-fixed, paraffin-embedded breast cancer sections. *Pathology* 42:165-U116.
- Tilkorn, D.J., Z. Lokmic, C.L. Chaffer, G.M. Mitchell, W.A. Morrison, and E.W. Thompson. Disparate Companions: Tissue Engineering Meets Cancer Research. *Cells Tissues Organs* 192:141-157.
- Traven, A., T.L. Lo, T. Lithgow, and J. Heierhorst. The Yeast PUF Protein Puf5 Has Pop2-Independent Roles in Response to DNA Replication Stress. *PLoS One* 5: Traven, A., T.L. Lo, B.L. Pike, H. Friesen, J. Guzzo, B. Andrews, and J. Heierhorst. Dual functions of Mdt1 in genome maintenance and cell integrity pathways in *Saccharomyces cerevisiae*. *Yeast* 27:41- 52.
- Vandyke, K., A.L. Dewar, P. Diamond, S. Fitter, C.G. Schultz, N.A. Sims, and A.C.W. Zannettino. The Tyrosine Kinase Inhibitor Dasatinib Dysregulates Bone Remodeling Through Inhibition of Osteoclasts In Vivo. *Journal of Bone and Mineral Research* 25:1759-1770.

## Publications

- Verhagen, A.M., A. Goradia, J. Choi, D. Metcalf, B. Kile, J.E. Collinge, C.A. de Graaf, T.M. Baldwin, D.J. Hilton, and R. Starr. Lymphopenia and defective hematopoiesis in the lamin B receptor deficient ENU mutant mouse LYM3. *Experimental Hematology* 38:021.
- Vethakkan, S.R., A.J. Jenkins, T.W.H. Kay, D.J. Goodman, J.M. Walters, J.L. Gooley, R.C. Boston, D.J. Holmes-Walker, and G.M. Ward. Improved Second Phase Insulin Secretion and Preserved Insulin Sensitivity After Islet Transplantation. *Transplantation* 89:1291-1293.
- Vo, M., L. Holz, V. Benseler, R. Starr, D. Hilton, T. Kay, M. Chong, G.W. McCaughan, D.G. Bowen, and P. Bertolino. Suppressor of cytokine signaling-1 (SOCS-1) deficient bone marrow chimeric mice as a model of chronic immune mediated hepatitis. *Journal of Gastroenterology and Hepatology* 25:A17-A17.
- Voss, J.E., S.W. Scally, N.L. Taylor, S.C. Atkinson, M.D.W. Griffin, C.A. Hutton, M.W. Parker, M.R. Alderton, J.A. Gerrard, R.C.J. Dobson, C. Dogovski, and M.A. Perugini. Substrate-mediated Stabilization of a Tetrameric Drug Target Reveals Achilles Heel in Anthrax. *Journal of Biological Chemistry* 285:5188-5195.
- Walker, E.C., N.E. McGregor, I.J. Poulton, M. Solano, S. Pompolo, T.J. Fernandes, M.J. Constable, G.C. Nicholson, J.G. Zhang, N.A. Nicola, M.T. Gillespie, J. Martin, and N.A. Sims. Oncostatin M promotes bone formation independently of resorption when signaling through leukemia inhibitory factor receptor in mice. *Journal of Clinical Investigation* 120:582-592.
- Walsh, N.C., and E.M. Gravalles. Bone remodeling in rheumatic disease: a question of balance. *Immunological Reviews* 233:301-312.
- Wei, J., J. Waithman, R. Lata, N.A. Mifsud, J. Cebon, T. Kay, M.J. Smyth, A.J. Sadler, and W.S. Chen. Influenza A Infection Enhances Cross-Priming of CD8(+) T Cells to Cell-Associated Antigens in a TLR7- and Type I IFN-Dependent Fashion. *Journal of Immunology* 185:6013-6022.
- White, K.E., J. Quach, M. Askmyr, and L.E. Purton. Ciliary neurotrophic factor has sex and age-dependent effects on B lymphopoiesis that are mediated by changes in the bone marrow microenvironment. *Experimental Hematology* 38:053.
- Wielens, J., S.J. Headey, D. Jeevarajah, D.I. Rhodes, J. Deadman, D.K. Chalmers, M.J. Scanlon, and M.W. Parker. Crystal structure of the HIV-1 integrase core domain in complex with sucrose reveals details of an allosteric inhibitory binding site. *Febs Letters* 584:1455-1462.
- Wilkinson-Berka, J.L., R. Heine, G. Tan, M.E. Cooper, K.M. Hatzopoulos, E.L. Fletcher, K.J. Binger, D.J. Campbell, and A.G. Miller. RILLKKMPSV influences the vasculature, neurons and glia, and (pro)renin receptor expression in the retina. *Hypertension* 55:1454-U1288.
- Wilson-O'Brien, A.L., N. Patron, and S. Rogers. Evolutionary ancestry and novel functions of the mammalian glucose transporter (GLUT) family. *Bmc Evolutionary Biology* 10.
- Winkler, I.G., N.A. Sims, A.R. Pettit, V. Barbier, B. Nowlan, F. Helwani, I.J. Poulton, N. van Rooijen, K.A. Alexander, L.J. Raggatt, and J.P. Levesque. Bone marrow macrophages maintain hematopoietic stem cell (HSC) niches and their depletion mobilizes HSCs. *Blood* 116:4815-4828.
- Wubben, J.M., C. Dogovski, R.C.J. Dobson, R. Codd, J.A. Gerrard, M.W. Parker, and M.A. Perugini. Cloning, expression, purification and crystallization of dihydrodipicolinate synthase from the psychrophile *Shewanella benthica*. *Acta Crystallographica Section F-Structural Biology and Crystallization Communications* 66:1511-1516.



## SVI seminar program

### **Prof Leslie E Silberstein**

Director, Joint Program in Transfusion Medicine and Center for Human Cell Therapy

Children's Hospital Boston, Dana-Farber Cancer Institute, Brigham & Women's Hospital, Boston MA USA  
"Quantitative Imaging of the bone marrow microenvironment"

### **Dr Phil Salmon**

SkyScan NV, Kontich, Belgium

"In vivo micro-computed tomography (microCT) applications in bone and soft tissue using the new SkyScan 1076"

### **Dr Steve J Gamblin**

Joint Head Division of Molecular Structure, MRC National Institute for Medical Research, The Ridgeway Mill Hill, UK

"Structural and functional insights into the properties of Influenza HA which give it pandemic potential"

### **Prof Ian G Macara**

Harrison Distinguished Professor of Microbiology, Center for Cell Signaling, University of Virginia School of Medicine

"Polarity Proteins in Mammary Morphogenesis and Metastasis"

### **Prof Martin Kussman**

Group Leader Functional Genomics - Nestle Research Center, Lausanne Switzerland

Faculty of Science, Aarhus University, Denmark

"Proteomics in nutrition and health - from bioactives to biomarkers"

### **Dr Xinhua Ji**

Chief, Biomolecular Structure Section, Macromolecular Crystallography Laboratory, National Cancer Institute, US

"The mechanism of RNase III action: How Dicer dices"

### **Prof Kei Sakamoto**

MRC Protein Phosphorylation Unit, College of Life Sciences, University of Dundee, Sir James Black Centre, Dundee, Scotland

"Molecular mechanism by which insulin and AMPK control glycogen storage in muscle"

### **Prof Stefan Karlsson**

Head, Molecular Medicine & Gene Therapy

Lund Stem Cell Center, Lund University - Sweden

"Regulation of hematopoiesis by Smad signaling"

### **Dr Eugenia Flores-Figueroa**

Head, Hematopoietic Microenvironment Laboratory, Oncology Hospital, National Medical Center, Mexican Institute of Social Security, Mexico City

"Dissecting the hematopoietic microenvironment in haematological disorders: mesenchymal stem cells, a key piece of the puzzle"

### **Prof Bao-Liang Song**

Institute of Biochemistry & Cell Biology, Shanghai Institutes for Biological Sciences, Chinese

Academy of Sciences, Shanghai

"Cholesterol Homeostasis: Sterol-regulated protein degradation and trafficking"

### **Dr Seth Masters**

Immunology Research Centre, School of Biochemistry & Immunology, Trinity College, Dublin, Ireland

"Interleukin-1beta and the inflammasome in type 2 diabetes"

### **A/Prof Kevin Pflieger**

Head, Molecular Endocrinology, Western Australian Institute for Medical Research

"Uncovering heteromer-biased ligands for GPCRs"

### **Julie Quach**

Final PhD Seminar, SVI

"Regulation of fat and bone cells by zfp467, a novel zinc finger protein"

### **Nana Saleh**

Final PhD Seminar, SVI

"The influence of lymphocytes and immune-related cytokines on the metabolism of bone"

### **Dr Kieran Harvey**

Head, Cell Growth and Proliferation Laboratory, Cancer Cell biology Program, Peter MacCallum Cancer Centre

"Growth suppression by the Hippo pathway"

### **A/Prof Tracy Bryan**

Children's Medical Research Institute, Westmead

"Telomerase: structural and functional studies of a promising cancer target"

### **A/Prof Bernie Duncker**

Department of Biology, University of Waterloo, Waterloo, Ontario, Canada

"Characterization of pre-replicative complex subunit function in *Saccharomyces cerevisiae*"

### **Prof Jeremy Crook**

Director of Stem Cell Medicine, The O'Brien Institute

"Human stem cells for modelling neural development and disease"

### **Prof David Thorburn**

Head, Mitochondrial Research, Murdoch Children's Research Institute

"Genetics and pathogenesis of mitochondrial diseases: NextGen sequencing and mouse models"

### **Peter Campbell**

Final PhD Seminar, SVI

"Susceptibility of human islets to cytotoxic T cells and isolation stress"

### **Dr Colin House**

Cancer Genomics & Biochemistry Laboratory, Peter MacCallum Cancer Centre

"Siah as a target for cancer therapeutics"

### **Dr Maria Askmyr**

Stem Cell Regulation Unit, SVI

"The effects of myeloablative therapies on the cells of the bone marrow micro environment"

### **Prof Stavros Maolagas**

Director, Division of Endocrinology & Metabolism, Director, the UAMS/VA Center for Osteoporosis and Metabolic Bone Disease, Vice Chair for Research, Department of Internal Medicine, University of Arkansas for Medical Sciences

"Hormones, redox balance, and skeletal homeostasis: an unforeseen entanglement"

### **Dr Tony Mutsaers**

Stem Cell Regulation Unit, SVI  
"Biomarker and Therapeutic Studies of Antibodies and Small Molecules that Target EGFR"

### **Dr Meg Wall**

SVH Hematology/Cytogenetics Service

"RAD001 therapy uncovers a requirement for mTOR signalling in Eu- myc lymphoma"

### **Dr Ross Dickins**

WEHI

"Targeted cancer therapy using RNA interference in mice"

### **Dr Kate Graham**

Immunology and Diabetes Unit, SVI

"Autoreactive cytotoxic T lymphocytes require target tissue stimulus to acquire cytotoxic effector capacity"

### **Dr Matt McCormack**

Rotary Bone Marrow Research laboratories, Royal Melbourne Hospital

"Identification of Self-renewing Thymocytes that are the Cell-of-origin in a Mouse Model of T-cell Leukemia"

### **Randy Suryadinata**

Final PhD Seminar, SVI

"CDK-mediated phosphorylation of RBP1 regulates the pRb tumor suppressor"

### **Sih Min Tan**

Department of Medicine, SVH

"RAD001 therapy uncovers a requirement for mTOR signalling in Eu-myc lymphoma"

### **Dr Gary Hime**

Department of Anatomy & Cell Biology, University of Melbourne

"From fruit fly to mouse: in vivo analysis of regulators in the stem cell niche"

### **A/Prof Anandwardhan**

#### **A Hardikar**

Group Leader, Diabetes & Pancreas Biology Section, The O'Brien Institute

"Thrifty Jerry: a rat model of chronic multigenerational undernutrition"

### **Dr Lee Wong**

Murdoch Children's Research Institute

"Epigenetic control of centromeres and telomeres"

### **Dr Peter Vee Sin Lee**

Department of Mechanical Engineering, University of Melbourne

"The role of impact loads on osteocartilage degeneration"

### **Dr Owen Prall**

Molecular Medicine Division, WEHI, Department of Anatomical Pathology, Royal Melbourne Hospital

"Novel roles for cardiac progenitor genes during development"

### **Dr Mark Shackleton**

Medical Oncologist & Group Leader Melanoma, Research Laboratory, Peter MacCallum Cancer Centre

"Understanding melanoma progression"

### **Dr Alex Thompson**

St. Vincent's Hospital

"Genetics of HCV treatment response"

### **Dr Roger Zebaze**

Department of Endocrinology - Austin Health

"New capabilities in quantitative bone imaging"

### **Dr Leonie Quinn**

Department of Anatomy & Cell Biology, University of Melbourne  
"Animal models for control of the myc oncogene"

### **Dr David Stapleton**

Bio21 Institute

"The AMPK b carbohydrate-binding module and phosphorylation regulate phycoerythrin sensing by AMPK"

### **Prof Decio Eizirik**

Universite Libre de Bruxelles, Belgium  
"Mitochondrial pathways involved in cytokine-induced beta cell apoptosis"

### **A/Prof Richard Lock**

Head, Leukemia Biology Program, Children's Cancer Institute Australia, Lowy Cancer Research Centre, University of New South Wales

"Xenograft models of pediatric acute lymphoblastic leukemia yield novel insight into drug resistance mechanisms"

### **Prof Mark Johnson**

Professor & Chairman, Department of Oral Biology, University of Missouri Kansas City School of Dentistry

"Muscle and Bone Crosstalk Signaling: More than Just a Simple Loading Paradigm"

### **A/Prof Andrew Hill**

Bio21 Institute

"Cellular processing of proteins involved in prion and Alzheimer's diseases"

### **A/Prof Damian Myers**

Department of Surgery/Orthopaedics, St. Vincent's Hospital

"Through the looking glass: Investigating the neurobiology of epilepsy using advanced imaging in translational research"

## Organisational chart



SVI is an independent medical research institute conducting medical research into the cause, prevention and treatment of diseases that are common and have serious effects on health.

Diseases studied at SVI:

- Type 1 and 2 diabetes
- Obesity and heart disease
- Bone diseases such as arthritis and osteoporosis
- Cancer and the spread of cancer
- Infectious diseases such as Hepatitis and AIDS
- Alzheimer's and other neurological disorders

SVI is affiliated with St. Vincent's Health and the University of Melbourne and is a member institution of St Vincent's Health, Australia.

SVI hosts the National Serology Reference Laboratory and is a member of Bio 21; the Victorian Breast Cancer Research Consortium; St. Vincent's Diabetes Centre of Excellence; the Association of Australian Medical Research Institutes; and is accredited by the NHMRC. Through these links SVI provides a valuable service to clinical medicine, graduate education and community welfare.

## SVI staff and students

### Patron

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MBBS BSc(Med) Syd PhD Melb  
HonLLD Mon HonLLD Melb  
HonMD Mainz HonMD Ncl  
HonMD Leeds HonMD UWA  
HonDSc Syd HonDSc Old HonDSc  
ANU HonDSc UNSW HonDSc LaT  
HonDSc McMaster HonDSc Oxon  
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Jiong Zhou, BSc(Hons) Swinburne;  
PhD Mon (to 5/10)

#### Visiting Scientists

Prof Jianhao Pei, MBBS China;  
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PhD China (1/10-3/10)  
A/Prof Bernard Duncker, BSc  
Ottawa; PhD Montreal (3/10-4/10)

#### Research Assistants

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Sophie Broughton, BSc(Hons)  
Swinburne (from 11/10)  
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Melb (to 6/10)  
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(Hons) Melb  
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BSc(Hons) Melb (to 7/10)  
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Lisna Wirrawan Liauw (from 09/10)

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Beth Castles

Julie Malyon

Kathryn O'Connell

Dimitra Samaras

### IT Manager

Peter Tonoli, A/Dip IT Swinburne

### IT Support Officers

Mathew Eley, BA Melb; Microsoft Certified-CTS, MCITP; Apple Certified-10.5,10.6; (from 10/10)

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Jon Rhoades, BSc (Hons) BioChem York UK; Microsoft Certified-MCSE, MCSA, MCTS, MCITP  
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### National Serology Reference Laboratory, Australia

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### Logistics Co-Ordinator

Stephen Gilmore, BSc UK (from 10/10)

### Data Management And Website Officer

Rosanna Fahmy

### Laboratory Assistant

Frank Torzillo

### Executive Assistant

Alison Natoli

### Computer Systems Manager

John Tomasov, BSc(Hons) PhD

LaT Grad Dip Comp Sc Mon

### Office Manager

Louie Opasinov, BSc Dip Ed Melb

### Training Coordinator / Records Administrator

Helen Hasler

### Postgraduate Scholars

#### Doctor of Philosophy

Michele Ashton, BSc(Hons) Melb

Peter Campbell, BSc(Hons) LaT

Jon Chee, BSc(Hons) Melb

Ling Yeong Chia, BSc(Hons)

Murdoch, WA

Chen Gao, BSc Auckland,

MSC Auckland

Devika Gunasinghe, BDS(Hons)

MPhil U Peradeniya

Nicholas Hoch Dip Pharm Rio

Grande do Sul

Guarang Jhala, BSc Pune,

MSc Pune

Sabine Jurado, MSc Nice

Xianning Lai, BSc (Hons) Melb

Kevin Mittelstaedt, MSc Berlin

Hayley O'Neill BSc(Hons) Deakin

Walter Pfister, BSc(Hons) Melb

Cletus Pinto, BSc QUT

BSc(Hons) Melb

Julie Quach, BAppSc(Hons) RMIT

Alice Schofield, BAppSc

(Hons) Melb

Eliza Soo, BSc(Hons) Singapore

Randy Suryadinata,

BSc(Hons) Melb

Anthony Tachtsidis,

B BiomedSc(Hons) Mon

Miralireza (Farzin) Takyar,

MBBS Iran

Shanna Tam, BSc(Hons) Melb

Iris Tan, BSc(Hons) Melb

Julian Tang, BSc(Hons) Melb

Razan Wafai, BSc(Hons) Vic  
Jibran Wali, BSc Lahore,  
MBBS Lahore MHSc Auckland  
Nancy Wang, BSc(Hons) Melb

### Doctor of Medical Science, Masters by Research

Jennifer Collier, MBBS Melb, FRACP

### Undergraduate Scholars

#### Bachelor of Science (Honours)

Holly Brennan

Joseph Ciantar

Allana (Leni) Green

Ashley Harding

Hilda Lau

Jane-Lee Ng

Mina Rizk

Brett Tonkin

Leander Timothy

Prerak Trivedi

#### Undergraduate Research Opportunity Program (UROP)

Edward Chu

Allison Irvin

#### Bachelor of Science – Third Year Research Placements

Carrie Tsang

#### MBBS - Fifth Year Research Placements

Tzen Koh

#### Summer Vacation Research Placements

Sam Rudstein

## SVI committees

### Board Committees

#### SVI Audit and Finance Committee

The purpose of the SVI Audit and Finance Committee is to assist the SVI Board in fulfilling its responsibilities in relation to the identification of areas of significant financial risks and the monitoring of:

- adherence to the Company's Statement of Corporate Governance Principles
- maintenance of an effective and efficient internal and external audit
- management and external reporting
- effective management of financials
- compliance with laws and regulations
- business dealings, in particular related party transactions

The Committee also undertakes the role of an audit committee and provides recommendations to the SVI Board on the appointment of the external auditors, direction of audit (without impacting on the auditor's independence) and the level of audit fees.

#### 2010 Committee members (independent):

Ruth O'Shannassy (Chair), Anthony Burgess, Paul Holyoake, Janene Krongold and Michael McGinniss

#### 2010 Committee members (management):

Thomas Kay

### SVI Commercialisation and Intellectual Property Committee

The purpose of the SVI Commercialisation and Intellectual Property Committee (CIP) is to ensure processes are in place for protection and commercialisation of the intellectual property assets of SVI. In 2010, the SVI CIP Committee oversaw SVI's participation in the Cooperative Research Centre for Cancer Therapeutics (CRC-CT). The CRC-CT, which involves many other significant Australian research institutions, was set up to commercialise basic cancer research. SVI is the core Structural Biology Group of the CRC-CT. The Committee also oversaw SVI's IP out-licensing activities with various companies and reviewed SVI's Collaboration Research Agreements with academic partners.

#### 2010 Committee members (external):

Greg Robinson (Chair), John Sime, Andrew Baker, Michelle Baker, Paula de Bruyn, Stephen Livesey (joined Dec 2009), and Michael McGinniss

#### 2010 Committee members (internal):

Thomas Kay, Michael Parker, Bruce Kemp and Tony Mason (Convenor)

### Internal Committees

#### SVI Occupational Health and Safety Committee

The Occupational Health and Safety Committee (OHS) meets on a monthly basis to deal with various health and safety operational issues at the Institute and devise policy in compliance with Victorian Occupational Health and Safety Act (2004) and Victorian Occupational Health and Safety Regulations (2007).

#### 2010 Committee members

Ginny Leopold (Chair), Jörg Heierhorst, David Murfitt, Helen Ritchie, Ankita Goradia, Frosa Katsis, Cameron Kos, Thomas Loudovaris, Narelle McGregor and Kevin Mittelstaedt

#### SVI Equipment Committee

The SVI Equipment Committee meets monthly to coordinate equipment requirements throughout the Institute and to provide strategic advice to the Director.

The Committee aims to make effective use of scientific equipment and technologies by encouraging researchers to share resources. It administers the annual NHMRC Equipment Grant and also accepts specific, communal and non-communal equipment proposals for consideration according to guidelines. The Committee made a total of 16 applications to various philanthropic trusts and obtained funds to the value of \$338,757 from eleven successful applications.

#### 2010 Committee members:

Michael Parker (Chair), David Murfitt, Natalie Sims, Rohan Steel, Thomas Brodnicki, Anne Johnston, Julie Malyon





## Statement Of Financial Position As At 31 December 2010

|  | 2010 (\$)         | 2009 (\$)         |
|--|-------------------|-------------------|
| <b>ASSETS</b>                              |                   |                   |
| <b>Current Assets</b>                      |                   |                   |
| Cash and cash equivalents                  | 14,556,068        | 13,669,181        |
| Trade and other receivables                | 899,406           | 1,172,315         |
| Other assets                               | 241,110           | 36,673            |
| <b>Total Current Assets</b>                | <b>15,696,584</b> | <b>14,878,169</b> |
| <b>Non-current Assets</b>                  |                   |                   |
| Trade and other receivables                | 250,000           | 250,000           |
| Financial assets                           | 2,614,000         | 1,978,492         |
| Property, plant & equipment                | 8,631,915         | 8,994,599         |
| <b>Total Non-current Assets</b>            | <b>11,496,025</b> | <b>11,223,091</b> |
| <b>Total Assets</b>                        | <b>27,192,609</b> | <b>26,101,260</b> |
| <b>Current Liabilities</b>                 |                   |                   |
| Trade and other payables                   | 1,798,313         | 889,622           |
| Short-term provisions                      | 1,333,841         | 1,195,915         |
| Funds held in trust for NSRL accrued leave | 138,280           | 138,280           |
| Other current liabilities                  | 851,466           | 1,895,236         |
| <b>Total Current Liabilities</b>           | <b>4,121,900</b>  | <b>4,119,053</b>  |
| <b>Non-current Liabilities</b>             |                   |                   |
| Long-term provisions                       | 145,478           | 120,876           |
| <b>Total Non-current Liabilities</b>       | <b>145,478</b>    | <b>120,876</b>    |
| <b>Total Liabilities</b>                   | <b>4,267,378</b>  | <b>4,239,929</b>  |
| <b>NET ASSETS</b>                          | <b>22,925,231</b> | <b>21,861,331</b> |
| <b>EQUITY</b>                              |                   |                   |
| Retained surplus                           | 22,863,278        | 21,780,048        |
| Financial asset reserve                    | 61,953            | 81,283            |
| <b>TOTAL EQUITY</b>                        | <b>22,925,231</b> | <b>21,861,331</b> |

The Statement of Financial Position provided above, together with the attached Statement of Comprehensive Income and Statement of Cash Flows have been extracted from the audited general purpose financial statements of St Vincent's Institute of Medical Research. The summary financial information does not include all the information and notes normally included in the statutory set of financial statements. A full set of audited general purpose financial statements can be obtained upon request to the Chief Finance Officer. The statutory financial statements (from which the summary financial information has been extracted) comply with Australian Accounting Standards. The statutory financial statements were unqualified by the auditors, William Buck Audit (Vic) Pty Ltd.



## Statement Of Comprehensive Income For The Year Ended 31 December 2010

|  | Note | 2010 (\$)        | 2009 (\$)        |
|--|------|------------------|------------------|
| Revenue  | 1    | 20,700,696       | 20,590,258       |
| Other income   |      | 0                | 381,880          |
| Total revenue  |      | 20,700,696       | 20,972,138       |
| Consumables and general research expenses                        |      | (4,936,146)      | (4,652,257)      |
| Employee benefits expense  |      | (11,169,874)     | (10,406,321)     |
| Depreciation and amortisation                                    |      | (1,758,827)      | (1,797,200)      |
| Administration expenses  |      | (1,463,933)      | (1,250,484)      |
| Transfers to collaborators                                       |      | (269,356)        | (786,454)        |
| Other expenses   |      | 0                | (208,136)        |
| Total expenses   |      | (19,598,136)     | (19,100,852)     |
| <b>Surplus for the year</b>                                      |      | <b>1,102,560</b> | <b>1,871,286</b> |
| Gains and losses remeasuring available-for-sale financial assets |      |                  |                  |
| - Equity investments   |      | (19,330)         | 81,283           |
| <b>Total Comprehensive Income for the year</b>                   |      | <b>1,083,230</b> | <b>1,952,569</b> |

### Note 1: Grants

#### Commonwealth Government

|  |  |                  |                  |
|--|--|------------------|------------------|
| National Health and Medical Research Council             |  |                  |                  |
| - Infrastructure support scheme                          |  | 1,509,894        | 1,321,587        |
| - Research grants  |  | 6,688,451        | 6,876,459        |
| Australian Research Council                              |  | 607,865          | 986,255          |
| Department of Innovation, Industry, Science and Research |  | 204,943          | 272,679          |
|  |  | <b>9,011,153</b> | <b>9,456,980</b> |

#### Victorian State Government

|   |  |                  |                  |
|---|--|------------------|------------------|
| Department of Innovation, Industry & Regional Development |  |                  |                  |
| - Operational infrastructure Support                      |  | 1,549,722        | 1,441,926        |
| - Other Direct research grants                            |  | 0                | 242,044          |
|   |  | <b>1,549,722</b> | <b>1,683,970</b> |

## Statement Of Cash Flows For The Year Ended 31 December 2010

|  | 2010<br>Inflows<br>(Outflows) \$ | 2009<br>Inflows<br>(Outflows) \$ |
|--|----------------------------------|----------------------------------|
| <b>Cash flow from operating activities</b>       |                                  |                                  |
| Grants received                                  | 15,179,138                       | 16,670,411                       |
| Payments to suppliers and employees              | (16,991,859)                     | (16,944,627)                     |
| Donations, legacies and bequests                 | 2,836,922                        | 2,288,996                        |
| Other revenue                                    | 1,096,773                        | 1,084,453                        |
| Interest received                                | 648,185                          | 575,379                          |
| Dividends received                               | 168,819                          | 59,354                           |
| <b>Net cash provided by operating activities</b> | <b>2,937,978</b>                 | <b>3,733,966</b>                 |
| <b>Cash flow from investing activities</b>       |                                  |                                  |
| Purchase of plant and equipment                  | (1,357,229)                      | (1,231,741)                      |
| Purchase of motor vehicle                        | (38,914)                         | -                                |
| Leasehold improvements                           | -                                | -                                |
| Payments for investments                         | (654,948)                        | (45,868)                         |
| <b>Net cash (used in) investing activities</b>   | <b>(2,051,091)</b>               | <b>(1,277,609)</b>               |
| Net increase/(decrease) in cash held             | 886,887                          | 2,456,357                        |
| Cash at the beginning of the year                | 13,669,181                       | 11,212,824                       |
| <b>Cash at the end of the year</b>               | <b>14,556,068</b>                | <b>13,669,181</b>                |



## Donors and bequests

### Private Donors, Bequests and Foundations

#### \$100,001 plus

Alberti AO Hon LLD, S

#### \$50,001 – \$100,000

The Leslie Family (The Bill Heath Fellowship donated in memory of Stuart Leslie)

H & L Hecht Trust administered by Perpetual Trustees

Brenda Shanahan Charitable Foundation

#### \$25,001 – \$50,000

North, C

ANZ Trustees Limited

EJ Whitten Foundation

The Marian & E H Flack Trust

The Alan (AGL) Shaw Trust – administered by Perpetual Trustees

The Percy Baxter Charitable Trust – administered by Perpetual Trustees

#### \$10,001 – \$25,000

Janko Inge Foundation

Newcrest Mining Limited

Reece Australia Limited

Simpson Family Foundation

LEW Carty Charitable Fund

George Castan Family Charitable Trust

Vermont Cancer Research Fund

Harold & Cora Brennan

Benevolent Trust – administered by Equity Trustees

Yencken, T & M

Burgess, A

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Salta Properties Pty Ltd

#### \$5,001 – \$10,000

Arcaro, J & G

Bell Charitable Fund

administered by Aitken Walker & Strachan

DBR Corporation Pty Ltd

Generation Investments Pty Ltd Drummond, C

Harold Mitchell Foundation

Henderson, A & L

Macfarlane, J

McDonald, H

The Michael & Andrew Buxton Foundation

The Angior Family Foundation administered by the National Australia Trustees Ltd

Schiavello, T & E

McCorkell, P

#### \$2,001 – \$5,000

Lowe, D

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Ralph AC, J

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Smith, K

Smorgon, G

Wigney, D

#### \$901 – \$2,000

Commins, H

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Xipell, J & T

Aroni, B & Kaldor-Aroni, R

Hatzimosis, J

Johnston, G

Spooner DSJ, Dame J

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Gourlay OAM, L

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Barker, R

Barro, R

Berkowitz, D

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Buckle, R & C

Caulfield, G

Clarke, B

Dale, G & R

Demediuk, N & F

Elliott, R

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Gelber, N

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Kay, T

Kelly, AP

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McNulty, M

McPhail, B

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Penington AC, D

Reid, I

Riviera Properties Limited

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Russell, J

Sime, J

Tabak, L

Thomas, C & C

Walters OAM, E

Webb, B

#### \$301 – \$900

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D'Souza, R

Reeve, F

Sion, Y

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Gray, M & N

McBain, B

Nicol, C

Rider Levett Bucknall

Santamaria, J & S

Tisher, F

Reeves, S

McCarthy, B

Sakell, T

Wilson HTM Services Pty Ltd

Carson, I & S

Cebon-Glass, A & Glass, R

Wu, J

#### \$101 – \$300

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Macquarie Bank Limited

Mercorillo, R

Pallot, D & J

Renard, R & R

Hart Charities

National Bank

Johnston, Campbell

McGowan, M

O'Dwyer, D & G

Bourke, L & Warner, M

Dubravica, DJ

Forrest, LE

Genazzano College

Irwinconsult Gardiner

The Jack & Ethel Goldin Foundation

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Pretorius, J

Smorgon, S & M

Weir, R & R

Westmore-Peyton, C

Wraith, A

Zwier, L

Chambers, M

Janover, M

O'Reilly, C

Roseby, M

Shalit, J

Walton, A

Tees, L

Finkel Foundation

Hurley, J

James, R

Martin AO, TJ

Rush, G & Menelaus, J

Buckley, D

#### Less than \$100

Anderson, D

Arwas, J

Bailey AO, W

Barui, S

Brennan, J

Clark, P

Harry, R

Henderson, JK

Hoy, B

King, J

Lacey, C

Le Guier, V

Rees, R

Rogers, R

Sumitani, K

Sutton, J

Van Dijk, L & L

Webster, N

Wurm, J

Nihill, E

MacGeorge, M

Farrell, B

Murphy, N

Alward, J

Bittner, I

Blackwell, D & H

Cameron, V

Corrigan, H & D

Curtis, B & J

Gravina, V

Griffin, J

Janus, E

Katsis, F

McGuinness, B

Rapke, J

Sadler, J & J

Seddon, L

Small, M

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Steadman, R

O'Shannassy, M & R

Cooke, E

Hackett, J

Wheatley, S

Deagan, P

Foenander, L

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Renkin, D

Tracey, R & H

Peirce, S

Edelman, E

Hurley, L

Coutts, J

Furler, J

Bowker, T

Cygler, L

Ferlan, M

Keane, M

Mendes, T

Railey, J

Plonka, A

Kappler, J

## Donors and bequests

**We also acknowledge those donors who wish to remain anonymous**

**In Memorial Donations during the year donations were given to the memory of:**

James Whittington  
Jeff Clifton  
Maria Tarascio  
Maureen Higgins  
Roslyn Smorgon

**Trusts & Foundations permanently established for the purpose of allocating funds to St Vincent's Institute on an ongoing basis:**

DJ & LM Fox Foundation  
– administered by Nicholas O'Donohue & Co  
John Holt Medical Research Endowment – administered by Perpetual Trustees  
K & A Bongiorno Research Endowment – administered by Perpetual Trustees  
The Mary Jane Polinelli Foundation – administered by Perpetual Trustees

**The following permanent funds are included in the company's pool of invested funds with income being directed to the Institute's medical research program**

Albert H Maggs Endowment  
Diane B Jones Endowment  
George Menzies Carson Bequest  
Laura Sampson Lamb Estate  
Lorna M Miller Endowment  
Mary T Porter Estate  
Merna Dorothea Sheahan Estate  
The Mary Potter Research Grant  
The Roslyn Smorgon Memorial Fund

Design Chris Haydon  
Able & Baker  
chris@ableandbaker.com.au  
Finished art Michelle Galea  
0412 067 005  
Photography Andrew Wuttke  
0412 424 993

# Donating to SVI

Your donation today, however large or modest, could fund the new work of a scientist, the purchase of vital equipment or allow the development of new research initiatives.

Every dollar of your donation will directly fund medical research.

## 1. Donate now to SVI

I want to make a single donation of:

\$25  \$50  \$75  \$100  \$150  \$500  \$1000

Other \$ \_\_\_\_\_

Remember, you're not just giving money.  
You're giving hope to sufferers everywhere.

## 2. Pledge a regular donation to SVI

I want to make a regular monthly donation of:

\$20  \$50  \$75  \$100  Other \$ \_\_\_\_\_

SVI receives just 60% of its funding from Government sources and needs your support to continue its vital work.

## 3. Join the SVI 1000 Club

I want to make an annual donation of \$1000 for:

1yr  2yr  3yr  3yrs +

Type of membership:

New or  Continuing  Corporate or  Individual

All gifts over \$1,000 in a calendar year will automatically qualify you as a member of the SVI 1000 Club. SVI respects your privacy. If you do not wish to receive some or all of the supporter information or you wish to remain anonymous, please contact our office on: (03) 9288 2480.

SVI is endorsed as a tax deductible gift recipient.  
All donations over \$2 are tax deductible.  
SVIMR ABN: 52 004 705 640.

Send payment to: St Vincent's Institute of Medical Research,  
41 Victoria Parade, Fitzroy, VIC 3065  
Tel: 03 9288 2480 Fax: 03 9416 2676  
Email: enquiries@svi.edu.au Web: www.svi.edu.au

See reverse for receipt and payment details.

# Donating to SVI

## Receipt details

Title \_\_\_\_\_ First Name \_\_\_\_\_

Surname \_\_\_\_\_

Position \_\_\_\_\_

Company \_\_\_\_\_

Address \_\_\_\_\_

Suburb \_\_\_\_\_

Post Code \_\_\_\_\_ State \_\_\_\_\_

Phone Work \_\_\_\_\_

Fax \_\_\_\_\_

Phone Home \_\_\_\_\_

Mobile \_\_\_\_\_

Email \_\_\_\_\_

## Donation payment details

Cheque (please make payable to St Vincent's Institute)

Credit card (please complete details)

Diners  Visa  Mastercard  Amex

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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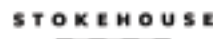
Amount being paid \$ \_\_\_\_\_

Expiry Date \_\_\_\_ / \_\_\_\_ Signature \_\_\_\_\_

**Thank you to our 2010 event sponsors and supporters:**



Jack and ^ friends





**St Vincent's Institute**

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Fitzroy Victoria 3065  
Location: 9 Princes Street,  
Fitzroy Victoria 3065

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Fax: 03 9416 2676  
Email: [enquiries@svi.edu.au](mailto:enquiries@svi.edu.au)  
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