Dear Members, Colleagues, and Supporters of the Centre

Happy New Year! This year we celebrate the 10 year anniversary of the Freemasons Foundation Centre for Men’s Health and the partnership between the Freemasons Foundation and the University of Adelaide. We will use this anniversary to review our achievements and the Centre members and collaborators who have shaped our Centre’s profile. Most importantly we will be setting our goals for the next 10 years and a pathway to achieving these for the betterment of men’s health and well-being. The Centre remains the only dedicated multidisciplinary men’s health research centre in Australia with programs extending from fundamental discovery science in our laboratories to clinical research advancing health care in our hospitals and health services to delivering education and programs in our communities. We hope you can join us in celebrating our success and by being part of our exciting future.

Upcoming events

Men’s Health Research Monthly Seminar Series

In 2017, the venue for the men’s health research monthly seminar series will be the new Adelaide Health and Medical Sciences Building in the west end, scheduled for opening in February. The details of the first seminar will be announced in the next Newsletter.
Centre Research News

End of Year Boost for Men’s Health Research

Congratulations to Centre Members on their recently announced men’s health research grant funding, closing out a successful year for men’s health research.

**Dr Ian Johnson (pictured right),** Post-doctoral Research Scientist from the School of Pharmacy and Medical Sciences, the University of South Australia, was awarded the John Mills Young Investigator Award from the Prostate Cancer Foundation of Australia. Ian’s research focuses on endosomes which are membrane bound vesicles found in all animal cells. Ian aims to identify which cellular machinery drives altered endosome production or function and how this may contributes to prostate cancer. The goal is to apply this knowledge to improve diagnostic and prognostic testing in prostate cancer.

**Associate Professor Lisa Butler,** Head of the Prostate Cancer Research Group, School of Medicine, the University of Adelaide at SAHMRI and **Professor Nico Voelcker** at the University of South Australia were awarded a novel concept grant from the Prostate Cancer Foundation of Australia. This project will look at the feasibility of using nanometre size porous silicon carrier platform that the team has developed to deliver drugs to the surface of prostate cancer cells and specific receptors on those cells that are implicated in cancer.

**Professor Robert Adams,** Discipline of Medicine, Uni of Adelaide, was awarded a Vanguard Grant from the National Heart Foundation with colleagues at the University of Adelaide and the Adelaide Institute of Sleep Health to continue the Centre’s work on obstructive sleep apnoea in men and its links to cardiovascular disease and other chronic disease risk, how best to screen for OSA in primary care, and refining on who and who not to treat.

New potential targets for prostate cancer therapy

**Dr Rajdeep Das (pictured left),** FFCMH PhD Scholarship student in the **Dame Roma Mitchell Cancer Research Laboratories**, the University of Adelaide, has received a Dean’s letter of commendation for his thesis on **microRNAs** (small fragments of genetic material that regulate how genes are expressed in cells) and prostate cancer. Raj has recently taken up a new position as a postdoctoral scientist at the University of California, San Francisco.

This month sees Raj’s work published in one of the leading international cancer journals “Cancer Research”. Raj, senior author and primary supervisor, **Dr Luke Selth**, and his national and international colleagues have identified a miRNA, **miR-194**, that promotes the metastasis, or spread, of prostate cancer. He showed that miR-194 causes aggressive cancer by inhibiting the activity of a **metastasis-suppressing factor called SOCS2**. Dr Selth says that “We have identified a completely new pathway that regulates prostate cancer metastasis. Importantly, there are multiple points in this pathway that could potentially be targeted to improve prostate cancer outcomes – but there is still a lot of work to do before this research could be translated into new drugs.”
The graph to the left shows the percent of men treated for prostate cancer at the Memorial Sloan Kettering Cancer Centre (USA) who remain disease free over time. The grey line represents men with high levels of SOCS2 expression, who have significantly less likelihood of relapse when compared to men with low levels of SOCS2 expression (black line).

This work was supported by funding from the National Health and Medical Research Council of Australia, the US Department of Defense and Movember/Prostate Cancer Foundation of Australia.


How South Australian men advanced medical knowledge in 2016

Here are some examples of how South Australian men in the Centre’s MAILES (Florey Adelaide Male Ageing Study AND males in the North-West Adelaide Health Study) longitudinal male ageing study have helped to advance medical knowledge in 2016. In particular, we present summaries of papers published in some of the leading medical journals in the respective fields.

1. Expanding our understanding of the clinical consequences of poor sleep health

Sleep, gastrointestinal problems and mental health

It has long been accepted that men with common mental health problems, such as anxiety & depression, may also be at greater risk for gastrointestinal diseases such as gastroesophageal reflux disease (GERD). However, most of the previous evidence for this has come from small samples of men attending specialised clinics. We are one of the first to demonstrate such an association in community-based men but also we have shown that having poorer sleep quality may heighten the association between depression & GERD.


Obstructive sleep apnoea and kidney disease

Using data from ~900 men who generously participated in at-home sleep studies, we have been able to show that men with severe obstructive sleep apnea (OSA) were more likely to have mild chronic kidney disease. This is one of few studies in non-clinical “healthy” populations. The links to kidney disease is likely to be as a result of the lower levels of oxygen in the blood (hypoxia) that result as a consequence of severe OSA.

Waking up to urinate at night
Also using data from our sleep studies, we demonstrated that men with moderate or severe OSA were at a greater risk of having to wake to urinate two or more times per night (nocturia). This effect was persistent even after accounting for other factors that can increase nocturia (such as increasing age, diabetes, heart disease). Repeated broken sleep, such as due to nocturia, has consequences for day-time function. Dr Sean Martin presented this new knowledge at the 2016 Scientific meeting of the International Continence Society in Tokyo (pictured right).


Significance: Most men are unaware that they have OSA and our research continues to reveal the broader consequences of poor sleep health in men. Our findings further highlight the need for better education and GP screening for OSA in men to potentially circumvent a range of significant health problems.

2. Testosterone for health
It is well recognised that the sex hormone testosterone is essential for healthy development and physical and mental health over the life trajectory, particularly in men. We have shown, in our previous MAILES studies that low levels of testosterone in blood is associated with chronic disease risk. We therefore examined whether, and found that, incorporating testosterone levels as a risk factor in existing diabetes risk assessment tools improves the risk prediction for subsequent diabetes.

Significance: This has implications for health screening in primary care. Whether giving men who have low levels, testosterone, offers any appreciable health benefits is still being determined.


3. Depression in men and health service use
One of the core aims of MAILES is to better understand how men engage with the health system in order to better accommodate their particular needs, and by extension their health outcomes. Dr Brett Scholz talked to a group of MAILES men about their experiences with depression and how this may or may not be brought up with their doctor. He examined, in particular, men’s discourse around the links between depression and comorbid illness, and the social contexts in which depression is experienced.

Significance: Greater awareness and training on cues offered by men in their discourse of depression and treatment that focusses on depression as similar to a physical health concern and as a condition experienced in social conditions will improve detection and treatment.

Publication: Scholz B, Crabb S, Wittert GA. “Males don’t wanna bring anything up to their doctor”: Men’s discourses of depression. Qualitative Health Research. 2016.

4. Biological basis of depression in men with chronic disease
Type 2 diabetes is associated with a range of health conditions, in addition to the complications associated with diabetes. One of these conditions is depression, however little is known about how this occurs. Using data from MAILES men, Dr Phillip Tully and the research team have shown that
a certain marker of endothelial (the interior lining of blood vessels) damage, called e-Selectin, was persistently higher in men with Type 2 diabetes who went on to develop depression.

**Significance:** This finding is part of an emerging body of research demonstrating the biological basis of depression and how we may better screen for depression and risk.


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**PhD student Clare McGuiness joins Housing SA**

The Centre congratulates **Clare McGuiness** *(pictured right)* on her successful appointment as Graduate Officer in the policy division at Housing SA in the state government Department of Communities and Social Inclusion. As the areas of housing and health overlap in many ways, Clare’s behavioural psychology expertise developed during her PhD will put her in good stead for her new role in policy.

The Centre is very proud of Clare’s PhD achievements. Clare was awarded an Australian Postgraduate Award for her PhD and received a joint PhD top-up scholarship from the CSIRO and the Freemasons Foundation Centre for Men’s Health for her project on cognitive style, and whether it is related to participation in health-related behaviours such as cancer screening, exercise, diet and smoking. Her supervisors were Professor Deborah Turnbull (School of Psychology, Uni of Adelaide, Dr Ian Zajac, CSIRO and Professor Carlene Wilson (Flinders University).

Clare’s first paper from her PhD studies is:


Clare was a finalist for the 3 minute thesis competition in 2015, represented the Centre numerous times speaking at community men’s health events and she was involved in the production of a series of men’s health videos for SA Health and Primary Producers SA. We cannot, of course, forget her interaction with the Hon Jeffrey Kennett AC when he handed back the gift of SA AFL team merchandise at the inaugural business breakfast in 2014.

We wish Clare all the best for the outcomes of her thesis submission and her exciting career ahead.
Other Centre News

FFCMH moves to the West-End in Feb 17

The Freemasons Foundation Centre for Men's Health's Royal Adelaide Hospital group will relocate to the new state of the art Adelaide Health and Medical Sciences (AHMS) Building in the North Terrace West End precinct as of 10th of February, 2017. The Centre administration, our FAMAS volunteers, and some students and staff will be located on Level 6 of the AHMS. The main contact number for the office will remain as (08) 8313 0514.

Laboratory and clinical research groups will also be relocating to AHMS. These include The Dame Roma Mitchell Cancer Research Laboratories, led by Professor Wayne Tilley, and the Embryo and Gamete Biology Research Group, led by Professor Michelle Lane. These groups will be joining a number of FFCMH groups in the West End precinct, which are based at SAHMRI.

For more information on the AHMS go to www.adelaide.edu.au/west-end/about/

Congratulations Rifat Jahan and Adel Aref

With the new year comes two new baby boys. The Centre congratulates Centre administrative support officer, Rifat Jahan and her husband Zahirul on the arrival of their son Zahian (pictured left). This is their first baby so we wish them all the best as their new life as parents begin.

We also congratulate PhD candidate Adel Aref and his wife Reham on the arrival of their second child Omar (pictured right), who is baby brother to Abdulrahman, Adel's family will join him in Adelaide mid-year, as he embarks on his second year of his PhD. Both boys and mums are doing well.

Latest men’s health published research from Centre members

- Watching the bank balance build up then blow away and the rain clouds do the same: A thematic analysis of South Australian farmers’ sources of stress during drought. By: Kate Fennell et al. In: Journal of Rural Studies.
The Freemason Foundation Inc.

The mission of the Freemasons Foundation is to ethically and proactively support, promote, fund and drive men's health issues. It is one of the leading charities supporting men's health in the community. True to this mission, the Freemasons Foundation Centre for Men's Health is an initiative of the Foundation and which operates as a joint venture with The University of Adelaide.

The Centre acknowledges the major funding support of the University of Adelaide and the Freemasons Foundation 2007-2017, and the broader support of the Freemasons community here in South Australia/Northern Territory and nationally.

Find out about us

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