A world of persistence & creativity.
In a secondary school nestled in the foothills of Argentina’s Sierras Chicas, a young Gabriella Crespi is inspired by a teacher with a passion for neuron biology.

In a snow-bound Dundee laboratory, undergraduate John Scott finds himself captivated by the tiny chemical changes that cause cancer and cystic fibrosis.

In a sprawling Bangalore hospital, a brush with diabetic children draws Balasubramanian Krishnamurthy away from the registrar’s office and into the lab.

In a San Francisco ‘wound healing’ clinic, Nancy Hancock is moved to abandon plans for medical school and pursue a Master’s in Structural Biology instead.

In a Tel Aviv primary class, ten-year old Ora Bernard stares enthralled at the internal workings of a dissected frog, and a lifetime love of biology begins.

From the moment Pehr Edman sent a telegram in 1957, accepting the post as St Vincent’s Institute’s first Director, SVI’s ambition and achievement has drawn incisive and driven research minds from all over the world.

Our labs are currently enriched by natives of Sao Paulo, Boston, Montevideo, Skopje, Hanover, San Diego, Jakarta, Quito, Singapore, Jiangsu, Cologne, Mumbai, Stockholm and many other cities.

The perspectives and influences they bring enriches the work undertaken by colleagues with more familiar origins such as Horsham, Carlton and Yallourn.

Together, these talented individuals will help take SVI’s work to the next level.

Moreover, the work of our incredible researchers goes back into the repository of global knowledge, helping other teams in other institutes make breakthroughs in their own programmes and projects.

In this report, you’ll read about the year’s research highlights, the contributions our staff have made to the scientific community and the fellowships, prizes and grants that have been awarded.

In a way that Pehr Edman might never have imagined on his long voyage from Europe, St Vincent’s has become a truly global hub for original medical research, both drawing from, and giving to, the world around us.
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.

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

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.
1957

Pehr Edman travels from Lund, Sweden to Melbourne to be SVI’s first Director.
St Vincent’s International. Today our researchers bring inspiration and knowledge from all over the world.
“I grew up in Glasgow, but did my PhD at the University of Dundee in Scotland. It was a small university, but the research institute based there is huge. About 800 staff all up.

As a student, I remember being gobsmacked that little changes in the chemistry of life can cause horrible diseases such as cystic fibrosis and cancer. I really wanted to find out more about this biochemical fabric of life, and that’s how I found my way into research.

It was working into the long summer evenings that I first heard about Bruce Kemp’s lab at SVI. Really, they were competitors with our lab in Dundee. But I liked the work he was doing, so I applied for a position and here I am. I thought it would be a great opportunity to live and work in Australia with some high profile people, and to continue working on AMPK, and I haven’t been disappointed.”

“I was born in Auckland, then moved to Hong Kong when I was one. I remember Hong Kong as being jammed with people, from mini-skirted, mid-life crisis ‘aunties’ to crusty old men in their white singlets. When I returned to Auckland to go to university, the sense of space was almost overwhelming.

I became interested in research through a bit of luck. I didn’t know what to do at university so I signed up for biomedical science, optoelectronics and commerce. I got into biomed and quite enjoyed the molecular biology aspect, which led me into postgraduate studies.

I was fortunate enough to fall under the supervision of Prof. John Fraser and Prof. Ted Baker. Ted’s lab is part of the mycobacterium tuberculosis structural genomics consortium, so there was a lot of focus on TB proteins. It was John that first made contact with Michael Parker at SVI as I was finishing up my PhD.

What inspired me to do research? I guess I am attracted to the diverse range of research that is available. It keeps me motivated and interested. Getting to play with large expensive equipment is a bonus!”

“When I was in the beginning of my secondary school in Cordoba, Argentina, I was lucky to have a really good teacher who was also doing interesting research related to neurobiology. Though we were young, she taught us a few techniques related to this. She was very inspiring and started me along the research path.

I got my degree at the National University of Cordoba, which is the oldest University in Argentina and the second oldest in all the Americas. Cordoba was one of the first Spanish capitals, so all the streets and plazas are lined with graceful colonial architecture. It gets really hot in the summer, and my family would always escape up into Las Sierras (the hills) to get away from it.

After graduating, I worked in virology in Cordoba, before moving to Emory University in Atlanta where I did research on Parkinson’s disease. Then I read about a position in Michael Parker’s laboratory. What I liked was that there was not only support from an impressive team but also had an interesting research topic that I liked. I’ve been here three years now, and I’m very excited by the work we’re doing!”

“When I graduated from Bangalore Medical College, I had intended to embark on a career as a registrar, to provide security for my wife and our three children. But attached to the College were a number of teaching hospitals. It was in one of these hospitals that I got exposed to a clinical research project.

I was involved in an epidemiological study, assessing the risk of diabetes in the offspring of parents who both had Type 2 diabetes.

Later, as a registrar undergoing clinical training in endocrinology, I was exposed to research projects that involved basic laboratory research. We studied clinical, immunological and genetic profiles of diabetes in children. This stimulated my interest in research.

My goal is to be a clinician-researcher. To achieve this I realised I needed more research exposure. So I contacted Professor Peter Colman. When I asked him if he had a position in his lab, he replied “I’m afraid I’m not really in a position to take you. You should ask Tom Kay.”

“I feel very fortunate today that Peter didn’t have a position for me!”
11

Tel Aviv to Paris to Montreal to Melbourne to Basel to Melbourne to SVI
Ora Bernard, Unit head, Cytoskeleton and Cancer

“I loved growing up in Tel Aviv. My primary school was two minutes walk from the beach, and we could see the blue water from our second floor classroom. As soon as the lessons finished, we were off to the beach. After I finished my Master’s at Tel-Aviv University, I went to Paris to work in the lab of Jean Dausset in Hospital St Louis. We worked on human transplantation antigens for which Dausset received the Nobel Prize. I got married to Claude who did his National Service in Montreal. So Montreal was where I started my PhD, at McGill University Dept of Biochemistry. I spent three and a half years at the Walter & Eliza Hall Institute, before taking a position at the Basel Institute of Immunology. I worked there with Susumu Tonegawa on Immunoglobulin rearrangement for which Susumu got his Nobel Prize. After 2 years in Basel I returned to WEHI where I stayed for 26 years before moving to SVI.”

Germany to Stockholm to SVI
Susanne Feil, Postdoc, Structural Biology

“The school I went to in Bruchsal, Germany was a “Wirtschaftsgymnasium”. “Wirtschaft” means “economy” and the word “gymnasium” is the word for a prestigious secondary school. We were taught a lot of subjects that covered all aspects of economics. I really didn’t like it. I actually had to move to Stockholm and go back to school and study biology before I could study it at university. Sweden in the eighties had a solid social welfare system. Students were given a lot of respect and lecturers were very supportive and fair. I will always remember what my first lecturer said: “You are here - so you must be good!” My most inspiring lecturer was Margareta Ohne. She still teaches microbiology, toxicology and genetics. Margareta was the one who helped me decide to focus on molecular biology and microbiology.

Part of my University degree was to get some work experience in a laboratory. Bruce Kemp accepted me as a student and offered me a position as a research assistant after I finished my degree. Now, my research at SVI allows me to do far more sophisticated things than I ever thought I would be capable of.”

California to SVI
Nancy Hancock, Postdoc, Structural Biology

“I grew up in Salinas, California. One of its few claims to fame is that John Steinbeck was born there. Biology was always my favourite subject at school, though having parents who were in the medical fields might have helped. After finishing my undergraduate degree I had planned on applying to medical school but that changed after I did an internship in a ‘wound healing’ lab at the University of California, San Francisco. It was a summer position in the laboratory of Professor Thorne Hunt who was working on the identification and purification of angiogenesis factors. I really loved the work and then completed a Master’s Degree on the identification and cloning of a gene in yeast that confers resistance to the antibiotic tetracycline. After graduating, I worked primarily in biotech and pharmaceutical companies, before I was offered a position in Michael Parker’s Structural Biology laboratory six years ago.”

NSW to Harvard to SVI
Louise Purton, Head, Stem Cell Regulation

“I grew up in Balranald, on the banks of the Murrumbidgee in New South Wales. It’s only a little place, just 1500 people and nobody had ever been awarded a PhD before me. My interest in blood cells began at University. After graduating I was fortunate enough to spend some time at the Peter MacCallum Institute and then Harvard. When my partner Carl Walkley and I wanted to return to Australia, I was impressed with the Bone group here. We had collaborated with them in the past, and Carl and I both independently thought SVI would be a great place to come back to when we were finished in Boston. What is it about research that drives me? It’s the never-ending challenge that I enjoy. Also, it’s nice to know that we might be able to make a difference in understanding how diseases occur and find better therapies for them.”

Germany to Stockholm to SVI
Susanne Feil, Postdoc, Structural Biology

“Part of my University degree was to get some work experience in a laboratory. Bruce Kemp accepted me as a student and offered me a position as a research assistant after I finished my degree.

Now, my research at SVI allows me to do far more sophisticated things than I ever thought I would be capable of.”
Improving memory
Approximately one quarter of people over the age of 65 are estimated to suffer some form of cognitive impairment, underscoring the need for effective cognitive-enhancing agents. Insulin-regulated aminopeptidase (IRAP) is potentially an innovative target for the development of cognitive enhancers, as its peptide inhibitors exhibit memory-enhancing effects in both normal and memory-impaired rats. Using a homology model of the catalytic domain of IRAP and virtual screening, we identified a class of non-peptide, small molecule inhibitors of IRAP. Subsequent medicinal chemistry performed on the highest affinity compound produced inhibitors with nanomolar affinities (Ki 20-700 nM) for IRAP. In vivo efficacy of one of these inhibitors was demonstrated in rats, improving performance in both spatial working and recognition memory paradigms. We have identified a family of specific IRAP inhibitors that is biologically active: these will be useful both in understanding the physiological role of IRAP and potentially in the development of clinically useful cognitive enhancers. Our work on IRAP is in collaboration with Dr Siew Yeen Chai of the Howard Florey Institute.

New treatment for emphysema?
The aggregation of antitrypsin into polymers is one of the causes of neonatal hepatitis, cirrhosis and emphysema. A similar reaction resulting in disease can occur in other human serpins, a group of diseases collectively known as the serpinopathies. One possible therapeutic strategy involves inhibiting the conformational changes involved in antitrypsin aggregation. The citrate ion has previously been shown to prevent antitrypsin aggregation and maintain the protein in an active conformation; its mechanism of action, however, is unknown. We have solved the crystal structure of citrate bound to antitrypsin and show that a single citrate molecule binds in a pocket between the A and B β-sheets, a region known to be important in maintaining antitrypsin stability. This work is in collaboration with Professor Steve Bottomley, Monash University.

Drug discovery

Proteins are one of the body’s essential building blocks. In addition to contributing to the structure of the body, proteins also act as molecular engines, controlling all of the body’s functions. Determining the structure of a protein can help us to understand its function. 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 protein crystallography research in the Structural Biology Unit involve proteins implicated in cancer, brain disease, bacterial and viral infection.
Structure revealed

After years of painstaking research, in 2008 Professor Michael Parker and his lab, along with collaborators at the Centre for Cancer Biology in Adelaide, revealed the three-dimensional structure of an important molecule, called GM-CSF, bound to its receptor. GM-CSF signalling is responsible, in part, for diseases such as arthritis, rheumatoid arthritis and certain types of leukaemia. The researchers now plan to use their knowledge of the structure to design compounds to stop the signal from being transmitted.
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. As such, 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. Abbott Laboratories produced a small molecule activator of AMPK, called A769662, that had an unknown mechanism of action. We have found that the A769662 drug acts one of the three AMPK subunits, the β subunit, and is specific for the AMPK β1 isoform. This means that the drug will only affect tissues that contain the β1 isoform, such as the liver, but not skeletal muscle, which has the β2 isoform. Our work has highlighted the potential for a new generation of AMPK activating drugs that can target particular tissues.

AMPK fat metabolism and exercise
Exercise training prevents the development of type 2 diabetes. One of the ways it may do this is by increasing fat burning in muscle. Ten years ago we discovered that exercise increases the activity of AMPK, an effect which was associated with phosphorylation and inhibition of the metabolic enzyme ACC. ACC is a critical enzyme that controls fat metabolism. We tested whether AMPK phosphorylation of ACC occurred in mice with reduced muscle AMPK and found, surprisingly, that these mice burned equal amounts of fat. This suggests that there are backup systems in muscle to compensate for a lack of AMPK, which help to control fat metabolism during exercise. The identification of these alternative systems may represent a new way to increase fat burning with obesity.

Bruce Kemp
Sebastian Beck-Jorgensen
ZhiPing Chen
Sandra Galic
Kimberley Hewitt
Jane Honeyman
Frosa Katsis
Rebecca Keall
Lotte Leick
Belinda Michell
Jonathon Oakhill
Hayley O’Neill
John Scott
Rohan Steel
Gregory Steinberg
Shanna Tam
Sarah Turpin
Bryce van Denderen
Sheena Wee

Photo 1 to r
Bruce Kemp
John Scott
Rohan Steel
Gregory Steinberg
The Magic Pill

Researchers in the Protein Chemistry and Metabolism Unit are focussed on harnessing the potential of an enzyme called AMP kinase (AMPK), with the aim of reversing problems associated with obesity and type 2 diabetes. In 2008, Dr John Scott and his colleagues showed that an AMPK-activating drug works by specifically acting on a version of AMPK found mainly in the liver. This finding is important because drugs that can act on AMPK in specific locations are likely to be of great benefit for obese and type 2 diabetic patients.
Identifying those at risk
As part of our development of new strategies to better prevent heart failure, we are collaborating with cardiologists at St Vincent’s Health, and Melbourne and Monash Universities to investigate whether measurement of a protein in blood called NT-proBNP can help us to identify people at increased risk of heart failure. Therapies that effectively prevent heart failure are available, but we lack a simple way to identify people at increased risk of heart failure who could benefit from these therapies. We are recruiting 3500 people from the community to study whether people with increased blood levels of NT-proBNP have abnormal heart function that may place them at increased risk of heart failure in the future. Identifying people before, or at the earliest stages of heart failure, will enable us to ensure they receive appropriate preventive treatments.

The heart bank
To study the mechanisms of heart failure, we are collaborating with cardiologists and surgeons at St Vincent’s Health to establish a cardiac tissue bank. With patient consent, small pieces of heart muscle are taken during open heart surgery. Together with colleagues from Melbourne and Monash Universities, we are comparing heart muscle from patients with and without heart failure to identify why the muscle is unable to work properly in heart failure.

Heart disease

Molecular Cardiology

Heart failure is a condition where the heart is unable to pump sufficient blood for the body to perform normal daily activities. Approximately 20% of people will develop heart failure during their lifetime. It is a major burden on the community because of the poor quality of life and premature death of affected individuals, as well as the costs of care. We are studying why heart failure occurs, evaluating new therapies and developing strategies to better prevent heart failure.
Heart to Heart

As part of his research into why heart disease occurs, Associate Professor Duncan Campbell works closely with cardiologist Dr David Prior from St Vincent’s Hospital. The two coordinate taking biopsies from patients undergoing open heart surgery. They then compare the heart tissue from patients who have experienced heart failure to healthy heart tissue, looking for differences between the two. These studies will help them to understand why hearts fail, with the aim of developing new treatments for people with heart failure.
The role of cytokines in type 1 diabetes

CD4+ T cells can kill pancreatic beta cells in type 1 diabetes. Cytokines produced by CD4+ T cells have the potential to kill beta cells, or to upregulate the cell death receptor Fas on beta cells and increase their susceptibility to killing by Fas ligand. We investigated the direct effects of cytokines on beta cells in mouse models of type 1 diabetes that are dependent on CD4+ T cells. Inhibiting the effects of cytokines by overexpression of suppressor of cytokine signalling 1 (SOCS1) in beta cells did not reduce diabetes or the presence of immune cell infiltration in pancreatic islets. SOCS1 overexpression prevented Fas upregulation on NOD4.1 beta cells because this requires cytokines. However, SOCS1 transgenic islets were destroyed when grafted into NOD4.1 mice, as were islets deficient in Fas, suggesting that CD4+ T cells do not use Fas to kill islets. Our previous data indicates SOCS1 protects beta cells from CD8+ T cell killing. In contrast, our data show that beta cells under attack by CD4+ T cells display signs of being affected by cytokines but these effects are not essential for diabetes progression.

The Tom Mandel Islet Transplant Program

The Tom Mandel Islet Transplant Program is a highly collaborative national program funded by the Australian Government and administered by the Juvenile Diabetes Research Foundation. We have carried out four transplants into three recipients since our first successful transplant in 2007. Our first recipient no longer needs to take any insulin following a second infusion of islet cells. One other recipient is also insulin free after two infusions and the third is waiting for her second infusion. The recipients are being studied in detail, including looking at insulin production by the transplanted cells and also evidence of recurrent diabetes and transplant rejection. We are now able to supply many collaborators around Australia with islets for research. We continue to work closely with our colleagues in Sydney and Adelaide and hope to perform an islet transplant in Adelaide, using cells shipped from Sydney or Melbourne. The Program aims to expand its activities in 2009 by beginning transplants of islet cells at the same time that kidney transplants are done for patients with type 1 diabetes.

People with type 1 diabetes lack insulin, the hormone that regulates the body’s use of glucose. Insulin is produced by beta cells in the pancreas, which are contained within small clumps of cells called islets. In type 1 diabetes, beta cells are mistakenly attacked and destroyed by the immune system. We study the precise mechanisms by which this occurs, and work to find ways of preventing this from happening. We have begun translating our mouse work to a more clinical level by using human islets for laboratory studies and establishing a human islet transplant program.
Sweet Death

After working for the last three years on how the insulin-producing beta cells in the pancreas die, PhD student Mark McKenzie had a breakthrough. The beta cells in patients with diabetes are bathed in high glucose, which can damage, and even kill the cells. Mark, along with his co-workers in the Immunology and Diabetes Unit, found that removing two molecules from the beta cells could protect them from glucose-induced death. This is particularly exciting because drugs designed to inhibit these molecules may be valuable in the prevention of diabetes.
Regulation of cytokine signalling by SOCS1

Cytokines are important messengers that control the survival, growth, differentiation and function of cells of the immune system. SOCS (suppressor of cytokine signalling) proteins function as "stop signals" to ensure that cytokine signals are turned off when no longer needed. Our work aims to define the molecular mechanism by which one member of this family, SOCS1, switches off signals in response to the cytokine interferon γ (IFNγ). According to current dogma, SOCS1 inhibits cytokine signalling by direct interaction with Jak kinases and inactivation of Jak activity. Recent data from in vitro studies have challenged this belief, and suggest that SOCS1 binds directly to Y441 of the IFNγ receptor (IFNGR1), and then inhibits Jak activity. To test this theory, we have generated mice in which this putative SOCS1 binding site on IFNGR1 is ablated. Our preliminary data indicate that responses to IFNγ are amplified in these mice, suggesting that this residue mediates negative regulation of IFNγ signalling. We are currently testing whether SOCS1 interacts with this site in wild type, but not mutant, cells.

Characterisation of mice expressing a kinase-dead allele of Lyn

Lyn kinase, a member of the Src family of tyrosine kinases, functions as both a positive and negative regulator of B cell activation. In the absence of Lyn, B cell receptor (BCR) signalling is unregulated, leading to perturbed B cell development, hyperactive B cells and lethal antibody-mediated autoimmune disease. We have generated a mutant mouse pedigree, Mld4, harbouring a novel mutation in the gene encoding Lyn, which renders the protein devoid of kinase activity. Despite similarities between the phenotypes of Lyn<sup>−/−</sup> and Lyn<sup>−/−</sup> mice, the spectrum of defects in lyn<sup>Mld4/Mld4</sup> mice is less severe. In particular, although defects in the B cell compartment are similar, autoimmune disease is absent or mild in lyn<sup>Mld4/Mld4</sup> mice. Our data suggest that BCR hyper-sensitivity is insufficient for the development of autoimmune disease in lyn<sup>−/−</sup> mice, and implicate other cell lineages, particularly pro-inflammatory cells, in autoimmune disease progression.
Mapping Molecules

Associate Professor Robyn Starr and her group study the signalling molecules involved in autoimmune disease. Their painstaking research has helped to map out which parts of these molecules are important for signalling and may play a role in the development of autoimmune disease. By dissecting the molecules and figuring out the function of their different regions, the group hopes to be able to modulate their function.
Understanding communication

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; this equal activity of two different cell types is known as coupling. 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.

We have been particularly interested in the possibility that the bone resorbing cells, the osteoclasts, may produce factors that control bone formation at remodelling sites by stimulating the bone-forming osteoblasts. In pursuing this question, this year we identified two important mechanisms. One was to show that the cytokine, cardiotrophin-1, is produced by osteoclasts and promotes bone formation. It may therefore be an important local factor in the coupling of bone formation to resorption in the remodelling process. The second was the discovery of a new mechanism by which the osteoblasts themselves control their filling of remodelling spaces. They do this through the regulated production of membrane molecules known as ephrins, which act upon their receptors in adjacent osteoblasts to stimulate bone formation.

We also continue with our efforts to define how cells of the immune system influence bone formation and resorption, and showed in new work this year that the cytokine, interleukin-23, favours higher bone mass in growing bones by limiting the formation of the bone resorbing osteoclasts near the growth plate. Finally, in work that we will continue over the next few years, we have found that the osteocytes, cells located deep in bone and communicating with those on the surface, participate in previously unrecognised ways to control bone remodelling.

The communication processes among cells of bone are essential for the maintenance of the normal skeleton. Our research reveals how disordered bone remodelling can result in bone loss and osteoporosis. The research also extends to our commitment to understanding the mechanisms by which the bone microenvironment can favour the growth of some solid and haematological cancers.

Matthew Gillespie
Elizabeth Allan
Steve Bouralexis
Holly Brennan
Ally Chau
Vanessa Cheung
Melissa Ciccomancini
Blessing Crimeen-Irwin
Jonathan Gooi
Pat Ho
Vicky Kartsogiannis
Jack Martin
Narelle McGregor
Frances Milat
Rachel Mudge
Done Onan-Asik
Sueli Pompolo
Ingrid Poulton
Julie Quach
Julian Quinn
Evange Romas
Haainawati Saleh
Natalie Sims
Emma Walker

Photo l to r
Natalie Sims
Narelle McGregor
Emma Walker
Bone Remodelling

Professor Jack Martin has worked on understanding the way the cells of bone communicate with each other for as long as his colleague Dr Natalie Sims has been alive. Even after all this time, the experimental work carried out by their research group continues to discover new communication pathways among these cells, many of which have the potential to influence future treatment strategies for osteoporosis, fracture healing and other diseases of bone.
Vitamin A and blood and bone
We are interested in the roles of vitamin A receptors (retinoic acid receptors) in blood and bone cell development. Vitamin A is a hormone that has multiple and essential roles in organ formation. We have previously described that the active form of Vitamin A, all-trans retinoic acid, has contrasting effects in the development of blood cells and, more recently, bone production. We have identified that these contrasting effects are in part due to the distinct effects of different retinoic acid receptors (RARs) on the development of different blood cell types. One RAR, RARgamma, is critical for maintaining a balance between blood stem cell self-renewal and differentiation. We are further investigating how RARs have different effects in blood and bone cell development by use of RAR specific knockout mice and RAR specific ligands.

Osteosarcoma
We have developed and characterised a new model of osteosarcoma, the most common tumour of bone. We are now using this model to further our understanding of the development and spread of this disease. This model is also amenable to use as a pre-clinical model and we are currently exploring several hypotheses directed at modifying the disease.
Helpful Mice

In a year of many firsts for Drs Louise Purton and Carl Walkley – most significantly, the first year as Heads of their own Unit – the two have made their first steps at SVI towards finding new treatments for blood and bone cancers. Carl spent 2008 developing a new tool to study the most common primary cancer of bone, osteosarcoma. Little progress has been made in the last 20 years towards treatment for this devastating cancer, partly because there were no animals available that developed a disease similar to the human one. Carl now has mice that display many of the features of osteosarcoma, providing him with an extremely powerful tool for his future research.
Working towards new treatments against leukaemia

T cell leukaemia cells resemble normal developing T cell precursors. Consequently, the study of how T cell precursors develop in the thymus is important to elucidate the molecular mechanisms of leukaemogenesis. We are attempting to identify new T cell oncogenes by utilising 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.

Leukaemia-causing genes

The prognosis of both children and adults with T-cell acute lymphoblastic leukaemia (T-ALL) is the worst of all cases of human ALL. Whilst great strides have been made by intensifying chemotherapy regimes, further dosage increases would cause deleterious side effects. Therefore, more specific therapies need to be utilised. In order to develop more targeted therapies for T-ALL, it is paramount to identify the causative mutations that underlie disease development.

We have recently identified an Ets transcription factor as a gene responsible for T cell lymphoma in mice. Using a retroviral overexpression strategy we will be able to elucidate how this transcription factor perturbs T cell development and induces lymphoma. This will be accomplished with genomic analysis of normal and leukaemic cells by microarray. Subsequently, we are planning to identify Ets downstream targets that could potentially be used for preliminary drug screens. By utilising shRNAs we will also identify the normal role of this Ets transcription factor in T cell development. Importantly, this will further illuminate the potential therapeutic ability of inhibitors of downstream targets of the Ets transcription factor and whether they will have the capacity to negatively impact T cell development.

The potential significance of this research is that chemotherapy and associated side effects will be considerably reduced if a specific Ets transcription factor inhibitor can be developed. Additionally, specific inhibitors may be more effective in maintaining event-free survival as they would be targeted to the potential leukaemic stem cell.
Leukaemia Genes

When Gleevec, a new drug developed by American researchers to treat leukaemia, came on the market, it gave new hope to leukaemia sufferers. Gleevec is effective because it stops a specific leukaemia-causing gene from working. However, Gleevec does not work for T cell leukaemia/lymphoma. In 2008, Dr David Izon’s group identified a new leukaemia-causing gene. The researchers are investigating the role of this gene in disease, with the aim of eventually developing new specific drugs to inhibit it.

A FACS profile allows researchers to look at the individual characteristics of fluorescently labelled cells in a sample.
DNA damage is a key determinant of the onset and severity of cancer. At the same time, almost all cancer therapies act by causing DNA damage. Better understanding of DNA damage responses is therefore likely to improve our knowledge of how cancer develops and could reveal new approaches to cancer therapy. Our laboratory is interested in the molecular mechanisms by which cells deal with DNA damage. We study how human as well as yeast cells sense that their DNA is damaged and how specific DNA lesions are repaired, and we have discovered novel proteins with important roles in these processes.

**A molecular dimmer switch**
The Rad53 kinase (similar to human Chk2) plays a central role in the DNA damage response in yeast cells. Rad53 activation requires its phosphorylation on any of four threonine-glutamine motifs in the N-terminal SQ/TQ-cluster domain (SCD1) by the upstream kinases Mec1/Tel1 (ATR/ATM). While SCD1 mono-phosphorylation fully supports Rad53 functions for the survival of DNA damage, it is insufficient for the activation of its downstream effector kinase Dun1. In collaboration with Ming-Daw Tsai’s laboratory (Ohio State University and Academia Sinica), we found that Dun1 is only activated when the Rad53 SCD1 is phosphorylated on at least two threonines. Our 3D structural analyses showed that this was due to the fact that the Dun1 FHA domain, to which the Rad53-SCD1 binds as a prerequisite for signal propagation, contains two separate phospho-threonine-binding sites and therefore has a 100-fold higher affinity for di-phosphorylated relative to mono-phosphorylated SCD1. These analyses provide a comprehensive molecular mechanism by which cells can fine-tune their response to the strength of the DNA damage signal: low-level damage results in Rad53 mono-phosphorylation and auto-activation, whereas escalating damage increases the amount of di-phosphorylated Rad53 and signal amplification to involve Dun1.

**ASCIZ in B lymphocytes**
Our laboratory recently discovered a new protein, ASCIZ, which seems to specifically act in response to small DNA base lesions. In collaboration with Shunichi Takeda’s laboratory (Kyoto), we have now confirmed that in this role ASCIZ also affects the repair of physiological base damage during antibody gene diversification in B cells. Chicken B lymphocytes that lack ASCIZ have almost 10-fold higher templated mutation rates in the re-arranged immunoglobulin variable regions upon enzyme (AID)-induced base damage, whereas cells overexpressing human ASCIZ have 5-fold lower mutation rates. ASCIZ also seems to be required for the efficient conversion of MMS-induced base damage into the cytotoxic repair intermediate, 5'-dexo-ribose-phosphate. Altogether, the results indicate that ASCIZ may be a rate-limiting factor for channelling the repair of small base lesions into the accurate base excision repair pathway.

**Jörg Heierhorst**
Andrew Hammet
Nicolas Hoch
Alessia Ivashkevich
Sabine Jurado
Xianning Lai
Tricia Lo
Nora Tenis
Ana Traven

Photo l to r
Nicolas Hoch
Nora Tenis
Jörg Heierhorst
The Dimmer Switch

Associate Professor Jörg Heierhorst and his group have spent years trying to unravel how cells respond to DNA damage. This year, in collaboration with Ming Daw Tsai and colleagues at Academia Sinica and National Taiwan University, the group had a major breakthrough. The researchers described a new mechanism that acts as a ‘molecular dimmer switch’, allowing cells to fine tune their repair responses, depending on the level of DNA damage that has occurred.
In higher eukaryotes, controlled cell proliferation and differentiation is required for normal growth and development. Deregulation of cell growth pathways leading to unrestrained cell division is a primary characteristic of cancerous cells. Therefore, defining the causes of increased cellular division is fundamental to understanding carcinogenesis. Our group is interested in understanding the molecular mechanisms of cell division and how deregulation of these pathways contributes to the development of human cancer. Our research ultimately aims to develop new approaches for cancer therapy.

### 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 and SAP180 bind to mSIN3A and histone deacetylase 1 (HDAC1), which are transcriptional regulators. RBP1 and SAP180 are phosphorylated by cyclin/CDKs in vitro. Using mass spectrometry we have shown that they are phosphorylated on cyclin/CDK sites in cells. This phosphorylation disrupts their association with pRb. These studies suggest that phosphorylation of RBP1 and SAP180 disrupts their association with pRb to activate transcription and cell cycle progression. In ongoing studies we will determine if CDK-mediated phosphorylation of RBP1 and SAP180 regulates cell cycle progression.

### Control of 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. The recent approval of the proteasome inhibitor bortezomib for the treatment of multiple myeloma indicates that this pathway offers new avenues for cancer therapy. Ubiquitin-conjugating enzymes (UBCs or E2s) and ubiquitin ligases (E3s) are pivotal in the ubiquitination pathway and are implicated in human cancer development. Our laboratory has unveiled critical regions in E2s and E3s, which regulate the activity of these enzymes and cell cycle progression. In addition, we have shown that these important regions control which type of ubiquitin chain is attached to proteins. This is an important issue, 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.
Divide and Conquer

Dr Boris Sarcevic wants to understand why cancer cells divide uncontrollably, leading to tumour formation. His group is focused on the role of a family of enzymes, called ubiquitin enzymes, without which cells cannot divide. This year, Boris and his group have shown which parts of the ubiquitin enzymes are responsible for cellular division. The ultimate aim of this work is to develop compounds that can stop cancer cells from forming tumours.

Molecular alterations to the Cdc34 molecule control cell growth.
The role of LIM kinases in cancer metastasis

LIMK1 and LIMK2 are regulators of the actin cytoskeleton. Both enzymes inhibit actin depolymerization by inhibiting the activity of cofilin, an actin depolymerizing enzyme, resulting in accumulation of actin filaments. While the role of LIMK1 in cancer metastasis is well established, that of its family member, LIMK2, is not yet known. Because of its involvement in cancer metastasis, LIMK1 is a good candidate for the development of small drug molecules that can inhibit its activity. In collaboration with the CRC for cancer therapeutics (CRC-CTx) we have screened a library of compounds and identified several molecules that inhibit LIMK1 activity in vitro and in cells. Some of these compounds can inhibit the proliferation and invasion of MDA-MD-231, an invasive human breast cancer cell line, in a 3D culture that mimics cells grown in the body. Animal studies designed to test the ability of these drugs to inhibit breast cancer metastasis in a mouse model of breast cancer are underway.

The role of LIMK2 in adipocytes

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 the expression of one of the LIMK2 isoforms (LIMK2a). These 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, inflammation and lipotoxicity, 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.
Multi-tasking

Associate Professor Ora Bernard has spent years researching a family of proteins called the LIM kinases. She is interested in these proteins because they are involved in cell movement, which is important for the spread of cancer. In 2008, Ora and her colleagues found that one of her favourite proteins has an even more diverse role than originally thought. Ora has shown that mice which do not have the protein are obese and, like type 2 diabetics, insulin resistant. Ora’s research into this interesting family of enzymes continues.

Mice lacking the LIMK2 protein (right) are obese and insulin resistant.
Pharmacogenomics is the study of how an individual’s genetic makeup affects the course of disease and responses to medication. Work at SVI combines traditional sciences, such as biochemistry, with recent advances in our knowledge of genetics and drug discovery. This allows us to identify genes that are involved in disease and help design drugs to stop them from working. We have recently identified genes involved in the spread of cancer and those associated with the onset of diabetic kidney damage.

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 promising 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 in diabetic nephropathy
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 recently identified a gene that plays a critical role in the generation and subsequent pathological consequences of accumulated extracellular matrix. We are collaborating with the Institute’s Structural Biology Unit to elucidate the crystal structure of this protein and design specific inhibitors to block its detrimental biological activity.
Over the past year Dr Mark Waltham and his group have been developing a promising drug that slows the growth of cancer in bone. Patients with specific types of cancer may benefit from treatment with this drug, especially if that cancer is likely to spread to bone. New technologies acquired by SVI are helping the group to test the anticancer agent in mice and in combination with conventional therapies.

Metastatic tumour growth in mouse bone.
MMP-13 studies
In collaborative studies with the Pharmacogenetics Unit, we have previously examined the effects of commercially developed MMP-inhibitors (Marimastat/B2516 and Prinomastat/AG3340) in the MDA-MB-231 human breast cancer xenograft system. These agents significantly inhibited the growth of MDA-MB-231 cells in mice, and delayed the onset and severity of bone metastatic lesions. Our current goal is to define and inhibit individual MMPs responsible for breast cancer growth and spread. We found that MMP13 was abundant in these lesions, and found also significant inhibition with a new MMP13-specific inhibitor from Pfizer Global. MMP13 may prove an important new drug target in both primary breast cancer and bone metastases.

Epithelial-mesenchymal transition
We have characterised a human breast cancer model of epithelial-mesenchymal transition (EMT). EMT allows normally stationary cells to migrate, invade tissue structures, and survive outside of the collective. PMC42 cells are a unique human breast cancer cell line system which undergoes EMT in response to Epidermal Growth Factor (EGF), an important etiologic factor in breast cancer. Gene array studies have identified candidate effector molecules, which we are examining in clinical breast cancer specimens using immunohistochemistry and Multiplex tandem PCR (MT-PCR). MT-PCR allows us to measure RNA levels of various EMT-related genes in a single archival section. These wet-lab studies complement ongoing bioinformatic analyses of our own array data and published cell line and breast cancer array data, which have provided evidence of EMT-associated gene expression in putative human breast cancer stem cells (BCSC) isolated from clinical specimens. Bioinformatic analysis is also identifying new potential EMT targets for further analysis in the PMC42 system.

Cancer

VBCRC Invasion and Metastasis

The VBCRC Invasion and Metastasis Unit is part of the Victorian Breast Cancer Research Consortium, a series of Melbourne-based breast cancer-focussed groups. We study the spread of cancer cells to secondary sites (metastasis) and have two major themes: matrix metalloproteinases (MMPs) and Epithelial-Mesenchymal Transition (EMT). MMPs are enzymes that cells use to cut through tissue, and are important in the movement of cells to other sites – we especially study bone metastasis. EMT allows cells to change their physical state from a stationary into a migratory state, helping them spread.

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Erik Thompson
Tony Blick
Devika Gunasinghe
Dexing Huang
Cletus Pinto
Manisha Shah
Jenny Trinh
Razan Wafai
Edwin Widodo

Photo l to r
Erik Thompson
Dexing Huang
Devika Gunasinghe
Stopping the Spread

Associate Professor Rik Thompson has spent much of his career looking at the changes that occur as a cancer cell becomes capable of spreading. Researchers in the VBCRC Unit have now found that these changes may help to identify the breast cancer stem cell, which spreads easily and is highly malignant. The group now aims to use the knowledge that it has acquired to stop these cells from causing recurrence of breast cancer.

A human breast cancer cell line with invasive (red), non invasive (green) and mixed characteristics.
HIV-1 progression in infected individuals
Observations from clinical studies are that a less fit virus is also less pathogenic. Understanding the particular virus to which an individual is exposed initially is very important for planning treatment and in development of a protective vaccine. Little is known of HIV-1 viral fitness in early acute infection. Access to a unique clinical cohort of HIV-1 infected individuals has facilitated the examination of virus fitness during this stage of infection. Using a highly sensitive, quantitative real-time PCR assay, viral DNA production is used to measure virus replication ex vivo as a rapid method to assess viral fitness. Changes in relative viral fitness over the course of the acute infection were observed. Unexpectedly, viral fitness during acute infection was higher than later in the course of infection. These findings suggested that the fitness of virus during acute HIV-1 infection may be relatively higher than previously thought. The implications are important for developing a preventative HIV vaccine to block initial infection.

Improving HCV diagnostic tests
The prevalence of HCV infection in Australia is ~242,000 people, most of whom (80%) are IV drug users. Currently, assays reliably determine the prevalence of HCV infection but not its incidence. By thoroughly investigating immune responses generated by individuals infected with HCV we intend to identify interactions which differentiate the stages of infection, thus aiming to find a marker of recent HCV infection. Accurate epidemiological monitoring of HCV will permit the design of better programs to control its spread, trace outbreaks and manage treatment programmes. Further, a marker for predicting clinical outcomes of infection is being investigated. This would be invaluable, because of those infected with HCV, 20 to 30% resolve their infection without therapeutic intervention. Such intervention can have numerous adverse side effects and can be expensive. The aim is better interpretation of diagnostic laboratory findings, improved provision of clear and accurate reports to clinicians, patients and blood donors, enhancing the Australian blood service’s safety and donor retention.
The Fitter the Better

The ‘fitter’ a virus, the more successfully it will grow in its host. Little is known about the effects of HIV/AIDS viral fitness in early infection. Dale McPhee and his colleagues in the NRL were surprised to find a high level of fitness of HIV virus upon first infection. This research will help in the effort to develop a more effective vaccine to protect against HIV.

Photo 1 to r
Alicia Arnott
Dale McPhee
Penny Buxton
An exciting part of 2008 was the planning of the Aikenhead Centre for Medical Discovery, which will further strengthen SVI’s future. Great progress was made in plans for the governance structure of the Centre and the relationships between the parties. At the time of writing we are at an early stage of seeking funding to build this new research facility on the corner of Victoria Parade and Nicholson Street. Very recently we have had word of funding by the Victorian State Government for the development of more detailed plans. There is no doubt that the tragic Victorian bushfires in February and the current economic crisis will pose challenges, but also opportunities, for major infrastructure projects such as this.

Researchers on the campus will be co-located with some neighbouring institutions; the aim being close collaboration between basic science and clinical medicine. The main participating institutions will be SVI, the Bernard O’Brien Institute for Microsurgery, the Bionic Ear Institute, St Vincent’s Health and the University of Melbourne. The University of Wollongong and Step Ahead Australia will also have a presence in the Centre. The goals are to have impact on health through collaboration, sharing of resources and links with the clinic. The ultimate goal is an integrated research centre and hospital campus. The Centre will provide many opportunities for both clinicians interested in innovation and researchers interested in greater involvement in clinical medicine.

The themes that will differentiate this initiative from others will be medical bioengineering and research responding to National Health Priorities, especially diseases of metabolism such as heart disease and diabetes. The theme of medical bioengineering will encompass protein crystallography, neurosciences, including the bionic eye and new epilepsy treatments, tissue engineering, genetic engineering of organs for transplantation in humans and joint replacement. There will be a very strong focus on research training for scientists and doctors of the future.

The institutes involved in the Centre will retain their autonomy and independence – there is no intention for them to fully merge. We will retain the identity of SVI as a strong and excellent laboratory research centre but with greatly enhanced links with neighbouring institutions and significantly increased opportunities for collaboration, especially with our clinical colleagues. We will have very open access to visit and interact with others and we will share many support services and facilities. There will be an overarching independent Board for the whole centre, plus an Executive made up of representatives from the five major founding partners.

One of the greatest of many opportunities in this initiative is to work more closely than ever before with the University of Melbourne. Medical research institutes (MRIs) are an integral part of the biomedical research effort of the University and closer ties between Institutes and the University are mutually highly desirable and beneficial. The University and its affiliated MRIs are recognised as one of the top few bioscience precincts in the world and the two together are much stronger than either alone. MRIs are one of the engine rooms of Australia’s medical research effort and have been very successful, especially on hospital campuses.

It has become very important for achievement to be counted using various metrics, even if these can have flaws. Universities are ranked by scales such as those used by the Times Higher Education Supplement and the Shanghai Jiao Tong University. The University has aspirations to be ranked among the very best in the world, especially in biomedicine. Institutes like SVI can help accomplish this. Research at MRIs should ideally be viewed as an extension of the research mission of universities and hospitals.

We aim to overcome any barriers to working closely together and have made great progress in building our relationship with the University over the past year. Continuing this and moving forward on the Aikenhead Centre are top priorities for the year to come.

2008 has been another outstanding year of achievement by our scientists and many of these highlights are detailed within this report. We would like to thank you for your support this year and we particularly want to acknowledge and thank the SVI Board and the SVI Foundation Board for all their hard work in 2008.
“An exciting part of 2008 was the planning of the Aikenhead Centre for Medical Discovery, which will further strengthen SVI’s future.”

BM Shanahan
SVI Chair

TWH Kay
SVI Director
**2008 Institute Highlights**

**Happy birthday!**
In 2008 SVI celebrated its 50th birthday, capped off by a reception at Government House on the 1st of September hosted by the Governor and Mrs Jan de Kretser. In the 50 years since it began, SVI has developed an impressive international reputation, has grown from a staff of 8 to around 200 and its research laboratories now occupy more than 2000m$^2$.

**Funding success**
SVI will receive over $5.5 million of National Health and Medical Research Council (NHMRC) Project Grant funding over the next 3-5 years to conduct vital research into type 1 diabetes, leukaemia, cancer, heart failure and metabolism. Nearly two thirds of SVI funding comes from Government grants.

Grants from the NHMRC were announced in October 2008, with nine groups of SVI researchers receiving funding. SVI’s success rate for Project Grant funding was 42%, well above the national average of 27%.

Grants include over $1.4 million awarded to Associate Professor Duncan Campbell and colleagues for their research into cardiovascular risk factors. Notably, this grant was awarded for a period of 5 years, as opposed to the usual 3 years of funding.

Five groups of researchers investigating cancer received a total of $3.27 million, which includes two grants awarded to Dr Carl Walkey, and Associate Professor Jörg Heierhorst’s grant, which was given a perfect score by reviewers.

Drs Stuart Manering, Greg Steinberg and Professor Bruce Kemp’s research into type 1 diabetes and obesity also received a funding boost of more than $800,000.

In addition to the Project Grant success, Professor Michael Parker, Head of SVI’s Structural Biology Unit, was jointly awarded an NHMRC Program Grant with his collaborator Professor Angel Lopez from The Centre for Cancer Biology, Adelaide. The grant totals more than $3.7 million, and will go towards the team’s research into the GM-CSF hormone receptor and related receptors.

**Welcome home**
2008 saw the arrival of researchers Louise Purton and Carl Walkley, who returned to Australia from Harvard University to head the new Stem Cell Regulation Unit.

While at Harvard, Carl and Louise published two papers in the prestigious journal Cell, along with SVI’s Dr Natalie Sims. Their research showed that the bone marrow, where blood cells are made, may be responsible for blood diseases such as leukaemia. Prior to this work, it was believed that the fault lay within the blood cells themselves.

The researchers have already proven themselves in the year since their arrival at SVI, establishing their research team, successfully applying for funding from a variety of funding bodies, and coordinating a number of funding drives for cancer research.

SVI’s success rate for Project Grant funding was 42%, well above the national average of 27%.
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.

“the chance to explore a stimulating area of research guided by leading scientists”
Students at SVI

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, the comedy festival, rock climbing, interdepartmental soccer, movie evenings and the Postgraduate Ball. The annual Student Retreat, held in Phillip Island in 2008, provides great educational and socialising opportunities for students.

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.

SVI Honours Programs
More information:
Associate Professor Ora Bernard,
Student Coordinator, SVI
Tel: 9288 2480 or email:
obernard@svi.edu.au
http://www.medstv.unimelb.edu.au/
Prospective/Honours/

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:

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.

SVI PhD Programs
More information:
www.svi.edu.au/education/phdprojects
Or contact: Postgraduate Student Coordinator, SVI
Tel: 9288 2480 or email:
enquiries@svi.edu.au

PhD – finding the root causes of arthritis and osteoporosis
Before undertaking a PhD at SVI, Jonathan Gooi obtained his honours degree in the Anatomy and Cell Biology Department, Melbourne University in spinal cord regeneration.

He said: “I chose to study for my PhD at SVI because of the interesting bone research being undertaken and its excellent international reputation”.

Jonathan’s PhD, completed in December 2008, focused on the signalling between osteoblasts (bone forming cells) and osteoclasts (bone resorbing cells), specifically identifying bone formation factors released from osteoclasts.

“The benefit of studying at SVI over a larger institute is the fact that there is a good support network throughout the whole institute”, he said. “SVI offers plenty of opportunities to present my work nationally and internationally. Furthermore, due to grant funding and the work of the Foundation, SVI provides state of the art equipment”.

Scholarship Awards
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) http://cms.services.unimelb.edu.au/scholarships/pgrad
SVI PhD & Honours Scholarships
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: www.svi.edu.au/scholarships
Or contact: SVI Foundation Student Awards Coordinator
Tel: 9288 2480 or email: enquiries@svi.edu.au

PhD applications due: 31 October 2009
Honours applications due: 30 November 2009

Scholarship – finding the link between metabolism and type 2 diabetes
Hayley O’Neill was first introduced to SVI by her Undergraduate Research Opportunities Program (UROP) supervisor and in December 2008, completed her Honours year in SVI’s Protein Chemistry and Metabolism Unit with Greg Steinberg.

Hayley’s research project focused on AMPK, the body’s fuel gauge, which controls the burning of fats and sugars when cells need energy. Her findings at the end of the year contributed to the body of knowledge about AMPK in an area that hasn’t been investigated before.

Hayley said: “This line of research is absolutely fascinating and I have now been accepted to study the role of AMPK signalling in fat metabolism and during exercise for my PhD in 2009 with Greg Steinberg and Bruce Kemp.”

She continued: “The generous scholarship I received from the SVI Support Group was vital to the success of my Honours project. It meant that I didn’t have to take on extra part time work and could focus on my studies and complete the project to the best of my ability.”

Congratulations to the students undertaking their studies at SVI who were awarded scholarships in 2008:

SVI Support Group sponsored:
Shanna Tam
Kevin Mittelstaedt

Dansu sponsored:
Julie Quach

Major Engineering sponsored:
David Ascher

University of Melbourne sponsored:
Eveline Angstetra
David Ascher
Eugene Estella
Kevin Mittelstaedt
Ms Brenda M Shanahan 3  
BSc Bcomm  
Chair, SVI  
Ms Shanahan has a research background in finance in Australian and overseas economies and share markets. She is Chair of St Vincent’s Health, Melbourne. Challenger Listed Investments and Clinivel Pharmaceuticals Ltd; Board member of the Sisters of Charity Health Service Ltd (retired Dec 08); and Non Executive Director of JM Financial Group Ltd.  
She is a former member of the Australian Stock Exchange and former Executive Director of a stockbroking firm, a fund management company and an actuarial company.

Mr Douglas A Wright 10  
FAICD FPRIA  
Deputy Chair, SVI  
Mr Wright is a founder and Chair of Wrights, a group of Australian-owned communications, marketing, research and IT consultancies. He is a public affairs strategist and has worked in the media and business in Australia and overseas. He is Vice Chair of Worldcom, the largest network of independent public relations firms and a member of the Australian Bankers’ Association Small Business Forum. Mr Wright is an Associate Fellow of the Australian Marketing Institute and a Fellow of the Public Relations Institute of Australia, a member of the Counselors’ Academy of the Public Relations Society of America and the Institute of Chartered Public Relations (UK).

Dr Susan M Alberti AO 7  
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 a Fellow of the American Marketing Academy and is the Founder Chair of SVI, Victoria University Foundation Board member and also a Board member of the Western Bulldogs and Co-Chair of the Western Bulldogs Forever Foundation.

Professor James A Angus Until May ‘08  
BSc PhD FAA  
Professor Angus is Dean of Medicine, Dentistry and Health Sciences, The University of Melbourne. Prior to this appointment, he was Professor and Head of the Department of Pharmacology, and Deputy Dean of the Faculty of Medicine, Dentistry and Health Sciences; President of the Academic Board; and Pro Vice-Chancellor, The University of Melbourne. He is a member of the Blood Institute Management Committee and past Vice-President of the International Union of Pharmacology. He has extensive research experience in preclinical pharmacology in the areas of cardiovascular and antinociceptive drugs.

Professor James D Best Until Feb ‘08  
MBBS MD FRACP FRCPath  
FRCP Edin  
Professor Best is Head of the School of Medicine in the Faculty of Medicine, Dentistry and Health Sciences at The University of Melbourne and Professor of Medicine in the Department of Medicine, St Vincent’s Hospital, Melbourne. As a member of Council for the National Health and Medical Research Council (NHMRC), he chairs the NHMRC Research Committee.

Mr Jeff Clifton 6  
BCE DIPCe  
Mr Clifton is currently the Managing Director of Clifton Property Group, which consists of a development management group, Clifton Hall Consulting and a project management group, CBM Project Management. Both companies serve the Australian property industry and Mr Clifton has been in the property industry for over 35 years. Mr Clifton was formerly Executive Chairman of Farsands and Managing Director of the Clifton Convey Group, which are now part of Cityreal International following a sale of the business. Mr Clifton is also a Director of OML Pty Ltd, the responsible entity of the Timbercorp Primary Infrastructure Fund and Chairman of the Becton Development Fund No 1.

Ms Nicole Feely Until Nov ‘08  
BComm LLB FAICD  
Ms Feely, Chief Executive Officer, St Vincent’s Health, Melbourne (until Nov ‘08) has a background in business law, politics and administration in both the private and public sectors.

Professor Richard Fox AM 1  
MBBS PhD FRACP  
Richard Fox is Director of Research at St Vincent’s Health. He is also Vice President of Cancer Council Victoria; Chair of the Cooperative Research Centre for
Cancer Therapeutics; and Chair of the Cancer Institute NSW Research and Grants committee.

Mr Paul Holyoake 2
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.

Mr Barry J Jackson
Until Feb 08
BComm (Hons) MAICD
Mr Jackson is a Director of Paperlinx Ltd, Alesco Corporation Ltd (retired 9/08), Equity Trustees Ltd and CSR Ltd (retired 03/07). He was formerly Managing Director of Pacifico Group Ltd from 1995 until 2001 and has over 30 years experience in manufacturing and industrial marketing.

Professor Thomas WH Kay 4
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 12
From Jul ‘08
MComm
Mr Macfarlane is Chairman of Deutsche Bank Group, Australia & New Zealand following seven years as President and 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.

Ms Ruth O’Shannassy 9
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 2005. Mr Pizzey is currently a Director of Alumina Ltd, Alcoa 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.
2008 saw the loss of three wonderful SVI supporters to cancer.

In January, my good friend and long time SVI supporter, Roslyn Smorgon passed away. In October, the Italian community mourned the loss of Annette Mascitti. Then in December, the Foundation Board lost Jonathan Rowe, who had given us his enthusiastic support for six years.

It is years like these that galvanise me and my Foundation Board members to work harder.

Work harder to help SVI’s researchers.

Work smarter to find new and innovative ways to raise funds.

Work faster to find solutions to devastating diseases like cancer.

**New events**

This year several new events were launched thanks to the dedication of board members; SVI staff, Robin Berry, Clare Lacey and Jo Crowston; and our sponsors who turn great ideas into reality. The launch of the Roslyn Smorgon Memorial Fund at the Black Tie Dinner in April raised $366,000 for cancer research. The AFL Collingwood vs St Kilda pre-match breakfast raised $40,000 for diabetes research. The Bloom Fabrics Fashion Parade raised $22,000 for cancer research. And the Golf Day raised $26,600 for heart research.

**New ambassadors**

Our fundraising efforts were given a boost this year with the help of our new ambassadors, Luke Darcy, James Clement and Ali Moore. James made a heartfelt appeal for people to support diabetes research during his MCG lap of honour. Luke expertly MC’d the football breakfast and Ali’s interviewing skills were invaluable at the Deutsche dinner. We are very lucky that these talented people are willing to give up their time to support SVI.

**New challenges**

Thank you to all those who have donated money, time and skills to SVI this year. With the economic situation affecting so many people I hope you will continue to find ways to support SVI’s dedicated scientists find new treatments for cancer, diabetes, arthritis and Alzheimer’s.

Wishing you all the best.

God Bless,

Dr Susan Alberti AO HonLLD
SVI Foundation, Chair
Foundation SVI Highlights

MARCH
Directors Dinner
Guest speaker: Daryl Jackson AO, Director, Daryl Jackson Architects. Held at Crown Towers.

APRIL
Celebrating 50 Years
SVI supporters celebrated 50 years in style, raising a total of $597,683, including $366,000 in donations and pledges for The Roslyn Smorgon Memorial Fund for cancer research at SVI. Thanks to the event committee: event chair, Christine Tarascio and members, Sue Alberti, Karen Plant, Benni Aroni and Jeni Coutts.

JUNE
Director’s Dinner

Young SVI Ball
SVI’s young supporters danced the night away at The Melbourne Aquarium to raise funds for SVI’s research.

AUGUST
SVI AFL Discovery Day Breakfast
August 2008
Raising $40,000 for diabetes research at SVI was the focus of the Collingwood vs St Kilda pre-match breakfast, hosted by SVI ambassadors James Clement and Luke Darcy. Thanks to the committee: event chair, Brian Cooney and members, Benni Aroni, Karen Plant and Jeni Coutts.

SEPTEMBER
SVI Bloom Fashion Parade
Jacqui and Rachel Bloom hosted a unique fashion parade featuring outfits made from exquisite Bloom fabrics. The event held in honour of their late mother and founder of Bloom Fabrics, Evelyn, raised $22,000 for cancer research at SVI. Thanks to the committee members, Jacqui Bloom, Rachel Bloom, Karen Plant, Suzan Morlacci and Jeni Coutts.

MC and SVI ambassador, Luke Darcy interviewing Lila Holbrook about living with diabetes

Deutsche Dinner
Deutsche Bank’s newly appointed Chairman, Australia and New Zealand, JT Macfarlane cemented the bank’s long standing relationship with SVI at a celebratory dinner hosted by TV and radio presenter, Ali Moore.
SVI Foundation Highlights

OCTOBER

SVI Nissan Golf Day
SVI’s inaugural golf day at Albert Park sponsored by Nissan Fleet was a great success, raising $26,600 for SVI. Thanks to the committee members: Leon Wiegard, Michael Dwyer, Charlie Happell, Mark Pearce, Anita Struck, Barry Holbrook and Charlie Cracknell.

Italian Chamber of Commerce Dinner
A Night in Venice, the Italian Chamber of Commerce’s annual dinner, was held in aid of SVI, raising $18,500 for research.

Trusts and Foundations
Thank you to the following Trusts and Foundations:

- The Sydney Maxwell Wellard Estate administered by Equity Trustees funded the purchase of a refrigerated centrifuge machine to speed up research into bone cancer.
- The Medical Research and Technology in Victoria - William Buckland Foundation administered by ANZ Trustees funded the purchase of a haematological analyser which automates the analysis of blood cells in the study of leukaemia.
- The Mason Foundation funded a new Alzheimer’s disease research project.
- The Rebecca L Cooper Foundation funded the purchase of a microscopy camera and computer to assist in the isolation of pancreatic cells used for islet transplants for people with diabetes.
- The EJ Whitten Foundation funded the work of a scientist researching ways to prevent the spread of cancer.
- The Reece Foundation funded general research at SVI.

We would like to thank the 1000 Club subscribers for 2008.
In memory
We are very grateful for the generous donations to research at SVI in honour of Annette Mascitti, who passed away in October 2008. In the years before her death, Annette was passionate about helping SVI give hope to people touched by cancer.

Annette Mascitti

Roslyn Smorgon passed away in January 2008. Roslyn supported SVI in many ways and to pay tribute to her life Susan Alberti set up The Roslyn Smorgon Memorial Fund for cancer research at SVI to which David Smorgon and his family generously donated.

Roslyn Smorgon

Jonathan Rowe
We are sad to report that Jonathan Rowe passed away in December 2008 following a battle with cancer. Jonathan had been a Foundation Board member since its inception in 2003. As an advertising professional he was instrumental in transforming SVI’s marketing through the re-launch of the SVI brand and the development of improved marketing tools. In his honour, Susan Alberti has set up the Jonathan Rowe Student Scholarship to fund the work of cancer research students. We will miss his optimism and his enthusiasm for the continued welfare of the institute.

Jonathon Rowe
Dr Susan M Alberti AO
HonLLD
Chair, SVI Foundation Board
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 a Board member of SVI, Victoria University Foundation Board member and also a Board member of the Western Bulldogs and Co-Chair of the Western Bulldogs Forever Foundation.

Mr Benni Aroni
Deputy 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.

Mrs Karen Plant
Co-Vice Chair, SVI Foundation Board
Karen is a qualified interior decorator. With her husband Barry, 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. Karen’s foray into charity work was the refurbishing of the cancer ward at The Royal Children’s Hospital. Karen is a board member of The Deakin Foundation, for Deakin University, as well as a member of the MBH Charity Foundation Board. Karen enjoys family life with her husband Barry and children Nicholas and Ayleisha.

Mr Robin Berry
CEO, SVI Foundation Board
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 Brian Cooney
Mr Cooney is one of Australia’s leading individuals in the sports marketing industry. Specialising in sponsorship and event management, Mr Cooney has been responsible for some of the biggest commercial arrangements in Australian sport. In his senior management role with the world’s largest sports marketing company, IMG, he has wide experience in dealing with figures from Government and corporate Australia.

Jeni Coutts
Since Nov ’08
Prior to starting her own Corporate Affairs consultancy in 2003, Jeni 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, community and investor relations. Jeni holds degrees in Public Relations/Politics and Law and is a Board Member of Impact, a community-based not for profit organisation providing support services for people with intellectual and psychiatric disabilities and neurological disorders.

Ms Marcia Griffin
Ms Griffin was CEO of Pola Cosmetics and a former Victorian Telstra Business Woman of the Year. Current roles include Directorships of PMP Limited, Holt Private Capital and Griffin and Row Pty Ltd. Marcia is also a TR2 Chair-TEC is an organisation dedicated to increasing the effectiveness of CEO’s. Marcia is also an author of a business biography, “High Heeled Success”. She is also a motivational speaker and marketing and strategy consultant.

Ms Connie McKeage
Until Dec ’08
Ms McKeage is CEO of Pentafin Solutions, one of Australia’s fastest growing software solutions companies. Prior to her role at Pentafin, Connie held key executive positions with organisations including Bankers Trust Australia (BTA), Rothschild Asset Management and Perpetual Funds Management (Deputy Managing Director). She has also spent considerable time working in Asia, Canada, Europe and the US.
USA, where she held the position of Managing Director Global Operations for NewRiver Communications. In 2003 Connie was awarded a Centenary Medal for her contribution to Australian society in the area of Business Leadership.

Mrs Claire O’Callaghan 5. Chair, SVI Support Group
A St Vincent’s 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.

Ms Brenda M Shanahan 2. Ms Shanahan has a research background in finance in Australian and overseas economies and share markets. She is Chair of SVI, St Vincent’s Health, Challenger Listed Investments, Clinuvel Pharmaceuticals Ltd; Board member of the Sisters of Charity Health Service Ltd (retired Dec 08); and Non Executive Director of JM Financial Group Ltd. She is a former member of the Australian Stock Exchange and former Executive Director of a stockbroking firm, a fund management company and an actuarial company.

Mrs Christine Tarascio 7. Chair, Events Committee
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
Sam Tarascio has more than 10 years formal hands on experience in the property industry. Following a brief stint at corporate advisory firm Coopers & Lybrand, Sam started his career in property at Jones Lang LaSalle, gaining experience in their property management and then sales and leasing divisions. Sam joined the family company, Salta, in 1999 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. Sam is now Managing Director of Salta Properties.
Fellowships, prizes and grants

Structural Biology
Grants
- P Batterham, MW Parker. Functional and regulatory analysis of nicotinic acetylcholine receptors, key targets of insecticides, ARC Discovery Grant
- MW Parker, S Yeen, Chai. Structure/function studies of insulin-regulated membrane aminopeptidase. NHMRC Project Grant
- L Miles. Alzheimer’s Disease Drug Discovery. Mason Foundation (ANZ Trustees) Grant

Protein Chemistry and Metabolism
Fellowships and Prizes
- Steenra Wee was awarded a Peter Doherty Fellowship
Grants
- BE Kemp, ZP Chen, B Michell. Regulation of protein kinases and their substrates. NHMRC Project Grant
- MJ Watt, BE Kemp. Regulation of lipolysis: new players, new paradigms. ARC Discovery Grant
- GR Steinberg. Adipose tissue SOCS3: role in regulation of insulin sensitivity in obesity. Diabetes Australia Research Trust

Molecular Cardiology
Grants
- DJ Campbell, DL Prior, MJ Black. Cellular and Molecular Determinants of Heart Disease in Metabolic Syndrome and Type 2 Diabetes in Humans. National Heart Foundation Grant

Immunology and Diabetes
Fellowships and Prizes
- Peter Campbell received a Young Investigator Prize from the Transplantation Society of Australia and New Zealand, at the XXII International Congress of the Transplantation Society
- Eugene Estella was awarded the T.J. Martin Prize at St. Vincent’s Hospital Research Week
- Kate Graham was awarded the Best Scientific Poster at St. Vincent’s Hospital Research Week
Grants
- L Harrison, T Kay, G Morahan, A Lew, P O’Connell. Prevention and cure of type 1 diabetes. NHMRC Program Grant
- J Trapani, T Kay, A Strasser, H Thomas, J Allison. Cell death pathways and type 1 diabetes. NHMRC Special Program Grant in Type 1 Diabetes
- H Thomas, J Allison, T Kay. Apoptotic pathways in pancreatic beta cells leading to type 1 diabetes and transplant rejection. NHMRC Project Grant
- T Loudovaris. Cell Therapy for Type 1 Diabetes. Diabetes Australia Research Trust Grant

Bone, Joint and Cancer
Fellowships and Prizes
- Jonathan Cooi was awarded the Roger Melick Young Investigator Award, from the Australian and New Zealand Bone and Mineral Society
- Hamawati (Nana) Saleh was awarded the Christopher & Margie Nordin Young Investigator Poster Award from the Australian and New Zealand Bone and Mineral Society

K Pantel. Exploring epithelial-mesenchymal transitions and tumor dormancy in breast cancer

Pharmacogenomics
Fellowships and Prizes
- Sarah Vickery was awarded an AMATA Conference Travel Studentship
- Amanda Burnside was awarded a Cancer Research Vacation Studentship

NRL
Grants
- D McPhee, K Wilson, EM Dax. Potent broadly reactive neutralizing HIV-1 monoclonal antibodies. NHMRC Project Grant
- EM Dax, S Walker. Capacity Building for Laboratories in Asia and the Western Pacific

VBCRC Invasion and Metastasis
Grants
- EW Thompson, M Waltham. MMP13 as a therapeutic target in breast cancer. NHMRC Project Grant
- EW Thompson, A Dobrovic, P Chong, P Hill, M Henderson, K Pantel. Exploring epithelial-mesenchymal interconversions in the breast cancer metastatic cascade. Cancer Council Victoria Project Grant

- L Soon, F Braert, EW Thompson, P Vallotton. A new model for 3D migration involving cell structures and metalloproteinases. ARC Discovery Grant
- M Shah, EW Thompson, M Waltham. Targeting host and tumoral MMP-13 in primary breast cancer and bone metastasis. Komen Foundation Postdoctoral Fellowship
- EW Thompson, RL Anderson, A Yap, G Goodall, C Saunders, J Street. Targeting tumour dormancy in breast cancer
- Think Tank. NBCF Collaborative Breast Cancer Research Program
### Service to the scientific community

#### Service on Scientific Advisory Boards and Committees

<table>
<thead>
<tr>
<th>Name</th>
<th>Positions</th>
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</thead>
<tbody>
<tr>
<td>Ora Bernard</td>
<td>Member, Postgraduate Research Committee, Department of Medicine, St Vincent's Hospital; Member, PhD Confirmation Committee, Department of Medicine, St Vincent's Hospital</td>
</tr>
<tr>
<td>Duncan Campbell</td>
<td>Member, Scientific Advisory Boards of the International Academy of Cardiology and of the World Congress on Heart Disease</td>
</tr>
<tr>
<td>Elizabeth Dax</td>
<td>Chair, Australian Society of Microbiology, Research Trust Committee; Immediate Past President, Australasian Society of HIV Medicine; Vice President, AIDS Society of Asia and the Pacific; Associate Member, Medical Devices Evaluation</td>
</tr>
<tr>
<td>Wayne Dimech</td>
<td>National Examination Council Member, Australian Institute of Medical Scientists; State Convenor/ National Secretary, Clinical Serology and Molecular Special Interest Group, Australian Society for Microbiology</td>
</tr>
<tr>
<td>Matthew Gillespie</td>
<td>Member, Cancer Council of Victoria; Member, Science Policy Committee of the American Society for Bone and Mineral Society; Member, NHMRC Research Committee; Chair, NHMRC Project Grants Working Group; Chair, Membership and Education Committee, International Bone and Mineral Research Society</td>
</tr>
<tr>
<td>Andrew Hammet</td>
<td>Member, SVI Space Committee</td>
</tr>
<tr>
<td>Jörg Heierhorst</td>
<td>Member, NHMRC Project Grant Review Panel; Member, Cancer Council Victoria Medical &amp; Scientific Committee; Member, Early Career Researcher Committee, Victorian Cancer Agency; Member, Human Research Ethics Committee, St Vincent’s Health</td>
</tr>
<tr>
<td>Thomas Kay</td>
<td>Member, Bio21 Scientific Advisory Committee; Member, VBCRC Scientific Committee; Member, Executive Committee Research Council, St Vincent’s Hospital; Member, National Serology Reference Laboratory Management Committee; Member, Medical and Scientific Advisory Committee, Juvenile Diabetes Research Foundation; Chair, JDRF Medical Scientific Review Committee, Immunology and Transplantation Panel; Member, Research Council, Diabetes Australia; Member, St Vincent’s Hospital Medical Executive Committee</td>
</tr>
<tr>
<td>Bruce Kemp</td>
<td>Member, Scientific Advisory Board, MRI, TheraPchos, Boston; Chairman, CSIRO Molecular &amp; Health Technologies Science Council</td>
</tr>
<tr>
<td>Tom Loudovaris</td>
<td>Member, Occupational Health and Safety Committee, SVI</td>
</tr>
<tr>
<td>Jack Martin</td>
<td>Member Scientific Advisory Board, Botnar Research Centre, Nuffield Orthopaedic Centre, University of Oxford, UK; Elected Vice-Chairman, International Society, “Cancer and Bone Society”; Member, NHMRC Human Genetic Advisory Committee; Chairman, Medical Research Advisory Committee, Australian Cancer Research Foundation</td>
</tr>
<tr>
<td>Dale McPhee</td>
<td>Chair, 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, Immunoregulatory Research Network</td>
</tr>
<tr>
<td>Michael Parker</td>
<td>Member, BioCARS Sub-Committee of the Australian Synchrotron Research Program; Member, Oversight Committee of the Bio21 C3 Facility; OzReader, Australian Research Council Grants; Chair, SVI Equipment Committee; Member, SVI Commercialisation Committee</td>
</tr>
<tr>
<td>Louise Purton</td>
<td>Member, NHMRC Training Fellowships Grant Review Committee</td>
</tr>
<tr>
<td>Evange Romas</td>
<td>Co-Chair, Scientific &amp; Program Committee, Australian Rheumatology Association</td>
</tr>
<tr>
<td>Thomas Kay</td>
<td>Member, Scientific Advisory Board, Australian Rheumatology Association Research Trust</td>
</tr>
<tr>
<td>Boris Sarcevic</td>
<td>OzReader, Australian Research Council; NHMRC grant review panel member; Chair, SVI/Department of Medicine Seminar Committee; Chair, SVI Mass Spectrometry Committee; St Vincent’s Research Week Junior Investigator Award Judge</td>
</tr>
<tr>
<td>Robyn Starr</td>
<td>Panel Chair, NHMRC Career Development Award; Assessment Committee; Member, UROP Committee (Bio21)</td>
</tr>
<tr>
<td>Gregory Steinberg</td>
<td>Chair, Paget-Ewing Award Committee, (International) Metastasis Research Society; Treasurer, The EMT International Association (TEMITA); Member, Metastasis Research Society Board; Member, Australasian Microarray &amp; Associated Technologies Association Committee; Member, Research Advisory Committee, National Breast Cancer Foundation, Australia; Member, NSW Cancer Institute Review Panel; Member, Cancer Australia Review Panel; Member, NHMRC Grant Review Panel GRP 1g – Cancer Biology; Member, National Breast Cancer Foundation Review Panels for Scholarships, Fellowships and Career Awards; Member, Bernard O’Brien Institute for Medical Research Scientific Oversight Committee; Member, Tissue Resource Management Committee, Shared SVH/PeterMac Tissue Bank; Member, St Vincent’s Hospital Cancer Steering Committee; 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)</td>
</tr>
<tr>
<td>Anne Thorburn</td>
<td>Member, Building Space Committee, SVI</td>
</tr>
<tr>
<td>Bryce van Denderen</td>
<td>Member, St Vincent’s Hospital Animal Ethics Committee; Member, St Vincent’s Hospital Institutional Biosafety Committee</td>
</tr>
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#### Service on Boards and Editorial Boards

<table>
<thead>
<tr>
<th>Name</th>
<th>Positions</th>
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<tbody>
<tr>
<td>Duncan Campbell</td>
<td>Member, Editorial Board, Integrated Blood Pressure Control</td>
</tr>
<tr>
<td>Matthew Gillespie</td>
<td>Board Member, International Bone and Mineral Research Society; Board Member, Australian and New Zealand Bone and Mineral Society; Editorial Board, Arthritis and Rheumatism; Editorial Board, Bone; Editorial Board, BoneKey; Editorial Board, Journal of Bone and Mineral Research; Editorial Advisory Board, Journal of Oral Biosciences</td>
</tr>
<tr>
<td>Thomas Kay</td>
<td>Associate Editor, Journal of Molecular Endocrinology; Regional Editor, Autoimmunity; Associate Editor, Endocrinology</td>
</tr>
<tr>
<td>Bruce Kemp</td>
<td>Editorial Board, Cellular Signalling; Editorial Board, Journal of Molecular and Genetic Medicine; Editorial Advisory Board, The Open Enzyme Inhibition Journal; Guest Editor, Circulation Research, Cardiac AMP- Activated Protein Kinase in Health and Disease; Chairman, Review Panel for the de Duve Institute, Brussels Biochemistry Group</td>
</tr>
<tr>
<td>Jack Martin</td>
<td>Board Member, Victorian Breast Cancer Research Consortium; Associate Editor, Bone; Associate Editor, Endocrinology; Associate Editor, Calcified Tissue International; Editorial Board, Journal of Clinical Investigation; Editorial Board, Arthritis Research and Treatment; Editorial Board, Trends in Endocrinology and Metabolism; Editorial Board, BoneKey</td>
</tr>
<tr>
<td>Dale McPhee</td>
<td>Editorial Board, Advisory Board, Journal of Biomedical Science</td>
</tr>
<tr>
<td>Natalie Sims</td>
<td>Editorial Board, Bone</td>
</tr>
<tr>
<td>Robyn Starr</td>
<td>Editorial Board, Cytokine and Growth Factor Reviews</td>
</tr>
</tbody>
</table>
Service to the wider community

Gregory Steinberg
- Editorial Board, American Journal of Physiology Endocrinology and Metabolism

Erik Thompson
- Associate Editor, The Breast Journal
- Associate Editor, Cells, Tissues Organs
- Associate Editor, Clinical and Experimental Metastasis
- Guest Editor, Cells Tissues Organs
- Special Issue on the 2nd International EMT Conference
- Guest Editor, Clinical and Experimental Metastasis
- Special Issue on Epithelial Mesenchymal Transitions in Cancer

Anne Thorburn
- Editor, Obesity Reviews

Kong Wah Ng
- Editorial Board, Bone

David Ascher
- Member, Royal Australian Chemical Institute, Victorian Branch

Elizabeth Dax
- Member, International Advisory Committee for 9th International Congress on AIDS in Asia and the Pacific, Jakarta

Wayne Dimech
- Local Organising Committee; National Australian Society for Microbiology Conference, 2008
- Organiser, National Serology Reference Laboratory, Australia Workshop on Serology, 2008

Matthew Gillespie
- Program Committee, IBMS Davies Workshop: Bone Biology & Therapeutics, Davos, Switzerland, 2008
- Program Chair, Australian and New Zealand Bone and Mineral Society, Melbourne, 2008
- Program Chair, Cancer and Bone Society, Sydney, 2009
- Chair, Membership and Education Committee for the International Bone and Mineral Research Society

Jörg Heierhorst
- Member, Organising Committee, 4th Australian Telomere Workshop, Sydney, 2008
- Member, Organising Committee, 11th Australian Cell Cycle Workshop, Melbourne, 2008
- Session Chair, EMBO Conference Telomeres and DNA damage response, Villars, Switzerland, 2008
- Member, Organising Committee, 31st Annual Lorne Genome Conference, Lorne, 2010

Bruce Kemp
- Member, Organising Committee, Lorne Conference on Protein Structure and Function
- Chair, Finance Subcommittee, Lorne Conference on Protein Structure and Function

Jack Martin
- Co-organiser, International Conference, “Cancer-induced Bone Diseases”, Sydney
- Program Committee, Symposium on Cell and Molecular Biology of Bone, Davos, Switzerland
- Member, Program Organising Committee, International Congress of Endocrinology, Rio de Janeiro, 2008
- Co-organiser, Symposium on Paget’s Disease, Oxford, UK

Michael Parker
- Vice-President, Lorne Protein Organising Committee
- Chair, Program Sub-Committee of the Lorne Protein Organising Committee
- Member of the Scientific Programme Advisory Committee for the OzBio2010 Conference, Melbourne, 2009
- Member of the Organising Committee for “Complement, Perforins and bacterial cholesterol dependent cytolysins: the hole family”, Prato, Italy, 2009

Louise Purton
- Abstract reviewer and session chair, The 50th Annual Meeting of the American Society for Hematology, San Francisco, USA

Boris Sarcevic
- Member, St Vincent’s Research Week Organising Committee, St Vincent’s Hospital
- Organising committee, Australian Cell cycle Workshop

Erik Thompson
- Co-Chairperson, Program Committee, 2008 Joint Metastasis Research Society – AACR Conference on Metastasis 2008, Vancouver, Canada
- Program Committee, 4th Pacific Rim Breast and Prostate Cancer Conference, Whistler Blackcomb Resort, Canada
Structural Biology
- Dr R Pace, Department of Biochemistry, La Trobe University. Malarial proteins
- Dr B Rawlinson, Department of Microbiology, Prince of Wales Hospital, NSW. Cytomegalovirus
- Dr D Rhodes, Aveza, 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 Fraumann, Department of Medicine, Austin Health, The University of Melbourne. Prostate cancer proteins
- Prof S Y Chai, Howard Florey Institute. Malarial proteins
- Dr K Barnham, Department of Structural Biology, College of Pharmacy.
- Dr R Cappai, Department of Neurosciences, University of Sheffield. Myeloma effects on Natural Killer cells
- Dr A Albiston, Howard Florey Institute. Skeletal muscle AMPK physiological functions
- Dr D Stapleton, Bio21 Institute. AMPK structure and regulation of AMPK
- Dr L Garcia-Fuentes, University of Almeria. Glutathione transferases
- Dr G Steinberg, Department of Biochemistry, Uppsala University. Glutathione transferases
- Dr D Power, Austin Research Institute. AMPK and kidney function
- Prof D Power, Austin Research Institute. AMPK and kidney function
- Dr G McConell, Department of Physiology, University of Melbourne. Prostate cancer proteins
- 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 Smeonec, 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

Molecular Cardiology
- A/Prof D Kelly and Prof R Gilbert, The University of Melbourne. Department of Medicine, St Vincent’s Hospital. The effect of AZT on the survival of cells in diabetic TGR(Ren-2) rat
- Dr M Yi, Mr J Kenny and Mr Andrew Newcomb, Cardiothoracic surgery, St Vincent’s Hospital. Establishment of SVHIM 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 the systemic inflammatory response to cardiopulmonary bypass

Protein Chemistry and Metabolism
- Dr L Macaulay, CSIRO Molecular Health Technologies. Lipid metabolism, obesity
- Dr M Feerbrao, Baker Heart Research Institute. Information and insulin resistance
- Dr L Witters, Darmouth 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 Meana, Duke University Medical Centre. CaMKK structure and function
- Dr J Hawley, RMIT University. AMPK in exercise and type 2 diabetes
- Dr M Birnbaum, Howard Hughes Medical Institute. Skeletal muscle AMPK physiological functions
- Dr M Ernst, Ludwig Institute for Cancer Research. gpl30 signalling and metastasis
- 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

Immunology and Diabetes
- Dr T Brodnicki, The Walter and Eliza Hall Institute. Identification of Mouse Diabetes Susceptibility Genes
- 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

Bone, Joint and Cancer
- Dr C Carlyle, Sunnybrook Research Institute. OCIL actions on Natural Killer cells
- Dr D Curtis, Royal Melbourne Hospital Patched and osteoclasts
- Dr P Croucher, University of Sheffield. Myeloma effects upon bone cells
- Prof P Eibeling, Western Hospital, Melbourne Hypophosphatasia
- Dr A Evdokios, The Hanson Institute, TRAIL and bone metabolism
- Dr A Foarg, Murdoch Childrens Research Institute. Aggressive effects upon the growth plate
Collaborations

- Dr E Gardiner, Princess Alexandra Hospital. NPV actions on HIV-1.
- Dr M Henderson, Peter MacCallum Cancer Institute. Breast cancer metastasis.
- Dr M Karsdal, Nordic Biosciences. Role in bone remodelling and osteointegrin.
- Dr N Kulkarni, Eli Lilly and Company. PTH anabolic actions on bone.
- Dr DP Levesque, Biotherapy Program, Mater Medical Research Institute, University of Queensland. Effect of stem cell mobilization on bone formation.
- Dr K Matako, Keio University, Japan. Eph and Ephrin interactions in bone.
- Dr J Orinya, Eli Lilly and Company. PTH anabolic actions.
- A/Prof J Price, Department of Biochemistry, Monash University. Stress proteins and anti-oxidant effects in breast cancer bone metastasis.
- Dr S Richardson, LaTrobe University. Bone phenotype of transhytretin knockout mice.
- Prof M Rogers, University of Aberdeen GPR55 and bone metabolism.
- Dr M Smyth, Peter MacCallum Cancer Institute. Natural killer cell and dendritic cell functions.
- Dr D Thomas, Peter MacCallum Cancer Institute. Wnt Inhibitory Factor 1 in bone metabolism.
- Dr T Tiganis, Monash University. T-cell PTP in bone metabolism.
- Dr I Winkler, Biotherapy Program, Mater Medical Research Institute. Effect of stem cell mobilization on bone formation.

Stem cell characterization

- A/Prof Grant McCarron, Peter MacCallum Cancer Centre. Roles of retinooids in leukaemia.
- Prof S Orkin, Dana-Farber Cancer Institute, Children’s Hospital Boston, Harvard Stem Cell Institute, Harvard Medical School, Howard Hughes Medical Institute. Characterisation of a new model of osteosarcoma.

Haematology and leukaemia

- A/Prof R Starr, SVI. The role of SCG5 proteins in early T cell development.
- Dr R Johnstone, The Peter MacCallum Cancer Centre. Genes involved in T cell leukaemia.
- Prof H Mandukar, St Vincent’s Hospital. A mouse model of B cell lymphoma.
- Dr A Wei, Alfred Hospital. Modelling human leukaemia in mice.

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-remodelling complex.
- Dr Gra Bernard, SVI. Regulation of LIMK activity and microtuble dynamics by phosphorylation.

Molecular genetics

- Prof Ming-Daw Tsai, Ohio State University. Structural analyses of FHA domain functions.
- 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 MTDAI gene.
- Dr M Barasi, NIH. Robotic genetic analyses of the yeast ESL genes.
- A/Prof T Freije and Dr T Beilin, Victor Chang Institute. Transcriptome analyses of ESI genes.
- A/Prof P Moro, Jefferson University Philadelphia. S100A1 functions in the heart.

Cytoskeleton and cancer

- Prof P Robinson, Children’s Medical Research Institute. Identification of the LIMK1-interacting protein p25 and determination of its phosphorylation sites.
- Prof J Bamburg, Colorado State University. The role of LIMK1 in the regulation of microtuble disassembly.
- Dr R Anderson, Peter MacCallum CancerCentre. The role of LIMK1 in cancer metastasis.
- Dr I Street, Walter and Eliza Hall Institute. The search for LIMK1 inhibitors.
- Prof Peioka Lappalainen, Institute of Biotechnology, University of Helsinki, Helsinki, Finland. Twinfilin, a new LIMK2 substrate.
- Dr Matt Watt, Monash University. The role of LIMK2 in controlling obesity.

VBCRG invasión and metastasis

- A/Prof P Hill, St. Vincent’s Hospital. Analysis of epithelial - mesenchymal transition markers in archival breast cancer specimens, mammographic density.
- Dr R Anderson, Peter MacCallum Cancer Centre. MMPs in mouse mammary metastasis model; breast cancer growth and metastasis in MMP-deficient mice.
- A/Prof I Campbell, Peter MacCallum Cancer Centre. Genotyping breast cancer cell variants.
- A/Prof M Henderson, Department Of Surgery, University of Melbourne. Studies in clinical breast cancer specimens.
- A/Prof L Ackland, Deakin University. Epithelial-Mesenchymal Transition EMT in breast cancer.
- Dr M Waiham, SVI. MMP inhibition studies in breast cancer systems and gene array analysis of epithelial-mesenchymal transition.
- Dr B Williams, Monash Institute for Medical Research. Studies on bladder and prostate cancer progression and metastasis to bone.
- Dr NA Ahmed, Department of Pharmaceutical and Medical Research. Studies in clinical breast cancer specimens, mesenchymal transition (EMT) in breast cancer.

Pharmacogenomics

- A/Prof T Brown, Monash University. Role of hyaluronan synthase in breast cancer progression.
- Dr A Stevenson, CSIRO. Phase-contrast X-ray radiography in biomedical research.
- A/Prof EW Thompson, SVI. MMP inhibition studies in breast cancer systems and gene array analysis of epithelial-mesenchymal transition.
- Dr T Rowe, Arana Therapeutics. Analysis of mammographic density.
- Dr 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 neurones.

NRL

- Dr G Vercauteren, Department of Essential Health Technologies, WOO, Geneva. HIV Testing Strategies.
- Dr G Dore, NCHECR. Detailed investigation of the humoral immune response to HIV-1 to identify diagnostic and prognostic serological markers.
- Dr A Kelleher, NCHECR. Characterising antibody responses for HIV Long Term Non-progressors.
- Dr P Gorry, Burnet Institute. Pathogenesis of HIV Long Term Non-progressors.
- Dr J Lountrant, ARCBS. Pathogenesis of HIV Long Term Non-progressors.
- Dr J Sullivan, ARCBS. Pathogenesis of HIV Long Term Non-progressors.
- Dr W Dyer, ARCBS. Pathogenesis of HIV Long Term Non-progressors.
- Prof S Crowe, Burnet Institute. Unusual HIV Infections.

- Prof Hiroshi Sato, Kanazawa Medical School, Japan. MT1-MMP regulation and epithelial-mesenchymal transition.
- Prof Motoharu Seki, Department of Cancer Cell Research, Institute of Medical Science, University of Tokyo, Japan. Collagen regulation of MT1-MMP function.
- Prof Z Werb, Department of Anatomy and Cell Biology, California, San Francisco. USA. MMP-13 involvement in breast cancer progression.
- Dr T Sasaki, Max Planck Institute for Medical Research. Studies in clinical breast cancer.

- Dr 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 neurones.

- Dr G Vercauteren, Department of Essential Health Technologies, WOO, Geneva. HIV Testing Strategies.
- Dr G Dore, NCHECR. Detailed investigation of the humoral immune response to HIV-1 to identify diagnostic and prognostic serological markers.
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- Dr J Sullivan, ARCBS. Pathogenesis of HIV Long Term Non-progressors.
- Dr W Dyer, ARCBS. Pathogenesis of HIV Long Term Non-progressors.
- Prof S Crowe, Burnet Institute. Unusual HIV Infections.
**Presentations**

**Structural Biology**
- Michael Parker
  - BIT’s 1st Annual Protein and Peptide Conference (PejCon-2008). “From Concept to Market”, Shenzhen, China. Invited speaker
- The Joint Pacific Rim International Conference on Protein Science and the 4th Asian Oceania Human Proteome Organisation, Cairns. Invited speaker
- Hanson Institute, Adelaide. Seminar speaker
- St Vincent’s Hospital, Grand Rounds Bench to Bedside Research Forum, Melbourne. Seminar speaker
- Prince Henry’s Institute, Melbourne. Seminar speaker
- Department of Biochemistry, La Trobe University, Melbourne. Seminar speaker
- Royal Society of Victoria, Melbourne. Invited speaker

**Protein Chemistry and Metabolism**
- Bruce Kemp
  - FASEB Summer Research Conference “AMPK in Sickness and Health: From Molecule to Man”. Snekkersten, Denmark. Invited speaker
  - Molecules to Man Seminar Series, St Vincent’s Hospital campus Fitzroy Seminar speaker
  - CSIRO National Flagship Health, Werribee. Invited speaker
  - Michael Clark Symposium, Hobart. Invited speaker
- Gregory Steinberg
  - FASEB Summer Research Conference “AMPK in Sickness and Health: From Molecule to Man”. Snekkersten, Denmark. Invited speaker
  - 4th Scientific Meeting of the European Society of Hypertension and the 22nd Scientific Meeting of the International Society of Hypertension, Berlin, Germany. Speaker
  - 56th Annual Meeting of the Cardiac Society of Australia and New Zealand, Adelaide. Invited speaker

**Immunology and Diabetess**
- Thomas Kay
  - National Institute for Health, Bethesda, Maryland. Invited speaker
  - Keystone Meeting on Islet Biology, Snowbird, Utah. Invited speaker
- Eveline Angstret
  - SVU/Department of Medicine Seminar Program. Speaker

**Signal Transduction**
- Shanna Tam
  - The Monash University Faculty of Pharmacy and Pharmaceutical Sciences, 3rd Annual Postgraduate Research Symposium 2008

- Duncan Campbell
  - 4th Asian Pacific Congress on Heart Failure, Melbourne. Speaker
  - Renin Summit, Berlin, Germany. Invited speaker
  - Hypertension 2005, joint congress of 18th Scientific Meeting of the European Society of Hypertension and the 22nd Scientific Meeting of the International Society of Hypertension, Berlin, Germany. Speaker

**Bone, Joint and Cancer**
- Thomas Kay
  - National Institute for Health, Bethesda, Maryland. Invited speaker
  - Keystone Meeting on Islet Biology, Snowbird, Utah. Invited speaker
- Eveline Angstret
  - SVU/Department of Medicine Seminar Program. Speaker

**Evange Romas**
- Clare Bone Meeting, Clare Valley, South Australia. Invited speaker
- 3e (Evidence, Experts, Exchange) meeting: Methotrexate use in the rheumatic diseases, Paris, France. Invited speaker
- Australian & New Zealand Bone & Mineral Society, Melbourne. Invited speaker

**Natalie Sims**
- St Vincent’s Hospital Melbourne Molecules to Man Seminar Series. Invited speaker
- Bernard O’Brien Institute of Microsurgery Seminar Series. Invited seminar
- AMGEN Bone Academy Meeting, Melbourne. Invited speaker
- American Society for Bone and Mineral Research Annual Scientific Meeting, Montreal, Canada. Plenary poster presentation

**Stem Cell Regulation**
- Maria Askmyr
  - The Children’s Hospital at Westmead, Sydney. Invited seminar speaker
Presentations

Louise Purton
- Fred Hutchinson Cancer Research Centre, Seattle, USA. Invited seminar speaker
- Hanson Institute, Adelaide. Invited seminar speaker
- 18th Annual Meeting of the Australian and New Zealand Bone and Mineral Society, Melbourne. Invited speaker

Carl Walkley
- Fred Hutchinson Cancer Research Centre, Seattle, USA. Invited seminar speaker
- Australian Cell Cycle Workshop, Melbourne. Speaker
- Australian Health & Medical Research Congress, Bone and Joint Symposium, Brisbane. Invited speaker
- Leukemia & Lymphoma Society Stohlman Scholar Symposium, Kansas City, USA. Invited speaker
- Sansom Institute, University of South Australia, Adelaide. Invited seminar speaker
- Peter MacCallum Cancer Centre, Melbourne. Invited seminar speaker
- 18th Annual Meeting of the Australian and New Zealand Bone and Mineral Society, Melbourne. Speaker
- NuRx Pharmaceuticals Inc, Irvine, USA. Invited speaker
- SVI/Department of Medicine at St Vincent’s Hospital, University of Melbourne, Melbourne. Invited seminar speaker
- International Bone & Mineral Society Davos Workshops: Bone Biology & Therapeutics, Davos Switzerland. Invited speaker
- Technical University of Munich, Munich, Germany. Invited seminar speaker

Cell Cycle and Cancer
Boris Sarcevic
- The 5th international conference on ubiquitin, ubiquitin-like proteins and cancer, Houston, Texas, USA. Speaker
- Indian Society of Molecular Biology Annual Conference, Mumbai, India. Invited speaker

Randy Suryadinata
- Australian Cell Cycle Workshop, University of Melbourne, Speaker

Molecular Genetics
Jörg Heierhorst
- FASEB Summer Research Conference: Yeast Chromosome Structure, Replication & Segregation, Carefree, Arizona, USA. Speaker.
- 4th Australian Telomere Workshop, Sydney. Speaker
- 10th Australian Cell Cycle Workshop, Melbourne. Speaker
- Children's Medical Research Institute, Westmead. Seminar speaker

Andrew Hammert
- 10th Australian Cell Cycle Workshop, Melbourne. Speaker

Ana Traven
- 10th Australian Cell Cycle Workshop, Melbourne. Speaker
- SVI of Medical Research. Seminar speaker

Cytoskeleton and Cancer
Ora Bernard
- Gordon Conference on Phosphorylation and G-Proteins mediate signaling networks, University of New-England. Speaker
- ComBio, Canberra, Session chair and invited speaker
- The Weizmann Institute of Science. Invited speaker

Erik Thompson
- 7th Annual AACR Conference on Frontiers in Cancer Prevention Research. Invited speaker
- 4th International PacRim Breast and Prostate Cancer Meeting, Whistler Blackcomb Resort, British Columbia, Canada. Session co-chair and invited discussant
- Joint MRS-AACR Conference on Metastasis. Vancouver, BC, Canada. Invited speaker and session chair
- Cold Spring Harbor Symposium on Epithelial Mesenchymal Transitions: Invited speaker
- US-DOD Era of Hope Conference, Baltimore, USA. Speaker
- Lombardi Cancer Center, Georgetown University, USA. Institute seminar
- National Breast Cancer Foundation/Prostate Cancer Foundation of Australia Annual Research Update, WEHI, Melbourne. Invited speaker
- Matrix Biology Society of Australia and NZ, Btrialong Beach, NSW. Speaker
- Baker Medical Research Institute, Melbourne. Seminar speaker
- Research in Progress Seminars, University of Melbourne/St Vincent’s Hospital, Melbourne. Seminar speaker
- Griffith Institute for Health and Medical Research, Griffith University, Brisbane. Seminar speaker
- Department of Pharmacy, University of Queensland, Brisbane. Seminar speaker

Pharmacogenomics
Mark Waltham
- 2020 Public Forum ‘Biotechnology’, Hobart. Invited speaker
- Cancer Pharmacogenomics Conference, Manipal, India. Invited speaker

NRL
Wayne Dimech
- International Society for Blood Transfusion, Macao, China. Invited speaker
Thu-Anh Pham
- International Society for Blood Transfusion, Hanoi, Vietnam. Invited speaker
review of protein and (pro)rein receptor research. Hypertension 52:142-159


Campbell DJ. 2008. Interpretation of plasma renin concentration in patients receiving aliskiren therapy. Hypertension 51:15-18

Campbell DJ. 2008. Can the study of female rats help our understanding of women's hypertension? Hypertension 52:114-114; author reply e13-144


Campbell DJ. 2008. Critical
Dr Bronwyn Hegarty
Diabetes & Obesity Program
Garvan Institute of Medical Research
“Adiponectin – the long and short of its effects on hepatic glucose metabolism”

Dr David Nicolic-Patterson
Department of Nephrology, Monash Medical Centre
“JNK signalling in acute and chronic tissue damage”

Dr Carl Walkley
SVI
“Stem cells to anaemia”

Dr Peter E Czabotar
The Walter and Eliza Hall Institute
“Structural studies of the Bcl-2 family of proteins”

A/Prof Jean-Pierre Levesque
Mater Medical Research Institute
“Behaviour of haematopoietic stem cells is governed by their niches”

Prof James Whisstock
Department of Biochemistry & Molecular Biology, Monash University
“Structural studies on membrane attack complex/perforin-like proteins”

Dr Nicky Konstantopolous
Metabolic Research Unit
Deakin University
“Transcription-based identification of insulin resistance subtypes”

Dr Rajan Sankaranarayanan
Structural Biology Laboratory, Centre for Cellular & Molecular Biology, Hyderabad, India
“Structural basis of proofreading/editing mechanism during translation of the genetic code”

Prof Martin Lavin
Queensland Institute of Medical Research
“A central role for ATM in the DNA damage response”

Dr Craig Morton
SVI
“You don’t have to be pretty to do modelling”

Dr Gregory Hannigan
Centre for Cancer Research, Monash Institute of Medical Research
“Integrin linked kinase: What it is and what does it do”

Dr Duncan Campbell
SVI
“Angiotensin and bradykinin”

Dr Ana Traven
SVI
“Post-transcriptional control of yeast morphogenesis and biofilm formation: implications for fungal pathogenesis”

Dr Martin Sadowski
SVI
“Mechanisms of ubiquitination in the control of proteolysis, cell cycle progression and cancer”

Dr Chris Jolly
DNA Repair Laboratory, Centenary Institute, Sydney
“Antibody hypermutation: you can fool all of the DNA repair pathways some of the time”

Dr Mark Chong
New York University School of Medicine, Skirball Institute of Biomolecular Medicine, New York USA
“Gene regulation during T lymphocyte differentiation: the expected and unexpected layers of complexity”

A/Prof Maria Kavallaris
Head, Pharmacoproteomics Program, Children’s Cancer Institute Australia for Medical Research
“Targeting the cytoskeleton in cancer”

Dr Ian Trounce
Research Group Leader
Mitochondrial Stress
Department of Medicine/Clinical Neurosciences St. Vincent’s Hospital, Centre for Eye Research
“Modelling mitochondrial dysfunction in age-related neurodegeneration”

David Ascher
Final PhD Seminar – SVI
“Structural studies of proteins involved in memory”

Dr Sebastian Beck-Jorgensen
Molecular Physiology Group, Section of Human Physiology
Department of Exercise & Sport Sciences, University of Copenhagen, Denmark
“Muscle specific deletion of SOCS3 protects against obesity induced insulin resistance”

Dr Peter Walsh
SVI
“Leishmaniasis, Chagas’ disease and African Sleeping Sickness; new drugs for neglected diseases”

Dr Carl Roullot
Bernard O’Bien Institute
“Oxidative stress and NADPH oxidase in brain damage and repair after ischaemic stroke”

Prof Peter Cowan
Immunology Research Centre St Vincent’s Hospital
“Overcoming the complement and coagulation barriers in xenotransplantation”

Dr Neil Saunders
School of Molecular and Microbial Sciences, University of OId
“Protein kinases and their substrates: prediction, analysis and informatics challenges”

Prof Sharad Kumar
Division of Haematology, Hanson Institute, Institute of Medical & Veterinary Sciences, Adelaide
“Regulation of protein function by ubiquitination: Role of the Nedd4 family of ubiquitin ligases”

Jon Gooi
Final PhD Seminar, SVI
“Calcitonin attenuates the anabolic effect of PTH in vivo and rapidly upregulates sclerostin expression”

A/Prof David Cameron-Smith
School of Exercise & Nutrition Science, Deakin University
“Molecular regulation of skeletal muscle function by nutrients: Significance in ageing”

“Genetic strategies to improve mouse islet graft function”

Tharun Mysore
Final PhD Seminar, Department of Immunology, St Vincent’s Hospital
Dr Anthony Cesare
Children’s Medical Research Institute, Sydney
“Telomere capping dysfunction and homologous-recombination mediated maintenance in humans and yeast”
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 type 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 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 committees

Board Committees

SVI Audit and Finance Committee
The purpose of the Audit and Finance Committee is to assist the 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 Board on the appointment of the external auditors, direction of audit (without impacting on the auditor’s independence) and the level of audit fees.

2008 Committee members (external):
Ruth O’Shannassy (Chair), Paul Holyoake, Janene Krongold and Michael McGinniss

2008 Committee members (internal):
Thomas Kay and David Rees

SVI Commercialisation and Intellectual Property Committee
The purpose of the 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 2008, the 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.

Members of the Committee also reviewed SVI’s Collaboration Research Agreements with both academic and industrial partners.

2008 Committee members (external):
John Sime (Chair), Barry Jackson, Michael McGinniss, Paula de Bruyn, Michelle Baker, Greg Robinson and Andrew Baker

2008 Committee members (internal):
Thomas Kay, Michael Parker, Tony Mason (Convenor)

SVI Occupational Health and Safety Committee
The Occupational Health and Safety Committee (OH&S) meets on a fortnightly basis to deal with various health and safety operational issues at the Institute and devise policy in line with legislative and regulatory requirements.

In 2008 the activities of the Committee focused on a revision of SVI OH&S based on the results from the Independent Safety Audit reported in February 2008. In addition to the policy aspects of OH&S, the team work on practical implementation throughout the Institute. Chemical management now includes the team’s involvement at point of purchase, and the storage, use and the eventual disposal of chemicals. Where possible, safer alternatives are investigated and encouraged. SVI OH&S policy must comply with the regulatory and legislative requirements, but must also evolve to keep pace with the developments in SVI research.

2008 Committee members:
Ginny Leopold (Chair), David Murfitt, Helen Ritchie, Frosa Katsis, Thomas Loudovaris, Narelle McGregor, 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 12 applications to various philanthropic trusts and obtained funds to the value of $122,680 from five successful applications.

Orders placed in 2008 included the following major purchases:
- Jasco Model J815 Spectropolarimeter
- Sysmex KK-21N Haematological Analyser
- Leica CM3050 cryostat.

2008 Committee members:
Michael Parker (Chair), David Murfitt, David Rees, Natalie Sims, Gregory Steinberg

SVI Website Committee
The aim of the SVI Website Committee is to ensure that the Institute has the most effective website possible.
The Committee reviews the current website and coordinates updates. The main focus in 2008 was to initiate design of a new website for the Institute. This has involved creating a detailed brief for the new site and interviewing web design companies, who will tender for the job in 2009.

2008 Committee members:
Jo Crowston (Chair), Anne Johnaton, James Mugg, Natalie Sims
Income

- Competitive research grants: 63%
- Government infrastructure support: 15%
- Legacies, bequests and donations: 9%
- Other operating income: 6%
- Investment income: 5%
- Industry: 3%
Financial snapshot 2008

Expenditure

69% Research

11% Laboratory support

6% Administration
5% Building operations
4% Transfers to collaborators
3% Foundation
2% Commercial development
Directors’ Report

Your Directors present their report on the company for the financial year ended 31 December 2008.

1. Directors
The names of Directors in office at any time during or since the end of the year are:
Dr Susan M Alberti AO HOA LLID Mr Jeffrey N Clifton
Mr Paul Holyoake Prof Thomas WH Kay
Prof Jim McCluskey (from 28/7/08) Mr John MacFarlane (from 28/7/08)
Mr Michael McGinniss Ms Ruth A O’Shannassy
Mr G John Pizzey Mr Gregory J Robinson
Ms Brenda M Shanahan Mr Douglas A Wright

Directors listed above have been in office since the start of the financial year to the date of this report unless otherwise stated.

Ms Nicole Feely, Mr Barry Jackson, Professor James Best and Prof James Angus resigned from the board during 2008.

2. Company Secretary
The following person held the position of company secretary at the end of the financial year:
Mr David R Rees – Bachelor of Business, Graduate Diploma Company Secretarial Practice, Certified Practicing Accountant, Chartered Secretary. Mr Rees has worked for St Vincent’s Institute of Medical Research for 10 years, performing management roles. Mr Rees was appointed company secretary on 1 January 2004.

3. Principal Activity
The principal activity of the company during the financial year was medical research. There was no significant change in the nature of the company’s principal activity during the financial year.

4. Operating Results
The operating surplus of the company amounted to $794,083. The surplus is reinvested in the company.

5. Dividends
In accordance with the company’s constitution no dividends are paid.

6. Review of Operations
St Vincent’s Institute (SVI) carries out biomedical research into common diseases of the community, including diabetes (type 1 and type 2), obesity, cardiovascular disease, bone diseases including arthritis and osteoporosis, cancer, Alzheimer’s disease, and virology.

During 2008, the Institute recruited several dedicated and high achieving researchers in the area of cancer and diabetes. SVI has already benefited from their presence through additional research grants and the creation of a network of internal and external collaborations that will generate a high level of research activity and exchange of ideas. SVI has maintained a consistently high level of research performance and is aiming to build on this with further selective recruitment in 2009. A particular achievement was our success rate in NHMRC grants of close to twice the national average.

The 2008 surplus of $794,083 is slightly down on the 2007 surplus of $962,858, however the main contributing factor for this is the inclusion of an unrealised share loss (shares that have not been sold) as an expense in the Income and Expenditure Statement. SVI, like many other organizations with investment portfolios, has suffered during the share market downturn. However SVI’s share portfolio ($1,677,597) represents only 13% of our total funds available for investment. The remaining 87% of funds are in cash deposits and short-term interest bearing investments. SVI has no borrowings.

Research related income represents 81% of total revenue. The competitive grant component that covers government, non-government and overseas funding sources is 63% and infrastructure support is 15% and industry 3%. Research grant income (net of fund transfers to our collaborators) grew by 23%, mainly through our partnership in a government sponsored Cooperative Research Centre and additional peer reviewed research awards.

In 2008 non-research operating income decreased by $359,723 (9%), which was mainly due to the reduction in legacies, bequests and donations income. The previous year comparison should be viewed in the context that 2007 was a very successful fund raising year. Fund raising can be very unpredictable and it was difficult to match some of the large donations of last year. It also underlines the difficulty of planning future research activities around the optimism that fund raising programs will finance a project.
Directors' Report

Expenditure in both research and non-research activities has grown 15% and 14% respectively. The similar increase in expenditure is not surprising as administration services and facilities have to keep pace with the research groups’ needs. There is little free capacity in administration thus expenditure in this area grows in parallel with research activities.

SVI allocated $489,601 to purchase new equipment in 2008, well down on last year’s figure of $1,757,165. There is a direct correlation between the funds raised from non-research sources and the spending on equipment. The Institute is heavily reliant on funding from philanthropic foundations and other donations for the purchase of equipment. In 2008, the legacies, bequests and donations contribution decreased by $499,779. Peer review granting bodies rarely provide significant funds for equipment so there is an ongoing need to raise funds. The SVI Foundation plays a major role in fundraising through organising events and developing relationships and networks with industry, philanthropic foundations and individuals. Their work helps bridge the gap between grant income and the full direct costs of research.

The Victorian and Commonwealth Governments provided $2,882,638 in infrastructure funding, which covered 48% of our infrastructure expenditure commitment, the balance coming from other sources eg. interest and dividends. The government infrastructure support funding is derived by applying formulae to the Institute’s competitive grant income and in this way making the funding allocations based on performance. The government’s policy of linking infrastructure support to research activity is also important because it provides some opportunity for Institutes to keep pace with the growing cost of providing support and services to the research projects. The funds are used in accordance with government guidelines for “indirect” costs of carrying out research such as administration, laboratory services, building operations and commercial development. A decrease in infrastructure support, for example as a result of capping Government infrastructure spending in the context of growth in competitive grants, would be a significant problem for SVI.

The SVI Foundation has made an excellent financial contribution this year through its fundraising efforts, raising $1.2 million this year.

In 2008 the number of staff and students was 130 (2007 - 133). In addition SVI is the host institute for the National Serology Reference Laboratory (NSRL), providing administration and research support to the 31 NSRL staff.

7. Significant changes in state of affairs
No significant changes in the state of affairs of the company occurred during the financial year.

8. After balance date events
No matters or circumstances have arisen since the end of the financial year which significantly affected or may significantly affect the operations of the company, the results of those operations, or the state of affairs of the company in future financial years.

9. Future developments, prospects and business strategies
The Institute is aiming, with St Vincent’s Health Melbourne and other campus research institutes, to establish The Aikenhead Centre for Medical Discovery using a model of integrated medical research and clinical care. The Centre will bring together tissue engineering, bionic technology and material sciences in a clinical environment to focus on regenerative and restorative medicine. The Institute and its partners are looking to redevelop the St Vincent’s site at the corner of Victoria Pde and Nicholson St Fitzroy, Melbourne and is currently making representations to government. The timing for this project is 2014/15.

10. Environmental issues
The company operates predominantly within the medical research sector and is committed to conducting its business activities with respect for the environment while continuing to meet expectations of members, employees, customers and suppliers. During the period from 1 January 2008 to the date of this report, this company has complied with the requirements of the Environmental Protection Act.

11. Options
No options over issued shares or interests in the company were granted during or since the end of the financial year and there were no options outstanding at the date of this report.
12. Meetings of directors
During the financial year, 12 meetings of directors (including committees) were held. Attendees were:

<table>
<thead>
<tr>
<th>Directors' Meetings</th>
<th>Commercialisation</th>
<th>Committee Meetings</th>
<th>Audit &amp; Finance</th>
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</table>

13. Directors' and auditors' indemnification
The company has not, during or since the financial year, in respect of any person who is or has been an officer or auditor of the company or a related body corporate:

- indemnified or made any relevant agreement for indemnifying against a liability incurred as an officer, including costs and expenses in successfully defending legal proceedings;
- paid or agreed to pay a premium in respect of a contract insuring against a liability incurred as an officer for the costs or expenses to defend legal proceedings; with the exception of the following matters.

During or since the financial year the company has paid premiums to insure each of the directors against liabilities for costs and expenses incurred by them in defending any legal proceedings arising out of their conduct while acting in the capacity of director of the company, other than conduct involving a wilful breach of duty in relation to the company.

14. Proceedings on Behalf of Company
No person has applied for leave of Court to bring proceedings on behalf of the company or intervene in any proceedings to which the company is a party for the purpose of taking responsibility on behalf of the company for all or any part of these proceedings.

However legal proceedings are being taken against the National Serology Reference Laboratory (NRL) in relation to a claim for negligence. St Vincent’s Institute (SVI) is the NRL’s host organisation. SVI, as host organisation, has a contractual agreement with the Commonwealth Government, to provide services to the NRL and allow it to conduct its business through SVI.

The Victoria Managed Insurance Fund, as insurers of the NRL and SVI, has engaged legal council and any financial settlement will be covered by insurance.
**Directors' Report**

**15. Auditor's Independence Declaration**

The lead auditor's independence declaration for the year ended 31 December 2008 has been received and can be found on page 76 of the financial statements.

Signed in accordance with a resolution of the Board of Directors.

Director  
BM Shanahan

Director  
RA O'Shannassy

Dated this 23rd day of March 2009, Melbourne, Australia
AUDITOR’S INDEPENDENCE DECLARATION
UNDER SECTION 307C OF THE CORPORATIONS ACT 2001
TO THE DIRECTORS OF ST VINCENT’S INSTITUTE OF MEDICAL RESEARCH

I declare that, to the best of my knowledge and belief, during the year ended 31 December 2008 there have been:

(i) no contraventions of the auditor independence requirements as set out in the Corporations Act 2001 in relation to the audit; and

(ii) no contraventions of any applicable code of professional conduct in relation to the audit.

WEBB AUDIT PTY LTD

[Signature]
AP MARKS
Director

Dated: Melbourne: 23 March 2009
Discussion and analysis of the Financial Statements

Information on St. Vincent’s Institute of Medical Research Concise Financial Report

The financial statements and disclosures in the concise financial report have been derived from the 2008 Financial Report of St. Vincent’s Institute of Medical Research. A copy of the full financial report and auditors report will be sent to any member, free of charge, upon request.

The discussion and analysis is provided to assist members in understanding the concise financial report. The discussion and analysis is based on the company’s financial statements and the information contained in the concise financial report has been derived from the full 2008 Financial Report of St. Vincent’s Institute of Medical Research.

Income Statement

The 2008 net surplus was $794,083, which is a strong result considering direct research expenditure on consumables increased by $675,913 and employee benefits by $1,000,990. These costs were fully offset by an increase in grant income of $2,809,713, in particular research grant income increased by $2,328,048.

In 2008, the total income was $19,058,695 and the key sources were 68% from government grants, of which 53% was competitive grant funding and 15% infrastructure support. Non-government research grants were 12%, Legacies, Bequests and Donations 10% and interest/dividends 5% and other sources 5% of total income. The total expenditure was $18,264,612 and the components were direct research expenses of 66%, laboratory and building support services (including depreciation) 14%, administration 7%, SVI Foundation 3%, commercialisation support 2%, external transfers to collaborators 4% and investment portfolio movements 4%. The share investment unrealised expense for the year was $381,880, which reflects the decline in the market value of the share portfolio.

Balance Sheet

In 2008 the total Net Assets increased by $564,017, representing an increase of 3% on 2007. Although this was not a significant change overall, there were however some important changes to the composition of the balance sheet:

- Current Assets increased by $3,096,891 (33%) to $12,428,724 and mostly in Cash and Cash Equivalents, which includes term deposits and deposits at call of $7,786,918 and cash at bank of $3,425,906. Trades and other receivables make up the balance.

- Total Current Liabilities increased by $938,659 (31%), mainly due to Grants in Advance, which increased by $882,458. The Grants in Advance totals $1,819,734 and is part of the cash held by SVI. These funds are due to be spent in 2009.

- The net value of the property, plant and equipment declined by $1,370,881, with asset purchases for the year of $540,967 being offset by the annual depreciation and amortisation of $1,911,848.

- Financial Assets represents shares listed on the stock exchange and the value has declined in 2008. The market value has decreased by $611,181 of which $230,066 is shown as a reduction in the Financial Asset Reserve and $381,880 as an unrealised loss in the Income Statement. However, an additional injection of funds to the investment account during 2008 has meant that the Financial Assets show an overall a net decrease of $189,995.

Statement of Changes in Equity

In 2008 the Equity increased by $564,017 (3%), which was the net result of a surplus from operating activities of $794,083 and decrease in the financial asset reserve of $230,066. The decrease in financial asset reserve reflects a fall in the market value of share investments held by SVI.

Cash Flow Statement

In 2008 the net cash position increased by $3,409,549 (44%), resulting from a surplus in operating activities of $4,372,467 and an application of funds to investment activities of $962,918. In contrast to last year, there were less funds spent on investments, in particular plant and equipment, where cash purchases were down by $1,287,665. Grants Received was significantly higher than 2007 due to a general increase in income and an increase of $882,458 in the grants in advance was a standout component.
**Income Statement for the year ended 31 December 2008**

<table>
<thead>
<tr>
<th>Note</th>
<th>2008 ($)</th>
<th>2007 ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue</td>
<td>2</td>
<td>19,058,695</td>
</tr>
<tr>
<td>Other Income</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Consumables used</td>
<td></td>
<td>(3,722,203)</td>
</tr>
<tr>
<td>Employee benefits expense</td>
<td></td>
<td>(9,742,242)</td>
</tr>
<tr>
<td>Depreciation and amortisation expense</td>
<td></td>
<td>(1,911,848)</td>
</tr>
<tr>
<td>Other expenses</td>
<td></td>
<td>(2,888,319)</td>
</tr>
</tbody>
</table>

**Surplus for the year**

3  
794,083  
962,858

The accompanying notes form part of these financial statements.
### Balance Sheet as at 31 December 2008

<table>
<thead>
<tr>
<th></th>
<th>2008 ($)</th>
<th>2007 ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ASSETS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Current Assets</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash and cash equivalents</td>
<td>11,212,824</td>
<td>7,803,275</td>
</tr>
<tr>
<td>Trade and other receivables</td>
<td>1,185,149</td>
<td>1,478,569</td>
</tr>
<tr>
<td>Other assets</td>
<td>30,751</td>
<td>49,989</td>
</tr>
<tr>
<td><strong>Total Current Assets</strong></td>
<td><strong>12,428,724</strong></td>
<td><strong>9,331,833</strong></td>
</tr>
<tr>
<td><strong>Non-current Assets</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trade and other receivables</td>
<td>250,000</td>
<td>250,000</td>
</tr>
<tr>
<td>Financial assets</td>
<td>1,677,597</td>
<td>1,867,592</td>
</tr>
<tr>
<td>Property, plant &amp; equipment</td>
<td>9,560,057</td>
<td>10,930,938</td>
</tr>
<tr>
<td><strong>Total Non-current Assets</strong></td>
<td><strong>11,487,654</strong></td>
<td><strong>13,048,530</strong></td>
</tr>
<tr>
<td><strong>Total Assets</strong></td>
<td><strong>23,916,378</strong></td>
<td><strong>22,380,363</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>2008 ($)</th>
<th>2007 ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Current Liabilities</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trade and other payables</td>
<td>813,421</td>
<td>724,199</td>
</tr>
<tr>
<td>Short-term provisions</td>
<td>1,110,747</td>
<td>1,143,769</td>
</tr>
<tr>
<td>Funds held in trust for NSRL accrued leave</td>
<td>138,280</td>
<td>138,280</td>
</tr>
<tr>
<td>Other current liabilities</td>
<td>1,819,734</td>
<td>937,275</td>
</tr>
<tr>
<td><strong>Total Current Liabilities</strong></td>
<td><strong>3,882,182</strong></td>
<td><strong>2,943,523</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>2008 ($)</th>
<th>2007 ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Non-current Liabilities</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Long-term provisions</td>
<td>125,434</td>
<td>92,095</td>
</tr>
<tr>
<td><strong>Total Non-current Liabilities</strong></td>
<td><strong>125,434</strong></td>
<td><strong>92,095</strong></td>
</tr>
<tr>
<td><strong>Total Liabilities</strong></td>
<td><strong>4,007,616</strong></td>
<td><strong>3,035,618</strong></td>
</tr>
<tr>
<td><strong>NET ASSETS</strong></td>
<td><strong>19,908,762</strong></td>
<td><strong>19,344,745</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>2008 ($)</th>
<th>2007 ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>EQUITY</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Retained surplus</td>
<td>19,908,762</td>
<td>19,114,679</td>
</tr>
<tr>
<td>Financial asset reserve</td>
<td>-</td>
<td>230,066</td>
</tr>
<tr>
<td><strong>TOTAL EQUITY</strong></td>
<td><strong>19,908,762</strong></td>
<td><strong>19,344,745</strong></td>
</tr>
</tbody>
</table>

The accompanying notes form part of these financial statements.
Statement of Changes in Equity for
year ended 31 December 2008

<table>
<thead>
<tr>
<th>Retained Surplus $</th>
<th>Financial Asset Reserve $</th>
<th>Total $</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Balance at beginning of Financial year 2007</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18,151,822</td>
<td>225,067</td>
<td>18,376,889</td>
</tr>
<tr>
<td>Revaluation increment</td>
<td>-</td>
<td>4,998</td>
</tr>
<tr>
<td>Surplus for the year</td>
<td>962,858</td>
<td>-</td>
</tr>
<tr>
<td><strong>Balance at end of financial year 2007</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19,114,679</td>
<td>230,066</td>
<td>19,344,745</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Retained Surplus $</th>
<th>Financial Asset Reserve $</th>
<th>Total $</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Balance at beginning of Financial year 2007</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19,114,679</td>
<td>230,066</td>
<td>19,344,745</td>
</tr>
<tr>
<td>Revaluation decrement</td>
<td>-</td>
<td>(230,066)</td>
</tr>
<tr>
<td>Surplus for the year 2008</td>
<td>794,083</td>
<td>-</td>
</tr>
<tr>
<td><strong>Balance at end of financial year 2008</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19,908,762</td>
<td>-</td>
<td>19,908,762</td>
</tr>
</tbody>
</table>

The accompanying notes form part of these financial statements.
Cash Flow Statement for the year ended 31 December 2008

<table>
<thead>
<tr>
<th>Cash flow from operating activities</th>
<th>2008 Inflows (Outflows) $</th>
<th>2007 Inflows (Outflows) $</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grants received</td>
<td>16,595,059</td>
<td>13,500,811</td>
</tr>
<tr>
<td>Payments to suppliers and employees</td>
<td>(15,862,107)</td>
<td>(13,436,832)</td>
</tr>
<tr>
<td>Donations, legacies and bequests</td>
<td>1,958,005</td>
<td>2,457,784</td>
</tr>
<tr>
<td>Other revenue</td>
<td>818,487</td>
<td>324,812</td>
</tr>
<tr>
<td>Interest received</td>
<td>756,487</td>
<td>592,661</td>
</tr>
<tr>
<td>Dividends received</td>
<td>106,536</td>
<td>259,544</td>
</tr>
<tr>
<td><strong>Net cash provided by operating activities</strong></td>
<td><strong>4,372,467</strong></td>
<td><strong>3,698,780</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Cash flow from investing activities</th>
<th>2008 Inflows (Outflows) $</th>
<th>2007 Inflows (Outflows) $</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purchase of plant and equipment</td>
<td>(489,601)</td>
<td>(1,757,166)</td>
</tr>
<tr>
<td>Purchase of Motor vehicle</td>
<td>(51,366)</td>
<td>-</td>
</tr>
<tr>
<td>Leasehold improvements</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Payments for investments</td>
<td>(421,951)</td>
<td>(365,565)</td>
</tr>
<tr>
<td><strong>Net cash (used in) investing activities</strong></td>
<td><strong>(962,918)</strong></td>
<td><strong>(2,122,731)</strong></td>
</tr>
</tbody>
</table>

| Net increase/(decrease) in cash held | 3,409,549 | 1,576,049 |
| Cash at the beginning of the year   | 7,803,275 | 6,227,226 |
| **Cash at the end of the year**     | **11,212,824** | **7,803,275** |

The accompanying notes form part of these financial statements.
Notes to the Financial Statements for the year ended 31 December 2008

Note 1:

The financial statements, specific disclosures and other information included in the concise financial report are derived from and are consistent with the full financial report of St Vincent’s Institute of Medical Research. The concise financial report cannot be expected to provide as detailed an understanding of the financial performance, financial position and financing and investing activities of St Vincent’s Institute of Medical Research as the full financial report.

The financial report of St Vincent’s Institute of Medical Research complies with all Australian equivalents to International Financial Reporting Standards (AIFRS) in their entirety. The presentation currency used in this concise financial report is Australian dollars.

The accounting policies have been consistently applied by the company and are consistent with those of the previous year unless otherwise stated.
## Notes to the Financial Statements for the year ended 31 December 2008

### Note 2: Revenue

#### Operating activities

**Research activities:**
- government grants for direct research 4-5 10,204,254 7,901,206
- other research grants 2,332,288 1,649,663
- government grants for operational support 4-5 2,882,638 2,698,875
  **15,419,180**  **12,249,744**

**Non-research activities:**
- legacies, bequests, donations 1,958,005 2,457,784
- dividends from other corporations 106,536 259,544
- interest from other corporations 756,487 564,957
- contract services 384,146 535,945
- royalty 205,312 105,353
- other 229,029 75,655
  **3,639,515**  **3,999,238**

**Total revenue**  **19,058,695**  **16,248,982**

#### Non-operating activities

- realised gain on disposal of shares - 67,709

**Total other income/(loss)** - 67,709

### Note 3: Surplus

(a) The following expenditure was incurred in determining the surplus:

#### Expenses

<table>
<thead>
<tr>
<th></th>
<th>2008 ($)</th>
<th>2007 ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct research</td>
<td>12,060,836</td>
<td>10,460,132</td>
</tr>
<tr>
<td>Operational support</td>
<td>3,110,967</td>
<td>2,718,609</td>
</tr>
<tr>
<td></td>
<td><strong>15,161,803</strong></td>
<td><strong>13,178,741</strong></td>
</tr>
<tr>
<td>Transfer of funds to external, joint collaborators</td>
<td>809,081</td>
<td>399,008</td>
</tr>
<tr>
<td>Depreciation of non-current assets</td>
<td>1,194,101</td>
<td>1,058,337</td>
</tr>
<tr>
<td>Amortisation of non-current assets</td>
<td>717,747</td>
<td>717,747</td>
</tr>
</tbody>
</table>

(b) Significant revenues and expenses:

<table>
<thead>
<tr>
<th></th>
<th>2008 ($)</th>
<th>2007 ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unrealised loss on market value of shares</td>
<td>381,880</td>
<td>0</td>
</tr>
</tbody>
</table>

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Notes to the Financial Statements for the year ended 31 December 2008

<table>
<thead>
<tr>
<th>Note</th>
<th>Commonwealth Government</th>
<th>2008 ($)</th>
<th>2007 ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>National Health and Medical Research Council:</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Infrastructure support scheme</td>
<td>1,492,348</td>
<td>1,245,809</td>
</tr>
<tr>
<td></td>
<td>- Research grants</td>
<td>6,825,500</td>
<td>5,369,282</td>
</tr>
<tr>
<td></td>
<td>Australian Research Council</td>
<td>882,023</td>
<td>902,502</td>
</tr>
<tr>
<td></td>
<td>Department of Health and Ageing</td>
<td>1,977,704</td>
<td>1,370,881</td>
</tr>
<tr>
<td></td>
<td>Department of Innovation, Industry, Science and Research</td>
<td>319,027</td>
<td>33,541</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>11,496,602</strong></td>
<td><strong>8,922,015</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Note</th>
<th>Victorian State Government</th>
<th>2008 ($)</th>
<th>2007 ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Department of Innovation, Industry &amp; Regional Development:</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Operational Infrastructure Support</td>
<td>1,390,290</td>
<td>1,453,066</td>
</tr>
<tr>
<td></td>
<td>- Other Direct research grants</td>
<td>200,000</td>
<td>225,000</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>1,590,290</strong></td>
<td><strong>1,678,066</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Note</th>
<th>Trade and other receivables</th>
<th>2008 ($)</th>
<th>2007 ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Current</td>
<td>Grants and reimbursements</td>
<td>1,185,149</td>
</tr>
<tr>
<td></td>
<td>Provision for impairment receivables</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>1,185,149</strong></td>
<td><strong>1,478,569</strong></td>
</tr>
<tr>
<td></td>
<td>Non-current</td>
<td>St Vincent’s Hospital - Imprest Advance</td>
<td>250,000</td>
</tr>
</tbody>
</table>

| Note | Segment Reporting |  |
|------|-------------------| |
|      | The company operates in the medical research sector where it undertakes basic and clinical research in Australia. | |
Notes to the Financial Statements for the year ended 31 December 2008

DIRECTORS’ DECLARATION

The directors of St Vincent’s Institute of Medical Research declare that the concise financial report of St Vincent’s Institute of Medical Research for the financial year ended 31 December 2008, as set out in pages 72 to 87.

a) complies with Accounting Standard AASB 1039: Concise Financial Reports; and

b) is an extract from the full financial report for the year ended 31 December 2008 and has been derived from and is consistent with the full financial report of St Vincent’s Institute of Medical Research

This declaration is made in accordance with a resolution of the Board of Directors.

Director
BM Shanahan

Director
RA O’Shannassy

Dated this 23rd day of March 2009, Melbourne, Australia
INDEPENDENT AUDIT REPORT TO THE MEMBERS OF
ST VINCENT’S INSTITUTE OF MEDICAL RESEARCH


The accompanying concise financial report of St Vincent’s Institute of Medical Research comprises the balance sheet as at 31 December 2008, the income statement, statement of changes in equity and cash flow statement for the year then ended and related notes, derived from the audited financial report of St Vincent’s Institute of Medical Research for the year ended 31 December 2008, and the discussion and analysis. The concise financial report does not contain all the disclosures required by Australian Accounting Standards.

Directors’ Responsibility for the Financial Report

The directors of the company are responsible for the preparation and presentation of the concise financial report in accordance with Accounting Standard AASB 1039: Concise Financial Reports (including the Australian Accounting Interpretations), statutory and other requirements. This responsibility includes establishing and maintaining internal control relevant to the preparation of the concise financial report, selecting and applying appropriate accounting policies; and making accounting estimates that are reasonable in the circumstances.

Auditor’s Responsibility

Our responsibility is to express an opinion on the concise financial report based on our audit procedures. We conducted an independent audit, of the financial report of St Vincent’s Institute of Medical Research for the year ended 31 December 2008. Our audit report on the financial report for the year was signed on 24 March 2009 and was not subject to any modification. The Australian Auditing Standards require that we comply with relevant ethical requirements relating to audit engagements and plan and perform the audit to obtain reasonable assurance whether the financial report for the year is free from material misstatement.

Our procedures in respect of the concise financial report included testing that the information in the concise financial report is derived from, and is consistent with, the financial report for the year, and the examination on a test basis, of evidence supporting the amounts, discussion and analysis, and other disclosures which were not directly derived from the financial report for the year. These procedures have been undertaken to form an opinion whether, in all material respects, the concise financial report complies with Accounting Standard AASB 1039: Concise Financial Reports and whether the discussion and analysis complies with the requirements laid down in AASB 1039: Concise Financial Reports.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.
Independence

In conducting our audit, we have complied with the independence requirements of the Corporations Act 2001. We confirm that the independence declaration required by the Corporations Act 2001, provided to the directors of St Vincent’s Institute of Medical Research on 23 March 2009, would be in the same terms if provided to the directors as at the date of this auditor’s report.

Auditor’s Opinion

In our opinion, the concise financial report including the discussion and analysis of St Vincent’s Institute of Medical Research for the year ended 31 December 2008 complies with Accounting Standard AASB 1039: Concise Financial Reports.

WEBB AUDIT PTY LTD


AP MARKS
Director
Private Donors, Bequests and Foundations:

$100,001 plus
Brenda Shamahan Charitable Foundation
DJ & LM Fox Foundation administered by Nicholas O’Donohoe and Co

$50,001 - $100,000
Alberti AG Hon LLB, S
Leslie, N (The Bill Heath Fellowship in memory of Stuart Leslie)
The Banelong Foundation
The Marion & EH Flack Trust
The Mason Foundation administered by ANZ Trustees

$25,000 - $50,000
The Clive & Vera Ramaciotti Foundations administered by Perpetual Limited

$10,001 - $25,000
Burton, A
Equity Trustees Charitable Trusts
Holyoake, P & M
Michelmore AO, J
North, C
Portsea Hotel
Salta Properties Pty Ltd
The Rebecca L Cooper Medical Research Foundation
The William Buckland Foundation administered by ANZ Trustees Limited

$5,001 - $10,000
Bell Charitable Fund
Carson, I
Clovercote Pty Ltd
DBR Corporation Pty Ltd
Finzroy, R
Generation Investments Pty Ltd
Gold Age Aged Care
Harold Mitchell Foundation
Joe Arcao & Associates Pty Ltd
Schiauvolo Group Pty Ltd
Tregonning, K & B

$2,001 - $5,000
Best, W
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Frost, R
Gorman & Kelly Commercial Property Management P/L
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Kalua, H
La Trobe Financial Services Pty Limited – Melbourne
La Trobe Financial Services Pty Limited – Thirroul
Lowe, D
Macquarie Bank Limited
Mercuri, V & D
Palace Cinemas
Smith, JFM
The Michael & Andrew Buxton Foundation
Watson, B

$901 - $2,000
Agosta, A
All Souls’ Opportunity Shop
Amore Engineering P/L
Arcaro, J & G
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Barker, R
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Bates Smart Pty Ltd
Braun, B & M
CAF Australia
Cary, J & L
Caulfield, G
Caulfield, K
Charities Aid Foundation UK
Clifton, J & S
Commune, H
Concept Financial Services
Cooney, B
Dalton, C
Demelius, F
Eade, R
Edgar, R
Elliott, R
F & J Ryan Foundation
Fink, B & K
Hall, J & S
Hall, S
Harries, HR & EM
Hughes, M
Isael, A & C
Kelly, AP
Knowles, J
Lade, S
McCarthy AO FTSE, NJ
McCorckle, P & P
McNulty, M
McPhail, B
Nicoll, G
O’Brien, N & C
Orion Corporate Advisory Services
Pagliani, C
Penington, D
Phillips, G
Pizzey, J & B
Power, T
Reid, I
Riviera Properties Limited
Robinson, G & C
Shaw, B
Simpson Family Foundation
Smith, C & S
Spry-Bailey AO, P
Spry-Bailey, P
Thomas, C & C
Walters OAM, R
Webb, B
Webb, M
Wilkie, R & R
Xipfell, J & T
Yemens, T & M

$301 - $900
Audio Visual Dynamics Pty Ltd
Bruce, G
Chappell, J
Clavarelli, M
Clement, J
Gibson, M
Griss, C & A
Hains, H
Harcourt, S
Levin, N & S
McCann, N & P
McCarthy, B
Old England Hotel
Parnell, B & Campbell R
Sametamria, J
Sir Henry Barkly Hotel
Stubbs, C & C
Waddell, A

$101 - $300
Blich, F & S
Candy, B
Carey, S & B
de Gruchy, D
De Winter, L
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Tabak, L
Tatasciore, G
The Jack & Ethel Goldkin Foundation
Trans-Tasman Business Circle
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Less than - $100
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Bare, NR
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Bauer, M
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Beer, S
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Di Roberto, L
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