

CELEBRATING HEALTH AND MEDICAL RESEARCH IN SOUTH AUSTRALIA
ASMR SA ANNUAL SCIENTIFIC MEETING - Adelaide Convention Centre

SOUTH AUSTRALIA'S BRILLIANT YOUNG RESEARCHERS MEET IN ADELAIDE JUNE 4

This multi-disciplinary meeting showcases the cutting edge research being conducted in South Australia.
Fertility, cancer, nutrition, diabetes, brain injury, sleep disorder, arthritis, cerebral palsy, allergy, wound healing, asthma, stroke, cystic fibrosis, nanotechnology!

No more big daddies?

While many studies have explored the impact of obesity on female fertility, few have investigated how obesity affects fertility in men. After surveying a large number of existing studies, Jared Campbell and colleagues at the University of Adelaide have determined that male obesity increases the likelihood of infertility by almost 50%. Interestingly, the research group found that the abnormalities in semen that decrease fertility in obese males are not assessed in conventional semen analysis, suggesting that the semen parameters typically measured in fertility clinics may be insufficient to detect the cause of failure to conceive in some obese men. These findings provide the impetus to re-evaluate standard semen screening techniques used by fertility clinics.

Gene therapy showing promise for rare brain disorder

Gene therapy – the replacement of a mutated dysfunctional gene with a normal functional gene – represents the holy grail for researchers aiming to discover treatments for genetic disorders. Chantelle McIntyre and colleagues at the University of Adelaide have been trialling gene therapy to treat Sanfilippo Syndrome, a rare but severe genetic disease characterised by progressive mental deterioration and premature death. One barrier to the use of gene therapy for brain diseases is achieving transfer of the therapeutic gene into the brain; however McIntyre and colleagues show that this issue can be overcome by administering the therapy directly into the brain. In mice, this approach produced a sustained reduction in brain pathology and mitigation of behavioural deficits, providing hope for an effective lifetime treatment of this and other genetic brain diseases.

Closing the Gap by closing the eyelids

Sleep is the foundation of all health, with poor sleep patterns having a significant impact on all aspects of health. Danny Camfferman from the University of South Australia has been investigating sleep quality in Indigenous children, and how this may influence health outcomes. He found that Indigenous children had significantly less total sleep time than non-Indigenous children, and significantly less stable wake-up times on school days. His findings support the view that sleep health should be considered in the Closing the Gap conversation, especially as sleep health is quintessentially modifiable.

Feverfew may be useful in prostate cancer treatment

Current radiotherapy treatment for prostate cancer is associated with undesirable side effects, such as impotence and incontinence due to damage to normal tissues. Parthenolide, a component of the herbal medicine feverfew, has been shown to have anti-inflammatory and anti-tumour properties in several cancer types. Katherine Morel and colleagues from Flinders University have results which suggest that parthenolide may be a useful protection for normal tissues during radiotherapy treatment.

Interview and Photo Opportunities

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