



How to Split the Pie

Bring industry expertise to academia – this was the message I brought to Ian Frazer when he was in Melbourne recently with other members of the Australian Medical Research Advisory Board for a public consultation on the MRFF.

I recommended a portion of the Fund would be well spent on initiatives to embed colleagues with experience and a successful track record gained in industry into research. This suggestion was made rather than, or at least in addition to, the reverse – a call for increasing numbers of researchers to spend time in industry learning the ropes of commercialisation, which while admirable may take some considerable time to yield the results we hope for. The proposal was not surprising given my own experience and that of several BioMedVic Directors who can all attest to the two-way impact of building bridges between industry and academia, something BioMedVic has encouraged for some time.



Two BioMedVic members provide great examples of this type of cross-pollination and learning. The partnership started in 2013 between the Murdoch Childrens Research Institute (MCRI) and software development company [Curve Tomorrow](#), aims to develop innovative software solutions for issues relating to child health. More recently we've seen the formation of the HealthTech Accelerator by Melbourne Health and STARTUP61/Laneway Labs who have partnered to enable healthcare technology entrepreneurs to turn their startups into breakthroughs to transform health. These are both fantastic examples of the bidirectional benefit that can flow from having industry working with – and within – research organisations.

Last but not least, congratulations to the five – yes five – winners of [2016 Australian Museum Eureka Prizes](#) from Melbourne. Not bad out of 16 categories! In particular, hats off to the teams from our members who were winners: Melissa Little and Minoru Takasato's Scientific Research prize for their MCRI team's work to grow kidney tissue from stem cells; Leann Tilley and her team from The University of Melbourne's award of the Infectious Disease prize for research into the malaria parasite; and Sharath Sriram from RMIT whose career was recognised for the Emerging Leader in Science prize.

With talent like these, and more besides, Victoria is well placed to hold off any push from the warmer states for our well-deserved medical research crown. And there's never been a better time for Members to inform and get behind BioMedVic's advocacy to the Victorian Government for its long-term science and innovation plan. Supported by continuous investment and focused on areas in which Victoria is or has the potential to be a world leader, this plan will see the clinical and economic benefits of innovation flow.

Jan Tennent

MEMBER FEATURE

Research at the Heart of Health

THE ROYAL WOMEN'S HOSPITAL MELBOURNE



The Royal Women's Hospital does more than support the health of Melbourne locals – it is a hub of active research aimed at improving health outcomes for women and children in Victoria and globally.

Over 3,000 patients are currently participating in 62 clinical trials throughout the hospital's services in nine research centres. The hospital's recently released 2015 Research Report "[Discoveries improving care for women and babies](#)" showcases this research leadership. The Report includes details of the hospital's clinical trials and translational research in newborn and cancer research, as well as in gynaecology, pregnancy, mental health, infectious diseases, midwifery and maternity, anaesthetics and allied health.

Professor Peter Rogers, Director of Research said "a key feature of the Women's program is that clinical trials and research arise frequently from issues being addressed in services provided by the hospital, and, over a period of time, the findings from these studies will inform the nature of clinical work with patients."

"This important cycle may take considerable time, for testing and international comment to be considered," he added. "But there is a close nexus between the research program and clinical work."

A recent example of this cycle is the management of breathing support in preterm babies. Preterm babies have underdeveloped lungs and often require breathing support to survive. In a series of clinical trials researchers at the Women's evaluated several different techniques for providing non-invasive ventilation to preterm babies, including high flow nasal cannulae. Their evidence, generated over two decades, has changed the way preterm babies are managed around the world.

As Australia's first and largest specialist hospital for women and newborns, the Women's continues to improve health outcomes for women and babies through clinical trials and translational research. These projects are currently conducted at the Women's, as well as in conjunction with collaborative organisations and researchers both in Australia and overseas.



For more information on The Royal Women's Hospital research activities, see <https://www.thewomens.org.au/about/reports-publications/>.

UROP IN THE SPOTLIGHT

Christina Gangemi | Stem Cell Biologist

A budding researcher is bringing the secrets of stem cells into sharp focus.



"It's a continual process of uncovering the unknown," Christina said when asked about what draws her to science.

And intrigued by what makes adult stem cells tick, Christina's curiosity found a home when she first joined the Hobbs lab at the Australian Regenerative Medicine Institute (ARMI) through a UROP placement in 2016.

Christina embarked on a project investigating different protein molecules belonging to the Tsc22-domain family, thought to exist in adult stem cells and to play a role in their development. After taking cross sections of mouse testes and staining the tissue with fluorescent molecules which attach to different proteins, she could visualise – under a microscope – whether these proteins were located in stem cells. Christina discovered that one protein in this family was present in testis stem cells, and

could track its location in the cell.

Stepping into a research lab for the first time during her UROP placement only strengthened Christina's passion for science. "I love coming into the lab early in the morning to start an experiment. It gets me focused and ready for the day ahead," she said.

But it's not just the techniques – Christina gets a kick out of thinking independently. When her supervisor Robin Hobbs asked her to review her data halfway through her placement and propose what experiments she wanted to do next, she met the challenge head on.

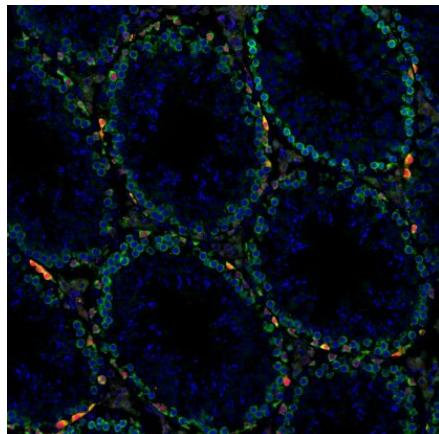
"It was a really interesting experience to look back at all the work I had done and realise just how much data I had collected!" Christina recalls. She adds that it was "an important moment, because I realised that the process of review is vital as a researcher in order to keep your project in perspective."

Christina's independent thinking and ownership of her project shone brightly at the 2016 UROP Conference Day, where she presented her results – and won the prize for best presentation in the Biomedical Category.

She says this day was one of the highlights of her placement. "Getting my work out there and communicating it effectively to others was a challenge, but in the end it was a really rewarding experience," she said.

Christina is currently completing her UROP project and will embark on an Honours project in the same lab at ARMI next year. She has landed right where she wants to be.

"I feel like every researcher has the chance to uncover their own puzzle piece of knowledge, however big or small that may be," she said. "Either way, we all contribute to the bigger picture of understanding life itself."



Fluorescent images, such as this stained cross section of a mouse testis (above), allow Christina to track proteins to their location in tissues.

Image credits: Christina Gangemi | Australian Regenerative Medicine Institute

STEMM Central Bootcamp Kicks Off

The energy in the room was electric with many collaborations sparked at the launch of the STEMM Central Bootcamp for Research Commercialisation on 23rd September. As participants heard presentations and got stuck into activities, they received an inspiring lesson on what research translation and commercialisation entails and the core capabilities required to enable successful outcomes.



STEMM CENTRAL
commercialisation bootcamp

The workshop was about getting to know the basics of research commercialisation and included presentations from Dr Warwick Tong (CTx) and Linda Peterson (Linda Peterson & Associates), who spoke about their experience in taking products from research to market.

Attendees then played our research, translation, commercialisation card game with support from our mentors Dr Amabel Tan (Thomson Reuters), Dr Larry Ward (Medicines Development), Dr Mark Devlin (CTx), Ms Melanie Carew (CRC for Mental Health), Dr Robert Shepherd (Medicines Development), Dr Sally McArthur (Swinburne) and Mr Tom Williams (BioMentoring Australia).

Participants were surprised by the many steps involved in the commercialisation process – but not disillusioned. “Open, honest and frank discussion,” is how a Bootcamp participant described the workshop. “The event today was fantastic – I am so happy that I signed up and am taking part in this great program.”

The STEMM Central program is being developed by Cancer Therapeutics CRC (CTx), in partnership with BioMedVic, and aims to deliver training to help early career medical researchers learn about the process of translating their discoveries. Participating researchers undertake short, intensive education modules and activities designed to build strength, competency and connections in research translation and commercialisation.

The next three events are Speed Mentoring, Design Thinking and Market & Competitor Analysis in October, November and December, respectively. For more information email info@stemmcentral.com.

BioMedVic September Scorecard



Listening to Members

3 Meetings

Speaking to Government

6 Briefings



Connecting Academia & Industry

6 Events & Workshops

Connecting Clinicians with Industry & Academia

1 Event



Training for Innovation

1 Workshop

Promoting Victoria Globally

2 Conferences & Events



VCRN Early Career Clinician Researcher Award & VCRN Career Recognition Award



**BIOMEDICAL
RESEARCH
VICTORIA**

*Applications & Nominations
Closing Soon!*

Clinician Researchers Deserve to be
Recognised. [Apply](#) | [Nominate](#)

BioMedVic Annual General Meeting coming up!

UH @ the Woodward | 14th October 2016, 10:00 am

We look forward to welcoming Members and friends to the 2016 Annual General Meeting.

BioMedVic Events Diary

If you haven't yet subscribed to our weekly Events Diary, sign up and check out what our members and others are up to at www.biomedvic.org.au/events.

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