



Conference Day 1 – Thursday, September 11, 2025

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

09:00 **Welcome and Introduction to the Conference by Co-Chairperson**

Erhard Bieberich, Professor, Department of Physiology, College of Medicine,
University of Kentucky, USA -- Conference Co-Chairperson

09:15 **Welcome and Introduction to the Conference by Co-Chairperson**

Brian Cunningham, Professor and Intel Alumni Endowed Chair, University of Illinois
at Urbana-Champaign, USA -- Conference Co-Chairperson

Session Title: Conference Opening Session and State of EV Research 2025

09:30 **Enhanced Nanoparticle and Fluorescence Tracking with the ZetaView® X40: Technical Innovations and Application Examples**



Sven Kreutel, CEO, Particle Metrix, Inc., USA and Germany

10:00 **Visualizing and Characterizing Extracellular Vesicles In situ and In vivo Using Label-Free Multimodal Nonlinear Optical Imaging**

Stephen Boppart, Professor and Grainger Distinguished Chair in Engineering,
University of Illinois Urbana-Champaign, United States of America

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

11:00 **A Cholesterol Metabolite Stimulates the Secretion of Pro-Cancer Extracellular Vesicles from Immune Cells**

Erik Nelson, Associate Professor of Molecular and Integrative Physiology, Co-
Program Lead, Cancer Center at Illinois, University of Illinois Urbana Champaign,
United States of America

11:30 **From Bioreactors to Biosensors: Platform Technologies for Advancing EV Research**

Colin Hisey, Assistant Professor, Department of Biomedical Engineering, Northwestern University, United States of America

12:00 **Technology Spotlight Presentation**

EXODUS: Innovative Technique for Automatic Isolation of Extracellular Vesicles and its Diverse Applications

EXODUS

Ziwen Wang, Field Application Scientist, EXODUS Bio, United States of America

12:30 **Networking Lunch in the Exhibit Hall: Meet Exhibitors and Engage with Colleagues**

Session Title: Therapeutic Applications of EVs

14:00 **Extracellular Vesicle-Based Therapies for Preservation and Treatment of Skeletal Muscle Health**

Marni Boppart, Professor, Department of Health and Kinesiology, Beckman Institute, University of Illinois at Urbana-Champaign, United States of America

14:30 **Engineering a Muscle-Brain Axis *In Vitro* for Study of Exosome-Mediated Bioelectrical Communication**

Hyunjoon Kong, Professor, Chemical & Biomolecular Engineering, University of Illinois at Urbana-Champaign, United States of America

15:00 **Unraveling the Physical Interactions of Extracellular Vesicles in Tissues**

Jae-Won Shin, Associate Professor, University of Michigan-Ann Arbor, United States of America

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

16:00 **Digital Counting of Intact Nano-Objects and Their Proteins Using Nucleic Acid Engineering and Photonic Crystal Enhanced Microscopy**

Brian Cunningham, Professor and Intel Alumni Endowed Chair, University of Illinois at Urbana-Champaign, United States of America

16:30 Screening Tests using Integrated Micro- and Nanofluidic Devices for the Early Detection of Ovarian Cancer with Extracellular Vesicles Serving as the Input

Steve Soper, Foundation Distinguished Professor, Director, Center of BioModular Multi-Scale System for Precision Medicine, The University of Kansas, United States of America

17:00 Instrumentation Hands-on Demonstration

Particle Metrix Instrumentation Hands-on Demonstration and Running Samples

Sven Kreutel, CEO, Particle Metrix, Inc., USA and Germany

17:30 Networking over Beer and Wine -- Engage with Colleagues and Network

18:30 Close of Day 1 Conference Programming

Conference Day 2 – Friday, September 12, 2025

08:00 Morning Coffee and Networking in the Exhibit Hall

09:00 **Bioengineering EVs to Probe and Program Therapeutic Delivery**

Josh Leonard, Professor of Chemical and Biological Engineering, Northwestern University, United States of America

09:30 **Ceramide-Rich EVs (CREVs): A Sphingolipid that Controls Vesicle Function**

Erhard Bieberich, Professor, Department of Physiology, College of Medicine, University of Kentucky, USA -- Conference Co-Chairperson

10:00 **Instrumentation Hands-on Demonstration**

EXODUS BIO Platform Onsite Demonstration for EV Isolation

Ziwen Wang, Field Application Scientist, EXODUS Bio, United States of America

11:00 Mid-Morning Coffee Break

11:30 **GALC Enzyme Replacement Therapy Via Extracellular Vesicles: An Adjuvant Strategy to Reduce Inflammation in Krabbe Disease**

Maria Irene Givogri, Research Associate Professor, Department of Anatomy and Cell Biology. College of Medicine. University of Illinois at Chicago, United States of America

12:00 **Keratinocyte-derived Extracellular Vesicles in Painful Diabetic Neuropathy**

Daniela Maria Menichella, Associate Professor, Northwestern University, United States of America

12:30 Networking Lunch in the Exhibit Hall: Meet Exhibitors and Engage with Colleagues

Session Title: Short Presentations from Early Career Research Investigators

14:15 A Nanoparticle-based Platform for Non-Invasive Tracking and Precision Engineering of Autologous EVs with CRISPR Ribonucleoprotein (RNP) Cargo

Koushik Debnath, Postdoctoral Research Associate, University of Illinois Chicago

14:30 Detection and Profiling of Neurodegenerative Disease-Related Extracellular Vesicles via Surface Plasmon Resonance Biosensors

Yi (Bella) Xin, Cornell University

14:45 Targeted Therapeutic Potential of Functionally Engineered Extracellular Vesicles Overexpressing miR-22-3p

Destiny Ogbu, University of Illinois Chicago