

MEDIA RELEASE - Friday May 30th, 2014

Victoria, home to Australia's largest bioscience research community

Showcasing young health and medical research scientists in Melbourne today!

ASMR Vic Scientific Meeting - Royal Melbourne Hospital, Parkville

Children born to obese couples at higher risk of health problems

Obesity affects over 60% of Australians and is known to have a detrimental impact on egg and sperm quality. While research has shown that being born to either an obese mother or obese father leads to increased disease risk in later life, little is known about the health implications for children conceived by parents who are both obese. Bethany Finger and colleagues at the University of Melbourne have been exploring this question by studying embryo development in obese mice. Their findings indicate that combined parental obesity, compared to obesity in either the mother or father alone, has further negative effects on embryo development and quality, further highlighting the importance of parental diet for embryo health.

New, highly accurate *biomarker* to diagnose *mucosal* infection

Accurate diagnosis of many infections rely on sensitive and specific tools for detecting biomarkers in the blood. Khayriyyah Mohd Hanafiah and colleagues from the Burnet Institute have developed a new reagent to detect *dimeric IgA* a promising antibody marker of active mucosal infections in humans. Preliminary trials in hepatitis patients, have shown that the reagent is capable of detecting very low concentrations of the antibody; allowing for effective discrimination between infected individuals from uninfected controls with 100% accuracy. This new reagent will be a valuable tool for the diagnosis of mucosal infections in patients.

Chemotherapy destroys more than just the cancer

Patients undergoing chemotherapy for colorectal cancer frequently experience side effects such as nausea, vomiting, constipation and diarrhoea that can persist up to 10 years post-treatment. The reasons for these gut-specific side effects are unclear. Rachel McQuade and Vanesa Stojanovska from Victoria University have been studying the effects of common chemotherapies on the nerves in the gut that control secretion and motility. What they have found is quite alarming – the chemotherapies not only destroy the cancer but also the normal healthy nerve cells of the gut. These findings are likely to explain the side effects seen in patients receiving chemotherapy, and encourage the development of new therapies that do not have such destructive off-target effects.

Media contacts: Hannah Yong 0415 216 820 or Catherine West: 0415 928 211

The ASMR Medical Research Week
is supported by funding from the
Australian Government Department
of Health

Major National Supporter of ASMR MRW®



Australian Government

National Health and Medical Research Council