

SelectBIO Hong Kong February 7-8, 2025 Conference Agenda ALVA HOTEL BY ROYAL 1 Yuen Hong Street, Shatin, Hong Kong

Full Abstracts of Speaker Presentations on SelectBIO Website

https://www.selectbioconferences.com/



Friday, February 7, 2025 - Conference Day 1

- 08:30 Conference Registration, Materials Pick-Up, Coffee and Networking Yat Heen, Level 2, ALVA HOTEL
- 09:00 Welcome and Introduction to the Conference -- Topics Addressed and Themes Explored at this Conference
 - Anderson Shum, Vice President of Research, City University of Hong Kong
- 09:15 Plenary Presentation
 Ultra-high Sensitivity Diagnostics with Droplet Microfluidic Devices
 David Weitz, Mallinckrodt Professor of Physics and Applied Physics, Director of the Materials Research Science and Engineering Center, Harvard University, United States of America

09:45 Plenary Presentation

Microfluidics and Biosensors: Unlocking New Possibilities in Biophysics and Diagnostics

Amy Shen, Provost, Professor, Micro/Bio/Nanofluidics Unit Okinawa Institute of Science and Technology (OIST), Japan

10:15 Coffee, Tea + Light Bites and Networking with Colleagues and Exhibitors

11:00 Plenary Presentation

Moving Cells on Chips for Clinical Applications

Mehmet Toner, Helen Andrus Benedict Professor of Biomedical Engineering, Massachusetts General Hospital (MGH), Harvard Medical School, and Harvard-MIT Division of Health Sciences and Technology, United States of America

11:30 Plenary Presentation

Micro-Surgical Tools for Dissecting Cells and Tissues

Sindy K.Y. Tang, Associate Professor, Department of Mechanical Engineering and by courtesy of Bioengineering and Radiology, Stanford University, United States of America

12:00 Plenary Presentation

Microfluidic Control For Single Filaments and Minimal Biopolymer Networks Sarah Köster, Professor, University of Göttingen, Germany

12:30 Networking Lunch – Alva House Lunch Buffet

13:25 Session Title: Emerging Themes in Extracellular Vesicles (EV) Research – I

13:30 Plenary Presentation

Microfluidic Innovations in Liquid Biopsy: From Digital EV Profiling to Point-of-Care Diagnostics

Yoon-Kyoung Cho, Professor, Department of Biomedical Engineering; Dean, College of Information and Biotechnology, UNIST (Ulsan National Institute of Science & Technology), Ulsan, Republic of Korea

14:00 Technology Spotlight Presentation

Characterization of Extracellular Vesicles and Other Biological Nanoparticles using Nanoparticle Tracking Analysis (NTA)

Sven Kreutel, CEO, Particle Metrix, Inc., Germany and United States of America



14:30 Development of DNA Aptamers Targeting Colorectal Cancer Cell-derived Small Extracellular Vesicles and their Biomedical Applications

Ki Soo Park, Associate Professor, Konkuk University, Republic of Korea

- 15:00 Mid-Afternoon Coffee, Tea + Light Bites and Networking with Exhibitors
- 15:29 Session Title: Innovations in Microfluidics I
- 15:30 Plenary Presentation
 Transforming Healthcare: Microfluidics for Disease Diagnosis and Monitoring
 Chwee Teck Lim, NUS Society Chair Professor, Department of Biomedical
 Engineering, Institute for Health Innovation & Technology (iHealthtech),
 Mechanobiology Institute, National University of Singapore
- 16:00 Technology Spotlight Presentation
 Microfluidics and Additive Manufacturing:
 Dilase 3D, the (R)evolution
 Paul Coudray, CEO, Kloé, France



- 16:30 Biomedical Innovations in Molecular Diagnosis Powered by Microfluidics Lorena Diéguez, Leader of the Medical Devices Research Group, INL-International Iberian Nanotechnology Laboratory, Portugal
- 17:00 Close of Day 1 of the Conference

Saturday, February 8, 2025 – Conference Day 2

- 08:00 Morning Coffee, Tea and Networking
- 08:55 Session Title: Innovations in Extracellular Vesicles (EVs)/Exosomes II
- 09:00 Keynote Presentation
 Bacterial Extracellular Vesicles in Disease Diagnosis and Treatment
 Lei Zheng, Professor, Director of Department of Clinical Laboratory
 Medicine, Vice President of Nanfang Hospital, Southern Medical University,
 China
- 09:30 Technology Spotlight Presentation
 EXODUS: Innovative Technique for Automatic
 Isolation of Exosomes and Its Diverse
 Applications



- Lulu Zhang, Application Scientist, EXODUS BIO, China
- 10:00 Extracellular Vesicles for Precision Therapeutic Development
 Mei He, Associate Professor, University of Florida, United States of America
- 10:30 Mid-Morning Coffee, Tea + Light Bites and Networking with Exhibitors
- 11:00 APLP1 as a Brain-Derived Extracellular Vesicle Biomarker in Advancing Neurodegenerative Disease Diagnostics
 Jisook Moon, Associate Professor, CHA University, Republic of Korea
- 11:30 Keynote Presentation by Conference Co-Chair
 Translation of Extracellular Vesicles From Bench to Bedside
 Andreas Möller, Professor, Chinese University of Hong Kong
- 12:00 Lunch and Networking with Colleagues and Exhibitors Alva House Lunch Buffet
- 12:59 Session Title: Biomedical Innovations Driven by Microfluidics and EV Research
- 13:00 Technology Spotlight Presentation
 Scaling Up Microfluidic Innovations from
 Lab to Fab



- Yexian Wu, Executive Vice President, HiComp Microtech, China
- 13:30 Multi-Stimulus Perception and Visualization by an Intelligent Liquid Metal-Elastomer Architecture

Hongzhang Wang, Assistant Professor, Tsinghua Shenzhen International Graduate School, China

14:00 The Functional and Clinical Significance of Extracellular Vesicles in Hepatocellular Carcinoma
Judy Yam, Professor, The University of Hong Kong

14:30 Distance-based Ratio-metric Assay using Thread-based Microfluidics for Sensing Applications

Naresh Kumar Mani, Associate Professor, Centre for Microfluidics, Biomarkers, Photoceutics & Sensors, Manipal Academy of Higher Education, India

- 15:00 Engineering Inhalable Nanomedicine for Respiratory and Neurological Diseases
 Aviva Chow, Associate Professor, The University of Hong Kong
- 15:15: Cell Mechanics: From Mechanotransduction to Tissue Morphogenesis and Disease Detection

Yuan Lin, Professor, The University of Hong Kong

15:30 Customized Nanodiamond-based Nanodevices

Zhiqin Chu, Professor, The University of Hong Kong

15:45 Mid-Afternoon Coffee, Tea + Light Bites and Networking