



iSCMS 2026
October 06 - 09

Programme - International Single Cell Mass Spectrometry Conference 2026,

King's College London

Day 1 : Tuesday 6th October 2026

9-9.25 am Workshop Registration : New Hunt's House Entrance Foyer, Great Maze Pond, London SE1 9RT

IMPORTANT: Anyone that cannot arrive by 9.25 am but would like to join the workshops, please email iSCMS@kcl.ac.uk by 2 October and we will make arrangements to pick you up.

9.30 – 1pm Single cell workshops and tours (delegates will be allocated to small groups, rotating between these facilities):

- Single cell metabolomics, lipidomics and capillary sampling at the **SEISMIC facility**, <https://www.kcl.ac.uk/research/facilities/the-seismic-facility-for-single-and-sub-cellular-omics>
- Single cell and spatial transcriptomics at the **single cell omics platform**, <https://www.kcl.ac.uk/research/facilities/single-cell-omics-platform> with sample processing support from the Clinical Diagnostics Development Unit, <https://clinical-diagnostics-development-unit.sites.er.kcl.ac.uk/>

1 pm – 2 pm Buffet LUNCH, networking, Guy's hospital

2 - 2:30 pm **Walk** to London Metallomics Facility, Franklin Wilkins building, Stamford Street, London SE1 9NQ

- Single cell elemental analysis at the **London Metallomics Facility**, <https://www.kcl.ac.uk/research/facilities/london-metallomics-facility>

Blend of lectures and tours with ample time for discussion, including data analysis.

5 pm Hidden City James Bond **Social Event** – join us for an outdoor escape room around London!



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Day 2 : Wednesday 7th October 2026

8.30 Tea / coffee / registration , The Great Hall , King's Building , The Strand

9.00 Conference opening and welcome - Ajay Shah, Dean of the Faculty of Life Sciences and Medicine and Melanie Bailey, conference Chair

Session 1 : Chair Erwin Schoof, Technical University Denmark

9.15 **Featured Speaker: Ryan Kelly, Bringham Young University, USA, *Throughput improvements for label-based and label-free single-cell proteomics***

9.45 Ed Emmott, University of Liverpool, UK, *Applying single cell proteomics to virus research*

10.00 Oneyka Francis Offer, University of Strasbourg, France, *Single cell proteomics insight into thermophilic prokaryotes*

10.15 Coffee

Session 2 : Chair Ryan Kelly, Bringham Young University, USA

10.45 **Erwin Schoof, Technical University Denmark, *Seeing the invisible: measuring proteins below their limit of detection***

11.15 Sam Payne, Bringham Young University, USA, *An AI Model to Detect Inaccurate Quantification in Single Cell Proteomics*

12.00 **Sponsor Talk, Acoustofab:** *Acoustic levitation technology for contactless, contamination-free Mass Spectrometry Workflows*, Ronan O'Cualain

12.10 – 13.10 LUNCH + Group Photo

Session 3: Chair John Fletcher, University of Gothenburg, Sweden

13.10 **Featured Speaker: Jens Soltwisch, University of Munster, Germany, *Integrating MALDI-MS Imaging and Fluorescence Microscopy for Molecular Analysis at the Cellular and Subcellular Level***

13.40 Pei Su, University of California, Riverside, USA, *Orbitrap-Based Single Molecule Mass Spectrometry for Proteoform Profiling Across Biological Scales*



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13.55 Chris Anderton, Pacific Northwest National Laboratory, USA, *Toward revealing metabolic and lipidomic differences between individual yeast cells from a clonal population*

14.10 **Sponsor Talk, Bruker:** Integrating Single Cell Proteomics with Optofluidic Cell Biology: *Immune cell characterization and isolation on the Beacon platform coupled to proteomic analysis on the timsUltra AIP, Christoph Krisp*

14.20 Coffee

Session 4: Chair Melanie Bailey, King's College London

14.45 **Featured Speaker: John Fletcher, University of Gothenburg, Sweden, Surface Sensitive Cell Analysis with SIMS**

15.15 Dong-Hyun Kim, University of Nottingham, UK, *From Glioblastoma Heterogeneity to Invasion: Multimodal Single-Cell Metabolomics Reveals Metabolic Drivers of Tumour Progression*

15.30 **Sponsor Talk, IonOptika:** A new multimodal ion beam imaging SIMS combining keV and MeV SIMS with RBS and PIXE, Michal Ryszka

15.40 Featured Speaker: Yu Bai, Peking University, China, Single cell metabolomics platform and its applications

16.10-17.10 Poster Session 1

18:00 Conference dinner, The George Pub, The Strand

Day 3 : Thursday, 8th October 2026

8.30 Tea / coffee / registration

Session 5 Chair Jens Soltwisch, University of Munster

9.00 **Featured Speaker: Zoltan Takats, Imperial College London, Sub-cellular Quantitative MSI – a Dream or Reality?**

9.30 Patrick Muller, University of Vienna, Austria, *Rapid Single-Cell Metabolomics Using a Plug-and-Play LEGO-Based CyESI-MS Platform with Untargeted Tandem Mass Spectrometry*

9.45 Jake Penny, King's College London, UK, *Single and sub-cellular lipidomics at the SEISMIC facility*



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10.00 **Sponsor Talk, Sciex:** *Spatial analysis of brain cell proteome with lightSCOPE*, Bodgan Budnik, Weiss Institute

10.10 Coffee (20 mins)

Session 6 Chair Alex Morrell, King's College London

10.30 **Featured Speaker: Gunda Kollensberger, University of Vienna, Austria, *Spatial metallomics at single cell resolution***

11.00 Mina Nikoli, Ghent University, Belgium, *Towards Reliable Single-Cell ICP-MS Analysis of Mammalian Cells*

11.15 Samuel O. Nitschke, University of Sydney, Australia, *Complementary studies of the bioavailable and total Pb pools in cells using fluorescence and single-cell ICP-MS*

11.30 **Sponsor talk, Molecular Machines:** 'Finding "The One": How Laser Capture Microdissection and Single Cell Picking Uncovers the Hidden World of Single Cells', Asif Khan

11.40 **Featured Speaker: Maria Montes-Bayon, Oviedo, Spain, *Complementary mass cytometry (CyTOF) and elemental mass spectrometry for biomarker analysis in individual cells***

12.10 **LUNCHTIME SEMINAR** Delivered by Konstantinos Thalassinou UCL, UK, on Behalf of Thermo Fisher: ***Single-Cell Proteomics Reveals Heterogeneous and Bimodal Proteomic Responses to DNA Damage***

12.40 **LUNCH**

Session 7 Chair Claire Davison, King's College London

13.20 **Featured Speaker: Ahmed Ali, Leiden University, Netherlands, *Live single-cell metabolomics: Pathway towards biological translation***

13.50 Takuma Yanagisawa, Meijo University, Japan, *Development of a quantitative method for single-cell phospholipid analysis using highly sensitive mass spectrometry and cell volume normalization*

14.05 **Sponsor Talk, Yokogawa:** Abigail Cook, King's College London on behalf of Yokogawa, *Revealing the Bystander Effect: Combining Live Capillary Sampling with LC-MS for Single-Cell Metabolomics*



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14.15 Poster Session II + coffee

15.30 Ali Salehi-Rayhani, Imperial College London, UK, *Functional single-cell metabolic phenotyping through integrated microfluidics and mass spectrometry*

15.45 Evosep TBC

15.55 Round table discussion : *challenges and future perspectives for single cell mass spectrometry*

16.55 Presentation awards for best poster and ECR talks

17.00 closing remarks

17.10 The PROTEOMICS Show Live Podcast with Ben Orsburn



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BMSS Single Cell SIG Meeting

Friday, 9th October 2026:

9.30 Coffee and registration

10.00 Welcome : Melanie Bailey and Dong Hyun Kim

Session 1 Chair Carla Newman, GSK

10.10 Featured Speaker: Alejandro Brenes, University of Edinburgh, *From Picograms to Immune Phenotypes: Advances and Limits of Mass Spectrometry-Based Single-Cell Proteomics*

10.40 Coffee break + conference photo

11.10 Ben Orsburn, University of Pittsburg, USA, *Lessons learned in operating single cell proteomics in a university core environment*

11.30 Markella Loi, University of Liverpool, UK, *Single-cell phenotypic analysis and multiplet detection through incorporation of microscopy data into cellenONE-based single-cell proteomic data analysis*

11.50 FLASH poster presentations (3 mins)

12.20 LUNCH and posters

Session 2 Chair Dong-Hyun Kim, University of Nottingham

13.30 Featured Speaker: Felicia Green, RFI, *Integrated chemical imaging enables pathological insights at the cellular scale*

14.00 Catia Costa, UK National Ion Beam Centre, University of Surrey, *Optimising Sample Preparation for Single-cell SIMS Analysis*

14.20 Kissi Kontor, University of Surrey and University of Wollongong, *Single-cell and subcellular lipidomics of soma and neurites in a differentiated SH-SY5Y neuronal model*

14.40 coffee break

Session 3 Chair Melanie Bailey, King's College London

15.10 Paula Menero Vladaos, LGC, UK, *Investigating the feasibility of using microbeads for transport efficiency assessments in single cell ICP-MS*

15.30 Ketolly Leal, University of Campinas, Brazil, *The effect of metal stress on the single-cell metallomic profile of yeasts deleted of Hsp70*



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15.50 Une Kontrimaite, University of Nottingham, *Cellular-Scale Mapping of Tyrosine Metabolism and Drug Response in a 3D Glioblastoma Invasive-Margin Model*

16.10 Poster and ECR talk prizes

16.25 Close + **social gathering**