GUT MICROBIOME, ANTIPSYCHOTICS AND SCHIZOPHRENIA

Professor Xu-Feng Huang

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We investigated gut microbiome in response to antipsychotic drug risperidone treatment in the first episode schizophrenia patients. Our study revealed the correlation between the intestinal microflora and the changes of glycolipid metabolic parameters induced by risperidone treatment in these patients. Patients of first-episode schizophrenia showed an imbalance of intestinal flora and abnormality of inflammatory marker and the two factors interacting with each other which may play an important role in the development of schizophrenia. The abnormality of glucolipid metabolism index induced by risperidone may be at least partially attribute to the change of intestinal microflora composition. I would also like to present the development of gut-on-chip device.

TEA SAPONIN AMELIORATES ALTERATION OF GUT MICROBIOTA AND COGNITIVE DECLINE IN DIET-INDUCED OBESITY

Dr Yinghua Yu

Honorary Principal Fellow, Centre for Translational Neuroscience, UOW

Tea saponin treatment prevented the high fat (HF) diet-induced recognition memory impairment and improved neuroinflammation, gliosis and brain-derived neurotrophic factor deficits in the hippocampus. Furthermore, tea saponin attenuated the HF diet-induced endotoxemia, pro-inflammatory macrophage accumulation in the colon and controlled gut microbiota alterations. Tea saponin also improved glucose tolerance and reduced body weight gain in HF diet-induced obese mice. The behavioural and neurochemical improvements suggest that tea saponin could limit unfavourable gut microbiota alterations and cognitive decline in HF diet-induced obesity.

Date: Wednesday 27th June 2018
Time: 1 - 2 PM
Location: Auditorium, Research & Education Centre, St George Hospital
Ground Floor, 4 – 10 South St, Kogarah
Light refreshments will be provided
www.stgcs.med.unsw.edu.au/ripm