



FHMRI Sleep Health

Home of the AISH Sleep Health Clinics
A Flinders Health and Medical Research Institute Flagship
NEWSLETTER VOLUME 1 | January 2025



A message from the Director

I am delighted to welcome you to the first edition of the FHMRI Sleep Health Newsletter! Through this platform our aim is to keep you informed about our latest projects, clinical trials and achievements, and to give you insights into science-based sleep health information.

2024 RECAP

In June 2024 FHMRI Sleep Health was recognised as a Flinders Health and Medical Research Institute Flagship, highlighting our team's commitment to research excellence.

The FHMRI Sleep Health Team have been busy since the rollout of the SBS series Australia's Sleep Revolution in March 2024, especially our Sleep Health Clinic which has since received a large volume of referrals and enquiries.

Professor Sutapa Mukherjee continued with her public advocacy for sleep health with the release of her ABC Conversations podcast *Dr Sutapa Mukherjee on how to sleep well*. The Consumer Advisory Group recruited additional members to help lead further advocacy work and consult as consumers in research. As you can see in the newsletter, FHMRI Sleep Health researchers, along with other Australian researchers discovered that a bedtime nasal spray has the potential to reduce the severity of sleep apnoea in people and lower their blood pressure.

As we look forward to 2025, I want to thank you for being an essential part of our community. We hope you find these newsletter updates useful. Here's to encouraging great sleep health together!

Professor Danny Eckert
Director, FHMRI Sleep Health



Professor Danny Eckert

IN THIS EDITION

Australia's Sleep Revolution
with Dr Michael Mosley

Novel nasal spray trial findings

FHMRI Sleep Health in the
news



In a global first, the Flinders Sleep Health Team spotlights their innovative approach to treating sleep disorders, in the SBS series *Australia's Sleep Revolution* with Dr Michael Mosley.

The groundbreaking three-part TV series aired on SBS in March 2024, and has also been released by the BBC in multiple countries. The internationally renowned, multidisciplinary Flinders Sleep Health Team led this rigorous, cutting-edge trial with the ambitious goal of testing a completely new approach to sleep disorders care.

Over the span of just two months, the team treated Dr. Michael Mosley and thirty South Australians with chronic sleep disorders, all while being filmed for the series. As part of their comprehensive approach, the team also examined the effects of a two-week parliamentary sitting period on the sleep and associated health outcomes of four federal politicians, aiming to raise awareness and advocate for policy change.

The trial was a major success, resolving sleep disorders in over 80% of participants. Specifically, more than 90% of those who completed the insomnia treatment program experienced clinically significant improvements and no longer had clinically defined insomnia. For individuals with moderate to severe sleep apnoea, over 60% saw resolution of their condition without the need for conventional continuous positive airway pressure (CPAP) therapy.

"I was very keen to work with the Flinders team, who are world-class, and to take part in this world-first clinical trial as an observer, but also a participant. It was a joyful experience, and I learnt a surprising amount, not only about the science of sleep but also the real causes of my own insomnia. A truly eye-opening series which I do hope will have a huge impact." Dr Michael Mosley.

This pioneering series not only highlights the potential for innovative treatments to transform lives but also underscores the importance of multidisciplinary collaboration in tackling complex health issues. The televised trial marks a significant milestone in sleep health, showcasing how novel approaches can lead to substantial improvements in patient care.



Some of the team during filming, including Professor Danny Eckert, Associate Professor Amy Reynolds, Dr Michael Mosley and Emeritus Professor Leon Lack

WATCH ANYTIME WITH **SBS ON DEMAND**

2024 SA Science Excellence + Innovation Awards



Ms Jessica Steens, Professor Sutapa Mukherjee and Professor Danny Eckert accepting the *Excellence In Industry Collaboration Award*

On Friday 8th of November at the 2024 SA Science Awards held at the Adelaide Entertainment Centre, the Sleep Revolution Team won the *Excellence in Industry Collaboration Award* for *The Australia's Sleep Revolution with Dr Michael Mosley* three-part TV series. It was noted that the TV series was a top-ranking SBS factual series with ratings almost 50% above timeslot average.

This award is open to teams that have channelled innovative and productive models of STEMM and industry collaboration which may lead to economic, social or environmental impact. This awards night is a significant occasion in South Australia's science calendar to truly showcase the diversity of scientific endeavour and exceptional research happening in our state.



Sleep apnoea solution could be right under your nose

Australian researchers have discovered that a bedtime nasal spray has the potential to reduce the severity of sleep apnoea in people and lower their blood pressure.

The new research published in [The Journal of Heart and Circulatory Physiology](#) offers hope to millions of people around the world affected by sleep apnoea, a common and debilitating chronic respiratory condition.

“Obstructive sleep apnoea (OSA) is a sleep disorder where the muscles in the back of the throat relax and the upper airway narrows or collapses, restricting oxygen intake and causing people to wake repeatedly throughout the night,” says [Professor Danny Eckert](#), College of Medicine and Public Health.

“It has been linked to a variety of medical conditions including cardiovascular disease, stroke, obesity, diabetes, anxiety and depression. Treatment options are limited and while continuous positive airway pressure (CPAP) machines are a proven treatment for OSA, around 50 per cent of people struggle to tolerate them,” he says.

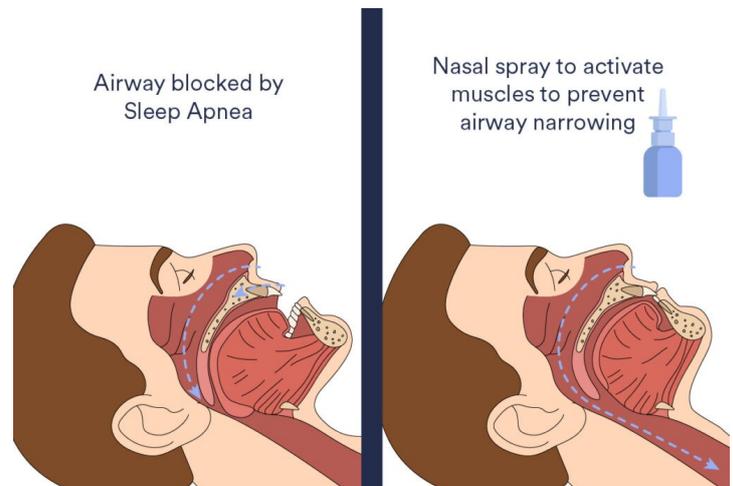
The aim of the study was to determine the effects of a new potassium channel blocker nasal spray on OSA severity and to investigate the potential influence of different breathing approaches such as restricted ‘nasal only’ breathing and the physiological characteristics of those who had a favourable response.

“Potassium channel blockers are a class of drugs that block the potassium channel in the central nervous system. When used in a nasal spray, the blockers have the potential to increase the activity of the muscles that keep the upper airway open and reduce the likelihood of the throat collapsing during sleep,” says lead author [Dr Amal Osman](#).

“What we have discovered is that the nasal spray application of the potassium channel blocker that we tested is safe, well tolerated. Those who had a physiological improvement in their airway function during sleep also had between 25-45% reductions in markers of their OSA severity including improved oxygen levels as well as a reduction in their blood pressure the next day,” says Dr Osman.

“These insights provide a potential pathway for development of new therapeutic solutions for those people with OSA who are unable to tolerate CPAP machines and/or upper airway surgery, and those with a desire for alternatives to existing therapies,” says Professor Eckert.

[Read more](#)



Using a bedtime nasal spray that activates throat muscles can reduce the severity of sleep apnoea and lower blood pressure

Trials currently recruiting participants

[Whilst we have many studies with ongoing recruiting, some are highlighted below.](#)

The Vibrance-1 Study is now recruiting people living with **narcolepsy type 1** to research an investigational study drug taken orally for the potential treatment of excessive daytime sleepiness symptoms. To learn more contact aish.sleep@flinders.edu.au or call our site coordinator on 8201 7687

The Vibrance-2 study will also soon be recruiting people living with **narcolepsy type 2** for more information <https://vibrancestudies.com/>

Other: Another trial recruiting people with **idiopathic hypersomnolence** is currently being developed and recruitment is due to commence in 2025. To be contacted when more information is available, please send your details to aish.sleep@flinders.edu.au.

FHMRI Sleep Health In The News

Professor Sutapa Mukherjee on how to sleep well an ABC Conversations Podcast

From muscle paralysis and sleepwalking, to the power of our subconscious, Professor Sutapa Mukherjee takes you into the secret world of sleep. Available to listen on the [ABC Listen app](#)



Congratulations to Josh Fitton for winning The Australasian Sleep Association (ASA) SA Branch New Investigator Award!

This prestigious award, announced at the ASA and ANZSSA Annual Scientific Meeting, recognises excellence in research design, execution and communication. Well done on this remarkable achievement!

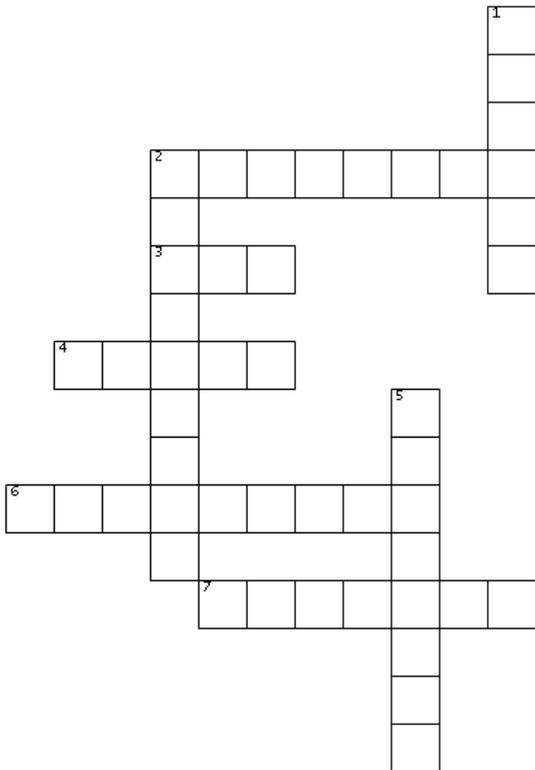
Test your knowledge about sleep health!

ACROSS

2. A common stimulant, if taken late in the day, that can prevent you from sleeping well
3. Which sleep stage involves dreaming?
4. Which marsupial sleeps an average of 20 hours a day?
6. What is the hormone that tells your body to sleep?
7. What common sleep problem gets worse with age and weight gain?

DOWN

1. How many minutes does a sleep cycle typically last?
2. Rhythm, a natural, internal biological clock
5. Being exposed to WHAT adjusts the clock so that it stays aligned with day and night?



Update from the AISH Sleep Clinics

The clinics have also been working on a number of other research related projects and the Development of *CBTi training* package to upskill GPs and other health professionals funded by General Practice Mental Health Standards Collaboration (pending accreditation by RACGP).

Since the airing of the SBS series Australia's Sleep Revolution with Dr Michael Mosley, the clinic has received many enquiries about our services and referrals. To help with the referral process our team have developed a set of referral forms for patients to take to their GP to inform them of the necessary referral requirements.

