

March 2016 Newsletter

This month Franklin Women attended a breakfast held by the Heart Research Institute
focusing on women in science and business. One of panelists pointed out a stat that really stuck – although the L'Oréal For Women in Science Awards receive hundreds of applicants each year, there are far fewer female applicants for the gender-neutral science awards. Right now it is the 'awards season' for science with applications open for a number of prestigious awards – see Prime Minister's Prizes for Science; Young Tall Poppy Science Awards; L'Oréal For Women in Science Fellowships; Australian Academy of Science honorific awards; and the Australian Academy of Science honorific awards; and the Australian Academy of Science honorific awards; and the Australian Academy of Science honorific awards; and the Australian Academy of Science honorific awards; and the Australian Academy of Science honorific awards; and the Australian Museum Eureka Prizes (which we will hear more about at our event next week). So before you come up with a good excuse otherwise, nominate yourself for one of these awards (don't underestimate how wow you are!). Or, how about nominating one of your female colleagues who should be recognised for their contributions to our field? As they say, you gotta be in it to win it.

We hope you enjoy this month's newsletter. You may pick up the underlying theme of 'stretching' your limits (whether it is going for that award, following an innovative idea or donning lycra in the work place!).

Happy reading!

Melina and the FW team

._____

What happened this month

- The NHMRC announced the recipients of \$129.4 million of grant funding for some amazing health and medical research projects.
- Chief Scientist Dr Alan Finkle spoke on powering innovation in Australia at the Cooperative Research Centre Association Conference and the National Press Club.
- The 2016 <u>Science Meets Parliament</u> event was held, aiming to help scientists learn how to better communicate with the media, policymakers and parliament brilliant!
- The <u>World Science Festival</u> was held early this month, including the moderated discussion <u>Bucking the sySTEM</u>: the myth of merit.
- A panel discussion on <u>The Future of Science: Women</u> was held at the National Press Club.



This month's Journal Club comes from Devanshi Seth, a Principle Scientist and Group Head at the Centenary Institute of Cancer Medicine and Cell Biology. Devanshi is the newest member of the <u>Franklin Women Peer Advisory Committee</u> and we are thrilled to have her join the team!

Whitfield J, Rahman K, Haber P, Day C, Masson S, Daly A, Cordell H, Mueller S, Seitz H, Liangpunsakul S, Westerhold C, Liang T, Lumeng L, Foroud T, Nalpas B, Mathurin P, Stickel F, Soyka M, Botwin G, Morgan T, **Seth D** and the GenomALC Consortium. Brief report: Genetics of alcoholic cirrhosis – GenomALC Multinational Study. Alcoholism: Clinical Experimental Research 2015;39(5):836-842. doi:10.1111/acer.12693



What were the aims of this research? Why do only some drinkers develop liver cirrhosis and others who drink similar levels don't? This important question remains unanswered.

What are the top 3 take home findings of your research?

- 1. We showed for the first time a parental link to this disease.
- 2. Per day and total life-time alcohol consumption was greater for both men and women drinkers with no liver disease compared to those with cirrhosis, highlighting that individual susceptibility is variable for this disease. 3. Our data underscores a genetic component to the risk and the heritability of this disease.

How does this research contribute to the field? This study

has great potential in defining the first genetic architecture of liver cirrhosis and discovering risk factors. So far, there is no effective treatment and no specific biomarker for this disease, and therefore discovery of biomarkers will improve early identification and provide better treatment options.

Who are your collaborators and how did your work relationship come about? I'm extremely fortunate to have several local and international collaborating partners who have provided significant support to my research and professional career. For this project, my colleagues and I were funded by the highly prestigious National Institutes of Health/National Institute on Alcohol Abuse and Alcoholism. We founded the <u>GenomALC Consortium</u> comprising more than 20 eminent clinicians/researchers from Australia, Belgium, France, Germany, Switzerland, UK and USA to conduct this clinical study.

What is your current role and organisation and how long have you been there for? Since 2000 I've been a Principal Scientist at the Drug Health Services, Royal Prince Alfred Hospital and Centenary Institute. I am also Associate Professor at the Central Clinical School, University of Sydney. Currently I lead a unique Alcoholic Liver Disease Research Program which broadly addresses gaps in understanding this disease via genetic, cellular and clinical studies. I also Chair the Gender Equity Program at the Centenary Institute, which has made some significant achievements in several areas influencing a more equitable workplace for all staff.

What new skills or projects are you currently working on? My expertise is in high throughput gene/protein expression analysis, molecular and cellular biology, and in vitro/in vivo models of alcohol-induced cell injury. My team and I are now planning to use mass cytometry for analysis of bloods from non-drinkers vs drinkers with and without liver cirrhosis in order to identify changes in inflammatory cells associated with alcohol as well as those associated with cirrhosis.

Who is a woman that inspires you? My mum, an amazingly creative and industrious woman who performs her best even in the most trying of circumstances. She's a multitalented homemaker and my guru in what I know today. My other inspiration comes from the Nobel Laureate Barbara McClintock, an American cytogeneticist, who won the Nobel Prize in 1983 for the discovery of transposons 40 years earlier! She also described the first genetic map of maize. Goes to show brilliance pays in the end!

What food have you eaten too much of in your life? Salt, most definitely!! I crave salt and, believe it or not, you'll always find sachets of salt in my purse and passport belt.

Have you published recently? Firstly congratulations! Secondly drop us a line at hello@franklinwomen.com. We'd love to hear from you and are always on the lookout for journal club contributors for our newsletter. ©

Bringing ideas to life - Meet and Move App

Turning our research into innovative health solutions is what we all aspire to in health and medical research and Bridget Foley is doing just that! She shares how she got funding to turn her idea for an app to increase physical activity into reality.

I have never seen the point in sitting around and waiting for things, when you could be walking, talking and having fun. Since finishing school, I have heard a lot of young people saying they are not as active now, at age 18–25, as they were in school. As we are



searching for our place in the world we lose those great physical activity behaviours from our youth. Students also lack social connections with their peers and struggle to connect off-screen with other young people. So, in an attempt to increase the physical activity of young people, I came up with the idea of a 'walking bus' for adults!

A <u>walking bus</u> is usually for primary school children but is a great way to get people active and connecting with others. I haven't seen it done with adults, so I have been endeavouring

to get one started this year. I applied for and was granted funding from the <u>Healthy Sydney University initiative</u> to trial getting people to meet at uni and move to, from and around campus, together. My formative research uncovered a need for technological support to coordinate walking groups and also to ensure the project would be sustainable if I wasn't there (which was great foresight as I am no longer based at Camperdown!).

I entered a competition with the <u>Foundation for Young Australians</u> to attend the Samsung <u>Adappt Bootcamp</u>, an app development competition for young people wanting to use tech for social good. I had zero expectations and only took about 30 minutes to prepare the application, but oh my gosh was it worth it! The <u>Meet and Move app</u> idea was selected in

this national competition and I attended the Samsung Adappt workshop in Sydney. It was a life-changing experience, winning \$10,000 from Samsung to further develop the app.

I am now working with some mentors from the bootcamp to create a minimum viable product for students at the University of Sydney to meet and move. The app will be launched in semester 2, 2016 and until then I am trialling the project without technical support, just with timetabled walks for active travel. I will be evaluating the pre—post impact to see if the app helps increase the social connections and also physical activity of students. If successful, I plan to expand use of the Meet and Move app to other universities, pending funding for ongoing development.

<u>Bridget Foley</u> is an early career researcher and physical activity activist. She is passionate about prevention research and making physical activity and good nutrition fun and exciting for young people. Bridget is also pretty keen on distance running and lives every day with type 1 diabetes.

Evidence into action - Active workplaces

The evidence is piling up that too much sitting is bad for our health. This month we've collected some stories from fellow health and medical researchers on how they inject more activity into their workplaces. Have you also got a workplace activity story to share with the FW community? Let us know on Twitter openits.

Workplace yoga – <u>Professor Chris Semsarian</u>, Cardiologist, University of Sydney and Centenary Institute



When I looked around my workplace and saw people sitting all day, I realised we needed some formal regular activity. Standing more, sitting less, standing desks and... yoga! We have had 1-hour weekly yoga classes for the last 2 years and it has been so good at so many levels. Great team bonding, better physical health, cardiovascular fitness, mental health benefits, and lots of fun too! I purposely arranged the classes during our normal workday so that everyone could attend, rather than before or after work when it's more difficult to attend, especially for the women in my team who have children. We were blessed to meet *Krystle Alves* from *Yoga In Motion*, who is the most

knowledgeable and caring yoga teacher, and comes to our workplace each week to teach us! As the leader of my #TeamCardio, I think it's part of my responsibility to ensure the workplace environment is healthy in all ways, including the promotion of physical activity!

Standing desks – <u>Dr Lina Engelen</u> and <u>Dr Jo Chau</u>, Research Fellows, Prevention Research Collaboration, Charles Perkins Centre, University of Sydney

Sit-stand (or height adjustable) desks are one way to break up sitting time while working. <u>Recent research</u> from our <u>research group</u> shows that sit-stand desk interventions have positive effects on musculoskeletal issues. Beyond the physical benefits, participants reported they felt more energised, engaged, productive and motivated while standing in comparison to while sitting. So, how should you use a sit-stand desk? The important thing is to find a way that suits you. Lina likes to stand up when she's writing, and feels more alert and creative when standing. Jo prefers to check her emails standing up but sits to write. Remember to go slowly to strengthen the muscles needed for standing for longer periods. It's like training for a marathon: you don't start running 42km at once, but build up to it gradually.

Team fitness breaks – <u>Dr Melina Georgousakis</u>, Research Fellow, National Centre for Immunisation Research and Surveillance (NCIRS).



Our core activity in the Policy Team at NCIRS is evidence synthesis and translation into policy, so we do a lot of reading and writing (which means, sitting). Last year we came across this <u>video</u> on Twitter of a team coming together in their office to exercise and we got inspired! Now, every 2 hours throughout the workday, our team breaks to do 5 minutes of exercise. Nothing fancy, no change of clothes required, with a different team member leading each exercise. Every 3 weeks we review and revise our exercise schedule to mix things up a bit. Not

only have we all felt the health benefits (physical and psychological) but also socially it has been so great for our team, which also positively affects our work. A win-win for all!



We are loving right now...

Physical activity!! The weather is getting cooler and days are getting shorter and getting up early for a swim or walk is starting to seem less appealing. But there are lots of ways to be active, and actually enjoy it! Here are some of our favourites...

- As you can see from this list of <u>ways to be active in the workplace</u>, money and equipment aren't always needed. Start small, have fun and move...
- Have you heard of <u>No Lights No Lycra</u>? This dance phenomenon is taking over the world! No lights, no costumes, no steps to learn, just DANCE like no-one's watching!
- If donning some lycra is more your thing, try out <u>Retrosweat</u> for an authentic 80s aerobics experience, and don't forget that <u>laughing is good exercise</u> too!
- There are heaps of workout apps available, but of course us busy gals at FW HQ are big fans of the <u>Scientific 7-minute Workout</u>.
- Prefer some social interaction? Why not try a <u>dog-walking meet-up group</u>?
- And after all that, you've earned yourself a good rest, like these adorable puppies!

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>. Want to receive our newsletters directly to your in-box? <u>Subscribe here</u>.