Session #	Abstract Number : Title	Presenter	Organization	Theme
1 Keynote	360: Genome-wide association study of the human lipidome provides new insight to lipid metabolism and metabolic disease	**Peter Meikle**	Baker Heart And Diabetes Institute	Technology, Systems Biology & Advancing the Field
1.1	78: Single cell analysis of lipids using chip-based nanoelectrospray ionisation mass spectrometry	**Sarah Hancock**	UNSW Sydney	Technology, Systems Biology & Advancing the Field
1.2	165: Multi-omic signatures of chronic metal tolerance	**Katie Hillyer**	CSIRO	Environmental, Plant, Animal, Agriculture, Food and Model Organisms
1.3	121: A reference map of sphingolipids in murine tissues	**Federico Torta**	National University Of Singapore	Environmental, Plant, Animal, Agriculture, Food and Model Organisms
2 Keynote		**Yulan Wang**	Singapore Phenome Center, Lee Kong Chian School of Medicine	
2.1	52: Discovery and validation of serum metabolites associated with wholegrain consumption using nontargeted metabolic profiling	**Stefania Noerman**	University of Eastern Finland	Environmental, Plant, Animal, Agriculture, Food and Model Organisms
2.2	51: Processing of Proton Transfer Reaction Time-of Flight Mass Spectrometry (PTR-TOF-MS) data for untargeted biomarker discovery in exhaled breath: application to COVID-19 intubated ventilated patient	**Camille Roquencourt**	CEA	Technology, Systems Biology & Advancing the Field
3 Keynote	362: Metabolomics in the Early Detection of Cardiovascular Disease: Taking the road less traveled	**Carina Mels**	Hypertension In Africa Research Team	Metabolomics in Health and Disease
3.1	192: FlyMet.org: an online metabolomics tissue atlas and multi-omics resource using Drosophila as a model organism	**Karen McLuskey**	University of Glasgow, UK	Environmental, Plant, Animal, Agriculture, Food and Model Organisms
3.2	18: Finger Sweat Analysis Enables Metabolic Biomonitoring in Humans	**Julia Brunmair**	Department Of Analytical Chemistry, Faculty Of Chemistry, University Of Vienna	Metabolomics in Health and Disease
3.3 Sponsor	272: Trends and technology in metabolomics-based microbiomics for gut-liver-brain research in oncology and neurology	**Therese Koal**	Biocrates Life Sciences	Metabolomics in Health and Disease
4 Keynote		**Theodore Alexandrov**	European Molecular Biology Laboratory (EMBL)	
4.1	62: MetaboAtlas21: A metabolome atlas of 21 mouse tissues and biofluids in response to the metabolic challenge	**Tomas Cajka**	Institute of Physiology of the Czech Academy of Sciences	Metabolomics in Health and Disease
4.2 Sponsor	253: New research perspectives using accurate mass technology for the advancement for metabolomics in systems biology.	**Jose Castro-Perez**	Sciex	Metabolomics in Health and Disease
5 Keynote	363: Exploring the Potential of Metabo-Endotypes and MultiOmic-Endotypes in the Improvement of Disease Classification	**Rachel Kelly**	Harvard Medical School	Technology, Systems Biology & Advancing the Field

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5.1	93: Metabolite Profiling of Fourteen By-Products from the Coffee Production Chain	**Mariana da Silva**	São Paulo State University	Environmental, Plant, Animal, Agriculture, Food and Model Organisms
5.2	41: Application of chemoresistive gas sensors and chemometric analysis to differentiate the fingerprints of global volatile organic compounds from diseases. Preliminary results of COPD, lung cancer and breast cancer.	**Rogelio Flores Ramírez**	Coordinación para la Innovación y Aplicación de la Ciencia y la Tecnología	Metabolomics in Health and Disease
5.3 Sponsor	453: Metabolomics Sample Collection in the Wild	**Annie Evans**	Metabolon	Technology, Systems Biology & Advancing the Field
6 Keynote	372: Untargeted Metabolomics Approach to Investigate Systematically the Mechanistic Action of Prospective Drugs for Neglected Diseases	**Marina F.M. Tavares**	University Of Sao Paulo	Metabolomics in Health and Disease
6.1	225: In vivo estimation of ketogenesis using metabolic flux analysis framework and double tracer method - technical challenges and model interpretation	**Stanislaw Deja**	UT Southwestern Medical Center	Metabolomics in Health and Disease
6.2	222: Detecting dynamic shifts in time-series metabolic data using machine learning	**BJ Stubbs**	Tufts University	Technology, Systems Biology & Advancing the Field
7 Keynote	361: Targeted and untargeted metabolomics in grape and wine research	**Farhana Pinu**	New Zealand Institute For Plant And Food Research Ltd	Environmental, Plant, Animal, Agriculture, Food and Model Organisms
7.1	187: NP-MRD: The World's Largest NMR Database for Natural Products	**Zinat Sayeeda**	University of Alberta	Technology, Systems Biology & Advancing the Field
7.2	76: Metabolomics of Switchgrass-Diazotroph Interactions	**Darian Smercina**	Pacific Northwest National Laboratory	Environmental, Plant, Animal, Agriculture, Food and Model Organisms
8 Keynote	365: Metabolic dysregulation in women with dormant genital tuberculosis	**Koel Chaudhury**	Indian Institute Of Technology Kharagpur	Metabolomics in Health and Disease
8.1	22: NMR metabolic profiling of bronchoalveolar lavage fluid to understand the pathogenesis of hypersensitivity pneumonitis	**Sanjukta Dasgupta**	IIT Kharagpur	Metabolomics in Health and Disease
8.2	59: Disease or medication? Delineating the metabolic effects of asthma vs. treatment – a case study for challenges in clinical metabolomics.	**Stacey Reinke**	Edith Cowan University	Metabolomics in Health and Disease
8.3	94: Rapid Development of Improved Data-Dependent Acquisition Strategies	**Joe Wandy**	Glasgow Polyomics, University of Glasgow	Technology, Systems Biology & Advancing the Field
9 Keynote	249: TB or not TB: New metabolomics biomarkers better characterizing and diagnosing tuberculosis.	**Du Toit Loots**	North-West University, Human Metabolomics	Metabolomics in Health and Disease

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9.1	27: Novel Machine Learning based Mass Spectral Similarity Scores substantially improve Metabolite Annotation Accuracy	**Justin JJ van der Hooft**	Wageningen University	Technology, Systems Biology & Advancing the Field
9.2	162: Diet and other determinants of blood acylcarnitine concentrations in healthy individuals of the European Prospective Investigation into Cancer and nutrition study	**Roland Wedekind**	International Agency For Research On Cancer	Metabolomics in Health and Disease
10 Keynote	294: Discovering Pesticides, Pharmaceuticals and their Transformation Products in Luxembourg Waters using Open Cheminformatics Approaches	**Emma Schymanski**	LCSB, University Of Luxembourg	Technology, Systems Biology & Advancing the Field
10.1	115: Exposure to environmental contaminants is associated with sex-specific alterations of hepatic metabolism in non-alcoholic fatty liver disease	**Tuulia Hyötyläinen**	Örebro University	Metabolomics in Health and Disease
10.2	32: Flipping the metabolomics workflow: Assigning confidence to structural annotations from mass spectra with COSMIC	**Martin Hoffmann**	Friedrich Schiller Universität Jena	Technology, Systems Biology & Advancing the Field
11 Keynote	364: Unravelling the biochemistry of bipolar disorder: a multi-omics approach	**Alessandra Sussulini**	University Of Campinas	Metabolomics in Health and Disease
11.1	183: Systemic and Lung Tissue Specific Metabolic Effects of Allergic Sensitization in Mice	**Kedir Turi**	Vanderbilt University	Environmental, Plant, Animal, Agriculture, Food and Model Organisms
11.2 Sponsor	343: Robust metabolic profiling for routine quantitation and confident unknown identification	**Amanda Souza**	Thermo Fisher Scientific	Technology, Systems Biology & Advancing the Field
12 Keynote		**Bing Yu**	University of Texas Health Science Center at Houston	
12.1	95: Plasma Metabolomic Profiles of Age-related Macular Degeneration Progression	**Ines Lains**	Massachusetts Eye And Ear, Harvard Medical School	Metabolomics in Health and Disease
12.2	220: Metabolomics on a Chip: Development of an Impedance-Based Metabolite Biosensor for Early Diagnosis of Colon Cancer	**Ya-Chun Chan**	University Of Alberta	Metabolomics in Health and Disease