

RI Invited Speaker Form Please complete as much as you can

Name & job title:	Dr Tony Coll, University Lecturer
Institution:	University of Cambridge Metabolic Research Laboratories, Wellcome Trust-MRC Institute of Metabolic Science (IMS)
Talk title:	Mechanisms in disorders of energy balance
Date:	30 th October 2018
Seminar Abstract: (provide URL if easier)	Diseases of human metabolic health where energy balance is disordered are significant medical and socioeconomic problems. Meaningful intervention requires a knowledge of the processes involved. The understanding of human obesity has benefited greatly from advances in molecular genetics. In addition to the identification of many mechanistically illuminating, highly penetrant monogenic disorders, genome-wide association studies (GWAS) have identified multiple common genetic variants strongly associated with body mass index (BMI). In this seminar, I will review some of our work using murine models to better understand the biological significance of these genetic variants. I will also review some of our emerging work on GDF-15, a peptide long recognised to have an anorectic effect but only more recently acknowledged to be a bona fide hormone.
Speaker Biography: (provide URL if easier)	Dr Tony Coll is an Honorary Consultant Physician (Addenbrooke's Hospital, CUHFT) and a University Lecturer in Metabolic Medicine at the University of Cambridge (Clinical Biochemistry). He is based within Wellcome Trust-MRC Institute of Metabolic Science (IMS), a purpose built centre on the Addenbrooke's Biomedical Campus dedicated to research, education, prevention and clinical care in the areas of obesity, diabetes and related diseases. In collaboration with colleagues in the IMS (O'Rahilly, Yeo) he has active research group working on disorders of energy homeostasis, with a particular interest on how the brain controls food intake and energy expenditure. Our current understanding of the central control of appetite has relied heavily upon mouse models and he combines murine genetics and whole animal physiological studies to address these issues, in particular how signals from peripheral organs are integrated within the brain to change appetitive behaviour.