



Microfluidics for Biomedical Innovation 2026 Shenzhen Extracellular Vesicles 2026 Shenzhen

Dates: Friday, 23 January 2026 - Saturday, 24 January 2026

Location: Shenzhen, China

Conference Day 1 – Friday, 23 January 2026 – 5th Floor Ballroom

08:00 Conference Registration, Materials Pick-Up, Coffee, Tea and Networking

09:00 Chairperson's Welcome

Welcome and Introduction to the Microfluidics Conference by Conference Senior Chairperson

Tingrui Pan, Yangtze River Chair Professor, University of Science and Technology of China, China

09:10 Chairperson's Welcome

Welcome and Introduction to the Microfluidics Conference by Conference Senior Chairperson

Hsueh-Chia Chang, Bayer Professor of Chemical and Biomolecular Engineering, University of Notre Dame, United States of America; Co-Founder & CTO, Aopia Biosciences

Session Title: Conference Opening Plenary Session

09:20 Plenary Presentation

Next-Generation Microfluidic Biosensing: Integrating LSPR, Synthetic Receptors, and Functionalized 3D-Printed Platforms

Amy Shen, Professor and Provost, Okinawa Institute of Science and Technology Graduate University (OIST), Japan

09:50 Plenary Presentation

Liquid Metal based Microfluidic Wearable Sensors for Biomedical Applications

Chwee Teck Lim, NUSS Chair Professor, National University of Singapore

10:20 Plenary Presentation

Size-Based Quantification of Extracellular Vesicles and Viruses in Untreated Plasma/Urine by Brownian Rotation of Immuno-Janus Particles

Hsueh-Chia Chang, Bayer Professor of Chemical and Biomolecular Engineering, University of Notre Dame, United States of America

10:50 Mid-Morning Coffee and Tea Break and Networking with the Exhibitors

11:20 Plenary Presentation

Extracellular Vesicles (EVs): Biomarkers for Cardiovascular Disease

Dominique PV de Kleijn, Professor Experimental Vascular Surgery, Professor Netherlands Heart Institute, University Medical Center Utrecht, The Netherlands

11:50 Plenary Presentation

MSC Exosomes in Disease Modulation: Immunity as the Common Denominator

Sai Kiang Lim, Research Director, Paracrine Therapeutics, Singapore; Associate Research Professor, National University of Singapore

12:20 Plenary Presentation

Real-time Microfluidic Devices for Healthcare – Innovative Monitoring of Premature Babies in the NICU

Martyn Boutelle, Professor of Biomedical Sensors Engineering, Imperial College London, United Kingdom

12:50 Networking Lunch – Engage with Colleagues and Meet the Sponsors and Exhibitors

Session Title: Innovations in Microfluidics, circa 2026

Session Chairperson: Professor Tingrui Pan, Yangtze River Chair Professor, University of Science and Technology of China

Venue: 5th Floor Ballroom

14:00 Building Microfluidic Organs-on-chip for Translational Biomedical Innovations

Lorena Diéguez, Leader of the Medical Devices Research Group, INL-International Iberian Nanotechnology Laboratory, Portugal

**14:30 Keynote Presentation
Microneedle Patch-based Interstitial Fluid Rapid Analysis and Skin Wound pH Monitoring**

Xueji Zhang, National Chair Professor, Vice Chairman of Shenzhen University, China - Conference Co-Chair

**15:00 Technology Spotlight Presentation
How to Choose Between Maskless and Mask-based Photolithography?**

Anatole Heliot, Kloé, France



15:30 Mid Afternoon Coffee and Tea Break and Networking with the Exhibitors

Session Title: Innovations in Extracellular Vesicles Research, circa 2026

Session Chairperson: Professor Hsueh-Chia Chang, Bayer Professor of Chemical and Biomolecular Engineering, University of Notre Dame, United States of America

Venue: 5th Floor Ballroom

16:00 Electrokinetic Separation of Extracellular Vesicles

Levent Yobas, Professor, Department of Electronic and Computer Engineering, Department of Chemical and Biological Engineering, Hong Kong University of Science and Technology, Hong Kong

16:30 Intracellular Calcium Modulation via High Frequency Cell Mechanostimulation for Enhancing Exosome Production

Leslie Yeo, Distinguished Professor, Royal Melbourne Institute of Technology (RMIT), Australia; Chief Editor, Biomicrofluidics

**17:00 Technology Spotlight Presentation
EXODUS: Innovative Technique for Automatic Isolation of Extracellular Vesicles and its Diverse Applications**

Lulu Zhang, Application Scientist, EXODUS BIO, China



**17:30 Technology Spotlight Presentation
Particle Metrix**



18:00 Evening Networking Reception in the Exhibit Hall

19:00 Close of Day 1 of the Conference Programming

Conference Day 2 – Saturday, 24 January 2026 – 5th Floor Ballroom

08:00 Morning Coffee, Tea and Networking in the Exhibit Hall

Session Title: A Deep Dive and Focus on Extracellular Vesicles

09:00 Chairperson's Welcome & Presentation

Extracellular Vesicle Diagnostics

Hsueh-Chia Chang, Bayer Professor of Chemical and Biomolecular Engineering, University of Notre Dame, United States of America; Co-Founder & CTO, Aopia Biosciences -- Conference Senior Chairperson

09:30 Keynote Presentation – Title to be Confirmed

Hang Hubert Yin, Professor, Tsinghua University, China

10:00 Technology Spotlight Presentation

ONI Presentation



10:30 Mid-Morning Coffee and Tea Break and Networking in the Exhibit Hall

11:00 AI-Driven Dual-Action Extracellular Vesicle Therapy for Osteoarthritis: Toward Precision Cartilage Regeneration

Hsiu-Jung Liao, Researcher, Department of Medical Research, Far Eastern Memorial Hospital, Assistant Professor, Institute of Biopharmaceutical Science, National Yang-Ming University, Taipei

11:30 The Impact of Extracellular Vesicles on Therapeutics and Diagnostics in Hepatocellular Carcinoma

Judy Yam, Professor, The University of Hong Kong; Associate Editor, JEV

12:00 Development of Urinary Exosome-based Diagnosis for Urogenital Diseases

Haifang Yin, Professor, Head of Medical Technology Division, Tianjin Medical University, China

12:30 Networking Lunch - Meet Colleagues and Engage with Exhibitors

13:30 Functional mRNA-Encapsulating Extracellular Vesicles for Biomedical Applications

Chi-Ying Huang, Distinguished Professor and Dean, Sciences in Institute of Biopharmaceutical Sciences, College of Pharmaceutical Sciences, National Yang Ming Chiao Tung University, Taipei

14:00 Decoding Extracellular Vesicle Cargoes for Biomarker Discovery in Neurological Disorders and HIV Infection

Yiyao Huang, Research Scientist, Nanfang Hospital, Southern Medical University, China - Conference Co-Chair

14:30 Keynote Presentation

Bacterial Extracellular Vesicles: Research Approaches and Translational Value in Diagnostics and Therapy

Lei Zheng, Professor of Medicine, Vice President, Nanfang Hospital Southern Medical University, China; Vice President, Chinese Society for Extracellular Vesicles, China -- Conference Co-Chairperson

15:00 Mid-Afternoon Coffee and Tea Break and Networking in the Exhibit Hall

15:30 Advancing Extracellular Vesicle Analysis: Nano-Flow Cytometry for Fundamental Research and Biomedical Applications

Xiaomei Yan, Distinguished Professor, Xiamen University, China; Co-Founder of NanoFCM, Inc.

16:00 Envelope Protein on the Surface of Flavivirus Infection-Derived Extracellular Vesicles Displays Antigenic Landscape Similar to Virions

Gang Long, Professor, Fudan University, China

16:30 Circulating Extracellular Vesicles Drive Neuronal Amyloid- β Production in Alzheimer's Disease

Zhigang Li, Associate Professor, Seventh Affiliated Hospital, Sun Yat-sen University, China

17:00 Extracellular Vesicle Mediated Immune Response in Renal Disease: From Bulk to Single Vesicles

Linli Lv, Professor, Institute of Nephrology, Southeast University, China

17:30 Interaction of Cyanobacterial EVs and Viruses

Qinglu Zeng, Professor, The Hong Kong University of Science and Technology, Hong Kong

18:00 Efficacy of Hypoxia-Conditioned MSCs and Their Extracellular Vesicles in Rat Models of Alzheimer's Disease and Spinal Cord Injury

Nguyen Thanh Liem, Director of Vinmec Research Institute of Stem cell and Gene Technology, VinUniversity, Vietnam

18:30 Close of Conference