

***A SHOWCASE OF CANBERRA'S BEST AND BRIGHTEST AT THE ASMR ACT
NEW INVESTIGATOR FORUM
AT THE JOHN CURTIN SCHOOL OF MEDICAL RESEARCH 8AM – 5PM***

Smartphone health apps must consider older Aussies

The rapid surge in the use of technology has revealed potential for smartphone applications to assist with management of chronic disease in aging populations. But, a new study by Nathan D'Cunha from the University of Canberra has highlighted that the technology is not user friendly for older Australians, as a majority recruited for this study experienced technological difficulties that resulted in low compliance of using the app to monitor their health. The inclusion of features such as reminder messages, alerts or prompts, may promote better user engagement and has the potential to improve self-management of health conditions in an older population.

Honey: its' more than just sugar

Although honey is a sugar, its floral sources and geographic origin influence its composition of antioxidants and phytochemicals, to give it health benefits. Maddy Hunter from the Department of Nutrition and Dietetics at the University of Canberra used common analytical methods to test potential associations between the colour, phytochemical content and antioxidant activity of a selection of commercially available Australian honeys. She found that colour is associated with the phytochemical composition and antioxidant activity of the honey samples; the darker the honey, the more phytochemicals and antioxidant potential they contain.

The genetic cause of lupus

Lupus is a chronic autoimmune disease with a well-established genetic basis. Grant Brown from the Department of Immunology and Infectious Disease, John Curtin School of Medical Research, Australian National University, has sequenced the genome of individuals with severe childhood-onset lupus to find a rare single-gene mutation that causes lupus, but is not inherited from the parents. Grant has exploited this gene mutation to create an animal model, proving that it causes the condition, and also providing new opportunities to test targeted therapies that may be effective in the patients in the future.

The genetic pathway to restoring sight

Age-related macular degeneration, affecting the retina of the eye, is the leading cause of blindness in Australia. Many factors contribute, including microRNAs - small molecules controlling the expression of genes. Adrian Cioanca from the Eccles Institute of Neuroscience, has shown that the machinery that controls the function of microRNA is abnormal in retinal degeneration. This finding shines a new light of the cause of retinal degeneration. Boosting our knowledge of the role of microRNA, through studies like Adrian's, could open the door for the discovery of a new form of gene-based therapy for sight-threatening conditions.

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