BRITISH MASS SPECTROMETRY SOCIETY

PLEASE CHECK BACK FOR FUTURE SCHEDULE UPDATES v.22/07/25

Monday 8th September

Lennox 3 - *denotes an early-career scientist

TIME	ORAL TRACK A
15:00	**WELCOME FROM BMSS CHAIR** **CHAIR'S INVITED LECTURE** **Simon Gaskell, University of Plymouth** Recurring principles and themes in the development of mass spectrometric techniques **Chair: Andrew Ray** *BMSS Chair*
	METABOLOMICS & LIPIDOMICS (O1) In partnership with the Scottish Metabolomics Network **Chair: Gavin Blackburn** *University of Strathclyde*
16:00	**Keynote: Ruan Edrada-Ebel** *University of Strathclyde* Developing secondary metabolomics to define biomarkers for biological activity and yield optimisation (concatenating mass spectrometry with NMR spectroscopy)
16:30	**Corinne Spickett** *Aston University* Investigating the membrane phospholipid environment of the Adenosine A2A receptor
16:50	**Danita Patel** *University of Manchester* Exploring the sebaceous metabolome for Tuberculosis screening*
17:10	**Rachel Clifton** *University of Nottingham* Understanding ovine footrot pathogenesis using liquid extraction surface analysis mass spectrometry
17:30	**CAREERS WORKSHOP (LAMMERMUIR)**
19:00	*END OF ACADEMIC DAY*
19:30	**DAI GAMES SYMPOSIUM & INCLUSIVE SOCIAL EVENT & NETWORKING**

BRITISH MASS SPECTROMETRY SOCIETY

Monday 8th September AM

Lammermuir

TIME	ORAL TRACK B
15:00	**WELCOME FROM BMSS CHAIR** **CHAIR'S INVITED LECTURE** **Simon Gaskell, University of Plymouth** Recurring principles and themes in the development of mass spectrometric techniques **LENNOX 3**
	PROTEOMICS (O2)
	Chair: Oliver Slingsby *Shimadzu*
16:00	**Keynote: Simone Nicolardi** *Leiden University Medical Center* Advancing biopharmaceutical analysis with wide mass range ultrahigh-resolution MALDI mass spectrometry
16:30	**Rebecca Edwards** *University of Birmingham* Improving protein identification in native ambient top-down mass spectrometry via proton transfer charge reduction
16:50	**Hamish Stewart** *Thermo Fisher Scientific* High sensitivity analysis via parallelized pre-accumulation on orbitrap and astral analyzers
17:10	**Sumit Kumar** *National Institute of Pharmaceutical Education and Research (NIPER)* A multi-tool approach integrated with high resolution mass spectrometric experiments enabling in-depth characterisation of Cerebrolysin®*
17:30	**CAREERS WORKSHOP**
19:00	*END OF ACADEMIC DAY*
19:30	**DAI GAMES SYMPOSIUM & INCLUSIVE SOCIAL EVENT & NETWORKING**

BRITISH MASS SPECTROMETRY SOCIETY

Monday 8th September PM

Lowther

TIME	ORAL TRACK C
15:00	**WELCOME FROM BMSS CHAIR** **CHAIR'S INVITED LECTURE** **Simon Gaskell, University of Plymouth** Recurring principles and themes in the development of mass spectrometric techniques **LENNOX 3**
	EARTH, ENVIRONMENT & FOOD (O3)
	Chair: Samuel Mutto *University of Warwick*
16:00	**Keynote: David Megson** *Manchester Metropolitan University* Aligning PFAS testing with regulations; how many PFAS are there and how do we measure them…?
16:30	**Paul Gates** *University of Bristol* UPLC-MS/MS investigation of the oxidative bleaching of β-carotene by acid activated clays
16:50	**Callan Littlejohn** *University of Warwick* Algorithms for the end group determination of large molecular weight polymer samples*
17:10	**Luciana da Costa Carvalho** *University of Oxford* Profiling of oud (agarwood) by IC-MS and TD-GC/MS: linking resin composition to smoke emissions*
17:30	**CAREERS WORKSHOP (LAMMERMUIR)**
19:00	*END OF ACADEMIC DAY*
19:30	**DAI GAMES SYMPOSIUM & INCLUSIVE SOCIAL EVENT & NETWORKING**

BRITISH MASS SPECTROMETRY SOCIETY

Tuesday 9th September AM
Lennox 3

TIME	ORAL TRACK A
09:00	**PLENARY LECTURE** **Erin Baker, University of North Carolina at Chapel Hill** Garbage in, garbage out: the inextricable link between environmental exposures and human health **Chair: Kat Hollywood** *BMSS Meetings Secretary*
10:00	**FLASH PRESENTATIONS 1** **Chair: Anna Cordiner** *University of York* Flash Presentation Orals (5min, no questions)
11:00	**TEA/COFFEE & EXHIBITION & POSTER SESSION** Flash Presenters: Sessions 1, 2 & 3 ODD Numbered Posters
12:00	**FLASH PRESENTATIONS 4** **Chair: Alisha Henderson** *Loughborough University* Flash Presentation Orals (5min, no questions)
13:00	**BUFFET LUNCH & EXHIBITION**

BRITISH MASS SPECTROMETRY SOCIETY

Tuesday 9th September PM

Lennox 3

TIME	ORAL TRACK A
	ION MOBILITY MS (O4)
	Chair: Nikki Atwal *Waters Corporation*
14:00	**Keynote: Jim Reynolds** *Loughborough University* Development of differential mobility spectrometry (DMS) for 'Omics' and gas-phase kinetics applications
14:30	**Ana Clara Bath Alén** *University of Manchester* Using ion mobility-mass spectrometry to understand de novo designed α-helical coiled coils*
14:50	**Anthony Devlin** *Rosalind Franklin Institute* Tools to uncover isomeric glycosylation in tissue*
15:10	**Declan Cook** *University College London* Using IM-MS to screen, identify, and rank isobaric peptide ligands*
15:30	**TEA/COFFEE & EXHIBITION & POSTER SESSION** Flash Presenters: Session 4, 5 & 6 EVEN Numbered Posters
16:30	**PARTNER PRESENTATIONS 1**
17:30	*END OF ACADEMIC DAY*
18:00	**LGBTQ+ PRE-DINNER SOCIAL GET TOGETHER**
19:00	**DRINKS RECEPTION AND CONFERENCE DINNER**

BRITISH MASS SPECTROMETRY SOCIETY

Tuesday 9th September AM

Lammermuir

TIME	ORAL TRACK A
09:00	**PLENARY LECTURE** **Erin Baker, University of North Carolina at Chapel Hill** Garbage in, garbage out: the inextricable link between environmental exposures and human health **LENNOX 3**
10:00	**FLASH PRESENTATIONS 2** **Chair: Georgina Charlton** *University College London* Flash Presentation Orals (5min, no questions)
11:00	**TEA/COFFEE & EXHIBITION & POSTER SESSION** Flash Presenters: Sessions 1, 2 & 3 ODD Numbered Posters
12:00	**FLASH PRESENTATIONS 5** **Chair: Callan Littlejohn** *University of Warwick* Flash Presentation Orals (5min, no questions)
13:00	**BUFFET LUNCH & EXHIBITION**

BRITISH MASS SPECTROMETRY SOCIETY

Tuesday 9th September PM

Lammermuir

TIME	ORAL TRACK A
	HDX & COVALENT LABELLING (O5) In partnership with the Scottish Biological Mass Spectrometry Discussion Group
	Chair: Rebecca Beveridge *University of Strathclyde*
14:00	**Keynote: Glenn Masson** *University of Dundee* Rapid structural screening of drugs at single amino acid resolution with spatial K_ds using HDX-MS/MS
14:30	**Vanessa Duerr** *University of Manchester* Advances in HDX-cIM-MS: tackling large protein complexes*
14:50	**Adam Cahill** *University of Leeds* Design and characterisation of photoactivatable and lysine reactive o-nitrobenzyl alcohol-based crosslinkers*
15:10	**Danielle Kay** *University of Birmingham* Applying native MS and HDX-MS to characterise molecular glue induced protein-protein interaction stabilization*
15:30	**TEA/COFFEE & EXHIBITION & POSTER SESSION** Flash Presenters: Session 4, 5 & 6 EVEN Numbered Posters
16:30	**PARTNER PRESENTATIONS 2**
17:30	*END OF ACADEMIC DAY*
18:00	**LGBTQ+ PRE-DINNER SOCIAL GET TOGETHER**
19:00	**DRINKS RECEPTION AND CONFERENCE DINNER**

BRITISH MASS SPECTROMETRY SOCIETY

Tuesday 9th September AM

Lowther

TIME	ORAL TRACK A
09:00	**PLENARY LECTURE** **Erin Baker, University of North Carolina at Chapel Hill** Garbage in, garbage out: the inextricable link between environmental exposures and human health **LENNOX 3**
10:00	**FLASH PRESENTATIONS 3** **Chair: Alejandro Brenes** *University of Edinburgh* Flash Presentation Orals (5min, no questions)
11:00	**TEA/COFFEE & EXHIBITION & POSTER SESSION** Flash Presenters: Sessions 1, 2 & 3 ODD Numbered Posters
12:00	**FLASH PRESENTATIONS 6** **Chair: Nikita Bhakta** *University of Leicester* Flash Presentation Orals (5min, no questions)
13:00	**BUFFET LUNCH & EXHIBITION**

BRITISH MASS SPECTROMETRY SOCIETY

Tuesday 9th September PM
Lowther

TIME	ORAL TRACK A
	AMBIENT & IMAGING MS (O6)
	Chair: Catherine Welsh *AstraZeneca*
14:00	**Keynote: Rian Griffiths** *University of Nottingham* MS strategies to understand infection: probing endogenous and exogenous metabolites to reveal infection and inflammation markers
14:30	**Oliver Hale** *University of Birmingham* Exploiting the solubility of proteoform complexes in discrete-mode nano-DESI MS imaging
14:50	**Alisha Henderson** *Loughborough University* assessing the quantitative performance of atmospheric solids analysis probe-mass spectrometry*
15:10	**Sphamandla Ntshangase** *University of Edinburgh* How does lipoprotein(a) influence lipid distribution in carotid plaques? A MALDI imaging insight*
15:30	**TEA/COFFEE & EXHIBITION & POSTER SESSION** Flash Presenters: Session 4, 5 & 6 EVEN Numbered Posters
16:30	**PARTNER PRESENTATIONS 3**
17:30	*END OF ACADEMIC DAY*
18:00	**LGBTQ+ PRE-DINNER SOCIAL GET TOGETHER**
19:00	**DRINKS RECEPTION AND CONFERENCE DINNER**

BRITISH MASS SPECTROMETRY SOCIETY

Wednesday 10th September AM

Lennox 3

TIME	ORAL TRACK A
	ADVANCES IN MS (O7) **In memory and celebration for the life and work of Keith Jennings**
	Chair: R Graham Cooks *Purdue University*
9:00	**Keynote: Andrew Gill** *Nottingham Trent University* From ions to ecosystems: a mass spectrometrist's journey into molecular bioscience and agricultural innovation*
9:30	**Hendrik Krolle** *Vrije Universiteit Amsterdam* Developing a gas-phase charge reduction source modification for native ESI mass spectrometry*
9:50	**Nathan Fenwick** *University of Bradford* Hammett correlations from competition experiments in accelerated formation of diarylquinoxalines in reactive mass spectrometry*
10:10	**Scott Denham** *University of Edinburgh* Exploring mixed-mode fragmentation in targeted MS3 for steroid profiling on a nominal mass instrument
10.30	**TEA/COFFEE & EXHIBITION**
	SMALL MOLECULES & PHARMACEUTICALS (O10)
	Chair: Ilaria Belluomo *Imperial College London*
11:30	**Keynote: Lorna Nisbet** *University of Dundee* Detection of illicit drugs in seized vape pods from Scottish prisons
12:00	**Sarah Wilson** *University of York* Time resolved mass spectrometry for the on-line monitoring of photolysis and catalysis reactions*
12:20	**Philip Leung** *Imperial College London* A novel headspace thermal-desorption gas-chromatography time-of-flight mass spectrometry workflow for early upper gastrointestinal cancer detection*
12:40	**Angela Taylor** *University of Birmingham* urinary steroid profiling using gas chromatography mass spectrometry reveals distinct clusters in adrenocortical carcinoma.
13:00	**BUFFET LUNCH & EXHIBITION**

BRITISH MASS SPECTROMETRY SOCIETY

Wednesday 10th September PM

Lennox 3

TIME	ORAL TRACK A
14:00	**PRIZE PRESENTATIONS**
14:15	**MACCOL LECTURE & CLOSING REMARKS** **Kevin Pagel, Freie Universität Berlin** Infrared Spectroscopy in a Mass Spectrometer – Molecular Fingerprints for Omics Research **Chair: Mike Morris** *BMSS Vice-Chair*
15:15	*CLOSE*

BRITISH MASS SPECTROMETRY SOCIETY

Wednesday 10th September AM

Lammermuir

TIME	ORAL TRACK B
	MS IN STRUCTURAL BIOLOGY (O8)
	Chair: David Clarke *University of Edinburgh*
9:00	**Keynote: Andrea Sinz** *Martin Luther University Halle-Wittenberg* Structural characterization of "difficult" proteins by cross-linking mass spectrometry using MS-cleavable cross-linkers
9:30	**Clinton Veale** *University of Cape Town* Qualitative elucidation and modulation of the hop-hsp90 transient protein-protein interactions through native mass spectrometry
9:50	**Emily Byrd** *University of Leeds* α-Helicity shapes conformation, amyloid formation and liquid-liquid phase separation of the TDP-43 C-terminal domain*
10:10	**Cameron Baines** *University of Birmingham* Metal-deficient hSOD1G37R localises to brain and spinal cord regions implicit in ALS pathology*
10.30	**TEA/COFFEE & EXHIBITION**
	BIOPHARMACEUTICALS (O11)
	Chair: Sophie Lellman *UCB*
11:30	**Keynote: Sarah Cianferani** *Institut du Médicament de Strasbourg* Structural MS for biopharmaceuticals : decoding complex drugs with precision
12:00	**Keving Hes** *Vrije Universiteit Amsterdam* Structural characterisation of oligonucleotide modifications using advanced mass spectrometry based approaches*
12:20	**Leonie Mueller** *Newcastle University* Combining MALDI-TOF MS and diaPASEF proteomics for a novel phenotypic drug screening approach*
12:40	**Corentin Beaumal** *National Institute for Bioprocessing Research and Training* Investigating the Complexity of Fc Fusion Proteins using a Orbitrap Excedion Pro Hybrid instrument*
13:00	**BUFFET LUNCH & EXHIBITION**

BRITISH MASS SPECTROMETRY SOCIETY

Wednesday 10th September AM

Lowther

TIME	ORAL TRACK C
	CLINCAL & FORENSIC (O9)
	Chair: Vanshni Vekereya *LGC Group*
9:00	**Keynote: Lewis Couchman** *Analytical Services International* Mass spectrometric analysis of insulin, insulin analogues and GLP-1/GIP agonists: considerations in post-mortem toxicology
9:30	**Samar Alzeer** *University of Edinburgh* Challenges in LC-MS/MS method development for studying flumazenil and benzodiazepines pharmacokinetics in overdose subjects*
9:50	**Ilaria Belluomo** *Imperial College London* Design of a non-invasive breath test for epileptic seizures: the VIBES study
10:10	**Fozia Shaheen** *University of Birmingham* Thyroid hormone profiling: a novel LC-MS/MS method for comprehensive metabolite detection*
10.30	**TEA/COFFEE & EXHIBITION**
	LIFE SCIENCES (O12)
	Chair: Patricia Kelly *University of Strathclyde*
11:30	**Keynote: Guinevere Lageveen-Kammeijer** *University of Groningen* Decoding the molecular landscape of life – microscale proteomics and glycomics from single cells to dissected niches
12:00	**Emma Sisley** *Omass Therapeutics* High-throughput native mass spectrometry screening platform for hit identification of cytokines
12:20	**Felicia Green** *Rosalind Franklin Institute* Imaging with secondary ion mass spectrometry (SIMS) utilised for detection of proteins
12:40	**Valeria Calvaresi** *University of Oxford* Combining hydrogen/deuterium-exchange mass spectrometry (HDX-MS) with mass photometry (MP) to understand Ebola virus entry mechanisms
13:00	**BUFFET LUNCH & EXHIBITION**

BRITISH MASS SPECTROMETRY SOCIETY

FLASH PRESENTATIONS 1: LENNOX 3

R Graham Cooks *Purdue University* Organic synthesis by mass spectrometry

Jiaqi Luo *Rosalind Franklin Institute* Correlative mass spectrometry imaging (MSI) and scanning electron microscopy (SEM) imaging at cryogenic temperature*

James Mccullagh *University of Oxford* Ion-exchange chromatography mass spectrometry (IC-MS): a versatile technique for characterising highly polar and ionic compounds

Matthew Green *Genedata* The importance of impatience: battling bottlenecks to accelerate high throughput mass spectrometry analysis

Masaaki Ubukata *JEOL Ltd* A new structural analysis for GC-MS non-targeted analysis using predicted EI spectra by machine learning

Yifeng Jia *University of Oxford* Optimisation on microscope-mode secondary ion mass spectrometry imaging*

William Dixon *Verdel Instruments* Application of total correlation mass spectrometry (TOC-MS) to complex samples

Pierre Chouzenoux V*rije Universiteit Amsterdam* Mass spectrometry instrumentation dedicated to the studies of viral protein complexes and particles*

Harry Tata *University of Bristol* seaMass-alpha: sparse signal deconvolution for quantification and impurity detection in raw oligonucleotide mass spectra*

Harold Cannon *University of Oxford* Using ammonium hydroxide to enhance analysis of short chain fatty acids with anion-exchange chromatography-mass spectrometry*

BRITISH MASS SPECTROMETRY SOCIETY

FLASH PRESENTATIONS 2: LAMMERMUIR

Sarah Vickers *University of Birmingham* In-situ native mass spectrometry analysis and imaging of intact proteins in xenograft tumours*

Yee Man Michelle Pang *University of Edinburgh* Mapping transient, short linear motif-mediated protein-protein interactions using photo-crosslinking top-down mass spectrometry*

Arppana Varughese *University of Nottingham* Probing the protein-protein and protein-ligand interactions of STING using complementary structural mass spectrometry techniques*

Anna Simmonds *University of Warwick* Towards structural mass spectrometry for fragment-based drug discovery*

Edward Neal *University of Bristol* Investigating picolitre droplets as vessels for conserving native protein conformations*

Thomas Hoare *University of Manchester* Unfolding of super stable proteins during nano-ESI: lessons for structural mass spectrometry*

Christina Robb *University of Strathclyde* Ion mobility mass spectrometry provides insight into molecular mechanisms of ubiquitin shuttle protein substrate recognition*

Peter Fox *University of Edinburgh* Characterisation of TPR2A-HSP90 transient interaction at high spatial resolution using Isotope depletion top-down HDX (ID-TD-HDX)*

Niklas Geue *Freie Universität Berlin* Experimental evidence for long-range participation of levulinoyl protecting groups in glycosylation reactions*

Hadeeqa Raza *University of Leicester* Probing the dynamic nature of 14-3-3 isoforms using native mass spectrometry

BRITISH MASS SPECTROMETRY SOCIETY

FLASH PRESENTATIONS 3: LOWTHER

Samuel Mutto *University of Warwick* Comparative FTICR and GCMS analysis of bitumen use in ancient Mesopotamia dating to 2500–2000 BC*

Dougal Clumpas *University of Edinburgh* Unraveling the smoky flavours in whisky with high resolution mass spectrometry*

Haokai Wang *University of Warwick* Pyrolysis bio-oils: how ionisation techniques reveal hidden diversities

Rhona Cowan *University of Edinburgh* Mass spectrometry metabolite profiling for the classification of therapeutic potential of bark extracts*

Sanugi Dassanayake *University of Warwick* Investigating the remediation of oil sands process-affected water using FT-ICR mass spectrometry*

Ane De Frutos Olasagasti *Edge Hill University* REIMS-based detection of malaria and Dengue infection in mosquito vectors*

Minhui Zhu *University of Manchester* Development of a quantitative MRM assay using skin swabs rich in sebum to diagnose Parkinson's*

Kei Carver Wong *University of Nottingham* Characterising the secretome of polarised macrophages in response to bio-instructive materials*

Isabelle Legge *University of Oxford* Untargeted profiling of the urine metabolome using ion-exchange chromatography-mass spectrometry (IC-MS)*

Priyal Naveen Golchha *University of Manchester* Spatial metabolomic profiling of colorectal tumours using DESI-MSI and histopathology*

BRITISH MASS SPECTROMETRY SOCIETY

FLASH PRESENTATIONS 4: LENNOX 3

David Bowers *University of Surrey* Detection of nitrosamines in organic solvents using coated blade spray mass spectrometry*

Greice Zickuhr *University of St Andrews* Spatial multi-modal analysis uncovers lipidomic signatures associated with aggressive tumour phenotype in patient-derived tumour organoids*

Vanshni Vekereya *LGC Group* Evaluation of atmospheric solid analysis probe - mass spectrometry (ASAP-MS) for point of care testing

Monika Selvakumar *University of Edinburgh* Mass spectrometry imaging reveals spatial lipidomics across the spectrum of metabolic dysfunction-associated steatotic liver disease*

Stephen Holman *AstraZeneca* Evaluation of atmospheric solid analysis probe-mass spectrometry (ASAP-MS) for real-time monitoring of heterogeneous slurry reactions

Bin Yan *National Physical Laboratory* Analysis and comparison of matched FFPE and fresh-frozen tissues using multimodal mass spectrometry imaging

Andriana Michailidis *University of Surrey* The rapid detection of illicit drugs in a pub*

John Moncur *SpectralWorks Ltd* Statistical tools to eliminate false positives during rapid testing for illicit drugs using ASAP MS

Jasmin Werner *Imperial College London* Unravelling metabolic dysregulation in head and neck cancer with laser-desorption rapid evaporative ionisation mass spectrometry*

Yufeng Zhou *University of Liverpool* Unravelling matrix effects in paper spray mass spectrometry for bioanalysis: a systematic review and meta-analysis*

BRITISH MASS SPECTROMETRY SOCIETY

FLASH PRESENTATIONS 5: LAMMERMUIR

Emma Harry ***AstraZeneca*** Unravelling isotopic distribution challenges: assessing instrumental variability in oligonucleotide degradation quantification

Teena Binny George ***University of Warwick*** Precision unravelled: elucidating cyclic peptides with ultrahigh resolution mass spectrometry*

Zijie Dai ***University College London*** Resolving the dimerisation core of human amylin (hIAPP) through native top-down ion-mobility and electron-capture dissociation*

Une Kontrimaite ***University of Nottingham*** Mass spectrometry-based profiling of glioblastoma metabolism in a decellularised human brain ECM model*

Andrew Pitt ***University of Manchester*** The detection and identification of lipid peroxidation products

Kamila Pacholarz ***AstraZeneca*** Unravelling the stereochemistry of phosphorothioated oligonucleotides using high resolution ion mobility mass spectrometry

Kish Adoni ***University College London*** Proteomics and ion mobility MS to probe the mechanisms of alpha-1antitrypsin driven hepatic fibrosis*

Abigail Hubball ***University of Nottingham*** Understanding polymicrobial infection in Cystic Fibrosis via LESA-MS: benefits of FAIMS ion mobility*

Thivviya Sivakanthan ***University of Leicester*** Comparative proteomic profiling of extracellular vesicles linking sarcopenia and cardiovascular disease in chronic kidney disease*

Georgina Charlton ***University College London*** Probing DNA damage response at the single-cell level using the Orbitrap Astral mass spectrometer*

BRITISH MASS SPECTROMETRY SOCIETY

FLASH PRESENTATIONS 6: LOWTHER

Amar Rai *Imperial College London* Mapping gas-phase fragmentation and photodegradation of floxacin drugs via IMS-MS/MS and computational modelling*

Young-Ji An *Jeonbuk National University* Validating the use of tobacco condensates for toxicity testing

Ruby Spratt *University of York* Time resolved mass spectrometry as a tool for the on-line study of metal-facilitated cross-coupling reactions*

John Sidda *University of Oxford* Expanding the MR1-ligandome using multi-platform metabolomics: towards novel cancer immunotherapies

Farah Salim *University of Leicester* From pill to plasma: establishing reference intervals for aspirin metabolites with a targeted LC-MS/MS method*

Joanna Simpson *University of Edinburgh* A novel LC-MS/MS method for simultaneous quantitation of steroid and thyroid hormones in chickens

Pongpanot Pongworasuwanna *University of York* UV isomer-dependent photochemistry of sulfobenzoic acid using laser-interfaced electrospray ionization mass spectrometry technique*

Samuel Weekes *University of Warwick* Breaking down verapamil: ultra-high-resolution FT-ICR and tandem MS for structural analysis*

Melissa Greenwood *Newcastle University* Quantification of chondroitin sulphate glycosaminoglycans throughout lactation using a streamlined method for analysing human breastmilk*

Drew Szabo *University of York* Clustering and selection of chemicals for cost effective tandem mass spectrometry analysis (MS2) of chemicals*

BRITISH MASS SPECTROMETRY SOCIETY

POSTERS

NB: Poster numbers will be allocated at a point closer to the event.

ADVANCES IN MS

How many scans is enough? Predicting resolving power in 2DMS experiments*
Anna Cordiner (University of York)

Mass spectrometry without chromatography: Analysis of mixtures by collision induced dissociation without precursor isolation
Steven Wright (Verdel Instruments)

Distinctive fragmentations in EI mass spectra of orthogonally protected sulphonamides and their isomeric rearrangement products
Amie Saidykhan (University of Bradford)

Development of helium-free direct analysis in real time mass spectrometry and application to food authenticity*
Hannah Tate (University of York)

SPME, ASAP-MS and Me: a sensitive and rapid approach to pesticide analysis*
Dara Lorianne Pierre (University of Surrey)

High throughput screening of post-translational modifications across antibody candidates to inform machine learning*
Clare Noon (UCB)

Novel nano-electrospray ion source for charge detection mass spectrometry
Rob Lewis (Waters Corporation)

The design and characterisation of a new CDMS instrument for the analysis of megadalton-sized molecules
David Bruton (Waters Corporation)

AMBIENT & IMAGING MS

Optimisation of nanospray desorption electrospray ionisation (nano-DESI) probes for native ambient mass spectrometry imaging workflows
Jack Roberts (Rosalind Frankling Institution)

A versatile, high-throughput robotic platform for multimodal sample introduction to a SICRIT ion source
Barry Smith (University of Liverpool)

High-resolution microscope-mode secondary ion mass spectrometry imaging
Yuting Su (University of Oxford)

A novel embedding-free approach to ocular cryosection preparation for native ambient mass spectrometry*
Peter Hughes (Rosalind Franklin Institute)

Paper-arrow mass spectrometry for rapid cortisone analysis from salivary microsamples*
Tung-Ting Sham (University of Liverpool)

Integrating DESI with TIMS-TOF/TIMS FT ICR for improved in-situ tissue imaging*
Siyu Liu (Rosalind Franklin Institute)

Rapid detection of drugs in E-cigarettes using ambient ionisation mass spectrometry*
Adam Haworth-Duff (University of Liverpool)

Employing EDC for semi-targeted MSI with SELECT SERIES MRT mass spectrometer and DESI XS
Emmanuelle Claude (Waters Corporation)

Echo-DESI-MS for high-throughput screening of biotransformations
Rachel Smith (University of Manchester)

Understanding the suitability of desorption electrospray ionisation (DESI) mass spectrometry imaging for molecular fingerprinting*
Rohith Krishna (Sheffield Hallam University)

High resolution DESI imaging single cell analysis
Joanne Ballantyne (Waters Corporation)

Evaluation of perfused tissue for analysis of intact proteoforms by native ambient mass spectrometry (NAMS)*
Hadar Ash (University of Birmingham)

Evaluating ASAP-MS for rapid detection of sports prohibited substances: optimising workflows using SpectralWorks AnalyzerPro XD
Liam Heaney (Loughborough University)

BIOPHARMACEUTICALS

Application of high-resolution mass spectrometry workflows to characterise biopharmaceuticals and impurities
Tomas Adomavicius (Sygnature Discovery)

BRITISH MASS SPECTROMETRY SOCIETY

State-of-the-art mass spectrometry characterisation of adeno-associated virus (AAV)
Lauren Tomlinson (Pharmaron Biologics Ltd)

Improving quantitative sensitivity for peptide analysis in plasma using a novel QTOF mass spectrometer
Tom Ruane (SCIEX)

Proteoform specific microheterogeneity assessment of biopharmaceuticals using the Orbitrap Ascend Biopharma Edition tribrid mass spectrometer
Jonathan Bones (National Institute for Bioprocessing Research and Training)

Host cell protein analysis across innovator monoclonal antibody-based protein therapeutics using the Orbitrap Astral
Sara Carillo (National Institute for Bioprocessing Research and Training)

Calibration of charge detection MS instruments
Keith Richardson (Waters Corporation)

Assessment of resolution and instrument type on the assessment of oligonucleotide impurities
Rachelle Black (AstraZeneca)

Characterisation of polysorbates in biopharmaceutical drug products using liquid chromatography mass spectrometry
Will Burkitt (UCB)

Top down CID MS/MS and ETD MS/MS analysis and characterisation of TryBe molecules
Sophie Lellman (UCB)

Ligand:antibody affinity chromatography coupled to mass spectrometry
Nisha Patel (UCB)

Evaluating process development strategies through a multi-attribute-MS approach to minimize disulfide bond-related modifications in mAbs*
Ameya Parkar (Institute of Chemical Technology)

Rapid online buffer exchange with the DynaChip platform for complex native biological analysis
Suraj Dhungana (Andson Biotech)

Investigation of post-translational modifications of KRas.G12C mutant by mass spectrometry*
Shu Gao (University of Leicester)

Identification and quantification of drug-leachable interactions in biotherapeutics by multi-dimensional liquid chromatography and ToF-MS*
Deborah Adebambi (Resolian)

CLINICAL & FORENSIC

Identification of cancer biomarkers in human breath utilising TD-GC-MS
Valerio Converso (Imperial College London)

Delivering real-time therapeutic drug monitoring of β-lactams using LC-MS/MS: insights from the TDM-TIME study*
Jake Lain (Manchester University NHS Foundation Trust)

Advancing precision medicine with mass spectrometry: The Centre for Precision Approaches to Combatting Antimicrobial Resistance
Kamila Schmidt (University of Manchester)

A new plasma N-glycomics-based strategy for the diagnosis of congenital disorders of glycosylation*
Alan Ribeiro Mól (Universidade de Brasília)

Putative N-glycan alterations in the plasma of patients with intellectual disability probed by mass spectrometry
Guilherme Dotto Brand (Universidade de Brasília)

Multimodal analytical approach applied to whisky labels for authenticity determination
Veronika Tibljas (Sheffield Hallam University)

Identifying the amyloid fibril protein in patients with amyloid of an unknown type*
Metkel Tsegay (University College London)

Integrated tissue and plasma multi-omics profiling reveals distinct T2D signatures in patients undergoing CABG*
Scarlett Manley (University of Leicester)

Determination of the salivary steroid profile using mass spectrometry*
Mariyam Mariyam (University of Birmingham)

Combining DART ionization and trapped ion mobility QTOF-mass spectrometry for the analysis of controlled substances
Stephen Brookes (Bruker)

BRITISH MASS SPECTROMETRY SOCIETY

EARTH, ENVIRONMENT & FOOD

Understanding fluoropolymer degradation in fuel cells through mass spectrometry*
Zoe McShane (Johnson Matthey)

Investigation of atmospheric transfer of 'forever chemicals' from sewage using targeted and non-targeted HRMS*
Jishnu Pandamkulangara Kizhakkethil (Coventry University)

Comparison of hydrophilic-lipophilic balanced and weak anion exchange SPE for trapping airborne per/polyfluoroalkyl substances*
Amoluck Eluri (Deakin University)

PFAS/emerging contaminants leveraging the technique LC-VIP HESI-TIMS-HRMS and comprehensive untargeted workflows
Erik van Balderen (Bruker)

HDX & COVALENT LABELLING

Quantum-induced structural signalling in avian cryptochrome 4 revealed by HDX-MS
Monika Kish (University of Exeter)

Higher order structure characterization of ADCs using hydrogen-deuterium exchange mass spectrometry (HDX-MS)
Denis Calnan (Thermo Fisher Scientific)

Developing traceable multi-component test materials for the validation of PFAS LC-MS methods: The EURAMET 'ScreenFood'
Christopher McElroy (LGC Group)

ION MOBILITY MS

Integrating DT-IMS with compact mass spectrometry for field-deployable detection of drugs and explosives*
Mohammed Al Saud (University of Liverpool)

Differential mobility analyser (DMA) coupled with pixelated ion detector for illicit drug analysis in mixtures *
Cedric Boisdon (University of Liverpool)

Characterisation of biomolecules by ion mobility-mass spectrometry and gas phase infrared spectroscopy*
Caitlin Walton-Doyle (Freie Universität Berlin)

Bridging the gap between free-molecular and continuum flow regimes in ion mobility spectrometry of nanoparticles *
Kacper Kulikowski (Waters Corporation)

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When one size doesn't fit all: LC-MS in a multi-project facility
Marina-Alexandra Machidon (University of Manchester)

METABOLOMICS & LIPIDOMICS

Development of an LC-MS/MS method for the combined quantification of oxysterols and bile acids*
Martin Roumain (UCLouvain)

Automated identification of verapamil metabolites using KNIME: comparative analysis in human, rat, and guinea pig
Nouf Alourfi (King Abdulaziz University)

Secondary metabolites of endophytic Hypoxylon rubiginosum isolated from Fucus vesiculosus seaweed by using spectral-based metabolomics*
Fadiah Almutairi (University of Strathclyde)

Design, optimization, and metabolomic evaluation by LC-MS of rifampicin–isoniazid co-loaded liposomes
Pragati Sinha (National Institute of Pharmaceutical Education and Research)

Using ion mobility mass spectrometry for structural characterisation of lipids to advance Parkinson's Disease diagnostics*
Lea van Dissel (University of Manchester)

A novel cation-exchange chromatography-MS/MS method for metabolite and metal ion analysis in biological samples*
Rachel Williams (University of Oxford)

Characterisation of surfactant phospholipid synthesis and metabolism in mice models of acute lung injury*
Siona Silveira (University of Southampton)

Analyses of urinary metabolomics in paediatric Crohn's disease during exclusive enteral nutrition and after food*
Patricia Kelly (University of Glasgow)

A targeted LC-MS/MS lipidomics panel developed for use in clinical assays for aspirin resistance patients*
Aldred Charlesworth (University of Leicester)

Accelerating lipidomics: integrating microsampling devices with rapid microbore metabolic profiling (RaMMP) for UPLC-MS analysis *
Ana Sanchez Lorenzo (Imperial College London)

Application of NMR and MS metabolomics with machine learning approaches for the characterization of dual PGE_2/LTB_4 inhibitors*
Miller Santos Ferreira (Federal University of Alfenas)

A metabolomics-based investigation of Anadenanthera spp. (angico) and 5-meo-dmt: in vitro neuroprotection and clinical effects*
Abert Katchborian-Neto (Federal University of Alfenas)

MS IN STRUCTURAL BIOLOGY

Assembly pathway of bacterial protein nanocages
Thomas Ballinger (University of Edinburgh)

Charge detection mass spectrometry analysis of thermally activated native protein complexes*
Anisha Haris (Waters Corporation)

DynaChip online buffer exchange and desalting coupled to CD-MS for the analysis of large biologics
Mason Chilmonczyk (Andson Biotech)

Understanding oligonucleotides: structural insights into the thrombin-binding aptamer and 38-GC using ion mobility and UVPD*
Francesca O Bellingeri (University of Leeds)

Adjustable source pressure regulation improves the transmission of protein complexes on Orbitrap Tribrid mass spectrometer*
Sherzod Nazarov (University of Birmingham)

The power of combining mutagenesis, mass spectrometry, and molecular dynamic simulations to decode nanobody stability*
Valentina Faustinelli (LGC Group)

BRITISH MASS SPECTROMETRY SOCIETY

PROTEOMICS

Are Solid Particles Ready for Prime-Time Proteomics?
Eduardo Shigueo Kitano (Rosalind Franklin Institute)

Novel recombinant chymotrypsin: a superior complementary protease to trypsin for proteomics
Jon Ditcham (University College London)

Standard LC-MS workflows using a single deep learning model
Shabaz Mohammed (Rosalind Franklin Institute)

Investigating chemical modifications of pollen proteins on exposure to air pollutants using non-targeted MS analysis *
Dimple Pathania (Deakin University)

Optimising mass spectrometry to study the proteoform changes in VPS35-D620N protein mutation of Parkinson's disease
Yuko Lam (University of Dundee)

Ultra-sensitive quantitation and rapid method development for targeted immunopeptidomics using the Stellar Mass Spectrometer
Andrew Williamson (Thermo Fisher Scientific)

Flexible and scalable FFPE Processing with BeatBox tissue kit 24x for in-depth proteome analysis
Adam Hughes (PreOmics GmbH)

Label-free quantitative proteomics with high precision and accuracy, driven by ultra-high-sensitivity MS/MS
Daniel Parnaby (SCIEX)

Keep an i-on kynurenine: proteomic profiling of WT and KMO$^{-/-}$ Drosophila melanogaster via Evosep–timsTOF workflow
Muzammil Khomusi (University of Leicester)

Reinventing chymotrypsin: a novel recombinant analog for accurate and reliable peptide mapping of biotherapeutic proteins
Chris Moffat (Promega)

SMALL MOLECULES & PHARMACEUTICALS

Quantitative end-of-reaction monitoring in pharmaceutical drug development using ASAP-MS*
Catherine Welsh (AstraZeneca)

BRITISH MASS SPECTROMETRY SOCIETY

A high-throughput native mass spectrometry-based platform for the screening and characterisation of small-molecule drugs*
Aisha Ben-Younis (OMass Therapeutics)

From method to mindset: using cortisol LC-MS/MS as a structured training platform*
Paul Sampson (University of Leicester)

AQbD approach in development of HS-GC-MS/MS method for simultaneous analysis of residual solvents in pharmaceuticals
Shubham Dhiman (National Institute of Pharmaceutical Education and Research)

Advanced data analysis of peptide LC-MS spectra through in silico fragmentation*
Michael Sutherland (Advanced Chemistry Department UK Ltd)

Evaluating ethnic differences in antihypertensive drug responses in the AIM-HY cohort using LC-MS/MS analyses
Ammar Akram (University of Leicester)

Bridging quantification and structural resolution in lipidomics: a dual-derivatization approach based on GC-MS and LC-MS/MS*
Yicen Yue (University of Liverpool)

Development of a gas chromatography mass spectrometry method for urinary oestrogen profiling*
Joshua Bain (University of Birmingham)

Transforming quantitative sensitivity for small molecule analysis using a high-resolution workflow
Iain Mayer (SCIEX)

Glycidyltrimethylammonium chloride (GTMAC) - a novel derivatising reagent for detection of estrogens by LC-MS/MS
Shazia Khan (University of Edinburgh)

Combining high-throughput affinity selection mass spectrometry-based platform and native-MS to discover and characterize β1AR ligands
Juliana Maria De Lima (OMass Therapeutics)

Maximising confidence in nitrosamine analysis: strategies to prevent false positives and negatives in LC-MS
Nathanael Page (Resolian)