

Programme MSB 2017

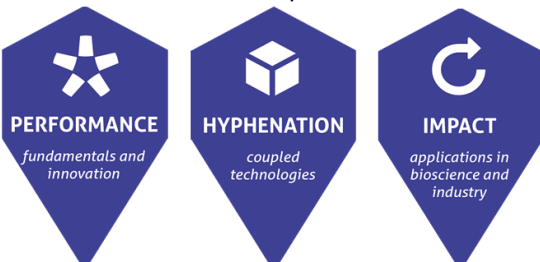
Sunday, March 26

13:00	<b>Short course 1</b> room: Oxford 16 <b>Two-dimensional liquid chromatography</b> Andrea Gargano ( <i>Center for Analytical Sciences Amsterdam</i> )	<b>Short course 2</b> room: Oxford 18 <b>Ion mobility-mass spectrometry</b> Albert Konijnenberg ( <i>University of Antwerp</i> )	<b>Short course 3</b> room: Oxford 20 <b>Bioactivity screening analytics</b> Jeroen Kool ( <i>Vrije Universiteit Amsterdam</i> )	<b>Short course 4</b> room: Oxford 22 <b>Robust capillary electrophoresis</b> Cari Sanger ( <i>Kantisto</i> )
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YS = Young Scientist

16:00	<b>Opening Plenary Session</b> room: Rotonde co-chairs: Govert Somsen ( <i>Vrije Universiteit Amsterdam</i> ) en Rawi Ramautar ( <i>Leiden University</i> )			
17:00	<b>Opening ceremony</b>			
17:15	PL1 - <b>Vaccine development and bioanalysis: an industry perspective</b> Jerome Custers ( <i>Janssen Vaccines &amp; Prevention</i> )			
18:00	PL2 - <b>High-power one-, two-, and three-dimensional liquid-chromatographic separations</b> Peter Schoenmakers ( <i>University of Amsterdam</i> )			
18:45	<b>Welcome Reception</b> room: Atrium Lounge			
18:50				
21:00				

**Main themes oral presentations**


















**PERFORMANCE**  
fundamentals and innovation

**HYPHENATION**  
coupled technologies

**IMPACT**  
applications in bioscience and industry

Monday, March 27

8:30	<b>Plenary Session</b> room: Sorbonne 2 chair: Maarten Honing ( <i>DSM Resolve</i> )			
9:15	PL3 - <b>Microfluidics in biotherapeutic development: enhancing throughput and allowing for heightened characterization</b> Nathan Lacher ( <i>Pfizer</i> )			

	<b>(Bio)Pharma-meets-microscale-separations Session 1</b> room: Sorbonne 2	<b>Metabolomics &amp; Biomarker Analysis Session</b> room: Sorbonne 4	<b>Microfluidic Separations &amp; Lab-on-a-Chip Session</b> room: Oxford 16
9:25	<b>Introduction by the session chair</b> Cari Sanger ( <i>Kantisto</i> )	<b>Introduction by the session chair</b> Oleg Mayboroda ( <i>Leiden University Medical Center</i> )	<b>Introduction by the session chair</b> Jorg Kutter ( <i>University of Copenhagen</i> )
9:30	KN3 - <b>Why analytical science is ever more needed to develop biopharmaceuticals in the 21st century</b> Marta Germano ( <i>Janssen Vaccines &amp; Prevention</i> )	KN2 - <b>Robust CE-MS methods for metabolomics: achieving greater throughput, lower costs and better data comparability</b> Philip Britz-McKibbin ( <i>McMaster University</i> )	KN1 - <b>One- and two-dimensional chip-HPLC coupled to MS</b> Detlev Belder ( <i>University of Leipzig</i> )
10:00	 Or11 - <b>Glycosylation of recombinant antigens in Mycobacterium tuberculosis: analytical challenges in a glycovaccine development</b> Caterina Temporini ( <i>University of Pavia</i> )	 Or6 - <b>Metabolic profiling of biomass-limited samples from a mouse model of polycystic kidney disease by sheathless CE-MS</b> Elena Sanchez-Lopez ( <i>University of Alcala</i> ) <b>YS</b>	 Or1 - <b>Microfluidic sample preparation combined with ultrasensitive nanoLC-MS for deep proteome analysis of 10–140 cells</b> Ryan Kelly ( <i>Pacific Northwest National Laboratory</i> )
10:20	 Or12 - <b>CE-MS for intact mass analysis of antibodies and antibody-drug-conjugates</b> Aran Paulus ( <i>Thermo Fisher Scientific</i> )	 Or7 - <b>Anion chromatography coupled to high resolution mass spectrometry: a powerful tool for targeted and non-targeted metabolomics</b> Michaela Schwaiger ( <i>University of Vienna</i> ) <b>YS</b>	 Or2 - <b>MicroTAS for IMAC preconcentration, separation and detection of phosphorylated biomarkers</b> Myriam Taverna ( <i>Universite Paris-Sud</i> )
10:40	<b>Coffee break in Asamblea and Alegria I&amp;II</b>		
11:00	 Or13 - <b>Characterization of Fcγ receptor biotinylation under controlled reaction conditions by MS and ligand binding analysis</b> Karin Lubbers-Geuijen ( <i>Synthon Biopharmaceuticals</i> ) <b>YS</b>	 Or8 - <b>Analytics in microbiome: investigating quorum sensing peptides</b> Nathan Debonne ( <i>DruQuAR</i> )	 Or3 - <b>Low-cost environmental diagnostics enabled by novel hybrid microsystems</b> Vincent Remcho ( <i>Oregon State University</i> )
11:20	 Or14 - <b>Improving the sensitivity for LC-MS quantitation of biologics in plasma using trap-and-elute microLC-MS</b> Remco van Soest ( <i>Sciex</i> )	 Or9 - <b>Metabolomics approach towards understanding rare cardiovascular diseases</b> Renata Wawrzyniak ( <i>Medical University of Gdansk</i> ) <b>YS</b>	 Or4 - <b>Orthogonal charge- and size-based separations of polymer microparticles in non-uniform microfluidic channels</b> Sergio Fernandez-Posa ( <i>University of Groningen</i> )
11:40	 Or15 - <b>Forced degradation comparability of an AQbD-developed adenovirus quantification CZE method</b> Lars Geurink ( <i>Janssen Vaccines and Prevention</i> ) <b>YS</b>	 Or10 - <b>Using metabolomics approach to investigate biochemical mechanisms involved in ultra-weak photon emission</b> Rosilene Rossetto Burgos ( <i>Leiden University</i> ) <b>YS</b>	 Or5 - <b>Magnetic bead-based immunoassays coupled with isoelectric focusing of Aβ peptides: towards microfluidic droplet manipulation</b> Thanh Duc Mai ( <i>Institute Galien Paris-Sud</i> ) <b>YS</b>
12:00	<b>Science Cafe lunch</b> room: Sorbonne 2 presented by SCIEX		
12:15			

13:15













13:30

**Poster Pitches**  
room: Sorbonne 2  
chair: Peter Schoenmakers (*University of Amsterdam*)

14:00

**Poster Session 1**  
rooms: Asamblea and Alegria I&II

15:15

<b>(Bio)Pharma-meets-microscale-separations Session 2</b> room: Sorbonne 2	<b>Glycomics &amp; Protein Analysis Session</b> room: Sorbonne 4	<b>Microcolumn Technologies &amp; Separation Media Session</b> room: Oxford 16
<b>Introduction by the session chair</b> Michel Eppink ( <i>Synthon/Wageningen University</i> )	<b>Introduction by the session chair</b> Herbert Lindner ( <i>Innsbruck Medical University</i> )	<b>Introduction by the session chair</b> Gerard Rozing ( <i>Rozing.com Consulting</i> )
KN6 - <b>Where industry meets academia in biopharma</b> Marc Eggink ( <i>Synthon</i> )	KN5 - <b>Characterizing glycan and glycopeptide isomers derived from biological systems by LC-MS/MS</b> Yehia Mechref ( <i>Texas Tech University</i> )	KN4 - <b>Impact of column diameter and flow rate on sensitivity and resolution in LC-UV and LC-MS separations</b> Monika Dittmann ( <i>Agilent Technologies</i> )
 Or26 - <b>N-glycosylation analysis of erythropoietin therapeutic formulations and bioprocess samples by MALDI-TOF-MS</b> David Falck ( <i>Leiden University Medical Center</i> )	 Or21 - <b>Glycan analysis by temperature gradient capillary electrophoresis. Some like it hot</b> Andras Guttman ( <i>University of Debrecen</i> )	 Or16 - <b>From analytical to nano flow LC-MS: high robustness and sensitivity to answer complex biological questions</b> Remco Swart ( <i>Thermo Fisher</i> )
 Or27 - <b>Ultra-fast pH-gradient ion exchange chromatography for the separation of monoclonal antibody charge variants</b> Robert van Ling ( <i>Thermo Fisher Scientific</i> )	 Or22 - <b>Sialic acid derivatization strategies for MALDI-TOF-MS profiling of glycans and glycopeptides in complex samples and tissues</b> Noortje de Haan ( <i>Leiden University Medical Center</i> ) <b>YS</b>	 Or17 - <b>Benchmarking pillar array columns optimized for high peak capacities</b> Wim De Malsche ( <i>Vrije Universiteit Brussel</i> )
<b>Coffee break in Asamblea and Alegria I&amp;II</b>		
<b>Panel discussion</b> <b>Two sides of Science</b> room: Sorbonne 2 chair: Martin Donker ( <i>Isogen</i> )	 Or23 - <b>Analysis of proteins, protein complexes, and proteomes using sheathless CZE-MS under native conditions</b> Alexander Ivanov ( <i>Northeastern University</i> )	 Or18 - <b>Development of microfluidic chip technology to achieve unprecedented separation performance</b> Jelle De Vos ( <i>Vrije Universiteit Brussel</i> ) <b>YS</b>
	 Or24 - <b>Glycosylation analysis of prostate specific antigen – towards improved diagnosis of prostate cancer</b> Guinevere Kammeijer ( <i>Leiden University Medical Center</i> ) <b>YS</b>	 Or19 - <b>High sensitivity and selectivity in analysis of drugs in plasma using 4D micro-UHPLC-MS enabling enhanced sample loadability</b> Ronald de Vries ( <i>Janssen Pharma</i> )
	 Or25 - <b>Characterization of isomeric Glycans In Pancreatic Diseases by GRIL and ZIC-HILIC-MS combined with Exoglycosidase Digestion</b> Estela Gimenez ( <i>University of Barcelona</i> )	 Or20 - <b>3D-print of planar separation media</b> Gertrud Morlock ( <i>Justus Liebig University</i> )

18:00

19:00

**Conference dinner**  
Restaurant Gaudi

21:00

## Tuesday, March 28





### Plenary Session

room: Sorbonne 2  
chair: James Landers (*University of Virginia*)







**Presentation of Arnold O. Beckman Medal**  
Jeff Chapman (*Sciex*)

PL4 - **Lecture of Beckman Medal awardee**  
TBA

9:15

<b>Multidimensional Separations &amp; Lipidomics Session</b> room: Sorbonne 2	<b>Young Scientists Session</b> room: Sorbonne 4
<b>Introduction by the session chair</b> Michael Lämmerhofer ( <i>University of Tübingen</i> )	<b>Introduction by the session chair</b> Rob Haselberg ( <i>Vrije Universiteit Amsterdam</i> )
KN7 - <b>Microscale online comprehensive two-dimensional LC – second thoughts on speed, efficiency and selectivity</b> Thorsten Teutenberg ( <i>Institute of Energy- and Environmental Technology</i> )	KN8 - <b>Pushing the boundaries of lipid research (and your own boundaries)</b> Jurje Kamphorst ( <i>University of Glasgow</i> ) <b>YS</b>
 Or28 - <b>Toward high-throughput &amp; high-resolution comprehensive 2D HPLC analysis of intact proteins: a parallel 2nd-D column approach</b> Shaorong Liu ( <i>University of Oklahoma</i> )	 Or33 - <b>Development of an ion chromatographic microfluidic chip platform integrating separation, suppression, and detection</b> Sam Wouters ( <i>Vrije Universiteit Brussel</i> ) <b>YS</b>
 Or29 - <b>Online 2DLC meets top-down MS: WCX/αm/RPLC UVPD-HRMS analysis of histone isoforms, a method with a long name and many forms</b> Andrea Gargano ( <i>Center for Analytical Sciences Amsterdam</i> ) <b>YS</b>	 Or34 - <b>Novel CZE method for the quantification of intact adenovirus particles – QbD method development and implementation</b> Ewoud van Tricht ( <i>Janssen Vaccins and Prevention</i> ) <b>YS</b>
<b>Coffee break in Asamblea and Alegria I&amp;II</b>	

10:40

11:00	 <b>Or30 - Hyphenating IC and CE: The Development of a comprehensive system and its application to arsenic speciation analysis</b> Andrea Beutner ( <i>University of Regensburg</i> ) <b>YS</b>	 <b>Or35 - Longitudinal plasma metabolic changes associated with cortical spreading depression in a transgenic mouse model of migraine</b> Isabelle Kohler ( <i>Leiden University</i> ) <b>YS</b>
11:20	 <b>Or31 - A laminar flow interface for efficient coupling of CE to capillary array electrophoresis for multidimensional separations</b> John Chin ( <i>Concordia University</i> )	 <b>Or36 - Glucose Unit calculation for CE analysis without the use of the maltooligosaccharide ladder</b> Gabor Jarvas ( <i>University of Pannonia</i> ) <b>YS</b>
11:40	 <b>Or32 - A novel structure elucidation strategy of bacterial Lipid-A applying HPLC-MS/MS for future vaccine adjuvant bioanalysis</b> Agnes Dörnyei ( <i>University of Pécs</i> )	 <b>Or37 - A CE-based Method for the analysis of hIAPP oligomers involved in Type 2 Diabetes and the screening of aggregation inhibitors</b> Corentin Berardet ( <i>Institut Galien Paris Sud</i> ) <b>YS</b>

12:00  
12:15

**Science Café lunch**  
room: Sorbonne 2  
presented by AGILENT TECHNOLOGIES





13:15  
13:30

**Poster Pitches**  
room: Sorbonne 2  
chair: Peter Schoenmakers (*University of Amsterdam*)

14:00

**Poster Session 2**  
rooms: Asamblea and Alegria I&II

15:15

<b>Advanced Detection Strategies Session</b> room Sorbonne 2	<b>Forensic Analysis Session</b> room: Sorbonne 4
<b>Introduction by the session chair</b> Christopher Birch ( <i>University of Virginia</i> )	<b>Introduction by the session chair</b> Marina Tavares ( <i>University of Sao Paulo</i> )
KN9 - <b>Nanoscale measurements of vesicle content in solution, in cells, and in varicosities</b> Andrew Ewing ( <i>Chalmers University &amp; University of Gothenburg</i> )	KN10 - <b>The potential and challenges of rapid chemical and toxicological analysis in forensic science</b> Arian van Asten ( <i>Netherlands Forensic Institute/University of Amsterdam</i> )
 <b>Or38 - Analysis of polyvinyl alcohol microbubbles with different detectors</b> Leila Josefsson ( <i>KTH - Royal institute of Technology</i> ) <b>YS</b>	 <b>Or40 - CZE automated fraction collection for the analysis of sexual assault evidence</b> Sarah Lum ( <i>University of Notre Dame</i> ) <b>YS</b>
 <b>Or39 - Development of multi-parametric surface plasmon resonance for living cell sensing</b> Teemu Suutari ( <i>University of Helsinki/Vrije Universiteit Amsterdam</i> ) <b>YS</b>	 <b>Or41 - Separation of organophosphate nerve agents by CE and microchip CE</b> Xi Cao ( <i>Tyndall National Institute</i> ) <b>YS</b>

16:40  
17:00

**All-participant Excursion Keukenhof & Dinner**

21:00



**Wednesday, March 29**

**Plenary Session**  
room: Sorbonne 2  
chair: Michael Ramsey (*University of North Carolina*)









8:30









PL5 - **A mass spectrometry view into diverse aspects of glycobiology**  
Albert Heck (*Utrecht University*)

9:15

<b>CE-MS &amp; Advanced MS Techniques Session</b> room Sorbonne 2	<b>Sample Preparation Session:</b> room: Sorbonne 4
<b>Introduction by the session chair</b> Jeff Chapman ( <i>Sciex</i> )	<b>Introduction by the session chair</b> Julie Schappler ( <i>University of Geneva</i> )
KN11 - <b>CE-MS as a robust routine tool in clinical diagnosis</b> Harald Mischak ( <i>Mosaiques-diagnostics/University of Glasgow</i> )	KN12 - <b>Microextraction through supported liquid membranes - Tuning the extraction chemistry for biomedical and pharmaceutical applications</b> Stig Pedersen-Bjergaard ( <i>University of Oslo</i> )
 <b>Or42 - Thiol-ene micropillar electrospray ionization platform for zeptomole level bioanalysis</b> Risto Kostianen ( <i>University of Helsinki</i> )	 <b>Or47 - Microsampling and micropreparation of biological fluids for sensitive quantitation of estetrol by LC-(Chip)-MS/MS</b> Marianne Fillet ( <i>University of Liege</i> )

10:00

10:20	 Or43 - Investigation of a multiply post-translationally modified brain protein by CE-MS Betina Sarg ( <i>Innsbruck Medical University</i> )	 Or48 - From hours to minutes: fast and sensitive profiling of the human tissues and biofluids Irena Dapic ( <i>University of Amsterdam</i> ) <b>YS</b>
10:40	Coffee break in Asamblea and Alegria I&II	
11:00	 Or44 - CE-MS for the assessment of protein conformers Elena Dominguez-Vega ( <i>Vrije Universiteit Amsterdam</i> ) <b>YS</b>	 Or49 - Novel capillary isoelectric focusing device increases the depth of proteomics analysis Roman Zubarev ( <i>Karolinska Institutet</i> )
11:20	 Or45 - The application of capillary electrospray ionization to the detection of neuropeptides Stephen Lock ( <i>Sciex</i> )	 Or50 - Electroextraction coupled to CE-MS: a new tool for metabolomic profiling of biomass-limited samples Amar Oedit ( <i>Leiden University</i> ) <b>YS</b>
11:40	 Or46 - Combining native ion mobility and top-down mass spectrometry for conformational footprinting of heterogeneous protein ensembles Albert Konijnenberg ( <i>University of Antwerp</i> ) <b>YS</b>	 Or51 - Automated enzyme microreactor fabrication in a CE instrument for proteomics applications Karen Waldron ( <i>University of Montreal</i> )
12:00	Science Café lunch room: Sorbonne 2 presented by ISOGEN LIFE SCIENCE	
12:15		
13:15		

	<b>Electrodriven Separations Session</b> room: Sorbonne 2	<b>Affinity, Bioactivity and Bioanalysis Session</b> room: Sorbonne 4
13:25	Introduction by the session chair Sergey Krylov ( <i>York University</i> )	Introduction by the session chair Jeroen Kool ( <i>Vrije Universiteit Amsterdam</i> )
13:30	KN13 - Some thoughts on electrodriven separations: Fields, friction, fluids, and free energy Stephen Weber ( <i>University of Pittsburgh</i> )	KN14 - Simultaneous analysis of enzyme structure and activity by kinetic CE-MS Maxim Berezovski ( <i>University of Ottawa</i> )
14:00	 Or52 - Solid state electrophoresis Rosanne Guijt ( <i>University of Tasmania</i> )	 Or56 - Playing the ACE card for ligand binding assays Herman Wätzig ( <i>University of Braunschweig</i> )
14:20	 Or53 - An integrated, centrifugally-driven microdevice for the electrophoretic separation of DNA Brandon Thompson ( <i>University of Virginia</i> ) <b>YS</b>	 Or57 - Fraction collection of full GC separations in 384-well plates with parallel MS detection for bioactivity screening Willem Jonker ( <i>Vrije Universiteit Amsterdam</i> ) <b>YS</b>
14:40	Coffee break in Asamblea and Alegria I&II	
15:05	 Or54 - Organelle fractionation for subpopulation analysis Daihyun Kim ( <i>Arizona State University</i> ) <b>YS</b>	 Or58 - Getting more with less: Improving sensitivity and reducing sample consumption with micro-LC/MS assays in bioanalysis Eric van Beelen ( <i>Waters</i> )
15:25	 Or55 - CE-C4D method development and validation for the determination of azithromycin, clarithromycin and clindamycin Prasanta Paul ( <i>KU Leuven</i> ) <b>YS</b>	 Or59 - Quantitative profiling of endocannabinoids and related N-acyl ethanolamines in human CSF using nano LC-MS/MS Vasudev Kantae ( <i>Leiden University</i> ) <b>YS</b>
15:45		

	<b>Closing Plenary Session</b> room: Sorbonne 2 co-chairs: Govert Somsen ( <i>Vrije Universiteit Amsterdam</i> ) en Ravi Ramautar ( <i>Leiden University</i> )
16:00	PL6 - Microfabricated technologies for accomplishing liquid phase separations and mass spectrometry Michael Ramsey ( <i>University of North Carolina</i> )
16:45	<b>Presentation of Best Poster Awards</b> Monika Dittmann ( <i>Chair Poster Award Jury</i> )
16:55	<b>Presentation of Young Scientist Award</b> Philip Britz-McKibbin ( <i>Chair Young Scientist Jury</i> )
17:00	Invitation to MSB 2018, Sao Paulo, Brazil Marina Tavares ( <i>chair</i> )
17:05	Closing ceremony
17:10	
17:15	<b>Farewell Reception</b> room: Gaudi Lounge