

Time slot	Sunday 27 June	Time slot	Monday 28 th	Time slot	Tuesday 29 th	Time slot	Wednesday 30 th	Time slot	Thursday 1 st July
		08.30 - 18.00	Registration						
		Plenary session * 09.00 - 10.30	PLENARY SESSION P1 APPLICATIONS GALORE! Chair: Roy Goodacre (UK)	Plenary session * 09.00 - 10.30	PLENARY SESSION P2 ADVANCED TECHNOLOGIES Chair: Masura Tomita (Japan)	Plenary session * 09.00 - 10.30	PLENARY SESSION P4 YOUNG SCIENTISTS: SPONSORED BY MPF Chair: Jules Griffin (UK)	Parallel Session 9A 09.00 - 10.30	NUTRITION & HEALTH SPONSORED BY UNILEVER Chair: Ben van Ommen (Netherlands)
Registration 08.30 - 18.00	Registration / coffee	09.00 - 09.50 Keynote speaker	Jack Newman (USA) Microbial Fermentations for Diesel Fuel Production	09.00 - 09.50 Keynote speaker	Graham Cooks (USA) Mass Spectrometry and Metabolomics: Miniaturization, Ambient Ionization, Microorganisms and Disease Diagnosis	09.00 - 09.30 Invited speaker	Thomas Hankemeier (Netherlands) Metabolomics tools & technologies: now & tomorrow?	09.00 - 09.30 Invited speaker	Lorraine Brennan (Ireland) Identification of nutritional responsive phenotypes: the role of metabolomics
Workshops 10.00 - 12.30	Workshops	09.50 - 10.10 Selected speaker	John Draper (UK) Common patterns of metabolic reprogramming are associated with cellular penetration in two very different plant- pathogen interactions	09.50 - 10.10 Selected speaker	Justin van der Hooft (Netherlands) Systematic metabolite identification using HPLC-MSn fragmentation trees and LC- MS-SPE-NMR	09.30 - 09.45 Selected speaker	Cheryl Strelko (USA) NMR metabolic analyses with 13C-glutamine identify altered TCA and gamma-glutamyl cycles in the metastatic VM-M3 tumorigenic cell line	09.30 - 09.50 Selected speaker	Ali Moazzami (Sweden) Metabolomics study of the effect of rye bran intervention on the progression of prostate cancer
Parallel Workshop 1a 10.00 - 12.30	Mass Spectrometry: identification and quantification strategies	10.10 - 10.30 Selected speaker	Steffen Neumann (Germany) In silico fragmentation and chemical similarity for metabolite identification from tandem-MS	10.10 - 10.30 Selected speaker	Clare Daykin (UK) Interactive Metabolomics: A Powerful New Technique	09.45 - 10.00 Selected speaker	Lynsey MacIntyre (UK) Mapping Biomarkers in the Brain using Mass Spectrometry-Based Metabolomic Profiling on Several Platforms MS	09.50 - 10.10 Selected speaker	Amanda Lloyd (UK) Development of metabolomics as novel approach to biological indicators which characterise and quantify dietary exposure
	see separate Workshop programmes		xxxxxx		xxxxxx	10.00 - 10.15 Selected speaker	Peter Wurtz (Finland) Quantitative metabolic profiling of early risk for atherosclerosis by serum NMR metabolomics	10.10 - 10.30 Selected speaker	Ewa Szymanska (Netherlands) Tracking nutritional effects: a biostatistics view on applied metabolomics studies
			xxxxxx		xxxxxx	10.15 - 10.30 Selected speaker	Jeongwoon Kim (USA) A tomato EMS mutant with altered trichome flavonoid methylation identified by LC-MS screening	Parallel Session 9B 09.00 - 10.30	METABOLOMICS-ASSISTED BREEDING Chair: Joachim Kopka (Germany)
Parallel Workshop 1b 10.00 - 12.30	Developments in NMR		xxxxxx		xxxxxx		xxxxxx	09.00 - 09.30 Invited speaker	Arnaud Bovy (Netherlands) Metabolomics-assisted breeding to improve the consumer quality of tomato fruit
	see separate Workshop programmes		xxxxxx		xxxxxx		xxxxxx	09.30 - 09.50 Selected speaker	Henning Redestig (Japan) Covering the chemical diversity of rice kernels to investigate correlations between metabolite levels and phenotypical traits
			xxxxxx		xxxxxx		xxxxxx	09.50 - 10.10 Selected speaker	Takayuki Tohge (Germany) Metabolomics-assisted breeding: a viable option for crop improvement?
			xxxxxx		xxxxxx		xxxxxx	10.10 - 10.30 Selected speaker	Yaakov Tadmor (Israel) Comparative intraspecific metabolomic and genomic variation analyses in Cucumis melo
		Coffee 10.30 - 11.00	Coffee 10.30 - 11.00	Coffee 10.30 - 11.00	Coffee 10.30 - 11.00	Coffee 10.30 - 11.00	Coffee 10.30 - 11.00		Coffee 10.30 - 11.00
		Parallel Session 1A 11.00 - 12.30	MODEL SYSTEMS FOR TRANSLATIONAL RESEARCH Chair: Mark Viant (UK)	Plenary session * 11.00 - 12.30	DATABASES, BIOINFORMATICS & DATA ANALYSIS P3 Chair: Oliver Fiehn (USA)	Parallel Session 6A 11.00 - 12.30	GENOME, METABOLOME, MICROBIOME Chair: Uwe Sauer (Switzerland)	Plenary Session 10.30 - 12.30	PLENARY SESSION P5 THE FUTURE Chair: Thomas Hankemeier
		11.00 - 11.30 Invited speaker	Henri Brunengraber (USA) Uncovering the metabolism of 4- hydroxyacids: drugs of abuse and products of lipid peroxidation	11.00 - 11.30 Invited speaker	Ben van Ommen (Netherlands) How to deal with metabolomics data and databases?	11.00 - 11.30 Selected speaker	Marc-Emmanuel Dumas (UK) Genomics and network biology of metabolic profiles	11.00 - 11.50 Keynote speaker	Hannelore Daniel (Germany) Metabolomics between powerful technologies and lack of knowledge

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		11.30 - 11.50 Selected speaker	Jake Bundy (UK) Metabolic changes of ageing and longevity in the nematode <i>C. elegans</i>	11.30 - 11.50 Selected speaker	Amine Ghozlane (France) Metaboflux : a method to analyse flux distributions in metabolic networks.	11.30 - 11.50 Selected speaker	Jerzy Adamski (Germany) Metabolites profiled by targeted metabolomics associate with lipid levels		
		11.50 - 12.10 Selected speaker	Aalim Weljie (Canada) Hypoxia-induced metabolic shifts in cancer cells: beyond the 'Warburg effect'	11.50 - 12.10 Selected speaker	Jeroen Jansen (Netherlands) Between-Metabolite Relationships: metabolomics with new glasses	11.50 - 12.10 Selected speaker	Thomas Binsl (Netherlands) Metabolic flux determination under non-steady state conditions in an in vitro model of the large intestine containing human faecal microbiota	11.50 - 12.20	Society issues Presentation Noble Foundation Prize for Best Young Plant Scientist
		12.10 - 12.30 Selected speaker	Paul Lee (USA) Application of Tracer-based Metabolomics and Phenotypic Phase Plane Analysis in Metabolic Studies	12.10 - 12.30 Selected speaker	Miguel Rojas-Cheto (Netherlands) The metabolite identification pipeline based on MS fragmentation	12.10 - 12.30 Selected speaker	Nicola Zamboni (Switzerland) Deep phenotyping of genomes by high-throughput metabolomics	12.20 - 12.30	Masaru Tomita Invitation to metabolomics2011
		Parallel Session 1B 11.00 - 12.30	TECHNOLOGY UPDATES Chair: Lloyd Sumner (USA)		xxxxxx	Parallel Session 6B 11.00 - 12.30	BIOTIC INTERACTIONS AND PLANT STRESS Chair: Simone Rochfort (Australia)	Close	Robert Hall Thomas Hankemeier
		11.00 - 11.30 Selected speaker	Volker Krufft (sponsored by AB Sciex) A strategy for the quantitative analysis of all lipids in complex samples with a single acquisition method.		xxxxxx	11.00 - 11.30 Invited speaker	Lloyd Sumner (USA) Metabolomics Reveals that the Devastating Phymatotrichopsis omnivora (root rot) Pathogen Circumvents Traditional Medicago truncatula Defense Responses and Suggests Strategies for Metabolic Engineering of Resistance		
		11.30 - 11.50 Selected speaker	Ed Ledford (sponsored by ZOEX) Classification of Breast Cancer Grades by Pattern Recognition in GC x GC x HiResTOMFS Images		xxxxxx	11.30 - 11.50 Selected speaker	Joachim Kopka (Germany) The GC-MS metabolite profiling platform for Legume analysis (2003-2010): A case study from metabolite atlas to the testing of robustness for translational genomics		
		11.50 - 12.10 Selected speaker	Martin Hornshaw (sponsored by ThermoFisher) Discovering Unexpected Products of CYP Catalysed Reactions in Brain using Charge-Tagging™ and LTQ Orbitrap MSn.		xxxxxx	11.50 - 12.10 Selected speaker	Kirsten Leiss (Netherlands) An eco-metabolomic approach to study host plant resistance		
		12.10 - 12.30 Selected speaker	Theodore Sana (sponsored by Agilent) A QTOF generated LC-MS/MS library facilitates compound identification of non-targeted metabolomics data.		xxxxxx	12.10 - 12.30 Selected speaker	Susanne Rasmussen (New Zealand) Metabolomics analysis of plant-fungal associations: New insights from the Lolium perenne - Neotyphodium lolii symbiosis		
Lunch 12.30 - 14.00	Lunch	Lunch & Posters: 12.30 - 14.00	Lunch & Posters	Lunch & Posters: 12.30 - 14.00	Lunch & Posters	Lunch & Posters: 12.30 - 14.00	Lunch & Posters	12.30	Depart
		Sponsor session 12.45 - 13.45	Technology Showcase 1A Platinum Sponsor LECO	Sponsor session 12.45 - 13.45	Technology Showcase 2A Platinum Sponsor ThermoFisher	Sponsor session 12.45 - 13.45	Technology Showcase 3A Platinum Sponsor Agilent		
		Sponsor session 12.45 - 13.45	Technology Showcase 1B Platinum Sponsor: Waters	Sponsor session 12.45 - 13.45	Technology Showcase 2A Platinum Sponsor Ab SCIEX				
Parallel workshop 2a 14.00 - 16.30	Biostatistics, chemometrics and bioinformatics	Parallel session 2A 14.00 - 15.30	METABOLOMICS & BIOMARKER DISCOVERY Chair: Rima Kaddurah-Daouk (USA)	Parallel session 4A 14.00 - 15.30	PHARMACOMETABOLOMICS, PERSONALIZED HEALTH & THE FUTURE OF THE HEALTH SYSTEM Chair: Guowang Xu (China)	Parallel session 7A 14.00 - 15.30	PATHWAYS DISCOVERY AND DISEASE PATHOPHYSIOLOGY Chair: Matej Oresic (Finland)		NuGO Workshop

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	see separate Workshop programmes	14.00 – 14.30 Invited speaker	Rick Dunn (UK) Traversing the methodological gap - defining the role of metabolism in human function at the systems level with advances in large-scale mass spectrometry-based studies	14.00 – 14.30 Invited speaker	Jan van der Greef (Netherlands) One size fits all? : a systems perspective on Personalized Health	14.00 – 14.30 Invited speaker	Joshua Rabinowitz Viral Hijacking of Host Cell Metabolism		
		14.30 - 14.50 Selected speaker	David Broadhurst (Ireland) Uncovering the Metabolomic Signature of Intrauterine Growth Restriction in Early Pregnancy: Search, Discovery and Validation	14.30 - 14.50 Selected speaker	Rima Kaddurah-Daouk (USA) Pharmacometabolomics Research Network: Approach for Personalized Medicine	14.30 - 14.50 Selected speaker	Kenjiro Kami (Japan) CE-MS-based Metabolomics Identified a Novel Anaerobic Energy Metabolism of Cancer Cells		
		14.50 - 15.10 Selected speaker	Guowang Xu (China) Where and how to "fish" disease-related metabolite biomarkers by using LC-MS based metabonomics	14.50 - 15.10 Selected speaker	Rachel Cavill (UK) Integrating transcriptomic and metabolomic data to enhance the detection of pathways associated with drug response	14.50 - 15.10 Selected speaker	Jean-Charles Portais (France) Complementarity of NMR and MS for pathway discovery using 13C-labelling strategies: the example of the ethylmalonyl-CoA pathway in bacteria		
		15.10 - 15.30 Selected speaker	Matej Oresic (Finland) Metabolome in schizophrenia and related psychotic disorders: Findings from the general population cohort	15.10 - 15.30 Selected speaker	Jildau Bouwman (Netherlands) Let's visualize personalized health	15.10 - 15.30 Selected speaker	Dinesh Barupal (USA) Impact of hormonal receptors expression on breast cancer metabolic phenotypes		

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Parallel workshop 2b 14.00 - 16.30	Plant metabolomics	Parallel Session 2B 14.00 - 15.30	ENVIRONMENT & ECOLOGY Chair: Jake Bundy (UK)	Parallel Session 4B 14.00 - 15.30	DEVELOPMENTS IN PLANT METABOLOMICS Chair: Ute Roessner (Australia)	Parallel Session 7B 14.00 - 15.30	PLANT SYSTEMS BIOLOGY Chair: Mike Beale (UK)		
		14.00 – 14.30 Invited speaker	Nicole van Dam (Netherlands) Metabolomics for plant-herbivore interactions: Let's go wild!	14.00 – 14.30 Invited speaker	Dan Jones (USA) Deep profiling and localization of specialized plant metabolites	14.00 – 14.30 Invited speaker	Wolfram Weckwerth Green Systems Biology – from genomes, metabolomes and proteomes to ecosystems		
		14.30 - 14.50 Selected speaker	Dan Bearden (USA) Environmental Metabolomics with Marine Organisms	14.30 - 14.50 Selected speaker	Miyako Kusano (Japan) Multi-platform metabolomics approach for an objective substantial equivalence assessment of transgenic tomato	14.30 - 14.50 Selected speaker	Annemie Geeraerd (Belgium) Systems biology investigation of the ethylene metabolism of tomato fruit		
		14.50 - 15.10 Selected speaker	Simone Rochfort (Australia) Metabolomics for Functional Metagenomics	14.50 - 15.10 Selected speaker	Stephanie Moon (USA) Metabolomics based annotation of novel genes in Arabidopsis thaliana	14.50 - 15.10 Selected speaker	Atsushi Fukushima (Japan) Comparative metabolomics characterizes the impact of genotype-dependent methionine accumulation in Arabidopsis thaliana		
		15.10 - 15.30 Selected speaker	Andrew Southam (UK) A Multi-Platform Metabolomic Approach to Investigate Toxicant Induced Disruption of Sexual Development in Wild Male Fish	15.10 - 15.30 Selected speaker	David Portwood (UK) Plant metabolomics: Tomato Metabolite Profiling and Identification Employing High Resolution MS Strategies	15.10 - 15.30 Selected speaker	Animesh Acharjee (Netherlands) Integrating genetic markers with -omics data using genetical genomics and modern regression methods		
Tea 16.30	Tea 16.30	Tea 15.30 – 16.00	Tea 15.30 – 16.00	Tea 15.30 – 16.00	Tea 15.30 – 16.00	Tea 15.30 – 16.00	Tea 15.30 – 16.00		
		Parallel Session 3A 16.00 - 17.30	DRUG DISCOVERY & DRUG DEVELOPMENT Chair: Bruce Kristal (USA)	Parallel Session 5A 16.00 - 17.30	SYSTEMS BIOLOGY OF MAMMALIAN/MICROBIAL METABOLISM Chair: Marta Cascante (Spain)	Parallel Session 8A 16.00 - 17.30	HOT TOPICS Chair: Joshua Rabinowitz (USA)		
		16.00 - 16.30 Selected speaker	Michael Riley (USA) Metabolomics in Drug Discovery: From Screening to Mechanistic Insights	16.00 - 16.30 Invited speaker	Uwe Sauer (Switzerland) High throughput intracellular metabolomics and what concentration data tell us	16.00 - 16.30 Selected speaker	Roland Wohlgermuth (Switzerland) Bioinspired Synthesis of Chiral and Non-Chiral Metabolite Standards		
		16.30 - 16.50 Selected speaker	Catherine Winder (UK) Global metabolic profiling as a tool to determine the multiple intervention sites for targeted chemical effectors	16.30 - 16.50 Selected speaker	Dirk Walther (Germany) Metabolic pathway relationships revealed by an integrative analysis of the metabolic and transcriptional temperature stress response dynamics in yeast.	16.30 - 16.50 Selected speaker	Michael Lassman (USA) Polar metabolite profiling in biological tissues and fluids for qualitative and quantitative analysis		
		16.50 - 17.10 Selected speaker	Alain van Gool (Singapore) Integrated Molecular Profiling Approaches towards Biomarker Discovery in Neuroscience	16.50 - 17.10 Selected speaker	Paula Gaspar (Portugal) In vivo metabolite profiling of Lactococcus lactis mutants towards the optimal production of reduced compounds	16.50 - 17.10 Selected speaker	Huiru Tang (China) Combined NMR and LC-DAD-MS Analysis Revealed Comprehensive Metabonomic Variations for Three Phenotypic Cultivars of Salvia Miltiorrhiza Bunge		
		17.10 - 17.30 Selected speaker	Johan Lindberg (Sweden) Safety Biomarker discovery/qualification for drug induced liver injury	17.10 - 17.30 Selected speaker	Marjan de Mey (Belgium) Catching prompt metabolite dynamics of E. coli with the BioScope at oxygen rich conditions.	17.10 - 17.30 Selected speaker	Roldán Cortés (Spain) Determination of metabolic Volatile Organic Compounds in exhaled breath of patients with Chronic Obstructive Pulmonary Disease by Gas Chromatography Mass Spectrometry.		

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		Parallel Session 3B 16.00 - 17.30	PLANT PHYSIOLOGY Chair: Kazuki Saito (Japan)	Parallel Session 5B 16.00 - 17.30	VOLATILES & SECONDARY METABOLISM Chair: Dan Jones (USA)	Parallel Session 8B 16.00 - 17.30	FOOD & APPLIED METABOLOMICS Chair: Robert Hall (Netherlands)		
		16.00 - 16.30 Invited speaker	Lothar Willmitzer (Germany) Changing environments lead to extensive rewiring of metabolic networks in Arabidopsis thaliana	16.00 - 16.30 Invited speaker	Joe Chappell (USA) Understanding the molecular wizardry of terpene metabolism in plants	16.00 - 16.30 Invited speaker	Annick Moing (France) Metabolic, enzymatic and mineral element profiling issued from multiple analytical platforms renews the study of melon fruit quality and physiology		
		16.30 - 16.50 Selected speaker	Ric de Vos (Netherlands) Untargeted comparative plant metabolomics to determine gene function in vivo	16.30 - 16.50 Selected speaker	Roland Mumm (Netherlands) A metabolomic approach to decipher fragrance in rice	16.30 - 16.50 Selected speaker	Ilka Abreu (UK) Metabolomics as a potential selection tool for novel traits in soft fruit breeding programs		
		16.50 - 17.10 Selected speaker	Charles Warren (Australia) What does it take to tolerate water and nutrient deficiencies? Insights from stress-tolerant plant species	16.50 - 17.10 Selected speaker	Hong Soon Rhee (S. Korea) Comparative profiling of metabolites, gene transcripts and proteins involved in benzylisoquinoline alkaloid biosynthesis of Papaver somniferum for targeted metabolic engineering	16.50 - 17.10 Selected speaker	Yury Tikunov (Netherlands) An integrated x-omics approach to uncover tomato fruit quality traits		
		17.10 - 17.30 Selected speaker	Mathew Davey (UK) Cold acclimation duration and freezing temperatures - distinct intra-specific metabolic phenotypes of two geographically isolated plant populations	17.10 - 17.30 Selected speaker	John Hugh Snyder (USA) Exploiting Medicago Germplasm Diversity for Triterpene Saponin Biosynthetic Gene Discovery Using an Integrated Metabolomics and Transcriptomics Approach	17.10 - 17.30 Selected speaker	Federico Marini (Italy) The influence of a sports drink on the post-exercise metabolism of elite athletes as investigated by NMR-based metabolomics.		
Kick-off Plenary 17.30 - 18.45	Opening ceremony Welcome message from Dr Colja Laane , Director, Netherlands Genomics Initiative Chairs: Robert Hall & Thomas Hankemeier Kick off Plenary speaker: Leroy Hood: Systems Approaches to Medicine	Early evening activity	Posters + wine 17.30 - 19.00	Early evening activity	Posters + wine 17.30 - 19.00	Early evening activity	Dinner 19.30		
18.45 - 20.00	Reception		Workshops		Workshops				
		Parallel workshop 3a 18.30 - 19.45	Databases & Standards Discussion session see separate workshop programme	Parallel workshop 4a 18.30 - 19.45	Environmental metabolomics see separate workshop programme				
		Parallel workshop 3b 18.30 - 19.45	Nordic Interest Group see separate workshop programme	Parallel workshop 4a 18.30 - 19.45	Pharma & Future of Health System see separate workshop programme				