

A NIGHT OF SCIENCE IN THE SOUTH

PROGRAM OF EVENTS

WOODCROFT LIBRARY
FRIDAY 24 SEPTEMBER
6-8PM

Cost \$15 per person | Light supper provided

Beer and wine available for purchase

Bookings essential via [Onkapingalibraries.eventbrite.com](https://onkapingalibraries.eventbrite.com)

This project is supported by Inspiring South Australia



WELCOME

DR GRACE VINCENT

CENTRAL QUEENSLAND UNIVERSITY, APPLETON INSTITUTE

Why do we sleep? Dr Vincent will provide an overview of the basics of sleep science, how much we need and what happens to our body and mind when we don't get enough of it.

DR JANET SLUGGETT

UNIVERSITY OF SOUTH AUSTRALIA

SOUTH AUSTRALIAN HEALTH AND MEDICAL RESEARCH INSTITUTE

Aged care facilities house some of our most vulnerable members of the community. Dr Sluggett is investigating commonly used medications and their effects.

DR YAN JIAO

UNIVERSITY OF ADELAIDE

Dr Jiao will talk about why clean energy is important to us and how molecular modelling is helping to address the bottleneck in realizing a clean energy future.

ASSOCIATE PROFESSOR MARIA INACIO

SOUTH AUSTRALIAN HEALTH AND MEDICAL RESEARCH INSTITUTE

Professor Inacio, an epidemiologist, will discuss the work her team has done to define, evaluate, and improve the quality and safety of aged care services.

DR SHERYN PITMAN

DEPARTMENT FOR ENVIRONMENT AND WATER

The sustainability of human life on Earth depends upon the integrity of the relationship between humanity and nature. Nature supports humanity, and knowledge and understanding of how nature works form the foundation of ecological literacy. It is ecological literacy that underpins our capacity as humans to make well-informed decisions about how to live in sustainable ways. Her research explores how much we know about how nature works, and who knows.

INTERMISSION

WELCOME BACK

DR KYLIE DUNNING
UNIVERSITY OF ADELAIDE

Light is used to measure many things. It's used to discover gravitational waves. It's used in hospitals to measure the levels of oxygen in your blood. Dr Dunning will cover how we use light to measure the health of an embryo. It's hoped this will lead to improved success rates for hopeful parents undergoing IVF.

DR ASHLEIGH SMITH
UNIVERSITY OF SOUTH AUSTRALIA

Dementia has the unenviable claim as Australia's second leading cause of death. With no treatment breakthroughs, the number of people with dementia will increase to 1.1million Australians by 2058. Individual factors such as physical inactivity and poor diet, could prevent 40% of dementia. Dr Smith's research considers for the first time, how multiple dementia risk factors interact to either increase or decrease future risk.

ASSOCIATE PROFESSOR TASHA STANTON
UNIVERSITY OF SOUTH AUSTRALIA

We assume that what we experience is "reality". In fact, we create our own "reality" in our brain, using available sensory information, our past experiences, and our expectations. Professor Stanton will discuss using perceptual trickery for good – tricking the brain using virtual or mediated reality to change bodily feelings, like pain.

DR MARGARET SHANAFIELD
FLINDERS UNIVERSITY

When it rains, how much of the water flows through our streams? And how much of that water becomes groundwater? How fast does that groundwater move out to the sea? We all know the water cycle but actually measuring each component can be quite difficult in practice! Dr Shanafield will walk you through what we know about the Willunga Basin, from rainfall to streamflow, evaporation to groundwater flow - and what we don't know!

THANK YOU

BOOKINGS ESSENTIAL

OnkaparingaLibraries.eventbrite.com

