Metabolomics 2022 Valencia, Spain – June 19-23 https://www.metabolomics2022.org/

Pre-ConferenceWorkshop W8: Clinical Lipidomics

Organized by

NORDIC METABOLOMICS SOCIETY

Monday, June 20, 2022

8:15 Clinical lipidomics – an introduction (Margrét Thorsteinsdóttir; University of Iceland) 8:25 Impact of preanalytical factors on data quality in lipidomics (Tuulia Hyötyläinen; Örebro University, Sweden)

8:45 Microsampling and microextraction in clinical lipidomics: path forward? (Dajana Vuckovic; Concordia University, Canada)

9:05 Variabilities and reference ranges of human blood plasma lipids (Markus Wenk; National University of Singapore)

9:25 Moving towards human tissue reference lipidomes – analytical considerations (Maria Fedorova; Technische Universität Dresden, Germany)
9:45 Discussion (All speakers; Discussant –Matej Orešič; Örebro University, Sweden)

Within the metabolomics community, there is growing interest in the comprehensive analysis of lipids (lipidomics), especially in the clinical domain. This is because lipid-related disturbances play important roles in the pathogenesis of most of the common diseases. There are many (pre)analytical challenges and considerations that the researchers entering the field of lipidomics need to be aware of, which have been tackled over the past decades within the lipidomics community.

The workshop aims to introduce (1) the key factors that impact human lipid levels as measured by lipidomics, including biological (e.g., diet, circadian rhythm) and preanalytical (e.g., sample collection and storage), and (2) the analytical techniques, and related challenges, for lipidomic analysis of human biofluids and tissues, including discussion of inter-laboratory comparability and reference ranges. The workshop is intended for metabolomics researchers entering or already pursuing research in clinical lipidomics. Research experience level: intermediate-experts.

The workshop is supported by the COST Action CA19105 – Pan-European Network in Lipidomics and EpiLipidomics (EpiLipidNet; <u>https://www.epilipid.net/</u>). COST (European Cooperation in Science and Technology) is a funding agency for research and innovation networks. Our Actions help connect research initiatives across Europe and enable scientists to grow their ideas by sharing them with their peers. This boosts their research, career and innovation.







Funded by the Horizon 2020 Framework Programme of the European Union