

High Content 2021

8th Annual Conference of The Society of Biomolecular Imaging and Informatics

Program Agenda

26 Aug 2021






[To Register](#)

Monday, October 4, 2021

All times US Eastern

11:00 a.m. – 2:00 p.m. **Exhibit Hall open / Digital networking**

11:00 a.m. – 2:00 p.m. **Education Course Day**

	<i>Track 1</i>	<i>Track 2</i>
11:00 a.m. – 12:00 p.m.	Intro to 3D assays: plate setup through analysis	Introduction to high- content image analysis
	Sponsored by 	Sponsored by 
12:00 – 1:00 p.m.	Metrics and best practices for assay development and standardization	Introduction to AI / deep learning
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1:00 – 2:00 p.m.	3D best practices	Introduction to assay statistics
	Sponsored by YOKOGAWA 	

Tuesday, October 5, 2021

All times US Eastern

9:00 a.m. – 5:00 p.m.	Exhibit Hall open / Digital networking
9:00 – 11:00 a.m.	Poster session with live chat and video (1)
10:00 – 11:00 a.m.	Roundtable Cloud-optimized data management and analysis for high-content screening Sponsored by  Glencoe SOFTWARE
11:00 a.m. – 12:00 p.m.	Keynote presentation Toward intelligent microscopes: deep learning's potential for biomedical imaging applications —Aydogan Ozcan (University of California, Los Angeles)
12:15 – 2:15 p.m.	Session I — How does high-content intersect with single-cell analysis and/or spatial omics? Chair: Greg Way (Broad Institute)
12:15 – 12:40 p.m.	Life beyond the pixels: single-cell analysis using deep learning and image analysis methods —Peter Horvath (FIMM, Szeged University)
12:40 – 1:05 p.m.	Expansion-assisted iterative FISH (EASI-FISH): spatio-molecular profiling in thick tissue —Yuhan Wang (Janelia Research Campus)
1:05 – 1:30 p.m.	Spatiotemporal dissection of the human proteome —Emma Lundberg (KTH Royal Institute of Technology)
1:30 – 1:55 p.m.	Mapping the temporal and spatial dynamics of the human endometrium in vivo and in vitro —Roser Vento-Tormo (Wellcome Sanger Institute)
1:55 – 2:15 p.m.	Q & A

2:30 – 4:30 p.m.	Session II — 3D biology: instrument platforms, consumables, software, and models Chair: Karen Dowell (Akoya Biosciences)	
2:30 – 2:55 p.m.	Primary human liver cell spheroids as a platform for evaluating liver toxicity and potency of per- and polyfluoroalkyl substances (PFAS) —Ella Atlas (HealthCanada)	
2:55 – 3:20 p.m.	The development and utility of physiologically relevant models in drug discovery —Madhu Lal-Nag (Research Governance Council, FDA)	
3:20 – 3:45 p.m.	Redefining patient-relevant 3D in vitro models —Leo Price (Ocello / CrownBio)	
3:45 – 4:10 p.m.	From works of art to a scalable industry —Patrick Guye (Trillium)	
4:10 – 4:30 p.m.	Q & A	
4:30 – 5:30 p.m.	Roundtable The current landscape of oncological testing using high-content technology Sponsored by 	Educational session In situ techniques for high-content analysis —Jeffrey Moffit (Boston Children’s Hospital / Harvard Medical School)
4:30 – 6:00 p.m.	Poster session with live chat and video (2)	

Wednesday, October 6, 2021

All times US Eastern

9:00 a.m. – 5:00 p.m.	Exhibit Hall open / Digital networking
9:00 – 11:00 a.m.	Poster session with live chat and video (3)
10:00 – 11:00 a.m.	Roundtable AI and automation of high-content screening analysis

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11:00 a.m. – 12:00 p.m.	Keynote presentation Co-evolving AI and pathology to target cancer evolution —Yinyin Yuan (The Institute of Cancer Research, London)
12:15 – 2:15 p.m.	Session III — Infectious disease: SARS-CoV-2 and beyond Chair: Spencer Shorte (Institut Pasteur / Institut Pasteur Korea)
12:15 – 12:40 p.m.	SARS-CoV-2 biology and drug development —Seungtaek Kim (Institut Pasteur Korea)
12:40 – 1:05 p.m.	Deep-learning enabled phenomics applied to COVID-19 drug discovery —Katie Heiser (Recursion Pharmaceuticals)
1:05 – 1:30 p.m.	Compound repurposing by target based and phenotypic approaches to identify in vitro inhibitors of SARS-CoV-2 viral entry and replication —Philip Gribbon (European ScreeningPort, Fraunhofer ITMP)
1:30 – 1:55 p.m.	High-content screening for the serology and treatment of SARS-CoV-2 infection —Vilja Pietiäinen (FIMM, University of Helsinki)
1:55 – 2:15 p.m.	Q & A
2:30 – 4:30 p.m.	Session IV — Functional genomics and imaging: genotype to phenotype Chair: Heba Sailem (University of Oxford)
2:30 – 2:55 p.m.	Genome-wide optical pooled screens and analysis of high-content genomic screening data —Paul Blainey (MIT / Broad Institute)
2:55 – 3:20 p.m.	Arrayed functional genomics screens for identification and validation of drug targets —Jenna Bradley (AstraZeneca)
3:20 – 3:45 p.m.	An update on the JUMP–CP Consortium: insights from pilot experiments and outlook —Paula Andrea Marin Zapata (Bayer AG)
3:45 – 4:10 p.m.	President's Innovation Award Guest Speaker
4:10 – 4:30 p.m.	Q & A

4:30 – 5:30 p.m.

Roundtable

How to choose and insert the right reporter protein for your project

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Educational session

AI for image enhancement—Uri Manor (Salk Institute for Biological Studies)

4:30 – 6:00 p.m.

Poster session with live chat and video (4)

5:30 p.m.

Award Ceremony and Annual General Meeting (Poster Hall)