



181 Longwood Avenue Boston, Massachusetts 02115-5804 **Department of Medicine** *Channing Division of Network Medicine* 

## Channing Microbiome Seminar

January 27 (Friday), 2023, 9AM (ET)

Zoom: https://us02web.zoom.us/j/81070959105?pwd=RFJNd3dSZmR6dXJZNjJiYVVzQ3NEQT09

Meeting ID: 810 7095 9105 Passcode: 984617



## Sarah Berry, PhD

School of Life Course & Population Sciences King's College London

## Personalised nutrition for metabolic health

Abstract: There is growing awareness of the need to move beyond the 'one-size-fits-all' approach in nutritional advice. However, for personalised nutrition to become a reality, large-scale, high precision data integrating multiple dietary, lifestyle, physiological, genetic and metagenomic data is required. This seminar will explore 1) why we need personalised approaches to nutrition advice, 2) the current status of personalised nutrition and remote clinical trials and 3) new developments with a focus on the ZOE PREDICT programme of research. The ZOE PREDICT programme is an ongoing programme of personalised nutrition (n>45,000) assessing the genetic, metagenomic, metabolomic and meal-context drivers of metabolic responses to predict individual responses to food using AI. This research is at the forefront of developments in personalised nutrition and is forging a new way forward in the design and implementation of large-scale remote nutrition research studies integrating novel technologies, citizen science and AI. The PREDICT programme has demonstrated the large and potentially modifiable variation in metabolic responses to identical meals in healthy people and the role that 'what' we eat, 'who' we are, our microbiome, and 'how' we eat plays in shaping our responses.

Bio: Sarah Berry is a Reader in Nutritional Sciences at King's College London. Her research interests relate to the influence of dietary components on cardiometabolic disease risk, with particular focus on; personalised nutrition, postprandial lipid metabolism and food and fat structure. Since commencing her research career at King's, she has been the academic leader for more than 30 human nutrition studies in cardio-metabolic health. Sarah is also the Chief Scientist at ZOE Ltd and PI of the PREDICT programme of research, assessing the genetic, metabolic, metagenomic, and meal-dependent effects on metabolic responses to food in >45,000 individuals in the UK and US. This research is at the forefront of developments in personalised nutrition and is forging a new way forward in the design and implementation of large-scale remote nutrition research studies integrating novel technologies, citizen science and AI.



