

March 2017 Newsletter

Last week we had our first event of the year and it was pretty great for a number of reasons. Firstly, our guest speaker *Dr Linda Friedland*, a leading authority on women's and workplace health and performance, gave such an inspiring presentation on reframing the concept of 'work–life balance' towards a more achievable goal of 'work–life integration' (read all about it on our *Storify*). However, it was also the women in the room who made the breakfast the success it was. It was so rewarding to see the room full of women from such diverse roles in the sector sharing their own experiences but also reaching out to offer each other support. For me, THAT is what Franklin Women is all about.

That is why we also try to provide an opportunity for women in health research careers to share their stories, both professional and personal, in our newsletter. This month's newsletter is no exception and we hope you enjoy reading the different stories on offer, from our Career Profile with previous Eureka Prize finalist Dr Denisse Leyton to Sarah's side project authoring children's books.

Happy reading!

Melina and the FW Team

What happened this month

- The 8th of March marked <u>International Women's Day</u>, and we loved seeing women celebrated around Australia and the world!
- Applications are open for the Prime Minister's Prizes for Science, closing April 12.
- It's also not too late to apply for the <u>2017 Australian Museum Eureka Prize</u> (and we hear from a previous finalist in this month's Career Profile below).
- PhD students should consider applying for the fantastic <u>Amplify Ignite Program</u>.
- The 18th <u>Science Meets Parliament</u> event was held on March 21–22 in Canberra you can read the <u>opening address</u> and <u>National Press Club address</u>.
- The <u>Illawarra Health and Medical Research Institute</u> launched a new awards and scholarships program to support women in health and medical research.
- Your newsletter curator and FW Advisory Board member Amy Vassallo was featured in <u>Postgraduate Futures</u> discussing her PhD journey.



Career Profile

Meet <u>Dr Denisse Leyton</u>, ARC Future Fellow and Senior Lecturer in Microbiology at the Research School of Biology and Medical School at the ANU. She is also part of the team who were finalists in the 2015 Australian Infectious Diseases Research Centre Eureka Prize for Infectious Diseases Research.



What is your training in the health or medical science field? I was awarded a PhD in microbiology from Monash University in 2008. Since that time I have undertaken two post-doctoral positions, one at the University of Birmingham (UK) (2008–2011) and the other at Monash University (2011–2014). The latter was under an Australian Research Council (ARC) Super Science Fellowship. In 2012, I also had a sabbatical at the Institut Pasteur in Paris funded by a Bede Morris Fellowship from the Australian Academy of Science. Most of my research career has focused on the

function and assembly of bacterial disease-causing molecules called autotransporters.

How did you get to be at the Research School of Biology and Medical School at the ANU? In 2015, I was recruited to the Australian National University (ANU) into a joint Teaching and Research academic appointment between the Research School of Biology (RSB) and Medical School (MS) where I am a laboratory head and lecturer teaching microbiology to medical students, respectively. That same year I was awarded an ARC Future Fellowship, which I took up in 2016. I applied for the position primarily because it was an opportunity to establish my own laboratory in a division (Biomedical Science and Biochemistry) with internationally recognised research strengths in my area of expertise (i.e. membrane proteins). I was fortunate that the ANU recognised my leadership potential and hired a then Early Career Researcher, and, importantly, also provided me with a supportive environment in relation to mentoring and infrastructure.

What is one of your favourite projects you are currently working on? It's work that I started in 2008 when I was working as a post-doc in the UK! At the time, I didn't see the work to conclusion because I had other projects that took priority and a limited amount of time to complete them, which is often a limitation of research. I was fortunate that my then supervisor allowed me to bring the plasmids and bacterial strains back with me to Australia, and continue with the work. We are close to submitting this work for publication, which is more exciting than usual for me since this paper will be my first senior author publication.

What are some of the major 'outputs' from your work? I have <u>published 26 peer-reviewed</u> primary papers, reviews and book chapters. These include papers in the top-tier generalist journals and top-tier journals in the field. I have also received many personal awards and distinctions, including being part of a team that was one of two finalists for the 2015 Australian Infectious Disease Research Centre <u>Eureka Prize for Infectious Diseases research</u>. While we did not take out the top prize, the Eureka Prizes are Australia's most comprehensive national science awards so coming runner up was still an enormous honour.

How do you think your work contributes to the field and/or the overall health of the community? Research in my laboratory has increased understanding of the fundamental mechanisms by which autotransporters are assembled in bacteria, knowledge that we are now drawing upon for practical applications in the real world. For example, we are using the knowledge gained to guide the development of new antimicrobials that could act as a new frontline of defence against a plethora of infectious diseases or at least increase the longevity of our current antibiotics.

Who do you collaborate with and how did those work relationships come about? I have always actively sought out new collaborations with more experienced researchers across research institutions and with distinct expertise in order to advance my research and/or build new research directions. This has involved engaging possible collaborators via email contact or directly engaging them in conversation at conferences. I also still actively collaborate with my post-doctoral supervisor. Attracting and maintaining such relationships has actively facilitated my research and growth as a scientist, and led to opportunities that would have otherwise not come about.

Do you have any side interests or passions that you are looking to develop? I have tried to combat bigotry and ignorance towards LGBTIQ people simply by being visible. I hope that by being out and proud I can show colleagues, students, and those in the broader population with bigoted views or preconceived stereotypes of LGBTIQ people that we are really just people. That we can occupy the same range of positions in society as heterosexuals and that our relationships aren't so different to those of heterosexuals. I have now begun to more actively pursue initiatives to help fight for LGBTIQ rights. For example, this year I became an ANU Ally, which means that I am part of a network of people who actively support a more inclusive ANU community for LGBTIQ people that is free of harassment and discrimination.

What food have you eaten too much of in your life? Cheese. I am a cheese fiend! In 2010, my partner and I attended the Great British Cheese Festival in Cardiff Castle. She (being impartial to cheese) soaked up the sun while listening to Welsh bands and watching cheese tossing and rolling. I of course went on a cheese rampage, sampling as many different cheeses as physically possible and washing them down with local beers and ciders. Unsurprisingly, I felt quite poorly that evening, but this day will nevertheless remain a major highlight of my life!

Don't forget there's just over 1 month left to enter the <u>2017 Australian Museum</u> <u>Eureka Prizes</u>! Entries close 7pm AEST on Friday 5th of May.

Why choose a career in health?

Inspiring the next generation of women to pursue careers in health, science and research is a cause near and dear to our hearts here at Franklin Women. So when we heard that <u>Refraction Media</u> was launching a new publication dedicated to just that we invited Co-Founder <u>Heather Catchpole</u> to tell us more.

If you're lucky, between the ages of 14 and 18 you may have a great science teacher who introduces you to some of the amazing processes that make our bodies function, and the weird and wonderful things that happen when they go wrong.

However, most of us have little idea of the vast scope of health areas available to study and the ways in which these areas are growing and changing. Australia spends an estimated 9.7% of its gross domestic product on health – about \$161.6 billion in 2014–15.



But aside from economics, most people in this industry care mainly about making an impact through their work, and are driven by compassion and curiosity. You'd be lucky if the odd biology class is enough to spark that curiosity, let alone prepare you for a career in medicine, genetics and molecular biology. These research areas that have undergone a complete transformation in the last 15 or so years, leading to revolutions in the way we understand and treat disease. Molecular biologists have effectively created their own career area, so rapidly has the science advanced.

Health careers are incredibly diverse, encompassing medicine and health care, sports medicine, e-health, bionics, start-ups, clinical practice, bioinformatics, pharmacy, occupational health and safety and much more. Moreover they are careers that suit a diversity of people, open up

the world for travel opportunities, and are ubiquitous wherever there are populations to support.

Health start-ups alone are a huge growth area, with 9.3% of all start-ups in Australia focusing on medtech and health, according to Startup Muster's 2016 report released this month. Take CliniCloud, a medical kit and app that gives patients tools and connects them with medical professionals. CliniCloud founders, medical graduates and keen coders Hon Weng Chong and Andrew Lin, are profiled in the first issue of Careers with Health magazine, released in February. Their startup has raised \$5 million in funding.

These cutting-edge careers are at the intersections of the skills and content taught in secondary and tertiary study today. We call it STEM + X, where STEM is science, technology, engineering and maths, and 'X' is your passion, hobby, another field of interest or even a world-changing goal.

Careers with Health dives into these career areas in a friendly, fun format for teens. It is part of the phenomenally successful series kickstarted by Careers with Code, produced by Refraction Media in partnership with Google. Careers with STEM magazines now include Health, Science, Code, Engineering and Maths. Free copies of the magazine are distributed to all Australian high schools, and additional copies are available to order.

By creating these magazines, we hope to inspire the next generation not just to explore the career areas in health today, but to create the career areas of the future. It's only through their ingenuity that we'll tackle the health challenges we'll face tomorrow.

<u>Heather</u> is Head of Content and co-founder of Refraction Media, and also leads the production of ScienceMeetsBusiness.com, a platform for the voice of science in industry. Highlights have included filming a nuclear reactor and travelling to MountainView, California, to interview Googlers for the US edition of Careers with Code. You can read more about her in a recent *FW career blog*.

From pen to publication

Having a side project helps keep us interested in our work. This month <u>Sarah Fraser</u> talks to us about her side project publishing children's books.



Many of us, no matter how much we enjoy our jobs, have that other thing we do simply for the joy of it. It might be volunteer tutoring, a Kickstarter collaboration, or writing about our research for schoolkids. Officially known as a 'side project', this kind of work is what keeps us motivated when the day job isn't doing it for us at the moment.

For me, a medical writer by trade, that side project is books. Specifically, books of the non-medical, fictional, entertaining children variety. I love it. There is no peer review. There isn't a citation to be found, and sometimes I just *make stuff up!* It's very liberating.

More recently, that side project has expanded to include not just writing, but publishing books. I had never seen myself as a publisher, but I found myself with some spare time and a spare manuscript that hadn't been picked up by my previous publisher. Where's my Mummy? was an adventure story for 6–9-year-olds (it involves

mummies of the Egyptian kind), and in my opinion, better than the last book I wrote, which had been published. Still keen to see my book in print, I began to look into self-publishing it. I'm an editor, I had access to a family member who draws things for a living, so I thought,

Why not?

The good news, for people like me who want to publish on a budget, is that publishing books is easier now than ever. E-books obviously mean it is much more affordable, but even printing is cheap now with the range of print-on-demand services around.

The hardest part? Deciding on a name for my publishing business! There are so many publishers out there, and the name has to do so much – tell people what you do, be catchy, witty but not daggy. Animals are popular for children's publishers. Emus, wombats, puffins abound. In the end, after toying with zany animal names (Zebra Press?) and boring but respectable (Brunswick Publishers?) I settled somewhere in between with Quiet Corner Publishing. I liked the idea of being in my own quiet corner of the world, publishing books I'm passionate about.

Within 2 months I had published my first book, which is astoundingly fast compared with the normal turn around in the book industry. And it looks fantastic. It was so satisfying to produce, and looks so good, this side project is in real danger of becoming the main event!

<u>Sarah</u> is a medical writer, editor and author. Her latest book, *Where's my Mummy?*, featuring reluctant adventurer Annie Boldfoot, is published by Quiet Corner Publishing. You can read more on her <u>website</u>, where Sarah also blogs about self-publishing!



We are loving right now...

Writing!! This month we've been thinking about how vital writing skills are for successful careers in health and medical research. With the help of our Editor at FW, Donna Armstrong, here are some of our favourite tricks and tools...

- Check out these excellent online resources on <u>formatting tips and tricks</u>, <u>designing</u> and writing scientific papers and (for the word nerds) <u>quick and dirty grammar tips</u>.
- Health Writer Hub has some great articles on <u>writing clearly without dumbing down</u>, <u>writing quality content readers understand</u> and other tips to <u>improve your writing</u>.
- Dedicated time for writing is a must! <u>Writing retreats</u>, <u>writing boot camps</u> or <u>Shut Up</u> <u>and Write</u>! sessions are some methods that come highly recommended.
- Check out this video by a Harvard psychologist on <u>Linguistics</u>, <u>Style and Writing in</u>
 <u>the 21st Century</u>, it's a lengthy one but very worthwhile!
- Did you know <u>reading more can actually help you become a better writer?</u> Brilliant! Head to <u>Girls at Library</u> for your next book suggestion.
- Now be inspired by these little ones to go write!

We want to include your contributions in our newsletter. If you are doing something, or know about something, that you think other women in our field would be interested in, drop us a <u>line</u>. We are all about sharing, promoting and collaborating between women in our field. Don't be shy, it might bring about a great opportunity! Want to receive our newsletters directly to your in-box? <u>Subscribe here</u>.