Franklin Women

April 2015 Newsletter

When I was a PhD student I was very lucky to receive a top-up scholarship from the Cooperative Research Centre for Vaccine Technology (CRC-VT). At the time, the biggest perk was the extra financial support. But looking back now, it offered me a lot more. It was through the CRC that I was introduced to the concept of translational research, I received funding to work at a science communication company, and I was exposed to health researchers in executive roles – combining their science know-how with their other skills. One of these researchers was Professor Anne Kelso, then Director of the CRC. What I remember most about Anne was not just her scientific brilliance but also how approachable she was, always making time for and offering encouragement to junior researchers. We are so excited that this month we can share with you our chat with Anne (she jumped at the opportunity!) as she prepares for her new role as CEO of the NHMRC.

Also, in preparation for our next event on how to make the most of social media in your career (LinkedIn, ResearchGate, Yammer, Twitter...overwhelmed yet?), PhD student Chloe Warren shares her experiences with social media and why it might be worth persevering with. (She met Dr Karl!) Event details will come soon. Until then...

Melina and the FW team



- FW member Yosephine Gumulya <u>blogged</u> for us about her journey from academia to industry and back.
- The Australian Early- and Mid-Career Researcher Forum <u>Science Pathways</u> <u>conference</u> was on in Adelaide with a focus on science communication. A great piece in <u>The Age</u> by Dr Maggie Hardy accompanied it.
- CSIRO scientist Amanda Barnard was one of two awarded the <u>2015 Feynman Prize</u> <u>for Nanotechnology</u> – a top award in the field. Her research is revolutionising health treatments among other advancements!
- Franklin Women and some of our talented members were featured in <u>Lab+Life</u> <u>SCIENTIST</u> magazine in an article about empowering women in science. Hoorah!
- Exiting NHMRC CEO Prof Warwick Anderson addressed the <u>National Press Club on</u> <u>NHMRC</u> achievements and future challenges.



This month's Journal Club contribution comes from Marnee McKay and Jennifer Baldwin of the 1000 Norms Project, 3rd year PhD candidates at the Faculty of Health Sciences of the University of Sydney. Happy reading!

Baldwin JN, McKay MJ, Hiller CE, Nightingale EJ, Moloney NA, Vanicek N, Ferreira P, Simic M, Refshauge KM, Burns J on behalf of the 1000 Norms Project Consortium. (2015). Forming norms: informing diagnosis and management in sports medicine. Br J Sports Med, available online

McKay MJ, Baldwin JN, Ferreira P, Simic M, Vanicek N, Hiller CE, Nightingale EJ, Moloney NA, Quinlan KG, Pourkazemi F, Sman AD, Nicholson LL, Mousavi SJ, Rose K, Raymond J, Mackey MG, Chard A, Hübscher M, Wegener C, Fong Yan A, Refshauge KM, Burns J on behalf of the 1000 Norms Project Consortium. (2015). 1000 Norms Project: protocol of a cross-sectional study cataloging human variation. Physiotherapy, available online

What were the aims of this research? The aim of the 1000 Norms Project is to improve our understanding of the physical capabilities of the healthy population across the entire lifespan. The Project involves measuring a range of strength and power, joint range of motion, dexterity, balance, ambulation, endurance, motor planning and physical performance indicators of 1000 healthy people aged 3–100 years. This information will be made freely available via an online portal to researchers and healthcare professionals around the world.

What methodologies were employed, any limitations to note? The complete methodology of the 1000 Norms Project, including sampling strategies, inclusion and exclusion criteria and a detailed protocol booklet for each physical measure, has been published. The biggest challenge to date is recruitment. One hundred people per decade are being recruited with over-sampling of children to reflect the rapid periods of growth and maturation throughout childhood. We have assessed nearly 800! Currently our greatest challenge is recruiting working aged men (30–59 years), children (3–17 years) and women over 80 years.

What are the take home findings of your research? We are seeing a trend of similar capabilities in the young and the elderly with optimal performances in mid adult years. What we have been surprised by is the capabilities of the elderly and their determination to "give it a go" when attempting new assessments they probably haven't tried in years. Another pleasant surprise is how technologically proficient our older participants are – we have even had a 101-year old contact us via email and come in to take part!!

How does this research contribute to the field? Currently limited comprehensive datasets exist detailing the range of normal variation in healthy individuals. Previous studies establishing reference values have typically comprised a limited number of measures and have frequently involved young, disease-free adults, reducing the applicability of the reference data to the wider population. The reference dataset that this Project will generate will stimulate high impact research activity and establish a greater understanding of the interactions and associations between different musculoskeletal and neurological measures of health.

Who are your collaborators and how did your work relationship come about? The 1000 Norms Consortium is led by Professor Joshua Burns, from the Sydney Children's Hospital and The University of Sydney. It is an inter-disciplinary multi-institutional

collaboration of researchers, clinicians and higher degree students. We personally applied for research scholarships in 2012 and were successful! We had not met each other previously and have gone on to establish an outstanding and productive working relationship, but even more importantly a true friendship that will be life-long.

Who is a woman that inspires you? Marnee: Professor Jennifer Alison, a colleague who manages to combine clinical practice, a stellar academic career, happy family life and is kind and friendly to boot! My personal powerhouse role models are without a doubt my mum and my late Nan – awesome women! *Jen:* I'm a big fan of women in politics – Tanya Plibersek and Penny Wong spring immediately to mind, as they are both wonderful leaders and role models, and are great to watch in debate/conversation for the way they communicate and interact with others.

What food have you eaten too much of in your life? We are not entirely sure too much food can ever be consumed, so here is a summary of food and beverages related to the

1000 Norms Project so far....Approximately 700 cups of tea or coffee have been made with 25 litres of milk! 300 chuppa chups have been given out. Over 200 Natural Confectionary Fruit Chews have been 'chewed' (green ones are delicious). Approximately 500 Oreo wafers have been enjoyed and over 150 juice boxes have been sipped or spilt. Phew...



A chat with Anne Kelso



Franklin Women roving reporter <u>Louise Randall</u>, Early Career Researcher at The University of Melbourne, had the daunting task of chatting with Professor Anne Kelso, incoming Chief Executive Officer of the National Health and Medical Research Council. However, it turned out not so daunting at all as Anne warmly shared with Louise her career journey so far, some words of wisdom and thoughts on taking the helm of the NHMRC. A few of Anne's responses are below – the full conversation is on our <u>blog</u>.

Louise: We are so excited that a medical research scientist is to be the CEO of the NHMRC. Your research career started in immunology with your PhD at the University of Melbourne. Can you tell us how your research has evolved over the years, please?

Anne: I was always interested in science at school. My mother was a scientist before she had a family. She was from a different time when most women stopped work when they were married or when they started to have children. She really introduced me to biological sciences and I thought it was really cool when I was a kid. I was particularly interested in

microbiology because it was a whole microscopic world that you couldn't normally see. I got the idea that I should be a microbiologist and that's exactly why I enrolled in science and majored in microbiology. But then during the third year, I found the lectures that were the most interesting and the most challenging were those on immunology. So then I did my honours year and PhD with Bill Boyle, the leader in immunology in the Department of Microbiology at that time. So that early interest as a child was carried through and I was very happy with that choice.

Looking back, there were many areas of biological science that I would've loved just as much. Perhaps, if I were starting again now, neuroscience would've been the equivalent of immunology back in those days. Immunology is still very exciting but neuroscience feels like the next frontier. Perhaps I would make a different decision today.

Louise: Your career progression appears to have evolved in a positive and systematic way. Could you please comment overall on it?

Anne: In retrospect, it can look like a logical progression when you make each of these steps in a career. I didn't design a career. I started out as a research scientist and I loved it and I thought I would do that forever. Then your thoughts change about how to contribute, what you enjoy and what the opportunities are and you try something different. You look back and think, "Oh yeah, that was sensible." You can pretend that it was all planned but it wasn't and it could've been a different decision and have been just as interesting and rewarding, just a different pathway. Actually, that's really a comment about science in general, isn't it? There are so many pathways that you can take. There isn't one best pathway. You find your own way, try to enjoy it and make a contribution, whatever you choose to do. So I've ended up taking several big steps and each of them has been relatively terrifying. I've never been certain that I would be able to do the jobs but, in the end, it's very exciting to have a go and it has worked out so far.

For all of Anne's responses, including her thoughts on her new role at the NHMRC and the opportunities and challenges ahead, visit our <u>blog</u>.

Lets try this PhD thing

When I first started my <u>blog</u>, it was with the intention to record the progress of my PhD...and I guess that's exactly what it's turned out to be. However, my original intention was for it to be a record of ideas and experimental trouble-shooting, as opposed to a mish-mashed collection of emotionally charged self-reflective think-pieces and rants. The blog evolved with my attitude as I realised that the PhD journey is as much about learning to deal with i) the academic environment and ii) yourself, as it is about learning your subject matter. Maybe even more so.

I post each of my pieces to Twitter and also Facebook. Interestingly, Facebook gets me a lot more views. Initially this disappointed me as I could see from the stats that the majority of views were actually coming from my grandparents. However, as my PhD progressed, I attended academic events and made more connections within my university. This led to me making new Facebook contacts (who were arguably my intended audience; PhD students, post-docs, sci-comm enthusiasts) who would like, comment on and even share my blog – because the material was so relevant to them. It all got very exciting. The same thing

happened with Twitter; the more I tweeted about science, the more science followers I got and the more recognition my blog got. Don't get me wrong, I'm not really a big deal in the PhD-blog world, but it's amazing how it grew with me putting really quite minimal effort into promoting it.

With my avid science tweeting and blog writing, I got a reputation with my peers (professional and un-professional) as being social media and sci-comm savvy (they said it,

not me). This led to me being invited to talk to high school students about science career pathways on multiple occasions (unpaid), manage the social media platforms for the inaugural EMBL Australia PhD Symposium (unpaid), write content for my institution's annual report and website (paid!), participate in the Science and Engineering Challenge (paid!), run kids' science parties (paid!) and spend the day with Dr Karl (unpaid...but who cares?!). Not all of these gigs might sound ideal, but for me, they have provided amazing learning opportunities, fun and (some) money.



Chloe Warren is a PhD student at the University of Newcastle in the area of Medical Genetics. She is also a passionate science communicator. You can see her do her thing on Twitter (@cfwarren), on her <u>blog</u>, and at children's science parties!

We are loving right now...

Super useful apps!! Here are some of our favs:

- For your body: <u>Nike+Training Club</u> A pocket-sized personal trainer that helps you workout anywhere, anytime, no excuses!
- For your mind: <u>Smiling Mind</u> Originally designed for young people it's a great app for newcomers to mindfulness meditation
- For staying organised: <u>Any.do</u> A clean, easy-to-use to-do list manager
- For paying friends back: <u>Square Cash</u> Take the stress out of bill spitting when out with friends, no small change needed!
- For your creative side: <u>*Pinterest*</u> Now that the rest of your life is on track, you can procrastinate for hours looking at pretty pictures...

We want to include your contributions in our newsletter. If you have published your work recently or are doing (or know of) something that other women in our field would be interested in, drop us a <u>line</u>.

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