

**SelectBIO Laguna Hills November 18-20, 2024 Consolidated  
Conference Agenda  
The Hills Hotel – Laguna Hills, California**

Monday, November 18, 2024

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08:00 Exhibitors Start Move-In to the Exhibit Hall

09:00 Pre-Conference Training Course

**Microfluidics and Nanofluidics for Diagnostic Tests**

Presented by Professor Steve Soper, Foundation Distinguished Professor,  
University of Kansas

Duration: 09:00 – 11:00

Venue: The Slate Room

**\*\*Separate Registration is Required to Participate in this Training Course\*\***

11:00 Pre-Conference Training Course

**Microfluidic Product Development**

Presented by Dr. Leanna Levine, Founder & CEO, ALine, Inc.

Duration: 11:00 – 13:00

Venue: The Slate Room

**\*\*Separate Registration is Required to Participate in this Training Course\*\***

13:00 Main Conference Registration Commences

Conference Entrance/Registration Area

13:45 Plenary Session Begins in the Plenary Ballroom

Chaired by Professor Dino Di Carlo, Professor, UCLA and Dr. Leanna Levine, CEO,  
ALine, Inc.

**2024 Conference Focus and Themes Highlighted Over the 2.5-Day Event**

14:00 Steven C. George, Edward Teller Distinguished Professor and Chair, Department of  
Biomedical Engineering, University of California-Davis, United States of America

**Organ-on-Chip Systems to Probe Extracellular Vesicle Transport Across  
Biological Barriers**

14:30 Abraham Lee, Chancellor's Professor, Biomedical Engineering & Director, Center for  
Advanced Design & Manufacturing of Integrated Microfluidics, University of  
California-Irvine, United States of America

**Microfluidic Immunoengineering**

15:00 Valérie Taly, CNRS Research Director, Professor and Group leader Translational Research and Microfluidics, Université Paris Cité, France  
**Presentation Title to be Confirmed**

15:30 Mid-Afternoon Coffee Break and Networking in the Exhibit Hall

16:15 Roger Kamm, Cecil and Ida Green Distinguished Professor of Biological and Mechanical Engineering, Massachusetts Institute of Technology (MIT), United States of America  
**Brain Neurovascular Models and Their Application to Modeling Transport in Health and Disease**

16:45 Jim Heath, President, Institute for Systems Biology, United States of America  
**New Technologies for Accelerating Progress in Cancer Immunotherapies**

17:15 Eric Diebold  
WW Vice President, Research and Development, BD Biosciences, United States of America  
**Integrating Innovations for the Advancement of Single Cell Analysis**

17:45 Martyn Boutelle, Professor of Biomedical Sensors Engineering, Imperial College London  
**Title to be Confirmed**

18:15 Patient Advocate Presentation for Cancer and Technology Development

18:45 Networking Reception in the Exhibit Hall with Beer, Wine and Dinner  
Network with Colleagues, Engage with the Exhibitors and View Posters

20:15 Close of Day 1 of the Conference – Main Conference Programming

20:30 Training Course  
**3D-Printing of Microfluidics**  
Presented by Noah Malmstadt, Professor of Chemical Engineering and Materials Science, University of Southern California  
Duration: 20:30 – 22:30                      Venue: The Slate Room  
\*\*Separate Registration is Required to Participate in this Training Course\*\*

Tuesday, November 19, 2024

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07:30 Morning Coffee, Continental Breakfast and Networking in the Exhibit Hall

Session Title: Emerging Themes and Trends in Lab-on-a-Chip and Microfluidics 2024

Venue: Ballroom A

09:00 Dino Di Carlo, Armond and Elena Hairapetian Chair in Engineering and Medicine, Professor and Chair of Bioengineering, University of California-Los Angeles, United States of America

**Accelerating Life Science Research: From Lab-on-a-Chip to Lab-on-a-Particle**

09:30 Adam Abate, Professor of Bioengineering and Therapeutic Sciences, University of California-San Francisco, United States of America

**High-Throughput Mapping of Functional Proteins and Pathways**

10:00 Steve Soper, Foundation Distinguished Professor; Director, Center of BioModular Multi-scale System for Precision Medicine, Adjunct Professor, Ulsan National Institute of Science & Technology, The University of Kansas

**Applications of Resistive Pulse Sensing in Biology and Medicine**

10:30 Mid-Morning Coffee Break and Networking in the Exhibit Hall - Meet Exhibitors and View Posters

Session Title: Presentations Focusing on Organoids in this Session

Venue: Ballroom A

11:00 Holger Schmidt, Distinguished Professor of Electrical and Computer Engineering, Narinder Singh Kapany Chair of Optoelectronics, Director, W.M. Keck Center for Nanoscale Optofluidics, University of California-Santa Cruz, United States of America

**Lab-on-Chip Devices for Analysis of Extracellular Vesicles and Their Contents From Cerebral Organoid Tissue**

11:30 Mehdi Nikkhah, Associate Professor of Bioengineering, Arizona State University, United States of America

**Engineering Organotypic Disease On-a-Chip Models; Harnessing Innovations in Microfluidics, Biomaterials and Single-Cell Resolution Analysis**

12:00 Alysson Muotri, Professor, Director of the Stem Cell Program, University of California-San Diego, United States of America

**Applications of Human Brain Organogenesis**

12:30 Networking Buffet Luncheon -- Network with Exhibitors and Colleagues, View Posters

Session Title: Organoids and Organs-on-chips -- Utilizing Microfluidics for Harvesting Biological Insights

Venue: Ballroom A

13:30 Shuichi Takayama, Professor, Georgia Research Alliance Eminent Scholar, Georgia Institute of Technology, United States of America

**Organoids with Reversed Biopolarity (ORBs): SARS-CoV-2 Drug Testing & Breast Cancer Progression**

14:00 Alice Soragni, Assistant Professor, University of California-Los Angeles, United States of America

**Leveraging Patient-derived Tumor Organoids for Precision Medicine**

14:30 Mandy Esch, Project Leader, National Institute of Standards and Technology (NIST), United States of America

**Development of Pumpless Single-Organ and Multi-Organ MPS**

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

Session Title: 3D-Printing of Microfluidics

Venue: Ballroom A

15:30 Gregory Nordin, Professor, Brigham Young University, United States of America

**Pushing Boundaries: High Resolution 3D Printing for Microfluidics**

16:00 Technology Spotlight Presentation

Jeff Schultz, Co-Founder, Phase, Inc., United States of America

**A Platform for Commercialization of 3D Printed Microfluidics Embedded into Standard Well Plates**



16:30 Pranav Soman, Professor, Biomedical and Chemical Engineering, Syracuse University; IPA Program Director, Advanced Manufacturing (AM), National Science Foundation (NSF), United States of America

**Addressing Key Challenges in Multi-Material and Multi-scale Digital Projection Stereolithography**

17:00 Technology Spotlight Presentation

Bryce Hiller, Digital Education Coordinator, ASIGA, United States of America

**ASIGA Advancing 3D Printed Microfluidics**



17:30 Technology Spotlight Presentation  
Nicolas Brillouet, CTO, Kloé, France

**Microfluidics and Mask-Aligner: How to Make the Right Choice?**



18:00 Kevin Healy, Jan Fandrianto and Selfia Halim Distinguished Professorship in Engineering, University of California-Berkeley, United States of America  
**Exploiting Non-Animal Models to Optimize Lipid Nanoparticle/mRNA Complexes as Heart Therapeutics**

18:30 Networking Reception with Beer, Wine and Dinner in the Exhibit Hall -- Network with Exhibitors, Colleagues and View Posters

20:15 Close of Day 2 Main Conference Programming

20:30 Training Course

**Introduction to Microfluidics**

Presented by Shuichi Takayama, Professor, Georgia Research Alliance Eminent Scholar, and Price Gilbert, Jr. Chair in Regenerative Engineering and Medicine, Georgia Institute of Technology & Emory University School of Medicine, United States of America

Duration: 20:30 – 22:30

Venue: The Slate Room

\*\*Separate Registration is Required to Participate in this Training Course\*\*

Tuesday November 19, 2024 – Afternoon Session in Parallel Track  
Innovations in Flow Cytometry & Extracellular Vesicles 2024

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Session Title: Flow Cytometry and EVs

Venue: Ballroom B

13:20 Michael Graner, Professor, Dept of Neurosurgery, University of Colorado Anschutz School of Medicine – Session Co-Chairperson

**Single Cell Analysis and EV Research via Flow Cytometry**

13:30 Daniel Chiu, A. Bruce Montgomery Professor of Chemistry, University of Washington, United States of America

**High-Resolution Analysis of Single Extracellular Vesicles and Particles with Digital Flow Cytometry**

14:00 Yu-Hwa Lo, Professor, University of California San Diego, United States of America

**AI Enabled 2D and 3D Image-Guided Cell Analyzers and Sorters**

14:30 Beckman-Coulter Technology Spotlight Presentation



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

15:30 Gregory Cooksey, Project Leader, National Institute of Standards and Technology (NIST), United States of America

**A Microfluidic Serial Cytometer to Estimate Per-Cell Uncertainty and Single Object Kinetic Measurements**

16:00 Technology Spotlight Presentation  
Joseph de Rutte, CEO and Co-Founder, Partillion Bioscience, United States of America



**Nanovials: Bridging Microfluidics with Flow Cytometry to Enable Functional Screening of Cells**

16:30 Leyla Esfandiari, Associate Professor of Biomedical Engineering, University of Cincinnati, United States of America

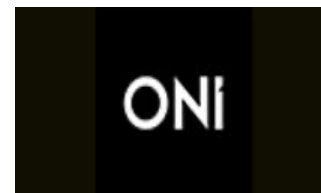
**Title to be Confirmed**

17:00 Technology Spotlight Presentation  
Sven Kreutel, CEO, Particle Metrix, Inc., United States of America



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

17:30 Technology Spotlight Presentation  
Alison Fujii, Field Application Scientist, ONI Inc., United States of America



**Characterization of Extracellular Vesicles Using the ONI Nanoimager Super-Resolution Microscope**

18:00 Terry Morgan, Professor, Oregon Health and Science University (OHSU), United States of America -- Conference Track Co-Chairperson

**NanoFACS and Bioassays**

18:30 Networking Reception with Beer, Wine and Dinner in the Exhibit Hall -- Network with Exhibitors, Colleagues and View Posters

20:15 Close of Day 2 Main Conference Programming

20:30 Training Course

**Introduction to Microfluidics**

Presented by Shuichi Takayama, Professor, Georgia Research Alliance Eminent Scholar, and Price Gilbert, Jr. Chair in Regenerative Engineering and Medicine, Georgia Institute of Technology & Emory University School of Medicine, United States of America

Duration: 20:30 – 22:30

Venue: The Slate Room

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Wednesday, November 20, 2024 – “Ballroom A Track”

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07:30 Morning Coffee, Continental Breakfast and Networking in the Exhibit Hall

08:00 Industry Breakout Round Tables:

**Each Round-Table Moderated by an Industry Participant  
Delegates Engage with the Moderator and Others to Discuss Topics Relating to  
Commercialization Themes Across Topics of this Conference**

Moderators are:

- David Weitz, Harvard – Microfluidics
- Roger Kamm, MIT – Organs-on-Chips
- Greg Cooksey, NIST – Flow Cytometry

Duration: 08:00-09:00      Venue: Ballroom A

Research to Commercialization -- Companies Present Technologies and Engage with the Participants

Chaired by Dr. Leanna Levine, CEO, ALine, Inc.

Venue: Ballroom A

09:00 David Weitz, Mallinckrodt Professor of Physics and Applied Physics, Director of the Materials Research Science and Engineering Center, Harvard University, United States of America

**High-Sensitivity Biomarker Detection Using Digital PCR with Microfluidics**

09:30 Technology Spotlight Presentation

Jing Chen, Founder & CEO, Hicomp Microtech, United States of America and China

**Can Your Prototype Go Big? Scaling Up Microfluidic Innovations from Lab to Fab**



10:00 Technology Spotlight Presentation

Théo Champetier, Technical Sales Engineer, Elveflow, France

**Elveflow, Microfluidics One-Stop-Shop: PDMS Microfabrication and Flow Control**



10:30 Technology Spotlight Presentation

Harald Fuchs, Project Manager, Z-MICROSYSTEMS, Austria

**Precision Microfluidic Plastic Consumables: From Design for Manufacturing to High-Volume Production**





11:00 Technology Spotlight Presentation  
Leanna Levine and Stefano Begolo, ALine, Inc., United States  
of America



**Title to be Confirmed**

11:30 Technology Spotlight Presentation  
Magdalena Schimke, Sales Specialist, STRATEC  
Consumables GmbH, Austria



**The Key Role of Microfluidics and Plasmonic Sensors in  
Monitoring Cell Therapy Manufacturing**

12:00 Technology Spotlight Presentation  
Victor Morel Cahoreau, Head of Sales, Eden Microfluidics,  
France



**A Holistic Journey into Microfluidics Innovative  
Materials and Microfluidic Solutions**

12:30 Noah Malmstadt, Professor, Mork Family Dept. of Chemical Engineering & Materials  
Science, University of Southern California, United States of America

**Understanding Three-Dimensional Microfluidic Design to Optimize Lipid  
Nanoparticle Fabrication**

13:00 Networking Lunch in the Exhibit Hall -- Engage with Exhibitors, Colleagues and View  
Posters

14:00 Best Poster Awards Given Out in Ballroom A  
3 Cash Awards Sponsored by the RSC and Lab-on-a-Chip Journal  
100 British Pounds Sterling per Award

Wednesday, November 20, 2024 – “Ballroom B Track”

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07:30 Morning Coffee, Continental Breakfast and Networking in the Exhibit Hall

08:00 Industry Breakout Round Tables:

**Each Round-Table Moderated by an Industry Participant**

**Delegates Engage with the Moderator and Others to Discuss Topics Relating to Commercialization Themes Across Topics of this Conference**

Moderators are:

- David Weitz, Harvard – Microfluidics
- Roger Kamm, MIT – Organs-on-Chips
- Greg Cooksey, NIST – Flow Cytometry

Duration: 08:00-09:00

Venue: Ballroom A

Session Focus on Organoids First and then Moves to Flow Cytometry and EVs

Venue: Ballroom B

09:30 Robert Halliwell, Professor of Neuroscience, University of The Pacific, United States of America

**Neurons from Human Stem Cells in 2D and 3D Culture for the Discovery of New Antiseizure Agents**

10:00 Hervé Tiriatic, Assistant Researcher, University of California-San Diego, United States of America

**Title to be Confirmed**

10:30 John Nolan, CEO, Cellarcus Biosciences, Inc., United States of America

**Single Vesicle Measurements and the Optimization and Validation of EV Production and Manufacturing**

11:00 Lynn Pulliam, Professor of Laboratory Medicine and Medicine, University of California-San Francisco, United States of America

**Title to be Confirmed**

11:30 Malgorzata Witek, Associate Research Professor, University of Kansas, United States of America

**Liquid Biopsy Core (LBC) - Enabling Tools for the Isolation of Liquid Biopsy Markers and Their Molecular Analysis**

12:00 Speaker Details to be Confirmed

12:30 Speaker Details to be Confirmed

13:00 Networking Lunch in the Exhibit Hall -- Engage with Exhibitors, Colleagues and View Posters

14:00 Best Poster Awards Given Out in Ballroom A  
3 Cash Awards Sponsored by the RSC and Lab-on-a-Chip Journal  
100 British Pounds Sterling per Award