

## MONDAY, MAY 22

8:00 – 8:45 am	Light snacks and coffee in Atrium	
8:45 am	Opening Remarks, Room 208	
9:00 – 10:00 am	<b>Plenary: Christian Neusüß, Aalen University</b> CE-MS: Past, Presence and Perspectives	
10:00 – 10:30 am	<b>Break &amp; Snacks in Atrium</b>	
10:30 – 10:35 am	<b>Microfluidics and Lab-on-Chip I</b> Room 103 Chair: Yong Zeng Opening Remarks	<b>New Trends in MS and IMS</b> Room 214 Chair: Fanny Liu Opening Remarks
10:35 – 11:05 am	<b>Keynote: Tony Hu</b> , Tulane University  IGRA-on-Chip and Lab-in-a-Tube Enable Rapid Tests for TB Detection	<b>Keynote: Si Wu</b> , The University of Oklahoma  Top-Down Proteomics of Human Single Cells using Spray-Capillary Based Microsampling and Online CE-MS Analysis
11:05 – 11:25 am	Stephen Weber, Michael T. Rerick and Jun Chen  Electroosmotic Perfusion--External Microdialysis for Tissue Sampling and Determination of Reaction Rates in the Extracellular Space	Jusung Lee and Christian Bleiholder  Structural Characterization and Differentiation of Isomeric, Non-separable Carbohydrates Using Tandem Trapped Ion Mobility Spectrometry–Mass Spectrometry (tandem-TIMS/MS)
11:25 – 11:45 am	Md Moniruzzaman and Chris Easley  High-resolution Sampling from Adipose Tissue with Multiplexed Glycerol and Fatty Acid Quantification Using a Droplet-based Microfluidic Analog-to-digital Converter with On-chip Merging Electrodes	Boone Prentice  Separation and Identification of Isomeric and Isobaric Lipids via Gas-phase Ion/ion Reactions
11:45 – 12:05 pm	Larissa Cunha, M. Shane Woolf and James P. Landers  A Microfluidic Tool for Automated Forensic Differential Extraction (DE) of DNA-based Sexual Assault Evidence	Ahmed Hamid, Orobola E. Olajide, Yuyan Yi and Jingyi M. Zheng  Strain-Level Differentiation of Bacteria Using Liquid Chromatography and Paper Spray Ion Mobility Mass Spectrometry
12:05 – 1:15 pm	<p><b>Join us for Lunch in Room 108 for the Science Café</b></p> <p><b>Agilent Metabolomic Solutions: Discovery, Targeted, Qualitative Flux, Cell Analysis, and Genomics</b></p> <p>Stephen Baumann, Technical Marketing Manager, Global Applied Markets, Agilent Technologies</p> <p><i>sponsored by Agilent Technologies</i></p> 	
1:30 – 1:35 pm	<b>Omics / Systems Biology I</b> Room 103 Chair: Jarrod Marto Opening Remarks	<b>Sample Preparation and Extraction Techniques</b> , Room 214 Chair: Emanuela Gionfriddo Opening Remarks
1:35 – 2:05 pm	<b>Keynote: Beatrix Ueberheide</b> , NYU Grossman School of Medicine  Using localized proteomics on human post-mortem tissue to characterize and catalogue protein changes in Alzheimer's disease	<b>Keynote: Robbyn Anand</b> , Iowa State University  Electrokinetic Enrichment, Separations and Extraction in Droplet Microfluidics

2:05 – 2:25 pm	Kevin Jooß, Ashley Ives, Antonin Papin, Alexey A. Soshnev, Navid Ayon, Matthew Robey, Ethel Cesarman, Ari M. Melnick, Rafael D. Melani and Neil L. Kelleher  Characterization of Linker Histone H1 Proteoforms in Naïve vs. Germinal Center B Cells Using CZE-MS	Md Nazibul Islam and Zachary Gagnon  Free-Flow Biomolecular Concentration and Separation Using Conductive-Wall Teichophoresis
2:25 – 2:45 pm	Christian Bleiholder, Thais Pedrete, Jusung Lee and Fanny Liu  Towards Deep Top-down Protein Analysis by Tandem-trapped Ion Mobility Spectrometry/mass Spectrometry Coupled with Parallel Accumulation Serial Fragmentation (tandem-TIMS/PASEF)	Raymond Fernando Yu, Jude Prasanna Vaas and Joselito Quirino  Cationic Surfactants as Stationary Pseudophases for In-line Sample Concentration in Capillary Electrophoresis
2:45 – 3:05 pm	Michael Armbruster, Scott F. Grady, Christopher K. Arnatt and James L. Edwards  High-throughput Metabolic Screening Using Neutron Encoded 96-Plex Tags	Jessica Torres, Karen S. Campos and Christopher Harrison  Application of Deep Eutectic Solvents for the Use of Detection of past Life via CE-LIF
3:10 – 4:05 pm	<b>Posters &amp; Snacks, Atrium</b>	
4:10 – 4:15 pm	<b>Micro- and Nanoscale CE and LC I</b> Room 103 Chair: Rawi Ramautar Opening Remarks	<b>Cellular Analysis I</b> Room 214 Chair Matthew Lockett Opening Remarks
4:15 – 4:35 pm	<b>Keynote: David Chen</b> , The University of British Columbia  Head to Head Comparison of CEMS and LCMS: The Potential of CE can be Realized with Simple Improvements of the Technology	<b>Keynote: Brian Paegel</b> , University of California, Irvine  Translating the Genome into Drugs: Activity-Based DNA-Encoded Library Technology
4:35 – 4:55 pm	Cynthia Nora Nagy, Melinda Andradi and Attila Gaspar  Questioning the Significance of Sample Clean-up Prior to CZE Peptide Mapping Studies	Md Nazibul Islam, Zachary Gagnon, Satchit Nagpal and Bhavya Jaiswal  Micro-Particle and Cell Trapping via High-Throughput Continuous Free-Flow Dielectrophoresis on Paper with Locally Non-Uniform Pore Scale-Generated Electric Field Gradients
4:55 – 5:15 pm	Elena Dominguez Vega  Understanding the Influence of Antibody Glycosylation in Receptor Binding Using Affinity CE-MS	Leonie Wittmann and Sebastian Patrick Schwaminger  Age Dependent Magnetophoretic Fractionation of a Heterogeneous Yeast Population by a 3D-printed Millifluidic Chip
5:15 – 5:35 pm	Govert Somsen, Iro K. Ventouri, Peter J. Schoenmakers, Rob Haselberg and Andrea FG Gargano  Characterization of Native Protein Complexes by microSEC-MS	Genoveve Gutierrez, Richard Ortiz and Christopher Baker  Development of a 3D Printed Microfluidic Bubble Perfusion Device for Ex Vivo Brain Tissue Slice Culture