



## **Plenary Speaker**

### Peter Sorger, PhD

Otto Krayer Professor of Systems Biology at Harvard Medical School, Head of the Harvard Program in Therapeutic Sciences (HiTS) and Director of its Laboratory of Systems Pharmacology Harvard Medical School



## **COVID-19 Research Speakers**

### Alain Borczuk, MD

Professor, Pathology and Laboratory Medicine, Weill Cornell Medicine



### Z. Gordon Jiang, MD, PhD

Assistant Professor of Medicine, Beth Israel Deaconess Medical Center



### Robert Schwartz, MD, PhD

Professor of Medicine, Weill Cornell Medicine



### Åsa Segerstolpe, PhD

Research Scientist, Broad Institute of MIT and Harvard



#### **David Ting, MD**

Associate Clinical Director for Innovation, MGH Cancer Center Assistant Professor of Medicine, Harvard Medical School



## **SPEAKERS**

# **Spatial Genomics Research Speakers**



Karin Pelka, PhD
Post-Doctoral Fellow, Broad Institute
of MIT and Harvard and Massachusetts
General Hospital (MGH)



Laura Perin, PhD
Investigator, Research Urology, Assistant
Professor of Research Surgery, Children's
Hospital Los Angeles, The Saban
Research Institute



Sargis Sedrakyan, PhD
Investigator, Research Urology
Assistant Professor of Research Surgery,
Children's Hospital Los Angeles, The
Saban Research Institute



Yang Muh-Hwa, MD, PhD Investigator, Urology Research Assistant Professor, National Yang Ming University

# **Spatial Genomics Data Analysis Speakers**



**Alexander Aivazidis, PhD** Student, Wellcome Sanger Institute



Omer Bayraktar, PhD
Appointed Cellular Genetics Group Leader
Wellcome Sanger Institute



**Christina Curtis, PhD**Associate Professor, Medicine - Oncology
Associate Professor, Genetics, Stanford University



**Christopher E. Mason, PhD**Associate Professor; Director, WorldQuant Initiative for Quantitative Prediction, Weill Cornell Medicine



**Ioannis Vlachos, PhD**Assistant Professor of Pathology, Beth Israel Deaconess Medical Center





# AGENDA

		Advancing Science: A Spatial Biology Conference September 15, 2020 (Start Time: 9:00 am BST/10:00 am CET)
British Standard Time (BST)	Central European Time (CET)	
8:00 am (BST)	9:00 am (CET)	DOORS OPEN
8:30 am (BST)	9:30 am (CET)	Exhibits Hall/Poster Viewing/Networking/GeoMx* Interactive Data Experience
9:00 am (BST)	10:00 am (CET)	PLENARY SESSION
		Spatial Analysis of Immune Micro-Environments In Cancer and COVID-19 Peter Sorger, PhD, Otto Krayer Professor of Systems Biology at Harvard Medical School, Head of the Harvard Program in Therapeutic Sciences (HiTS) and Director of its Laboratory of Systems Pharmacology Harvard Medical School
		Break (5 min)
9:45 am (BST)	10:45 am (CET)	COVID-19 RESEARCH
		Transcriptomics of SARS-CoV2 Induced Lung Injury: A Spatial Transcriptomics Approach Z. Gordon Jiang, MD, PhD, Assistant Professor of Medicine, Beth Israel Deaconess Medical Center
		COVID-19 Respiratory Distress Syndrome: Dissecting the Root Cause of Its Severity Robert Schwartz, MD, PhD, Professor of Medicine, Weill Cornell Medicine and Alain Borczuk, MD, Professor, Pathology and Laboratory Medicine, Weill Cornell Medicine
		Spatial Insights Of Lung Pathology in COVID-19 Autopsies Åsa Segerstolpe, PhD, Research Scientist, Broad Institute of MIT and Harvard
		Temporal and Spatial Heterogeneity of Host Response to SARS-CoV-2 Pulmonary Infection David Ting, MD, Associate Clinical Director for Innovation, MGH Cancer Center Assistant Professor of Medicine, Harvard Medical School
		Panel Roundtable
		Break (15 min)
11:30 am (BST)	12:30 pm (CET)	SPATIAL GENOMICS RESEARCH
		Mechanisms of Alport Syndrome Pathogenesis Laura Perin, PhD, Investigator, Research Urology, Assistant Professor of Research Surgery, Children's Hospital Los Angeles, The Saban Research Institute and Sargis Sedrakyan, PhD, Investigator, Research Urology Assistant Professor of Research Surgery, Children's Hospital Los Angeles, The Saban Research Institute
		Cellular Elements and Spatially-Organized Immune Hubs in Colorectal Cancer Karin Pelka, PhD, Post-Doctoral Fellow, Broad Institute of MIT and Harvard and Massachusetts General Hospital (MGH)
		Spatial Evolution of Epithelial-Mesenchymal Program of Head and Neck Cancer Muh-Hwa Yang, MD, PhD, Investigator, Urology Research Assistant Professor, National Yang Ming University
		Break (15 min)





# AGENDA

		Advancing Science: A Spatial Biology Conference September 15, 2020 (Start Time: 9:00 am BST/10:00 am CET)
1:00 pm (BST)	2:00 pm (CET)	SPATIAL GENOMICS DATA ANALYSIS
		Spatial Characterization of The Tumor-Immune Microenvironment Through Therapy in Breast Cancer Christopher E. Mason, PhD, Associate Professor; Director, WorldQuant Initiative for Quantitative Prediction, Weill Cornell Medicine
		Spatial Characterization of The Tumor-Immune Microenvironment Through Therapy in Breast Cancer Christina Curtis, PhD, Associate Professor, Medicine - Oncology Associate Professor, Genetics, Stanford University
		Whole Transcriptome in Situ Cell Atlas Reveals The Cellular Composition of The Developing Human Brain Omer Bayraktar, PhD, Appointed Cellular Genetics Group Leader Wellcome Sanger Institute and Alexander Aivazidis, PhD, Student, Wellcome Sanger Institute
		Spatial Transcriptomics and Single-Cell Integration for In-Depth Localized Tissue Interrogation Ioannis Vlachos, PhD, Assistant Professor of Pathology, Beth Israel Deaconess Medical Center
		Panel Roundtable
2:30 pm (BST)	3:30 pm (CET)	Exhibits Hall/Poster Viewing/Networking/GeoMx* Interactive Data Experience





# POSTERS

Presenters	Title
<b>Dan Zollinger</b> NanoString Technologies	Molecularly guided digital spatial profiling for highly multiplexed analysis of gene expression with spatial and single cell resolution
Sarah Church NanoString Technologies	Deep Spatial Profiling of the Immune Landscape of MSI and MSS Colorectal Tumors
Yugi Ren NanoString Technologies	Genomic Characterization of Breast Cancer Heterogeneity using Breast Cancer 360™
Parick Danaher NanoString Technologies	Updating immune cell deconvolution for the spatial genomics era
Jason Reeves NanoString Technologies	Enabling pathway analysis of RNA expression in formalin-fixed paraffin embedded tissues with the GeoMx™ DSP platform
Shilah A. Bonnett NanoString Technologies	Multi-step Antibody Validation for the GeoMx®Digital Spatial Profiler
Alejandra Solache Abcam	Abcam's Recombinant RabMAb Discovery and Validation Platform
Anushka Dikshit ACD	Molecularly guided highly multiplexed digital spatial analysis reveals differential gene expression profiles in the WNT-β-catenin pathway between melanoma and prostate tumors

