

Ninth Symposium on Biologic Scaffolds for Regenerative Medicine

*** Program ***

Day 1: April 28, 2016 (Thursday)

6:00 – 8:00 pm Registration Silverado East Foyer

Reception Fairway Deck

Day 2: April 29, 2016 (Friday)

7:00 – 8:00 am Breakfast Fairway Deck

Welcome

8:00 – 8:05 am Stephen F. Badylak, DVM, PhD, MD
University of Pittsburgh Silverado East

Keynote Address

8:05 – 8:40 am Robert M. Nerem, PhD
Georgia Institute of Technology Regenerative Medicine: Harnessing the Power of the Intrinsic Human Biology

Session I: Biologic Scaffold for Cardiac Reconstruction Chair: TBD

8:40 – 9:05 am Frederick J. Schoen, MD, PhD
Brigham and Women's Hospital and Harvard Medical School Role of matrix and cell dynamics in heart valve health and disease

9:05 – 9:25 am Robert Matheny, MD, FACS
CorMatrix Cardiovascular, Inc. Development of a SIS Regenerative Heart Valve; From Benchtop to Clinical Trial

9:25 – 9:45 am Dan T. Simionescu, PhD
Clemson University Development of chemically stabilized acellular cardiac valve scaffolds and in vivo testing in a sheep right ventricular outflow tract model

9:45 – 10:05 am Allan S. Stewart, MD
Mount Sinai Health System The evolution of intra-cardiac biologic scaffolds: where have we been and where are we going

10:05 – 10:25 am Lauren D. Black III, PhD
Tufts University Acellular Cardiac Extracellular Matrix-Silk Patches for Cardiac Repair post-Myocardial Infarction

10:25 – 10:45 am Break Fairway Deck

Session II: Biologic Scaffolds for Plastic and Reconstructive Surgery Chair: TBD

10:45 – 11:05 am Robert G. Martindale, MD, PhD
Oregon Health & Science University Metabolic end products of absorbable bioscaffolds in soft tissue repair; are they helping or hurting us?

11:05 – 11:25 am Anders Sandin, MD
Queen Silvias Childrens Hospital Use of Biodesign® after chest wall resection in children: - Our experience in two cases

11:25 – 11:45 am Adam Young, PhD
ACell, Inc. The Use of Urinary Bladder Matrix for Body Wall Repair in Multiple Preclinical Models

11:45 – 12:05 pm Nicholas C. Pashos, BS
Tulane University School of Medicine Characterization of a Biologically Derived Graft for Nipple-Areolar Complex Reconstruction

12:05 – 12:25 pm Kristen Jones, MD
University of Minnesota Neuroprotective Potential of Biologic Scaffolds in Acute Stroke and Human

Translational Feasibility: A Neurosurgeon's Perspective

12:25 – 1:45 pm Lunch

Fairway Deck

Session III: TBD Biologic Scaffolds for TBD
Chair: TBD

1:45 – 2:05 pm Karen L. Christman, PhD
University of California, San Diego Mechanisms of action of a myocardial matrix hydrogel for treating myocardial infarction

2:05 – 2:25 pm Inkyung Kang, PhD
Benaroya Research Institute at Virginia Mason A Role for Versican in Engineered Tissues: Modulating Elasticity and Inflammation

2:25 – 2:45 pm David M. Adelman, MD, PhD, FACS
The University of Texas MD Anderson Cancer Center Defining the Device to Tissue Transition in Fetal Bovine Acellular Dermal Matrix

2:45 – 3:05 pm George Hussey, PhD
University of Pittsburgh A novel bioactive component of biologic scaffolds: Implications for tissue repair and regeneration

3:05 – 3:25 pm Break

Fairway Deck

Session IV: Biologic Scaffolds for TBD
Chair: TBD

3:25 – 3:45 pm Robert Mecham, PhD
Washington University School of Medicine Extracellular Matrix Organization and Function

3:45 – 4:05 pm Cyrus Ghajar, PhD
Fred Hutchinson Cancer Research Center Where the Wild Things Are: Perivascular regulation of disseminated tumor cell dormancy and chemoresistance.

4:05 – 4:25 pm Matthew T. Wolf, PhD
Johns Hopkins University Urinary Bladder Extracellular Matrix Inhibits Tumor Formation

4:25 – 4:45 pm Arnold I. Caplan, PhD
Case Western Reserve University MSCs: how they work and why(some surprises)

4:45 – 5:05 pm Nikhil Gheewala, PhD
ACell, Inc. Developing a standard approach to evaluating the decellularization of biomaterial ECMs

5:05 pm Adjourn

6:00 – 7:30 pm Poster Session & Wine Reception

Fairway Deck

Day 3: April 30, 2016 (Saturday)

7:00 – 8:00 am Breakfast

Fairway Deck

Welcome

8:00 – 8:05 am Stephen F. Badylak, DVM, PhD, MD
University of Pittsburgh

Silverado East

Keynote Address

8:05 – 8:40 am Laura E Niklason, MD, PhD
Yale University

The Agony and the Ecstasy of Getting into the Clinic

Session V: TBD
Chair: Bryan N. Brown, PhD *University of Pittsburgh*

8:40 – 9:05 am	Nadia Rosenthal, PhD <i>Monash University, Australia</i> <i>The Jackson Laboratory, Bar Harbor</i>	Immune control of cardiac repair
9:05 – 9:30 am	Jeffrey M. Davidson, PhD <i>Vanderbilt University Medical Center</i>	Multiscale Properties of ECM Scaffolds
9:30 – 9:55 am	C. James Kirkpatrick MD, PhD, DSc, FRCPATH <i>Johannes Gutenberg University, Germany & University of Gothenburg, Sweden</i>	Developing in vitro & in vivo models to study tissue reactions to biologic scaffolds
9:55 – 10:30 am	Break	Fairway Deck
Session VI:	Role of the Macrophage in Bioscaffold Induced Tissue Reconstruction	
	Chair: Charles D. Mills, PhD (<i>BioMedical Consultants</i>)	
10:30 – 10:50 am	Charles D. Mills, PhD <i>BioMedical Consultants</i>	Macrophages. The Chicken and the Egg in Immune Responses to Injury or Biologic Scaffolds
10:40 – 11:00 am	Kaitlyn Sadtler, BS <i>Johns Hopkins University</i>	Th2 T cells are required for extracellular matrix-mediated functional muscle regeneration
11:00 – 11:20 am	Hui Li, PhD <i>Life Cell Corporation-Acelity</i>	Macrophage phenotype profile regulated by tissue matrices for Screening of Biomaterials
11:20 – 11:40 am	Samuel T. LoPresti, BS <i>University of Pittsburgh</i>	Effect of Source Animal Age upon Macrophage Response to ECM Scaffolds
11:40 – 12:00 pm	Wendy F. Liu, PhD <i>University of California, Irvine</i>	Regulation of macrophage function by engineered biopolymer scaffolds
12:00 – 1:20 pm	Lunch	Fairway Deck
Session VII:	Biologic Scaffolds for CNS, Whole Organ, Skin, and Cartilage Reconstruction	
	Chair:	
1:20 – 1:40 pm	Jenna Dziki, BS <i>University of Pittsburgh</i>	Biologic Scaffold Treatment for Volumetric Muscle Loss: Results of a Thirteen Patient Cohort Study
1:40 – 2:00 pm	Hilton Kaplan MBBCh, FCSSA, PhD <i>Rutgers University</i>	Decellularized Allogeneic Neurovascular Bundles for Reinnervation and Revascularization in Soft and Hard Tissue Reconstruction, the Rehabilitation of Massive Scarring, and Engineered Tissues
2:00 – 2:20 pm	Jeff Ross, PhD <i>Miromatrix Medical Inc.</i>	Engineering a Clinically Relevant Transplantable Liver with Sustained In-Vivo Perfusion
2:20 – 2:40 pm	Karthikeyan Narayanan, PhD <i>Institute of Bioengineering and Nanotechnology, Singapore</i>	Decellularized organs: Whole organ construction with stem cells
2:40 – 3:00 pm	Ian L. Valerio, MD, MS, MBA <i>Ohio State University Wexner Medical Center</i>	Application of bioartificial dermal regeneration templates for skin restoration in combat casualty injuries
3:00 – 3:20 pm	Byoung-Hyun Min, MD, PhD <i>Ohio State University Wexner Medical Center</i>	Biomembrane from porcine cartilage extracellular matrix contributes enhancement of efficacy of Microfracture for cartilage repair- Clinical results followed up 1 year postoperatively
3:20 – 3:45 pm	Break	Fairway Deck

Session VIII:	TBD Chair:	
3:45 – 4:05 pm	Kenneth Burhop, PhD <i>Integra LifeSciences</i>	Collagen Matrix: Structure & Function - Translating to New Opportunities in Regenerative Medicine
4:05 – 4:25 pm	Inna Kornienko, MS <i>Technologies of Moscow Institute of Physics and Technology</i>	Low-immunogenic matrix suitable for transplantation
4:25 – 4:50 pm	Bryan N. Brown, PhD <i>University of Pittsburgh</i>	A Macrophage Centric Approach to the Evaluation of ECM Scaffolds for Tissue Reconstruction
4:50 – 5:00 pm	Stephen F. Badyak, DVM, PhD, MD <i>University of Pittsburgh</i>	Closing Remarks & Adjourn

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