

### JULY 2011 / JUNE 2012

# Annual Review

Inspiring Innovation veski's vision is to foster an innovation economy.

our mission is to identify globally competitive individuals and leading researchers and bring them to Victoria for the benefit of the Australian economy.



## contents

achievements aims and objectives **veski** board chairman's report chief executive officer's report **veski** operations **veski** standard **veski** family

| 04 | veski innovation fellowships             | 20 |
|----|--|----|
| 06 | 2012 <b>veski</b> innovation fellows     | 21 |
| 80 | veski innovation fellows                 | 27 |
| 10 | inaugural <b>veski</b> innovation fellow | 38 |
| 12 | veski programs                           | 40 |
| 14 | veski awards                             | 42 |
| 18 | statement of financial position          | 48 |
| 19 |  |    |

## achievements

## July 2011

A **veski** award in design supported Lucy McRae's workshop with RMIT University during the 2011 State of Design festival

**veski** supported the 18th International Botanical Congress by helping students and teachers attend this unique event

### August

**veski** innovation fellow Professor Michael Cowley participated in the National Science Tour which visited major cities and regional locations across Australia

## September

**veski** continued its support of the RMIT Business Innovation Lectures with talks about innovation in business, advanced manufacturing, sport, education, philanthropy and the arts

## October

**veski** supported the 2011 Endeavour Adventure hosted by the University of Melbourne's School of Engineering

**veski** innovation fellows achieved significant funding success including more than \$1.5 million worth of NHMRC grants awarded to Associate Professor Ygal Haupt and his team

### November

Professor Michael Cowley became the fourth member of the **veski** family to be awarded an ATSE fellowship joining Professor Snow Barlow FTSE, Professor Andrew Holmes AM FRS FAA FTSE and Professor Edwin van Leeuwen FTSE

## February 2012

**veski** hosted Professor Göran Roos in Melbourne as part of its international connections program; Professor Roos was visiting Australia supporting the Prime Minister's Taskforce on Manufacturing in Australia

## March

The Minister for Innovation, the Hon Louise Asher, officially announced three 2012 **veski** innovation fellows: Dr Seth Masters, Associate Professor Tiffany Walsh and Professor Cameron Simmons

### April

**veski** hosted a **veski** conversation with the CEO of the Australian Science Media Centre, Dr Susannah Elliott, as part of our communication activities to raise the profile of our fellows

### May

**veski** was awarded an additional \$2 million over three years to increase the number of **veski** innovation fellowships, and to deliver a program to inspire students and teachers and lift the participation rates in the sciences

### June

**veski** supported the Australian Academy of Science's 'Hooked on Science' national lecture tour with Australian Nobel Laureate Elizabeth Blackburn when it visited Victoria to an audience of more than 200 Victorian students and teachers

**veski** hosted fellows, directors and their partners at the Australian Society of Medical Research (ASMR) Gala Dinner

## July 2012

**veski** hosted several bright young students and their teachers at the Official Dinner following the 2012 Graeme Clark Oration entitled 'Forever Young' delivered by Dame Linda Partridge forming part of **veski's** activities to lift participation rates in science amongst students in Victoria



# aims and objectives

Our vision is to foster an innovation economy.

Our mission is to identify globally competitive individuals and leading researchers and bring them to Victoria for the benefit of the Australian economy.

## SUPPORT

### OBJECTIVES

- Promote and attract globally competitive applicants for a range of prestigious fellowships
- Champion globally competitive scientists and researchers during visits to Victoria
- Provide the veski family with access to, and advice on engaging with local networks for maximum impact and exposure

### APPROACH

- Provide professional development opportunities to ensure excellence for the **veski** family
- Utilise the fellows in profile raising opportunities including speaking engagements, committee memberships and nominations for other prestigious awards
- Deliver a successful, competitive and internationally recognised fellowship program leveraging **veski**'s established application process

### BUILD

- Build creative linkages between representatives of the science, business and innovation communities
- Establish ongoing and mutually beneficial relationships with world leading specialists
- Build a collaborative environment within the **veski** family
- Continually review the composition of the **veski** board of directors to reflect the organisations' mission and objectives
- Deliver a series of veski conversations including public lectures and invitation-only forums utilising veski's network of world leading specialists
- Drawing upon veski's extensive network, establish and expand upon partnerships with relevant organisations

### FOSTER

- Maintain and develop partnerships with Victorian Host Organisations
- Promote and leverage the veski family to inspire Victoria's future innovators
- Promote and encourage the work of the veski family and support related programs and world first initiatives
- Ensure a significant return on our investments
- Provide unique experiences and resources for senior school students, undergraduates, early career scientists and teachers
- Support informal networking among **veski** family and peers
- Partner with organisations to provide profile raising opportunities for the **veski** family

Our mission is to identify globally competitive individuals and leading researchers and bring them to victoria for the benefit of the australian economy.

## **veski** board

veski is governed by a board of directors who are also its members. They are responsible for veski's statutory and financial reporting obligations as well as ensuring the strategic direction, business plans, operating systems and veski programs are managed and administered effectively. This includes full compliance with the terms and conditions of the Funding Agreement established between veski and the State Government of Victoria.

The **veski** board of directors comprises a breadth and depth of local and international experience in science, academia, design, industry and private and public sector management.

### During 2011 / 2012, the veski board of directors comprised of:

- Professor Snow Barlow FTSE, Chairman
- Professor John Denton
- Mr Ron Douglas
- Professor Andrew Holmes AM FRS FAA FTSE
- Mr Lewis Johnson
- Professor Ian Smith
- Mr Tony Sweeney
- Mr Greg Sword AM
- Ms Julia Page, CEO & Company Secretary



Professor John Denton, Mr Lewis Johnson, Mr Greg Sword, Professor Snow Barlow, Ms Julia Page, Professor Andrew Holmes, Mr Tony Sweeney, Mr Ron Douglas and Professor Ian Smith

## chairman's report Frse

This has been an important year in the continued development of **veski**. Following an independent review of **veski's** activities and achievements the Victorian Government announced an additional \$2 million funding for **veski** over three years in its 2012-2013 budget. These new much needed resources will support an increased number of **veski** innovation fellowships and enable **veski** to work in partnership with Victorian schools, teachers and students to lift the participation rate in the sciences and to improve the knowledge and expertise of science teachers. The Minister for Innovation, the Hon Louise Asher presented the 2012 veski innovation fellowships at an event celebrating two important milestones for veski; firstly we were able to award three new innovation fellowships compared to two in previous years and secondly, we were able to appoint our first veski innovation fellow in an organisation outside of the Melbourne CBD.

Another feature of this event was a **veski** conversation between **veski** innovation fellows Dr Mark Shackleton and Professor Marcus Pandy and myself moderated by our inaugural **veski** innovation fellow Professor Andrew Holmes AM. The fellows discussed some of their achievements since returning to Victoria – which have been many and varied – and reinforced the important role **veski** has to play in supporting science and innovation in Victoria. It also revealed firsthand the tremendous value these world-class researchers bring to the State of Victoria.

It was wonderful to hear about the advances our fellows have made since returning to Victoria and reflect on **veski's** achievements since 2004. Throughout the conversation we identified and discussed the opportunities that exist in Victoria across the science, innovation and technology sectors, and how **veski** continues to contribute to shaping the State's innovation and research communities. The 2012 **veski** innovation fellows Dr Seth Masters, Associate Professor Tiffany Walsh and Professor Cameron Simmons returned to Melbourne after establishing scientific research careers in Ireland, the United Kingdom and Vietnam respectively.

As well as focusing on welcoming and engaging our new fellows, we have continued to celebrate a number of significant achievements across the **veski** family including major funding successes, senior appointments, important research outcomes and public recognition. The achievements of our fellows are detailed in the fellowship section of our annual report.

A significant highlight was the announcement of a 2012 Royal Medal for Professor Andrew Holmes AM, which will be presented to him in November 2012 at the Royal Society's Anniversary Day meeting in the UK.

In 2011 / 2012, we have continued to support the local research, science and innovation communities through a series of successful RMIT Business Innovation Breakfasts in partnership with Ernst and Young. Our fellows and our board members have also attended and supported events such as the 2012 ASMR Dinner, and supported other programs such as the Victoria Prize and L'Oreal For Women in Science Fellowships. Finally, **veski's** chief executive officer Ms Julia Page has been a tower of strength in guiding these exciting new developments. The **veski** board of directors is very grateful for the continued support we receive from Julia, her team, the **veski** family and our other partners.

I would also like to thank my fellow **veski** board members for their continued support and guidance in the past year.

**veski** is confidently looking forward to embarking on our next exciting chapter in our development with a new and expanded fellowship program and a dramatically expanded inspirational schools program.

Professor Snow Barlow FTSE veski chairman

As well as focusing on welcoming and engaging our new fellows, we have continued to celebrate a number of significant achievements across the veski family including major funding successes, senior appointments, important research outcomes and public recognition.

## chief executive officer's report Trage

This year, the **veski** family grew to include 15 **veski** innovation fellows who had relocated to Victoria from leading institutions in the United Kingdom, United States of America, Israel, Singapore, Ireland and Vietnam. It is testament to our established local and international networks and our well-developed fellowship processes that veski continues to attract a high calibre of applicants for its prestigious veski innovation fellowships.

I am pleased to report that a large number of quality applications were received from leading researchers all around the world. They were supported by several Victorian host organisations and, after a thorough review process, the **veski** board of directors was pleased to award three **veski** innovation fellowships.

As the **veski** chairman indicated, thanks to careful investment and management of the funds provided by the State Government over the past eight years, we were able to offer an additional fellowship in 2012.

Another important achievement for our organisation was the appointment of our first **veski** innovation fellow to work in an organisation outside of the Melbourne CBD and the establishment of a partnership with a new host organisation, Deakin University, and a collaboration with the Victorian Life Sciences Computation Initiative (VLSCI).

We continue to receive support from Victorian host organisations and I thank them for their important role in helping us bring these new fellows back to Victoria from Ireland, the United Kingdom and Vietnam. Our partnership with the Walter and Eliza Hall Institute of Medical Research began in 2006 and continued in 2012 with the announcement of their fourth **veski** innovation fellow, Dr Seth Masters, who returned from Trinity College.

**veski** has an ongoing focus on establishing new partnerships with host organisations and was pleased to work with Deakin University's Institute of Frontier Materials to bring Associate Professor Tiffany Walsh back to Victoria from Warwick University.

Finally, we were pleased to work with the Nossal Institute for Global Health and the Department of Microbiology and Immunology at the University of Melbourne to attract Professor Cameron Simmons back from Oxford University. He will play an important role in the newly established Peter Doherty Institute.

Dr Masters, Associate Professor Walsh and Professor Simmons join a group of Victoria's leading scientists and researchers who continue to demonstrate the value in bringing leading researchers back to work in Victoria.

The **veski** board of directors and staff have continued to review our strategies and operations and have refined our program in line with the government's key priorities and election commitments. I am confident we have an established and solid foundation which will allow us to expand our fellowship offering in 2012/2013 and introduce a number of exciting new programs while continuing to deliver our current program of fellowships and activities.

An important part of **veski's** annual activities is promoting our fellows and keeping the government, business and non-profit sectors informed of our activities and programs. We have grown our database to include more than 1,000 representatives of these sectors, as well as media. We have also refined our communication channels by implementing a communications strategy which includes expanding our relationships with our partners and supporting a range of innovation-focused events and activities.

Our partnership with RMIT University and Ernst and Young delivered a number of well-attended Business Innovation Breakfasts throughout the year, including a successful event in February with internationally renowned advanced manufacturing advisor Professor Göran Roos.

We have again supported a range of important educational initiatives, including the 2011 Endeavour Adventure with the University of Melbourne's School of Engineering, and the Australian Academy of Science's "Hooked on Science" lecture with Australian Nobel Laureate Professor Elizabeth Blackburn. Following the success of our involvement with the Graeme Clark Oration in 2011, **veski** again hosted a group of students and their teachers at the 2012 Oration and the dinner that followed.

The **veski** team has also developed and delivered a range of activities to support our **veski** family. This aspect of **veski's** program supports our new fellows as well as our existing fellows and includes meetings between our **veski** fellows and **veski** board members as well as informal and formal functions for the **veski** family to connect and learn from each other.

My sincere thanks to the **veski** family for their continued and enthusiastic support of our programs and activities. Thanks also to our supporters within host organisations, across government and throughout the community.

Ms Julia L Page veski chief executive officer

I am confident we have an established and solid foundation which will allow us to expand our fellowship offering in 2012/2013 and introduce a number of exciting new programs while continuing to deliver our current program of fellowships and activities.



## veski operations

**veski** will expand its operations over the next three years to include at least six additional innovation fellowships above the current levels; as well as implementing a new program to inspire students and lift participation rates in science.

#### veski brand and communications

**veski** continues to promote the organisation, both locally and internationally, through the **veski** board of directors, the **veski** innovation fellows and its established networks.

**veski** developed and implemented a communications plan in 2011 in line with feedback from the various reviews conducted. We also supplemented existing marketing materials to promote our programs and to highlight the activities of our talented **veski** innovation fellows appointed in 2012.

The **veski** website and regular email bulletins continue to provide a valued source of communication and ongoing brand awareness. **veski** programs are highlighted on the website with articles and other promotions and in our regular newsletter and timely bulletins to ensure our supporters are aware of forthcoming activities.

As part of **veski's** review of its communications, we have refined the **veski** brand and **veski** website. The review and subsequent redesign will result in the launch of a new brand, a new suite of marketing materials, and a new website in late 2012.

#### Tax Concession Charity (TCC) Status

**veski** continues to benefit from tax concession charity status on the grounds that it is a charitable institution.

#### Funding

A Funding Agreement, established between **veski** and the State Government of Victoria in June 2003, outlines how funding to **veski** is to be expended in line with **veski's** annual objectives.



**veski** gratefully acknowledges the State Government of Victoria's strategic endowment.





Valter+Eliza Hall

Internet Martical Research







### Additional Funding

Effective 1 July 2012 **veski** will receive additional funding from the State Government of Victoria to increase the number of **veski** innovation fellowships and a Schools Inspiring Students Program. This funding was announced in the 2012/13 Victorian State budget.

#### Other Support

**veski** continues to develop its relationship with the philanthropic and business sectors and is constantly pursuing opportunities to secure collaborative funding for our activities.

During the 2011 / 2012 financial year, **veski** received in kind support from the following organisations, including host organisations, and we thank them for their continued support of **veski** and its programs:



The ATLANTIC Philanthropies





😹 MONASH University



ERNST & YOUNG Quality In Everything We Do



## veski operations

#### veski staff

**veski's** chief executive officer receives support from a small, dedicated team of staff with specific skills in administration, finance and project management.

The team supports the **veski** chief executive officer in delivering the **veski** innovation fellowship program along with a range of other activities and events delivered by **veski**.

**veski's** chief executive officer receives additional support from consultants as required including communications and technology.

#### veski office: Milton House

**veski** has established a strong presence at Milton House, 25 Flinders Lane, Melbourne. The office space provides facilities for staff and board members to conduct the business of **veski** and also provides space for **veski** innovation fellows to visit while in the CBD.

**veski** continued to offset some of its annual office rental expense by sub-letting the **veski** office to companies in similar industries. In the past 12 months, **veski** has shared space with Biolink Australia and the c word communications agency.

#### enhanced veski brand

Since **veski** was established in 2004, the acronym for Victorian Endowment for Science, Knowledge and Innovation, **veski**, has become a recognised name within the Victorian science and innovation sectors and often stands alone.

Based on this knowledge, the **veski** board of directors made the decision to develop **veski** as a standalone brand to position the organisation for its future activities.

The new brand demonstrates innovation through form and colour, engagement through a dynamic graphic language, science and technology through multi-dimensional forms and gradiated colour, and strength through the triangular shape and inter-connecting forms.

As part of the re-branding process, the logo and brand will be applied to a range of printed and electronic communications materials including the **veski** website.

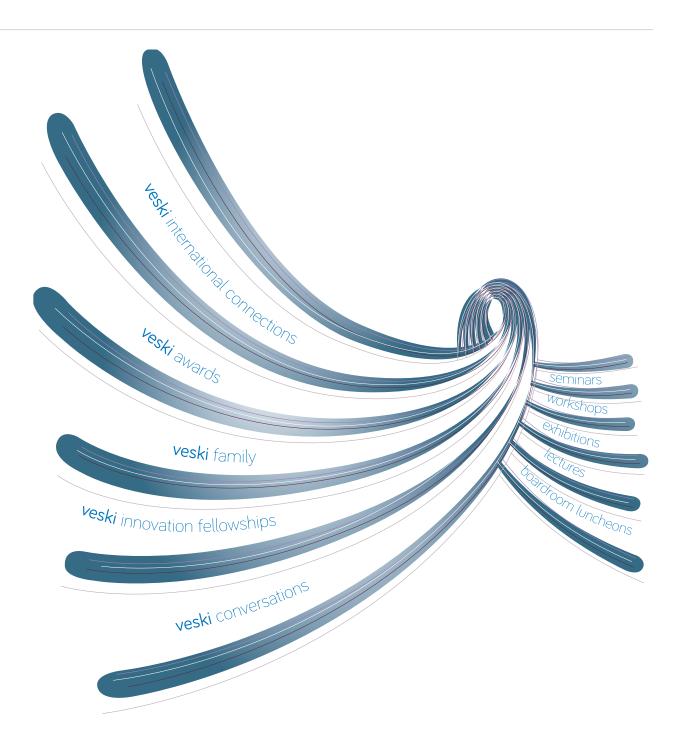
The revised logo and brand combine elements of the previous branding with enhanced features. The colours were selected to align with some iconic Melbourne brands. The logo is a representative shape of the **'v'** in **veski** and Victoria.





## **veski** standard

**veski** continues to promote the **veski** standard - a set of best practice principles for host organisations and **veski** innovation fellows, to assist with their relocation to Australia, developed in conjunction with ICC Mercer.



The **veski** family was established to provide our alumni with opportunities to network with other likeminded individuals and support their evolving needs as they re-establish themselves in Victoria. The group now includes our veski innovation fellows, our board of directors and our fellows in an ambassadorial role. veski has a two way relationship with members of the veski family; drawing upon their skills and networks to support veski's programs and providing members with unique opportunities.

During the year, as part of our ongoing commitment to the **veski** family, **veski** hosted a number of events to encourage collaboration and networking among peers, like-minded colleagues, VIPs, and key policy makers, including:

- our annual end of year celebration;
- a series of veski conversations, roundtables and discussions
- a **veski** family day
- a veski-hosted table at the ASMR Gala Dinner

**veski** also introduced the **veski** family news, which provides members of the **veski** family with a regular update on strategic activities being undertaken by the organisation as well as upcoming events and achievements across the **veski** family.

We have also been working with our fellows to inspire Victoria's future innovators through attendance at events such as the Graeme Clark Oration.

In April 2012, a **veski** conversation with the CEO of the Australian Science Media Centre, Dr Susannah Elliott, formed part of our communications activities to raise the profile of our fellows. The **veski** family also provides informal networking opportunities with a number of **veski** innovation fellows requesting meetings with our board members to learn from their knowledge of business, government and media.



**veski** innovation fellows, with a record of achievement in science, technology or design, bring outstanding skills and specialist expertise to Victoria.

During 2011 / 2012, veski was able to award a further three veski innovation fellowships. These bring the total of announced veski innovation fellowships, as at 30 June 2012, to sixteen.

Over the eight year period in which **veski** has been awarding **veski** innovation fellowships, collectively, the innovation fellows have leveraged additional funds to the State of Victoria in excess of 18:1 to support their research efforts from Federal and International funding bodies. That's a little under \$40 million in return for a modest \$2.58 million investment in Victorian research.

#### Recently awarded outstanding veski innovation fellows

- Dr Seth Masters
- Associate Professor Tiffany Walsh
- Professor Cameron Simmons

#### Previously awarded veski innovation fellows

- Professor Andrew Holmes AM
- Professor Marcus Pandy
- Dr Gareth Forde
- Dr Alyssa Barry
- Professor Michael Cowley
- Professor Sarah Hosking
- Associate Professor Ygal Haupt
- Dr Ross Dickins
- Dr Mark Shackleton
- Professor Edwin van Leeuwen
- Dr Matthew Call
- Dr Christopher McNeill .

Please find summarised to follow the **veski** innovation fellows and their research projects – ordered by those most recently announced:

## Dr Seth Masters

Awarded \$150,000 over three years for his research into "Virus and host miRNA that target the innate immune system and inflammation" at the Walter and Eliza Hall Institute of Medical Research.

Dr Seth Masters is one of the first Laboratory Heads for the newly formed Inflammation Division at the Walter and Eliza Hall Institute of Medical Research. He wants to understand what's happening at a molecular level and in turn, discover a therapy that will change lives.

He will investigate inflammation as a consequence of infection, both bacterial and viral. When the body's immune system is under threat from disease and infection, it defends itself with inflammation. The body's white blood cells kill foreign organisms or diseased cells and kick-start the healing process. However, if the inflammatory response is too strong, surrounding tissue can be destroyed leading to chronic inflammatory diseases.

Chronic inflammatory diseases such as rheumatoid arthritis, gout, cancer and Type-2 diabetes are common problems for Australians, and understanding them has become a key focus in the inflammation field. Dr Master's project will investigate an important class of regulators that limit inflammation called micro-RNAs (miRNAs): small nucleic acid-based molecules encoded in the human genome. He has identified a micro-RNA, which limits inflammation linked to several diseases, including Crohns disease.

Seth also proposes to identify micro-RNAs in viruses that are used to avoid the body's immune system and then target them with technologies such as 'locked nucleic acids', a newly developed technology not yet employed in the fight against viral infections.

His team will conduct trials against the Herpes Simplex virus and Epstein-Barr virus which will be a first for Victoria as well as globally. The result will be a definitive catalogue of the miRNAs in these viruses that regulate innate immune pathways and inflammation. This will lead to new strategies to treat, vaccinate and prevent the spread of these diseases.

Seth's funding from the **veski** innovation fellowship concludes in 2015.



Since returning to Victoria, Seth has established a strong presence at the Walter and Eliza Hall Institute ... was awarded a Career Development Fellowship from the NHMRC worth more than \$390,000 ... has been particularly involved in mentoring undergraduate students

#### 22 ANNUAL REVIEW 2011 / 2012

## 2012 **veski** innovation fellows

#### Background

Seth graduated from Melbourne University in 2000 with a Bachelor of Science with first class honours majoring in chemistry and biochemistry. He also completed a Diploma in Arts (Philosophy).

Returning to Melbourne and The Walter and Eliza Hall Institute of Medical Research, Seth returns to the place he conducted his doctoral research.

After completing his studies in Melbourne, Seth spent three years in Bethesda, USA, at the National Institute of Arthritis and Musculoskeletal and Skin Disease. During this time he helped discover a new, rare inflammatory disease that affects young children, and a therapy that totally resolves it.

In 2009, he moved to Trinity College, Dublin, and continued to conduct further postdoctoral research. While at Trinity College, Seth was part of the team that discovered the potential underlying basis for Type-2 diabetes, a debilitating disease where people stop responding to insulin. As well as making consistently high quality contributions in top ranking journals, Seth has received numerous awards including recognition from the NIH for the discovery of a new disease as well as the Irish Society of Immunology, the International Society of Systemic Autoinflammatory Diseases, and from multiple international conferences. While working overseas, Seth also received a prestigious NHMRC Overseas Biomedical Fellowship.

Seth returned to Melbourne with his partner, Dr Lisa Mielke, who works as a postdoctoral researcher in the Molecular Immunology division at the Walter and Eliza Hall Institute on understanding the role of immune cells in the development of cancer.

#### Achievements since taking up his veski innovation fellowship

Since returning to Victoria as a **veski** innovation fellow, Seth has established a strong presence at the Walter and Eliza Hall Institute and appointed a postdoctoral fellow, Dr Motti Gerlic, with the support of funds provided by the **veski** innovation fellowship.

Seth has also used funds from his **veski** innovation fellowship to assist with the establishment of his laboratory at WEHI and purchasing equipment and consumables to aid his important research project. Seth was awarded a Career Development Fellowship from the NHMRC worth more than \$390,000 and has already applied for a range of research grants. He has also filed a patent for the method of prolonging the lifespan of stem and/or progenitor cells.

Seth has been particularly involved in mentoring undergraduate students and has participated in a range of events with the University of Melbourne including a workshop on careers in academia with undergraduates. He was also invited to deliver a lecture at the Baker IDI Institute.



## Associate Professor Tiffany Walsh

#### Awarded \$150,000 over 3 years for her research into "Aiding Developments in Advanced Materials with Molecular Simulation" at Deakin University.

Associate Professor Tiffany Walsh will use molecular simulations to see how nature fabricates its materials at the molecular level. She will shed light on the intriguing properties seen at the interface between biological and synthetic matter, poised to play a pivotal role in the development of novel advanced materials ranging from nanomedicine to energy conservation.

Her aim is to learn from nature's approach to manufacturing, paving the way for manufacturers to make high-performance, multi-functional materials in a similar way. This opportunity to mimic nature could significantly reduce energy consumption and completely transform the manufacturing sector.

Tiffany will establish a team at the Institute of Frontier Materials at Deakin University's Waurn Ponds campus in Geelong to undertake the world-leading research. She will also take advantage of the new Victorian Life Sciences Computational Initiative (VLSCI) facility located in Carlton.

The advanced capabilities of molecular simulation, particularly with the computational power available through the VLSCI, will help Tiffany identify nature's methods and relate them to future bio-inspired manufacturing approaches.

Her research will also open up new areas of biotechnology to deliver solutions and advances in areas such as personalised healthcare that are both commercially viable and socially useful.

Tiffany's funding from the **veski** innovation fellowship concludes in 2015.

#### Background

Tiffany grew up in Warrnambool before completing a Bachelor of Science with honours at the University of Melbourne, majoring in chemistry. Impressively, she graduated as the top student in chemistry in 1993, and won a Cambridge Commonwealth Trust Scholarship.

She gained her PhD in theoretical chemistry at Cambridge University in 1998 and was then granted a Glasstone Research Fellowship based in the Materials Modeling Laboratory in the Department of Materials at Oxford University. Following her time at Oxford, she joined the Tiffany has continued to build strong collaborations with her international colleagues and ... secured \$500,000 over five years from the Air Force Office for Scientific Research through the State University of New York at Buffalo



University of Warwick as a joint appointment between the Department of Chemistry and the Centre for Scientific Computing.

Before returning to Australia, Tiffany co-led a successful application for a £5.3million Programme Grant from the Engineering and Physical Sciences Research Council, and won industrial funding for a post-doctoral researcher from Unilever, UK.

Tiffany has an excellent publication and citation record indicating the growing impact of her work with more than 50 publications, including high-impact journals such as Nature. She has also been invited to deliver more than 30 conference presentations in the USA and Europe, and over four consecutive years was invited to speak at either the Materials Research Society or American Chemical Society meetings.

She also has a well-established international network of collaborators and will maintain strong links with colleagues in the United Kingdom and the United States while giving Victoria global recognition as a region of innovation in bionano materials modeling.

Her partner is a commercial IT Manager and will be working in technology in Victoria. They are both looking forward to living in Torquay, close to family and Deakin University's Waurn Ponds campus.

### Achievements since taking up her veski innovation fellowship

Tiffany has continued to build strong collaborations with her international colleagues and has already secured additional funding to support her research.

In March 2012, she secured \$500,000 over five years from the Air Force Office for Scientific Research through the State University of New York at Buffalo for "Bio-nanocombinatorics to Achieve Precisely-Assembled Multicomponent, Functional Hybrid Nanomaterials".

This work will see Tiffany continue her collaboration with Dr Ruth Pachter at the Air Force Research Laboratories concerning molecular simulation of graphene binding peptides. She has also initiated discussions for future collaborative research with a Chinese technology company and discussions with key scientists at Boeing Corporation.

She has also been working hard to establish her research team and computing facilities at Deakin University's Waurn Ponds campus and has shortlisted candidates for a postdoctoral fellow position as well as a postgraduate student role. She has moved office and computing equipment from Warwick University to Deakin University and purchased additional computing equipment to complement the facilities available through the VLSCI. Tiffany has continued to publish with her work being accepted to the journal Faraday Discussions on the topic of "exploring the influence of organic species on pre-and post-nucleation calcium carbonate".

In addition to her funding secured from the Air Force Office for Scientific Research, Tiffany is actively pursuing Australian Research Council funding.

Tiffany was invited to participate in several international conferences including Pepcon2012 in Beijing, the American Chemical Society Spring Meeting in San Diego, and the Materials Research Society Spring Meeting in San Francisco. Tiffany was also invited to join the selection panel for the Victoria Prize and the Resource Allocation Committee for VLSCI.



### Professor Cameron Simmons

Awarded \$150,000 over three years for his research into "Stop Dengue: Novel approaches to diagnose, treat and prevent dengue" at the Nossal Institute for Global Health and the Department of Microbiology and Immunology at the University of Melbourne.

Through a combination of basic and clinical research, Professor Cameron Simmons will help combat dengue by providing doctors with a set of simple methods to help diagnose dengue in patients, and predict if the patient is at risk of developing serious complications. These efforts are complemented with pharmaceutical industry collaborations on the development of specific drugs to treat dengue.

Cameron will further develop a novel strategy to stop mosquitoes transmitting dengue by 'infecting' them with a micro-organism called Wolbachia that stops the dengue virus from growing in mosquito tissues. Cameron will use his expertise and links in Asia to field test this novel disease control approach as part of the Eliminate Dengue initiative. These novel research strategies are uniquely placed to deliver results that could help reduce the huge financial and social burden of dengue both in Australia and throughout the world.

Cameron will be working across the Nossal Institute for Global Health and the Department of Microbiology and Immunology at the University of Melbourne. He will also be a major contributor to the newly established Peter Doherty Institute, which will be at the forefront of the fight against infectious diseases.

Cameron's funding from the **veski** innovation fellowship concludes in 2015.

### Background

Cameron has more than 10 years experience working in tropical infectious diseases in Vietnam with the University of Oxford, and is a World Health Organisation recognised expert in dengue epidemiology, pathogenesis and clinical trials.

Cameron returns to Victoria from the Oxford University Clinical Research Unit at the Hospital for Tropical Diseases, Ho Chi Minh City, Vietnam.

While focusing on his research and building his team in Victoria, Cameron will retain a faculty appointment with the Oxford University Clinical Research Unit, Vietnam, along with a small research team. In the past 12 months, Cameron has contributed to more than eight journal articles ... secured additional funding ... worth \$2,024,546.60 over five years ... been invited to lecture at the Bill and Melinda Gates Foundation, Seattle



25

Cameron has the combination of basic science expertise with knowledge of clinical field-based science, and understands how to bridge those two areas, which will be a particularly valuable asset for the Peter Doherty Institute.

Cameron is a Wellcome Trust Senior Research Fellow. He is also a consultant to several international pharmaceutical companies and a member of Eliminate Dengue, a team of international scientists with a diverse range of expertise including Wolbachia genetics, mosquito biology and ecology, dengue epidemiology and control, and health education and promotion. The collaboration draws on this diverse expertise with the explicit goal of developing a novel approach to dengue control.

As part of the Eliminate Dengue team, Cameron will be collaborating with Professor Ary Hoffmann from the University of Melbourne, and Professor Scott O'Neill, Dean of Science at Monash University. The group recently received top-ranking nationally and substantial funding through an NHMRC Program grant.

Cameron completed his Bachelor of Science with Honours and then his PhD at The University of Melbourne. He then moved to London in 1998 for post-doctoral work at Imperial College, and then in 2001 moved to the Oxford University Clinical Research Unit in Vietnam. He is returning to Victoria with his partner, a human genetics expert, and three daughters who have been living with him in Vietnam.

#### Achievements since taking up his veski innovation fellowship

Cameron accepted a senior appointment at the University of Melbourne and retains his appointment at the University of Oxford and his Wellcome Trust Senior Research Fellowship until 31 July 2013. He travels frequently as part of his dengue research program in Vietnam, and through his travel connects Victoria with international opportunities.

He is sharing a laboratory space within the Department of Microbiology and Immunology at the University of Melbourne with Associate Professor Andrew Brooks. Cameron has also appointed a post-doctoral scientist, Sonya Hubbard, who is conducting her research in this space. They will relocate to The Peter Doherty Institute in late 2013.

In the past 12 months, Cameron has contributed to more than eight journal articles on the topic of dengue and has already secured a NHMRC Program Grant starting in January 2012 worth more than \$2 million over five years.

Cameron has been invited to lecture at the Bill and Melinda Gates Foundation, Seattle, on prospects for control of dengue and has delivered a presentation to the Council of the Nossal Institute, University of Melbourne. Since becoming a **veski** innovation fellow, he has commenced a scientific collaboration with Antonio Lanzavecchia at the Institute of Biomedicine in Switzerland and been appointed to the external Data Monitoring Committee of a phase I Dengue vaccine trial being conducted in Melbourne by Merck Ltd.

Cameron has also been appointed to the Operational Management Committee for the Peter Doherty Institute at the University of Melbourne.



THE NOSSAL INSTITUTE FOR GLOBAL HEALTH

## Dr Matthew Call

#### Awarded \$150,000 over three years for his research "Intramembrane mechanics of immunoreceptor activation".

Dr Matthew Call relocated to Melbourne from Harvard Medical School, USA and is working alongside his wife, Melissa, who is also a research scientist, at the Walter and Eliza Hall Institute.

Dr Call is the second recipient of a **veski** innovation fellowship (non-Australian). He has taken up the position of Laboratory Head within the Structural Biology Division at WEHI.

Matthew's funding from the **veski** innovation fellowship concludes in 2013.

### 2011 / 2012 update

Matthew played a major role as a Partner Investigator in a successful Linkage Infrastructure, Equipment and Facilities (LIEF) bid submitted to the Australian Research Council and approved for funding in 2012.

This grant supports the purchase of a new, state of the art 700 MHz NMR spectrometer to be housed in a shared NMR facility at Bio21 in Parkville. This \$1.2 million instrument will provide much needed additional capacity for the entire community of NMR users in the Parkville precinct.

Matthew has continued to mentor colleagues at WEHI and collaborate with colleagues from other research institutions. He has also been developing a WEHI/Harvard immunology exchange as a pilot international collaborative program in the training of tomorrow's young medical scientists, with the assistance of **veski**.

Matthew was invited to speak at the 17th International Biophysics Congress in Beijing in October/November 2011.

Matthew has continued to mentor colleagues ... developing a WEHI/Harvard immunology exchange as a pilot international collaborative program in the training of tomorrow's young medical scientists, with the assistance of veski.

## Dr Christopher McNeill

Awarded \$150,000 over three years for his research into "Nanostructuring and nanocharacterisation of organic semiconductor devices".

Dr Christopher McNeill relocated to Melbourne after a stellar career at Cambridge University in the United Kingdom.

Dr McNeill is carrying out world-class research on flexible electronics and solar cells at Monash University.

Christopher's funding from the **veski** innovation fellowship concludes in 2013.

#### 2011 / 2012 update

Christopher has taken an active role in mentoring and supervising undergraduate students by lecturing in a fourth year undergraduate course at Monash University. His involvement not only provides much needed support and inspiration to final year students it also promotes his research to them.

Christopher has also been preparing for a move to a new building and managing the purchase of equipment for the new space, including a glove box evaporation system. In 2011 / 2012, Christopher secured more than \$900,000 worth of funding including an ARC Future Fellowship, a Larkins Fellowship from Monash University and a grant from the Collier Charitable Fund.

Christopher was invited to present at the Australian Synchrotron Users' meeting. He was also invited to a workshop on emerging materials for thin film solar cells at the University of California in August 2011, and a March meeting of the American Physical Society in Dallas, USA. He delivered a public lecture of the Victorian branch of the Australian Institute of Physics.

Christopher's work has allowed him to collaborate with the flexible electronics group at CSIRO Materials Science and Engineering as well as researchers from Monash University.

He was appointed to the Soft X-ray Proposal Advisory Committee at the Australian Synchrotron and became a member of national advisory board for the International organic excitonic Solar Cells conference.

Christopher was also named as a 2011 finalist for the young alumni award at the University of Newcastle.

Christopher secured more than \$900,000 worth of funding including an ARC Future Fellowship, a Larkins Fellowship from Monash University and a grant from the Collier Charitable Fund.

### Professor Edwin van Leeuwen FTSE

#### Awarded \$100,000 over 12 months to research "Geothermal base-load power options for Victoria".

Professor van Leeuwen returned to Melbourne after spending three years based in Singapore where he was managing BHP Billiton's global technology operations in Russia, China and India.

Edwin moved on from the University of Melbourne professorial position in June 2010 to take up the position of managing director of a major mining company Norilsk Nickel Australia. He was responsible for their Australian operations, including business development in South East Asia, India, China, Japan and South America.

Edwin's funding from the **veski** innovation fellowship concluded in 2010.

#### 2011 / 2012 Update

Edwin has relocated to Moscow from Perth to take up the position of Director of Business Development with Norilsk Nickel International after being Managing Director of Norilsk Nickel's Australian operations. Edwin remains linked to Australia through the development of the giant Honey Moon Well nickel deposit in Western Australia.

During the past year he has maintained a strong interest in geothermal energy, and discussed, with scientists from the Russian Academy of Sciences, and Moscow State University, projects in forecasting global economic collapse and commodity price forecasting using advanced novel mathematical techniques. ... he has maintained a strong interest in geothermal energy, and discussed, with scientists from the Russian Academy of Sciences, and Moscow State University ...

### Dr Mark Shackleton

#### Awarded \$150,000 over 3 years for his research into "Modelling human melanoma progression".

Dr Shackleton relocated from the University of Michigan, Ann Arbor, USA, where he was developing expertise in melanoma cell biology. Since returning to Australia, Mark was awarded a 2010 NHMRC Achievement Award, which is given to the highest-ranked applicant in Australia for the NHMRC's Career Development Award Level 1.

Mark is the Medical Oncologist and Group Leader of the Melanoma Research Laboratory, Research Division at The Peter MacCallum Cancer Centre.

In 2011, Mark was awarded a Pfizer Fellowship worth \$1 million.

Mark's funding from the **veski** innovation fellowship concludes in 2013.

### 2011 / 2012 update

Mark has made a number of advances in the techniques required for his research, specifically the development of a method for transplanting freshly isolated human melanoma cells into NSG mice.

The processing of melanomas into mice is well ahead of projections and Mark has established a number of collaborations with researchers in the USA to look at correlations between the biological outcomes of melanomas growing in NSG mice or in patients.

In the past year, he has presented at six conferences including the annual meeting of Japanese Society for Investigative Dermatology, Kyoto; the International Melanoma Conference, Tampa Bay; the Translational Oncology Conference, Ludwig Institute, Melbourne; the Annual Meeting of the Australasian Society for Stem Cell Research, NSW; the Australasian Society for Dermatology Research Meeting, Perth and the Hunter Valley Cell Biology Meeting.

As well as leading his research team at Peter Mac, Mark continues to care for melanoma patients at regular clinics at the institution. ... processing of melanomas into mice is well ahead of projections and Mark has established a number of collaborations with researchers in the USA ...

### Dr Ross Dickins

#### Awarded \$200,000 over 4 years for his research into "Modelling Cancer Therapy using RNA interference".

Dr Ross Dickins relocated from Cold Spring Harbour Laboratory, New York where he held the position of Postdoctoral Fellow. Since returning to Australia Dr Dickins has also received a Nossal Fellowship.

Dr Dickins established his laboratory at Walter and Eliza Hall Institute for Medical Research.

In 2010, Ross was awarded a \$1 million Viertel Foundation Fellowship.

Ross's funding from the **veski** innovation fellowship concludes in 2012.

#### 2011 / 2012 update

In the past 12 months, Ross has made many research advances and established a number of collaborations across WEHI and with other organisations including Peter Mac.

Ross has been actively promoting his research in Australia at the RNAi Global Initiative Symposium, Melbourne; the 24th Lorne Cancer Conference; the New Directions in Leukaemia Research Conference, Sunshine Coast; the Austin Hospital/ University of Melbourne Department of Medicine; the Children's Cancer Institute of Australia, Sydney; the Australian Centre for Blood Diseases; and the CSIRO Australian Animal Health Laboratory, Geelong.

Ross has also had an impact on the broader research field by generating targeted ES cells for making regulatable shRNA transgenic mice for use by several collaborating laboratories at WEHI, Peter Mac and the Australian Centre for Blood Diseases at Monash University.

In December 2011, Ross was awarded a NHMRC Project Grant worth \$650,000 over three years and he is working on a potential commercialisation project with CSL. ... an impact on the broader research field ... collaborating laboratories at WEHI, Peter Mac and the Australian Centre for Blood Diseases at Monash University ...



31

## Associate Professor Ygal Haupt

#### Awarded \$200,000 over four years for his research into "Regulation of Tumour Suppression".

Associate Professor Haupt was born in Israel and has dual Australian and Israeli citizenship.

Ygal's laboratory is located at the Peter MacCallum Cancer Centre where his wife, research scientist Dr Sue Haupt, is a key member of his team.

Ygal's funding from the **veski** innovation fellowship concludes in 2012.

### 2011 / 2012 Update

Associate Professor Haupt has achieved significant success in his research by crossing the p53 knock-in mice with PML knock-out mice and anlaysing the impact on the survival of the mice and the spectrum of cancer types. He has lectured at a number of international conferences including two major p53 meetings; the 6th international mdm2 workshop in New York and an international workshop on mutant p53 in Rome.

Ygal was appointed as an expert reviewer for the European Research Council, which is one of the most prestigious grant organisations in Europe and was invited to become an editorial board member for ISRN Oncology.

He has filed a patent on mutant p53 and PML and made significant progress in his campaign for discovery of a small molecule inhibitor in collaboration with CT-x. He oversaw the assay for the screen in his lab in collaboration with colleagues at CSIRO who prepared large-scale purified components.

Ygal has also continued to establish and shape his lab at Peter Mac and has forged new collaborations in Australia and abroad. He has translated his work into human cancer and is now working towards an increased awareness of the p53 field in Australia and is planning the first p53 meeting in Australia with the support of **veski**.

Ygal and his team have received two NHMRC grants worth more than \$1 million, and Ygal has contributed to a journal article in the prestigious Nature publication. ... two major p53 meetings; in New York and in Rome ... appointed as an expert reviewer for the European Research Council, which is one of the most prestigious grant organisations in Europe



### Professor Sarah Hosking

Awarded \$150,000 over three years for her research into "Anatomy and Function of the Visual Cortex in Human Glaucoma".

Professor Sarah Hosking received the inaugural **veski** innovation fellowship (Non-Australian) awarded to a non-Australian researcher with an international reputation who brings outstanding skills and specialised expertise to the Victorian community.

Sarah relocated from the United Kingdom where she was Professor of Optometry at Aston University in Birmingham and City University, London.

She undertook a joint research activity at the Centre for Eye Research Australia (CERA), with Professor Jonathan Crowston, Head of the Glaucoma Unit, and Professor Graeme Jackson at the Brain Research Institute at the Austin Hospital.

Sarah moved on from the professorial appointment at CERA in February 2010 to become Director, National Vision Research Institute of Australia (NVRI) and later the CEO, Australian College of Optometry. In her current role, Sarah is expanding the research initiated through the **veski** innovation fellowship with a growing team. The ACO is the parent company of the NVRI.

Sarah's funding from the **veski** innovation fellowship concluded in 2010.

### 2011 / 2012 Update

Sarah is responsible for the clinical vision research unit at the Australian College of Optometry specifically targetting visual disorders such as glaucoma and lifecourse metabolic and circulatory retinal health.

There major focuses in 2011 / 2012 included studies of functional and anatomical changes to the visual cortex resulting from glaucoma-like nerve damage; intraocular pressure and gas perturbations to identify pre-clinical markers of vision loss and retinal damage in patients with age, glaucoma and diabetes; and epidemiological studies of ocular and vascular risk factors for retinopathy in patients with diabetes.

Sarah has also taken an active role in the Victorian community since her return becoming the Victorian Chairman of Save the Children.



Children.

### Professor Michael Cowley FTSE

Awarded \$80,000 over 12 months for his research into "Re-establishing glucose sensing in a-MSH cells to treat diabetes".

Professor Michael Cowley returned to Melbourne after 10 years in the US, including a period as Associate Professor in the Division of Neuroscience, Oregon National Primate Research Center, Oregon Health and Science University, Beaverton, USA, where he specialised in research into obesity.

Professor Cowley established his laboratory at Monash University as part of their Obesity Initiative.

In 2009, Professor Cowley received a Prime Minister's Prize for Science for his work in breaking the link between fat and diabetes.

Michael's funding from the **veski** innovation fellowship concluded in 2009.

#### 2011 / 2012 update

In August, Michael was selected as one of four Australian scientists to embark on the National Tour during the 2011 National Science Week.

In November, he became the third **veski** innovation fellow, and fourth member of the **veski** family, to be elected a Fellow of the Australian Academy of Technological Sciences and Engineering (ATSE).

Michael was one of the 31 Australian leaders in technological science, engineering and innovation elected as 2011 Fellows of the ATSE, and follows **veski's** Professor Andrew Holmes AM FRS FAA FTSE, Professor Edwin van Leeuwen FTSE and chairman Professor Snow Barlow FTSE.

He has continued to publish a range of journal articles throughout 2011 / 2012 and has been invited to present at a range of events including a seminar for the Australian Institute for Musculoskeletal Science. Michael also participated in the inaugural 'Obesity and the metabolic syndrome" symposium at the State Library of Victoria. ... Michael was selected as one of four Australian scientists to embark on the National Tour during the 2011 National Science Week ... elected a Fellow of the Australian Academy of Technological Sciences and Engineering ...

#### Inspiring Innovation

## veski innovation fellows

### Dr Alyssa Barry

Awarded \$80,000 over 12 months for her research into "Population genomics of major surface antigen genes of the malaria parasite".

Dr Alyssa Barry returned from the New York University School of Medicine, USA to build a research group in the International Health Research Group at the MacFarlane Burnet Institute for Medical Research and Public Health.

Alyssa took up a laboratory head position at WEHI in March 2011.

Alyssa's funding from the **veski** innovation fellowship concluded in 2007.

#### 2011 / 2012 update

Alyssa has been using 'protein microarray' technology to screen human blood serum samples for immunity to proteins produced by the malaria-causing Plasmodium Falciparum parasite.

Her research determines a person's immunity to hundreds of proteins simultaneously, and was published in the journal Molecular and Cellular Proteomics in August 2011.

Alyssa is also investigating how humans living in countries where malaria is prevalent, such as Papua New Guinea, establish immunity that protects them from developing malaria.

She has collaborated with colleagues at the Queensland Institute of Medical Research, the Papua New Guinea Institute of Medical Research, and the University of California, Irvine to adapt existing protein microarray technology to allow small samples of human serum (less than one hundredth of a millilitre) to be tested simultaneously against hundreds of variants of PfEMP1 to determine to which variants the person was immune.



### Dr Gareth Forde

Awarded \$200,000 over three years for his research into "Plasmid DNA Purification for Gene Therapy and Vaccine Applications".

Dr Gareth Forde returned from Cambridge University to join the Monash University, Department of Chemical Engineering, Faculty of Engineering, as a Lecturer.

Gareth established a new Bio Engineering Laboratory (BEL) to house research at the interface of engineering, biotechnology and medicine at Monash University.

The lab allows collaborations with other researchers and houses a pilot-scale biomolecule production facility for process research and development into biomolecules such as proteins, vaccines and DNA.

The laboratory was co-funded by **veski** and allowed Gareth to continue his work to improve vaccine development times.

Gareth's funding from the **veski** innovation fellowship concluded in 2007.

#### 2011 / 2012 Update

The funding from **veski** contributed directly to enabling Gareth to continue the development of DNA vaccine ideas inspired by his work at Cambridge which lead directly to two patents: one covering a high performance chromatographic monolith and the second covering an enhanced pDNA growth medium.

Gareth provides ongoing technical input to the group commercializing these patents. The creation of the patents would not have been possible with the **veski** innovation fellowship.

In 2011, Gareth accepted the role as National Sustainability Manager with Lycopodium Process Industries where he works on projects in the areas of renewable energy, biofuels, energy efficiency and emissions reduction.



The funding from veski contributed directly to enabling Gareth to continue the development of DNA vaccine ideas inspired by his work at Cambridge which lead directly to two patents

# veski innovation fellows

## Professor Marcus Pandy

Awarded \$400,000 over four years for his research into "New Technologies for the Non-invasive Assessment of Musculoskeletal Health".

Professor Pandy returned from the University of Texas, Austin, to take up the role of Chair of Mechanical and Biomedical Engineering, Faculty of Engineering at the University of Melbourne.

Marcus held the position of Head of Department of Mechanical and Manufacturing Engineering from 1 January 2006 until March 2008.

Marcus' funding from the **veski** innovation fellowship will conclude in 2014.

#### 2011 / 2012 update

Marcus' research has resulted in the production of a highspeed biplane mobile x-ray fluoroscopy system for 3D measurement of human joint motion in vivo. He is currently testing the novel system for measuring bone motion in vivo at high speed.

Marcus has published research articles in top-tier journals and has successfully applied for research grants from the ARC, NHMRC and NIH. In the past 12 months, he has been part of eight successful grant applications.

Marcus has delivered keynote addresses at the Australia and New Zealand Orthopaedic Research Society in Brisbane; the ISSNIP Biosignals and Biorobotics Conference in Brazil; and the International Workshop of Modelling and Simulation of Human Motion in Korea.

Marcus has also continued to cultivate several international collaborations including a grant funded by the NIH with colleagues at the University of Florida and Stanford University.

Marcus' research has resulted in the production of a highspeed biplane mobile x-ray fluoroscopy system for 3D measurement of human joint motion in vivo. He is currently testing the novel system for measuring bone motion in vivo at high speed.



#### 38 ANNUAL REVIEW 2011 / 2012

# inaugural **veski** innovation fellow

## Professor Andrew Holmes AM FRS FAA FTSE

#### Awarded \$530,000 over five years for his research into "Organic Optoelectronic Materials: Next Generation Semiconductors".

Professor Andrew Holmes is the inaugural **veski** Innovation Fellow and returned from Cambridge University to work in the new \$100 million Bio21 Molecular Biology and Biotechnology Institute.

Bio21 houses the new Holmes custom built group laboratory with state of the art facilities including lab benches with piped services, cupboards and shelving to maximize storage space and flexibility of use, and fully serviced individual work stations.

In 2011, Andrew became the first **veski** innovation fellow to join the **veski** board of directors.

Andrew's funding from the **veski** innovation fellowship concluded in 2010.

#### 2011 / 2012 update

In July 2012, Andrew's international contribution to science and research was recognised by the Royal Society when they announced that he would be one of only three recipients of the 2012 Royal Medal – making him the only Australian in 10 years to receive the award.

He continues to lead the Victorian Organic Solar Cells Consortium involving the University of Melbourne, CSIRO and Monash University with industrial partners aiming to deliver efficient flexible printed solar cells for low cost applications in electricity generation. The Consortium also benefits from a strong collaboration with the Imperial College Doctoral Training Centre in Plastic Electronics.

Andrew and his team published a range of journal articles, presented at numerous conferences and events, and continued to promote their work in the media. In May 2012, Andrew participated in a public forum hosted by the University of Melbourne and The Australian Academy of Science. The discussion focused on the value of scientific research and international collaboration. Andrew also promoted international collaboration through interviews with Radio National and The Age/Sydney Morning Herald.

From October 2011 to March 2012, he became a fellow of Lincoln College and undertook the Newton Abraham Visiting Professorship in the Medical, Biological and Chemical Sciences at the Department of Chemistry, Oxford. Andrew was honoured as one of only three recipients of the 2012 Royal Medal ... He continues to lead the Victorian Organic Solar Cells Consortium involving the University of Melbourne, CSIRO and Monash University ...





Front: Professor Marcus Pandy, Dr Alyssa Barry, Professor Andrew Holmes, Dr Mark Shackleton, Associate Professor Tiffany Walsh Back: Professor Michael Cowley, Dr Christopher McNeill, Dr Matthew Call, Associate Professor Ygal Haupt, Dr Seth Masters, Dr Ross Dickins, Professor Cameron Simmons Not pictured: Dr Gareth Forde, Professor Sarah Hosking and Professor Edwin van Leeuwen

# veski programs

veski continues to deliver programs which provide community awareness and foster a culture of innovation across Victoria.

#### veski co-sponsored RMIT Business Innovation Breakfasts

**veski** continues to build creative linkages between representatives of the science, business and innovation communities by supporting activities such as the longrunning RMIT Business Innovation Breakfast series.

During 2011 / 2012, **veski** hosted in conjunction with RMIT University and Ernst & Young the following guest speakers:

- Mr Jeremy Stone, Group Manager, Innovation, GHD;
- Professor Göran Roos, Chairman VTT International;
- Mr Earl Eddings, CEO, Greencap Limited, and Director, Cricket Australia; and
- Mr Derek Young, RMIT Council, Chairman, Melbourne Theatre Company.

#### veski international connections

This program was developed to forge international connections with outstanding Australian expatriates and leading researchers by supporting them on visits to Victoria to deliver a variety of forums including seminars, boardroom luncheons, discussion groups and public lectures.

During 2011 / 2012, **veski** was able to take advantage of a visit to Australia by Professor Göran Roos, who was in the country supporting the Prime Minister's Taskforce on Manufacturing. As part of his visit, Professor Göran Roos delivered a RMIT Business Innovation Lecture about making things in a high cost environment which was attended by more than 100 leaders from Victoria's business, government and manufacturing sectors. He also participated in a **veski** conversation which provided a unique experience for our innovation fellows and board members.

#### 18th International Botanical Congress

In July 2011, **veski** supported a free public science debate, which provided an opportunity for students and teachers to participate in the 18th International Botanical Congress in Melbourne.

A panel of eminent scientists, with the equally eminent science journalist Robyn Williams as moderator, discussed and debated the role of plants and microorganisms in this time of great technological advancement and how each can be harnessed to solve tomorrow's environmental and energy problems by using life itself.

The speakers included Professor David Mabberley, Royal Botanic Gardens, Kew, UK; Dr Kevin Thiele, Curator Western Australia Herbarium; Dr Jeff Powell, Microbial ecologist and lecturer, University of Western Sydney and Dr Kirsten Heimann, Cell biologist and biofuels expert, James Cook University.

**veski** promoted the event to its database of school teachers and principals as well as the broader **veski** family.



# **veski** awards

veski offers awards in addition to its fellowships where individuals, groups or organisations can request financial assistance for activities in science, design and innovative technologies. Applicants must demonstrate how their proposal contributes to veski's objectives to enhance Victoria's intellectual capital. veski awards in science and design are between \$10,000 and \$30,000.

## veski awards in design

**veski** awards in design are provided to support Australian talent to showcase their design excellence on the global stage. They are also made available to outstanding designers as part of an international engagement program to share experiences and methodologies within the Victorian Design community.

All designers are encouraged to share their experiences with the broader Victorian community through workshops, symposiums, exhibitions and public lectures.

The **veski** design sub-committee reviews and evaluates the expressions of interest for the **veski** design awards against the **veski** objectives, and makes recommendations to the **veski** board of directors via the **veski** chairman.

The sub-committee was formed under the direction of **veski** board member Professor John Denton following a **veski** Design Think Tank in late 2004.

The **veski** design sub-committee comprises:

- Professor John Denton, Chairman
- Mr Tony Sweeney
- Professor Ken Friedman (stepped down 31 August 2012)
- Professor Tom Kvan
- Professor Shane Murray
- Professor Leon van Schaik AO
- Professor Des Smith.

#### veski awards in design delivered in 2011 / 2012

#### Lucy McRae exhibition/workshop

After delivering her inaugural summer school with funding from a **veski** award in design, world-renowned body architect Lucy McRae is talking with institutions around the world to replicate the concept she developed in Melbourne. The concept is tipped to become 'The Lucy McRae School'.

The innovation workshop brought together the elite and the talented to create a high octane, high energy atmosphere and the network of people involved opened up major connections between students and industry on a local and international level.

#### X\_Field Travelling Exhibition

X\_Field is a collaborative group of practitioners who work across the disciplines of art, architecture, landscape architecture, urban and interior design. **veski** funded new work of six eminent Victorian (X\_Field) practitioners, Charles Anderson, Richard Black, Mel Dodd, Sand Helsel, Andrea Mina, and SueAnne Ware in a travelling exhibition across Beijing, Seoul and Taipei.

The X\_Field Travelling Exhibition is scheduled to arrive in Melbourne in July 2013 and will be displayed at RMIT's new Design Hub on Swanston Street. "I want to thank you for giving me, the students at RMIT and the many number of people involved in making this project such a wonderful opportunity to be part of a project that conquered uncharted territory and introduced a whole innovative way of learning, providing students with access to experience something not usually available at University" - Lucy McRae

# **veski** awards

## veski awards in science

**veski** awards in science provide support for local, national and international initiatives, which return globally competitive individuals and leading researchers in the areas of science and innovative technology to Victoria for the benefit of the Australian economy.

The **veski** awards in science build creative linkages between representatives of the science, business and innovation communities and establish ongoing and mutually beneficial relationships with world leading specialists.

Awards can support local events with international speakers and guests or allow individuals from Victoria to participate in international conferences and workshops. Upon their return to Victoria, the individuals share their experiences with the local community through workshops, symposiums, boardroom luncheons, lectures and **veski** conversations.

In addition, **veski** bursaries are offered to help meet the costs of travel and casual relief teachers associated with attending such events and are part of **veski's** involvement with activities to lift participation rates in science amongst all students in Victoria. During 2011 / 2012, **veski** received several expressions of interest for **veski** awards in science.

The veski science sub-committee comprises:

- Professor Snow Barlow FTSE, Chairman
- Mr Lewis Johnson
- Professor lan Smith

#### veski awards in science delivered in 2011 / 2012

#### 2011 Endeavour Adventure

The Endeavour Adventure is an initiative of Endeavour; an annual program of events presented by The Melbourne School of Engineering at The University of Melbourne. Led by a team of engineering students, Endeavour aims to promote engineering excellence, collaboration and innovation to a wide audience.

A **veski** award in science provided students from a diversity of backgrounds the opportunity to visit The University of Melbourne's Parkville campus. They participated in a range of activities designed to inspire interest in engineering and technology-related fields as a study option and career path.

The Endeavour Adventure is held on the day of Endeavour's flagship event, The Endeavour Design Expo, which publicly displays the technical projects of more than 300 final-year students of The Melbourne School of Engineering.

The support of the Endeavour program is part of **veski's** involvement with activities to lift participation rates in science amongst students in Victoria.

**veski** also promoted the event via a series of bulletins and invitations to our list of school principals and science teachers.

#### 2012 'Hooked on Science' national lecture tour

A **veski** award in science provided **veski** bursaries for students and teachers to travel more than 350 kilometres to attend a unique learning experience with Australia's first female Nobel Laureate Professor Elizabeth Blackburn at the Walter and Eliza Hall Institute of Medical Research.

The students from Rushworth College P-12, Tyrrell College, Upper Yarra Secondary College and Keysborough Secondary College joined more than 200 Victorian students and teachers for the final stop of the National 'Hooked on Science' Lecture Tour.

Professor Blackburn began her distinguished science career at the University of Melbourne and is now Morris Herzstein Professor in Biology and Physiology in the Department of Biochemistry and Biophysics at the University of California, San Francisco.

Her inspiring presentation generated a wide range of questions from students and teachers. After talking about her career and the exciting work she has been part of around the world, she had some advice for the next generation of bright young minds in Victoria. Professor Blackburn told students if they don't know which area of science to pursue they should search for an area that really interests them. She said they should also try to make the process as organic as possible.

Also participating in the lecture were Dr Alicia Oshlack, Head of Bioinformatics at the Murdoch Childrens Research Institute and Dr Marnie Blewitt, Laboratory Head of Molecular Medicine at WEHI focused on epigenetics.

This national tour organised by the Australian Academy of Science and Atlantic Philanthropies, received support in Victoria from **veski** and the Walter and Eliza Hall Institute of Medical Research.



# **veski** awards 2012 / 2013

#### 2012 Graeme Clark Oration and Official Dinner

**veski** continued its support of the Graeme Clark Oration in 2012 by hosting bright young students, their teachers and **veski** innovation fellows at the Official Dinner, and promoting the event to **veski's** established network of science teachers.

The Graeme Clark Oration is an initiative of the ICT for Life Sciences Forum, which was established in Melbourne in 2008 to connect the community of researchers active at the intersection between biology, computing and engineering.

The 2012 Oration entitled 'Forever Young' was delivered by Dame Linda Partridge followed by the Oration Dinner attended by representatives of the business, government and science communities.

**veski** innovation fellows and board members hosted 10 students and teachers from three Victorian Schools in an effort to inspire the next generation of bright young minds.

Teachers and students from Carwatha College, Keysborough Secondary College and Methodist Ladies College joined **veski**-hosted tables at the Oration Dinner as part of **veski**'s activities to lift participation rates in science amongst students in Victoria.

The Oration Dinner, attended by leaders from the medical research, academic, business and government communities,

provided another opportunity for **veski** innovation fellows, students and teachers to hear from Dame Linda Partridge.

Following her dinner speech, Dame Partridge led a lively and enlightening question-and-answer session. Thanks to the encouragement of **veski** innovation fellows, a student from Carwatha College stood up and asked Dame Partridge what might be the effect on population numbers if the pill helped reduce age-related health issues.

The **veski** innovation fellows enjoyed the opportunity to engage directly with up-and-coming science students and their teachers.

Head of Science from Keysborough Secondary College, Leonie McGlashan said the best part of the evening was "having dinner with academics who generously invited our students to attend their work places". She also said, "That was the most spectacular night, it was heaven. We all thought so. Haven't stopped raving about it".

A student said: "As a young woman hoping to follow a career in science, I found Dame Linda Partridge's presentation very inspirational. Meeting the **veski** representatives at the dinner afterwards was also great, as it provided another opportunity for me to learn about the industry and ask questions".

## Two veski awards in design were offered for delivery during the next 12 months.

- RMIT University's 'Growing smarter material systems: visiting international Fellows, community awareness, International exhibition and conference' (delivery in February 2013)
- Monash University's 'Architects Symposium and Public Lecture: Blaine Brownall, USA, & Junya Ishigami, Japan' (delivery in February 2013)

### Four veski awards in science were offered for delivery during the next 12 months:

- 2011 Endeavour Adventure (for delivery in October 2012)
- 'First Australian p53 Workshop' (for delivery in November 2012)
- 2013 Graeme Clark Oration (for delivery in April 2013)
- 'WEHI-Harvard Immunology Exchange: A pilot international collaborative program in the training of tomorrow's young medical scientists" (for delivery in May 2013)

"...having dinner with academics who generously invited our students to attend their work places ... was the most spectacular night ... Haven't stopped raving about it"

-92

- Leonie McGlashan Head of Science Keysborough Secondary College STP Strates

# statement of financial position Types at 30 June 2012 ABN 93 104 711 275

| <b>Current assets</b><br>Cash and cash equivalents<br>Receivables<br>Other assets<br><b>Total current assets</b>               | 2012<br>\$<br>1,469,016<br>3,623<br>26,141<br><b>1,498,780</b> | 2011<br><b>\$</b><br>1,502,829<br>14,542<br>15,150<br><b>1,532,521</b> |
|--|--|--|
| Non-current assets<br>Property, plant and equipment<br>Total non-current assets<br>Total assets                                | 38,163<br><b>38,163</b><br><b>1,536,943</b>                    | 11,059<br><b>11,059</b><br><b>1,543,580</b>                            |
| <b>Current liabilities</b><br>Payables<br>Provisions<br>Other liabilities<br><b>Total current liabilities</b>                  | 62,440<br>33,491<br>1,300,348<br><b>1,396,279</b>              | 32,715<br>32,892<br>1,390,353<br><b>1,455,960</b>                      |
| <b>Non-current liabilities</b><br>Provisions<br>Total non-current liabilities<br><b>Total liabilities</b><br><b>Net assets</b> | 53<br>53<br><b>1,396,332</b><br>140,611                        | 1,455,960<br>87,620  |
| Equity<br>Retained earnings<br>Total equity  | 140,611<br><b>140,611</b>                                      | 87,620<br><b>87,620</b>  |

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Where necessary, comparative information has been reclassified and repositioned for consistency with current year disclosures.

All revenue is stated net of Goods & Services Tax [GST].





Inspiring Innovation

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