Remote Posters: Interactive Session – PARALLEL 1

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- **JOIN THE ZOOM MEETING** and enter the main meeting. Please share your video & audio to foster interactions!
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### Clinical Analysis (REMOTE POSTERS)

**FP 103** The amyloid proteome—investigating more than simple passive bystanders of a disease; **Juliane Gottwald**¹; Hans-Michael Behrens¹; Eva L. Gerick¹; Tomas Koudelka²; Annelie Lux³; Georg J. Rottenacher³; Jan Schürmann⁴; Christian Treitz⁵; Andreas Tholey⁶; Christoph Röcken⁷; ¹Department of Pathology, Christian-Albrechts-University Kiel, Kiel, Germany; ²Systematic Proteome Research & Bioanalytics, Institute for Experimental Medicine, Christian-Albrechts-University Kiel, Kiel, Germany; ³Center for Integrated Protein Science Munich at the Department of Chemistry, Technical University of Munich, Garching, Germany

### Data-Independent Acquisition (REMOTE POSTERS)

**FP 106** Comprehensive drug screening in whole blood using IDIA mode utilizing the combination of probe ESI and quadrupole time-of-flight mass spectrometer; **Hidekazu Saiki**¹; Eishi Imoto²; ¹Shimadzu Corp., Kyoto, Japan; ²Shimadzu corp., Kyoto, Japan

**FP 114** Data independent acquisition for DNA adductomics and its application in amphipods; **Giulia Martella**¹; Elena Gorokhova²; Pedro Sousa³; Brita Sundelin³; Hitesh Motwani³; ¹Stockholm University, Stockholm, Sweden; ²Stockholms Universitet, Stockholm, Sweden

### Disease Biomarkers (REMOTE POSTERS)

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### Drug and Metabolite Analysis (REMOTE POSTERS)

**FP 133** Simultaneous analysis of remdesivir and its metabolite in human plasma using fully automated sample preparation LC/MS/MS system; **Toshikazu Minohata**¹; Eishi Imoto²; ¹Shimadzu Corp., Kyoto, Japan; ²Shimadzu corp., Kyoto, Japan

**FP 139** A Tool for Automated Determination and Profiling of Therapeutic Oligonucleotide Impurities and Metabolites in LC-HRMS Data; Eva Duchoslav⁴; Harini Kaluarachchi⁵; Lyle Burton⁵; Thanh Ngu⁶; Peter Liuni⁷; Jason Causon⁸; ¹SCIEX, Concord, ON

### Education: Teaching MS and Teaching with MS (REMOTE POSTERS)

**FP 143.5** FTMS Teaching Pack: an interactive resource to teach FTMS fundamentals; **Olga Vvedenskaya**¹; Anton N. Kozhinov¹; Konstantin O. Nagornov¹; Yury O. Tsybin¹; ²Spectroswiss, Lausanne, Switzerland

### Energy: Petroleum and Biofuels (REMOTE POSTERS)

**FP 149** Comparison of direct and indirect analysis of crude oil molecules adsorbed onto carbonate rock surface using LDI–FTICR MS; **Nathaniel Terra Telles Souza**¹, ², ³, ⁴; Leticia Ligiero², ³, ⁴; Nicolas Agenet⁵; Marie Hubert-Roux³, ⁴; Carlos Afonso³, ⁴; Ryan P Rodgers⁶, ⁷; ¹IPREM, Université de Pau et des Pays de l’Adour, Pau, France; ²Total S.A. Exploration & Production–Lacq Research Center (PERL), Lacq, France; ³Normandie Université, COBRA UMR 6014 et FR 3038 Univ Rouen, Mont Saint Aignan, France; ⁴International Joint Laboratory–iC2MC, TotalEnergies - TRTG Refining and Chemicals, Gonfreville l’Orcher, Harfleur, France; ⁵TOTAL SA, Centre Scientifique et Technique Jean Féger, Pau, France; ⁶National High Magnetic Field Laboratory, Florida State University, Tallahassee, FL

### Environmental: General (REMOTE POSTERS)

**FP 160** Laser diode thermal desorption to the rescue: ultra-fast analysis of a chemical stressor of a vulnerable species of frog; **Cassandra Guérette**¹; Cédric Boué²; **Pedro A. Segura**³; ¹Université de Sherbrooke, Sherbrooke, QC; ²Nature-Action Québec, Béloïl, QC

**FP 167** Non-target quantification of water contaminants based on chromatographic and mass spectrometric properties using LC/ESI/HRMS; **Emma H Palm**¹; Louise M E Malm¹; Miklós Péter Mohai¹; Anneli Kruve¹; ¹Stockholm University, Stockholm, Sweden
FP 168 Method development and analysis of textile dye biodegraded metabolites with UPLC-FTICR-MS/MS and environmental toxicological study; Rafiqul Alam1; Syful Islam1; Nissa Nurfarin2; Dede Heri Yuli Yanto2; Md Badrul Alam3; Sang Han Lee3; Sunghwan Kim1,4; 1Department of Chemistry, Kyungpook National University, Daegu, South Korea; 2Research Center for Biomaterials, Indonesian Institute of Sciences (LIPI), Bogor, Indonesia; 3Department of Food Science and Biotechnology, Graduate School, Kyungpook National University, Daegu, South Korea; 4Mass Spectrometry Converging Research Center and Green-Nano Materials Research Center, Daegu, South Korea

Environmental: Pharmaceuticals and Pesticides (REMOTE POSTERS)

FP 170 Identifying the impact of a pandemic on pharmaceutical river contamination by LC-MS/MS; Stéphane Moreau1; Neil J Loftus2; Alan Barnes3; Melanie Egli3; Leon Barron3; 1Shimadzu Europa GmbH, Duisburg, Germany; 2Shimadzu MS/BU, Manchester, United Kingdom; 3Imperial College London, London, United Kingdom

Food Safety & Chemistry: Foodomics, Allergens, Bacteria, Foods, and Supplements (REMOTE POSTERS)

FP 181 Profiling of Vitamin B in Fortified Daily Nutritional Supplements Using LC-MS/MS; Vikrant Goel1; Saikat Banerjee2; 1Agilent Technologies, Gurgaon, India; 2Agilent Technologies, Haryana, India

FP 189 Milk metabolite phenotyping profiling of bovine, ovine, buffalo, caprine and donkey by LC-MS/MS QTOF analysis; Alan Barnes1; Neil J Loftus1; Anastasia Pesiridou2,3,4; Ioannis Sampsonidis4,5; Georgios Arsenos4,6; Georgios Theodoridis2,3,4; Shimadzu, Manchester, United Kingdom; 2Department of Chemistry, Aristotle University of Thessaloniki, Thessaloniki, Greece; 3Biomic_Auth, Bioanalysis and Omics Laboratory, CIRI-AUTH, Thessaloniki, Greece; 4FoodOmicsGR_Research Infrastructure, Auth Node, CIRI-AUTH, Thessaloniki, Greece; 5Department of Nutritional Sciences & Dietetics, International Hellenic University, Thessaloniki, Greece; 6Department of Veterinary Medicine, School of Health Sciences, Aristotle University of Thessaloniki, Thessaloniki, Greece

Food Safety: General (REMOTE POSTERS)

FP 198 A Water Analysis Platform Pesticides and PPCPs: LC-MS/MS screening of more than 400 pesticides in drinking Water; Doriane Toinon1; Aurore Jaffuel1; Mikeal Levi2; Yoshihiro Hayakawa1; Shimadzu Corporation, Kyoto, Japan; 1Shimadzu Corporation, Hadano-city, Japan; 2Shimadzu Corporation, Kyoto, Japan

FP 200 Highly sensitive simultaneous analysis of tetracyclines and β-lactams antibiotics in edible meat by LC/MS/MS; Ayaka Minamimoto1; Manami Kobayashi1; Junichi Masuda1; Yoshihiro Hayakawa1; Shimadzu Corporation, Hadano-city, Japan

Forensics (REMOTE POSTERS)

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FP 218 ‘Close to Real Time’ Trace Residue Analysis of Discarded Drug Packaging Samples at Large Public Events; Henry West1; John Fitzgerald1; Katherine Hopkins5; Eric Li3; Nicholas Clark3,4; Stephanie Tzanetis5,6; Shaun L Green1,7; Gavin E Reid1; 1University of Melbourne, Parkville, Australia; 2Agilent Technologies, Mulgrave, Australia; 3North Richmond Community Health, Richmond, Australia; 4Royal Melbourne Hospital, Parkville, Australia; 5Harm Reduction Victoria, North Melbourne, Australia; 6Harm Reduction Australia, Leura, Australia; 7Victorian Poisons Information Centre, Austin Health, Heidelberg, Australia

FP 221 Multi-Target Screening and Quantitative Method Validation of 24 Drugs in Synthetic Urine Using Automated Sample Preparation Coupled Directly to LC-MS/MS; Kate (xiaomeng) Xia1; Sarah R. Olive1; Mohamed Nazim Boutaghoul1; Rachel Lieberman1; Shimadzu Scientific Instruments, Columbia, MD
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<td>FP 323 Spatially Resolved Chemical Profiling of Plant Root Exudates Via Droplet-Based Liquid Microjunction Surface Sampling Probe-HPLC-ESI-MS; Vilmos Kertesz¹; John F. Cahill¹; Scott T. Retterer¹; Muneeba Khalid¹; Courtney L. Walton¹; ¹Oak Ridge National Laboratory, Oak Ridge, TN</td>
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<td>FP 326 Direct imaging of plant metabolites in the rhizosphere using laser desorption ionization ultra-high resolution mass spectrometry; Martin Lohse¹; Rebecca Haag¹, ²; Eva Lippold³; Doris Vetterlein³, ⁴; Thorsten Reenstma¹, ⁵; Oliver J. Lechtenfeld¹, ⁵; ¹Helmholtz Centre for Environmental Research GmbH - UFZ, Leipzig, Germany; ²University of Applied Sciences Ansbach, Ansbach, Germany; ³Helmholtz Centre for Environmental Research GmbH - UFZ, Halle, Germany; ⁴Martin Luther University Halle-Wittenberg, Halle, Germany; ⁵Leipzig University, Leipzig, Germany; ⁶ProVIS – Centre for Chemical Microscopy, Helmholtz Centre for Environmental Research – UFZ, Leipzig, Germany</td>
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FP 329 Native mass spectrometry imaging of intact soluble and membrane protein complexes by nano-DESI; Oliver J. Hale1; James W. Hughes1; Emma K Sisley1; Helen J Cooper1; 1University of Birmingham, Birmingham, United Kingdom

Imaging MS: Pharmaceuticals, Metabolites, and Lipids (REMOTE POSTERS)

FP 336 Drug Imaging and Uptake Kinetics in Fasciola hepatica Parasite Samples using AP-SMALDI MSI; Carolin M Morawietz1; Simone Häberlein2; Alejandra Peter Ventura3; Georg Rennar4; Kerstin Strupat5; Martin Schlitzer3; Christoph G Grevelding2; Bernhard Spengler1; 1Institute of Inorganic and Analytical Chemistry, Justus Liebig University, Giessen, Germany; 2Institute of Parasitology, Justus Liebig University, Giessen, Germany; 3Institute for Pharmaceutical Chemistry, Philipps University, Marburg, Germany; 4Thermo Fisher Scientific (Bremen) GmbH, Bremen, Germany

FP 341 Combination of Mass Spectrometry Imaging and Enzyme Expression Reveals Disparity between Prostaglandin and Prostaglandin Synthase in situ Localizations; Kyle D. Duncan1; Xiaofei Sun2; Erin Baker3; Sudhansu K. Dey2; Ingela Lanekoff1; 1Uppsala University, Uppsala, Sweden; 2Cincinnati Children’s Hospital Medical Center, Cincinnati, OH; 3North Carolina State University, Raleigh, NC

Informatics: Algorithms and Statistical Advances (REMOTE POSTERS)

FP 349 Machine Learning Models for Detecting PFAS Ions Using Low Resolution Mass Spectrometry; Tsach Mackey1; Kunyu Zheng1; Michael J Dolan1; Kaveh Jorabchi1; 1Georgetown Univ., Washington, DC

FP 351 The R-package prolfqua for proteomics label-free quantification data analysis; Witold E Wolski1; Jonas Grossmann1, 2; Maria D’Errico1, 2; Christian Panse1, 2; Paolo Nanni1; 1Functional Genomics Center Zurich, ETH Zürich / University of Zurich, Zürich, Switzerland; 2Swiss Institute of Bioinformatics, Lousanne, Switzerland

Informatics: Multiomics Integration (REMOTE POSTERS)

FP 363 Profiling Of Protein Clusters Using Over Representation Analysis; Maria D’errico1; Witold Wolski1; 1Functional Genomics Center Zurich, ETH Zürich / University of Zurich, Zürich, Switzerland

Informatics: Peptide ID and Quantification (REMOTE POSTERS)

FP 365.5 Reducing missing values in phosphoproteomic and proteomic isobaric labelling data using fragment spectrum clustering; Firas Hamood1; Matthew The1; Florian Bayer1; Mathias Wilhelm1; Bernhard Kuster1; 1Technische Universität München, Munich, Germany

FP 366 Integrating Filtered Peak Lists into Protein Prospector’s Batch-Tag; Peter R Baker1; Robert J Chalkley2; 1UCSF, Rokietnica, Poland; 2UCSF, San Francisco, CA

FP 368 TIMS Viz for Mobility Offset Mass Aligned interrogation of complex samples; Philipp Strohmidel1; Sebastian Wehner1; Jens Decker1; Ignacio Jauregui1; Christopher Adams2; Tharan Sri Kumar2; Sven Brehmer1; 1Bruker Daltonics GmbH & Co. KG, Bremen, Germany; 2Bruker, Inc., San Jose, CA

FP 371 Detection of multiple modifications in mass spectra without any a priori; Albane Lysiak1; 2; Fertin Guillaume3; Géraldine Jean3; Dominique Tessier2, 4; 1Université de Nantes, Nantes, France; 2INRAE, UR BIA, Nantes, France; 3Université de Nantes, Nantes, France; 4INRAE, BIBS facility, Nantes, France

Informatics: Workflow and Data Management (REMOTE POSTERS)

FP 378 Solution towards a vendor-neutral secure data transfer process between LIMS/ELN and LC-MS/MS instruments for bioanalysis; Mark E Arnold1; Tim Blacker2; Gidion De Boer3; Scott Davies1; Blair James2; Neil J Loftus3; Burkhard Schaefer5; 1AAPS Data Storage Group, Arlington, VA; 2SCIEX, Concord, ON; 3Thermo Fisher Scientific - Digital Science Business Unit, Breda, Netherlands; 4Shimadzu MS/BU, Manchester, United Kingdom; 5BSSN Software, part of MilliporeSigma, Darmstadt, Germany

FP 379 Automated Approach to Optimize Differential Mobility Spectrometry Separations; Eva Duchoslav1; Leigh Bedford1; Yves Leblanc1; Bradley B. Schneider1; 1SCIEX, Concord, ON
FP 382 Needles in a Stack of Needles: Finding Significant Thermal Shifts in Thermal Proteome Profiling with Inflect Statistical Analysis and Bioinformatics; Neil Mccracken¹; Hao Liu²; Aruna Wijeratne³; Amber L Mosley¹;
¹Indiana University School Of Medicine, Indianapolis, IN; ²Rutgers University, Newark, NJ
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**FP 402** Analysis of non-polar/non-volatile molecules by proton-transfer-reaction ionization time-of-flight mass spectrometry using supercritical carbon dioxide; Toshinobu Hondo\(^1\); Chihiro Ota\(^2\); Yumi Miyake\(^3\); Hiroshi Furutani\(^4\); Michisato Toyoda\(^2\); \(^1\)MS-Cheminformatics, Inabe-Gun, Japan; \(^2\)Project Research Center for Fundamental Sciences, Graduate School of Science, Osaka University, Toyonaka, Japan; \(^3\)Graduate School of Science and Engineering, Kansai University, Suita, Japan; \(^4\)Center for Scientific Instrument Renovation and Manufacturing Support, Osaka University, Toyonaka, Japan

**FP 404** DIP-MS: a probe for direct infusion of low-volume samples; Catia Marques\(^1\); Kyle D. Duncan\(^1\); Ingela Lanekoff\(^1\); \(^1\)Uppsala University, Uppsala, Sweden

**FP 406** Instantaneous solvent prompted desorption electrospray ionization (ISPD-ESI)-MS with a porous thin-film device: An efficient method for rapid analysis of biofluids; Christina Bottaro\(^1\); Fereshteh Shahhoseini\(^2\); Ali Azizi\(^1\); \(^1\)Memorial University, St. John’s, NL

**Ion Mobility: FAIMS/DMS (REMOTE POSTERS)**

**FP 438** Frequency and Waveform Dependence of the Compensation Voltage: Numerical Modeling of Cluster Systems in Differential Ion Mobility Spectrometry; Duygu Erdogdu\(^1\); Walter Wissdorf\(^2\); Hendrik Kersten\(^1\); Thorsten Benter\(^1\); \(^1\)University of Wuppertal, Wuppertal, Germany

**FP 439** Quantitative separation analysis of therapeutic oligonucleotide isomer impurities by cyclic ion mobility (cIM) technique; Shogo Omuro\(^1\),\(^2\); Takao Yamaguchi\(^2\); Taiji Kawase\(^3\); Kenji Hirose\(^3\); Satoshi Obika\(^2\); \(^1\)Analytical Research Labs., Astellas Pharma Inc., Tsukuba, Japan; \(^2\)Graduate School of Pharmaceutical Sciences, Osaka University, Suita, Japan; \(^3\)Nihon Waters K.K., Kitashinagawa, Japan

**FP 441** The investigation of prototropic isomers of rivaroxaban in differential mobility spectrometry; Nour Mashmoushi\(^1\); Daniel R Juhasz\(^2\); Neville J A Coughlan\(^3\); Yves Leblanc\(^2\); Bradley B. Schneider\(^2\); Mircea Guna\(^2\); Blake Ziegler\(^1\); J. Larry Campbell\(^1\),\(^3\),\(^4\); W. Scott Hopkins\(^1\),\(^4\); \(^1\)University of Waterloo, Waterloo, ON; \(^2\)SCIEX, Concord, ON; \(^3\)Bedrock Scientific, Milton, ON; \(^4\)Watermine Innovation, Waterloo, ON

**FP 442** First-Principles Modeling of Differential Ion Mobility – Aiming for Quantitative Prediction; Alexander Haack\(^1\); Justine Bissonnette\(^1\); Christian Ieritano\(^1\); W. Scott Hopkins\(^1\); \(^1\)University of Waterloo, Waterloo, ON

**Ion Mobility: General (REMOTE POSTERS)**

**FP 447** Concepts for Elongated Spiral and Helical Ion Guides; Hamish Stewart\(^1\); Alexander Wagner\(^1\); Alexander Makarov\(^1\); \(^1\)Thermo Fisher Scientific, Bremen, Germany

**Ion Mobility: Structure (REMOTE POSTERS)**

**FP 453** Controlling the Collision-Induced Unfolding/Dissociation Pathway of Hemoglobin through Charge State Manipulation in Ion Mobility Mass Spectrometry; Zhijun Zhu\(^1\); Xindi Tang\(^1\),\(^2\); Gongyu Li\(^3\),\(^4\); Lingjun Li\(^1\),\(^3\); \(^1\)Department of Chemistry, University of Wisconsin-Madison, Madison, WI; \(^2\)Department of Biochemistry, University of Wisconsin-Madison, Madison, WI; \(^3\)School of Pharmacy, University of Wisconsin-Madison, Madison, WI; \(^4\)Research Center for Analytical Science, College of Chemistry, Nankai University, Tianjin, China

**LC/MS: Sample Preparation (REMOTE POSTERS)**

**FP 476** BCA-no-more: seamless, high throughput protein quantification directly on S-Trap plates; Aleisha Benjamin\(^1\); Darryl J.C. Pappin\(^2\); John Wilson\(^1\); \(^1\)ProtiFi, LLC, Farmingdale, NY; \(^2\)Cold Spring Harbor laboratory, Cold Spring Harbor, NY

**FP 477** Fully Automated High Throughput Sample Preparation and Acquisition on an Exploris 240 for Aqueous Samples; Bernadette Vogler\(^1\); Günter Boehm\(^2\); Heinz Singer\(^3\); \(^1\)EAWAG, Dübendorf, Switzerland; \(^2\)CTC Analytics AG, Zwingen, Switzerland; \(^3\)EAWAG, Dübendorf, Switzerland
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**Lipids: General (REMOTE POSTERS)**

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Application of Hybrid Surface Technology for Improving Sensitivity and Peak Shape of Phosphorylated and Carboxylate Lipids; Giorgis Isaac¹; Robert S Plumb¹; Ian D Wilson³; ¹Waters Corporation, Milford, MA; ²Imperial college London, London, United Kingdom

FP 485  
Fast and Accurate Lipid Profiling and Identification of Serum Samples by probe-electrospray Q-TOF MS using SimLipid Software; Venkata Kolli¹; Rupanjan Goswami¹, ²; Arun Apte²; Tasuku Murata³; Koretsugu Ogata³; Atsuhioko Toyama³; ¹PREMIER Biosoft, Indore, India; ²PREMIER Biosoft, San Francisco, California; ³Shimadzu Corporation, Kyoto, Japan

**Lipids: ID and Structural Analysis (REMOTE POSTERS)**

FP 487  
A discovery platform for fatty acids using untargeted charge-switch derivatization UPLC-OzID-MS and automated large-scale data analysis; Jan Philipp Menzel¹, ², ³; Reuben S.E. Young¹, ²; Berwyck L.J. Poad¹, ²; Stephen J Blanksby¹, ²; ¹School of Chemistry and Physics, Queensland University of Technology, Brisbane, Australia; ²Centre for Materials Science, Queensland University of Technology, Brisbane, Australia; ³Centre for Data Science, Queensland University of Technology, Brisbane, Australia

FP 491  
Quantitative differentiation of glycerolipid sn-positional isomers with tandem mass spectrometry; Johan Lilija¹; Kyle D. Duncan¹; Ingela Laneckoff¹; ¹Uppsala University, Uppsala, Sweden

FP 496  
IRMPD action spectroscopy of [PC (4:0/4:0)+H/Na/K]+ and corresponding CID fragment ions; Simon Becher¹; Giel Berden²; Jos Oomens²; Sven Heiles²; Bernhard Spengler³; ¹Justus-Liebig-University Gießen, Gießen, Germany; ²FELIX Laboratory, Radboud University, Nijmegen, Netherlands; ³Justus-Liebig-University Gießen, Gießen, Germany

**Lipids: Targeted and Quantitative Analysis (REMOTE POSTERS)**

FP 505  
Development of an analytical method for human blood triglycerides using triple quadrupole mass spectrometer; Yutaka Umakoshi¹; Toinon Doriane¹; Masaki Yamada¹; ¹Shimadzu Corp., Kyoto, Japan

FP 505.5  
Comparison of untargeted LC-MS and targeted MRM-LC-MS-based lipidomics analysis; Deema O. Qasrawi¹; Evgeny Petrochentko¹, ²; Christoph H. Borchers³; ¹Segal Cancer Proteomics Centre, McGill University, Montreal, QC; ²Center for Computational and Data-Intensive Science and Engineering, Skolkovo Institute of Science and Technology, Moscow, Russia; ³McGill University, Montreal, QC

**MALDI: Applications (REMOTE POSTERS)**

FP 512  
The potential of intact cell mass spectrometry as a monitoring tool for fermentation processes; Cristian Zanetti¹; Christopher Stephan²; Alexandra Foettinger-Vacha³; Martina Marchetti-deschmann¹; ¹TU Wien, Vienna, Austria; ²Boehringer Ingelheim RCV GmbH & Co KG, Vienna, Austria

FP 517  
Alkaline Embolization In Vivo: Multi-Modal Feasibility Study using Computed Tomography, Fluoroscopy, and Mass Spectrometry Imaging; Emily A Thompson¹; Danielle L. Stolley³; Megan Jacobsen¹; Marina Yu³; Brett Pogostin³; Erin H. Seeley³; A. Colleen Crouch¹, ²; Shubhneet Warar³; Kevin McHugh³; Rick Layman³; Erik N. K. Cressman¹; ¹MD Anderson Cancer Center, Houston, TX; ²Rice University, Houston, TX; ³The University of Texas at Austin, Austin, TX; ⁴The University of Tennessee at Knoxville, Knoxville, TN; ⁵Baylor University, Waco, TX

**Metabolomics: Clinical Applications (REMOTE POSTERS)**

FP 521  
Characterising the impact of delivery mode on the biochemical signatures of neonatal brain cortex in mice using LC-MS/MS; Neil J Loftus¹; Alan Barnes¹; Maria Rodriguez Aburto²; Carmen Tessier²; John Cryan²; Jonathan Swann³; ¹Shimadzu MS/BU, Manchester, United Kingdom; ²APC Microbiome Ireland, University College Cork, College Road, Cork, Ireland; ³School of Human Development and Health, Faculty of Medicine University of Southampton, Southampton, United Kingdom
**Metabolomics: Targeted and Quantitative Analysis (REMOTE POSTERS)**

**FP 540**
automRm: An R package for fully automatic pre-processing of LC-QQQ data powered by machine learning; Joerg M Buescher¹; Daniel Eilertz²; Michael Mitterer²; ¹Max Planck Institute of Immunbio. and Epigenetics, Freiburg, Germany

**Nucleic Acids and Oligonucleotides (REMOTE POSTERS)**

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Rapid Analysis of mRNA 5'-Capping with High-Resolution LC-MS; Brian Liau; Agilent Technologies, Singapore, Singapore

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Probing the intramolecular folding of DNA i-motifs with native ion mobility mass spectrometry, charge- and collision-induced unfolding; Sanae Benabou Zdaou¹; Valérie Gabelica¹,²,³; ¹University of Bordeaux, Bordeaux, France; ²Laboratoire Acides Nucleiques: Régulations Naturelle et Artificielle, Bordeaux, France; ³Institut national de la santé et de la recherche médicale (Inserm), Bordeaux, France

**FP 578**
Analysis of Oligonucleotide Impurities on a UHPLC-TOF MS System with a Modified Surface Technology; Catalin E Doneanu¹; Christopher Knowles²; Jonathan Fox²; Emma Harry²; Ying Qing Yu³; Joseph Fredette³; Weibin Chen³; ¹Waters Corporation, Milford, MA; ²Waters Corporation, Wilmslow, United Kingdom; ³Waters Corporation, Milford, Massachusetts

**Peptides: Targeted and Quantitative Analysis (REMOTE POSTERS)**

**FP 600**
A SISCAPA-based approach for detection of SARS-CoV-2 viral antigens from clinical samples; Kiran Kumar Mangalaparthi¹; Sandip Chavan¹; Anil K. Madugundu¹,²,³,⁴; Rohit Budhraja¹; Santosh Renuse¹; Patrick M. Vanderboom¹; Anthony Maus¹; Jennifer Kemp¹; Benjamin R Kipp¹; Stefan K. Grebe¹; Ravinder J. Singh¹; Akhilesh Pandey¹,²; ¹Mayo Clinic, Rochester, MN; ²Institute of Bioinformatics, Bengaluru-560065, India; ³Manipal Academy of Higher Education, Manipal, India; ⁴National Institute of Mental Health and Neurosciences, Bengaluru-560065, India

**FP 601**
Quantitation of isoAsp Amyloid beta in human AD patients and genetically modified mouse model by a combination of MS approaches; Maria I. Indeykina¹; Polina Strelnikova¹,²; Anna E. Bugrova¹; Alexander Brzhozovskiy²; Eugene Barykin³; Maria S. Gavrish³; Alexey A. Babaev³; Natalia V. Zakharova¹; Alexey S. Kononikhin³; Alexander A. Makarov³; Evgeny Nikolaev³; ¹Emanuel Institute of Biochemical Physics, Russian Academy of Science, Moscow, Russia; ²Moscow institute of physics and technology, Dolgoprudny, Russia; ³Skolkovo Institute of Science and Technology, Moscow, Russian Federation; ⁴Engelhardt Institute of Molecular Biology, Moscow, Russia; ⁵Lobachevsky State University of Nizhni Novgorod, Institute of Neuroscience, Nizhny Novgorod, Russia

**Phosphopeptides: Quantitative Analysis (REMOTE POSTERS)**

**FP 615.5**
LiDIA-PASEF: A framework using experimental libraries for optimal acquisition of (phospho)proteomes by diaPASEF; Patricia Skowronek¹; Marvin Thielert¹; Fynn M. Hansen¹; Eugenia Voytik¹; Özge Karayel¹; Maria C. Tanzer¹; Florian Meier¹,²; Andreas-David Brunner¹; Matthias Mann¹,²,³; ¹MPI, Planegg, Germany; ²Jena University Hospital, Jena, Germany; ³NNF CENTER FOR PROTEIN RESEARCH, Copenhagen, Denmark

**Polymers (REMOTE POSTERS)**

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Reactive Desorption Electrospray Ionization (reactive-DESI) Mass Spectrometry to Determine a degradability scale of Poly(Lactic-co-Glycolic Acid) Chains; Thierry Nicolas Jean Fouquet¹,²; Jean-Arthur Amalian³; Nathan Aniel³; Isaura Carvin-Sergent³; Sébastien Issà³; Salomé Poyer³; Delphine Crozet³; Pierre Giusti⁴,⁵; Didier Gigmes³; Thomas Tramaille³; Laurence Charles³; ¹Bausch + Lomb, Rochester, NY; ²Jean-Arthur Amalian; ³International Joint Laboratory – IC2MC: Complex Matrices Molecular Characterization, Harfleur, France

**Protein Therapeutics: Structural Characterization (REMOTE POSTERS)**

**FP 646**
Characterization of Forced Photo-Stress Induced Modifications by Mass Spectrometry; Joanne Cotton¹; Luke K Brewer¹; Fatemeh Tousi¹; Martha Stapels¹; Karen Lee¹; "Sanofi, Framingham, MA"
Proteins: Conformation Analysis and Structural Biology (REMOTE POSTERS)

FP 657 Structural mass spectrometry approaches to decipher interactions within the ~380 kDa RUVBL1/RUVBL2/DPCD complex; Marie Ley1, 2; Evolène Deslignière1, 3; Paulo Espirito Santo4; Steve Hessmann1, 2; Cédric Schelcher1; Marie-Eve Chagot1; Ana Catarina Paiva4; Bruno Charpentier5; Tiago Bandeiras4; Xavier Manival5; Raphaël Dos Santos Morais5; Sarah Cianférani1, 2; 1Laboratoire de Spectrométrie de masse BioOrganique (LSMBO), IPHC, UMR 7178, Université de Strasbourg, CNRS, 25 rue Becquerel, 67087 Strasbourg, France; 2Infrastructure Nationale de Protéomique ProFI – FR2048, Strasbourg, France; 3Laboratoire de Spectrométrie de masse BioOrganique (LSMBO), IPHC, CNRS, UMR 7178, Université de Strasbourg, Strasbourg, France; 4Instituto de Tecnologia Química e Biológica António Xavier, Universidade de Nova de Lisboa, Oeiras, Portugal; 5CNRS, IMoPA, Université de Lorraine, Nancy, France

Proteins: PTMs (REMOTE POSTERS)

FP 658 Liquid chromatography setup-dependent artefactual methionine oxidation of peptides: the importance of an adapted quality control process; France Baumans1; Emeline Hanozin1; Dominique Baiwir2; Corentin Decroo3; Ruddy Wattiez3; Edwin De Pauw1; Gauthier Eppe1; Gabriel Mazzucchelli1; 1Mass Spectrometry Laboratory, MolSys Research Unit, University of Liege, Liege, Belgium; 2GIGA Proteomics Facility, University of Liege, Belgium; 3Proteomics and Microbiology Laboratory, University of Mons, Belgium

FP 663 A novel spectral annotation workflow that scores MS2 features unique to ADP-ribosylated peptides reveals the complexity in their dissociative properties; Shiori Kuraoka1; Waqas Nasir2; Bernard Delanghe2; Masanori Aikawa1, 3, 4; Sasha A. Singh1; 1Center for Interdisciplinary Cardiovascular Sciences, Division of Cardiovascular Medicine, Department of Medicine, Brigham Women’s Hospital, Harvard Medical School, Boston, MA; 2Thermo Fisher Scientific (Bremen) GmbH, Bremen, Germany; 3Center for Excellence in Vascular Biology, Cardiovascular Division, Brigham and Women’s Hospital, Harvard Medical School, Boston, MA; 4Channing Division of Network Medicine, Department of Medicine, Brigham Women’s Hospital, Harvard Medical School, Boston, MA

Proteomics: Clinical Applications (REMOTE POSTERS)

FP 669 Semi-quantitative proteomic analysis on cancer stem cell following synergistic treatment with curcumin and cisplatin; Mohd Nazri Ismail1; Nazilah Abdul Satar2; Badrul Hisham Yahaya2; 1ANALYTICAL BIOCHEMISTRY RESEARCH CENTRE, Bayan Lepas, Malaysia; 2Advanced Medical and Dental Institute, Universiti Sains Malaysia, Kepala Batas, Malaysia

Proteomics: Quantitative (REMOTE POSTERS)

FP 705 Label free DIA and DDA nano-LC/MS/MS improved quantitative profiling of redox stress mediated proteomic changes in mouse dendritic cells; Cristina C Clement1; Rajesh Kumar Soni2; 1Weill Cornell Medicine, New York, NY; 2Proteomics and Macromolecular Crystallography Shared Resource, Herbert Irving Comprehensive Cancer Center, Columbia University Irving Medical Center, New York, NY

Proteomics: Top Down Analysis (REMOTE POSTERS)

FP 719 Quantitative top-down proteomics by isobaric labeling with thiol-directed tandem mass tags; Konrad Winkels1; Tomas Koudelka1; Andreas Tholey1; 1Systematic Proteome Research & Bioanalytics, Institute for Experimental Medicine, Christian-Albrechts-Universität zu Kiel, Kiel, Germany

FP 725 Top-down Analysis of Multi-Phosphorylated Proteins using 193 nm Ultraviolet Photodissociation Mass Spectrometry; Edwin Escobar1; Mukesh Kumar Venkat Ramani1; Yan Zhang1; Jennifer S Brodbelt1; 1University of Texas at Austin, Austin, TX

FP 726 In situ top-down identification and native ambient mass spectrometry imaging of metal-bound and ligand-bound proteins in rat brain; Emma K Sisley1; Oliver J Hale1; Iain B Styles1; Helen J Cooper1; 1University of Birmingham, Birmingham, United Kingdom
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| FP 747 | Simultaneous low-level quantitation of four impurities in Clozapine API using Triple Quadrupole LC-MS/MS; Prasanth Joseph\(^1\); Sivakumar S.\(^1\); Saikat Banerjee\(^1\); Kannan Balakrishnan\(^1\); \(^1\)Agilent Technologies, Bangalore, India |
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| FP 758 | Comparison of semi-quantification methods for non-targeted screening of emerging contaminants with LC/ESI/HRMS; Louise M E Malm\(^1\); Anneli Kruve\(^1\); \(^1\)Stockholm University, Stockholm, Sweden |

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FP 099  Optimization of embedding human lung for bulk and spatial metabolomics, lipomics, and proteomics; Jessica K Lukowski1; Heather Olson1; Juan Wang1; Jennifer E Kyle1; Heidie Huyck2; Matthew Mcgraw2; Cory Poole2; Lisa Rogers2; Gloria Pryhuber2; Theodore Alexandrov3; James Carson4; Geremy Clair1; Joshua N Adkins1; Christopher R Anderton1; 1Pacific Northwest National Laboratory, Richland, WA; 2University of Rochester Medical Center, Rochester, NY; 3European Molecular Biology Laboratory, Heidelberg, Germany; 4Texas Advanced Computer Center, University of Texas at Austin, Austin, Texas

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<td>¹Sorbonne Université, Faculté des sciences et de l'ingénierie, Institut Parisien de Chimie Moléculaire (IPCM), Paris, France; ²Département de Chimie Moléculaire, UMR CNRS 5250, Université de Grenoble Alpes, Grenoble, France; ³Génomique métabolique, Genoscope, Institut François Jacob, CEA, CNRS, Univ Evry, Université Paris-Saclay, Evry, France; ⁴Université Paris-Saclay, CNRS, Institut de Chimie des Substances Naturelles, UPR 2301, Gif-sur-Yvette, France; ⁵NIDA IRP, NIH Structural Biology Unit Integrative Neuroscience Branch, Baltimore, MD; ⁶The Johns Hopkins University School of Medicine, Pharmacology and Molecular Sciences, Baltimore, MD</td>
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<td>¹Sorbonne Université, Faculté des sciences et de l’ingénierie, Institut Parisien de Chimie Moléculaire (IPCM), Paris, France; ²Université Paris-Saclay, CEA, INRAE, Département Médicaments et Technologies pour la Santé (DMTS), MetaboHUB, Paris, France; ³Département de Chimie Moléculaire, UMR CNRS 5250, Université de Grenoble Alpes, Grenoble, France; ⁴Génomique métabolique, Genoscope, Institut François Jacob, CEA, CNRS, Univ Evry, Université Paris-Saclay, Evry, France; ⁵Université Paris-Saclay, CNRS, Institut de Chimie des Substances Naturelles, UPR 2301, Gif-sur-Yvette, France; ⁶NIDA IRP, NIH Structural Biology Unit Integrative Neuroscience Branch, Baltimore, MD; ⁷The Johns Hopkins University School of Medicine, Pharmacology and Molecular Sciences, Baltimore, MD</td>
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<td>Xueyun Zheng¹; Aivett Bilbao¹; Joon-Yong Lee¹; Berwyck Poad²; Stephen J Blanksby²; Erin Baker³; Yehia Ibrahim¹; Richard Smith¹; Pacific Northwest National Laboratory, Richland, WA; Queenslands University of Technology, Brisbane, Australia; North Carolina State University, Raleigh, NC</td>
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<td><strong>FP 630</strong> Identification and unravelling of industrial and artists' alkyd paints and their reticulation using chemical depolymerization and ultra-high resolution mass spectrometry; Christian Rolando¹; Catherine Bordín¹; Ziad Mahmoud¹; Fabrice Bray¹; ¹Miniaturization for Synthesis, Analysis &amp; Proteomics, USR 3290, CNRS, University of Lille, Villeneuve d'Ascq, France; ²Shrieking Sixties, 1-3 Allée Lavoisier, Villeneuve d'Ascq, France</td>
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Global Proteomic Analysis Reveals a Novel Pathway Regulated by PERK, an ER Stress Sensor; Rathipriya Viswanathan\textsuperscript{1}; Brain Stoveken\textsuperscript{1}; Deborah Holstein\textsuperscript{1}; Sammy Pardo\textsuperscript{1}; Dana Molleur\textsuperscript{1}; Susan T. Weintraub\textsuperscript{1}; James D. Lechleiter\textsuperscript{1}; \textsuperscript{1}Univ. of Texas HSC, San Antonio, TX
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**Ambient Ionization: Applications (REMOTE POSTERS)**

FP 012 Immuno-enriched microsphere-magnetic blade spray tandem mass spectrometry (iMBS-MS/MS) for marine toxin detection in shellfish; Ariadni Geballa-Koukoula¹; Arjen Gerssen¹; Marco H. Blokland¹; Christopher T. Elliott²; Janusz Pawlisyn³; Michel W.F. Nielen¹, 4; ¹Wageningen Food Safety Research, Wageningen University and Research, Wageningen, Netherlands; ²Institute for Global Food Security, School of Biological Sciences, Queen’s University, Belfast, United Kingdom; ³Department of Chemistry, University of Waterloo, Waterloo, Ontario; 4Laboratory of Organic Chemistry, Wageningen University, Wageningen, Netherlands

**Art, Archaeology & Paleontology (REMOTE POSTERS)**

FP 038 Step by Step: Development of an In-solution Digestion Protocol for the Study of Collagen Degradation in Parchment; Antonia Malissa¹; ²; Manfred Schreiner¹; ²; Martina Marchetti-deschmann¹; ¹Vienna University of Technology, Institute of Chemical Technologies and Analytics, Vienna, Austria; ²Academy of Fine Arts Vienna, Institute of Natural Sciences and Technology in the Arts, Vienna, Austria

**Biomolecular Structure Analysis: Chemical Crosslinking and Covalent Labeling (REMOTE POSTERS)**

FP 081 MS-cleavable crosslinkers: a deep dive into public data; Lars Kolbowski¹; Swantje Lenz¹; Juri Rappsilber¹, ²; ¹TU Berlin, Berlin, Germany; ²University of Edinburgh, Edinburgh, United Kingdom

**Cannabis (REMOTE POSTERS)**

FP 082.75 The comparison of SPE and immunoaffinity column extraction methods for the quantification of mycotoxins using LC-MS/MS in a cannabis matrix; Sarah Lyons¹; Ryan Hayward¹; Seamus Riordan-Short¹; Robert O'brien¹, ²; ¹Supra Research and Development, Kelowna, BC; ²University of British Columbia, Vancouver, BC

**Carbohydrates (REMOTE POSTERS)**

FP 086 Differentiation of Structural- and Linkage Isomers of Human Milk Oligosaccharides using UHPLC with Charge Transfer Dissociation Mass Spectrometry (CTD-MS); Praneeth M. Mendis¹; Glen P. Jackson¹, ²; ¹C. Eugene Bennett Department of Chemistry, West Virginia University, Morgantown, WV; ²Department of Forensic and Investigative Science, West Virginia University, Morgantown, WV

**Clinical Analysis (REMOTE POSTERS)**

FP 093 Sensitive measurement of hydroxy metabolites of Vitamin-D and respective epimers using LC-MS/MS which overcomes challenges of chemiluminescent immunoassay; Siji Joseph¹; Suet Ying Lee², ³; Sunil Chidambar Kulkarni³; Andrea Leonardí; Erhan Simsek¹; Robin Philip¹; David Bradley¹; Chee-Sian Gan¹; Tze Ping Loh⁵; Markus R. Wenk¹, ³; Amaury Cazenave-Gassiot², ³; Anne K. Bendt³; ¹Agilent Technologies, Singapore,
**Drug Discovery/DMPK/ADME (REMOTE POSTERS)**

**FP 120** Detection of protein-drug complexes under native conditions in the low nM range using Magnetic resonance mass spectrometry (MRMS); Matthias Witt1; Yongwei Wang2; Michael Greig3; Jia Liu4; Changqiang Ke4; Yang Ye4; 1Bruker Daltonik GmbH, Bremen, Germany; 2Bruker Daltonics Corporation, Shanghai, China; 3Bruker Daltonics, Billerica, Massachusetts; 4Shanghai Institute of Materia Medica, Shanghai, China

**Drug and Metabolite Analysis (REMOTE POSTERS)**

**FP 132** Analysis of Favipiravir in human plasma using fully automated sample preparation LC/MS/MS system; Eishi Imoto; Shimadzu corp., Kyoto, Japan

**FP 134** An evaluation of rapid method for simultaneous analysis of ciclesonide and its impurities in an inhaler using online SFE-SFC-QTOFMS; Takahiro Goda1; Tetsuo lida2; Junichi Masuda1; Shinnosuke Horie2; Seiji Tanaka3; Nahoko Uchiyama3; Sayaka Masada1; Ryoko Ara3; Eiichi Yamamoto3; Takashi Hakamatsuka3; Haruhiro Okuda1; Yukihiro Goda3; 1Shimadzu Corporation, Hadano, Japan; 2Shimadzu Corp., Kyoto, Japan; 3National Institute of Health Sciences, Kawasaki, Japan

**Environmental: General (REMOTE POSTERS)**

**FP 156** Advanced characterization of marine dissolved organic matter: an analytical pipeline for hyphenation of liquid chromatography and ultrahigh resolution mass spectrometry; Fabian Moye1, 2; Boris P. Koch2, 3; Matthias Witt4; Jan Tebben2; 1Faculty of Biology and Chemistry, University of Bremen, Bremen, Germany; 2Alfred Wegener Institute for Polar and Marine Research, Bremerhaven, Germany; 3University of Applied Sciences, Bremerhaven, Germany; 4Bruker Daltonics GmbH & Co. KG, Bremen, Germany

**Environmental: Pharmaceuticals and Pesticides (REMOTE POSTERS)**

**FP 169** Quantification of fluctuating industrial emissions of pharmaceuticals in wastewater - Comparing onsite Orbitrap measurements with a fully automated lab workflow; Julian Bosshard1; Anne Dax1; Rebekka Gulde2; Heinz Singer1; 1EAWAG, Dübendorf, Switzerland; 2Association of Swiss Wastewater and Water Protection Professionals, Glattbrugg, Switzerland

**Food Safety & Chemistry: Foodomics, Allergens, Bacteria, Foods, and Supplements (REMOTE POSTERS)**

**FP 188** Identification of isoflavonoid phytoalexins biosynthesised in common bean (Phaseolus vulgaris) in response to bacterial blight using untargeted metabolomics profiling; Lili Mats1; Laura Cox2; Honghui Zhu1; Gale Bozzo2; 1Agriculture and Agrifood Canada, Guelph, ON; 2University of Guelph, Guelph, ON

**Food Safety: General (REMOTE POSTERS)**

**FP 196** Compensating matrix effect and low extraction recoveries by adopting procedural standard calibration approach for quantification of mycotoxins in milk samples; Prasanth Joseph1; Rohit Ojha1; Saikat Banerjee1; Kannan Balakrishnan1; 1Agilent Technologies, Bangalore, India

**Fundamentals: Ionization (REMOTE POSTERS)**

**FP 238.5** Understanding the mechanism of native supercharging of nucleic acids by ion mobility mass spectrometry; Debasmita Ghosh1, 2, 3; Frederic Rosu4, 5; Valérie Gabelica1, 2, 3; 1Institut national de la santé et de la recherche médicale, INSERM, Pessac, France; 2Le laboratoire ARNA (Acides nucléiques : Régulations naturelles et artificielles), Pessac, France; 3Univ. Bordeaux, UMR 5320, U1212, IECB, Pessac, France; 4Le Centre national de la recherche scientifique, CNRS, Pessac, France; 5Univ. Bordeaux, UMS 3033, F-33600, IECB, Pessac, France

**Glycoproteins (REMOTE POSTERS)**

**FP 264.5** Post-translational modification (PTM) profiling on fusion protein Aflibercept using a novel fragmentation technique; Xuezhi Bi1; Zoe Zhang2; 1Bioprocessing Technology Institute (BTI), Agency for Science, Technology and Research (A*STAR), Singapore, Singapore; 2Sciex, Redwood City, CA
Imaging MS: Disease Markers (REMOTE POSTERS)

FP 300 High-resolution DESI mass spectrometry lipidomic imaging of human carotid plaque; Nuria Slijkhuis¹; Mark Towers²; Mina Mirzaian¹; Ingeborg M. Nieuwenhuizen¹; Kim Van Gaalen¹; Eric J.G. Sijbrands¹; Yolanda B. De Rijke¹; Heleen M.M. Van Beusekom³; Kim Van Der Heiden¹; Emmanuelle Claude²; Gijs Van Soest¹; ¹Erasmus Medical Center, Rotterdam, Netherlands; ²Waters, Wilmslow, United Kingdom

Imaging MS: Instrumentation (REMOTE POSTERS)

FP 306 Probing the Molecular Basis of Mild Traumatic Brain Injury using Desorption Electrospray Ionization Cyclic Ion Mobility-Mass Spectrometry Imaging; Dmitry Leontyev¹; Bindesh Shrestha²; Hernando Olivos³; Alexis N Pulliam¹; Manvitha Manyam¹; Michelle C Laplaca¹, ³, ⁴; Facundo M. Fernandez¹; ¹Georgia Institute of Technology, Department of Chemistry and Biochemistry, Atlanta, GA; ²Waters Corp, Milford, MA; ³Georgia Institute of Technology, Coulter Department of Biomedical Engineering, Atlanta, GA; ⁴Emory University, Atlanta, GA

Imaging MS: Method Development (REMOTE POSTERS)

FP 311 Multimodal MSI of key species to study Age-related Macular Degeneration; Joshua J O Millar¹; Susan Campbell¹; Catherine Duckett¹; Sarah Doyle²; Laura Cole¹; ¹Sheffield Hallam University, Sheffield, United Kingdom; ²Trinity College Dublin, the University of Dublin, Dublin, Ireland

FP 314 A Fast method for lipids screening using TLC and Mass Spectrometry imaging; Sophie Rappe¹; Johann Far¹; Gauthier Eppe¹; Edwin De Pauw¹; ¹Mass spectrometry laboratory, Liege, Belgium

FP 316 Localized Protein Information and Physiological Tissue Mechanics of Human Menisci; Martin Handelshauser¹, ²; Philipp J. Thurner²; Martina Marchetti-deschmann³; ¹Institute of Chemical Technologies and Analytics, TU Wien, Vienna, Austria; ²Institute of Lightweight Design and Structural Biomechanics, TU Wien, Vienna, Austria; ³Institute of Chemical Technologies and Analytics, TU Wien, Vienna, Austria

FP 321 Host-guest chemistry for multiplexed mass spectrometry imaging of sodium, potassium and endogenous metabolites in tissue; Leonidas Mavroudakis¹; Kyle D. Duncan¹; Ingela Lanekoff¹; ¹Department of Chemistry - BMC, Uppsala University, Uppsala, Sweden

Imaging MS: Pharmaceuticals, Metabolites, and Lipids (REMOTE POSTERS)

FP 331 The absorption of drugs through porcine gastrointestinal tissue analysed by mass spectrometry imaging; Chloe E Spencer¹; Malcolm R Clench¹; Catherine Duckett¹; Stephen Rumbelow²; Steve Mellor³; ¹BMRC, Sheffield Hallam University, Sheffield, United Kingdom; ²CRODA Inc (B88), New Castle, DE19720; ³CRODA Europe Ltd, Leek, United Kingdom

FP 335 Improved molecular detection and acquisition speed using DESI mass spectrometry imaging quadrupole based mass spectrometer; Wei Rao¹; Emrys A Jones¹; Zoltan Takats¹; Emmanuelle Claude¹; ¹Waters Corporation, Wilmslow, United Kingdom; ²Imperial college London, London, United Kingdom

FP 338 Dual-polarity reactive MALDI matrix allows high-resolution mass spectrometry imaging and lipid double bond localization in atherosclerosis-prone apolipoprotein E-deficient mice; Fabian Wäldchen¹; Franziska Mohr²; Andreas H. Wagner²; Sven Heiles¹; ¹Justus-Liebig-Universität Giessen, Giessen, Germany; ²Medizinische Fakultät Heidelberg, Heidelberg, Germany

FP 339 Mass Spectrometry Imaging Enables Localization of Immuno- and Targeted Therapies Delivered Transarterially for Hepatocellular Carcinoma; Erin H. Seeley¹; Nina M. Munoz²; Rony Avritscher²; Bhanu Koppolu¹; Nivedita Ramkumar¹; Rhiannon Johnson¹; Steve Kangas³; Rahul A. Sheth³; ¹University of Texas at Austin, Austin, TX; ²University of Texas MD Anderson Cancer Center, Houston, TX; ³BTG/Boston Scientific, Natick, MA
Informatics: Peptide ID and Quantification (REMOTE POSTERS)

FP 365  Construction of amino acid sequence database for metaproteome analysis using genomes of closely related species; Nobuaki Miura; Yasushi Ishihama; Shujiro Okuda; Niigata University, Niigata, Japan; Kyoto University, Kyoto, Japan

Informatics: Protein ID and Quantification (REMOTE POSTERS)

FP 373  Repurposing Competitive Gene Set Tests for Differential Protein Expression Analysis; Junmin Wang; Raghothama Chaerkady; Shao Huan Samuel Weng; Lina Chakrabarti; Lisa Cazares; Sonja Hess; AstraZeneca, Gaithersburg, MD

Instrumentation: New Developments in Ion Detection (REMOTE POSTERS)

FP 400.5  CDMS mode of FTMS Orbital Frequency Analyser; Aleksandr Rusinov; Li Ding; Sergey Smirnov; Patrick Knight; Roch Andrzjewsky; Hiroki Waki; Shimadzu Research Laboratory, Manchester, United Kingdom; Ningbo University, Ningbo, China; Shimadzu Corp., Kyoto, Japan

Instrumentation: New Developments in Mass Analyzers (REMOTE POSTERS)

FP 410  Experimental Studies of a Novel Multi-turn Time-of-Flight Mass Spectrometer and Its Applications for High Mass Molecules; Yusuke Tateishi; Hiroyuki Miura; Koichi Kimura; Hikaru Shibata; Tamami Fujita; Tomoya Kudo; Masaru Nishiguchi; Hideaki Izumi; Osamu Furuhashi; Tomohito Nakano; Haruki Osa; Daisuke Okumura; Shimadzu Corporation, Kyoto, Japan

Ion Mobility: Applications (REMOTE POSTERS)

FP 429  Cyclic peptide protomers detection in the gas phase: impact on CCS measurement and fragmentation patterns; Andréa Mccann; Christopher Kune; Johann Far; Philippe Massonnet; Marc Ongenae; Gauthier Eppe; Loic Quinton; Edwin De Pauw; Mass Spectrometry Laboratory, MolSys Research Unit, University of Liege, Liege, Belgium; Maastricht Multimodal Molecular Imaging (M4i) institute, Division of Imaging Mass Spectrometry, Maastricht University, Maastricht, Netherlands; Shimadzu Research Laboratory, TERRA research center, Gembloux Agro-Bio Tech, University of Liege, Gembloux, Belgium

LC/MS: Sample Preparation (REMOTE POSTERS)

FP 478  Obtaining More Reproducible Data using A Novel Hybrid Technology to Remove Phospholipids from Plasma/Sera in a High Throughput Format; James Edwards; Kevin Doolan; Amy Johnson; George Whitfield; J. G. Finneran, Vineland, NJ; Porvair Sciences, Wrexham, United Kingdom

Lipids: General (REMOTE POSTERS)

FP 482  Discrimination of Beef from Different Origins Based on Lipidomics: a Comparison Study of DART-QTOF and LC-ESI-QTOF; Kewen Wang; Zhenzhen Xu; China Agriculture University, Beijing, China; Chinese Academy of Agricultural Sciences, Beijing, China

Lipids: Profile Analysis (REMOTE POSTERS)

FP 498  Targeted LC-MS/MS profiling for the identification of the key enzymes involved in lysosphatidic acid metabolism; Emily Armitage; Aurelien Tripp; Nikos Koundouros; David J Magee; Alan Barnes; Neil J Loftus; George Poulogiannis; Shimadzu, Manchester, United Kingdom; Signalling and Cancer Metabolism Team, Division of Cancer Biology, The Institute of Cancer Research, London, United Kingdom; Alan Meyer Cancer Center, Well Cornell Medicine, New York, NY; Pain Medicine Department, The Royal Marsden Hospital, London, United Kingdom

FP 501  Investigation of skin-relevant lipids and their oxidized state after UVA exposure via ESI and MALDI FTICR MS; Samuele Zoratto; Selma Avdić; Christopher Kremslehner; Michaela Sochorova; Florian Gruber; Martina Marchetti-deschmann; TU Wien, Wien, Austria; Medical University of Vienna, Vienna, Austria

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**FP 604** Application of in-sample calibration curve (ISCC) to peptide quantification by high resolution mass spectrometry (HRMS); Soumya Kandi; Qin Ji; John Paul Savaryn; Abbvie, North Chicago, IL; AbbVie, North Chicago, IL

### Phosphopeptides: Enrichment Methods (REMOTE POSTERS)

**FP 614** Fully automated sequential high-pH fractionation and phosphopeptide enrichment improves coverage and reproducibility of phosphoproteomics analysis; Delphine CM Rolland; Charlotte Brun; Sarah Cianférani; Serge Desmoulins; Shuai Wu; Christine Schaeffer-Reiss; Hopitaux Universitaire de Strasbourg, Strasbourg, France; Interface de Recherche Fondamentale et Appliquée en Cancérologie (IRFAC), INSERM UMR-S1113, Université de Strasbourg, Strasbourg, France; Laboratoire de Spectrométrie de masse BioOrganique (LSMBO), IPHC, CNRS, UMR 7178, Université de Strasbourg, Strasbourg, France; Agilent Technologies, Les Ulis, France; Agilent Technologies, Santa Clara, CA

### Protein Therapeutics: Quantitative Analysis (REMOTE POSTERS)

**FP 638** Host Cell Protein impurities characterization in biotherapeutics using finely tuned mass spectrometry-based workflows; Corentin Beaumal; Sega Ndiaye; Claire Dauly; Oscar Hernandez-Alba; Christine Carapito; Laboratoire de Spectrométrie de masse BioOrganique (LSMBO), IPHC, UMR 7178, Université de Strasbourg, CNRS, 25 rue Becquerel, 67087 Strasbourg, France; Thermo Fisher Scientific, 16 Avenue du Québec - BP 30210, 91941 Courtaboeuf Cedex, France

### Protein Therapeutics: Structural Characterization (REMOTE POSTERS)

**FP 644.5** Utility of Diethylpyrocarbonate (DEPC)-based Chemical Labeling in Epitope Mapping of Therapeutic Antibody; Yun Wang; Ekaterina Deyanova; Petia Shipkova; Olafur Gudmundsson; Richard Huang; BMS, Princeton, NJ

### Proteins: PTMs (REMOTE POSTERS)

**FP 659** Quantification of gluconoylation PTM in recombinant protein after basic pH hydrolysis treatment; Alessandro Vadi; GSK, Siena, Italy

### Proteomics: New Approaches (REMOTE POSTERS)

**FP 687** On the feasibility of using ultra-fast proteomics in drug target discovery studies; Anna A. Lobas; Julia A. Bubis; Elizaveta M. Solovyeva; Alexey A. Nazarov; Mark V. Ivanov; Victor G. Zgoda; Irina A. Tarasova; Lev I. Levitsky; Mikhail V Gorshkov; V.L. Talrose Institute for Energy Problems of Chemical Physics, Moscow, Russian Federation; Moscow State University, Moscow, Russian Federation; Orekhovich Institute of Biomedical Chemistry, Moscow, Russia

### Proteomics: Quantitative (REMOTE POSTERS)

**FP 700.5** Comprehensive Proteomic Characterization of Inflammatory and Alcohol-induced Phenotypes in Primary Mouse Astrocytes; Alexis Coiner; Ping Zhang; Jessica Wohlfahrt; Jennifer Guergues; Bin Liu; Stanley M. Stevens, Jr.; University of South Florida, Tampa, FL; University of Florida, Gainesville, Florida

### Single Cell MS (REMOTE POSTERS)

**FP 730** How to obtain elemental concentration information in single cells only by inductively coupled plasma-mass spectrometry?; Wen Qin; Hans-Joachim Stärk; Thorsten Reemtsma; Department of Analytical Chemistry, Helmholtz Centre for Environmental Research—UFZ, Leipzig, Germany; Institute of Analytical Chemistry, University of Leipzig, Leipzig, Germany
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Small Molecules: Quantitative Analysis (REMOTE POSTERS)

FP 750 Factors affecting distributions of protonated monomers and proton bound dimers in APCI reactions; Elie Lattouf1; Osmo Anttalainen1; Tapio Kotiah3; Hanna Hakulinen1; Paula Vanninen1; Gary Eiceman1; 1University of Helsinki, Helsinki, Finland

FP 751 Workflow to simplify and improve specificity in quantitative analysis of field residue samples; Krishnamoorthy Kuppannan1; Chris Bianca1; Kimberly Campbell1; Joseph Gesell1; Sharry Fears1; Amy Latham1; 1Corteva Agriscience, Indianapolis, IN

Stable Isotope Labeling (REMOTE POSTERS)

FP 760.5 Using stable-isotope labeled nicotinamide and high resolution mass spectrometry to probe the impact of NAMPT activators on the intracellular NADome; Tumpa Dutta1; Stephen J Gardell1; 1Advent Health, Orlando, FL

Systems Biology (REMOTE POSTERS)

FP 763.5 High sensitivity mass spectrometry for cell-type resolved dissection of murine pancreatic islet biology; Marvin Thielert1; Claire Berthault1; Andreas-David Brunner1; Chloé Lourenco2; Raphael Scharffmann2; Matthias Mann1,3; 1Max Planck Institute of Biochemistry, Martinsried, Munich, Germany; 2Institute Cochin, INSERM, Université de Paris, Paris, France; 3NNF Center for Protein Research University of Copenhagen, Copenhagen, Denmark

FP 766 Multi-dimensional mass spectrometry reveals domains of reactivated heterochromatin in a 3D cell model; Stephanie Stransky1; Jennifer Aguilan1; Edward Nieves1; Simone Sidoli1; 1Albert Einstein College of Medicine, Bronx, NY
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FP 041 Non-destructive proteomics of archaeological and palaeontological bones based on tape strip sampling; Fabrice Bray1; Stéphanie Flament1; Tarek Oueslati2; Christian Rolando1; 1MSAP USR 3290, villeneuve d'ascq, France; 2HALMA - UMR 8164, VILLENEUVE D ASCQ, France

Artificial Intelligence in MS Instrumentation and Applications (REMOTE POSTERS)

FP 047 MAGPIE: A machine learning approach for confidence assessment of protein-protein interactions in human plasma; Emily Hashimoto-Roth1; Diane Forget2; Vanessa Gaspar2; Steffany A. L. Bennett1; Marie-Soleil Gauthier1, 3; Benoit Coulombe2, 3; Mathieu Lavallée-Adam1; 1University of Ottawa, Ottawa, ON; 2Institut de recherches cliniques de Montréal, Montreal, QC; 3Université de Montréal, Montréal, QC

Biomarkers: Discovery (REMOTE POSTERS)

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Biomolecular Structure Analysis: Chemical Crosslinking and Covalent Labeling (REMOTE POSTERS)

FP 077 Can Overlabeling with DEPC Give Correct Protein Structural Information?; Zachary J Kirsch1; Richard W. Vachet1; 1University of Massachusetts Amherst, Amherst, MA

Cannabis (REMOTE POSTERS)

FP 082 Analysis of Cannabinoids in Milk from Cows Consuming Spent Hemp using Ultra High-Performance Liquid Chromatography-Tandem Mass Spectrometry; Daniel G Nosal1, 2; Massimo Bionaz3; Ruth N. Muchiri2; Richard B van Breemen1, 2; 1Voynich Biosciences, Corvallis, OR; 2Oregon State University, Corvallis; 3Oregon State University, Corvallis, OR

FP 083.5 ICP-MS Analysis of Cannabis Sativa Containing Food Products Using a Novel CRM Heavy Metal Mix (As, Cd, Hg and Pb); Stephan Altmaier; Merck KGaA, Darmstadt, Germany
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**FP 110** Leveraging a Higher Duty Cycle DIA Acquisition On a Novel QTOF for Enhanced Proteomics Analysis; Ihor Batruch; Yves Leblanc; Jason Causon; Naomi Diaz; Tatjana Talamantes; Anjali Chelur; Nic G. Bloomfield; Stephen Tate; Jose Castro-Perez; SCIEX, Concord, ON; 2SCIEX, Framingham, MA

**FP 113** Staggered windows TOF-DIA: a new approach to the high-throughput proteome analysis of hepatic insulin resistance; Mauro Galli; Arkadiusz Zbikowski; Agnieszka U. Blachnio-Zabielska; Hady Razak Hady; Piotr Zabielski; Department of Medical Biology, Medical University of Bialystok, Bialystok, Poland; 2Department of Hygiene, Epidemiology and Metabolic Disorders, Medical University of Bialystok, Bialystok, Poland; 31st Clinical Department of General and Endocrine Surgery, Medical University of Bialystok, Bialystok, Poland

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**FP 157** Trace Analysis of Per- and Polyfluoroalkyl Substances (PFAS) using LC-MS/MS and Automated Solid Phase Extraction (SPE) in Aqueous Matrices; Renee N.G Huang; Stephen Tersigni; Surjit Saini; Santa Clara Valley Water District, San Jose, CA

### Environmental: Pharmaceuticals and Pesticides (REMOTE POSTERS)

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### Food Safety & Chemistry: Foodomics, Allergens, Bacteria, Foods, and Supplements (REMOTE POSTERS)

**FP 193** A multidisciplinary approach of non-targeted screening, proteomics, and genome skimming to discover the cause of foodborne illness; Ann M Knolhoff; Melinda A McFarland; Sara M Handy; John B Mangrum; Jennifer L Fong Sam; Timothy R Crole; John H Callahan; FDA, College Park, MD

### Food Safety: General (REMOTE POSTERS)

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**FP 210** A practical lock-mass calibrant introduction method for the Q-Exactive to achieve improved identifications in non-targeted analyses; Christine M Fisher; Shannon E Murphy; Ann M Knolhoff; 1FDA Center for Food Safety, College Park, MD

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| FP 272 | Automatic MS-based N-linked and O-linked Glycopeptide Characterization with PEAKS GlycanFinder; Weiping Sun¹; Xiaodong Wei¹; Xiyue Zhang¹; Hui Li¹; Baozhen Shan¹; "Bioinformatics Solutions Inc, Waterloo, ON |

| FP 276 | N-glycosylation of EpCAM in breast cancer metastasis; Nicole M Jenkinson¹; Caitlin Tressler¹; Elizabeth Gordon²; Zheqiong Tan¹; Xinyi Elaine Shen¹; Kristine Glunde¹,³,⁴; Russell H. Morgan Department of Radiology and Radiological Science, Division of Cancer Imaging Research, Johns Hopkins University School of Medicine, Baltimore, Maryland; "Bruker Daltonics, Billerica, Massachusetts; "Sidney Kimmel Comprehensive Cancer Center, Johns Hopkins University School of Medicine, Baltimore, Maryland; "Department of Biological Chemistry, The Johns Hopkins School of Medicine, Baltimore, MD |

### Imaging MS: Disease Markers (REMOTE POSTERS)

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| FP 302 | An integrated MS strategy using high-resolution AP-MALDI-MSI and UHPLC-MRM to investigate brain cholesterol metabolism in Huntington’s Disease mouse model; Alice Passoni¹; Angela Marika Siciliano¹; Alessia Lanno¹; Laura Colombo¹; Monica Favagrossa¹; Mario Salmona¹; Renzo Bagnati¹; Enrico Davoli¹; "Istituto di Ricerche Farmacologiche Mario Negri IRCCS, Milan, Italy |

| FP 303 | Highly-Multiplexed and Multioic Mass Spectrometric Imaging with Photocleavable Mass-Tags; Gargey B. Yagnik¹; Ziying Liu¹; Kenneth J. Rothschild¹,²; Mark J. Lim¹; "AmberGen, Inc., Watertown, MA; "Boston University, Boston, MA |

### Imaging MS: Instrumentation (REMOTE POSTERS)

| FP 305 | Benefits of high resolution ion mobility separation on the Cyclic IMS for DESI mass spectrometry imaging; Susan E Slade¹; Ludovic Muller²; Nivedita Hegdekar³; Chinmoy Sarkar³; Marta M Lipinski³; Maureen Kane²; Emmanuelle Claude¹; "Waters Corporation, Wilmslow, United Kingdom; "Department of Pharmaceutical Sciences, University of Maryland School of Pharmacy, Baltimore, MD; "Department of Anaestheiology, }
**Imaging MS: Pharmaceuticals, Metabolites, and Lipids (REMOTE POSTERS)**

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**Imaging MS: Sample Preparation (REMOTE POSTERS)**

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Quantitative Investigation of Matrix Spraying Parameters for MALDI Mass Spectrometry Imaging Using Factorial Design and Automated Measurements of Delocalization; Nathaniel C Riemann¹; Caitlin Tressler¹; Sloane Tilley²; Christopher Donohue¹; Eric Barton¹; Jason Fan¹; Ethan Yang¹; Alain Creissen²; Kristine Glunde¹, ³, ⁴; ¹Johns Hopkins University School of Medicine, Baltimore, MD; ²HTX Technologies, LLC, Chapel Hill, NC; ³Sidney Kimmel Comprehensive Cancer Center, Johns Hopkins University School of Medicine, Baltimore, Maryland; ⁴Department of Biological Chemistry, Johns Hopkins University School of Medicine, Baltimore, Baltimore, Maryland

**Informatics: Algorithms and Statistical Advances (REMOTE POSTERS)**

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**Informatics: Metabolomics (REMOTE POSTERS)**

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**Informatics: Peptide ID and Quantification (REMOTE POSTERS)**

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Next-generation library searching for DDA experiments using Scribe; Brian C. Searle¹, ²; Damien Beau Wilburn¹; ¹The Ohio State University, Columbus, OH; ²Proteome Software, Portland, OR

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New high voltage power supplies for triple quadrupole MS polarity switching in under 5 ms; Oleg Silivra¹; Harald Oser¹; Michael Ugarov¹; David Minkler¹; Claudia Martins¹; Neloni Wijeratne¹; ¹Thermo Fisher Scientific, San Jose, CA

**Instrumentation: New Developments in Mass Analyzers (REMOTE POSTERS)**

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Teaching an old geometry new tricks: Poschenrieder for Charge Detection Mass Spectrometry (CDMS); John B Hoyes¹; Gavin Wray¹; ¹TrueMass, Rowarth, United Kingdom

**Ion Mobility: Applications (REMOTE POSTERS)**

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Comparison of small agrochemical isobars across various ion mobility spectrometry mass spectrometry (IMS-MS) systems; Chris J Brown¹; Sarah Dowd²; Dale Cooper-Shepherd¹; Nick Wang¹; Yelena Adefinskaya¹; David Mccaskill¹; Chelsea Plummer²; Jesse L Balcer¹; Erin Gemperline¹; Jeffrey R Gilbert¹; ¹Corteva Agriscience, Indianapolis, IN; ²Waters Corp, Milford, MA; ³Waters, Wilmslow, United Kingdom

**Ion Mobility: Fundamentals (REMOTE POSTERS)**

FP 446  
Collision cross sections of polyoxometalate anions and determination of Lennard-Jones interaction parameters of Mo and W in He and N2; Sébastien Hupin¹; Vincent Tognetti¹; Séverine Renaudineau²; Anna Proust²; Guillaume Izzet²; Frederic Rosu³; Valérie Gabelica³; Carlos Afonso³; Helene Lavanant¹; ¹Normandie Univ, UNIROUEN, INSA Rouen, CNRS, COBRA, 76000 Rouen, France, Mont St Aignan, France; ²Sorbonne Université, CNRS, UMR 8232, Institut Parisien de Chimie Moléculaire, PARIS, France; ³CNRS, University of Bordeaux and INSERM, Institut Européen de Chimie et Biologie (IECB, UMS3033, US001), Pessac, France;
**Ion Mobility: General (REMOTE POSTERS)**

FP 449  High-precision, high-resolution ion mobility: how standardizing relative mobilities can push the frontiers of isomer-specific assays; Alice Martynova\(^1\); Addison E. Roush\(^1\); Benjamin Zercher\(^1\); Emily L. Pruitt\(^1\); Tatjana Talamantes\(^2\); Jessica Perez\(^2\); Daniel Debord\(^3\); Nathan Roehr\(^2\); Grego Van Aken\(^2\); Gordon A. Anderson\(^3\); Miklos Gutman\(^1\); Libin Xu\(^1\); Matthew F. Bush\(^1\); \(^1\)University of Washington, Seattle, WA; \(^2\)MOBILion Systems, Chadds Ford; \(^3\)GAA Custom Electronics, LLC, Kennewick, WA

**LC/MS: Chromatography and Software (REMOTE POSTERS)**

FP 461.5  A Hybrid Stationary Phase of Ion-Exchange and Hydrophilic Interaction Chromatography for the LC/MS of Polar Compounds; Xiaoning Lu\(^1\); Shun-Hsin Liang\(^2\); \(^1\)Restek Corporation, Bellefonte, PA; \(^2\)Restek, Bellefonte, PA

**LC/MS: Sample Preparation (REMOTE POSTERS)**

FP 480  The utility of nanoparticle protein coronas for studying the plasma glycoproteome; Gary Wilson\(^1\); Sangtae Kim\(^1\); Shadi Ferdosi\(^2\); Marshall W Bern\(^1\); \(^1\)Protein Metrics, Inc., Cupertino, CA; \(^2\)Seer, Redwood City, California

**Metabolomics: Targeted and Quantitative Analysis (REMOTE POSTERS)**

FP 542  Fast diagnosis of methylmalonic academia based on DMS-MS; Chiraz El Saddik\(^1\); Eskander Alhajji\(^1\); Fathi Moussa\(^1\); Jean-François Benoist\(^2, 3\); Philippe Maître\(^1\); \(^1\)Université Paris-Saclay, CNRS, Institut de Chimie Physique, UMR8000, ORSAY, France; \(^2\)Université Paris-Saclay, Faculté de Pharmacie, Châtenay-Malabry, France; \(^3\)Hôpital Necker Enfants Malades, Paris, France

**Metabolomics: Untargeted Metabolite Profiling (REMOTE POSTERS)**

FP 553  LCMS based spatial metabolomics identifies metabolites altered by Influenza Virus (IAV) infection in plasma and lung tissue; Danya A Dean\(^1\); London Klechka\(^1\); Myron Hinsdale\(^2\); Krystin Eaton\(^2\); Adwaita Parab\(^1\); Ekram Hossain\(^1\); Laura-Isobel McCall\(^1\); \(^1\)University of Oklahoma, NORMAN, Oklahoma; \(^2\)Oklahoma State University, Stillwater, Oklahoma

FP 554  The Core Human Fecal Metabolome; Jacob J Haffner\(^1, 2\); Mitchellte Katemauswa\(^2, 3\); Thérèse S Kagone\(^4, 5\); Ekram Hossain\(^2, 3\); David Jacobson\(^1, 2\); Karina Flores\(^2, 6\); Adwaita Parab\(^2, 7\); Alexandra J Obregon-Tito\(^1, 2\); Raul Y Tito\(^1, 2\); Luis Marin Reyes\(^8\); Luzmila Troncoso-Corzo\(^9\); Emilio Guija-Poma\(^10\); Nicolas Meda\(^1\); Hélène Carabin\(^11, 12, 13, 14\); Tanvi P Honap\(^1, 2\); Krithivasan Sankaranarayanan\(^2, 7\); Cecil M Lewis Jr\(^1, 2\); Laura-Isobel McCall\(^2, 3, 7\); \(^1\)Department of Anthropology, University of Oklahoma, Norman, OK; \(^2\)Labsoratories of Molecular Anthropology and Microbiome Research (LMAMR), University of Oklahoma, Norman, OK; \(^3\)Department of Chemistry and Biochemistry, University of Oklahoma, Norman, OK; \(^4\)Burkina Faso Ministry of Health, Ouagadougou, Burkina Faso; \(^5\)Centre MURAZ Research Institute, Bobo-Dioulasso, Burkina Faso; \(^6\)Department of Biology, University of Oklahoma, Norman, OK; \(^7\)Department of Microbiology and Plant Biology, University of Oklahoma, Norman, OK; \(^8\)Instituto Nacional de Salud, Lima, Peru; \(^9\)Facultad de Medicina, Universidad Nacional Mayor de San Marcos, Lima, Peru; \(^10\)Centro de Investigación de Bioquímica y Nutrición, Facultad de Medicina Humana, Universidad de San Martín de Porres, Lima, Peru; \(^11\)Department of Biostatistics and Epidemiology, College of Public Health, University of Oklahoma Health Sciences Center, Oklahoma City, OK; \(^12\)Département de Pathologie et Microbiologie, Faculté de médecine vétérinaire, Université de Montréal, Saint-Hyacinthe, QC; \(^13\)Département de médecine sociale et préventive, École de santé publique de l’université de Montréal, Montréal, Quebec, Canada; \(^14\)Centre de Recherche en Santé Publique de l’université de Montréal et du CIUSS du Centre Sud de Montréal, Montréal, QC

FP 556  Visceral leishmaniasis impact on local; Mahbobeh Lesani\(^1\); Andrea Paun\(^2\); Michael Lewis\(^3\); Laura-Isobel McCall\(^4\); \(^1\)University of Oklahoma, Norman, OK; \(^2\)National Institute of Allergy and Infectious Diseases, NIH, Bethesda, MD; \(^3\)London School of Hygiene and Tropical Medicine, London, United Kingdom; \(^4\)University of Oklahoma, Norman, OK

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WEDNESDAY, NOVEMBER 17, 12:00 – 1:30 PM EASTERN
FP 557  How the urinary metabolome of hospitalized COVID-19 patients with and without acute kidney injury led to improved metabolomics analysis; Stephen Barnes¹; Landon S. Wilson¹; Taylor F. Berryhill¹; Jeffrey C. Edberg¹; Nathaniel H. Raines²; Samir Parikh³; ¹University of Alabama at Birmingham, Birmingham, AL; ²Harvard Medical School, Boston, MA; ³Harvard Medical School, Boston, Massachusetts

Natural Products (REMOTE POSTERS)

FP 567  Investigation of the antibacterial activity against foodborne pathogens and chemical composition of Psidium guajava extract and partitions; Angela I Calderon¹; Audrey M Hall¹; Swati Baskiyar¹; Michelle D Hayden¹; Emefa Monu¹; ¹Auburn University, Auburn, AL

Nucleic Acids and Oligonucleotides (REMOTE POSTERS)

FP 572  Ultra-sensitive quantification of oligonucleotides in plasma using microflow LC-MS/MS; Lijuan Kang¹; Yanping Lin¹; Wenyeng Jian¹; Lieve Dillen²; Remco van Soest³; Eshani Nandita⁴; ¹Janssen Research & Development, The Janssen Pharmaceutical Companies of Johnson & Johnson, Spring House, PA; ²Janssen Research & Development, The Janssen Pharmaceutical Companies of Johnson & Johnson, Springhouse, PA; ³Janssen Research & Development, The Janssen Pharmaceutical Companies of Johnson & Johnson, Beerse, Belgium; ⁴Sciex, Redwood City, CA

FP 590  Rapid Screening of Megadalton Native mRNA and dsDNA using Charge-Reduced Ion Mobility Spectrometry; Ananya Dubey Kelsoe¹; W. Henry Benner¹; Jared Clark¹; ¹IonDX Inc., Monterey, CA

FP 591  Development of Ex Vivo Stress Models to Predict In Vivo Stability of Oligonucleotides and Associated Delivery Strategies; Phillip Chu¹; Neelie Zacharias¹; Sumit Mahajan¹; Chun-wan Yen¹; Hao Cai¹; Craig Blanchette¹; Baris Bingol¹; Cong Wu¹; ¹Genentech Inc., South San Francisco, CA

FP 592  Development and Validation of a Paired-Ion Gradient UHPLC Triple Quadrupole Method for a Synthetic Oligonucleotide in Human Plasma and Feces; Alan M Dzerk¹; Patrick S Miller¹; Sarajlic Emina¹; Chris J Kafonek¹; Nachi Ridha¹; ¹Celerion, Inc, Lincoln, NE

Peptidomics (REMOTE POSTERS)

FP 607.5  Validation of Mild Acid Elution of MHC Class II Immunopeptides from Antigen Presenting Cells for Vaccine Development; Teesha C. Luehr¹, ²; Leonard J. Foster¹, ²; ¹University of British Columbia, Vancouver, BC; ²Michael Smith Laboratories, Vancouver, BC

FP 609  MHC Associated Peptide Proteomics (MAPPs) using an automated tip-based workflow on the Agilent AssayMAP Bravo; Jason Lamar¹; Violet Lee¹; Sylvia Wong¹; Lynn Kamen¹; Peter Tran¹; Ben Ordonia¹; Shan Chung¹; Surinder Kaur¹; Ola M Saad¹; ¹Genentech, So. San Francisco, CA

Polymers (REMOTE POSTERS)

FP 626  Solvent-less thermal extraction to detect volatile extractables from medical device materials; Milani R Wijeweera Patabandige¹; Keaton S Nahan¹; Berk Oktem¹; Eric M Sussman¹; Byeonghwa Yun¹; Samanthi Wickramasekara¹; ¹FDA, College Park, MD

Proteins: PTMs (REMOTE POSTERS)

FP 660  Histone Analysis using LC-TIMS-PASEF-MS/MS; Cassandra N. Fuller¹; Khoa N. Pham¹; Mario E. Gomez Hernandez¹; Natarajan V. Bhanu²; Benjamin A. Garcia²; Francisco A. Fernandez-Lima³; ¹Department of Chemistry and Biochemistry, Florida International University, Miami, FL; ²Epigenetics Program, Department of Biochemistry and Biophysics, Perelman School of Medicine, University of Pennsylvania, Philadelphia, PA

Proteomics: Clinical Applications (REMOTE POSTERS)

FP 672  Developing the Mass Spectrometry-Based Multi-omics Technologies for Exploring the Energy Metabolism Pathways of Renal Cancer and Clinical Applications; Yi-Ting Chen¹; Wei-Ju Tu¹; Chien-Lun Chen¹; ¹Chang Gung University, Taoyuan, Taiwan; ²Chang Gung Memorial Hospital, Taoyuan, Taiwan

Proteomics: Top Down Analysis (REMOTE POSTERS)

FP 721.5  Characterization of hemoglobin variants by chimeric ion-loaded top-down mass spectrometryand R scripts based on diagnostic ions; Yuan Lin¹; Lissa C. Anderson¹; Archana M. Agarwal³, ⁴; Alan G. Marshall¹, ²;
Single Cell MS (REMOTE POSTERS)

FP 733  Single cell mass spectrometry metabolomic studies of primary and metastatic cancer cells; Tra D Nguyen$^1$; Zhibo Yang$^1$; $^1$University of Oklahoma, Norman, OK