Join Agilent's Lunch Presentation at Metabolomics 2023

Title: Next-Generation Metabolomics Analysis of Human Plasma Identifies Metabolites Associated with COVID-19 Severity

Speaker: Ethan Stancliffe, Ph.D Student, Computational and Systems Biology - Washington University

Understanding the molecular mechanisms that underpin the diverse disease outcomes that follow a COVID-19 diagnosis is critical for the design of therapeutics and development of clinical tests. As metabolomics enables a detailed metabolic readout of phenotype, we performed global, Next-Generation Metabolomics analysis of both the polar and non-polar fractions of human plasma from 339 individuals, with samples collected at six longitudinal time points. Using the temporal metabolic profiles and machine learning, we built a model of disease severity and discovered a panel of 22 metabolites that successfully discriminated between individuals with severe and mild cases. Through analysis of the longitudinal samples, we confirmed that most of these metabolite markers correlated with the disease course. Finally, we confirmed that these metabolites were also altered in a hamster model of COVID-19. This presentation will provide an overview of this study and highlight other applications of Panome Bio's Next-Generation Metabolomics technology.

Title: Automation in Targeted Multi-omics Workflows

Speaker: Dan Cuthbertson, Global Cell Biology & Disease Research Segment Manager - Agilent Technologies

A brief overview of updates in automation of multi-omics samples and a look at new technologies in mass spectrometry.

Title: Future Trends in Metabolomics

Speaker: Gary Patti, Ph.D - Professor, Departments of Chemistry, Genetics, and Medicine - Washington University, Chief Scientific Officer - PanomeBio

A look at important future trends in Metabolomics

Learn more about Agilent resources for metabolomics [here](#)