Medical research: Our greatest renewable resource.
Medical research is one of Australia's greatest renewable resources. Long after the mining boom has come and gone, future generations will be reaping the rewards of the investments that we make today.
Every year, around 2,000 Australian science graduates embark on a PhD. These students undertake pioneering research over a period of three to four years, supported by dedicated and world-class teams of researchers and support staff.

After their PhD, many of these now well-trained and highly sought-after graduates travel overseas with their newly minted degree in hand, to carry out the first component of their post-PhD training, known as ‘the postdoc’.

**PhD student**
3-4 years of study following a 4 year undergraduate degree.

**Learning the ropes**
Michelle Ashton is in the third year of her PhD in SVI’s Immunology and Diabetes Unit.
While overseas, they are expected to prove themselves by publishing a number of papers in prestigious journals; a difficult feat, considering they also have to embark on a new research theme and adapt to life in a new country.

After this period, and if they have navigated all this successfully, they may choose to return home, bringing with them the skills and expertise garnered in their time abroad.

Postdoctoral Fellow
2-3 year stints, usually in one or two different places, often overseas.

Finding her feet
Rachelle Johnson started her first postdoc at SVI in 2011 after completing her PhD at Vanderbilt University, Tennessee.
Now, assuming they haven’t fallen by the wayside, having been tempted by better and more secure funding in a parallel industry, or decided that other careers are more sympathetic to those with a young family, they will enter a demanding grants’ cycle that will continue throughout their careers.

Leader, small research team
Making his mark
Andrew Deans spent 5 years in London at Cancer Research UK before returning to Australia last year.
Every three to five years they will have to apply for funding for their research, knowing that the average success rate is dismally low. Assuming they are able to maintain funding for their experiments and staff, they are themselves assessed every 6 years to see if they have performed well enough to be granted a salary, which is, in a chicken and egg fashion, contingent on them being successful gaining funding for their research.

Sound a bit tedious?

Now imagine that one of these researchers identifies how cancer cells evade the body’s defences: a discovery which allows the development of a new drug against breast cancer.
Emeritus Professor
Training
Australia’s future

Prof Jack Martin continues to make an extraordinary contribution to the advancement of knowledge, in his role both as a researcher and as a mentor to his more junior colleagues.

Medical research: Australia’s greatest renewable resource.

Those who manage to hurdle the difficulties and approach the end of their careers still enthused about the possibility of discovery and invigorated by the challenges, in turn become a source of great inspiration for a whole new generation of medical researchers.

Or whose studies lead to the development of a drug that enhances cognitive function, allowing people previously affected by dementia to live out their lives sharp-witted, rather than in an intellectual fog.

Or is involved in a program which facilitates transplantation of insulin-producing cells into people with type 1 diabetes, allowing recipients to live independently for the first time in years. This is why medical research continues in this country, not because of the monetary rewards, and certainly not because of job security, but because of a greater promise: improving health and saving lives.

Those who manage to hurdle the difficulties and approach the end of their careers still enthused about the possibility of discovery and invigorated by the challenges, in turn become a source of great inspiration for a whole new generation of medical researchers.

Medical research: Australia’s greatest renewable resource.

Or whose studies lead to the development of a drug that enhances cognitive function, allowing people previously affected by dementia to live out their lives sharp-witted, rather than in an intellectual fog.

Or is involved in a program which facilitates transplantation of insulin-producing cells into people with type 1 diabetes, allowing recipients to live independently for the first time in years. This is why medical research continues in this country, not because of the monetary rewards, and certainly not because of job security, but because of a greater promise: improving health and saving lives.
This is SVI
SVI is an independent institute conducting medical research into the cause, prevention and treatment of diseases that are common and have serious effects on health. We strive, through our research, to help alleviate the enormous financial, emotional and physical impacts of these diseases on individuals, their families and the community.

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

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

Our mission
To carry out high-quality biomedical research in order to make discoveries that will improve the health of the community by prevention or better treatment of common diseases that cause premature death or reduced quality of life.
<table>
<thead>
<tr>
<th>Page</th>
<th>Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>46</td>
<td>Cytoskeleton and Cancer Unit</td>
</tr>
<tr>
<td>47</td>
<td>Pharmacogenomics Unit</td>
</tr>
<tr>
<td>49</td>
<td>Invasion and Metastasis Unit</td>
</tr>
<tr>
<td>51</td>
<td><strong>Infectious Disease</strong></td>
</tr>
<tr>
<td>53</td>
<td>NRL</td>
</tr>
<tr>
<td>55</td>
<td>Students at SVI</td>
</tr>
<tr>
<td>57</td>
<td>SVI Director and Chair Report</td>
</tr>
<tr>
<td>59</td>
<td>2011 Highlights</td>
</tr>
<tr>
<td>63</td>
<td>SVI Board of Directors</td>
</tr>
<tr>
<td>65</td>
<td>SVI Foundation Chair Report</td>
</tr>
<tr>
<td>66</td>
<td>SVI $10,000 Discovery Fund</td>
</tr>
<tr>
<td>67</td>
<td>SVI Foundation Board</td>
</tr>
<tr>
<td>69</td>
<td>Research Achievements</td>
</tr>
<tr>
<td>81</td>
<td>Organisational Chart</td>
</tr>
<tr>
<td>82</td>
<td>SVI Staff, Associates and Students</td>
</tr>
<tr>
<td>84</td>
<td>SVI Committees</td>
</tr>
<tr>
<td>87</td>
<td>Financial Report</td>
</tr>
<tr>
<td>91</td>
<td>Private Donors, Bequests and Foundations</td>
</tr>
<tr>
<td>93</td>
<td>Jack Holt Society</td>
</tr>
</tbody>
</table>
Five notable discoveries of 2011

From understanding how the body responds to obesity, to the complex relationship between the blood and bone, 2011 was the year of interactions. The papers described here were the result of profound curiosity about cellular cause and effect and reflect SVI’s deep collaborative spirit.
Dr Jon Oakhill and colleagues turned their field on its head in 2011, with a paper in the prestigious journal Science. Jon’s research focuses on the protein AMP activated protein kinase (AMPK): the body’s energy gauge.

Jon explains, “In the field, it was always believed that the signal for our body’s cells to recharge their energy through AMPK occurred only after all the energy had been used up – like thinking that you could only refill your car’s petrol when the tank is completely empty. We showed that an intermediate energy breakdown product, called ADP, can also trigger AMPK to become active – a signal for filling up when the tank is only half full, so to speak.”

This research further uncovers the mechanisms that lie behind the health benefits of exercise and has important implications for the fight against obesity.
Many know the hormone erythropoietin, or Epo, because of its use as a performance-enhancing drug in cycling. By increasing the rate of red blood cell production, Epo increases oxygen absorption, reduces fatigue and improves endurance, but its use has other, less desirable effects.

Sofie Singbrant, working in the Stem Cell Regulation Unit with Carl Walkley and colleagues published a paper in 2011 in the journal Blood, showing that increased levels of Epo in mice can cause a loss of bone mass, and have unexpected effects on the immune system.

While this work has some relevance to certain elite athletes trying to cheat the system, more importantly, it may also impact on the treatment of cancer and anaemia, where Epo is used to increase red blood cell numbers.
"They were less inclined to exercise and more tired when they were made to do so." Sound familiar? In fact, SVI PhD student Hayley O’Neill is not talking about the reason that Australia is facing an obesity epidemic, but about the ‘lazy’ mice upon which she has focused her PhD studies.

In collaboration with Greg Steinberg at McMaster University in Ontario, Hayley and colleagues studied mice that were lacking a protein called AMP-activated protein kinase (AMPK) in their skeletal muscle.

AMPK is an incredibly important protein: it regulates the body’s use of energy by controlling the burning and storage of lipids and sugar. It is a major focus in the pharmaceutical industry because of its potential as a treatment for type 2 diabetes and obesity.

Hayley explains, “Our studies show that while AMPK was not required when the mouse was at rest, it was essential during exercise. This means that AMPK plays a critical role in regulating metabolism in muscles.”

Hayley says that while the research does not mean that we can blame our genes for our weight, it does explain the importance of AMPK in exercise and will help the researchers reveal the secrets of this important protein.
Heart disease is the leading cause of death in men and women. Once they come to hospital with symptoms, women have a worse prognosis than men. Associate Professor Jock Campbell showed in 2011 that differences between the structure of male and female hearts may contribute to this.

In collaboration with the cardiac surgeons at St. Vincent’s Hospital, Jock obtained small pieces of heart muscle from patients undergoing heart operations. When he compared the small blood vessels in heart muscle from men and women under the microscope he found, surprisingly, that the walls of women’s small blood vessels were thicker than men’s.

Jock says, "We know from other studies that blood vessels with thicker walls are more likely to constrict and limit blood flow. The shape of the blood vessels in women may reduce the supply of oxygen and nutrients to the heart muscle. This may result in chest pain and heart attacks, even when the woman’s coronary arteries appear to be free of disease."

A more thorough understanding of how the differences between the male and female heart affect disease vulnerability will help to reduce death from heart disease.
Dr Nirupa Sachithanandan is interested in a specific type of white blood cell that, until recently, has been relatively overlooked. Called a macrophage, the cell has traditionally been thought of as the cell’s garbage collector (loosely speaking, its name means ‘big mouth’) – these hungry white cells were first identified as scavengers of foreign invaders such as bacteria. However, it has recently become clear that, among other things, they are involved in the body’s response to obesity.

Nirupa’s PhD focused on the role of a family of proteins called the SOCS proteins in metabolism. These proteins acts as stop signs, helping to control signals that are relayed via chemical messengers called cytokines, which play an important role in diseases such as cancer and diabetes.

Working with her colleagues in the Immunology and Diabetes Unit, in 2011 Nirupa showed that mice lacking a member of the SOCS family, called SOCS1, in their macrophages were more sensitive to certain chemical signals that are increased in obesity. This indicates that SOCS1 plays an important role in protecting against the negative effects of obesity.

This research may lead to new strategies for the treatment of type 2 diabetes.
The 1990s saw the emergence of drugs that were designed based on knowledge of the three-dimensional structure of proteins. One of the first of these was a drug to treat the influenza virus, which was based on results from Australian research. Since then, research into protein structure has resulted in drugs for a range of conditions, including cancer, infectious disease and neurological disorders.

Rendering of the three-dimensional structure of the common cold virus. Researchers have crystallised the rhinovirus protein, diffracted X-rays off its surface and used the resulting diffraction pattern to determine the protein's three-dimensional structure. Using this knowledge, researchers can design molecules to interact with the protein, like designing a key based upon knowledge of a lock's structure (Image courtesy of Mike Kuiper).
In addition to contributing to the structure of the cell, proteins also act as molecular engines, controlling all of the body’s functions. Their actions are diverse and complex and are dictated by their precise three-dimensional (3D) structure.

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

The research in the Structural Biology Unit involves proteins implicated in cancer, brain disease and bacterial and viral infections.

A new drug for a common cold – nothing to sniff at

Rhinoviruses cause the majority of cases of the common cold as well as being responsible for sometimes severe exacerbations of underlying illnesses such as asthma, cystic fibrosis and chronic obstructive pulmonary disease. Rhinovirus infections are also associated with fatalities in immunocompromised patients such as transplant recipients. Although there is a clear medical need, the difficulties in developing a specific therapeutic against the human rhinovirus (HRV) have become almost proverbial, with the lack of a ‘cure for the common cold’ being used to highlight perceived flaws in scientific and medical progress.

The Australian Biotechnology company Biota has developed a potent, orally available rhinovirus inhibitor, BTA798, which has progressed to phase IIb clinical studies in humans.

As confirmation of the mechanism of action of BTA798, the atomic structure of HRV2 in complex with BTA798 has been determined by X-ray crystallography. The compound occupies a site in the VP1 protein usually filled by a lipid-like molecule known as pocket factor. Identification of the residues comprising the BTA798 binding pocket highlights the high degree of conservation between the large number of HRV serotypes and species and supports the expectation of broad-spectrum activity for BTA798 against other enteroviruses, including polio. Our work on rhinovirus crystallography is in close collaboration with Biota.

Targeting inflammatory diseases

3’,5’-Nucleotide phosphodiesterase family 4 (PDE4) have been identified as therapeutic targets in a variety of conditions, particularly inflammatory diseases. While numerous compounds have not advanced past the clinic, Roflumilast (Daxas®, Nycomed) was recently launched in Europe and North America for the treatment of chronic obstructive pulmonary disease. The side effect profiles of many PDE4 inhibitors, which are related to the archetypal compound rolipram, have triggered interest in the development of novel chemotypes that may exhibit an improved therapeutic window.

We serendipitously identified a novel class of PDE4 inhibitor while searching for antagonists of the parathyroid hormone-related protein (PTHrP) receptor. A series of six thiophene derivatives were identified as PDE inhibitors, and showed comparable inhibition to rolipram. Further compounds were synthesised with the most potent having an IC50 of approximately 20 nM. Crystallographic studies of PDE4D2 complexed to four of these compounds revealed the atomic details of how they inhibit the enzyme and provide a structural basis for explaining a structure-activity relationship for this compound class.

This work is in collaboration with SVI’s Bone Cell Biology and Disease Unit (in particular Jack Martin and Pat Ho) and with Phil Thompson at the Monash Institute of Pharmaceutical Sciences.
In 2011 Michael Parker was awarded one of Australia’s most prestigious awards for medical research, the Ramaciotti Medal for Excellence in Biomedical Research. This award was made for outstanding discoveries in experimental biomedical research that have had an important impact on biomedical science. Michael says, “By determining three dimensional structures of medically important proteins we can improve our understanding of how each protein works and contributes to disease. It was a great honour to be awarded this medal, which also highlights the impact structural biology has had on Australian medical research.”
Type 1 diabetes is one of the most common chronic diseases in children, occurring more frequently than cancer, cystic fibrosis, multiple sclerosis and muscular dystrophy. More than 140,000 Australians live with type 1 diabetes and around six more are diagnosed every day.
TYPE 1 DIABETES

THE DIFFERENCE BETWEEN A HEALTHY PERSON AND SOMEONE WITH TYPE 1 DIABETES LIES IN A TEASPOONFUL OF CELLS.

That crucial teaspoonful contains the beta cells – the cells whose job it is to produce insulin, which regulates the levels of sugar in the blood. The inability to do so means that those diagnosed with type 1 diabetes have to regularly monitor their blood glucose levels, inject doses of insulin to maintain those levels and have a greater risk of complications such as kidney disease, nerve damage, blindness and heart disease.

People get type 1 diabetes because their body’s own immune system, normally responsible for protecting them from pathogens and disease, has gone awry, and mistakenly targeted and directed the killing of the beta cells.

No-one knows why the immune system of some people mistakenly attacks their own cells, and no-one yet knows exactly how the cells are killed or which genes are involved. Methods have been established to replace the cells, but these remain imperfect.
Researchers in SVI’s Immunology and Diabetes Unit focus on the fundamental questions in type 1 diabetes: which genes are involved, how the insulin producing cells are killed, why the immune system attacks them in the first place, and how to develop better treatments for people with the disease.

**Regulating diabetes with TNF blockade**

There has been a lot of interest in the action of chemicals, called cytokines, made by the immune system and how they contribute to development of type 1 diabetes. Mice that lack the receptor for a cytokine called tumour necrosis factor (TNF) are completely protected from diabetes. We sought to determine the mechanism of this protection. Our results show that TNF is not directly required for beta cell killing, but mice lacking receptors for TNF had an increased number of a subset of T cells called regulatory T cells. We showed that the increased number of these cells leads to suppression of the immune cells that cause diabetes. Our study suggests blocking TNF may be beneficial in increasing the function of regulatory T cells and suppression of type 1 diabetes.

**Understanding how beta cells are killed – solving a cell death puzzle**

Type 1 diabetes is caused by death of insulin-producing pancreatic beta cells. One of the molecules that may kill beta cells is the Fas death receptor, which causes cell death after binding to Fas ligand on immune cells. While some reports suggest Fas is an important killing mechanism in diabetes, others do not, and this discrepancy has often been due to use of inadequate models to study this problem. We previously identified a molecule called Bid that is specifically turned on by Fas signalling in beta cells but not immune cells. Deficiency of Bid does not affect development of anti-beta cell immunity, but does prevent FasL-induced beta-cell death. We studied diabetes development in Bid-deficient mice to determine whether Fas is an important killing mechanism. These mice developed type 1 diabetes and insulitis similarly to wild-type mice, indicating that beta-cell death in type 1 diabetes can proceed without Fas-induced killing mediated by Bid.

**Gene shuffling events point to a new gene contributing to diabetes**

Type 1 diabetes is a complex genetic disease. Because the human population is diverse, we used selective mating of mice that develop diabetes to map one of 25 genomic regions associated with this disease. Notably, a unique chromosome feature, called a recombination hotspot, resulted in an unusual shuffling of DNA segments in these mice and pinpointed a novel gene for which genetic variants were associated with increased risk for type 1 diabetes. Although the function of this gene is currently unknown, it is turned on in immune cells that participate in the destruction of insulin-producing beta cells. Ongoing studies aim to determine the function of this gene and how it contributes to type 1 diabetes in humans.

**Interrogating T cells from the scene of the crime**

Type 1 diabetes develops when T-cells specific for the insulin-producing cells infiltrate the islets and kill them.
However, the antigens recognized by pathogenic T cells in type 1 diabetes are poorly understood. Identifying these antigens is of vital importance because it will lead to new antigen-based therapies; better assays to measure pathogenic T cells in blood; and a deeper understanding of the pathogenesis of human autoimmune diseases. We are the first in the world to isolate T-cell clones from the residual islets of people with type 1 diabetes. To date we have isolated T cells from four deceased organ donors who suffered from type 1 diabetes. Currently we are using these clones to identify the beta-cell antigens recognised by the T cells that cause type 1 diabetes.

In 2011, researcher Helen Thomas was awarded the Juvenile Diabetes Foundation/Macquarie Group Foundation Diabetes Research Innovation Award, recognizing research from her lab that furthered understanding of how insulin producing cells live and die. Helen says, “Understanding how beta cells are killed in type 1 diabetes is very important if we are to stop the immune system response that leads to their death. Importantly, the molecules identified in our studies have unique structure and function, making the design of drugs for their inhibition possible.”
Around 275 Australians are diagnosed with diabetes every day, the majority of them with type 2 diabetes. Diabetes costs Australia over $3 billion per year. Someone in Australia dies from a heart attack every 10 minutes. Heart disease is Australia’s number one killer, with one in five people developing it in their lifetime. Its cost in human terms is impossible to quantify, but its economic costs are in excess of $14 billion annually.

Tracing of continuous blood pressure measurement in laboratory rats. The ability to accurately measure blood pressure, in addition to heart rate and other parameters, in conscious, unrestrained laboratory animals is of great value to researchers investigating new treatments for high blood pressure and heart disease that commonly occur in people with type 2 diabetes.
MUCH HAS BEEN MADE OF AUSTRALIA’S OBESITY EPIDEMIC.

And with reason. More than 67% of Australians are overweight and more than 18% are classified as obese. In the last 20 years, Australia’s overweight rate has risen faster than that of any other developed country and the increases show no sign of abating.

Obesity is a key risk factor for type 2 diabetes and heart disease, as well as for osteoarthritis and a number of cancers.

Type 2 diabetes is a disorder of the metabolism. People with the disorder do not produce enough insulin, which results in excess sugar in their blood. When combined with muscles that have become resistant to the effects of insulin, type 2 diabetes results.

Heart disease is the leading cause of death of people with diabetes.

In obese and overweight people, the natural control mechanisms that maintain the body’s energy balance are impaired. For these patients, new treatments may well focus on an enzyme called AMP-activated protein kinase (AMPK). Simply put, when needed, AMPK passes a ‘make more energy’ message to the cell. By doing so, it regulates the burning and storage of fats and sugars, and affects the level of sugars and cholesterol in the blood stream.

Researchers at SVI are trying to find new ways of fighting the effects of Australia’s obesity epidemic by focusing on the body’s control of energy and by finding new ways of identifying people at risk of developing heart disease.
**Protein Chemistry and Metabolism**

Research in the Protein Chemistry and Metabolism Unit is concerned with the control of the body’s energy metabolism via an enzyme called AMP-activated protein kinase (AMPK).

**AMPK and obesity**
Individuals who are obese are frequently insulin insensitive, putting them at increased risk of developing type 2 diabetes. The accumulation in adipose tissue of inflammatory macrophages is a feature of obesity-induced insulin resistance. Genetic deletion of the AMPK β1 subunit in mice reduced macrophage AMPK activity and mitochondrial content, resulting in suppressed rates of fat oxidation. β1-/- macrophages displayed increased levels of diacylglycerol and markers of inflammation. The effect of AMPK β1 loss in macrophages was confirmed in vivo by transplantation of bone marrow from WT or β1-/- mice into WT recipients. When challenged with a high-fat diet, mice that received β1-/- bone marrow displayed enhanced adipose tissue macrophage inflammation and liver insulin resistance compared with animals that received WT bone marrow. Thus, AMPK activation and increasing fat oxidation in macrophages may provide a new therapeutic approach for the treatment of insulin resistance.

**Activating AMPK**
AMPK is activated by metabolic stress and restores ATP levels by switching off anabolic and switching on catabolic pathways in cells. We find that AMPK is activated primarily by rising ADP levels and not by AMP, as previously thought. AMPK activation is dependent on ADP-controlled phosphorylation of Thr172 on its activation loop. AMPK embodies many features of an adenylate charge regulatory system envisaged by Atkinson, where anabolic and catabolic pathway regulation is modulated by adenine nucleotide ratios. In this way AMPK functions as an Adenylate Charge-Regulated Protein Kinase.
While fat cells have always taken the blame for obesity, recent research suggests that a type of white blood cell called a macrophage may be an equally important contributor. In 2011, SVI postdoctoral researcher Dr Sandra Galic showed that a version of AMP kinase is involved in the response of blood cells called macrophages to high fat levels. The researchers found that mice were more sensitive to the effects of a high fat diet when AMPK was removed from their blood cells. This research raises the exciting possibility that AMPK activating drugs may be able to treat other diseases where macrophages play a role, such as atherosclerosis and rheumatoid arthritis.
The goal of researchers in SVI’s Molecular Cardiology Unit is to find ways to improve the cardiovascular health of Australians.

Impact of diabetes and obesity on the heart

Both obesity and diabetes increase the likelihood of an individual developing heart disease, and the current epidemics of obesity and diabetes mean that more people will develop heart disease. Obesity and diabetes increase the development of coronary artery disease, resulting in more heart attacks. In addition, people with obesity or diabetes are more likely to develop heart failure. Heart failure is a condition where the heart is unable to pump sufficient blood for normal daily activities. Obesity and diabetes reduce the ability of the heart to pump blood by causing the heart muscle to take longer to fill with blood between each heart beat, a condition that progresses to heart failure. We are investigating how obesity and diabetes affect the muscle of the heart. Previous studies of animals with diabetes suggested that diabetes increases the amount of fibrous tissue in the heart, and also increases the size of heart muscle cells and changes the small blood vessels of heart muscle. However, our studies of small pieces of heart muscle obtained from patients having heart surgery showed that diabetes does not have these effects in patients.

We are therefore investigating alternative mechanisms for the abnormal heart muscle function in people with diabetes. This research is only possible because patients agree to the surgeon taking a small piece of their heart muscle for this research during their heart operation. Understanding the reasons why obesity and diabetes affect heart muscle will assist in the development of new treatments to protect people with obesity and diabetes from developing heart failure.

Getting more benefit from new drugs

A new drug called aliskiren was recently approved for the treatment of high blood pressure. When we studied the effects of aliskiren in rats we found that it increased the amount of a protective molecule in the heart called bradykinin. This finding was totally unexpected and we are investigating whether aliskiren can protect the heart from heart attacks and from heart failure. Thus, aliskiren offers the possibility of benefits for patients additional to those provided by the lowering of high blood pressure.
Since 2005, Associate Professor Jock Campbell has been collecting a ‘bank’ of heart biopsies from people having open-heart surgery. Researchers in the Molecular Cardiology Unit are using the bank to get a clearer picture of what happens to the heart muscle of people with coronary artery disease, and with the deterioration of heart function that accompanies obesity, diabetes and ageing. This research would not be possible without the active participation of individuals undergoing open heart surgery, who consent to the surgeon taking a biopsy of their heart muscle. For Jock, it is both an honour and a privilege to collaborate with the community in this research.
Over 2 million Australians are affected by osteoporosis. Every 6 minutes, someone is admitted to an Australian hospital with an osteoporotic fracture. The direct health costs of osteoporosis are estimated at $1 billion per year.
While arthritis is often considered a disease of old age, it is not a natural part of ageing: in fact, more than 60% of the 3.85 million Australians affected by arthritis are of working age.

**OSTEOPOROSIS AND ARTHRITIS**

Demolition crews, made up of cells called osteoclasts, are blasting away at old bone, while builders, called osteoblasts, are replacing the old material with brand new, strong bone.

Just like a building site, specialist teams are also needed. These include cells called osteocytes, which, among other things, can direct where the new bone is laid. There are also ‘outside tradies’ involved – nerve cells and special types of blood cells – which have their own special jobs to do.

And communication is essential, just as it is in the construction industry. If the demolition crew destroy more bone than they should they can weaken the whole structure, which leads to osteoporosis. Arthritis results if the ends of the bones wear badly, or if immune cells mistakenly attack cells at the joints.
Region-specific control of bone formation by blood vessel formation

Bone formation is a process carried out exclusively by stromal-derived osteoblasts. In contrast, bone and cartilage destruction are carried out by osteoclasts, cells formed from haemopoietic precursors. Both processes are needed to produce a skeleton that is strong where it needs to be, but light where extra strength is not needed. In 2011, researchers in the Bone Unit discovered that one factor, called leukemia inhibitory factor (LIF), is needed to control both of these processes, but in a region and age-specific manner. In growing bone, such as the bones of children, LIF is produced by cartilage cells at the growing ends of the bones. There, LIF controls osteoclast formation by regulating the formation of blood vessels in that region. In contrast, in adult bone, the role of LIF in controlling osteoclast formation and vascularisation is redundant.

In this context, LIF regulates the commitment of osteoblast precursors, shifting their differentiation towards osteoblast differentiation rather than adipocyte (fat cell) formation.

Regulation of osteoclastic genes by oncostatin M in the context of inflammatory arthritis

Rheumatoid arthritis (RA) is an inflammatory joint disease characterised by inflammation of the joint lining and destruction of articular cartilage and bone. One focus for our studies is to identify factors that mediate bone destruction in inflammatory joint diseases like RA; one such factor is the cytokine oncostatin M (OSM). Using a mouse model of RA, we have identified increased expression of OSM and its receptors in RA-affected knee joints, particularly in cell types that contribute to joint destruction such as synovial fibroblasts. In isolated synovial fibroblasts, OSM, acting via its specific receptor, OSMR, potently induces expression of the pro-inflammatory and pro-bone resorption cytokine IL-6 and the pro-resorption cytokine RANKL. OSM also acts in concert with the major pro-inflammatory cytokines IL-1 and TNF, to further increase IL-6 and RANKL expression in these cells, as well as the IL-1 receptor, thereby amplifying IL-1 effects. Together our findings highlight the potential for OSM to contribute to both inflammation and joint destruction in RA.
2011 was a red-letter year for PhD student Farzin Takyar. Farzin’s work on the role of signalling molecules called ephrins in bone received awards from the key international bone research societies. Farzin showed that when a particular ephrin was inhibited, the number of bone forming cells on the surface of the bone increased, but strangely, the amount of bone did not increase. In fact, when combined with a known treatment for osteoporosis, the amount of bone present was actually reduced because more bone destroying cells were formed. Farzin and his colleagues are continuing this research, to determine what it means for ephrin-based therapies in the future.
In 1960, a child diagnosed with the most common type of childhood leukaemia had a less than 5% chance of survival. Today, about 85% of children with this type of leukaemia live more than 5 years. However, around 1,400 Australians still die of leukaemia every year.
Stem cells are how we all begin: a primitive cell with the potential to develop into the some 200 diverse cell types that make up our bodies. It is now recognised that adult stem cells also exist within tissues, where they play a role in normal maintenance and repair.

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

A complex series of steps must occur in order for a stem cell to become a specialised blood cell. The exact mechanics of how this happens is not yet fully understood. However, it is known that if this process goes awry, cancer can develop. These cancers, which affect the blood or bone marrow, are known as leukaemia.

By understanding how stem cells work, researchers hope to be able to understand their role in disease and develop new treatments.

Osteosarcoma is the most common primary tumour of bone and is normally diagnosed in adolescence. While treatment for the primary cancer has improved survival rates, around 70% of patients diagnosed with metastatic or recurrent osteosarcoma do not survive the disease.
Stem Cell Regulation

Understanding how myelodysplastic syndromes occur
Myelodysplastic syndromes (MDS) are a heterogeneous subset of blood cell diseases that frequently progress to acute myeloid leukaemia. The underlying causes of MDS are poorly understood and as a result there are no current curative therapies. We have generated a mouse model of MDS that completely recapitulates the human disease. We are using this model to delineate the key causes of the disease. This will allow us to identify better therapies for patients with MDS.

Models of osteosarcoma
We have developed and characterised a new model of the most common type of bone cancer, called osteosarcoma. This cancer is most common in children, and patient outcomes have not improved for many years. We now have developed models of human osteosarcoma that represent the different types of tumours seen in patients. We are seeking to use these models to test and identify new approaches to treating this cancer.

Adult stem cells are the focus of research in the Stem Cell Regulation Unit, where researchers aim to understand their influence on diseases of the blood and bone, including cancers such as leukaemia and osteosarcoma.
In late 2011, a team consisting of SVI researchers Associate Professor Louise Purton, Dr Carl Walkley and Professor Michael Parker were awarded a $2 million grant from the Australian Cancer Research Foundation (ACRF). The new ACRF Rational Drug Discovery Centre will provide Australian cancer researchers with access to early stage drug discovery tools, bridging the gap that exists between academia and industry in the drug discovery pipeline. Louise says, “Every year, 100,000 new cases of cancer are diagnosed in Australia. While survival rates have increased significantly over the past 20 years, 36,000 Australians die each year of the disease. Our aim is to improve these statistics, and the ACRF funding gives us the best chance to do so.”
The Haematology and Leukaemia Unit focuses on understanding how blood cells mature and how leukaemia disrupts normal blood cell maturation.

The responsible genes

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 using a retroviral cDNA library screening method in primary mouse cells. Additionally, we are creating leukaemia/lymphoma mouse models of T cells and other blood cell lineages using retroviral overexpression. We use multiparameter flow cytometry and cell sorting to analyse these models.

The responsible cell

With the advent of specific monoclonal antibodies and high speed flow cytometry, it has now become possible to isolate very small subsets of bone marrow subpopulations that are responsible for development of all the different blood lineages. We are using this technology to ultimately identify the leukaemic stem cell (LSC) and the leukaemia-initiating cell (LIC) in mouse models of lymphoma and myeloid leukaemia. Once identified, the LSC and/or the LIC will be molecularly compared to its normal counterpart to identify the genes that allow the LSC or LIC to self-renew and propagate disease. These genes can ultimately be used as targets to design drugs that are more specific and have less side effects than current therapies.
Sita Dewamitta followed a long road to end up at SVI. She completed her medical degree at Colombo University in Sri Lanka and then went on to do a PhD at the University of Kyoto in Japan. During her PhD studies she became interested in how the immune system develops, and how this development may go wrong in leukaemia. This curiosity led her to work with David Izon in SVI’s Haematology and Leukaemia Unit.
One in two Australians will be diagnosed with cancer in their lifetime and over 100,000 new cases are diagnosed every year. Although survival rates have increased significantly over the past 20 years, cancer remains a leading cause of death: every year over 36,000 Australians die of the disease.
THE 30 TRILLION CELLS IN THE HUMAN BODY ALL ARISE FROM A SINGLE FERTILISED CELL.

Even when we are fully grown, these cells are in a constant process of growth, death and renewal, allowing, for example, our bodies to respond to injury, recover from illness, our hair to grow and our weight to fluctuate.

Most of the cells in the body contain DNA, which acts as a cellular blueprint. DNA is a series of chemical “letters”, arranged in units called genes. Only certain genes are active in each cell, but each cell has a full copy of the entire DNA. So before a new cell can be made, all of the DNA in the parent cell must be copied.

Considering that each cell that is generated must copy around 3 billion letters of DNA, it is not surprising that sometimes the copies are not 100% accurate. In most cases this makes no difference; however, if a mutation occurs in a gene whose job it is to instruct a cell to divide, or in one that tells a cell to stop dividing, uncontrolled cell growth may occur.

When this occurs, a mass of cells develops. The mutated cells continue to grow, accruing further mutations and cleverly subverting nearby blood vessels, giving them the ability to grow even faster. At this point, cells can detach from the growing mass, make their way onto the body’s ‘highways’ – the bloodstream or lymph – and find another site where they can grow, resulting in secondary tumours.

If attempts to eradicate them with radiation, surgery and chemotherapy fail, the cancer cells are eventually so successful that they ironically cause the death of the organism upon whose survival they are dependent.
### A new molecular function for ASCIZ

The zinc-finger protein ASCIZ was originally cloned in our laboratory as a novel DNA base damage response protein, but we recently found that “knock out” mice that lack the ASCIZ gene die during late gestation with multiple organ development defects, most notably complete absence of lungs. This phenotype is due to a separate DNA damage-independent function of ASCIZ as a transcription factor. We have now found that ASCIZ plays a key role in the regulation of the dynein light chain DYNLL1. Absence of ASCIZ in human, mouse or chicken cells leads to >10-fold lower DYNLL1 levels. ASCIZ binds directly to the DYNLL1 promoter and can activate its expression in a Zinc-finger dependent manner. Interestingly, ASCIZ also contains at least 10 DYNLL1-binding sites in its transcription activation domain. This enables ASCIZ to sense cellular DYNLL1 levels, and increasing DYNLL1 binding to these sites progressively inhibits ASCIZ’s transcriptional activity in a unique feedback mechanism to keep free DYNLL1 levels stable. In addition to the dynein motor complex, DYNLL1 also regulates some 100 other proteins involved in diverse cellular processes.

A key aim of our future work is to determine which DYNLL1 targets are involved in the developmental defects of ASCIZ knock-out mice.

### Regulation of yeast checkpoint kinases

The yeast Rad53 kinase (similar to the human cancer-associated Chk2 kinase) plays key roles during normal DNA replication and in response to exogenous DNA damaging agents. We recently found that Rad53 prevents spontaneous DNA damage during normal S phases via an unexpected non-catalytic scaffold function that involves phosphorylation of its N-terminal SQ/TQ cluster. In addition, we are also exploring the fine molecular details of how Rad53 activation through phosphorylation is regulated under physiological conditions in vivo.
2011 saw PhD student Sabine Jurado’s hard work pay off with an article in the Journal of Biological Chemistry. Sabine’s PhD focuses on a protein called ASCIZ, which was originally discovered in the Unit. The group has shown that ASCIZ is involved in the cell’s response to DNA damage and it also plays a crucial role in the development of the lungs. Sabine showed that ASCIZ controls the production of another protein called DYNLL1. DYNLL1 is a molecular scaffold, which brings proteins into close proximity with each other so that they are able to perform their functions. The results indicate that the absence of lungs in animals without the ASCIZ protein may be due to insufficient levels of DYNLL1.
Genome Stability

The Role of Fanconi genes in breast and ovarian cancer predisposition
Several genes have been shown to cause a familial predisposition to breast cancer when one copy is inherited. These include multiple genes such as BRCA2/FANCD1 that can also cause the rare disorder Fanconi anaemia, when two copies are inherited. Familial breast cancer predisposition, and Fanconi anaemia both result from decreased ability to repair damage to DNA. We aim to understand how familial breast cancer and Fanconi anaemia are linked, by closely studying these DNA repair signalling mechanisms. We will determine how FANC genes contribute to cancer protection, and highlight potential strategies for treatment of breast cancer by specifically targeting this genetic pathway.

Structure and function of large DNA repair complexes
Many of the DNA repair functions of proteins involved in protecting us from cancer are not clearly defined, as the proteins participate in large multi-subunit protein complexes. We are using a cutting-edge approach to co-express these proteins together in large quantities so that they can be purified and analysed in vitro as intact complexes. Using this technique we have purified a four protein complex essential for homologous recombination in human cells and have determined its biochemical properties and structure using single particle electron microscopy. We are now working on the purification of other large DNA repair complexes for similar analysis.

We combine this work with a series of cell-based approaches such as analysis of chemotherapy toxicity, protein interaction techniques and genetic rescue of cell lines from patients with DNA repair defects. This combined approach allows us to create a better understanding of the contribution of each gene product to the essential cellular DNA repair function. Having a large-scale source of purified recombinant enzymes will also allow us to search for the inhibitors or activators that are required for the clinical targeting of DNA repair pathways in cancer treatment.

Researchers in the Genome Stability Unit focus on a number of rare familial cancer syndromes, hoping that the lessons learnt will give them new insights into the cause of more common cancers.
Dr Andrew Deans arrived at SVI in 2011 to head the new Genome Stability Unit. He did his PhD at the Peter MacCallum Cancer Centre in Melbourne and then went to London for nearly 5 years to complete his postdoctoral work in Steve West’s lab at Cancer Research U.K., one of the foremost DNA repair labs in the world. Andrew’s work focuses on two familial cancer syndromes, called Bloom’s Syndrome and Fanconi’s anaemia. The diseases are relatively rare, but have a lot to teach researchers like Andrew about the basic mechanisms of DNA repair that protect us from cancer.
Cell Cycle and Cancer

Work in the Cell Cycle and Cancer Unit focuses on the role of cell cycle proteins in the development of cancer.

Unit

Boris Sarcevic
Randy Suryadinata
Ricardo Tan
Siti Roesley

Identifying new substrates

Cyclin-dependent kinases (CDKs) promote cell cycle progression by phosphorylation of cell cycle regulators. Deregulated CDK activity results in the development of many human cancers due to increased cell division. We have isolated a protein called SAP180 which is phosphorylated by CDKs. SAP180 is related to the tumour suppressor, retinoblastoma binding protein (RBP1). RBP1 recruits histone deacetylases (HDACs) to pRb to inhibit transcription and cell cycle progression. We have demonstrated that RBP1 binds to mSIN3A and histone deacetylase 1 (HDAC1), which are transcriptional regulators. RBP1 is phosphorylated by cyclin/CDKs in vitro and on the same sites in cells during cell cycle progression. This phosphorylation disrupts RBP1 association with pRb. These results show that phosphorylation of RBP1 and pRb disrupts their association to activate transcription and cell cycle progression.

In 2011, Randy Suryadinata was one of 30 Australian researchers selected to receive funding from The Cure Cancer Australia Foundation. With this support, Randy will investigate a type of protein called pRb, which is a known tumour suppressor gene. In normal cells, pRb acts as a ‘brake’, stopping the growth of cancer cells. Before a cancer can develop, this ‘brake’ must be turned off by mutation. Randy is investigating how the protein works to inhibit the growth of tumours in normal cells, in order to be able to develop therapies for the treatment of cancer patients.
Cytoskeleton and Cancer

Researchers in the Cytoskeleton and Cancer Unit focus on the cellular cytoskeleton, which provides a scaffold for the cell’s inner workings and is involved in the spread of cancer.

Unit

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

Stopping the resistance

Neuroblastoma is the most common extracranial solid tumour in childhood and the most frequently diagnosed malignancy during infancy. Despite significant advances in understanding the genetics of the disease, the outcome for children with a high-risk clinical phenotype has improved only modestly. Most neuroblastomas initially respond to chemotherapy and local radiotherapy, however neuroblastoma frequently relapses with resistant disease, suggesting selection for drug-resistant cells during treatment. Thus, current attempts to improve the survival of patients with neuroblastoma, as well as other cancers, largely depend on strategies to target tumour cell resistance. There is therefore a need to understand the molecular mechanisms that mediate resistance to chemotherapeutic drugs. Interestingly, expression of LIMK2, a key regulator of the actin cytoskeleton, is significantly increased in neuroblastoma cells selected for their resistance to microtubule-targeted drugs. Furthermore, elevated LIMK2 expression correlates with resistance of human cancer cell lines to a wide range of chemotherapeutic drugs with different mechanisms of action, suggesting that LIMK2 may be a predictive marker of drug resistance. Despite this clear link, the signalling pathways that functionally integrate high levels of LIMK2 and anticancer drugs resistance are not fully elucidated. Therefore, the main aim of our project is to elucidate the functional role of LIMK2 in chemotherapeutic drug response in neuroblastoma cells.

Ora Bernard has spent her lifetime exploring the secrets of the cell all over the world – from Israel, to France, Canada, Switzerland and finally, Australia. Ora has focused her more recent work on investigating the role of the LIM kinase family – originally identified in her lab – in cell movement and the spread of cancer. In 2011, Ora announced that she would retire. Over her career, Ora has supervised 15 PhD students and mentored many others. While she will remain involved in her current two PhD students’ studies, she will wind down the activities in her lab, leaving a new generation to follow in her footsteps.
Researchers in the Pharmacogenomics Unit are interested in how the combination of genes and environment affect a person’s ability to fight disease.

Pharmacogenomics

Inhibiting breast to bone metastasis
Metastasis is the primary cause of mortality associated with cancer, yet the molecular mechanisms leading to metastatic spread are poorly understood. Over the past several years our laboratory has studied a number of cell-culture and animal based models of metastasis using a range of genomic profiling technologies in order to identify ‘culprit genes’ that contribute to metastasis. Using specialized genomic profiling techniques, we have established a ‘gene-fingerprint’ of metastasis which is being refined for potential application in clinical diagnosis. We have also been using a combined genomic and drug-response profiling technique to identify drugs that block the process of metastasis. Thus far, we have identified two drug molecules that are capable of inhibiting breast-to-bone metastasis in our mouse models. We are in the process of further testing these agents using our preclinical models of the disease in order to facilitate clinical trials in breast cancer patients.

New drug targets
Diabetes often leads to the development of a form of kidney damage known as diabetic nephropathy. Kidney damage in this condition is characterised by an increased accumulation of extracellular matrix (e.g., collagen) brought about by a high glucose environment. We have identified several genes that appear to play a critical role in the generation and subsequent pathological consequences of accumulated extracellular matrix. The expression of these genes may also play a role in other disease states, and potentially modulate drug activity within specific tissues that are the target of current therapies. We are collaborating with the SVI’s Structural Biology Unit to elucidate the crystal structure of one of these gene products and design specific inhibitors to block its detrimental biological activity.
Most drugs have different effects in different people. For this reason, using the one type of drug for all people with a specific disease is not optimal. Our Unit is exploring how to capture information from individual patient tissues at both the cell and DNA level in order to better rationalise therapies. In 2011, Sam Rudstein used a highly sophisticated DNA fingerprinting method on tumour cells to understand how a particular class of drug agent works and can be used for a specific subgroup of cancer patients. These types of studies pave the way for so called personalised therapies.
Invasion and Metastasis

Work in the Invasion and Metastasis Unit focuses on finding ways to halt the spread of cancer to other parts of the body.

Epithelial Mesenchymal Plasticity (EMP) in Breast Cancer
Circulating (CTC) and disseminated (DTC) tumour cells are found in the blood stream and bone marrow, respectively, of many cancer patients, but particularly breast cancer. CTC and DTC have prognostic importance and are thought to give rise to metastasis and recurrence. EMP is defined as a spectrum of changes in the shape, behaviour and motility of cells relating to embryonic development. There is increasing evidence that EMP is involved in breast cancer metastasis, and that it also defines the breast cancer stem cells that resist current therapies. We aim to determine the role of EMP in CTC and DTC and, in conjunction with the NBCF-funded EMPathy Breast Cancer Network (http://www.empathybcn.org), identify new EMP-related diagnostic, prognostic and therapeutic targets for breast cancer.

MMP13 – A key enzyme in breast cancer growth and spread
The protease MMP13 is upregulated in breast cancer and involved in the bone remodelling associated with breast cancer metastasis to bone. We have shown that a prototype MMP13 inhibitor from Pfizer delays both the growth of the primary tumour and the onset of associated bone lesions in breast cancer models. Studies in MMP13 knockout mice have confirmed that at least some of the MMP13 is from the tumour microenvironment, since both the primary growth and bone colonisation is reduced. We also found that MMP13 may be involved in the processes associated with angiogenesis.
Newly improved methods available in the Invasion and Metastasis Unit in 2011 mean that researcher Bryce van Denderen is able to study the genes that are active in the spreading cancer cells of patients with advanced breast cancer. These will help him to identify how and where some breast cancer cells ‘hide out’, evading treatment, and eventually seeding new cancer growths. With this knowledge in hand, the researchers in the group hope ultimately to be able to reduce the number of deaths from breast cancer, which kills around 2,000 Australian women each year.
The National Serology Reference Laboratory (NRL) was established in 1985 as part of the Australian Government’s HIV/AIDS Strategy, to evaluate HIV tests and adjudicate on the interpretation of HIV test results. The goal of the NRL is to support laboratories, in Australia and internationally, that perform testing for the diagnosis and management of human infectious disease.

Death rates from infectious diseases in Australia fell from 185 per 100,000 population in 1921 to six in 1995. As a proportion of all deaths, infectious diseases declined from 19% in 1921 to 1% in 1995. The decline in deaths from infectious diseases has been attributed to a range of social and demographic changes, public health measures and medical advances.
Infectious diseases were a prominent cause of death in Australia from the time of European settlement until the second half of the 20th century.

Infectious diseases range in severity from minor conditions such as the common cold, to serious illnesses such as hepatitis and AIDS, which may result in death. Death rates from infectious disease dropped dramatically over the last century, however, preventable deaths still occur in this country, particularly in indigenous Australians.

In addition, many of Australia’s neighbours, such as Papua New Guinea, still have high numbers of preventable deaths each year.
HTLV-1 Diagnosis
There are an estimated 15 to 20 million people infected with HTLV-I worldwide, including in Australia where HTLV-1 is endemic in our Central Australian indigenous communities. The cosmopolitan strains of HTLV-I from Japan, the Caribbean, the Americas and Africa demonstrate a low degree of genetic variation (0.5 to 3%). However, the Australo-Melanesian variant of HTLV-1 found in Papua New Guinea, the Solomon Islands and Australia demonstrates a highly divergent sequence, exhibiting only 92% sequence identity to the other known HTLV-1 strains. There is concern that the large sequence variation between the Australian HTLV-1 isolates and the prototype virus used in the manufacture of commercial HTLV-1 assays may result in decreased sensitivity or indeed a complete lack of detection of this virus in individuals infected with the Australo-Melanesian strain.

NRL is currently developing a real-time HTLV proviral load assay based on sequences obtained from locally sourced samples. We are also establishing an immortalised cell line harbouring the proviral DNA obtained from individuals infected with the Australo-Melanesian variant. The cells will be used to produce viral lysates that will form the basis of an “in-house” Western blot.

These assays will allow a definitive diagnosis to be made in samples from individuals infected with this variant, where the currently available diagnostic test produced indeterminate or discordant results because the divergent antigens or nucleic acid are not recognised.

WHO HIV Treatment 2.0
The Vietnam Ministry of Health (MOH) is facilitating the implementation of the World Health Organisation (WHO) HIV Treatment 2.0 program, by initiating a pilot study in two provinces. HIV Treatment 2.0 seeks to simplify the way HIV treatment is provided and to scale up access to life-saving medicines. One of the pillars of the Treatment 2.0 program is to provide point of care (POC) HIV diagnosis. In Vietnam an algorithm will be used where HIV antibody screening and confirmatory testing is performed using rapid tests.

The Vietnam office of WHO (WHO VN) has sought NRL’s advice about the implementation of HIV Treatment 2.0 and assistance with training programs for the people involved. In July, WHO VN invited NRL’s Director, Sue Best, to Vietnam to meet with stakeholders to help develop a plan for the HIV Treatment 2.0 pilot study.

Subsequently, in November, WHO VN invited NRL to return to conduct the trainer program in Vietnam and to generate the training materials required to train staff in primary health care centers conducting HIV confirmatory testing on site. During this visit, Kim Wilson (NRL) facilitated the development of the framework under which the testing will be conducted, developed the training curriculum, the training materials, the standard operating procedures and other related documents. Once implemented, NRL will provide technical support as necessary.
2011 saw the first year of funding for an NHMRC Project Grant held jointly by Lloyd Einsiedel from Flinders Medical Centre in South Australia and the NRL’s Kim Wilson. The researchers are investigating the effects of a type of virus called human T-lymphotropic virus I (HTLV-I) in Australia’s indigenous population. HTLV-I infection is very high among the indigenous peoples of Central Australia and infection is linked with a number of serious diseases, including leukaemia. The researchers are looking specifically at the role of the virus in contributing to bronchiecstasis, a type of obstructive lung disease, which is a major contributor to poor health outcomes in our indigenous population.
Students at SVI

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, structural biology, biochemistry, immunology and cell signalling, as well as clinical research into diseases including cancer, diabetes and bone disease.

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

Undergraduate Education
An Honours year at St Vincent’s Institute offers you the chance to explore a stimulating area of research guided by leading scientists. Prospective students should contact the leaders of the individual research groups to discuss potential projects. See http://www.svi.edu.au/students/phd_and_honours_projects/ for more details.

SVI Honours Programs
More information: A/Prof Louise Purton, Student Coordinator, SVI
Tel: 9288 2480 or email: enquiries@svi.edu.au
www.medstv.unimelb.edu.au/info/honours.html
Applications close on 30th November each year.

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

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

Postgraduate Education
Studying for your PhD at SVI will give you the opportunity to carry out research into major diseases under the supervision of leading Australian scientists. There are options to enrol through the University of Melbourne, Department of Biochemistry and the University of Melbourne Departments of Medicine and Surgery at St Vincent’s Hospital. Prospective students should contact the leaders of the individual research groups to discuss potential projects. See http://www.svi.edu.au/students/phd_and_honours_projects/ for more details.

SVI PhD Programs
More information: A/Prof Louise Purton, Student Coordinator, SVI
Tel: 9288 2480 or email: enquiries@svi.edu.au

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

- Australian Postgraduate Awards (APA)
- University of Melbourne, Melbourne Research Scholarships (MRS)
- University of Melbourne, Melbourne International Research Scholarships (MRS)
- NHMRC Biomedical Postgraduate Research Scholarships

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

More information: SVI Foundation Student Awards Coordinator
Tel: 9288 2480 or email: enquiries@svi.edu.au
PhD applications due: 31 December each year
Honours applications due: 31 December each year
Congratulations to the students who were recipients of SVI Foundation Student Awards in 2011, sponsored by the SVI Support Group and the SVI 1000 Club:
Anthonius Tan (Honours)
Allison Irvin (Honours)
Edward Chu (Honours)
Chen Gao (PhD)
Alvin Ng (PhD)
Suang Suang Koid (PhD)

1st year PhD student
Suang Suang Koid, supervised by Associate Professor Jock Campbell

I am from Malaysia, and I remember feeling intrigued in classes at high school when we were taught about how the biological systems in the body work. When I came to Melbourne to do my undergraduate studies, I chose to major in biomedical science. After I finished my undergraduate degree I worked for three years as a tutor at the Department of Pharmacology, The University of Melbourne. I found it very fulfilling teaching undergraduate students about research. The question I was asked most commonly was what it was like to do research. After a while, I could not resist returning to research! I started my PhD with Jock Campbell in April 2011. My PhD project focuses on the potential of a drug called Aliskiren for the prevention and treatment of cardiovascular diseases. I know there is a lot of hard work ahead of me, but I think this challenging project is really exciting because it has genuine potential to improve patient quality-of-life.

2nd year PhD student
Farzin Takyar, supervised by Associate Professor Natalie Sims and Professor Jack Martin

I did my medical degree at Tehran University of Medical Sciences in Iran and while I worked as an assistant physician for a number of years after that, I couldn’t let go of my interest in medical research. It is difficult to do research in Iran because there hasn’t been any considerable investment in infrastructure since the 1970s: for this reason most people go overseas. In fact, of my class of 180 people, only about 20 remain in Iran. And people talk about the Australian brain drain! I have been interested in bone development and disease since studying it during my medical degree, and I consider myself very lucky to have found a place in the Bone Biology and Disease Unit, working with Natalie and Jack Martin. I plan to go on to do a postdoc in the U.S. and hope one day to be able to return to Iran, where my parents are still living, and be able to work as a clinician-researcher there, maintaining the links that I have developed in Australia.

3rd year PhD student
Hayley O’Neill, supervised by Associate Professor Greg Steinberg and Professor Bruce Kemp

I have always played a lot of sport and have been interested in metabolism and exercise, so I jumped at the opportunity to do Honours in the Protein Metabolism and Chemistry Unit with Greg Steinberg, looking at the effects of an enzyme called AMP-activated protein kinase (AMPK) on insulin sensitivity in mice. That naturally progressed on to a PhD, and when Greg moved back to McMaster University in Ontario in the first year of my PhD I decided to go along with him to continue my studies. It was a steep learning curve and living overseas wasn’t as easy as I thought it was going to be, but it was a very valuable experience that most researchers wouldn’t have until they started their postdoc. I made some exciting discoveries about the role of AMPK in regulating metabolism in muscles, which has important implications for our efforts to curb the effects of obesity and type 2 diabetes. I hope to be finished writing my thesis in July and then I plan to go overseas again to do a postdoc. I am not sure where that will be, but it will definitely be somewhere warmer than Ontario, where it got to minus 30 in the depths of winter!
SVI Director and Chair Report

You will read in this Annual Report about our very significant success in the 2011 round of grants from the NHMRC. This was by any measure our most successful funding year to date. We credit our people, our technology and our support for this success.

Above all you will read in this Annual Report that successful medical research depends on finding the right people. Perhaps the most rewarding statistic in our funding results was that half of the grants SVI received were awarded to scientists who have been at SVI for less than 5 years. These include Dr Andrew Deans who returned to Australia in 2011 after 5 years at Cancer Research UK laboratories. Science attracts altruistic, passionate and talented young people prepared for challenge. This is one of the nation’s most highly educated work forces and the health sector remains a very desirable career choice for school leavers. It is very important for us to ensure adequate career opportunities and structures exist for researchers.

This is not always the case and research career opportunities for women, clinicians, highly skilled technical specialists and mathematicians interested in biology need particular attention.

Achieving this high rate of grant success requires enormous effort by scientists and by our research Grants Office and is very time consuming. The cycle for application and review for NHMRC funding takes up virtually the entire year. Grant writing begins before Christmas for submission in March. Reviewing extends from April to September and the writing begins again. Apart from being an essential mechanism to bring in funds, grant writing is essential for planning. But it is possible that this may be taking up too much time to the detriment of our scientists’ ability to carry out other important functions including clinical application of their findings and pharmaceutical and biotech applications.

A high level of focus on NHMRC funding means that we are reliant on government sources for most of our income. It is not ideal to be overly dependent on a single source of funds and diversification makes sense. The global financial crisis has resulted in flat or reduced government spending in most countries. In the context of even modest increases in costs, flat funding means shrinking real dollars for research. Therefore we either need to convince governments to spend more money despite the economic climate or we need to be better at finding other sources of income – or both. We are very grateful for the philanthropic contributions made by our supporters.

In other countries there is non-Government support from major charities that is of a similar scale to Government support, but in Australia philanthropy is more fragmented and generally of a smaller scale. In the UK, for example, there is the Wellcome Trust (with a corpus in excess of 10 billion pounds) and in the US major charities include the Howard Hughes Foundation and the Bill and Melinda Gates Foundation. These Foundations have rigorous processes and strong governance. Would it be feasible to establish an Australian philanthropic medical research funding body with the scale of the Wellcome Foundation and the Gates Foundation to complement Government support?

The issues above – careers, the grant system and opportunities for new sources of funding are some of the issues being addressed by the McKeon Review of Health and Medical Research, which is currently underway. We recognize the current constraints on government spending. But we also believe very strongly in the international competitiveness of Australian medical research and the importance of medical research to our health and the potential of medical research to contribute to employment and new manufacturing solutions. We will be presenting our ideas to the Review in the hope that it will set a positive direction for medical research.
As well as focusing on young researchers, we have outstanding older scientists at SVI. Ora Bernard retired at the end of 2011 after a remarkable lifetime in research, ranging from her work alongside Nobel Prize-winner Susumu Tonegawa in Switzerland in the 1970’s to a long career at The Walter and Eliza Hall Institute before coming to SVI in 2008. She has had a great impact at SVI, especially as a senior mentor to many.

We thank all of our supporters for assistance. It is vital to our success. This includes both State and Federal Governments, especially for provision of vital help with costs of running SVI through the Operational Infrastructure Support Scheme and the Independent Research Institutes Infrastructure Support Scheme. We thank the SVI Foundation for its fund-raising and the SVI Board for their guidance. Mr John Pizzey retired as a Director in 2011 and we thank him for his wisdom and support. We also thank St Vincent’s Hospital, Melbourne, the Sisters of Charity and the Trustees of the Mary Aikenhead Ministries for their ongoing support.

“Perhaps the most rewarding statistic in our funding results was that half of the grants SVI received were awarded to scientists who have been at SVI for less than 5 years.”

BM Shanahan
Chair

TWH Kay
SVI Director
April
Rumoured cuts to the NHMRC budget had a surprisingly positive effect: increasing the awareness of the importance of medical research in the wider community and acting as a catalyst for an unprecedented display of support, culminating in thousands of Australians attending ‘Rallies for Research’ throughout Australia in April.

May
SVI hosted its annual Forum in May, focused on Cancer Prevention, chaired by Sir Gustav Nossal and with speakers including Todd Harper, CEO of the Cancer Council Victoria, Simon McKeon, Australian of the Year, Dr Clara Gaff, Principal Development Manager of the Victorian Comprehensive Cancer Centre and Jörg Heierhorst, SVI cancer researcher.
June
Collingwood and St Kilda clashed in a match at the MCG on the 4th of June, helping to raise $50,000 for Juvenile Diabetes. The Institute’s fourth Discovery Day was sponsored by Watersun Homes and Barry Plant Real Estate and the evening saw some passionate fans supporting both their team and SVI. Thank you to the sponsors and to the Committee: Brian Cooney (Chair), Brian Cooney (Chair), Benni Aroni, Jim Hatzimoisis, Christine Collins, Jeni Coutts, Suzan Morlacci, Bruce Guthrie, Clare Lacey and Misty Warren (CFC).
July
Three hundred SVI supporters joined together in the beautiful Myer Mural Hall on the 21st July to hear about the importance of medical research in the fight against type 1 diabetes. The Hon Tony Abbott spoke of the importance of philanthropy in helping to support initiatives such as SVI’s Childhood Diabetes Appeal. Thanks to Sue Alberti and her staff for their support of this event.

A number of other politicians visited the Institute in 2011, including Louise Asher MLA, Minister for Innovation, Services and Small Business, Anna Burke MP, Federal Member for Chisholm, Richard Wynne MP, State Member for Richmond and Julie Bishop MP, Deputy Leader of the Opposition, shown here with SVI researcher Associate Professor Helen Thomas.

August
SVI’s Dr Jon Oakhill, Professor Bruce Kemp and colleagues published a paper in the prestigious journal Science in August. The article described a new paradigm for the activation of the protein AMP kinase, which could have implications for the treatment of diseases such as type 2 diabetes. Bruce has devoted a large part of his career to the investigation of AMP kinase and notably, the paper was Bruce’s eighth in the journal: a remarkable achievement. In the same month, Dr Andrew Deans joined the Institute, to head the Institute’s new Genome Stability Unit.
October
The results of NHMRC grants were announced in October, with SVI researchers achieving a 54.3% success rate, compared to the national rate of 24.8%. This was the second highest success rate nationally. It was also announced that Professor Tom Kay and Associate Professor Helen Thomas – together with colleagues from the Walter and Eliza Hall Institute, Sydney’s Westmead Millenium Institute and the Western Australian Institute of Medical Research – had been awarded a NHMRC Program Grant of $10.2 million to help them find new ways of halting type 1 diabetes.

Professor Michael Parker was awarded the prestigious Ramaciotti Medal for Excellence in Biomedical Research and a $50,000 grant, recognizing the major advances his work has made in the field of protein crystallography. This was followed up by the announcement that Michael, along with Associate Professor Louise Purton and Dr Carl Walkley, had been awarded $2 million by the ACRF to help them develop new treatments for cancer.

The SVI Support Group, chaired by Claire O’Callaghan, capped off their 22nd year by hosting a dinner for nearly 200 guests at the Athenaeum Club and raising $35,000 for the SVI student scholarship fund. Generous contributions from SVI supporters allow SVI to offer student scholarships to the best and brightest Honours and PhD students.

SVI’s fourth Annual Charity Golf Day at the Albert Park Golf Course, sponsored by Newcrest Mining, raised a record $107,000 in support of heart disease research at SVI. With more than 120 players, golfers enjoyed perfect weather on the green, followed by oyster shucking, Grange Hermitage wine tasting and dinner at Lago Restaurant, overlooking the course. SVI would like to thank the Golf Committee, chaired by the late Michael Dwyer, along with Leon Wiegard, Michael Kay, Mark Kerr, Barry Holbrook, Charlie Happell and Clare Lacey, who worked tirelessly throughout the year to ensure the success of the event.
SVI Board of Directors

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

Susan Alberti
AO, MAICD
Ms 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. Ms Alberti is Chair of the SVI Foundation, Victoria University Foundation Board member and also a Board member of the Western Bulldogs and Co-Chair of the Western Bulldogs Forever Foundation.

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

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

Mr John T Macfarlane
MComm
Mr Macfarlane is Chairman of Deutsche Bank Group, Australia & New Zealand following seven years as President & CEO of Deutsche Bank, Japan. An economist by training, Mr Macfarlane held senior positions with Bankers Trust in Sydney, New York and New Zealand until its acquisition by Deutsche Bank in 1999. He has served as: Director of the NZFE; member of the Global Markets Executive Committee, the Global Banking Executive Committee and the Global Regional Management Committee of Deutsche Bank; and Co-Chair of the Asia Pacific Deutsche Bank Executive Management Committee.

Professor James McCluskey
MBBS, B Med Sci, MD, FRACP, FRCPA
Until January 2011
Professor McCluskey is the Deputy Vice-Chancellor (Research) at the University of Melbourne and past Head, Department of Microbiology and Immunology at The University of Melbourne. He is also a Consultant Immunologist to the Victorian Transplantation and Immunogenetics Service, Australian Red Cross Blood Service.

Mr Stephen G Marks
FCA
From October 2011
Mr Marks is the Managing Director of Stephen G Marks & Co. Pty Ltd. He is a Fellow of the Institute of Chartered Accountants and a Fellow of The Institute of Company Directors in Australia. He was formerly Chairman of the Stobertons Chartered Accountants National Board and Managing Partner of the Melbourne office. He has recently retired as the Director of Prolity Services for ISM Bird Cameron. He is a member of the Audit Committee of Oxygen Youth Health and the Investment Advisory Committee of DMP Asset Management Ltd.

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

Professor Patricia O’Rourke
RN, Grad Dip App Sc (Nursing), GAICD
Professor O’Rourke was appointed St. Vincent’s Hospital Chief Executive Officer in April 2009. She has more than 20 years experience in the healthcare industry, including nursing and senior management roles. In her previous role as Chief of Clinical Operations and Chief Nursing Officer at St. Vincent’s Hospital her duties included leading regional and national projects, representing St. Vincent’s on a number of Department of Human Services committees, providing strategic and operational advice to the CBO and clinical leadership to the Executive. Until October 2008 she was a member of the Board of Southern Health.
Ms Ruth O’Shannassy
BComm
Ms O’Shannassy worked in economic research in the finance industry in Melbourne before moving overseas. She spent seven years living and working offshore, primarily as a stockbroker in London and Asia before returning to Australia. Ms O’Shannassy is a Board member of the Victorian Prostate Cancer Research Consortium.

Mr Christopher Page
BA
From October 2011
Mr Page has been a career banker for almost 40 years. His most recent role was as Chief Risk Officer for ANZ. Prior to that he spent 34 years with HSBC. From 2005 to 2007, Mr Page was also Chairman of the British Chamber of Commerce in Hong Kong. He established his consultancy business, Earnest Knight and Company Pty Ltd in January 2012. In addition to his role on the Board of SVI, he also is on the Board of a number of ANZ’s partnership banks in Asia.

Mr John Pizzey
BE(Chem) Fell Dip (Management)
FTEE FAICD FAIM
Until November 2011
Mr Pizzey retired from Alcoa in December 2003 where he was Executive Vice President of Alcoa Inc (USA) and Group President, Primary Products. He was Chairman of the London Metal Exchange Ltd (UK) in 2003. Mr Pizzey is currently a Director of Alumina Ltd, Amcor Ltd and Iluka Resources Ltd. He is also a member of the Board of Governors at Ivanhoe Grammar School.

Mr Gregory Robinson
BSc(Hons) MBA (Columbia)
Mr Robinson was appointed Managing Director and Chief Executive Officer of Newcrest Mining Limited in July 2011 following almost 5 years as the company’s Director of Finance, responsible for the Group’s finance function, 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.

Professor James Best
MBBS, MD, FRACP, FRCPPath, FRCP Edin, MD (Hon, St Andrews)
From May 2011
Professor Best is Professor of Medicine and Head of the Melbourne Medical School at the University of Melbourne. He is Chair of Australia’s National Health and Medical Research Council (NHMRC) Research Committee and a member of the Council. Professor Best is a member of the National Heart Foundation Research Committee, Chair of the Victorian Prostate Cancer Research Consortium and the Victorian Medical Insurance Agency, and inaugural Chair of the Steering Committee of the Australian Type 1 Diabetes Clinical Research Network. Professor Best has previously been a Board Member of three different metropolitan health services in Melbourne, including St Vincent’s Health.
SVI Foundation Chair Report

The SVI Foundation is proud to support research at SVI into common diseases that affect all Australians. The 18 Foundation Board members each played a significant role in our fundraising efforts in 2011, for which I, as Chair, am very grateful.

One of the key goals of the Foundation is to educate the public about the benefits of medical research. Institute staff and students have embraced the opportunity to share their interest in science through our program of bringing the community to the Institute – donors, bequestors, corporate representatives, state and federal government Ministers and school groups.

In February 2011 we welcomed Madeleine Whiting as our new Director of Development for the Foundation. The fundraising team and board members were kept very busy during the year with Foundation events and internal dinner tours of the Institute. These tours enable our scientists to share their knowledge with guests over a meal and provide guests with an opportunity to learn more about SVI research.

Some of the highlights of 2011 were the luncheon for $10,000 Discovery Fund members and friends hosted by Sam and Christine Tarascio. The $10,000 Discovery Fund was established with the aim of encouraging 100 donors to invest $10,000 per year for five years to raise $5 million to support research at SVI. I congratulate Christine on the success of the Fund, which continues with the addition of several new members in the last 12 months.

In July I hosted The Hon Tony Abbott as guest speaker at a Luncheon for 300 at the Myer Mural Hall. Tony Abbott has a long-standing interest in medical research, having been the Health Minister who announced the funding of the Islet Transplant Program. Three of our Islet Transplant recipients attended the luncheon, and Professor Tom Kay talked about the collaboration involved in the project across the whole St. Vincent’s Campus.

Other events included the SVI Discovery Day AFL match between Collingwood and St Kilda at the MCG in June, sponsored by Watersun Homes and Barry Plant Real Estate, which raised more than $50,000 for research into juvenile diabetes; The Newcrest Mining SVI Charity Golf Day saw many companies come together to compete for the Jack Holt Trophy and raise $107,000 for heart disease research. The Susan Alberti Charitable Foundation Signature Ball entertained 600 people and raised $300,000 to help support the Islet Transplant Program at SVI.

In October the 22nd annual black tie Athenaeum dinner, hosted by Claire O’Callaghan and her SVI Support Group, culminated in the announcement of support for two PhD students via funds raised at the dinner.

The year ended on a high note with a luncheon in the Myer Holdings boardroom, hosted by the Chairman of Myer, Howard McDonald.

Giving in celebration and giving in memory gifts had a large impact on our fundraising in 2011. Ricky and Amanda Smorgon’s daughter Isabella, aged 12, had guests at her Bat Mitzvah give donations to SVI in lieu of gifts. In this way she raised $7,500 towards the fund set up in memory of her late grandmother Roslyn Smorgon. A gift to SVI has the potential to make an enormous difference to the lives of many and we are very grateful to all those who supported Isabella.

Corporate partnerships are another way to support the Institute. Edgewise Insurance has made SVI one of their preferred charities: SVI receives commissions from specific Edgewise Insurance policies, which totalled $13,000 in 2011.

A number of new pieces of equipment are now available to researchers at SVI and the wider community thanks to generous donations from SVI supporters and from other Trusts and Foundations. This includes equipment that will be used to investigate the causes of Alzheimer’s disease, to measure changes in bone cell behaviour in diseases such as osteoporosis and arthritis, and to help detect cancer metastasis in animal models of bone cancer.

SVI relies on the support of individuals, corporations, government and the community. I would like to take this opportunity to thank all of our supporters, loyal donors, particularly members of the $10,000 Discovery Fund, the 1000 Club, and of course my fellow Foundation Board members and SVI staff for their dedication to the cause, helping to offer hope to all those in the community who have been touched by disease.

God bless,

Susan Alberti AO, MAICD
SVI Foundation Chair
An investment in the SVI $10,000 Discovery Fund is an investment in the health of Australians.

The SVI $10,000 Discovery Fund aims to accumulate a minimum of $5 million of capital, the income from which will be used to support vital research at SVI. Members of the Fund are kept abreast of new developments in research and are given opportunities to meet other members at exclusive events held throughout each year.

If you are interested in joining the Fund, please contact Christine Tarascio on 0418 318 627.

$10,000 Discovery Fund Members

Alberti AO, MAICD, S
Anonymous
Brenda Shanahan Charitable Foundation
Briggs, GW
Burgess, A & J
Caribbean Gardens Pty Ltd
Ceravolo, E
Costa Family Foundation
Foti, M
Gold Age Pty Ltd
Joe Arcaro Architects
Macfarlane, J
McDonald, HJ
North, C
Plant, B & K
Portsea Hotel
Schiavello Group Pty Ltd
SI Capital Pty Ltd
Simpson Family Foundation
Tarascio, S & C
Tarascio, S & C
Zagame Corporation

Image: In recognition of support from $10,000 Discovery Fund members, a luncheon was held in February at the home of Christine and Sam Tarascio, where 50 guests were treated to a banquet by Atlantic Catering and a talk from A/Prof Louise Purton (co-head of the Stem Cell Regulation Unit). The lunch, which was proudly sponsored by Salta Properties, saw the announcement that the Fund has now reached the $1 million mark. Thanks to Christine Tarascio, Chair of the Fund, and her committee: Maria Foti, Jan Spooner, Andrew Henderson, Tony Burgess, Brenda Shanahan and Clare Lacey.
SVI Foundation Board

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

Mr Benni Aroni
Co-Vice Chair, SVI Foundation Board
Mr Aroni is a qualified legal practitioner having been the managing partner of his own legal firm between 1982 and 1996. He has been a developer of Eureka Tower from 1996 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 1996. Subsequently he has focused his charity work on the SVI Foundation. He is and has been a Board member of several companies, listed and unlisted.

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

Ms Simone Carson
Ms Carson helped to found a dynamic not-for-profit called SecondBite 5 years ago. She remains on the Board of SecondBite with a special interest in volunteers and the relationships between Donors and Recipients. She is a member of AICD having completed a Company Directors’ Course in 2009. After leaving school Simone completed her Nursing training at The Royal Children’s Hospital, gained a certificate in Paediatric Intensive Care and a Bachelor of Education at La Trobe University. Apart from her work in PICU at RCH, she also undertook part-time work helping to co-ordinate a research project for the Infectious Diseases Department.

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

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

Mrs Maria Foti
During the past 20 years Mrs Foti has been the co-founder and Managing Director of National Educational Advancement Programs (Neap) Pty Ltd and its associated companies. Neap is an education services provider and educational publisher to the senior secondary school market. With a background in teaching and design, she has also been involved in a number of family-owned businesses, most notably owning, operating and designing garments for a wholesale ladies’ high fashion label and boutique.

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

Mr James Hatzimoisis
Mr Hatzimoisis is a Licensed Estate Agent and Accredited Auctioneer. He is a Director of 8 Offices within the Barry Plant Real Estate Network and has been instrumental in the growth of the Network particularly throughout Melbourne’s Western Suburbs. His primary focus is training, mentoring and skill development of Sales Teams within the group. Outside of work, his interests include conducting many Charity Auction events annually; he has been actively involved with the Bluey Day Foundation, Convoy For Kids, the MS Society and most schools in Melbourne’s Western suburbs and is a foundation Shareholder of the Melbourne Victory Football Club.

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

Mrs Maria Foti
During the past 20 years Mrs Foti has been the co-founder and Managing Director of National Educational Advancement Programs (Neap) Pty Ltd and its associated companies. Neap is an education services provider and educational publisher to the senior secondary school market. With a background in teaching and design, she has also been involved in a number of family-owned businesses, most notably owning, operating and designing garments for a wholesale ladies’ high fashion label and boutique.

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

Mr James Hatzimoisis
Mr Hatzimoisis is a Licensed Estate Agent and Accredited Auctioneer. He is a Director of 8 Offices within the Barry Plant Real Estate Network and has been instrumental in the growth of the Network particularly throughout Melbourne’s Western Suburbs. His primary focus is training, mentoring and skill development of Sales Teams within the group. Outside of work, his interests include conducting many Charity Auction events annually; he has been actively involved with the Bluey Day Foundation, Convoy For Kids, the MS Society and most schools in Melbourne’s Western suburbs and is a foundation Shareholder of the Melbourne Victory Football Club.
Ms Suzan Morlacci
Ms Morlacci has spent the better part of her life involved in her family business. She has put her hand and mind to all aspects of the business from Concrete Batching to Shipping. She currently manages the Credit and business from Concrete Batching to Shipping.

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

Dame Janet Spooner D.S.J.
For over 40 years Dame Janet has supported a number of charities and her dedication was acknowledged in 2004 when she was made a Dame of the Order of St John of Jerusalem (International Order Award). She has been involved with the following organisations in various roles: Royal Women’s Hospital – for mothers and babies (made Life Governor), SIDS, Queen Elizabeth Hospital, Lady Mayoress’ Committee (made Honorary Life Member), Cabrini Special Events Committee, Bone Marrow Donor Institute, and Women at the Alfred (for prostate cancer). She is also a member of the auxiliary board of the Royal Children’s Hospital and a Hummingbird Ambassador for the O’Brien Institute, acting as Honorary Treasurer.

Mr Peter Riley
Mr Riley was a Senior Partner/Executive Director in the Tax Consulting Division of Pitcher Partners Melbourne for approximately 19 years until 30 June 2010. In that role he had considerable experience in advising high wealth individuals, their families and their businesses, on investing in and outside of Australia, specialising in taxation and business advisory issues in relation to property development, corporate advisory, funds management, high wealth families and estate planning. He has current and past appointments with a number of professional bodies. On 1 July 2010 Peter founded Alandal Consulting Pty Ltd, a boutique firm advising high wealth families and their business arms. In addition to his role with SVI, he has a large number of roles in the not-for-profit sector.

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

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

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

Dame Janet Spooner D.S.J.
For over 40 years Dame Janet has supported a number of charities and her dedication was acknowledged in 2004 when she was made a Dame of the Order of St John of Jerusalem (International Order Award). She has been involved with the following organisations in various roles: Royal Women’s Hospital – for mothers and babies (made Life Governor), SIDS, Queen Elizabeth Hospital, Lady Mayoress’ Committee (made Honorary Life Member), Cabrini Special Events Committee, Bone Marrow Donor Institute, and Women at the Alfred (for prostate cancer). She is also a member of the auxiliary board of the Royal Children’s Hospital and a Hummingbird Ambassador for the O’Brien Institute, acting as Honorary Treasurer.
Fellowships, prizes and grants

Bone Cell Biology and Disease
Fellowships and Prizes
– T.J. (Jack) Martin is Visiting Research Professor of Medicine, Vanderbilt University, Nashville, USA
– Farzin Takayar was awarded an International Bone and Mineral Society New Investigator Award
– Farzin Takayar was awarded an American Society for Bone and Mineral Research New Investigator Award
– Farzin Takayar was awarded an American Society for Bone and Mineral Research New Investigator Award
– Benoit Le Goff was awarded the New Investigator Prize at the Australian Rheumatology Association 2012 Annual Meeting

– Jack Martin was awarded an honorary doctorate (Hon Cause) from Australian Catholic University

Grants
– Natalie Sims, Jack Martin, Nicole Walsh. gp130 signalling in bone formation and resorption. NHMRC Project Grant
– Natalie Sims, Jack Martin, Julian Chirn (PHB). Influence of osteocytes on bone anabolic therapies. NHMRC Project Grant
– Nicole Walsh, Natalie Sims, Evange Romas. The therapeutic value of targeting Wnt signalling for the treatment of osteoarthritis. NHMRC Project Grant
– Jian Guo Zhang (WEHI), Natalie Sims, Yibin Xu (WEHI). Structural and functional analysis of oncogenin M receptor signalling complexes. NHMRC Project Grant
– Natalie Sims, Nicole Walsh. Key factors that influence the development of rheumatoid and osteoarthrits. Rebecca L. Cooper Medical Research Foundation Equipment Grant
– Ling Yeong Chia, Natalie Sims. Australian Dental Research Foundation Research Project Grant
– Natalie Sims. Equity Trustees Lynne Quayle Charitable Trust
– Natalie Sims. Angior Equipment Grant
– Natalie Sims. The Jack Brockhoff Foundation Equipment Grant
– Peter Vee Sin Lee (University of Melbourne), Nicole Walsh, Andrea O’Connor (University of Melbourne). Melbourne Materiale Institute. Cell mechanobiology approach to understanding degenerative changes in osteoarthritis. Interdisciplinary Seed Funding
– Pazit Levinger (La Trobe University). Nicole Walsh, Chris van der Poel (La Trobe University). The pathogenesis of muscle inflammation in knee osteoarthritis and its effect on gait and muscle function. The Barbara Cameron Memorial Grant, Arthritis Australia

Cell Cycle and Cancer
Fellowships and Prizes
– Boris Sarcevic was awarded a Bio21 Institute Presentation award

Grants
– Randy Suryadinata. Cumulative cyclin-dependent kinase-mediated phosphorylation of pRb and RBP1 tumor suppressors controls cell cycle progression. Cure Cancer Australia

Cytoskeleton and Cancer
Fellowships and Prizes
– Kevin Mittleaet was awarded a SVI Foundation Student Scholarship
– Alice Schoffeld was awarded a SVI Foundation Student Scholarship
– Cristina Gamell-Fulla was awarded a Fellowship from the Oncology Children’s Foundation (NSW)

Genome Stability
Grants
– Andrew Deans. The Lynne Quayle Charitable Trusts, Equity Trustees Equipment Grant
– Andrew Deans. The Margaret Walkom Bequest

Immunology and Diabetes
Fellowships and Prizes
– Helen Thomas received the JDRF Macquarie Group Foundation Diabetes Research Innovation, Early Career Researcher Award
– Helen Thomas became an Associate Professor of the University of Melbourne
– Mugthia Joglerak was awarded a Juvenile Diabetes Research Foundation Postdoctoral Award
– Colleen Else received travel awards from the Australasian Society for Immunology, CASS Foundation and the International Mammalian Genome Society
– Allison Irvin and Edward Chu were recipients of the SVI Foundation Honours Scholarship Award
– Jonathan Chee received an ASI Travel Award and the ASI minor poster prize for students

Grants
– Tom Kay, Helen Thomas. Pathogenesis-based treatment of type 1 diabetes. NHMRC Project Grant
– Tom Kay, Kate Graham, Helen Thomas. Identifying islet factors that stimulate effector capacity in GtBs. JDRF Project Grant
– Tom Kay, Balasubramanian Krishnamurthy. Prevention of autoimmune diabetes by immune tolerance to proinsulin. NHMRC Project Grant
– Helen Thomas, Seth Masters. Glucose-toxicity-induced beta cell apoptosis. NHMRC Project Grant
– Stuart Manners, Helen Thomas. Analysis of human islet-infiltrating T cells in type 1 diabetes. JDRF SRA Grant
– Tom Brodnicki. How does Treg modulate autoimmunity mediated by toll-like receptors? NHMRC Project Grant
– Tom Brodnicki. Sert1’s role in lymphocyte function and autoimmunity. NHMRC Project Grant

Invasion and Metastasis Unit
Fellowships and Prizes
– EW Thompson was awarded the Matrix Biology Society of Australia and New Zealand Barry Preston Award
– EW Thompson was awarded the 2010 NBCF Pink Circle Research Award
– Edwin Wiodo won the poster prize at the TEMTIA-V meeting in Singapore

Grants
– EW Thompson, G Goodall, C Saunders, R Anderson, A Yap, I Street, A Dobrovic, A Dowling. Targeting breast cancer recurrence through epithelial mesenchymal plasticity. National Breast Cancer Foundation National Collaborative Research Program Grant
– EW Thompson, A Fahra Freis, G Goodall. Novel MicroRNA Regulators in the breast cancer EMT. National Breast Cancer Foundation / Cancer Australia (Project Grant administered through the University of Melbourne Department of Surgery)
– EW Thompson, I Haviv, M Watham, A functional genomic screen for tumorigenicity relative to epithelial–mesenchymal transition, breast cancer stem cell biology and therapeutic efficacy. US-DOD IDEA grant

Molecular Cardiology
Fellowships and Prizes
– Suang Suang Koid was awarded NHMRC Postgraduate Scholarship Grant

Grants
– Duncan Campbell. Alikiren: cardioprotection by increased bradykinin levels? NHMRC Project Grant
– Duncan Campbell. SVHM Endowment Fund
– Duncan Campbell. ANZ Trustees Equipment Grant
– Duncan Campbell. The George Carson Bequest

Molecular Genetics
Fellowships and Prizes
– Nicolas Hoch was awarded a Harold Mitchell Foundation Travel Scholarship
– Sabine Jurado was awarded a Melbourne University International Student Fee Reduction Scholarship

Grants
– Jorg Heierhorst. Developmental functions of a novel zinc-finger protein. NHMRC Project Grant
– Jorg Heierhorst. Multi-domain regulation of DNA damage response kinases. NHMRC Project Grant

National Reference Laboratory
Grants
– L Erieseel, K Wilson. Bronchiectasis and Infection with the Human T-Lymphotropic Virus among Indigenous Australians. NHMRC Project Grant

Protein Chemistry and Metabolism
Grants
– Bruce Kemp, Greg Steinberg. Understanding the importance of lipid metabolism in mediating the anti-diabetic effects of metformin NHMRC Project Grant
– Bruce Kemp, Jon Oakhill. An AMPK myristoyl switch controls AMP mediated metabolic stress signaling: NHMRC Project Grant
– Bruce Kemp, SL Macaulay. Molecular mechanisms underlying obesity and inflammation. CSIRO Preventative Health Flagship Collaboration Grant.

Stem Cell Regulation
Fellowships and Prizes
– Louise Purton was awarded an NHMRC Senior Research Fellowship
Fellowships, prizes and grants

Grants
- Louise Purton. Determining the impact of cytotoxic therapies on the bone marrow microenvironment. NHMRC Project Grant.
- Julie Quach. Christine and T Jack Martin Travel Grant.
- Julie Quach. Harold Mitchell Foundation Travel Grant.
- Carl Walkley. RNA editing and red blood cell production. NHMRC Project Grant.
- Carl Walkley. How does myelodysplastic syndrome affect the bone marrow? NHMRC Project Grant.

Structural Biology
Fellowships and Prizes
- Michael Parker was awarded the Ramaciotti Medal for Excellence in Biomedical Research.
- Michael Parker was awarded the Lemberg Medal by the Australian Society for Biochemistry and Molecular Biology.
- David Ascher received a Continuing Education Award from the CRC for Cancer Therapeutics.
- David Ascher received an Agilent Student Research Award.
- David Ascher received a Lorne Protein Structure and Function Conference Poster Prize.
- Mike Gorman was awarded a Cooperative Research Centre for Cancer Therapeutics Travel Grant.
- Julian Tang was awarded a Cooperative Research Centre for Cancer Therapeutics Travel Grant.
- Julian Tang was awarded an IUCr Travel Grant.
- Julian Tang was awarded a Department Of Medicine, University of Melbourne Travel Grant.

Grants
David Ascher
- Member, Victorian Branch of the Royal Australian Chemical Institute
- Member, Organising Committee, Victorian Branch of the Australian Society for Medical Research, Medical Research Week

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

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

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

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

Roderick Chappel
- Elected Member Representative on the NATA Council
- Chair, NATA Proficiency Testing Providers Accreditation Advisory Committee
- President of the International Leptospirosis Society
- Member, Taxonomic Subcommittee for Leptospirosis
- President, Medical Laboratory Quality Network

Andrew Deans
- Co-ordinator of internal seminars, SVI

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

Kate Graham
- Honours Program co-convener
- Program organizing committee, Australian Diabetes Society Annual Scientific Meeting, Perth, September 2011

Jörg Heierhorst
- Member, Cancer Council Victoria Medical & Scientific Committee
- Member, SVI Executive Committee
- Member, SVI Mass Spect Committee
- Member, SVI Student Committee
- Member, SVI Occupational Health and Safety Committee
- Member of Council, Cancer Council Victoria
- Organising Committee, Lorne Genome Conference 2011, Lorne, 2011
- Chair, Lorne Genome Conference 2012, Lorne, 2012

Sabine Jurado
- Co-chair, Biomed-Link Student Conference, Melbourne, 2011

Thomas Kay
- Regional Editor, Autoimmunity
- Member, SVI Board of Directors
- Member, SVI Foundation Board
- Member, SVI Commercialisation & Intellectual Property Committee
- Member, SVI Audit & Finance Committee
- Chair, SVI Faculty Executive Committee
- Chair, SVI Faculty Committee
- Chair, St. Vincent’s Hospital BioResources Oversight Committee
- Member, St. Vincent’s Hospital Executive Committee Research Council
- Member, St. Vincent’s Hospital BioResources Centre Users Group

T.J. Martin
- Visiting Research Professor of Medicine, Vanderbilt University, Nashville, USA, 2009-2011
- Member, Scientific Advisory Board, Bone Research Centre, Nuffield Orthopaedic Centre, University of Oxford, UK
- Member, Medical Research Advisory Committee, Australian Cancer Research Foundation.

Louise Purton
- Member, Leukaemia Foundation Senior Research Fellowships Committee
- Member, Animal Ethics Committee, St. Vincent’s Hospital Melbourne
- Faculty Member, Faculty of 1000, Non-haematopoietic Stem Cell Section
- Board of Directors, IHE Society for Hematology and Stem Cells
- Abstract reviewer, IHE Society for Hematology and Stem Cells Annual Meeting
- Member, St. Vincent’s Hospital Research Training Committee
- Member, Leukaemia Foundation Senior Research Fellowship Committee
- Member, Animal Ethics Committee (AEC), St. Vincent’s Hospital Melbourne
- Faculty Member, Faculty of 1000, Non-haematopoietic Stem Cell Section
Service to the community

- Board of Directors, ISEH Society for Hematology and Stem Cells
- Member, Scientific Committee, New Directions in Leukaemia Research, 2012 conference

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

Boris Sarcevic
- NHMRC grant review panel, Cancer Biology and Oncology
- Policy development at the Victorian Comprehensive Cancer Centre Early Career Professionals Strategic Workshop

Natalie Sims
- Council Member, Australian and New Zealand Bone and Mineral Society
- Chair, St. Vincent’s Cluster Research Technology Committee
- Member, Publications Committee, American Society for Bone and Mineral Research
- Member, NHMRC Fellowship Review Panel
- Editorial Board, Bone
- Editorial Board, BoneKey
- Board Member, International Society for Bone Morphometry
- Board Member, International Bone and Mineral Society
- Associate Editor, Calcified Tissue International
- Steering Committee, IBMS-Japan Society of Bone and Mineral Research Meeting, Tokyo, 2013
- Scientific Programme Committee, European Calcified Tissue Society 29th Symposium Stockholm 2012, Lisbon 2013
- Convener, Australia and New Zealand Bone and Mineral Society Annual Postgraduate Clinical Training

Eliza Soo
- Member, BioMed Link Organising Committee (Melbourne University)
- Treasurer, St. Vincent’s Students Society (SVH campus)

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

Helen Thomas
- Editorial Board, Diabetes
- Member, SVF Foundation Scholarship Awards Committee
- Helen Thomas, Organiser, Immunology Special Interest Group, Australian Diabetes Society Annual Scientific Meeting, Perth, September 2011
- Helen Thomas, Member, Organising committee, Australian Islet Study Group Annual Meeting, Sydney, October 2011

Erik Thompson
- President, Metastasis Research Society (International)
- Treasurer, The EMT International Association (TEMTIA)
- Board Member, Metastasis Research Society (International)
- Committee Member, Australasian Microarray and Associated Technologies Association (AMATA)
- Member, Research Advisory Committee, National Breast Cancer Foundation, Australia
- Co-Guest Editor, the Journal of Mammary Gland Biology, Special Issue on Epithelial Mesenchymal Transition in Mammary Development and Cancer
- Principal Guest Editor, Cells Tissues Organs, Issue “Epithelial Mesenchymal Transitions: New Advances in Development, Fibrosis and Cancer”
- Co-Guest Editor, Cancer Microenvironment, Special Issue on Microenvironment and Epithelial Mesenchymal Transition
- Associate Editor, Cells Tissues Organs
- Editorial Board Member, Clinical and Experimental Metastasis
- Editorial Board Member, The Breast Journal
- Member, Program Committee, Inaugural Biomarker Discovery Conference, Shool Bay, NSW, 2010
- Co-convenor TEMTIA 2011, the 5th International EMT Meeting, Singapore, 2011
- Member, Local Organizing Committee, 5th Pacific Rim Breast and Prostate Cancer Conference, Kingscliff, NSW, 2011
- Member, National Breast Cancer Foundation Review Panels for Scholarships, Fellowships and Career Awards
- Member, NSW Cancer Institute Review Panel
- Member, O’Brien Institute Scientific Oversight Committee
- Member, Tissue Resource Management Committee, Peter MacCallum Cancer Centre
- Member, University of Melbourne Working Group for the St. Vincent’s International Research Centre
- Member, St. Vincent’s Hospital Bioresource Centre Users Committee
- Member, Victorian Functional Genomics Centre Steering Committee, Peter MacCallum Cancer Centre (AMATA Representative)

Carl Walkley
- Member, NHMRC Grant Review Panel
- Deputy Chair, Institutional Biosafety Committee (IBC), St. Vincent’s Hospital Melbourne
- South Australian Cancer Collaborative Fellowship Review Committee, External Reviewer
- Leukaemia Foundation, Post-graduate and Post-doctoral fellowships review committee

Nicole Walsh
- Member (Category B), St. Vincent’s Health Animal Ethics Committee
- Acting St Vincent’s Institute Representative, UROP Committee
- Local Organising Committee, Australian and New Zealand Bone and Mineral Society Annual Meeting, Melbourne, 2013

Mark Waltham
- Editorial Board, Journal of Cancer Therapy

Edwin Widodo
- Student Representative, Faculty Advisory Council, Faculty of Medicine (Melbourne University)
Collaborations

Bone Cell Biology and Disease
– Dr Pivosnik, The University of Western Australia. Mathematical modelling of bone turnover
– Dr JMW Quinn, Prince Henry’s Institute. Cytokine actions on bone formation and resorption
– Prof G Nicholson, The University of Melbourne, Barwon Health. Osteonastin M effect in human osteoblasts
– Prof N Nicola and Dr Jian-guo Zhang, The Walter and Eliza Hall Institute. Osteonastin M mode of action in osteoblasts
– Dr V Krampe, Vassenge Therapeutics. Ephrin effects on osteoblasts
– A/Prof E Gardiner, Diamantina Institute. NPY actions on bone
– Drs J Sterling and S Guelcher, Vanderbilt University, Nashville, USA. Effects of bone on cancer cell phenotype
– Prof EM Gravallese, University of Connecticut. Osteocyte models
– Dr MA Kasah and Dr K Henriksen, Nordic Biosciences. Bone anti-resorptives
– A/Prof JP Levesque and Dr K Winkler, Biotherapy Program, Mater Medical Research Institute, University of Queensland. Effect of stem cell mobilization on bone formation
– Prof E Mackie, The University of Melbourne. PAR2 in bone
– Dr K Matsuo, Keio University, Japan. Rho and Ephrin interactions in bone
– Dr N Morrison, Griffith University. PTH and MCP1 interactions
– Dr J Onyia, Dr N Kulkarni and Dr N Ahmed, Dept. of Obstetrics and Gynaecology. Role of FANCM in breast cancer metastasis
– Dr S Richardson, La Trobe University. MMPs in mouse cancer spheroids
– Dr M O’Keeffe, The Burnet Institute. EMP analysis in CTC and DTC
– Dr A Zannettino, Department of Haematology, IMVS / Hanson Institute. Effect of dastatin on bone metabolism
– Prof S Kato, The University of Tokyo, Japan. Zifp467 regulation of osteoblast and adipocyte formation
– Prof C Kovacs, Memorial University of Newfoundland. Effects of pregnancy and lactation on the skeleton
– Dr E Dimitriades, Prince Henry’s Institute. Use of LIF antagonist as a contraceptive agent
– Prof H Kronenberg, Harvard University/Massachusetts General Hospital. G-protein signalling in osteoastatins
– Dr P Leviner, Dr C van der Poel, La Trobe University. Role of muscle Inflammation in osteoarthritis
– A/Prof P Vee Sin Lee, Melbourne University. Biomechanical changes contributing to joint destruction in osteoarthritis

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

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

Genome Stability
– Dr Alessandro Costa, University of California, Berkeley. Structural analysis of DNA repair proteins
– Dr Stephen C West, Cancer Research UK. Biochemistry of DNA repair proteins
– Assoc Prof David Thomas, Peter MacCallum Cancer Institute. Analysis of sarcoma associated pathways
– Dr Wojciech Niedzwiedz, Oxford University. Role of FANC in cell cycle
– Dr Simon Boulton, Cancer Research UK. Phosphorylation of Fanconi proteins

Haematology and Leukaemia
– Dr C Waldley, SVI. Erythropoietin effects on haemopoiesis and bone
– Dr L Purton SVI. The effect of retinoic signalling on T cell development
– Dr S Russell, The Peter MacCallum Cancer Institute. Cell polarity in T cell development
– Dr A Wei, Alfred Hospital. Modelling human leukaemia in mice

Immunology and Diabetes
– Prof P Cowan, St. Vincent’s Hospital, Melbourne. Overexpression of antioxidant proteins in pancreatic beta cells
– Dr S Grey, Garvan Institute. The mechanism by which A20 promotes allograft survival
– Prof L Harrison, The Walter and Eliza Hall Institute. Prevention and cure of type 1 diabetes: CD8+ T cells in diabetes pathogenesis
– Dr R Sutherland, The Walter and Eliza Hall Institute. Pancreatic islet transplantation
– Dr B Marsh, Institute of Molecular Biology Science, Brisbane. Characterisation and modulation of beta cell-macrophage interactions
– Prof C Parish and Dr C Simeonovic, Australian National University. The role of heparanase and heparin sulphate in islet destruction
– A/Prof P O’Connell, Westmead Millennium Institute. Clinical islet transplantation
– Dr P Santamaria, The University of Calgary. Mechanisms of pancreatic beta cell death in TCR transgenic mouse models of type 1 diabetes
– Dr 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 McCallum Cancer Institute. T-cell mechanisms of beta cell destruction
– Prof K Shortman, The Walter and Eliza Hall Institute. Identification and characterization of mouse diabetes susceptibility genes
– Dr G Belz, The Walter and Eliza Hall Institute. How does bacterial infection affect susceptibility to type 1 diabetes?
– Prof R Strugnell, The University of Melbourne. How does bacterial infection affect susceptibility to type 1 diabetes?
– Dr O Wijburg, The University of Melbourne. How does bacterial infection affect susceptibility to type 1 diabetes?
– Dr M Murphy, The University of Melbourne. Genetics of stress response

Infection and Metastasis
– Dr P Verma, Monash Institute of Medical Research. Generating induced pluripotent stem cells from the NOD mouse
– Dr D Goodman, St. Vincent’s Hospital. Immune responses following islet transplantation
– A/Prof Tony Purcell, Bic21, University of Melbourne. Epitope mapping in human type 1 diabetes
– Dr N O’Brien-Simpson, Bic21, University of Melbourne. Epitope mapping in human type 1 diabetes
– Dr J Gunton, Garvan Institute. Insulin secretion gene expression in human pancreatic islets
– Dr K Dwyer, St. Vincent’s Hospital, Melbourne. Adenosinergic transduction of human islets
– Dr M von Herrath, San Diego, California. Staining of human pancreas in situ with MHC class I and II tetramers
– A/Prof Tony Purcell, Bic21, Institute, University of Melbourne. Posttranslational modifications in human T1D
– A/Prof Neil O’Brien-Simpson, University of Melbourne. Peptide antigens in type 1 diabetes

Invasion and Metastasis
– Prof L Ackland, Deakin University, Melbourne. Epithelial Mesenchymal Transition (EMT) in breast cancer
– Dr N Ahmed, Dept. of Obstetrics and Gynecology, University of Melbourne. EMT in ovarian cancer spheroids
– A/Prof R Anderson, Peter MacCallum Cancer Centre, Melbourne. MMPs in mouse mammary metastasis models; Targeting breast cancer recurrence through EMP
– Prof I Campbell, Peter MacCallum Cancer Centre. Molecular and cellular attributes of mammographic density
– Prof P Choong, University of Melbourne Dept of Surgery, SVH. EMP analysis in CTC and DTC from patients with bone-metastatic breast cancer
– A/Prof A Dobrovic, Peter MacCallum Cancer Centre. EMP
analysis in CTC and DTC from breast cancer. Epigenetic regulation of EMP. Targeting breast cancer recurrence through EMP.

- Dr A Dowling. St Vincent’s Hospital, Melbourne. Targeting breast cancer recurrence through EMP.

- Prof A Fabra Freo. IDIBELL, Barcelona, Spain. Novel miRNA regulators in the breast cancer EMP.

- Prof G Goodall, Centre for Cancer Biology, Adelaide. Novel miRNA regulators in the breast cancer EMP. Targeting breast cancer recurrence through EMP.


- Prof M Henderson, Department of Surgery, University of Melbourne. Novel miRNA regulators in the breast cancer EMP. Targeting breast cancer recurrence through EMP.

- A/Prof P Hill, St Vincent’s Hospital, Melbourne. EMT and epithelial basement membranes. Molecular and cellular attributes of mammographic density.

- Prof J Hopper, Centre for MEGA Epidemiology, University of Melbourne. Molecular and cellular attributes of mammographic density.

- Prof WA Morrison, O’Brien Institute, Melbourne. Molecular and cellular attributes of mammographic density.

- Dr D Newgreen, Murdoch Children’s Research Institute, Melbourne. EMT in breast cancer.

- Dr J Price. Dept of Biochemistry, Monash University, Melbourne. HSPs and EMT. Molecular determinants of bone metastasis.

- Prof C Saunders, School of Surgery and Pathology, the University of WA, Perth. Targeting breast cancer recurrence through EMP.

- Dr L Soon, Australian Key Centre for Microscopy and Microanalysis (AMRF), University of Sydney. Breast cancer cell migration in 3D. Molecular and cellular attributes of mammographic density. Targeting breast cancer recurrence through EMP.

- Prof M Soutey, Dept of Pathology, University of Melbourne. Mammographic density.

- Prof K Stanley, AusDiagnosics, Sydney. Multiplex tandem PCR for paraffin-embedded archival material and EMT. Targeting breast cancer recurrence through EMP.

- Dr I Street, CRC for Cancer Therapeutics and WEHI, Melbourne. Targeting breast cancer recurrence through EMP.

- Dr M Waltham, SVL. MMP inhibition studies; EMP studies.

- Prof Z Werb, Dept. of Anatomy, University of California, San Francisco, USA. MMP-15 in breast cancer progression.

- Dr E Williams, Monash Institute for Medical Research, Melbourne. EMT; bladder and prostate cancer bone metastasis.

- Prof A Yap, IMB, the University of Queensland, Brisbane. Targeting breast cancer recurrence through EMP.

**Molecular Cardiology**

- A/Prof D Kelly, The University of Melbourne, Department of Medicine, St Vincent’s Hospital. The effect of renin inhibition in rats.

- Mr M Yi, 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. Investigation of new strategies for the treatment of acute lung injury.

- Dr MJ Black, Department of Anatomy, Monash University. Investigation of the pathogenesis of diastolic dysfunction.

- Prof H Krum and A/Prof C Reid, Department of Epidemiology and Preventive Medicine, Monash University. Strategies for the detection of heart failure in the community.

**Molecular Genetics**

- Prof Ming-Daw Tsai, Academia Sinica. Rac53 regulation.

- Dr Achille Pellicioli, University of Milan. Rac53 regulation.

- Dr M Barrai, NIH. Robotic genetic analyses of the yeast Egl2 genes.

- Prof T Preiss and Dr T Beilharz, Victor Chang Institute, and Monash Uni. Transcriptome analyses of Egl2 genes.

- Dr Ian Smyth and A/Prof Tim Cole, Monash University. Organ development defects in ASCIZ KO mice.

- Dr David Talbot, WEHI. Role of ASCIZ in the immune system.

- Prof D Kelleher, The Kirby Institute. Role of ASCIZ in the immune system.

- Prof D Kelly, The University of Melbourne. The efficiency of ASCIZ in the immune system.

- Dr P Haynes, The Kirby Institute. ASCIZ regulation.

- Dr D Prior, Cardiology, St. Vincent’s Hospital. Investigation of the pathogenesis of diastolic dysfunction.

- Prof H Krum and A/Prof C Reid, Department of Epidemiology and Preventive Medicine, Monash University. Strategies for the detection of heart failure in the community.

**Pharmacogenomics**

- Prof EW Thompson, SVL. MMP inhibition studies in breast cancer systems and gene array analysis of epithelial-mesenchymal transition.

- A/Prof R Anderson, Peter MacCallum Cancer Centre. Mouse models of cancer.

- Dr J Kennedy, ENT Department, St Vincent’s Hospital. Gene expression analysis of acoustic neuromas.

**Protein Chemistry and Metabolism**

- A/Prof G Bakwin, Department of Surgery University of Melbourne. Gastrointestinal peptides.

- Dr L Macaulay, CSIRO Molecular Health Technologies. lipid metabolism, obesity.

- Dr L Wittes, Darmouth Medical College. AMPK structure and function.

- Prof D Power, Austin Research Institute. AMPK and kidney function.

- Dr S Fraser Austin Research Institute. AMPK and kidney function.

- Dr P Mount, Dept. of Nephrology, Austin Hospital, Heidelberg AMPK and ischemia.

- Dr S Jørgensen Diabetes Research Unit, Novo Nordisk A/S. 2760 Maaloe, Denmark. Role of AMPK in exercise.

- Prof DG Hardie, Division of Molecular Physiology, College of

- Prof A Yap, IMB, the University of Queensland, Brisbane. Targeting breast cancer recurrence through EMP.

- Dr D Prior, Cardiology, St. Vincent’s Hospital. Investigation of the pathogenesis of diastolic dysfunction.

- Prof H Krum and A/Prof C Reid, Department of Epidemiology and Preventive Medicine, Monash University. Strategies for the detection of heart failure in the community.

- Prof Ming-Daw Tsai, Academia Sinica. Rac53 regulation.

- Dr Achille Pellicioli, University of Milan. Rac53 regulation.

- Dr M Barrai, NIH. Robotic genetic analyses of the yeast Egl2 genes.

- Prof T Preiss and Dr T Beilharz, Victor Chang Institute, and Monash Uni. Transcriptome analyses of Egl2 genes.

- Dr Ian Smyth and A/Prof Tim Cole, Monash University. Organ development defects in ASCIZ KO mice.

- Dr David Talbot, WEHI. Role of ASCIZ in the immune system.

- Prof D Kelleher, The Kirby Institute. Role of ASCIZ in the immune system.

- Prof D Kelly, The University of Melbourne. The efficiency of ASCIZ in the immune system.

- Dr P Haynes, The Kirby Institute. ASCIZ regulation.

- Dr D Prior, Cardiology, St. Vincent’s Hospital. Investigation of the pathogenesis of diastolic dysfunction.

- Prof H Krum and A/Prof C Reid, Department of Epidemiology and Preventive Medicine, Monash University. Strategies for the detection of heart failure in the community.

- Prof Ming-Daw Tsai, Academia Sinica. Rac53 regulation.

- Dr Achille Pellicioli, University of Milan. Rac53 regulation.

- Dr M Barrai, NIH. Robotic genetic analyses of the yeast Egl2 genes.

- Prof T Preiss and Dr T Beilharz, Victor Chang Institute, and Monash Uni. Transcriptome analyses of Egl2 genes.

- Dr Ian Smyth and A/Prof Tim Cole, Monash University. Organ development defects in ASCIZ KO mice.

- Dr David Talbot, WEHI. Role of ASCIZ in the immune system.

- Prof D Kelleher, The Kirby Institute. Role of ASCIZ in the immune system.

- Prof D Kelly, The University of Melbourne. The efficiency of ASCIZ in the immune system.

- Dr P Haynes, The Kirby Institute. ASCIZ regulation.

- Dr D Prior, Cardiology, St. Vincent’s Hospital. Investigation of the pathogenesis of diastolic dysfunction.

- Prof H Krum and A/Prof C Reid, Department of Epidemiology and Preventive Medicine, Monash University. Strategies for the detection of heart failure in the community.

- Prof Ming-Daw Tsai, Academia Sinica. Rac53 regulation.

- Dr Achille Pellicioli, University of Milan. Rac53 regulation.

- Dr M Barrai, NIH. Robotic genetic analyses of the yeast Egl2 genes.

- Prof T Preiss and Dr T Beilharz, Victor Chang Institute, and Monash Uni. Transcriptome analyses of Egl2 genes.

- Dr Ian Smyth and A/Prof Tim Cole, Monash University. Organ development defects in ASCIZ KO mice.

- Dr David Talbot, WEHI. Role of ASCIZ in the immune system.

- Prof D Kelleher, The Kirby Institute. Role of ASCIZ in the immune system.

- Prof D Kelly, The University of Melbourne. The efficiency of ASCIZ in the immune system.

- Dr P Haynes, The Kirby Institute. ASCIZ regulation.

- Dr D Prior, Cardiology, St. Vincent’s Hospital. Investigation of the pathogenesis of diastolic dysfunction.

- Prof H Krum and A/Prof C Reid, Department of Epidemiology and Preventive Medicine, Monash University. Strategies for the detection of heart failure in the community.

- Prof Ming-Daw Tsai, Academia Sinica. Rac53 regulation.

- Dr Achille Pellicioli, University of Milan. Rac53 regulation.

- Dr M Barrai, NIH. Robotic genetic analyses of the yeast Egl2 genes.

- Prof T Preiss and Dr T Beilharz, Victor Chang Institute, and Monash Uni. Transcriptome analyses of Egl2 genes.

- Dr Ian Smyth and A/Prof Tim Cole, Monash University. Organ development defects in ASCIZ KO mice.

- Dr David Talbot, WEHI. Role of ASCIZ in the immune system.
Collaborations

Life Sciences, University of Dundee, Dundee, Scotland, Control of ACC1 & 2
– Prof P Lang Department of Physiology, University of Tübingen, Gmelinistraße 5, Tübingen, Germany Role of AMPK in ion channel control
– Dr A Means, Duke University Medical Centre, CaMxx β structure and function
– Dr Q Thomas Department of Cancer and Cell Biology, Metabolic Diseases Institute, University of Cincinnati, Cincinnati, OH USA, Role of AMPK in metabolic control
– Prof E Richter Department of Exercise and Sport Sciences, University of Copenhagen, Copenhagen, 2100 Denmark Role of AMPK in exercise
– 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
– Prof A. Shikaev, Department of Surgery University of Melbourne. Gastrointestinal peptides
– Dr A Wilson, St. Vincent’s Hospital. Insulin resistance, adipocyte biology and cardiovascular disease

Stem Cell Regulation
– Prof S Orkin, Dana-Farber Cancer Institute. Osteosarcoma, erythroid differentiation
– Dr K Janeway, Dana-Farber Cancer Institute. Osteosarcoma
– Prof TJ Martin, SVI. Osteosarcoma
– Prof J Mattick, Garvan Institute, RNA Editing
– Dr J Hartner, TacomaArtemis GmbH, Germany, RNA Editing
– Dr M Higuchi, Max-Plank Institute, Heidelberg, Germany, RNA Editing
– Dr V Sankaran, Dana-Farber Cancer Institute. Erythroid differentiation
– Dr J Danke, RMIT Bundool. Osteosarcoma
– Dr M Dray, Middlemore Hospital Auckland. Osteosarcoma
– Prof L Gudas, Weill Cornell University, New York, USA. Leukaemia studies
– Prof M Parker, SVI. Leukaemia studies
– Prof P Chambon, IGBMC, France. Retinoid studies
– Dr R Chandraharana, IO Therapeutics, USA. Retinoid studies
– Prof A Zannettino, Institute of Medical and Veterinary Science, Adelaide. Myeloma niche studies
– Dr L Bendall, Westmead Millennium Institute for Medical Research, Sydney, Leukaemia niche studies
– Dr D Iron, SVI. Retinoid and T cell studies
– Prof S Karlsson, Lund Stem Cell Centre, Lund, Sweden. Leukaemia studies

Structural Biology
– Dr D Rhodes, JDI Bioservices, Victoria. HIV
– Dr S Tucker, Biota, Victoria. Viral respiratory diseases
– Dr O Bernard, SVI. LIM kinase
– Prof P Board, Australian National University. Glutathione transferases
– Prof D Bowtell, Peter MacCallum Cancer Institute. Proteins involved in ubiquitination
– Prof A Frauman, Austin Health, The University of Melbourne. Prostate cancer proteins
– Prof B Kemp, SVI. Protein kinase regulation
– Prof A Lopes, Centre for Cancer Biology, SA Pathology. Cytokine receptors
– Prof J Martin, SVI. Phosphodiesterases
– Prof E Simpson, Prince Henry’s Institute of Medical Research. Steroid receptors
– Dr C Clyne, Prince Henry’s Institute of Medical Research. Steroid receptors
– Dr D Stapleton, University of Melbourne. Protein kinase regulation
– Prof M Vadas, Centenary Institute for Cancer Research. Protein kinases
– Prof M Waters, University of Queensland. Growth hormone receptor
– Dr Y Chai, Monash University. IRAP
– A/Prof S Petrou, University of Melbourne. Ion channels and viral inhibitors
– Prof S Bottomley, Monash University. Serpins
– Prof J Gamble, Centenary Institute for Cancer Research. Protein kinases
– A/Prof R Pace, Australian National University. Photosystem II
– A/Prof P Thompson, Monash University. Phosphodiesterase inhibitors
– Dr R Tweten, University of Oklahoma, USA. Pore-forming toxins and receptors
– Prof P Dyson, Ecole Polytechnique Fédérale de Lausanne, Switzerland. Caspilatin drugs
– Prof M Lo Bello, University of Rome “Tor Vergata”. Glutathione transferases
– Dr L Garcia-Fuentes, University of Almeria. Glutathione transferases
– Dr G Stenberg, Uppeals University. Glutathione transferases
– Dr S Pinson, Centre for Cancer Biology, SA Pathology. Sphingosine Kinase
– A/Prof M Perugini, Bio21 Institute, Melbourne University. Bacterial virulence factors
– Prof P Batterham, Bio21 Institute, Melbourne University. Insecticide targets
– Dr T Bryan, Children’s Medical Research Institute, Sydney. Telomerase
– Dr S Cohen, Children’s Medical Research Institute, Sydney. Telomerase
– Prof P Robinson, Children’s Medical Research Institute, Sydney. Brain proteins
– Dr Adam Ratner, Columbia University. New York. Toxins
– Dr G Nie, Prince Henry’s Institute of Medical Research. PC6
– Dr C Harrison, Prince Henry’s Institute of Medical Research. PC6
– Prof E Reynolds, Melbourne University. Gum disease
– Dr E Dimitriades, Prince Henry’s Institute of Medical Research. LIF
– Prof G Marshall, Centre for Children’s Cancer and Blood Disorders, Sydney Children’s Hospital. EB-BP
– Prof K Kirk, Australian National University. Malaria
– Prof M McConville, Bio21 Institute, Melbourne University. Tropical diseases
– A/Prof P Eckert, WEHI. Cytokine signalling
– A/Prof John Silke, WEHI. TNF signalling
– Prof S McCall, University of Adelaide. Cytokine signalling
– Dr S Ralph, Bio21 Institute, Melbourne University. Malaria
– Dr T Mulhern, Bio21 Institute, Melbourne University. SARS
– Dr P Dooley, Bio21 Institute, Melbourne University. Protein kinase regulation
– Prof S Kriis, St. Georges Hospital, UNSW, Sydney. NSW Antiphospholipid syndrome
– Dr H Harris, Adelaide University, South Australia. EXAFS
– Dr K Dwyer, St. Vincent’s Hospital. Adenosine receptors
– Dr C Walkley, SVI. ADARs
– Dr L Purton, SVI. Hex
– Prof T Hughes, Royal Adelaide Hospital. BCR-ABL
– Dr A Hurt, WHO Melbourne. Influenza
– Dr K Peter, Baker IDI. Elastin
– Dr A, Alfred Hospital. Kinases
– Dr B Sarcevic, SVI. Ubiquitin
– Dr A Nash; CSL. Protein targets
– A/Prof M Gorell. Centenary Institute for Cancer Research. FAP
Presentations

David Ascher
- Melbourne Protein Group, Melbourne. Invited speaker

Nilukshi Arachchi
- 28th NRL Workshop on Infectious Diseases, Canberra. Speaker

Liza Cabeans
- 28th NRL Workshop on Infectious Diseases, Canberra. Speaker

Roderick Chappel
- Workshop on Leptospirosis Diagnosis, Bangkok, Thailand. Invited speaker
- Seventh Scientific Meeting of the International Leptospirosis Society, Mérida, México. Speaker
- 28th NRL Workshop on Infectious Diseases, Canberra. Speaker

Stirling Dick
- ASM Conference, Hobart. Speaker

Wayne Dimoch
- 28th NRL Workshop on Infectious Diseases, Canberra. Speaker

Jörg Heierhorst
- Keystone Symposium on Lung Development and Repair, Santa Fe, USA. Speaker
- COMBIO 2011, Cairns. Invited speaker
- 5th Australian B Cell Dialogue, Melbourne. Speaker
- 13th Australian Cell Cycle Workshop, Noosa. Speaker
- Children’s Medical Research Institute, Sydney. Seminar speaker
- Australian Wine Research Institute, Adelaide. Seminar speaker
- Department of Biochemistry and Molecular Biology, Monash University, Melbourne. Seminar Speaker

Natalie Sims
- Institute of Biological Chemistry, Academia Sinica, Taipei, Taiwan. Seminar speaker

Nicolas Hoch
- 13th Australian Cell Cycle Workshop, Noosa. Speaker

Gaurang Jhala
- Biomedlink 2011 Student Conference, St Vincent’s Hospital. Speaker

Sabine Jurado
- CTx Student Symposium, Melbourne. Speaker
- St. Vincent’s Hospital Research Week, Melbourne. Speaker

Thomas Kay
- Peter MacCallum Cancer Centre Seminar, Melbourne. Invited speaker
- 14th Australian Autoimmunity Workshop, Brisbane. Invited speaker
- Federation of Clinical Immunology Societies 2011, Washington DC. Speaker
- 2011 International Conference for Bioeconomy, Tianjin, China. Invited speaker
- Immunology Group of Victoria (IyV) Human Immunology Master Class, Melbourne. Invited speaker
- Asian Pacific Hepato Pancreato Biliary Association Congress, Melbourne. Invited speaker
- Bioc1 Cluster Hospital Research Director Forum, Translational Research, The Melbourne Summit, Melbourne. Invited speaker
- University of Melbourne Faculty of Medicine, Dentistry and Health Sciences – Diabetes, Obesity & Endo Research Domain Symposium, Melbourne. Invited speaker
- Ritchie Centre 2011 Colloquium, Melbourne. Invited speaker
- SVI Foundation $10,000 Discovery Fund Luncheon
- SVI Foundation Alcaenton Gallery Event
- SVI Dinner and Tour for $10,000 Discovery Fund Members and guests
- Cameron Livingstone Symposium / Advanced 7th International Conference on Quantum Bone Imaging, Workshop, Noosa. Speaker

Bruce Kemp
- FASEB Protein Kinases and Protein Phosphorylation, Snowmass Village, Colorado, USA. Invited speaker
- Molecular Cardiology Research Institute Tufts Medical Centre, Boston, MA, USA. Seminar speaker
- Cellular Signalling Technologies 2011, Danvers, MA, USA. Seminar speaker
- The First Frontiers in Obesity and Diabetes Research, Royal Society of Victoria, Melbourne. Invited speaker
- Department of Physiology University of Melbourne, 5 October 2011. Seminar speaker
- ANZAAS Victorian Division, GTAC Parkville 19 October 2011, Invited speaker

Anita Krishnamurthy
- Australian Diabetes Society Annual Scientific Meeting, Perth. Speaker

Xianning Lai
- 13th Australian Cell Cycle Workshop, Noosa. Speaker

Sally Land
- International Workshop on HIV and Hepatitis Virus Drug Resistance and Curative Strategies, Los Cabos, Mexico. Speaker
- 28th NRL Workshop on Infectious Diseases, Canberra. Speaker

Benoit Le Goff
- Australian Rheumatology Association Annual Meeting, Brisbane, Australia. Speaker

Stuart Manning
- Australian Diabetes Society Annual Scientific Meeting, 2011. Speaker

T.J. Martin
- Advances in Mineral Metabolism, Snowmass, Colorado, USA. Invited speaker
- Sarcoma Study Group, Melbourne. Invited speaker
- Indiana University, Indianapolis, USA. Invited speaker
- 14th Course on Osteoporosis and Metabolic Bone Disease, Gold Coast. Invited speaker
- Korean Society for Bone Metabolism, Seoul, South Korea. Invited speaker

Zia Mollah
- St. Vincent’s Hospital Research Week, Melbourne. Speaker

Jonathon Oakhill
- Lorne Conference on Protein Structure and Function, Lorne, Vic. Speaker

Michael Parker
- BT’s 3rd Annual International Congress of Antibody-2011, Beijing, China. Invited speaker
- 22nd Congress of the International Leptospirosis Diagnostics, Madrid, Spain. Invited speaker
- Australian Society for Biochemistry and Molecular Biology Annual Conference (ComBio2011), Cairns, Queensland. Invited plenary speaker

Louise Purton
- International Symposium on Stem Cells and Regenerative Medicine, Mexico City, Mexico. Invited speaker

Sue Rogers
- Deakin University School of Medicine, Geelong, Vic. Seminar speaker
- ComBio, Cairns. Invited speaker
- RMIT University School of Medical Sciences, Bundoora, Vic. Guest lecturer

Boris Sarcevic
- University of Kansas Medical Center
- Dept. of Physiology, University of California San Francisco
- 14th Annual Australian Cell Cycle Meeting, Noosa, QLD
- Lorne Protein Conference, Lorne

Natalie Sims
- University of Western Australia Department of Pathology Seminar Series, Perth. Seminar speaker
- Australia and New Zealand Bone and Mineral Society Satellite Symposium / Advanced Quantitative Bone Imaging Workshop, Gold Coast. Invited speaker
Presentations

- The University of Western Australia Institute of Advanced Studies Cartilage and Bone Symposium, Perth, Invited speaker
- Australia and New Zealand Bone and Mineral Society Annual Postgraduate Clinical Training Course, Sydney. Invited speaker
- Australia and New Zealand Bone and Mineral Society Annual Postgraduate Clinical Training Course, Melbourne. Invited speaker & Convenor
- International Osteoporosis Foundation / Australia and New Zealand Bone and Mineral Society 2nd Asia-Pacific Osteoporosis and Bone Meeting, Gold Coast. Invited speaker
- International Bone and Mineral Research Annual Scientific Meeting, San Diego USA. Speaker

Sofie Singbrant Soderberg
- St. Vincent's Institute and Department of Medicine, The University of Melbourne seminar series. Invited speaker

Gregory Steinberg
- Banting and Best Diabetes Centre Scientific Day. Invited speaker
- Muscle Health and Awareness Day, York University. Invited speaker
- Rigel Pharmaceuticals, South San Francisco. Invited speaker
- Thrombosis and Atherosclerosis Research Institute, Hamilton. Seminar speaker
- Boehringer-Ingelheim, Toronto. Seminar speaker

Joshua Szanyi
- UROP presentation day, Melbourne. Speaker

Farzin Takyar
- American Society for Bone and Mineral Research, San Diego USA. Speaker

Shanna Tam
- Research Training Forum Series, Department of Medicine, St Vincent's Hospital. Seminar speaker
- Cell Biology Seminar, Imperial College London, UK. Invited speaker

Helen Thomas
- University of Melbourne Department of Microbiology and Immunology. Seminar speaker
- John Curtin School of Medical Research. Seminar speaker
- Australasian Autoimmunity Workshop, Brisbane. Invited speaker
- The Annual Meeting of the EASD Islet Study Group, Natal, Brazil. Speaker

Erik Thompson
- International Bone & Mineral Society, Cancer and Bone Society meeting, Chicago, IL, USA. Invited speaker
- 102nd Annual AACR meeting, Orlando, FLA, USA. Invited panelist
- Keystone Symposium on Epithelial Plasticity and Epithelial to Mesenchymal Transition, Vancouver, B.C., Canada. Invited speaker
- 7th International Conference on Proteoglycans held in conjunction with the Matrix Biology Society of ANZ Annual Meeting, Sydney, NSW, 16-20 Oct. Barry Prestor Award Lecturer
- ANZ BCTG 33rd Annual Participants’ Scientific Meeting, Royal Pines Resort, Gold Coast, QLD. Invited speaker
- Breast Interest Group of the Royal Australian & New Zealand College of Radiologists – 8th General Breast Imaging Meeting. Invited speaker
- Ikibel, Barcelona, Spain
- St. Vincent’s Hospital (Melbourne), Breast cancer multidisciplinary meeting
- St. Vincent’s Institute Cross Campus Research Seminar, Melbourne
- Deskin University, School of Medicine

Joe Vincini
- SoGAT Clinical Diagnostics III, London, United Kingdom. Speaker
- 28th NRL Workshop on Infectious Diseases, Canberra. Speaker

Jibran Wali
- Australian Diabetes Society Annual Scientific Meeting, Perth. Speaker
- Australian Islet Study Group, Sydney. Speaker

Carl Walkley
- The Second International Retinoblastoma Tumor Suppressor Symposium, Toronto, Canada (Declined due to family commitment). Invited Speaker
- Annual Sarcoma Conference, Australian Sarcoma Study Group. Invited Speaker

Nicole Walsh
- International Osteoporosis Foundation / Australia and New Zealand Bone and Mineral Society 2nd Asia-Pacific Osteoporosis and Bone Meeting, Gold Coast. Speaker
- World Congress in Osteoarthritis, OARSI Annual Meeting. San Diego, USA. Speaker

Kim Wilson
- RCPA Pathology Update, Melbourne. Invited speaker


SVI Seminar Program

Prof Mark Forwood
Chair of Anatomy, Griffith University Gold Coast
“MCP-1 gene expression dominates chemokine activation of skeletal repair and remodeling in the rat”
A/Prof Sara Kozma
University of Cincinnati Medical Center, Cincinnati, OH, USA
“S6K1 regulates pancreatic β-cell size and insulin homeostasis in a cell-autonomous manner, independent of intracellular growth restriction”
Dr Christine Hawkins
Department of Biochemistry, La Trobe University
“A healthy life after cancer – killing cancer cells without mutating normal cells”
A/Prof Ann Turnley
Centre for Neuroscience, University of Melbourne
“Regulation of neural precursor cell proliferation, migration and integration in the adult nervous system”
Dr Honor Hugo
Invasion and Metastasis Unit, SVI
“ZEB1 suppression underpins Mesenchymal to Epithelial Transition: Implications for metastatic tumour growth driven by MYB”
Dr Marnie Blewitt
Molecular Medicine Division, WEHI
“The polycomb repressive complexes play opposing rather than synergistic roles in hematopoietic stem and progenitor cells”
Prof Claude Bernard
Deputy Director, Immunology & Stem Cell Laboratories, Monash University
“The promise of stem cells as a neurogenerative approach to the treatment of multiple sclerosis”
Prof Mark Cooper
Head of Research, Baker IDI
“Sweet dreams: the pathobiology of metabolic memory”
Dr Daniela Stock
Victor Chang Cardiac Research Institute
“Structure and function of biological rotary motors”
Dr Sofie Singbrant
Stem Cell Regulation Unit, SVI
“Erythropoietin (Epo) does more than regulate the formation of red blood cells”
A/Prof Peter Meikle
Head, Metabolomics Laboratory, Baker IDI Heart & Diabetes Institute
“Lipid Profiling for the investigation of Metabolic Syndrome Related Diseases”
Dr Benoit Le Goff
Bone Cell Biology and Disease Unit, SVI
“Oncostatin M: a key player in inflammatory arthritis”
Prof Jonathan Crowston
Managing Director, Centre for Eye Research Australia
“Mitoprotection: protecting retinal ganglion cells when mitochondria misbehave”
Dr Odilia Wihburg
Dept of Microbiology and Immunology, University of Melbourne
“The role of influenza A virus in Streptococcus pneumoniae transmission and disease”
Dr Stephen Tonna
Bone Cell Biology and Disease Unit, SVI
“The genetics of inherited kidney diseases from focal & segmental glomerulosclerosis to diabetic nephropathy”
Prof David Tarlinton
Immunology Division, WEHI
“The molecular basis of sustaining B cell memory”
Dr Darren Saunders
Garvan Institute of Medical Research
“Illuminating molecular pathways in cancer: In situ detection of ubiquitin ligase substrates”
Dr David Izon
Haematology and Leukaemia Unit, SVI
“Lymphoid development from myeloid progenitors: challenging the dogma”
Dr Tony Mutsaers
Stem Cell Regulation Unit, SVI
“Models of Osteosarcoma: from Mice and Dogs to Human”
Dr Jon Oakhill
Protein Chemistry and Metabolism Unit, SVI
Prof Neil Watkins
Centre for Cancer Research, Monash Institute of Medical Research
“Hedgehog signalling: From Flies to clinical trials”
Dr Stephen Ting
Peter MacCallum Cancer Centre
“Haematopoietic stem cell self-renewal via asymmetric cell division”
Dr Leanne Cotton
Australian Phenomics Network, Monash University
“Australian Phenomics Network Overview”
Dr Andrew Deans
Genome Stability Unit, SVI
“Familial cancer syndromes linked to genome instability: a biochemical approach”
Dr John Pimanda
Lowy Cancer Research Centre & The Prince of Wales Clinical School, University of NSW
“Transcriptional control of normal and abnormal blood stem cell development”
Dr Rachelle Johnson
Bone Cell Biology and Disease Unit, SVI
“Mechanisms of G1i2 regulation in tumour-induced osteolysis”
A/Prof Martin Lackmann
Protein Interaction and Cancer Research Laboratory, Monash University
“Eph-on/Eph-off switches controlling cell positioning”
Prof Andras Nagy
Mount Sinai Hospital, Samuel Lunenfeld Research Institute, Toronto
“Toward understanding somatic cell reprogramming to pluripotency”
Dr Marie-Odile Parat
School of Pharmacy University of Queensland
“Caveolae and angiogenesis”
A/Prof. Duncan Campbell
Molecular Cardiology Unit, SVI
“The human heart”
Mr Siddharth Rajakumar
Immunology Research Centre, St Vincent’s Hospital Melbourne, DoM University of Melbourne
“The role of purinergic signalling in kidney ischaemia reperfusion injury”
Ms Joanne Chia
Immunology Research Centre, St Vincent’s Hospital Melbourne, DoM University of Melbourne
“hCD39 overexpression is a potential strategy to improve islet engraftment after transplantation”

Overview”

Dr Andrew Deans
Genome Stability Unit, SVI
“Familial cancer syndromes linked to genome instability: a biochemical approach”

Dr John Pimanda
Lowy Cancer Research Centre & The Prince of Wales Clinical School, University of NSW
“Transcriptional control of normal and abnormal blood stem cell development”

Dr Rachelle Johnson
Bone Cell Biology and Disease Unit, SVI
“Mechanisms of G1i2 regulation in tumour-induced osteolysis”

A/Prof Martin Lackmann
Protein Interaction and Cancer Research Laboratory, Monash University
“Eph-on/Eph-off switches controlling cell positioning”

Prof Andras Nagy
Mount Sinai Hospital, Samuel Lunenfeld Research Institute, Toronto
“Toward understanding somatic cell reprogramming to pluripotency”

Dr Marie-Odile Parat
School of Pharmacy University of Queensland
“Caveolae and angiogenesis”

A/Prof. Duncan Campbell
Molecular Cardiology Unit, SVI
“The human heart”

Mr Siddharth Rajakumar
Immunology Research Centre, St Vincent’s Hospital Melbourne, DoM University of Melbourne
“The role of purinergic signalling in kidney ischaemia reperfusion injury”

Ms Joanne Chia
Immunology Research Centre, St Vincent’s Hospital Melbourne, DoM University of Melbourne
“hCD39 overexpression is a potential strategy to improve islet engraftment after transplantation”
SVI is an independent medical research institute conducting medical research into the cause, prevention and treatment of diseases that are common and have serious effects on health.

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

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

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

Patron
Str Gustav JV Nossal, AC CBE
MBBS BSc(Med) Syd PhD Melb
HonLD Mon HonLD Melb
HonMD Mains HonMD Ncl
HonMD Leeds HonMD UWA
HonDSc Syd HonDSc Qld HonDSc
ANU HonDSc UNSW HonDSc LaT
HonDSc McMaster HonDSc Oxon
FRCP FRACP FRCPA FRACOG
(Hon) FRCPath FRACP FRSE
FRCPath FAA FRS

St Vincent’s Institute Staff

Director
Thomas WH Kay, BMedSci MBBS
PhD Melb FRACP FRCPA
Professor (Medicine), The University of Melbourne

Deputy Director
Michael W Parker, BSc(Hons)
ANU, PhD Oxford, ARC Federation Fellow;
NHMRC Senior Research Fellow;
Professor (Biochemistry)
(Department of Molecular and Biological Science and Bio21 Institute),
The University of Melbourne

Associate Directors
Jörg Heierhorst, MD Hamburg;
NHMRC Senior Research Fellow;
Professor (Medicine), The University of Melbourne

John Holt Fellow
T John Martin, AO MD DSc Melb
Hon MD Sheffield FRACP FRCPA
FAA FRS, Emeritus Professor
(Medicine), The University of Melbourne

Pehr Edman Fellow
Bruce E Kemp, BA(BSc)(Hons) Adel
PhD Flinders FAAA, FARS, FRS;
NHMRC Senior Principal Research Fellow;
Professor (Medicine), The University of Melbourne

Research Faculty
Ora Bernard, MSc, TelAviv, PhD
McGill, MPS Mon, Associate Professor
(Medicine), The University of Melbourne

Tom Brodmnick, BSc Minnesota USA,
PhD Illinois USA, Senior Fellow (Medicine),
The University of Melbourne

Duncan Campbell, BMedSci MBBS,
PhD Grad Dip Epid Biostat Melb;
F RCPA FCSANZ, Associate Professor (Medicine),
The University of Melbourne

Andrew Deans, BSc(Hons), PhD Melb
(from 8/11)

David Izon, PhD Mon, Senior Fellow (Medicine),
The University of Melbourne

Stuart Manning, BSc Canterbury NZ,
DipGrad MSc: PhD Dunedin

NZ, Senior Fellow (Medicine),
The University of Melbourne

Boris Sarcevic, BSc(Hons) LaT
PhD Melb, Senior Fellow (Medicine),
The University of Melbourne

Helen Thomas, BSc(Hons) UWA
PhD Melb, NHMRC CDA Level 2 Fellow;
Associate Professor (Medicine),
The University of Melbourne

Erik Thompson, BSc(Hons) PhD
Griffith, Professor (Surgery), The University of Melbourne

Carl Walkley, BPharm(Hons)
UnSA, PhD Melb, Phillip Deslaurier
Senior Research Fellow Leukaemia
Foundation, Fellow (Medicine), The University of Melbourne

Mark Walkham, BSc(Hons) PhD
Qld, Senior Fellow (Surgery), The University of Melbourne

Research Scientists
Juliana Antoniopilais, BSc(Hons)
LaT, PhD LaT
Emma Baker BSc(Hons) Flinders
SA, PhD Melb

Brett Bennetts, BSc(Hons), PhD ADE
Sophie Broughton, BSc(Hons)
Swinburne, PhD Mon
Peter Campbell BSc(Hons) LaT,
PhD Melb (to 6/11)

Zhiping Chen, BSc Shanghai,
PhD ULP France

Lindus Conlan, BSc(Hons), PhD Melb
Sit Dhami, MBBS Colombo,
PhD Japan (from 3/11)

Colleen Elso, BSc(Hons) Melb,
PhD Melb

Suzanne Feil, BSc Stockholn,
PhD Melb, Honorary Senior Fellow
(Bio21 Molecular Science and
Biotechnology Institute)

Sandra Gaic, BSc(Hons)
Eberhard-Karls Uni, PhD Mon

Cristina Gamell Fulla, BSc
Barcelona, PhD Barcelona

Michael Gorman, BSc(Hons)
Liverpool, PhD London

Kate Graham, BSc(Hons), PhD Melb
JDRF Postdoctoral Fellow

Annet Hammarh, BSc Gothenberg,
PhD Uppsala Sweden

Jessica Holien, BSc(Hons), PhD Mon,
GradCert Comm Research Mon

Honor Hugo, BSc(Hons), PhD Melb,
PhD Melb, NIEC Fellow

Mugitha Joglekar, MSc,
PhD Hyderabad India

Rachelle Johnson, BSc Georgia USA,
PhD Vanderbilt USA
(from 8/11)

Frosa Katsis, BAppSc BC PTT
Balasubramanian, Krishnamurthy,
MBBS Bangalore, MD Agra, DM

Lucknow
Naomi Ling, BSc MSc Un Canterbury UK, PhD Melb

Thomas Louwkoaniai, BSc(Hons), PhD Melb

Belinda Michiel, BSc(Hons), MBA
PhD Melb, Senior Fellow (Medicine),
The University of Melbourne

Luke Miles, BSc(Hons), PhD LaT,
Honorary Senior Fellow (Bio21
Molecular Science and
Biotechnology Institute)

Zia Mollah, MBBS Bangladeshi,
PhD Japan

Tony Mutasera, Dip Vet Med
Ontario Vet College (to 8/11)

Suzanne Rogers, BSc(Hons), PhD London,
PhD London

Nirupa Sachithanandan, MBBS
Mon, FRACP PhD Melb (to 5/11)

John Scott, BSc Glasgow, PhD Dundee

Manisha Shah, MSc PhD India;
Komen Fellow

Sofie Singbright-Soederberg, MA
BiomedChem, PhD Lund Sweden
(to 7/11)

Monique Smets, PhD Amsterdam

Rohan Steel, BSc(Hon), PhD Melb

Randy Suryinadata, BSc(Hons) Melb,
PhD Melb

Eric Thompson, BSc(Hons) PhD
Melb, PhD Melb

Bryce van Denderen, BSc(Hons),
PhD Melb, Senior Fellow (Medicine),
The University of Melbourne

Nicole Walsh, BSc(Hons), PhD Melb

Jerome Wielens, BSc(Hons),
PhD Lund Sweden

Bryan Willis, BAppSciPharm VUT,
BSc LaT

Hayley Moon, BSc(Hons) Deakin

Megan Russell, BSc(Hons) Deakin

Natalie Sanders, BSc(Hons) Deakin

Mugdha Joglekar, BSc(Hons),
PhD Melb

Holly Brennan, BSc(Hons) Deakin

Rochna Chand BSc(Hons) Deakin
(to 11/11)

Jonathan Chee, BBiomedSci(Hons) Deakin

Joseph Ciantar, BSc(Hons) Deakin

Gabriela Crespi, DipBiol Nat

Elke Cordoba

Blessing Crimeen-Irwin,
BSc(Hons) Deakin

Lorraine Elkerbout, Dip Animal Tech,
Calibra

Kimberley Gleeson, BSc ANU

Alana (Leni) Green, BSc(Hons) Deakin

Nancy Hancock, BSc ANU

State Fresno MA San Francico

State

Christine Henderson, BA Deakin,
BSc(Hons) Deakin

Jean Hendy, BA AppSc RMIT

Dexing Huang, BSc Nanjing China

Alison Irvin, BSc(Hons) Deakin
(to 10/11)

Gaurang Jhala, BSc MSc Pune

Tanja Jovic, BSc(Hons) Deakin

Joline Kuechle, BSc(Hons) Deakin
(to 11/11)

Cameron Kos, BSc Mon

Sara Lawrence, BSc Bath, PhD London

Brian Lickiccoast, BSc(Hons) Deakin

Leanne Mackin, BSc Mon

Lina Mariana, BSc(Hons) Deakin

Emma Mcgowan, BSc(Hons) Deakin

Narele McGregor, AssocDipAppSci VUT, BSc LaT

Ingrid Poultot, BSc Health MLIS

RMTP, BMed&App Biotech

Charles Sturt

Megan Russell, BSc(Hons) Deakin

Jonathan Temasek Polytechnic

BSc(Hons) Deakin

Nora Tensin, BSc Mon,
GradDipMedLabSci Un SA

Brett Tonkin, BSc(Hons) LaTrobe

Prerak Trivedi, MBiotech

Swinburne, BPharm Gujarat India

Sylvie Van Twest, BSc West Ontario Canada,
MSc Unqelsh Canada (from 3/11)

Cardiac Technologists

Laura Moccia, B Nursing Uni

Chief Dip Cardiatic Tech OUT

Gladys Rodriguez, Cardiac Tech

Glenda Caracas, Dip Cardiatic Tech

OUT (to 4/11)
SVI staff, associates and students

<table>
<thead>
<tr>
<th>Senior Principal Research Associates</th>
<th>Senior Associates</th>
<th>Administrative Officers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peter Chooong, MBBS MD Melb FRACS FAORHTHA; Professor of Orthopaedics, St Vincent’s Hospital and The University of Melbourne</td>
<td>Lance Macaulay, BSc(Hons) PhD Mon; Primo Research Scientist CSIRO; Srin Fellow (Medicine) St Vincent’s and The University of Melbourne</td>
<td>Kate Barnett</td>
</tr>
<tr>
<td></td>
<td>Harshal Nandurkar, MBBS Bombay PhD Melb; FRACP FRCPA; Staff Haematologist, St Vincent’s Hospital</td>
<td>Steven Boz</td>
</tr>
<tr>
<td></td>
<td>Evange Romas, MBBS PhD Melb; Senior Lecturer (Medicine) The University of Melbourne</td>
<td>Beth Castles</td>
</tr>
<tr>
<td></td>
<td>Vincent Murphy, BSc Melb, GradDip Biostat &amp; Epid Melb</td>
<td>Laura Kantidakis (from 9/11)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Julie Malyon</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Kathyrn O’Connell</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Dimitra Samaras</td>
</tr>
<tr>
<td></td>
<td></td>
<td>IT Manager</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Peter Tonoli, A/Dip IT Swinburne; Dip Mgt, Swinburne</td>
</tr>
<tr>
<td></td>
<td></td>
<td>IT Support Officers</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mathew Esey, BA Melb; Microsoft Certified-CTS, MCITP; Apple Certified</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Irene Esquiuel</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Christopher Ryan, BSc/BIS Melb</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Jon Rhoaeks, BSc(Hons) BioChem York UK; Microsoft Certified- MCSCE, MCSA, MCSTS, MCITP Apple Certified ACSP, ACSA</td>
</tr>
<tr>
<td></td>
<td></td>
<td>National Serology Reference Laboratory, Australia</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Director</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Susan Best, MAppSc RMIT</td>
</tr>
<tr>
<td></td>
<td></td>
<td>MBA Melb</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Consultant</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Rodriguez Chapple, BAgScPhd PhD Melb MASM</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Marketing Manager</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Wayne Dimech, BAppSc RMIT</td>
</tr>
<tr>
<td></td>
<td></td>
<td>FAIMS MBA LaT</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Scientists</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Lena Arvanitis, BSc LaT</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Thein Thein Aye, MBBS PhD</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Nihon University</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Penny Buxton, BSc(Hons) Mon</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Chris Chiu, BSc(Hons) Adelaide (to 3/11)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Stirling Dick, BSc Tasmania</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cathryn Dunkley, BSc LaT</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Marina Karakaltsas, BSc LaT</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Gerakinie Kong, BSc Singapore, MSoc Sc Singapore</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sally Land, BSc(Hons) Dip Ed Melb</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mark Langan, BSc Swinburne (Hons) PhD Melb</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Nilusheki Malawe Arachchi, BSc RMTP; Dip Lab Tech Vic</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Tamara McDonald, BSc LaT</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Susie-Jane Noppert, PhD Mon; BAppSc (Hons)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Megan Pate, BSc(Hons) Melb (to 9/11)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Thu-Anh Pham, BAppSc; MAppSc RMTP</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Kim Richards, BSc(Hons) VU</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Derya Sahin, Vet Sc Turkey, PhD Ankara</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Kathy Smeh, BSc(Hons) DipEd BEd MEd Melb</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Robert Vinoya, BSc VU</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sandy Walker, BSc(Hons) LaT</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Kim Wilson, BAppSc QIT PhD Melb</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Post Market Monitoring Team Leader</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Giuseppe Vincini, BSc RMIT, MSc UK</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Logistics Co-Ordinator</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Stephen Gilmour, BSc Salisbury UK</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Data Management and Website Officer</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Rosanna Torzillo</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Laboratory Assistant</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Frank Torzillo</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Executive Assistant</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Alison Nataol</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Computer Systems Manager</td>
</tr>
<tr>
<td></td>
<td></td>
<td>John Tomaev, BSc(Hons), PhD LaT, Grad Dip Comp Sc Mon</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Office Manager</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Louie Opasinov, BSc, DipEd Melb</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Training Coordinator / Records Administrator</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Helen Hasler</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Postgraduate Scholars</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Doctor of Philosophy</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Michele Ashton, BSc(Hons) Melb</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Jon Chee, BSc(Hons) Melb</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ling Yeong Chia, BSc(Hons) Murdoch, WA</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Chen Gao, BSc Auckland; MSC Auckland</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Devika Gunasinghe, BDS(Hons) MPhil U Peradeniya</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Nicholas Hoch Dip Pharm Rio Grande do Sul</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Quarang Jhala, BSc Pune; MSc Pune</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Chacko Joseph, BTech-Industrial Biotech Chennai India</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sabine Jurado, MSc Nice</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Suang Suang Koid, BSc(Hons) Melb</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Xinning Lai, BSc(Hons) Melb</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Hui Peng Lim, BHealthSc(Hons) Adelaide, BScMgt(Hons) Uni London, Singapore</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Kevin Mittelstaedt, MSc Berlin</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Alvin Ng, BSc(Hons) Griffith NSW</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Hayley O’Neill BSc(Hons) Deskin</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Walter Pfister, BSc(Hons) Melb</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cletus Pinto, BSc QUT BSc(Hons) Melb</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Alice Schofield, BAppSc(Hons) Melb</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Eliza Soo, BSc(Hons) Singapore</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Anthony Tachtsidis, B BiomedSc(Hons) Mon</td>
</tr>
</tbody>
</table>
SVI committees

Board Committees
SVI Audit and Finance Committee
The purpose of the SVI Audit and Finance Committee is to assist the SVI Board in fulfilling its responsibilities in relation to the identification of areas of significant financial risks and the monitoring of:
• adherence to the Company’s Statement of Corporate Governance Principles
• maintenance of an effective and efficient internal and external audit
• management and external reporting
• effective management of financials
• compliance with laws and regulations
• business dealings, in particular related party transactions
The Committee also undertakes the role of an audit committee and provides recommendations to the SVI Board on the appointment of the external auditors, direction of audit (without impacting on the auditor’s independence) and the level of audit fees.
2011 Committee members (external):
Greg Robinson (Chair), John Sime, Andrew Baker, Michelle Baker, Paula de Bruyn, Stephen Livesey and Michael McGinniss
2011 Committee members (internal):
Thomas Kay, Michael Parker, Bruce Kemp and Tony Mason (Convenor)

Internal Committees
SVI Occupational Health and Safety Committee
2011 Committee members:
Virginia Leopold (Chair), Jörg Heierhorst, Prasa Katsis, Ankita Goradia, Cameron Koe, Thomas Loudovaris, and Kevin Mittelstaedt

SVI Commercialisation and Intellectual Property Committee
The purpose of the SVI Commercialisation and Intellectual Property Committee (CIP) is to ensure processes are in place for protection and commercialisation of the intellectual property assets of SVI.
In 2011, the SVI CIP Committee oversaw SVI’s participation in the Cooperative Research Centre for Cancer Therapeutics (CRC-CT). The CRC-CT, which involves many other significant Australian research institutions, was set up to commercialise basic cancer research. SVI is the core Structural Biology Group of the CRC-CT. The Committee also oversaw SVI’s IP out-licensing activities with various companies and reviewed SVI’s Collaboration Research Agreements with academic partners.
2011 Committee members:
Ruth O’Sullivan (Chair), Anthony Burgess, Paul Holyoake, Janene Krongold and Michael McGinniss

Undergraduate Scholars
Bachelor of Science (Honours)
Batool Albatat
Edward Chu
Rachael Costanzo
Allison Irvin
Andra Necula
Hong Quah
Aim Roeley
Sam Rudstein
Anthonius Ricardo Tan
Muhammad Zaid Zainuddin

Masters of Science
Gelinde Narekine
Jingjing Cai

Undergraduate Research Opportunity Program (UROP)
Harriet Dashnow
Hannah King
Aimee Khoo
Yue Li
Joshua Szanyi

Minalireza (Farzin) Takya, MBBS Iran
Shanna Tam, BSc(Hons) Melb
Iris Tan, BSc(Hons) Melb
Julian Tang, BSc(Hons) Melb
Jibran Wali, BSc Lahore; MBBS Lahore; MHSc Auckland
Nancy Wang, BSc(Hons) Melb

Doctor of Medical Science, Masters by Research
Jennifer Coller, MBBS Melb, FRACP

2011 Committee members
(external):
Greg Robinson (Chair), John Sime, Andrew Baker, Michelle Baker, Paula de Bruyn, Stephen Livesey and Michael McGinniss
2011 Committee members
(internal):
Thomas Kay, Michael Parker, Bruce Kemp and Tony Mason (Convenor)
### Statement Of Financial Position
**As At 31 December 2011**

<table>
<thead>
<tr>
<th></th>
<th>2011 ($)</th>
<th>2010 ($)</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>13,153,786</td>
<td>14,556,068</td>
</tr>
<tr>
<td>Trade and other receivables</td>
<td>2,051,994</td>
<td>899,406</td>
</tr>
<tr>
<td>Other assets</td>
<td>51,172</td>
<td>241,110</td>
</tr>
<tr>
<td><strong>Total Current Assets</strong></td>
<td><strong>15,256,952</strong></td>
<td><strong>15,696,584</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>2,824,956</td>
<td>2,614,110</td>
</tr>
<tr>
<td>Property, plant &amp; equipment</td>
<td>7,859,523</td>
<td>8,631,915</td>
</tr>
<tr>
<td><strong>Total Non-current Assets</strong></td>
<td><strong>10,934,479</strong></td>
<td><strong>11,496,025</strong></td>
</tr>
<tr>
<td><strong>Total Assets</strong></td>
<td><strong>26,191,431</strong></td>
<td><strong>27,192,609</strong></td>
</tr>
<tr>
<td><strong>Current Liabilities</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trade and other payables</td>
<td>2,568,524</td>
<td>3,282,282</td>
</tr>
<tr>
<td>Short-term provisions</td>
<td>939,197</td>
<td>701,338</td>
</tr>
<tr>
<td>Funds held in trust for NSRL accrued leave</td>
<td>138,280</td>
<td>138,280</td>
</tr>
<tr>
<td><strong>Total Current Liabilities</strong></td>
<td><strong>3,646,001</strong></td>
<td><strong>4,121,900</strong></td>
</tr>
<tr>
<td><strong>Non-current Liabilities</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provisions</td>
<td>204,233</td>
<td>145,478</td>
</tr>
<tr>
<td><strong>Total Non-current Liabilities</strong></td>
<td><strong>204,233</strong></td>
<td><strong>145,478</strong></td>
</tr>
<tr>
<td><strong>Total Liabilities</strong></td>
<td><strong>3,850,234</strong></td>
<td><strong>4,267,378</strong></td>
</tr>
<tr>
<td><strong>NET ASSETS</strong></td>
<td><strong>22,341,197</strong></td>
<td><strong>22,925,231</strong></td>
</tr>
<tr>
<td><strong>EQUITY</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Retained surplus</td>
<td>22,658,536</td>
<td>22,863,278</td>
</tr>
<tr>
<td>Reserves</td>
<td>(317,339)</td>
<td>61,953</td>
</tr>
<tr>
<td><strong>TOTAL EQUITY</strong></td>
<td><strong>22,341,197</strong></td>
<td><strong>22,925,231</strong></td>
</tr>
</tbody>
</table>

The Statement of Financial Position provided above, together with the attached Statement of Comprehensive Income and Statement of Cash Flows have been extracted from the audited general purpose financial statements of St Vincent’s Institute of Medical Research. The summary financial information does not include all the information and notes normally included in the statutory set of financial statements. A full set of audited general purpose financial statements can be obtained upon request to the Chief Finance Officer. The statutory financial statements (from which the summary financial information has been extracted) comply with Australian Accounting Standards. The statutory financial statements were unqualified by the auditors, William Buck Audit (Vic) Pty Ltd.
## Statement Of Comprehensive Income
### For The Year Ended 31 December 2011

<table>
<thead>
<tr>
<th>Note</th>
<th>2011 ($)</th>
<th>2010 ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue</td>
<td>15,135,998</td>
<td>15,714,128</td>
</tr>
<tr>
<td>Other income</td>
<td>5,042,860</td>
<td>4,986,568</td>
</tr>
<tr>
<td>Total revenue</td>
<td>20,178,858</td>
<td>20,700,696</td>
</tr>
</tbody>
</table>

Consumables and general research expenses | (4,482,852) | (4,936,146) |
Employee benefits expense | (11,675,402) | (11,169,874) |
Depreciation and amortisation | (1,918,271) | (1,758,827) |
Administration expenses | (1,480,315) | (1,483,263) |
Transfers to collaborators | (826,760) | (269,356) |
Total expenses | (20,383,600) | (19,617,466) |

**Surplus/Deficit for the year** | **(204,742)** | **1,083,230** |

Other Comprehensive income

Net (loss)/gain on revaluation of financial assets | 2 | (379,292) | (19,330) |

**Total Comprehensive Income for the year** | **(584,034)** | **1,063,900** |

**Total Comprehensive Income attributable to members of the entity** | **(584,034)** | **1,063,900** |

### Note 1: Revenue and Other Income

#### REVENUE

**Income from research activities:**

- government grants for direct research | 3-4 | 7,700,479 | 7,501,259 |
- other research grants | 4,414,651 | 5,153,253 |
- government grants for operational support | 3-4 | 3,020,868 | 3,059,616 |

**Total revenue** | **15,135,998** | **15,714,128** |

### Other income:

- legacies, bequests, donations | 2,254,894 | 2,840,222 |
- dividends from other corporations | 146,843 | 168,819 |
- interest from other corporations | 729,354 | 787,646 |
- contract services | 1,763,663 | 813,994 |
- royalty | 36,142 | 28,401 |
- other | 111,964 | 347,486 |

**Total revenue** | **20,178,858** | **20,700,696** |
**Statement Of Comprehensive Income**  
**For The Year Ended 31 December 2011**

<table>
<thead>
<tr>
<th>Note</th>
<th>Description</th>
<th>2011 ($)</th>
<th>2010 ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Note 2: Surplus/(Deficit) for the year</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(a) The following expenditure was incurred in determining the deficit:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Expenses</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- direct research</td>
<td>13,988,673</td>
<td>14,010,467</td>
<td></td>
</tr>
<tr>
<td>- operational support</td>
<td>3,649,896</td>
<td>3,578,816</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>17,638,569</strong></td>
<td><strong>17,589,283</strong></td>
<td></td>
</tr>
<tr>
<td>Transfer of funds to external, joint collaborators</td>
<td>826,760</td>
<td>269,356</td>
<td></td>
</tr>
<tr>
<td>Depreciation of non-current assets</td>
<td>1,200,524</td>
<td>1,041,080</td>
<td></td>
</tr>
<tr>
<td>Amortisation of non-current assets</td>
<td>717,747</td>
<td>717,747</td>
<td></td>
</tr>
<tr>
<td>(b) Significant revenues and expenses:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unrealised (gain)/loss on market value of shares</td>
<td><strong>(379,292)</strong></td>
<td><strong>(19,330)</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Note 3: Grants – Commonwealth Government</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>National Health and Medical Research Council</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Independent Research Institutes Infrastructure Support Scheme</td>
<td>1,360,360</td>
<td>1,509,894</td>
<td></td>
</tr>
<tr>
<td>- Research grants</td>
<td>7,062,785</td>
<td>6,688,451</td>
<td></td>
</tr>
<tr>
<td>Australian Research Council</td>
<td>424,303</td>
<td>607,865</td>
<td></td>
</tr>
<tr>
<td>Department of Innovation, Industry, Science and Research</td>
<td>213,391</td>
<td>204,943</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>9,060,839</strong></td>
<td><strong>9,011,153</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Note 4: Grants – Victorian State Government</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Department of Business and Innovation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Operational Infrastructure Support Program</td>
<td>1,660,508</td>
<td>1,549,722</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>1,660,508</strong></td>
<td><strong>1,549,722</strong></td>
<td></td>
</tr>
</tbody>
</table>
## Statement Of Cash Flows
For The Year Ended 31 December 2011

<table>
<thead>
<tr>
<th></th>
<th>2011 Inflows (Outflows)</th>
<th>2010 Inflows (Outflows)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cash flow from operating activities</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grants received</td>
<td>13,969,612</td>
<td>15,179,138</td>
</tr>
<tr>
<td>Payments to suppliers and employees</td>
<td>(18,242,282)</td>
<td>(16,991,859)</td>
</tr>
<tr>
<td>Donations, legacies and bequests</td>
<td>2,254,894</td>
<td>2,836,922</td>
</tr>
<tr>
<td>Other revenue</td>
<td>1,588,595</td>
<td>1,096,773</td>
</tr>
<tr>
<td>Interest received</td>
<td>616,073</td>
<td>648,185</td>
</tr>
<tr>
<td>Dividends received</td>
<td>146,843</td>
<td>168,819</td>
</tr>
<tr>
<td><strong>Net cash generated from operating activities</strong></td>
<td><strong>333,735</strong></td>
<td><strong>2,937,978</strong></td>
</tr>
<tr>
<td><strong>Cash flow from investing activities</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Payment for property, plant, equipment and fittings</td>
<td>(1,145,880)</td>
<td>(1,357,229)</td>
</tr>
<tr>
<td>Purchase of motor vehicle</td>
<td>-</td>
<td>(38,914)</td>
</tr>
<tr>
<td>Payments for available-for–sale investments</td>
<td>(590,138)</td>
<td>(654,948)</td>
</tr>
<tr>
<td>Net cash used in investing activities</td>
<td>(1,736,018)</td>
<td>(2,051,091)</td>
</tr>
<tr>
<td><strong>Net increase/(decrease) in cash held</strong></td>
<td><strong>(1,402,283)</strong></td>
<td><strong>886,887</strong></td>
</tr>
<tr>
<td>Cash and cash equivalents at the beginning of the financial year</td>
<td>14,556,068</td>
<td>13,669,181</td>
</tr>
<tr>
<td><strong>Cash and cash equivalents at the end of the financial year</strong></td>
<td><strong>13,153,786</strong></td>
<td><strong>14,556,068</strong></td>
</tr>
</tbody>
</table>
$300,000 plus
The Susan Alberti Charitable Foundation

$100,000 – $299,999
The Brenda Shanahan Charitable Foundation
Anonymous

$50,000 – $99,999
The Susan Alberti Charitable Foundation
$100,000 – $299,999
The Brenda Shanahan Charitable Foundation
Anonymous

$50,000 – $99,999
ANZ Trustees
Margaret Walkom Bequest
North, C
Perpetual Trustees
The Leslie Family – The Bill Heath Fellowship donated in memory of Stuart Leslie

$10,000 – $49,999
Bell Charitable Fund administered by Attiken Walker & Strachan
Best, J
Briggs, G
Burges, A & J
Caribbean Gardens Pty Ltd
Ceravolo, E
Costa Family Foundation

$1,000 – $9,999
All Souls' Opportunity Shop
Arthur, J & A
Barro, R
Buckley, R & C
Carson, I
The Cass Foundation
Chappell, J
Commens, H
crothers, M
Dabb, P
Dale, G & R
D’Arcy, J
Davis, D
Demediuk, N & F
Edgar, R & D
F & J Ryan Foundation
Gelder, N
Hale, G (Dec)
Harries, HR & EM
Henderson, K
Iseli, A & C
Johnstone, A & J
Jones, M
Kay, C & Swaney, S
Kelly, AP
Knowles, J
Levin, R
McCarthy AO FTSE, N
McCorkell, P
McGinniss, M
McKeage, C
McNulty, M
McPhail, B
Napthali Family Foundation
Nicoll, G
North, A
Nunan, T & G
O’Brien, N
O’Shannassy, M & R
Owen, K & E
Page, C
Pellicano, N & A
Penington, D
Pitcher Partners Advisors Pty Ltd
Pizzey, J & B
Power, T & D
Reid, I
Riley, P & C
Sevior, E
Schiavello, T & E
Sime, J
Simpson Family Foundation
Smith, C
Smith, J
Spry-Bailey, P & P
Stewart, R
The McGraw-Hill Companies
Thompson, S
Terney, L
Walters AO, E & Walters, G
Webb, B & M
Whiting, J
Whiting, M
Xipell, J & T

$100 – $999
Abbott MHR, A
Alexander, S
Axup, P
Basso, E
Batrouney, R & J
Beer, N
Benge, S & L
Berkovic, A
Besen Family Foundation
Bignell, S
Bowen, J & M
Burrill, T
Bursztyn, A & J
Bursztyn, T & R
Butler, J & F
Buxton, R
Cahill, J
Campbell, A & S
Carroll, W
Ceravolo, M
Charters, G
Chizik, B & D
Chrapot, A & V
Clarke, S
Cohen, C & E
Cowen, A
David, L
De Winter, P & K
Doolan, D & T
D’Souza, R
Duhavrica, D
Epstein, M & J
Faulkner AO, P
Finkler, G & J
Fried, D
Fried, Z & R
Gandel, T & H
Gehrig, R & H
Gibson, M
Glasser, R & S
Gobbo, J
Gold, D & M
Gourlay, L
Graham, J
Gurrieri, J
Harry, R
Hatzimoisis, J
Heathcote, R
Hendel, M & R
Herlihy, T
Hoy, B
Hurley, J
Johnson, D
Johnston, C
Jolson, S & L
Katz, D
Kaye, A & L
Klooger, J & J
Kostopoulos, D
Krite, S & S
Kulmar, M
La Fevre, D & S
Le Guier, V
Lew, J
Lew, P & A
Liberman, J & K
Liberman, J & L
Lord Mayor’s Charitable Foundation
Lucas, M
Lunn, D
Lussi, D
M & A Partners
MacKintosh, G & J
Macquarie Group Foundation
Marsh, G
Martin, JF
McCarthy, B
McFarlane, M
McGowan, M
Meadows, P
Melvin, D
Molesworth, C
Murphy, N
Mutton, Y
New, H & Y
Nicholson, JA
O’Callaghan, C
O’Collins, J & R
Olcha, A & T
Peer, D & L
Perelberg, J
Peyton, P
Poleon, P & R
Priester, A
Reen, R
Reeve, F
Reeves, S
Rogers, R
Rule, J & J
Rush, G & Menelaus, J
We also acknowledge donors not listed above and those who wish to remain anonymous. All donations are important to us, please accept our gratitude for your donation and continued support.

We would like to thank the 1000 Club subscribers for 2011.
Jack Holt’s dream lives on through his enduring gift

Medical research and racehorse training are poles apart. However, the successes of the late Jack Holt, one of Australia’s greatest trainers, led to the establishment of the internationally recognised St Vincent’s Institute of Medical Research.

Many do not know that John ‘Jack’ Holt, the famous Melbourne racehorse trainer known as ‘the Wizard of Mordialloc’, was also one of the great philanthropists of his time. Jack’s acts of generosity were made in a quiet and unassuming manner.

After a short career as a jockey, Jack Holt became a trainer in 1902. From 1918, he dominated Victoria’s training ranks, winning the Trainers’ Premiership 13 times, and training winners in a Melbourne Cup, two Caulfield Cups, six W.S. Cox Plates and a VRC Derby.

When Jack died in 1951, he left a bequest of £200,000 (an enormous sum in those days) to establish a school of medical research at St Vincent’s. St Vincent’s School of Medical Research officially opened on 23 April, 1958. In 1984 it was renamed St Vincent’s Institute of Medical Research (SVI).

In the more than 50 years since that time, discoveries from SVI have advanced treatments, offering hope to sufferers of diabetes, cancer, arthritis, osteoporosis, obesity and cardiovascular disease.

Our scientists and researchers are considered amongst the world’s best. They come to work each day striving to give hope to people suffering from disease.

Jack is remembered as a very generous and gentle man, passionate about medical research.

The Jack Holt Society has been established to honour the generosity of those individuals who have pledged a gift in their Will for the purpose of the ongoing medical research at St Vincent’s Institute.

Medical Research is vital for a healthy future for all of us. A gift in your will is a lasting gift that will enable your support to live on.

For a confidential discussion or further information about the Bequest Society, please contact Clare Lacey on 9288 2480 or 0408 766 686.
Thank you to our other 2011 supporters:

SVI Charity Golf Day:

SVI Charity Golf Day:

StageRight – Ditto Design – Crocmedia – The Slattery Media Group – Mitre Tavern – President’s Cup – The Footy Show – Salt & Pepper

SVI Charity Golf Day:


By supporting SVI’s medical research, you can make a difference.

1. Donate now to SVI
I want to make a single donation of:

- $25
- $50
- $100
- $250
- $500
- $1000
- Other $__

2. Join the SVI 1000 Club
I want to make an annual donation of $1000 for:

- 3 years
- 5 years
- Other ___________

Type of membership:

- New
- Renewing
- Private
- Corporate

3. Join the SVI $10,000 Discovery Fund
An investment in the $10,000 fund is an investment in the future needs of the Institute. For more information contact Madeleine Whiting on (03) 9288 2480

4. Leave a bequest to SVI
If you would like to talk to someone about making a bequest to SVI please contact Clare Lacey on (03) 9288 2480

See our website, www.svi.edu.au if you would like to make periodic payments from your bank account or credit card.
Donating to SVI

Donation payment details

- [ ] Cheque (please make payable to St Vincent’s Institute)
- [ ] Credit card (please tick one of the following cards and complete details)

Card type (please tick)
- [ ] Diners
- [ ] Visa
- [ ] Mastercard
- [ ] Amex

Expiry date

Amount being paid $

Name on card

Signature

Please make my receipt out to

Title

First Name

Surname

Position

Company

Address

Suburb

P/Code

State

Work

Home

Email

Mobile

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

Please return to:
St Vincent’s Institute of Medical Research,
9 Princes St, Fitzroy, VIC 3065 Tel: 03 9288 2480 Fax: 03 9416 2676
Email: foundation@svi.edu.au  Web: www.svi.edu.au