

Theme Leader Profile – Doug McEvoy

Where do you work?

I work at the Adelaide Institute for Sleep Health a *Flinders Centre of Research Excellence* based at the Repatriation General Hospital. I am heavily involved in research and together with Associate Professor Nick Antic also run a big clinical department with a multidisciplinary clinical team focussing on sleep.

Where were doing you prior to your current role?

I've been in my current role for over 24 years and previously worked at The Royal Adelaide Hospital.

What area of research are you working in?

I'm working in sleep disorders, and for the Alertness CRC, the research I am focussed on currently is phenotyping of patients with sleep apnea and insomnia. I'm also involved in some NHMRC funded clinical trials looking at new treatment approaches for sleep apnea. For example, I'm leading a trial of cognitive behaviour therapy to try to improve CPAP treatment adherence and patient outcomes in patients with overlapping OSA and insomnia. I'm also Principal Investigator for the Sleep Apnea Cardio Vascular Endpoint study (SAVE) an international, multi-centre, randomised, controlled trial to determine whether continuous positive airway pressure (CPAP) can reduce the incidence of cardiovascular disease in high risk patients with moderate-severe obstructive sleep apnea. It's taking place in seven countries and has recruited over 2700 participants. The findings will be released in 2016.

What attracted you to this type of research?

I first became aware of sleep apnea while undertaking research training in the US in the late 1970s. I was learning about lung physiology and the way lungs exchange gas. When I came back to Australia in 1981 I read Colin Sullivan and colleagues' report on CPAP treatment of OSA and became fascinated by the clinical problem of sleep apnea, how it had such a major adverse effect on respiration, lung oxygen exchange and people's health. At that time, sleep apnea was thought to be rare, but actually as everyone now knows, it is very common. My clinical and research interest has gradually expanded over the years to include non-respiratory sleep disorders.

What do you like best about your role?

I've always enjoyed research. The idea that you are in area of discovery, that you might discover things that will benefit people's health. I also like mentoring young people - helping them to realise their full potential and develop their own independent research careers.

What is the most fulfilling piece of research you've undertaken to date?

Probably, the SAVE study. The trial has been going for 10 years. It's an extensive study addressing two fundamental questions. Does sleep apnea cause cardio vascular disease and is CPAP able to modify that risk. Regardless of the result – positive or negative - it will have a major impact on the field.

What impact will your research have?

The sleep apnea and insomnia phenotyping studies within the CRC are very exciting. What's become apparent in recent years is that while sleep apnea and insomnia are very common, patients with these conditions arrive there by a variety of different pathways and the impacts of the disorders vary markedly between individuals. Some people are greatly affected, either neuro behaviourally or in terms of the cardio vascular impacts, while others seem to be spared these effects. I'm interested in how we can personalise therapy and for that you need new information and new tools to fully characterise or "phenotype" patients. If we can achieve this through the CRC's work, we will greatly improve treatment outcomes and patient well-being. And the community will reap the benefits of enhanced public safety and increased work force participation and productivity.

What is the best piece of advice you've been given?

Great things come from collaboration. Working with other people who share your passion for research but have complementary skills enhances the research effort and increases the chances of success.

What advice would you give to young researchers?

Working collaboratively is very important, but also, take your time to think, and refine the important questions. And be bold!

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