The impact of diet on health benefits conferred by probiotics and prebiotics

Maria Marco and Kevin Whelan, chairs

This discussion group will address the overarching question of whether diet impacts the capacity of probiotics and prebiotics to improve human health. The group will be guided by the following: What is the level of evidence from human studies that dietary background influences probiotic and prebiotic efficacy? What are the plausible mechanisms of diet-mediated effects on probiotics and prebiotics? How does the matrix in which probiotics and prebiotics are consumed alter their functionality in the digestive tract? What is the current state of knowledge on how dietary patterns modify the human gut microbiome? What is the optimal design of a dietary intervention study on the gut microbiome? Our major goal and output will be to work collaboratively towards developing detailed recommendations for taking diet and nutrition into account in the design of human studies on probiotics and prebiotics.