FO 2024 MGI

Future of Omics Conference

10 - 13 September
Shenzhen & Hong Kong

Program

10 September
Hong Kong Science Park

September 10 — Charles K. Kao Auditorium

Time	Topic	Speaker	Organization
		09:00 - 9:15 Registration	
09:20-09:40	Mapping the human microbiome in individuals, cohorts and populations	Prof. Larry Agenbaum	Karolinska Institute
09:45-10:05	Structural Variation Calling with Repeat Resolution and Accurate Genotyping	Prof. Ming Xiao Kang	The Chinese University of Hong Kong
10:10-10:30	Decipherring the molecular regulation of wheat Fusarium head blight using multi-omics approaches	Prof. Zhenqi Chang	The Hong Kong University of Science and Technology
		Coffee Break	
10:35-10:55	Efficient Analysis of Plant Physiological Processes with Multiomics Data	Dr. Xin Liu	BGI Research
11:05-11:25	Diagnostics for Liver Diseases - Beyond the Exome	Prof. Hanne Olaf Rieß	Institute for Medical Genetics and Applied Genomics
11:30-11:50	Jacob Bruhn announcement	Dr. Meng Yang	BGI-SZ
12:00-12:30	Closing remark	Dr. Jian Wang	BGI Group
		12:00 - 13:30 Lunch Time	
Afternoon		Signing Ceremony	
		eLab Tour	
		Transport to Shenzhen	
		19:00 - 21:00 Welcome Reception in Shenzhen (Invitation only)	

11 -13 September
Shenzhen, MGI Headquarter
International Conference Hall

September 11 — Function Hall I

Time	Topic	Speaker	Organization
		07:30 - 8:30 Registration	
08:30-08:50	Welcome Speech	Mr. Dongrui Ye	MGI
08:50-09:20	Sequencing and Beyond	Dr. Xun Xu	BGI Research
09:20-09:50	SEQ ALL	Dr. Radoje Drmanac	MGI Tech
9:50 - 10:10	LESLI	Dr. Hui Jiang	MGI Tech
		10:10 - 10:40 Coffee Break	
10:10-10:40	Technology Update	Dr. Ming Ni	MGI Tech
11:00-11:30		Dr. Ao Chen	STOmics
11:30-12:00		Dr. Jingjing Wang	MGI Tech
		12:00 - 13:30 Lunch Time, HQ Tour	
13:30-17:30	**DCS Lab & Multi-omics Forum I**		
13:30-13:50	Single cell multi-omic analysis of pan-leukaemia cell states	Prof. Tao Cheng	Peking Union Medical College (PUMC) and the Chinese Academy of Medical Sciences (CAMS)
13:50-14:10	Complex full-length transcriptome with long read sequencing	Dr. Wei Wu	Lingang Laboratory
14:10-14:30	Single cell transcriptomic analysis of oral cancer reveals two dominant cellular programs	Prof. Partha Majumder	Indian Institute of Liver and Digestive Sciences
14:30-15:30	Spatially Resolved Transcriptomics: Far-Sequencing Gene Regulatory Networks in Development and Disease	Prof. Mirana Ramialison	Murdoch Children's Research Institute
15:30-15:50	Single-cell transcriptomics of the placenta: bridging the understanding of maternal conditions and offspring health	Prof. Qiaoling Dong	Karolinska Institute
		15:50 - 16:20 Coffee Break	
15:50-16:10	Application of STOmics to elucidate the molecular mechanisms of Lung cancer	Prof. Michael Kanai	The University of Tokyo
16:10-16:30	Global transcriptomic heterogeneity contributes to cell fate determination during early embryonic development of Zebrafish	Dr. Chang Liu	BGI Research
16:30-16:50	Single-cell multi-omics study of the role of Epstein-Barr virus in nasopharyngeal carcinoma oncogenesis and tumor control	Prof. Wenwen Tang	Guangzhou Medical University
16:50-17:10	Beyond the Genome - Unlocking precision medicine with Multiomics deep phenotyping	Dr. Vishwanether Shinde	Fujirebio
17:10-17:30	Spatial Extension Of Cistrome to Enhance Computational 3DGenome Studies	Dr. Yanlin Zhang	Hong Kong University of Science and Technology
17:30-17:50	Hall 2.0: the next generation of Pathology that powered by Spatial Omics	Dr. Joe Yeong	Singapore General Hospital

September 11 — Meeting Room 410

Time	Topic	Speaker	Organization
13:30-15:30	**PopGen Forum**		
13:30-13:50	The Genome of Europe: A Reference Database of Genomes and Phenotypes of 1 Million Citizens (1+MG) initiative	Prof. André Uitterlinden	Erasmus MC
13:50-14:10	Diagnostics for Liver Diseases - Beyond the Exome	Prof. Hanne Olaf Rieß	Institute for Medical Genetics and Applied Genomics
14:10-14:30	Multi-omics Quality Control and Data Integration	Prof. Lanyang Shi	Fudan University
14:30-14:50	Tissue	Dr. Alexis Naghavi	Harvard Medical School
14:50-15:10	Biobank scaled proteomics enable discovery of genetic associations, biomarkers and mechanistic biology	Dr. Cindy Lawley	Olink
		15:10 - 15:30 Coffee Break	
15:30-15:50	The Data Analysis Algorithm for Large-Scale Population Genetic Research in the 2020s	Prof. Yadong Wang	Harbin Institute of Technology
15:50-16:10	TBC	Andrea Ripke	Dante Labs
16:10-16:30	Scaling Genomics: How Personal Omics Fuels Population-Wide Precision Medicine	Dr. Haoyi Weng	WeGene

September 12 — Function Hall I

Time	Topic	Speaker	Organization
18:00-20:30	Conference Dinner		

September 12 — Function Hall I

Time	Topic	Speaker	Organization
		09:00 - 10:40 Coffee Break	
09:00-09:20	High-Throughput Generation of Human Induced Pluripotent Stem Cells for Modeling Human Genetic Disorders	Dr. Wu Li	King Abdullah University of Science and Technology
09:20-09:40	Genetic insights into lung cancer resistance to targeted therapy	Dr. Christoph Zeigenhain	Lynxo Genomics
09:40-10:00	Deconstructing comprehensive molecular tumor diagnostics for all cancer patients	Dr. Jasper Park	Cornell University (online)
10:05-10:25	Harnessing AI for Spatial Omics Analysis	Prof. Dominian Chen	Kuler Music Medical School
		10:30 - 10:40 Coffee Break	
10:40-11:00	Single cell sequencing and spatial omics in the brain	Dr. Christian Conrad	Berlin Institute of Health
11:00-11:20	Dissecting tumor heterogeneity and microenvironment using single-cell and spatial technologies	Dr. Liang Wu	BGI Research
11:20-11:40	Exposing causal biomarkers for complex diseases using state-of-the-art genetic analysis	Prof. Xia Shen	Fudan University
11:40-12:00	Unravelling Genomic Dark Matter with AI and Cutting-Edge Sequencing Technologies	Dr. Lu Zhang	Hong Kong Baptist University
		12:00 - 13:30 Lunch Time, Product demo, HQ Tour	
13:30-16:50	**Clinical Genomics Forum**		
13:30-13:50	Understanding embryonic origins of tumors	Dr. Ankur Sharma	Garvan Institute of Medical Research
13:50-14:10	Immune Landscape of Steatotic HCC: Insights from Single Cell and Spatial Transcriptomics Analyses	Dr. Valerie Vilgrain	Translational Immunology Institute Sorbonne Université
14:10-14:30	Genetic variants influencing lung cancer susceptibility	Dr. Amit Dutt	University of Delhi
14:30-14:50	Multiomics comprehensive molecular tumor diagnostics for all cancer patients	Dr. Marie-Laure Yaspo	Max Planck/Berlin
14:50-15:10	Defeating cancer with genomics	Stephanie Xuehyung Tang	Inscripta INC
		15:10 - 15:30 Coffee Break	
15:30-15:50	Advancing transcriptome diversity among individual cells for precise cancer diagnosis	Prof. Vasan Yasodharan	McGill University
15:50-16:10	Metagenomic testing for Gastrointestinal and Digestive Health	James Lovegrove	NutriDNA
16:10-16:30	Decipher Clinical Significance of Extracranial Tumors through Multi-Omics Big Data	Dr. Wei Wang	BGI Research
16:30-16:50	Non-inherited disease in Oman	Dr. Aliya Al Hoori	National Genetics Center, Royal Hospital

September 12 — Meeting Room 410

Time	Topic	Speaker	Organization
09:00-11:00	**Public Health Forum**		
09:00-09:20	The Advancement of Nucleic Acid Sequencing and Its Impact on Public Health	Dr. Yiming Shao	NCAIDS/STD
09:20-09:40	Next generation sequencing at the south African medical research: leveraging our partnerships to advance omics in Africa	Prof. Craig Kinnear	South African Medical Research Council
09:40-10:00	TBC	Prof. Davide Cacchiarelli	University of Naples "Federico II"
10:00-10:20	TBC	Dr. Walter Kaufmann	Karolinska Institutet, AmbroGen
10:20-10:40	Sequencing-Based Research on the Discovery and Evolution of Pathogenic Bacteria	Dr. Zhang Zhihua	Jiaozhou University
		12:00 - 13:30 Lunch Time, Product demo, HQ Tour	
13:30-15:30	**Animal and Plant Genomics Forum**		
13:30-13:50	Application of NGS in Livestock animal breeding detection and AMR research	Prof. Shaolin Broz	China Agricultural University
13:50-14:10	TBC	Dr. Fayaz Khaki	Fujirebio Inc
14:10-14:30	Unveiling the Hidden Genes: Metagenomics and Genome Sequencing for Enhancing Plant Health and Productivity via PGPR Applications and Soil Interactions	Dr. Zahra Noorbakhsh	Indonesian Institute of Sciences
14:30-14:50	Evolution of sex chromosome, insight from the egg laying mammals	Dr. Yang Zhou	Indonesian Institute of Sciences
14:50-15:10	The impact of innovative sequencing technologies on crop improvements	Dr. Petra Van Bergvik	KeyGene
15:10-15:30	Low Coverage Sequencing and Its Application in Farm Animal Genomic Selection	Dr. Yuzhe Wang	China Agricultural University
		12:00 - 13:30 Lunch Time, Product demo, HQ Tour	
17:30-20:30	**Cocktail & Buffet (Eco-partners talks)**		
17:30-17:45	TBC	Dr. Charles Bae	Complete Genomics
17:45-18:00	Hong Kong's Innovation Hub: Catalyzing Global Tech Growth	Josephine Chan	Hong Kong Science & Technology Parks Corporation
18:00-18:15	SPOT-MAS: a breakthrough in Metabolomics by Multi-Covert Early Detection	Le Son Tran	Gene Solutions
18:15-18:30	Unlock the Full Potential of MGI Sequencing: the MGI N7 newest library prep reagent	Dr. Wang Wang	MGI
18:30-18:45	BGI NGS Solution on the MGI Platform	Dr. Jing Yu	GIT
18:45-19:00	Whole Transcriptome Profiling with Novel Single Cell Library Workflow on MGI Sequencer	Dr. Jing Chen	Bio-Rad
19:00-19:15	Agilent Andes & Novel Target Enrichment Solutions for Clinical Research and Medicine Analysis	Dr. Xingbo Zhou	Agilent
19:15-19:30	Optimizing Enzymes for High Quality NGS Library Prep	Yu Zhang	Watchmaker Genomics
19:30-19:45	CCRT Methylation and suitable alternative tests on array technology using MGI sequencing technology - TWIST Target Enrichment	Dr. Youper Cao	Twist
19:45-20:00	Franklin - the Future of Genetic Interpretation	Yann Ponsonnet	Genoox
20:00-20:15	Automated NGS Total Solution for Cancer Genomic Profiling: From Sample to Report	Harry Han	Genie+
20:15-20:30	Tencent tech advances omics data analysis	Dr. Rui Hao Zhang	Tencent Healthcare
		12:00 - 13:30 Lunch Time, Product demo, HQ Tour	
09:00-09:30	Keynote Speech	Dr. Chris Mason	Weill Cornell Medicine (online)
09:30-10:00		Prof. Marie Allen	Uppsala University
10:00-12:00	**Environmental Genomics Forum**		
10:00-10:20	TBC	Prof. Karsten Kristiansen	Copenhagen University
10:20-10:40	Pan-metagenomic analysis of extreme environments reveals the diversity and complexity of its microbial composition and functions	Dr. Songmian Hu	Institute of Microbiology, CAS
		10:40 - 10:45 Coffee Break	
10:45-11:05	Recent Advances of eDNA Technology in Biodiversity Monitoring	Dr. Xiaowei Zhang	Jiangxing University
11:05-11:25	Marine marine microbial diversity and its potential in bioprospecting	Dr. Ying Sun	Ocean University of China
11:40-12:00	Massive metagenomic studies reveal extraordinary novel biodiversity in the deepest oceans	Dr. Zewei Song	BGI Research Sanya
		12:00 - 13:30 Lunch Time, Product demo, HQ Tour	

Conference Eco-partners

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