SELECTBIO

SelectBIO Japan

October 13-14, 2026 Conference

Hotel Nikko Narita @ Tokyo-Narita

Microfluidics, MPS and Rapid Dx

Extracellular Vesicles (EVs)

Lipid Nanoparticles (LNPs)

Space Summit Asia/Pacific-Japan

Organized by SelectBIO Conferences

https://www.selectbioconferences.com/

Conference Day 1: Tuesday - October 13, 2026
Microfluidics, Organs-on-Chips
Point-of-Care & Rapid Diagnostics Japan 2026

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

09:00 **Keynote Presentation**
Development of Microfluidic based Biosensors for Healthcare Purposes

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

09:30 A Point-of-Care Pathogen Detection Using Reagent-Free Nucleic Acid Purification

Levent Yobas, Professor, Hong Kong University of Science and Technology, Hong Kong

10:00 Mid-Morning Coffee and Tea Break and Networking

10:30 Building Cross-Sector Consensus on the Utility of Complex In Vitro Models

Ivan Rusyn, University Professor, Texas A&M University, United States of America

11:00 Decellularized Liver Matrix-based Materials for Liver Tissue Engineering Application

Yung-Te Hou, Professor, National Taiwan University (NTU), Taiwan ROC

11:30 Versatile Microphysiological Systems Enabling Drug Evaluation and Organ Interaction Studies

Hiroshi Kimura, Professor, Micro/Nano Technology Center, Tokai University, Japan

12:00 **Keynote Presentation**
Advancing MPS toward Practical Implementation: Lessons from Japan's AMED-MPS Projects and a New Monitoring Initiative

Seiichi Ishida, Professor, Graduate School of Engineering, Sojo University; Guest Researcher, National Institute of Health Sciences, Japan

12:30 Networking Lunch – Japanese Bento – Engage with Colleagues Over Lunch

13:30 **Technology Spotlight Presentation**
Direct Laser Write Technology : What Makes Dilase Systems so Unique for Microfluidic Applications?

Lewis Kikuchi, Technical Adviser, BEAMS, Japan

14:00 From Bench to Market: ABIC's Approach to Developing and Commercializing Organoid and Microphysiological System Technologies

Tony Yung, Chief Commercial Officer, Advanced Biomedical Instrumentation Centre (ABIC), Hong Kong

14:30 Advancing Paper-Based Bioanalysis: From Point-of-Care Diagnostics to Bioluminescence Screening

Daniel Citterio, Professor, Department of Applied Chemistry, Faculty of Science and Technology, Keio University, Japan

15:00 Mid-Afternoon Coffee and Tea Break and Networking

15:30 Sample Handling System for High-Throughput Field-Resolved Infrared Molecular Fingerprinting

Akash Singh, Microfluidic Scientist, Max Planck Institute of Quantum Optics, Germany

16:00 Panel Discussion Focused on Commercialization of Microfluidics. What are the Applications where Microfluidics Can be Leveraged?

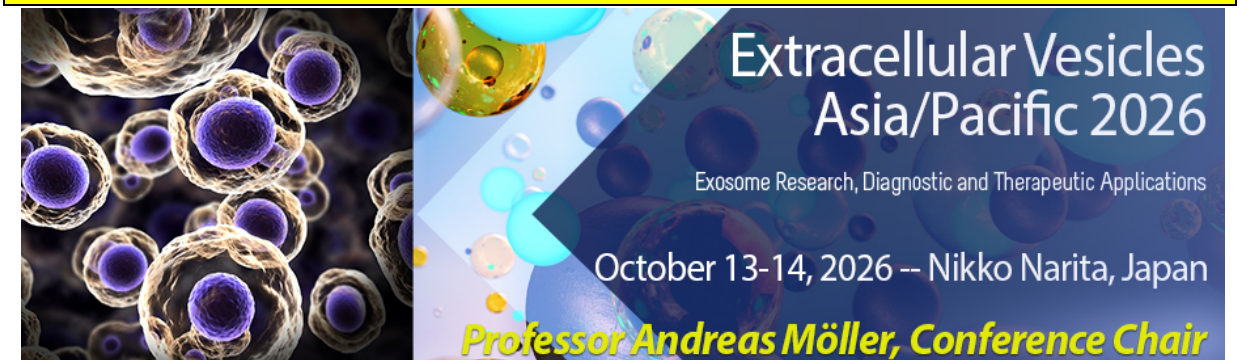
17:00 **Onsite Instrument Demonstration**
Onsite, Hands-On Demonstration and Deep Dive of the Particle Metrix Platform for NTA, fNTA and Lipid Nanoparticle (LNP) Analysis

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

17:30	Japanese Beer Reception – Networking and Continuation of Instrument Demonstration

18:30 Close of Day 1 of the Conference

Conference Day 1: Tuesday - October 13, 2026
Extracellular Vesicles (EVs) AP-Japan 2026



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

09:00 Keynote Presentation
Development of Microfluidic based Biosensors for Healthcare Purposes
Martyn G Boutelle, Professor of Biomedical Sensors Engineering, Department of Bioengineering, Imperial College London, United Kingdom

09:30 A POC Pathogen Detection Using Reagent-Free Nucleic Acid Purification
Levent Yobas, Professor, Hong Kong University of Science and Technology, HK

10:00 Mid-Morning Coffee and Tea Break and Networking

10:30 Building Cross-Sector Consensus on the Utility of Complex In Vitro Models
Ivan Rusyn, University Professor, Texas A&M University, United States of America

11:00 Decellularized Liver Matrix-based Materials for Liver Tissue Engineering Application
Yung-Te Hou, Professor, National Taiwan University (NTU), Taiwan ROC

11:30 Versatile Microphysiological Systems Enabling Drug Evaluation and Organ Interaction Studies
Hiroshi Kimura, Professor, Micro/Nano Technology Center, Tokai University, Japan

12:00 **Keynote Presentation**
Advancing MPS toward Practical Implementation: Lessons from Japan's AMED-MPS Projects and a New Monitoring Initiative

Seiichi Ishida, Professor, Graduate School of Engineering, Sojo University; Guest Researcher, National Institute of Health Sciences, Japan

12:30 Networking Lunch – Japanese Bento – Engage with Colleagues Over Lunch

13:30 Evaluating Extracellular Vesicle Integrity and Composition to Inform Downstream Applications
Andreas Möller, Professor, Director, JC STEM Lab of Personalized Cancer Medicine, Li Ka Shing Institute of Health Sciences, Chinese University of Hong Kong

14:00 **Keynote Presentation**
Clinical Study of UC-MSC-Derived Extracellular Vesicles for Knee Osteoarthritis in Japan
Takahiro Ochiya, Distinguished Professor, Tokyo Medical University, Japan

14:30 **Technology Spotlight Presentation**
Particle Metrix Nanoparticle Tracking Analysis Platform for Studying EVs and LNPs

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

15:00 Mid-Afternoon Coffee and Tea Break and Networking

15:30 **Technology Spotlight Presentation**
Therapeutic Delivery with Recombinant Extracellular Vesicles
Christopher P. Locher, Founder and CEO, Versatope Therapeutics, Inc., United States of America

16:00 **Keynote Presentation**
HIV Tat-Activated Microglial Extracellular Vesicles Drive Neuronal Iron Dysregulation and Synaptodendritic Injury
Shilpa Buch, Professor and Senior Executive Vice Chair of Research, University of Nebraska Medical Center, United States of America

16:30 Dysregulated Autophagy Promotes Ferroptosis-Associated Cargo Loading into HIV Tat-Stimulated Microglial Extracellular Vesicles
Palsamy Periyasamy, Associate Professor, University of Nebraska Medical Center, United States of America

17:00 **Onsite Instrument Demonstration**
Onsite, Hands-On Demonstration and Deep Dive of the Particle Metrix Platform for NTA, fNTA and Nanoparticle Analysis
Sven Kreutel, CEO, Particle Metrix, Inc., United States of America and Germany

17:30 Japanese Beer Reception – Networking, Instrument Demonstration

18:30 Close of Day 1 of the Conference

Conference Day 2: Wednesday - October 14, 2026
Lipid Nanoparticles (LNPs)
Extracellular Vesicles (EVs)
AP-Japan 2026

08:30 Morning Coffee, Tea and Networking

09:00 High-Throughput Microfluidics and AI for Next-Generation LNP Development
Nan Zhang, Associate Professor, University College Dublin, Republic of Ireland

09:30 A Deep Dive into LNPs
Noah Malmstadt, Professor, Mork Family Dept. of Chemical Engineering & Materials Science, University of Southern California, United States of America

10:00 **Keynote Presentation**
Lipid Self-Assembly: From Nanostructure to Therapeutic Function
Nhiem Tran, Senior Lecturer and Deputy Head of Department of Applied Chemistry and Environmental Science, RMIT University, Australia

10:30 Mid-Morning Coffee and Tea Break and Networking

11:00 Development of a Cell-Free Virus-like Particle Production Method Using Microfluidic Devices
Masatoshi Maeki, Professor, Hokkaido University, Japan

11:30 Molecular Design of Functional Lipids for Macromolecular Delivery *in vivo*
Yusuke Sato, Associate Professor, Faculty of Pharmaceutical Sciences, Hokkaido University, Japan

12:00 PEG-free Lipid Nanoparticles for Targeted mRNA Delivery
*Yi Yan Yang, Distinguished Principal Scientist, Agency for Science, Technology and Research (A*STAR), Singapore*

12:30 Networking Lunch – Japanese Bento – Engage with Colleagues Over Lunch

13:30 LNP-based Therapeutic Strategies for Cardiometabolic Diseases
Jiong-Wei Wang, Assistant Professor, Yong Loo Lin School of Medicine, National University of Singapore

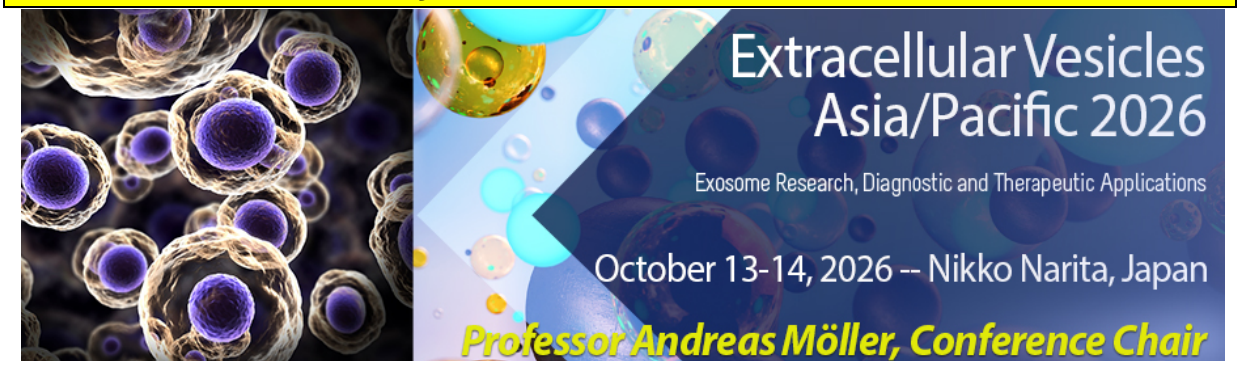
14:00 Development of MPS and its Application in Drug Discovery - Affinity with LNP Development
Yuzuru Ito, Professor, Institute of Life and Environmental Sciences, University of Tsukuba, Japan

14:30 Artificial Intelligence-driven Rational Design of Ionizable Lipids for mRNA Delivery
Defang Ouyang, Associate Professor, University of Macau, Macau

15:00 **Keynote Presentation**
Understanding the Nanomaterial Interaction with Biomolecules, A Journey from Safety to Applications in Nanomedicine
Marco Monopoli, RCSI University of Medicine and Health Sciences, Ireland

15:30 Late-Afternoon Coffee and Tea Break and Networking in the Exhibit Foyer

Day 2 - Late Afternoon EV Session



16:00 Multifaceted Roles of Extracellular RNAs: From Cancer Biomarkers to Bacterial EV Function
Juntaro Matsuzaki, Professor, Division of Interdisciplinary Genetics and Nanomedicine, Research Center for Drug Discovery, Keio University Faculty of Pharmacy, Japan

16:30 Mapping Cancer Extracellular Vesicle Delivery Networks in Metastatic Tissue Microenvironments
Nao Nishida-Aoki, Associate Professor, Global Center for Science and Engineering, Faculty of Science and Engineering, Waseda University, Japan

17:00 From Mechanisms to Relevance: How Do We Determine When Extracellular Vesicles Matter Biologically?
Shannon Callen, Research Coordinator, University of Nebraska Medical Center, United States of America

17:30 Close of Conference

Conference Day 1: Tuesday - October 13, 2026
Space Summit AP-Japan 2026

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

09:00 Chairperson's Welcome – Welcome and Introduction by Conference Chairperson
Kristin Kopperud, Aerospace Industry Professional, United States of America

09:30 Models and Outcomes of Public-Private Partnerships on the International Space Station National Lab
Michael Roberts, Chief Scientific Officer, International Space Station National Laboratory (CASIS), United States of America

10:00 Preventing Radiation- and Microgravity-Induced Injury: A Novel Countermeasure to Protect Bone
Melanie Coathup, Professor of Medicine/Lead, Biionix Cluster, University of Central Florida, The Stephen W. Hawking Center for Microgravity Research & Education, Florida Space Institute, United States of America

10:30 Mid-Morning Coffee and Tea Break and Networking

11:00 The Practical Application and Significance of Space-based Regenerative Medicine for On-Earth Regenerative Medicine
Louis Yuge, Founder, CTO Space Bio-Laboratories; Professor, E Hiroshima University, Japan

11:30 Novel Therapeutic Strategies to Sustain Bone Loss in Space: Lessons from Mission RR-25
Giuseppe Intini, Associate Professor, University of Pittsburgh, United States of America

12:00 Drug Screening Platform to Promote Muscle Regeneration Using Engineered Muscle-On-A-Chip Bioconstructs in Microgravity
Ngan F. Huang, Associate Professor, Stanford University, United States of America

12:30 Networking Lunch – Japanese Bento – Engage with Colleagues Over Lunch

13:30 Pt-TRAIL: Platinum Recovery from Asteroid Resources Using Deep Eutectic Solvents, from Extraction to Economic Viability
Volker Hessel, Professor, Adelaide University, Australia

14:00 From Lab to Factory: Enabling Biological Research and Manufacturing in Space
Tobias Niederwieser, Assistant Research Professor, BioServe Space Technologies, United States of America

14:30 Development of a Modular Multi-Stimulation Microfluidic Platform for Space Biomedical Research
Chia-Wen Tsao, Professor, Department of Mechanical Engineering, National Central University, Taiwan ROC

15:00 Mid-Afternoon Coffee and Tea Break and Networking

15:30 The Business of Space Medical Accelerator—Contributing to Advances in Medicine from Space
Masayuki Goto, Representative Director of Space Medical Accelerator, Japan

16:00 **Spotlight Presentation**
JAMSS Contributions to Research on the ISS and Commercial Space Stations
Kuniko Okada, General Manager, Sales and Business Management Department, Japan Manned Space Systems Corporation (JAMSS), Japan

16:30 Panel Discussion: Implementing Science in Space
Chaired by Kristin Kopperud, Aerospace Industry Professional, United States of America

Panelists
Tobias Niederweiser
Ngan Huang
Giuseppe Intini

17:30 Japanese Beer Reception – Networking and Continuation of Instrument Demonstration

18:30 Close of Day 1 of the Conference

Conference Day 2: Wednesday - October 14, 2026
Space Summit AP-Japan 2026

08:30 Morning Coffee, Tea and Networking

09:00 Introduction to Day 2 – Topics Covered and Themes Addressed
Kristin Kopperud, Aerospace Industry Professional, United States of America -- Conference Chairperson

09:15 **Keynote Presentation**
International Space Station: Building on 25 Years in Orbit and Igniting the Orbital Economy
Liz Warren, ISS Deputy Chief Scientist, NASA, United States of America

09:45 **Technology Spotlight Presentation**
In-Space Production of Protein-Based Artificial Retinas
Kristin Kopperud, Program Manager, LambdaVision, United States of America

10:15 Mid-Morning Coffee and Tea Break and Networking

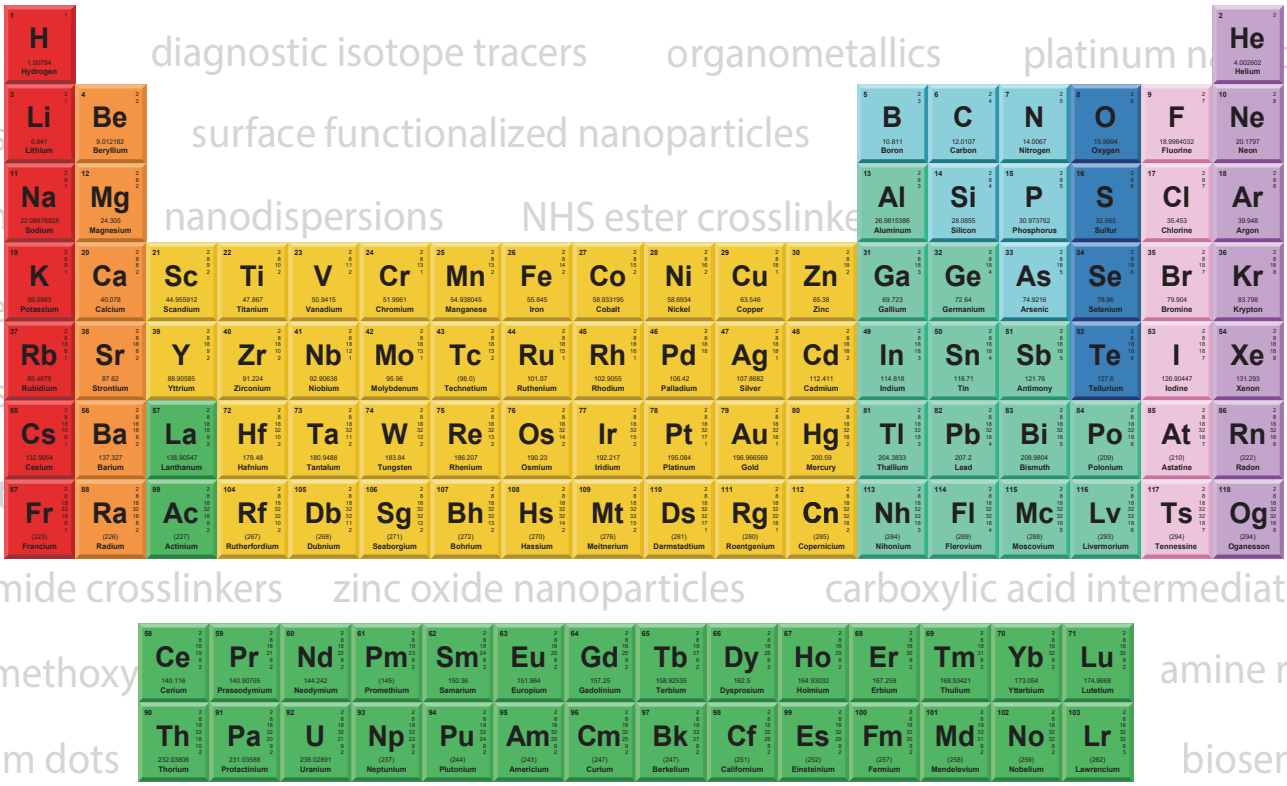
11:00 **Panel Discussion**
Panel Discussion Chaired by Kuniko Okada, General Manager, Sales and Business Management Department, Japan Manned Space Systems Corporation (JMASS)

12:00 Presentation Title to be Confirmed
Taketo Suzuki, Starlab/Mitsubishi, Japan

12:30 Networking Lunch – Japanese Bento – Engage with Colleagues Over Lunch

13:30 Networking Breakout Sessions

AMERICAN ELEMENTS
THE MATERIALS SCIENCE MANUFACTURER®



Now Invent.™

The Next Generation of Biochemistry Materials Manufacturers

Bulk & lab scale manufacturers of over 35,000 certified high purity compounds, metals, and nanoparticles, including amino acid derivatives, bioconjugation reagents, and isotope-labeled tracers for the biochemistry and life sciences research community, all engineered to meet the most rigorous quality standards.

American Elements Opens a World of Possibilities..... Now Invent!

www.americanelements.com

© 1997-2026. American Elements is a U.S.Registered Trademark