



NuGO ECN WEBINAR

Converging Lipidomics Data across Multiple Study Types for Precision Nutrition Research

March 5, 15:00-16:00 (CET)

Prof. Marta Guasch-Ferré and Dr. Naixin Zang, University of Copenhagen

This webinar will explore the integration of traditional and omics-based biomarkers, with a particular focus on metabolomics, for disease prevention. We will provide key examples from recent studies that demonstrate the potential of these tools to enhance our understanding of diet-disease interactions. Specifically, we will present findings from an NIH-funded project that I lead as Principal Investigator, titled "Circulating Metabolites, Lifestyle, and Mortality".

We will then introduce the concept of precision nutrition, outlining its definition, goals, and the latest research that aims to tailor dietary interventions based on individual characteristics such as metabolic profiles and genetic predispositions. Drawing on our work, I will present findings related to dietary patterns, lifestyle factors, and their associations with metabolomic profiles and cardiometabolic outcomes.

Finally, we will present unpublished findings from my research group on an emerging topic in the field of nutrition—sustainable diets—and how the integration of sustainable dietary patterns with metabolomics can enhance disease prediction and improve the understanding of the diet-disease associations.

By putting together evidence from the latest scientific literature and my research, this talk will emphasize the potential of precision nutrition in preventing cardiometabolic diseases while also considering the challenges to its implementation. We will conclude with key messages on how these advancements can shape the future of dietary recommendations and public health strategies.