

QUEENSLAND'S FINEST PUSHING THE BOUNDRIES OF MEDICAL RESEARCH

Maternal Drinking a Cause for Male Stress

Alcohol consumption by mothers has decreased significantly over recent years. Health and medical research has revealed that maternal drinking causes serious newborn health problems such as foetal alcohol syndrome. New research from The University of Queensland shows that consumption of alcohol by mothers around the time of conception, may still have significant impacts on the offspring's long-term health.

PhD student Danielle Burgess (*UQ School of Biomedical Sciences*) has measured stress hormone levels in preclinical models, showing that alcohol consumption during early pregnancy or around the time of conception altered stress responses in males.

Using sophisticated technologies Danielle has determined that the "*female offspring of early alcohol consuming mothers had elevated ways to respond to alcohol exposure, potentially "protecting" them from elevated stress*" Danielle said.

Danielle's research indicates a number of complex alterations in the stress systems of the body following very early maternal alcohol consumption and that further research into the impacts of this on human health is necessary.

Genetic markers indicating response to exercise training!

Some people have the right genes to fit into their jeans but our DNA does not determine our fitness on its own.

Nicholas Harvey from Bond University is focussing on genetic markers that show up more in elite athletes compared to the general population.

The project seeks to understand why some people remain exercise intolerant. Examining an elite athlete cohort from the 2008 Hawaiian Ironman Triathlon (Genomics Research Centre) the team found that several genetic markers are significantly associated with endurance.

This means that there could be a genetic signature that indicates personal response to exercise training!

Parasitic worms bring hope for MS sufferers

It has long been recognized that there is an inverse relationship between infection with parasitic worms and the development of allergic and autoimmune diseases: people who live in parts of the world where the worms are present have a much lower chance of developing these types of diseases.

Recently it has been shown that live parasitic worms can be used successfully to treat some of these diseases, including multiple sclerosis. Aakanksha Dixit from UQ Centre for Clinical Research is identifying the active components of the worms and has data which suggests that this parasite-derived peptide has potential as a novel treatment for patients with MS.

Media Contact: Jeremy Brooks 0428 850 383

Fernanda Caldos Cardoso 0401822108 Catherine West on 0415 928211

ASMR MRW Queensland Postgraduate Student Conference supported by the Queensland Government