Inspiring Innovation



## veski inspiring women fellowships

July 2015 - October 2020



# inspiring innovation since 2004

## final report

This report provides a summary of **veski's** performance in delivering the six **veski** inspiring women fellowships formerly known as **veski** Career Interruption Fellowships as part of a broader Women in Science program delivered between 2015 - 2020. **veski** is grateful to the Victorian Government and specifically, the support of the Office of the Lead Scientist of Victoria - enabling the creation, delivery and funding of the broader **veski** inspiring women program which includes the **veski** inspiring women fellowships.



The **veski** board of directors, MD & chief executive and management team are proud to continue to support all **veski** inspiring women fellows - way beyond the life of their funded fellowships.

## veski uniquely placed for advocacy

In 2014 **veski** MD & chief execuitve led a broad consultation in Victoria on promoting and assisting women in STEM. The result was a dynamic program funded by the Victorian Government through the Office of the Lead Scientist, and delivered by **veski**. A report published in 2014, 'Women in the Science Research Workforce: Identifying and Sustaining the Diversity Advantage', by Professors' Sharon Bell AM, Dean, Australian National University, College of Asia & the Pacific, and Lyn Yates, Professor of Education, the University of Melbourne, highlighted that, despite women's advanced qualifications and employment success in science and technology, in science research retention is low and women tend not to progress beyond the postdoctoral stage.'

With the STEM workforce of critical importance for the economic future of Australia, there was - and remains - an urgent need to identify and remove barriers to female progression into senior roles, and to clearly map scientific career paths for women in STEM fields.



#### veski inspiring women working group

In 2014 **veski** and the Victorian Government Department for Innovation, hosted a solutions-focused **veski** conversation about women in science, research and innovation and the challenges they face. Attendees included key representatives of Victorian research institutions, early and mid-career female researchers, and national funding bodies.

As a response, **veski** with the Office of the Lead Scientist of Victoria, led a broad consultation with key representatives of Victoria's science and innovation communities, on the pressing need for Victoria to do more to promote and assist women in STEM, forming the **veski** inspiring women working group.

The result was the development of a dynamic program, funded by the Victorian Government and delivered by **veski**, with support from the Office of the Lead Scientist of Victoria - the **veski** inspiring women program.

## veski inspiring women program

The **veski** inspiring women program delivered industry internships, professional development & networking events, a dedicated women's web portal, and the **veski** inspiring women fellowships.

#### veski inspiring women industry internships

The **veski** inspiring women industry internships aimed to support Victorian women's career choices in the industrial sector, through partnerships with government, industry and academia.

The program provided organisations with talented higher degree students and was an alternative, cost effective solution for research challenges or problems facing business.

Female honours and masters students, and their university supervisors, from STEM disciplines, partnered with industry through short-term (4 month) focused research internships.

The internships were also supported by funding for SME's from the Victorian Government.

The program included;

- Regular masterclasses
- Business provided on-site infrastructure, training & technology
- End of project report completed by the intern with business input.

#### veski inspiring women PD & networking

In 2015 **veski** offered the inspiring women professional development and networking program, focused on developing capability and key enterprise skills to support women at different career stages to progress in their professional life.

This series of masterclasses, networking and professional development sessions were offered to gender equity committee members, early-to-mid career researchers, females with a background in STEM, research office administrative staff and anyone interested in inspiring Victoria's future female leaders.

In 2016 **veski** continued this highly successful series of open invitation events, with broader skills training and education, to

meet the need for developing more women to become decision makers, senior management, product developers and members of Australian boards.

#### veski inspiring women's portal

A dedicated inspiring women's web portal was developed in 2015 to assist researchers to identify resources, information and opportunities that support their career progression, to advocate for inclusion & diversity and to promote the **veski's** inspiring women program.

#### The destination for veski inspiring women veski.org.au/inspiring-women















## veski inspiring women fellowships

The **veski** inspiring women fellowships were designed to support outstanding female leaders who are were planning for, experiencing, or returning from a career break, who were involved with research in STEM disciplines within Victorian academic or research institutions, and were either experiencing or anticipating difficulties juggling their career and family or carer commitments.

With flexible funding of up to \$150,000, provided over three years, inclusive of financial support from the fellow's institutions, the **veski** inspiring women fellowships allowed recipients to choose exactly how to allocate their funds to maximise career opportunities. This ensured greater connection with their research while taking career-breaks and returning to work giving them the ability to participate in important international conferences with the support of carers for young children, and the ability to employ research assistants to be their 'hands' in the laboratory while they were at home raising their young families. Host institutions were required to make a significant commitment to supporting these inspiring women by providing an additional cash contribution of 10 per cent of the total funding awarded each year, allowing these women to remain competitive by tailoring support mechanisms to suit their situations and make the juggling act possible.

The host institutions were also required to supporting the fellow's leadership potential by committing to invite, consider and where appropriate recommend the fellow to sit on relevant committees, panels and represent the institute as a leader or ambassador, and provide professional mentoring for the duration of the fellowship,

To date, the **veski** inspiring women fellowships have provided an opportunity for 6 female leaders to remain competitive in their field, enhancing the current talent pool and affecting cultural change within their organisations.



### #SupportWomenInSTEM #WomenInLeadership #Visability #Pipeline

## selection process

Drawing upon **veski's** experience in establishing fellowship programs, a tailored end-to-end fellowship process was developed, inclusive of a specific brand identity, communications strategy, documentation - including application criteria & forms, and an independent selection process.

There have been two calls for applications for the program to date, with the first call announced by the late Hon. Fiona Richardson on Wednesday, 24 June 2015.

**veski** was honoured to have the program supported by Hon. Fiona Richardson during her time as the Minister for Women.

In September 2016, **veski** called for applications for a further round of **veski** inspiring women fellowships - funded from the allocation of core **veski** fellowship funding. A 12% increase on the number of applications received in the first round clearly demonstrating the need for such a vital and important fellowship program.

#### Media Release

Fiona Richardson MP Minister for the Prevention of Family Violence Minister for Women

Wednesday, 24 June, 2015

#### FELLOWSHIPS SUPPORT WOMEN TO STAY IN SCIENCE

Applications are now open for career fellowships in the science industry to encourage women to stay in the field during motherhood or other carer roles.

State Covernment Victoria

The Inspiring Women Fellowships, valued at \$150,000 each, will operate over three to five years and are designed to support women in the early and middle stages of their careers to remain in their profession while managing other responsibilities.

The Labor Government has also developed the Industry Internships Program, which is open to female honours and masters university students.

The internships program is designed to financially support Victorian businesses operating in Science, Technology, Engineering and Mathematics environments to increase the number of women in the field.

The imbalance in the current workforce has led to an under-representation of women at the senior levels of scientific leadership. These programs are aimed at addressing the barriers faced by women trying to enter and reenter the profession.

Funded through the Victorian Government's Women in Science Program, the fellowships and internships are spearheaded by the Office of the Lead Scientist, Leonie Walsh.

Potential fellows and interns can apply at www.veski.com.au/inspiring-women

#### Quotes attributable to Minister for Women, Fiona Richardson

"The Andrews Labor Government will stand up for women to ensure they have equal rights and opportunities within their chosen profession."

"These fellowships have been designed to address the challenges that many women face in balancing their careers with motherhood or other significant carer roles."

"The Labor Government is committed to ensuring a sound gender balance in science, particularly in senior and leadership roles."

Application rounds were supported by the following Selection Panel members, highly regarded in the scientific innovation community, and dedicated to providing Victorian female scientists with the opportunity to remain competitive in their field, to enhance the current talent pool and affect cultural change:

- **Dr Leonie Walsh;** Productive Management Solutions (2015/16 as Chair & 2016/17);
- **Professor Terry Speed;** Walter and Eliza Hall Institute of Medical Research (2015/16 & 2016/17 as Chair);
- Mr Bill Hill; Gyder Surgical (2015/16 & 2016/17);
- Dr Marguerite Evans-Galea AM, Murdoch Children's Research Institute (2015/16);
- Professor Tiffany Walsh, Deakin University (2015/16);
- **Professor Mary Wlodek**, The University of Melbourne (2015/16);
- Professor Kay Latham; RMIT University (2016/17);
- Professor Colette McKay; The Bionics Institute (2016/17); and
- Professor Kate Smith-Miles; Monash University (2016/17).

**veski** sincerely thanks all Advisory Panel members and members of the Selection Panel for their guidance, input, time and support.

On 3 December 2015, the Governor of Victoria, Her Excellency the Hon. Linda Dessau AM, announced four inaugural inspiring women fellows

#### **Dr Emily Nicholson**

**Deakin University** 'Linking risks to ecosystems with the benefits they provide.'

Fellowship commencement: 1 March 2016

#### Dr Maria Liaskos

La Trobe University<sup>1</sup> 'Elucidating the mechanisms of immune suppression during Helicobacter infection and gastric cancer.'

Fellowship commencement: 1 March 2016

#### Dr Catherine Satzke

**Murdoch Children's Research Institute** 'Measuring pneumococcal vaccine impact in the Asia/Pacific region using state-of-the-art serotyping methods.'

Fellowship commencement: 1 March 2016

#### Dr Natalie Hannan<sup>2</sup>

**The University of Melbourne,** 'Investigating mechanisms of preeclampsia and developing novel therapeutics.'

Fellowship commencement: 1 March 2016

<sup>1</sup>Employed at Hudson Institute of Medical Research at the commencement of her fellowship <sup>2</sup>The fourth inaugural **veski** inspiring women fellowship was funded from **veski** core funds.

### inaugural veski inspiring women fellows



Top: **veski** inspiring women fellows: Dr Maria Liaskos, Dr Catherine Satzke, Dr Emily Nicholson and Dr Natalie Hannan. Bottom: Mr Philip Dalidakis, then Minister for Innovation, Her Excellency the Hon. Linda Dessau AM, Professor Ian Smith, **veski** chair and Dr Leonie Walsh, former Lead Scientist of Victoria.

### Dr Leonie Walsh

Former Lead Scientist of Victoria (2013-16)



There is extensive evidence to support that women face many gender based challenges during the critical stage of their career as they are transitioning into leadership positions. At the same time it is imperative for our economy and society that we have greater gender equity and diversity in our workforce to produce the best outcomes and provide the best workplaces.

The inspiring women's program addresses both of these issues by providing tools, networks and skills to help address barriers that prevent women from fulfilling their potential as Leaders in STEM fields and also helps to build a pipeline of highly capable emerging female leaders in STEM.



On 21 June 2017, the Governor of Victoria, Her Excellency, the Hon. Linda Dessau AM announced a further two **veski** inspiring women fellowships

#### Dr Cara Doherty

CSIRO 'Smart Sensing of Toxins' Fellowship commencement: 1 January 2018

#### Dr Emma Sciberras

#### **Deakin University**

'Improving outcomes for children with Attention-Deficit/Hyperactivity Disorder'

Fellowship commencement: 1 July 2017

"We need to encourage women into research and, as recognised so well by these awards, to keep them in research."

Her Excellency, The Honourable Linda Dessau AC, Governor of Victoria.

### veski inspiring women fellows in 2017



Left to right: **veski** chair Professor Ian Smith, **veski** inspiring women fellows in 2017; Dr Cara Doherty & Dr Emma Sciberras, & **veski** MD & chief executive Ms Julia L Page.

This round of veski inspiring women fellowships were funded from veski core funds.

veski inspiring women fellows in 2017 Drs' Cara Doherty & Emma Sciberras, Professor David De Kretser AC, s Julia L Page, Associate Professor Maria Liaskos



Drs' Maria Liaskos, Natalie Hannan, Emily Nicholson, Catherine Satzke

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Drs' Emily Nicholson, Natalie Hannan, Catherine Satzke, Maria Liaskos and veski MD & chief executive Ms Julia L Page

#### inspiring innovation

## veski inspiring women fellows

### economic & social outcomes for STEM women in Victoria



#### Real world impact

**veski** inspiring women fellowships are awarded with the intention that support will enable research to be translated into commercially viable applications that deliver economic, environmental and social impact across a number of sectors.



#### Creation of jobs

**veski** enables the creation of jobs by supporting **veski** inspiring women fellows to establish programs within Victoria with access to stable income streams, and enabling innovation with potential to accelerate economic activity and create new industries.



#### Enhance the talent pool

**veski** inspiring women fellowships drive competition in their targeted approaches: inspiring women fellows are enabled to continue research success, supported as leaders, and enhance the diverse talent pool.



#### Global connections

Victoria's intellectual capital is enhanced through the attraction of international researchers, and support of local talent to make global connections. Many inspiring women fellows have attended overseas conferences with **veski** support, leading to international collaborations.



#### Diversity and inclusion

**veski** promotes Victoria's inclusive and liveable brand by enabling successful female researchers to balance demanding careers and family commitments through the **veski** inspiring women fellowship.



#### Inspiring the next generation

You can't be what you can't see. **veski** inspires the next generation of female researchers and innovators by ensuring greater numbers of women stay and progress into leadership positions in Victoria, creating greater visibility by showcasing their research achievements through promotion and advocating for them through outreach and engagement activities.

## benefits assessment

In 2018 **veski** engaged SPP to conduct an independent benefits assessment of the **veski** inspiring women fellowships program.

The report found that the **veski** inspiring women fellowships program delivered unique benefits, which would not have been possible without the support of the fellowship. **veski** has held a genuinely unique position to deliver these benefits which will have enduring impact for not only the inspiring women fellows, but also on the research community more broadly. The support provided to the six **veski** inspiring women fellows since the program was introduced in 2015 has delivered a significant return on investment. Collectively, the inspiring women fellows have secured upwards of \$13.1 million in research income, with an average of \$1.3 million per fellow generated per annum.

**veski** inspiring women fellows have delivered a 14.5x return on **veski's** support driving increased female participation and cultural change in research and innovation. The **veski** inspiring women fellowships program has delivered unique benefits. Through the program **veski** has been able to build capacity, enable connections and drive significant cultural change to promote and enable female participation in research and innovation.

building capacity veski has provided real support to the 6 inspiring women fellows, in the form of financial assistance which has funded enablers of research success, including research assistants and equipment, international travel, and childcare.

enabling connections

veski has enabled the inspiring women fellows to broaden their professional networks in ways which otherwise would not have occurred. This includes connections with international researchers made when attending overseas conferences, and connections with high-profile individuals made at veski events.

driving cultural change

veski has made real progress in driving cultural change in favour of diversity and female participation in research and innovation. This includes improving awareness of the real challenges faced by females in research, and examples of mechanisms which can help address these challenges.



#### inspiring women fellowships



## impact

#### Greater competitiveness and success of female researchers

CHALLENGE: Despite relative gender equality at the PhD level, women constitute only 15-20% of academics at the top of their field.

Due to the support provided by **veski**, the inspiring women fellows have been able to continue their research amid career disruption, which has enabled them to remain at the top of their fields and secure competitive research grants. The fellowships have also provided a boost of confidence, which has encouraged the fellows to be more ambitious in their careers.

#### Enhanced opportunities for international collaborations

CHALLENGE: Women are underrepresented at international research conferences, largely due to family commitments.

By allowing the **veski** inspiring women fellows to use their **veski** support to travel with their families when attending invited talks and other international events, the **veski** fellowships have allowed these women to take advantage of career opportunities which have led to collaborations with prestigious international researchers.



#### Increased leadership opportunities for women in research

CHALLENGE: Even though female participation in knowledge based industries has increased over the last three decades, there remains a gender gap in leadership positions.

The connection with **veski**, and the prestige associated with the **veski** fellowships, has opened more leadership opportunities for the inspiring women fellows, and helped them to successfully transition into leadership roles.

#### Enhanced diversity and systemic culture change in research

CHALLENGE: Low levels of female participation in research is a systemic problem, requiring cultural change.

The **veski** inspiring women fellows are advocates for diversity and female participation. They leverage the platform provided by their **veski** fellowships to drive systemic cultural change, for example, by ensuring women are appropriately considered for leadership roles in their organisations, and by supporting the introduction of mentoring and other support initiatives.



#### Inspiring the next generation of female scientists

CHALLENGE: Attracting more young women into careers in research and innovation.

The **veski** inspiring women fellows are active in inspiring the next generation of female scientists, by acting as role models to young women in their organisations and research fields, as well as through volunteering for **veski** outreach programs, such as the **STEM sidebyside** programs for University students. The **veski** inspiring women fellows have also mentored over 118 nextgeneration female scientists.



Professor Ian Smith, **veski** chair with **veski** inspiring women fellows - Drs' Emily Nicholson, Maria Liaskos, Cara Doherty, Emma Scriberras, Natalie Hannan, Catherine Satzke and Ms Julia L Page, **veski** MD & chief executive.

## let's meet the veski inspiring women fellows...

#### **Dr Emily Nicholson**

**Deakin University** 

Dr Maria Liaskos

La Trobe University

#### **Dr Catherine Satzke**

Murdoch Children's Research Institute

Dr Natalie Hannan The University of Melbourne Dr Cara Doherty CSIRO

#### Dr Emma Sciberras

Deakin University



### Emily Nicholson

inspiring women



An inaugural **veski** inspiring women fellowship was awarded in 2015 to Professor Emily Nicholson to enable her to work part-time at Deakin University's School of Life

and Environmental Sciences.

The **veski** inspiring women fellowship allowed Professor Nicholson to host a workshop in Melbourne to bring key players to Australia to develop a strategy to assess the world's ecosystems by 2025. She was also able to use some funds to support childcare for her youngest child while undertaking these activities. In addition, the **veski** inspiring women fellowship allowed Emily to recruit a dedicated postdoctoral researcher in order to maintain her research workload while returning to work part-time. This has greatly improved her own research output and supported her research group.

The **veski** inspiring women fellowship has supported Emily's research solving critical conservation problems exploring how to balance development and nature conservation, and how to measure change in biodiversity.

Since 2007, Emily has worked as part of an international research team to develop a new framework for assessing risks to ecosystems, called the Red List of Ecosystems, which provides critical information for setting conservation priorities. The approach was adopted as the global standard by the International Union for the Conservation of Nature (IUCN), the world's largest environmental organisation, and also by governments worldwide and in Australia. Emily is mother to three children, and with the support of the **veski** inspiring women fellowship and her institution she has continued developing as a Victorian leader.

Emily is a senior lecturer in quantitative ecology at Deakin University, in the School of Life and Environmental Sciences, and a member of the Centre for Integrative Ecology. Her focus is on developing theory and tools to make complex environmental problems tractable for decision making. Emily's key themes are forecasting change in biodiversity through scenario modelling, conservation planning, and global biodiversity policy.

She has received numerous grants & awards including three ARC Linkage Grants since 2016, an ARC Discovery Grant, and an ARC Future Fellowship in 2019 to extend the research she undertook with the **veski** inspiring womens Fellowship. She was part of a collaborative team who received the Vice Chancellor's Award for Excellence for Mid-Career Researchers, and in 2019 she received the Deakin Vice-Chancellor's Award for International Research Collaboration.

In 2019 Emily also presented at the International Congress for Conservation Biology and UCL's Centre for Biodiversity & Environment Research.

She is extensively involved in gender equity, diversity & inclusion and a member of the SAGE Athena Swan Self-Assessment team and Deakin University's promotions committee on accounting for opportunity in evaluating C.Vs.

Emily continues to publish in top international journals, including an article in Nature in 2020.





### highlights

- Deakin Vice Chancellor's Award for Excellence for Mid-Career Researchers (2016)
- Promoted to Associate Professor (2018)
- Deakin Vice-Chancellor's Award for International Research Collaboration (2019)
- Funding of over \$5.9 million includes:
  - 3 ARC Linkage Grants
  - ARC Discovery Grant
  - ARC Future Fellowship (2019)
- Invited (with colleagues) to write a comment piece in Nature (2020)
- Promoted to Professor (2021)

The veski inspiring women fellowship made an immeasurable difference to my career trajectory. It provided the foundations for subsequent grants and research, most recently my ARC Future Fellowship.

veski invested in me and supported my research at a critical juncture, as I was returning to work part-time with three children. Through the veski network I have found new friends, champions and colleagues, who will be with me throughout my career.

The veski fellowship is really substantive and career changing. It has not only given me the confidence to drive further impact from my work, but also to become more ambitious in the grants and opportunities I apply for. The fellowship has enabled heightened visibility of my achievements as a researcher and leader, at Deakin University and beyond.



### Maria Liasko<u>s</u>

inspiring women fellow



An inaugural **veski** inspiring women fellowship was awarded to Associate Professor Maria Liaskos, at the Hudson Institute of Medical Research's Centre for Innate Immunity and Infectious Diseases to continue the momentum of her research program.

Associate Professor Liaskos, who previously secured ARC funding, also received an NHMRC grant while on maternity leave and focused on examining the mechanisms of immune suppression during Helicobacter infection, a bacterium in the stomach affecting more than three billion people worldwide, and is a causative agent of gastric cancer.

In 2016 Associate Professor Liaskos was appointed Senior Lecturer and Group Leader within the College of Science, Health and Engineering at La Trobe University.

The **veski** inspiring fellowship has significantly enhanced her competitiveness and allowed her to balance a career with raising two young children.

The fellowship has also supported Maria's expanding research program, giving her more 'hands' in the lab by hiring a research assistant to continue to progress the research during a period of part-time employment while returning to work from her second period of maternity leave.

The fellowship also provided funding for a full time PhD student for its duration, helping foster the next generation of researchers. This has been vital to ensuring the reestablishment of Maria's research team, which had been significantly reduced due to career interruptions and having to decline the supervision of PhD students.



support inspire inform

Maria has two children, and by acting as a role model to younger women wanting to undertake a career in STEM, Maria is working to enhance cultural change, proving that women can have leadership positions, successful STEM careers, flexible work hours, a strong support network and still be great mothers.

Maria obtained her PhD from the Department of Microbiology and Immunology at the University of Melbourne in 2005, under the supervision of Professor Richard Strugnell.

Since graduating, Maria's research interests have focused on understanding the mechanisms underlying the induction of inflammation and pathology in response to bacterial infection, and in particular, to the gastric pathogen Helicobacter pylori.

She undertook her postdoctoral studies in the laboratory of Associate Professor Richard Ferrero at Monash University, where she examined innate immune responses to Helicobacter pylori.

In 2016, Maria received a Victorian Young Tall Poppy Award, and in 2019 she received the Australian Society of Microbiology Frank Fenner Award.

Maria has contributed to the design and implementation of a university wide women's academic promotional support program at La Trobe. Maria was also a successful applicant for the **veski** inspiring women **STEM sidebyside** program in 2018.

She has received numerous funding to support her research, including in 2020 an ARC Discovery Project as CIA, and an ARC LEIF Grant as one of the Cl's.



### highlights

- Victorian Young Tall Poppy Awardee (2016)
- inaugural veski inspiring women STEM sidebyside participant (2018)
- Promoted to Associate Professor (2019)
- Australian Society of Microbiology Frank Fenner Award (2019)
- ARC Discovery Project (CIA) & ARC LEIF Grant (2020)
- Committee member of the Australian Society of Microbiology, Victorian Branch
- Scientific Chair of the National Australian Society for Microbiology
- Integral in the development of the the Peer Support program for academic women at La Trobe University

The veski inspiring women fellowship has been fundamental to ensuring that I can conduct innovative research and continue my career trajectory.

It has enabled me to remain competitive in my field of research and has facilitated the momentum of my career progression, which has included academic promotion, leadership opportunities and grant and award success.

I have seen women leave science because of the constant pressure of balancing work and a family life. Without my veski fellowship, my research would not have continued during my period of part time employment. I am now an advocate for similar fellowships to be established by more organisations. The fellowships are a small investment for a very long term gain.

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### Catherine Satzke

inspiring women fellow

An inaugural **veski** inspiring women fellowship was awarded in 2015 to Associate Professor Catherine Satzke from the Murdoch Children's Research Institute to enable her to stay connected with her work in the Infection and Immunity area and the Pneumococcal Research group. The fellowship helped combat a common challenge with maternity leave which is about continuing to conduct experiments while being away from the lab.

The **veski** inspiring women fellowship helped fund a postdoctoral scientist to be the 'hands at the bench' to carry out the experiments while Catherine was on leave and enabled her to maintain the momentum of the research. She was also able to employ a senior postdoctoral scientist to play a key role as a mentor to other staff and students while Catherine was on leave. The **veski** inspiring women fellowship enabled Catherine to undertake maternity leave knowing that her role as a supervisor and academic leader would be maintained during this period. This enabled her research to not only continue but thrive while she was away.

Catherine's research is focused on the bacterium Streptococcus pneumoniae, the pneumococcus, which is a leading killer of children under five years of age, with most deaths occurring in the developing world. Current childhood pneumococcal vaccines effectively reduce both disease and carriage, but only protect against a subset of pneumococcal types, and are costly to produce. Assessment of vaccine impact in these countries is important to justify their ongoing use and the cost incurred.



Catherine has two children, and continues to build the scientific research team she has established to maintain her growing international recognition and impact.

Catherine obtained her PhD in molecular microbiology from The University of Melbourne in 2007. She then established the pneumococcal microbiological research team at the Murdoch Children's Research Institute under the leadership of Professor Kim Mulholland. Catherine attracted further funding to establish two serotype reference centres, facilitating vaccine impact studies in Asia. She led the update of WHO standards for pneumococcal carriage studies and made important contributions to studies in Fiji, leading to vaccination introduction. She leads a project significantly funded by the Bill and Melinda Gates Foundation involving over 20 international collaborators.

In 2017, Catherine received the prestigious Australian Society of Microbiology Frank Fenner award and continues to attract national and international funding for her research, as well as presenting at high profile conferences nationally and internationally. In 2018 she co-chaired the International Pneumococcal Conference in Melbourne, following which she was invited to join the ISPPD governing board. She actively participates in WiSPP events, including as a mentor.

In 2020 Catherine became a CI for a newly funded NHMRC Centre of Excellence; Asia-Pacific Pneumococcal Disease Control in the Pneumococcal Conjugate Vaccine Era.



### highlights

- Bill & Melinda Gates Foundation Research Grants (2016, 2017, 2018)
- Australian Society for Microbiology Frank Fenner Award (2017)
- NHMRC Project Grants (2016, 2019, 2019)
- Promoted to Associate Professor (2018)
- Ideas Grant as CIA (2020)
- CIC, NHMRC Centre for Research Excellence (2020)
- Attracted funding of >\$3 million nationally and >\$13 million internationally, through a combination of collaborative projects (led by her group and others)

ßß The veski inspiring women fellowship was awarded at a key moment in my research, providing core salary support allowing me to retain key staff who were able to provide leadership of the group to keep our research going while I was on maternity leave and caring for young children.

This support would have otherwise been lacking and was a key factor in driving our success. The veski fellowship was instrumental in facilitating my research program.

When I was awarded the fellowship, I received a lot of exposure. My experience with veski has provided me with opportunities to meet high impact individuals, which has, and will continue to, benefit my career and my research.



### Natalie Hanna<u>n</u>

An inaugural **veski** inspiring women fellowship was awarded to Associate Professor Natalie Hannan in 2015 to support her continued work at The University of Melbourne's Department of Obstetrics and Gynaecology. With very young children it is extremely difficult to attend international meetings. The fellowship enabled Natalie to present her work at these important international meetings with the assistance of a carer for her very young daughter. This has meant she remains competitive in her field.

The **veski** inspiring women fellowship also allowed Associate Professor Hannan to employ part-time research assistance. Her research focuses on preeclampsia, which is a serious complication of pregnancy affecting around 2-7% of all pregnancies and causing significant illness to both mothers and their babies. With no effective treatment a therapeutic approach is urgently needed.

Using a unique approach to specifically target the delivery of therapeutics directly to the placenta, allows delivery of promising drugs at lower concentrations safely to the placenta, reducing off-target effects to both the mother and the baby. Targeted placental therapeutic delivery is an innovative step forward in the treatment of major obstetric complications. If successful and advanced for use in the clinic, it would be a breakthrough in the management of preeclampsia, dramatically improving outcomes for both mother and baby.



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Natalie has two children, and in addition to leading a talented research team, she has a strong track record of success as an ambassador for women in STEM along with a recognised community profile that demonstrates her strong leadership skills.

Natalie is an NHMRC R. D. Wright Biomedical Fellow in the Translational Obstetrics Group at the University of Melbourne. Her research focuses on understanding the complex interactions and mechanisms underlying implantation and pregnancy.

Her research has been recognised in many ways including the award of a major NHMRC Project Grant and Early Career Fellowship (2010-2014); a University of Melbourne Early Career Researcher Grant (2011) and Career Interruption Fellowship (2013). Overall she has obtained competitive funding of over four million dollars.

Natalie was the recipient of the Society for Reproductive Biology Visiting Lecturer Award in 2018.

She was also selected for the inaugural **veski** inspiring women **STEM sidebyside** program in 2018 and in 2019 was made Associate Dean, Diversity & Inclusion at The University of Melbourne. In the same year she was made Associate Professor, and was awarded the IFPA Andrée Gruslin Award.

Natalie continues to lead the Therapeutics Discovery and Vascular Function Group.





### highlights

- Society for Reproductive Biology Visiting Lecturer Award (2018)
- NHMRC R.D. Wright Biomedical Fellow (2018 2021)
- Inaugural veski STEM sidebyside participant (2018)
- Promoted to Associate Professor (2019)
- International Federation Placental Associations Outstanding Female Mid-Career Investigator Andrée Gruslin Award (2019)
- Melbourne Medical School Strategic Grants for **Outstanding Women (2019)**
- Dean of Diversity & Inclusion, The University of Melbourne (2019)
- Chair, Diversity & Inclusion Advisory Committee, UoM

This fellowship provided essential support for my research while I was preparing to return and after I returned from maternity leave, allowing research to continue.

The year following the award of this fellowship I was awarded 2 x NHMRC Grants as CIA (~ \$1M).

I was invited to present at two international conferences and this award supported a carer to accompany me and care for my infant daughter - enabling my attendance. I didn't need to choose between being there for my family, and taking career opportunities such as these.

The program has also given me a platform to encourage the women I work with to push boundaries and take opportunities in their own careers.





#### support inspiring inspire women

inform

A **veski** inspiring women fellowship was awarded in 2017 to Dr Cara Doherty from **CSIRO** Materials Science & Engineering to continue her outstanding track record as a multidisciplinary scientist in physics, chemistry and materials engineering. Through the synthesis, engineering and analysis of smart porous materials, Cara has achieved significant breakthroughs in energy production, water purification, gas separation and device fabrication.

While pregnant and on maternity leave, Cara published several high impact and highly cited review papers in the field of Metal Organic Framework research. However due to time away from the laboratory while having her two children. Cara had been restricted in the amount of new results she can produce. Particularly as her research involves working with radiation and various chemicals that are not safe for pregnant women to be exposed to. The **veski** inspiring women fellowship is significantly enhancing Cara's competitiveness in the Metal Organic Frameworks research field by allowing her to take on a PhD student and intern to accelerate her discoveries.

The fellowship is enabling Cara to learn from internationally renowned scientists, through travel to international laboratories in Japan and ongoing collaboration in France.

Cara was able to return to work full-time in 2018 with childcare support for her two children. Having the childcare support allowed for greater flexibility to attend conferences and courses in leadership and entrepreneurship.

Ultimately the **veski** inspiring women fellowship has supported Cara to achieve her long-term research goal of developing device technology so that smart devices can be manufactured here in Victoria. This is vital in ensuring the future of Australian manufacturing comprises design and fabrication of high-tech smart devices.

Cara obtained her PhD in Physical Chemistry from The University of Melbourne and CSIRO Molecular and Health Technologies. under the supervision of Professor Calum Drummond AO & Professor Rachel Caruso where she investigated the benefits of building hierarchically porous electrode materials to improve the power capabilities of Lithium ion batteries

She used self-assembly techniques to determine the optimal pore size to achieve high capacities at high loads with the outcomes resulting in highly cited publications.

Cara undertook her postdoctoral studies at CSIRO Materials Science & Engineering, where she focused on the development and characterisation of adaptive porous materials.

She has published her research in a number of highly regarded peer reviewed journals, including in Nature in 2018. Cara participated in the Homeward Bound Women in Leadership program in the same year. In February 2019 she was invited to co-chair on the Australian Synchrotron SAXS PAC Committee and to be a part of an international standardisation committee for using PALS for investigating porous materials. In 2020 she joined the selection panel for **veski** STEM filminators.



### highlights

- Homeward Bound Women in Science Leadership Program (2018)
- Lead author of application for CSIRO ResearchPlus (2018)
- Team Leader, Advanced Porous Materials research team
- ARC, Discovery Project (2018 2020)
- Chair, Australian Synchrotron PAC committee for SAXS beamline
- Member of PALS Standardisation Committee International expert on lab based PALS (2019)
- ARC Future Fellowship (2019)
- veski filminators selection panel (2020)

ßß My veski inspiring women fellowship enabled me to return from maternity leave at full-speed. It has allowed me to expand my research and kept me competitive in such a fast-paced research environment.

I have benefited from the professional development, the amazing network of scientists and the increased visibility. The best part of the fellowship has been bringing in students and interns and mentoring them in their scientific endeavours.

veski is life changing. When I got back to work after close to four years away from the lab, I realised a lot of change had occurred. The fellowship, and being recognised for my work, gave me the confidence to return to research. Unlike other programs, the funding provided by veski is not tokenistic - it is enough to make a real impact.

### Emma Sciberra<u>s</u>

inspiring women fellow



A **veski** inspiring women fellowship was awarded in 2017 to Associate Professor Emma Sciberras, a Senior Lecturer in the School of Psychology at Deakin University, and an Honorary Research Fellow at the Murdoch Children's Research Institute.

The **veski** inspiring women fellowship supported Emma to remain connected with her work on the complex problem of Attention-Deficit/ Hyperactivity Disorder (ADHD), which affects around 300,000 young people in Australia.

Emma is internationally renowned and sought after as a dedicated and enthusiastic research collaborator. Her research is internationally recognised and has already informed the development of two new interventions for children with ADHD focused on managing sleep problems and anxiety.

The **veski** inspiring women fellowship enabled Emma to return to work after a period of maternity leave, supporting her in establishing her own ADHD research lab across two institutions, and also enabling her to foster the career development of 20 early career researchers working across this research program.

Emma's research aims to investigate the developmental trajectories of common childhood disorders (using population-based methodologies), such as ADHD, and the risk and protective factors for poor versus better mental health, as well as academic and social outcomes in these children.

The identification of modifiable risk and protective factors will allow for the development of population-based interventions to improve



outcomes for children with these conditions.

As a researcher and clinical psychologist, Emma's program has a strong translational focus. The support of the **veski** inspiring women fellowship has ensured that Victoria, and Australia more broadly, remain at the forefront of research into ADHD, particularly life course epidemiology and psychological interventions.

Emma obtained her DPsych in Clinical Child Psychology from the University of Melbourne in 2010. Emma's work has resulted in the award of a number of NHMRC awards including 2 Early Career Fellowships, 3 NHMRC Project Grants & 2 NHMRC Career Development Fellowships.

In 2018 she was appointed to a Team Leader position within Community Health Services at the Murdoch Children's Research Institute. Her research has been presented at numerous international and national conferences, and is widely published, with a publication selected to contribute to professional development requirements of doctors in the USA. In 2018 she was appointed to an influential board in ADHD.

A publication in 2019 focused on the connection between ADHD and sleep difficulties and she has had over 25 papers published/accepted in 2019 alone (career total over 100). In 2019, Emma recorded an 8-part podcast series on sleep problems in children.

In 2020 Emma's research has revealed the key factors that can improve outcomes in children with ADHD, a disorder costing Australia AUD\$18 billion a year in social and economic losses. The award of a prestigious MRFF Investigator Grant in 2020 will continue to fund her research over the next 5 years.



### highlights

- Established ADHD lab at Deakin University (2018)
- Elected board member, Australian ADHD Professionals Assoc. (2018)
- Promoted to Associate Professor (2019)
- Deakin University Future Leaders program participant (2019)
- veski Fast Smarts Innovator (2019)
- 64 publications (~50% first/senior author) during fellowship term as well as receiving other significant funding including:
  - 3 NHMRC Project Grants (1 as LI)
  - ARC Discovery Project (2019-2021)
  - NHMRC Career Development Fellowship (2016 2021)
  - MRFF Investigator Grant Emerging Leadership (2021 2025)

This fellowship has provided me with the boost I needed to continue the productivity of my research program while transitioning to motherhood.

It has been vital in helping me to remain competitive in my field. This is evidenced in being awarded my next fellowship to continue my research over the next 5 years.

The veski inspiring women fellowship is an incredible scheme, there's nothing else like it. The amazing support has helped me to establish my own ADHD research lab and further the development of a number of early career researchers.





## communications

Communications regarding the **veski** inspiring women fellowships has been a key element in the delivery of the program. Information regarding calls for applications were widely distributed through **veski's** connected community and networks, and directed to the **veski** women's portal with dedicated information webpages regarding the fellowships application process. The portal also enabled **veski** to showcase our fellows, as well as other trailblazing women in STEM.

**veski** continues to promote the ongoing successes of the **veski** inspiring women fellows via various communications platforms including **veski** email bulletins, social media and media alerts.

All six **veski** inspiring women fellows participated in the making of a video where they talk about the **veski** inspiring women fellowships:



and sending tweets to their 15yr old selves:

In early 2019 **veski** inspiring women fellows also participated in the **veski** impact video to support **veski's** 15years of innovation - submitting videos of themselves

> click here to watch veski's 15yr impact video

With the incredible on-shore research talent in the **veski** inspiring women fellows and the returned overseas research talent of the **veski** innovation fellows - **veski's** core fellowship program - it was decided to combine the recipients of the two under the broader heading of **veski** fellows:



click here for the veski fellows montage



## veski inspiring women STEM sidebyside program

The **veski** inspiring women **STEM sidebyside** program is a leadership program that supports women wanting to progress or extend into leadership positions within a STEM industry.

With a proven track record for advocating for women in STEM through the delivery of the **veski** inspiring women's program, in 2018, **veski** partnered with the British Consulate General Melbourne and Monash University to lead the delivery of the **veski** inspiring women **STEM sidebyside** program.

The inaugural **veski** inspiring women **STEM sidebyside** program launched in March 2018 for women in STEM industries and university students, with a second iteration of the **STEM sidebyside** program delivered in 2019.

The **veski** inspiring women **STEM sidebyside** program is being delivered for a third time in 2020 – exclusively for a cohort of competitively selected mid-career emerging leaders from across academia, industry, government and not-for-profits with the support of Victorian universities, business and corporations.

The program in 2020 was developed to be delivered virtually to comply with restrictions of working from home and social distancing imposed on the residents of Victoria and Australia more broadly due the coronavirus (COVID-19) environment.

With women continuing to be underrepresented at leadership levels across Australia - the **veski** inspiring women **STEM sidebyside** mid-career emerging leaders program goes some way to addressing this challenge. The program is designed to help participants develop networks to empower women wanting to take the next step into leadership positions, enabling them to achieve their leadership goals, better foster and generate organisational cultural change and pave the way for future generations.

The program is now generously funded by Victorian universities and supporting business and corporations.



veski inspiring women STEM sidebyside program supporters in 2020





### #STEM sidebyside











The program was a fantasic opportunity to improve my **leadership skills** and meet other inspiring women in STEM.

The program has been instrumental in developing and refining a broad skillset for leadership, networking and career progression. I feel empowered with **CONFILTENCE** to elevate my own profile. I am certain that as a result of participating in this program I will become a better leader.

The program has given me the courage and support to believe anything is possible.

#### My **CONFIDENCE** has increased dramatically over the duration of the program.

**empower** would be the two words that come to my mind when I think of the STEM sidebyside

program.

**Resonance** and

Empowering women to step up, lean in and move onwards and upwards in STEM #sidebyside.

This program is **empowering** (by providing the tools and guidance needed to continue learning) and enlightening (through self-discovery) that selfless leadership styles are more effective and enjoyable in achieving results.

Being one of the participants of 2019 program is the **highlight** of 2019 for me. What an amazing programme and such incredible community for a woman to be part of.



It provided me with a platform and **opportunity** to network with so many amazing and inspring woman in STEM.

> The program allowed me to build a strong **network** with a fabulous group of women.

The program gave the confidence and skill set to **transition** to the next stage of my career and to take a big step up.

### about veski

**veski** was established in 2004 to enhance Victoria's intellectual capital through a program of fellowships, awards, and international networks. **veski** is at the forefront of Australia's innovation economy. Over the past sixteen years, **veski** has been instrumental in building Australia's intellectual capital and innovation capacity by:

- Attracting and supporting globally competitive researchers and innovators;
- Engaging and connecting Victoria's innovation community; and
- Building knowledge and capacity through skills, training and education.

### Attracting & supporting globally competitive researchers & innovators

veski innovation fellowships<sup>2</sup> Bringing outstanding and globally competitive scientists and researchers, typically in the top five percent of their respective fields in science and innovative technology, to Victoria.

Return on Investment:

18.4:1

#### veski sustainable agriculture fellowships<sup>2</sup>

Transforming local farming economies & securing Australia's food and agricultural industries by stimulating collaboration between researchers, farmers, industry and government, and supporting the adoption of AgTech.

Return on Investment:

5.7:1

### Engaging and connecting Victoria's innovation community<sup>3</sup>

#### veski connection and conversations

Encouraging collaboration and networking among leaders from academia, research, industry, philanthropy and government through an exclusive network, and facilitated **veski** conversations. **Number of veski connection members:** 

550+

#### veski residency and outreach

Attracting leading thinkers, entrepreneurs and internationally renowned industry specialists to Australia to deliver workshops, masterclasses, public lectures and thought leadership program.

#### Number of veski residencies & outreach activities supported:

14+

#### veski fast smarts

Showcasing Victoria's best & brightest innovators across academia, the creative industries, information & digital technologies, medical science environment & sustainability to inspire, inform and educate. Number of veski fast smarts attendees:

500+

### Building knowledge and capacity through skills, training & education<sup>3</sup>

veski masterclass, seminars and workshops Engaging with the broader community to provide skills and knowledge on topics of science and technology innovation. Number of individuals reached:

### 1900+

#### veski kickstart

Inspiring students to build connections with experienced leaders in industry, academia and business, and provide professional development to assist career progression.

Number of individuals reached:

500+

#### veski diversity and inclusion

Empowering people from diverse backgrounds to contribute to science and innovation, including addressing the retention of inspiring women into leadership roles within STEM, through professional development, networking and internships.

Number of women supported:

1020+

#### Independent Fellowship Programs Benefits Assessment Report conducted by Strategic Project Partners (SPP) in 2015<sup>1</sup> Independent Fellowship Programs Benefits Assessment Report conducted by SPP in 2018<sup>2</sup> veski Impact Statement - an independent report conducted by SPP in 2019<sup>3</sup>



Inspiring Innovation



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