

PROF. VIMAL KARANI

SESSION: SYMPOSIUM 3 (DAY 3: 1235 – 1300)

TOPIC: NUTRIGENETICS: THE FUTURE OF SPORTS NUTRITION



Professor Vimal Karani is a Professor in Nutrigenetics & Nutrigenomics. He joined the University of Reading after his post-doctoral training at the MRC Epidemiology unit (Cambridge, UK) and University College London (London, UK). He has also received advanced training in Epidemiology at the London School of Hygiene and Tropical Medicine, London, UK. Professor Vimal Karani has an interdisciplinary academic background, with qualifications from Molecular Genetics, Bioinformatics, Statistical Genetics and Genetic Epidemiology. He has published extensively in areas related to nutrigenetics and non-communicable diseases and presently has more than 80 peer reviewed publications (including those in premier biomedical journals: Nature Genetics, Lancet, BMJ, PLoS Medicine and PLoS Genetics) and book chapters. He has received significant global media attention for his work on nutrition, lifestyle and cardiometabolic diseases. He has received funds as a PI and Co-I from various funding bodies such as the Medical Research Council (MRC), Global Challenge Research Fund (GCRF), British Nutrition Foundation (BNF), British Heart Foundation (BHF), National Health and Medical Research Council (NH-MRC), The British Council, Newton Fund, Rank Prize Funds Nutrition Committee award and the Nutrition Society (NS). In the last seven years, the grants that he has been associated with are of the value ~£2.6 million. He won the UK Nutrition Society's Silver Medal award for the year 2020 for his contribution to the world of global nutrition and for his research on 'GeNuIne (Gene-Nutrient Interactions) Collaboration: Towards implementing multi-ethnic population-based nutrigenetic studies of obesity in lower middle-income countries'.

His primary research interests focus on the investigation of gene-nutrient interactions on metabolic- and cardiovascular disease- related outcomes using combined approaches from genetic epidemiology, statistical genetics and molecular biology. His long term goal is to use the findings from observational studies to carry out human intervention studies with a view towards developing industrial collaborations to facilitate 'Personalised Nutrition'. He has initiated a large-scale collaborative project called GeNuIne (Gene-Nutrient Interactions) Collaboration that aims to develop a personalised nutrition program based on the evidence from nutrigenetics, nutrigenomics and dietary intervention studies using cohorts from various ethnic groups. In this collaborative study, gene-nutrient interactions on cardio-metabolic traits across various ethnic populations (such as UK, India, Indonesia, Brazil, Thailand, Sri Lanka, Ghana, Morocco, Turkey and Pakistan) are being examined.

Prof. Karani is also a study coordinator of a large international collaboration (D-CarDia Collaboration), where he focusses on establishing the causal relationship between 25-hydroxyvitamin D and cardiovascular disease-related outcomes using Mendelian Randomization analysis in >155,000 individuals from the UK, US and Europe and the UK Biobank (N~500, 000).