

KEYSTONE SYMPOSIA

on Molecular and Cellular Biology

Engineered Cells and Tissues as Platforms for Discovery and Therapy (K1)

March 9-12, 2017 • Fairmont Copley Plaza • Boston, Massachusetts, USA

Scientific Organizers: Laura E. Niklason, Milica Radisic and Nenad Bursac

Sponsored by Editas Medicine, Inc. and Thermo Fisher Scientific Inc.

Abstract & Scholarship Deadline: November 9, 2016 / Abstract Deadline: December 13, 2016 / Discounted Registration Deadline: January 13, 2017

THURSDAY, MARCH 9

Arrival and Registration

FRIDAY, MARCH 10

Welcome and Keynote Address

Christopher P. Austin, National Institutes of Health, USA
Catalyzing Translational Innovation

Biologically-Based Microsystems

Jeffrey Beekman, UMC Utrecht, Netherlands
Epithelial Organoids as Tools for Discovery in Cystic Fibrosis
Takanori Takebe, Yokohama City University, Japan
Engineering Complex Organ Buds

Todd C. McDevitt, University of California, San Francisco, USA
Complex Cellular Models of Embryonic Development

Short Talk(s) Chosen from Abstracts

Workshop 1: Human iPS Cells in Disease Modeling

Short Talks Chosen from Abstracts

Engineered Organoids for Biological Discovery

Anjelica Leticia Gonzalez, Yale University, USA
Engineered Microvascular Interfaces in Disease States

Nenad Bursac, Duke University, USA
Micro-Tissues for Studies of Muscle Physiology and Disease

Uwe Marx, TissUse GmbH and Technische Universität Berlin, Germany
Multi-Organ On-Chip Systems

Short Talk Chosen from Abstracts

Poster Session 1

SATURDAY, MARCH 11

Cell-Based Platforms for Drug Screening

Gary A. Gintant, AbbVie, USA
Development of an In Vitro Pro-Arrhythmia Assay

Sharon Presnell, Organovo, Inc., USA
Bioprinting of Liver Organoids

Milica Radisic, University of Toronto, Canada
Evaluation of Cardiotoxicity Using Biowires

Karl-Heinz Krause, University of Geneva Faculty of Medicine, Switzerland
Engineered Neural Tissues for Human Disease Models, Toxicology, and Drug Screening

Short Talk(s) Chosen from Abstracts

Engineered Tissues in Cancer

Biju Parekkadan, Massachusetts General Hospital, Harvard Medical School, USA
Engineered Cancer-Stroma Microenvironments

Jordan S. Miller, Rice University, USA
Microvascular in vitro Models of Cancer Invasion and Metastasis

Speaker to be Announced

Short Talk Chosen from Abstracts

Poster Session 2

SUNDAY, MARCH 12

The Current Wave – Cells as Therapeutics

Joanne Kurtzberg, Duke University, USA
Game Changers: Using Cord Blood to Help the Brain

Kevin A. D'Amour, ViaCyte, Inc., USA
Cell-Material Composites for Type I Diabetes

Gordana V. Vunjak-Novakovic, Columbia University, USA
Engineered Tissues for Therapeutic Applications: Heart, Lung and Bone

Eduardo Marban, Cedars-Sinai Medical Center, USA
Talk Title to be Announced

Short Talk(s) Chosen from Abstracts

Workshop 2: Exosomes for Therapeutic Applications

Short Talks Chosen from Abstracts

The Next Wave – Cells as Building Blocks

May Griffith, Linköping University, Sweden
Engineered Corneal Tissues as Treatment for Blindness

Daniela Franco Bueno, Institute of Teaching and Research of Sirio Libanes Hospital, Brazil
Alveolar Bone Engineering for Cleft Lip and Palate

Laura E. Niklason, Yale University, USA
Engineered Arteries in Renal Failure and Arteriosclerosis

Meeting Wrap-Up: Outcomes and Future Directions (Organizers)

MONDAY, MARCH 13

Departure