

Sunday 18 October 2026

9:00 AM - 2:00 PM	ANPC EMCR pre-conference workshop	Workshop Australian National Phenome Centre
3:15 PM - 4:00 PM	Conference Registration	Registration The Mezzanine
4:00 PM - 4:30 PM	Opening & Welcome to Country	Opening Riverside Ballroom
4:30 PM - 5:30 PM	Opening Plenary - Prof. Kerry-Anne Rye	Plenary Riverside Ballroom
4:30 PM	Lipidomics and Lipid Function-Measuring Lipids is no Longer Enough Prof. Kerry-Anne Rye	
5:30 PM - 6:00 PM	ECR Rapid-Fire Talks	Session Riverside Ballroom
5:30 PM	Quantification and Localisation of New Brain Lipid Synthesis Using Deuterium Oxide and High Resolution Mass Spectrometry Catherine Zhang	
5:34 PM	Circulating fatty acid oxidation intermediates predict survival in ageing men: a prospective metabolomics study Manthan Sharma	
5:38 PM	Investigating Microglial Lipid Metabolism in Response to Amyloid-Beta: Implications for Alzheimer's Disease Ayesha Templeman	
5:42 PM	The lipid landscape behind harmful extracellular vesicle release in vascular aging Elizaveta (Eliza) James	
5:50 PM	Integrative Modelling of Lipidomics and Lipoproteomics: A Comparative Approach for BMI Prediction Novia Minaee	
5:54 PM	A Systematic Evaluation of Extraction and 4D-MS Parameters for Comprehensive Human Blood Lipidomics Nurul Saadah Ahmad	
6:00 PM - 8:00 PM	Welcome Reception	Social Silver Room

Monday 19 October 2026

8:00 AM - 8:45 AM	Registration	Registration The Mezzanine
8:45 AM - 9:30 AM	Keynote Prof. Hiroshi Tsugawa	Keynote Riverside Ballroom
8:45 AM	Toward agent-assisted lipidomics: extending the MS-DIAL ecosystem from laboratory-scale lipidomics to reproducible public data reanalysis Prof. Hiroshi Tsugawa	
9:30 AM - 10:30 AM	AI, Computational Tools & Data Standards for Lipidomics 1 <i>Computational tools and software in lipidomics</i>	Session Riverside Ballroom
9:30 AM	LipRich: An Open-Source, Browser-Based Application for Normalisation, Statistical Analysis, and Pathway Enrichment using Untargeted Lipidomics Data Sarah Hancock	
9:45 AM	An atlas of imputed plasma lipidomic biomarkers for health and disease in 197,840 individuals from the UK Biobank Changyu Yi	
10:00 AM	A pilot study of AI assisted LC-MS lipid structure identification for under represented lipid categories Zhixu Ni	
10:15 AM	A high-throughput LC-MS and machine learning framework for population-scale plasma lipidomics Amy W. Liang	
10:30 AM - 11:15 AM	Morning Tea	Break Silver Room
11:15 AM - 12:15 PM	Lipids in Health and Disease 1 <i>Membrane, in-vitro biology and biosensors</i>	Session Riverside Ballroom
11:15 AM	Melanoma cells remodel their lipidome yet maintain membrane biophysical properties during drug adaptation Aurelie Benfield	
11:27 AM	ER translocon gating governs metabolic allocation through selective lipid routing Carl Mousley	
11:39 AM	Co-fractionation multiomics for mapping the composition of native membrane lipid-protein complex interactomes Liuyu Peng	
11:51 AM	Effects of Reactive Oxygen Species on Liposomal Biomimetics of the Mitochondrial Membranes: A Biophysical Approach Susana Mesen-Porras	
12:03 PM	Characterization of a lipid droplet-associated microalgal protein as a novel phosphatidic acid biosensor Bilge Ercan	
12:15 PM - 1:45 PM	Lunch & Poster Session	Lunch Silver Room
POSTER 1	High-throughput regioisomer resolved analysis of phosphoinositides Kevin Huynh	
POSTER 3	A Comprehensive Targeted Lipidomics Workflow for Characterisation of Multiple Biological Matrices Dana Hicks	
POSTER 5	Quantification and Localisation of New Brain Lipid Synthesis Using Deuterium Oxide and High Resolution Mass Spectrometry Catherine Zhang	
POSTER 7	Bridging Lipid Annotation and Chemometric Analysis Through a Cross-Platform Nontargeted Lipidomics Workflow Chris Fouracre	
POSTER 9	Circulating fatty acid oxidation intermediates predict survival in ageing men: a prospective metabolomics study Manthan Sharma	
POSTER 11	Clinical Translation of Targeted Lipidomics: Validation of BREASTEST plus v2 for Early Breast Cancer Detection Mark David	
POSTER 13	Integrative Modelling of Lipidomics and Lipoproteomics: A Comparative Approach for BMI Prediction Novia Minaee	
POSTER 15	A unified workflow for small molecule analysis for exposomics and molecular epidemiology Bruker Sponsor	
POSTER 17	Targeted lipidomics identifies markers for skin collection in a minimally invasive micro-biopsy punch Kailyn O'Connor	
POSTER 19	Lipidomic Characterisation of Human Monocytes, Macrophages and Monocyte-Derived Microglia-Like Cells Matilda van Buuren-Milne	
POSTER 21	Glass-Like Well Plates for High-Throughput Lipidomics: Limiting Analyte Loss and Reducing Extractables Trajan Sponsor	
POSTER 23	Characterising Coffee Lipids from Green Bean to Brew: A Lipidomic Approach Jermaine Marie Ann Fabella	

POSTER 25	Serum lipidomics reveals class-specific lipid remodelling and altered acyl chain composition in Parkinson's disease Jack Price
POSTER 27	Ion mobility separation of lipids using a MALDI XS source with a Waters Cyclic IMS P20 Marten F. Snel
POSTER 29	Profiling Short-Chain Acylcarnitines in Human Peripheral Blood Mononuclear Cells Thy Duong
POSTER 31	Root-shoot lipidome interactions in Medicago truncatula after drought stress Alastair Ross
POSTER 33	Lipid remodelling defines divergent cancer immunotherapy outcomes Nicola Principe
POSTER 35	Pre-Analytical Matrix Considerations in Sepsis Lipidomics: A Systematic Review Comparing Serum and Plasma Profiling in Bacterial Infections Nurul Saadah Ahmad
1:45 PM - 2:30 PM	Keynote - A/Prof. Hyungwon Choi Keynote Riverside Ballroom
1:45 PM	Scalable workflows for population-scale lipidomics in cardiometabolic diseases A/Prof. Hyungwon Choi
2:30 PM - 3:15 PM	Clinical Lipidomics: From Pre-analytics to Cohort Studies 1 <i>Clinical and population lipidomics</i> Session Riverside Ballroom
2:30 PM	Comprehensive, multi-ancestry lipidomic GWAS reveals molecular pathways linking the human lipidome to cardiometabolic, neurodegenerative, and cancer risk Corey Giles
2:45 PM	Lipoprotein and lipid perturbations induced by acute and chronic inflammation Samantha Lodge
3:00 PM	A lipidomic risk score improves cardiovascular risk assessment in statin treatment across large cohorts Jingqin Wu
3:15 PM - 3:50 PM	Afternoon Tea Break Silver Room
3:50 PM - 4:20 PM	Platinum Sponsor Invited Talk: SCIEX Session Riverside Ballroom
3:50 PM	Large panel of lipid identification and quantitation using ZT Scan DIA analysis Dr. Thusitha Rupasinghe
4:20 PM - 5:00 PM	Clinical Lipidomics: From Pre-analytics to Cohort Studies 2 <i>Clinical and population lipidomics</i> Session Riverside Ballroom
4:22 PM	When recovery differs: Sex-based lipidomic changes after childhood burn injury Monique J Ryan
4:34 PM	Mass spectrometry-based plasma lipidomics identifies PUFA-related signatures associated with future stroke risk in older men Jaya Ajay Singh
4:46 PM	Identification of novel lipidomic biomarkers in first trimester maternal serum for the screening of aneuploidy specifically trisomy 21. Khoa Lam
5:15 PM - 6:00 PM	Australian Lipid Society AGM AGM Riverside Ballroom

Tuesday 20 October 2026

8:00 AM - 8:45 AM	Registration	Registration The Mezzanine
8:45 AM - 9:30 AM	Keynote - Prof. Gerald Watts	Keynote Riverside Ballroom
8:45 AM	Awaiting abstract Prof. Gerald Watts	
9:30 AM - 10:30 AM	Lipids in Health and Disease 2 <i>Lipoproteins and lipids in cardiometabolic disease</i>	Session Riverside Ballroom
9:30 AM	Defining the potential of alkylglycerol supplementation for treating diverse metabolic disorders Richard G. Lee	
9:45 AM	Non-Canonical Sphingolipid Remodeling in Adipose Tissue Tracks Insulin Resistance and Type 2 Diabetes Remission Elin Chorell	
10:00 AM	Targeting Endothelial Plasma Membrane Cholesterol to Mitigate Atherogenesis Jacob (Yanfei) Qi	
10:15 AM	Integrative lipidomic analysis across six cohorts reveals biological pathways underlying cardiovascular disease risk Tingting Wang	
10:30 AM - 11:15 AM	Morning Tea	Break Silver Room
11:15 AM - 12:15 PM	Microbial & Plant Lipids in Health and Biotechnology 1 <i>Lipidomic applications in animals, milk and microbiota</i>	Session Riverside Ballroom
11:15 AM	Free fatty acid consumption, metabolism and biosynthesis in honeybees Sam Hodgkinson	
11:27 AM	Untargeted lipidomics and proteomics to expand molecular coverage of human milk Alexandra George	
11:39 AM	High marbled Wagyu beef vs. low marbled Water buffalo beef - are there differences in the lipidome of muscle between both breeds? Dirk Dannenberger	
11:51 AM	Whole-grain rye feeding drives tissue-specific host-metabolic and microbial responses beyond conventional clinical endpoints Ambrin Farizah Babu	
12:03 PM	Interactive effects of lactation stage, dietary supplementation, and maternal metabolic state on human milk lipidome Baoru Yang	
12:15 PM - 1:45 PM	Lunch & Poster Session	Lunch Silver Room
POSTER 4	Application of Zeno SWATH DIA in multi-tissue metabolomic profiling Dr. Thusitha Rupasinghe	
POSTER 12	Investigating Microglial Lipid Metabolism in Response to Amyloid-Beta: Implications for Alzheimer's Disease Ayesha Templeman	
POSTER 20	The lipid landscape behind harmful extracellular vesicle release in vascular aging Elizaveta (Eliza) James	
POSTER 2	Development of a targeted lipid plasma method with a propanol free mobile phase Lee Thomasson	
POSTER 22	A Systematic Evaluation of Extraction and 4D-MS Parameters for Comprehensive Human Blood Lipidomics Nurul Saadah Ahmad	
POSTER 14	Lipidomic analysis reveals a distinct PUFA-rich profile in endometriosis Sarah W. Walsh	
POSTER 8	Development of a metabolomic screening algorithm for the early detection of genetic disorders using newborn dried bloodspots: The NewbornsInSA Study Tomas Rozek	
POSTER 16	Lipidome-wide analyses provide novel insights into the relationship between lipid metabolism, type 2 diabetes and prediabetes risk. Habtamu Bedimo Beyene	
POSTER 6	MStargetR: A reproducible, auditable, and containerised R workflow for end-to-end targeted mass spectrometry data processing Harrison Szemray	
POSTER 24	Targeting lipid and cholesterol metabolism in endometrial cancer Claudia E. Tiplady	
POSTER 10	Enabling Precision and Translational Lipidomics Through Bespoke Deuterated Lipids from ANSTO's National Deuteration Facility NDF sponsor	

POSTER 18	High-throughput Single-cell Multi-OMICS Using Standard-flow LC and a Multi-reflecting TOF MS Marten F. Snel
POSTER 26	Total Lipid Extract (TLE) from Bovine Liver (Avanti) on Orbitrap Tribrid Apex Small Molecule MS Thermo sponsor
POSTER 28	Sex-Specific Lipid Signatures Associated with Paracetamol Exposure Shaimaa Khandaker
POSTER 30	Optimization and Clinical Validation of a Cell-Free Cholesterol Efflux Capacity Assay Using Immobilized Liposomes-bound Magnetic Beads in Statin-Treated Patients Wanida Laiwattanapaisai
POSTER 32	Acetonitrile-Derived Acetamidinium Adduct Formation Reduces Signal Intensity in LC-MS Lipidomics Nat Mellett
POSTER 34	Enhancing the biodistribution of artificial lipid droplets as a novel lipid particle delivery system in vivo Ebony Monson
POSTER 36	Circular Bioprocessing: A study of spent media and biomass recycling with Umbelopsis isabellina Jasmeet Kaur Khanijou
1:45 PM - 2:30 PM	Keynote - Dr. Laura Bindila Keynote Riverside Ballroom
1:45 PM	Awaiting abstract Dr. Laura Bindila
2:30 PM - 3:15 PM	Advancements in Lipidomic Technologies 1 <i>Novel lipidomic methods and lipidomic applications in tissue</i> Session Riverside Ballroom
2:30 PM	Multi-Region Brain Lipidomics in Alzheimer's Disease Neuropathology Kevin Huynh
2:45 PM	Analysis of Total Fatty Acids by SFC/MS: Separation of Omega-3 and Omega-6, Branched and Hydroxy Fatty Acids Michaela Chocholouskova
3:00 PM	In vivo stable isotope labelling and mass spectrometry reveals that the APOE4 is a loss of function allele for brain lipid turnover Yushan Cai
3:15 PM - 4:00 PM	Afternoon Tea Break Silver Room
4:00 PM - 5:00 PM	Advancements in Lipidomic Technologies 2 <i>Novel lipidomic methods and lipidomic applications in tissue</i> Session Riverside Ballroom
4:00 PM	Rapid, High-Throughput Lipid Class Separation Using Supercritical Fluid Chromatography-Mass Spectrometry (SFC-MS) Rangika Perera
4:12 PM	A novel targeted reversed-phase LC-QqQ-MS/MS methodology reveals that ER translocon gating governs storage and membrane lipid partitioning in Saccharomyces cerevisiae Lee Thomasson
4:24 PM	Investigating the Diabetic Lipidome: A DBS-Based High-Resolution Mass Spectrometry Approach Jayden Lee Roberts
4:36 PM	Towards Quantitative FTIR-Based Plasma Lipid Profiling: A Design of Experiments Approach to Optimising Lipid Extraction Satnam Kaur
4:48 PM	Lipidomic investigation of atherosclerotic plaque in S. pneumoniae inoculated ApoE-/- mice Kanishka Senthilvel
7:00 PM - 10:00 PM	Conference Dinner  Dinner Reel Kitchen

Wednesday 21 October 2026

8:00 AM - 8:45 AM	Registration	Registration The Mezzanine
8:45 AM - 9:30 AM	Keynote - A/Prof. Shane Ellis	Keynote Riverside Ballroom
8:45 AM	Next-Generation Approaches for Enhancing Spatial Lipidomics A/Prof. Shane Ellis	
9:30 AM - 10:30 AM	Lipid Imaging & Single-Cell Lipidomics 1 <i>Imaging, Spatial and Structural Lipidomics</i>	Session Riverside Ballroom
9:30 AM	Lipidomic profiling of cancer cell membranes reveals signatures for therapeutic targeting Sonia Henriques	
9:45 AM	Assigning sn-position in glycerophospholipids by hyphenation of reversed-phase chromatography and collision-/ozone-induced dissociation mass spectrometry Qiyu Liu	
10:00 AM	Spatial Lipidomics Reveals Lipid Signatures Associated with Plaque Instability and Rupture in Medial-Derived Carotid Atherosclerotic Plaques Hanane Belhouf-Fakir	
10:15 AM	A tale of two glycerols: Uncovering the structural diversity of phosphatidylglycerol congeners through multi-dimensional analysis Therese M. Fulloon	
10:30 AM - 11:15 AM	Morning Tea	Break Silver Room
11:15 AM - 12:25 PM	Lipid Particles and Delivery Systems 1 <i>Lipid synthesis, delivery and metabolism</i>	Session Riverside Ballroom
11:15 AM	RNA Capture and Retention in Lyotropic Lipid Mesophases Dev Chauhan	
11:27 AM	Targeted lipid nanoparticle delivery of plasmalogen precursors as a therapeutic strategy to restore plasmalogen levels and enhance cellular resistance to stress-mediated injury Pukjara Jena Rungreang	
11:39 AM	Developing Potent and Selective Ceramide Synthase 6 Inhibitors for the Treatment of Metabolic Dysfunction in the Liver Patricia Schwarzkopf	
11:51 AM	Inhibition of lysosomal beta glucocerebrosidase promotes de novo synthesis in a neuronal model Jennifer Saville	
12:03 PM	Acetaminophen-Mediated Alteration of Cardiolipin distribution in Rat Organ Tissue HAY-YAN WANG	
12:15 PM	COMbiNtorial Chemistry for QUantitative Standards (CONCQUEST): Quantitative Phospholipid Standards via Randomized De Novo Synthesis Yanning Li	
12:30 PM - 2:00 PM	Closing Lunch  Agilent Technologies	Lunch Sen5es Restaurant and Wine Bar
2:00 PM - 3:00 PM	Closing Plenary - Prof. Aleksandra Filipovska	Plenary Riverside Ballroom
2:00 PM	Mitochondrial Architecture in Health and Disease: from Membrane Complexes to Organelle Networks Prof. Aleksandra Filipovska	
3:00 PM - 3:30 PM	Closing Address Awards & Prizes	Closing Riverside Ballroom