Statewide Symposium in Regenerative Medicine

Location:
ASU - Sky Song
Synergy I & II, Building 3
1475 N. Scottsdale Road
Scottsdale, Arizona

Program

Friday May 17, 2019

12:30 - 1:00 PM  Check-In
1:00 - 1:15 PM  Welcome and Introduction

Session A: University of Arizona

1:15 - 1:45 PM  Overview of Regenerative Medicine Efforts at University of Arizona & iPSC Cardiomyocyte Heterogeneity and Implications for Heart Disease Modeling
Jared Churko, PhD
Assistant Professor, Department of Cellular and Molecular Medicine
Director, iPS Cell Core
University of Arizona

1:45 - 2:05 PM  Using iPSC-Derived Cardiomyocytes to Investigate Human LMOD2 Cardiomyopathy
Jessika Iwanski, MS
MD/PhD Candidate
College of Medicine-Tucson
University of Arizona

2:05 - 2:25 PM  Regenerative Approaches for Age-Related Neurodegeneration
Lalitha Madhavan MD, PhD
Associate Professor, Department of Neurology
Center for Innovation in Brain Science
University of Arizona

2:25 - 2:45 PM  HiPSCs for Modeling of Vascular Toxicity
Won Hee Lee, PhD
Assistant Professor, Department of Basic Medical Sciences
University of Arizona College of Medicine-Phoenix.

2:45 - 3:00 PM  Break
**Session B: Mayo Clinic and The Translational Genomics Research Institute**

3:05 - 3:30 PM  
*Overview of Regenerative Medicine Efforts at Mayo Clinic & Advancing Blood and Marrow Tissue Engineering into Clinical Trials*  
Michael Gustafson, PhD  
Scientific Director, Nyberg Human Cellular Therapy Laboratory  
Mayo Clinic

3:30 - 3:50 PM  
*Mitochondria in Pluripotent Stem Cells: Stemness Regulators and Disease Targets.*  
Clifford Folmes, PhD  
Assistant Professor, Department of Biochemistry and Molecular Biology  
Mayo Clinic

3:50 - 4:15 PM  
*Overview of Regen Med Efforts at TGEN & Investigating CAR T Cell Therapy and Response at a Single Cell Resolution*  
Nicholas Banovich, PhD  
Assistant Professor, Division of Integrated Cancer Genomics Division  
TGEN

4:15 - 4:35 PM  
*New Life from the Autopsy Table: iPSCs for the Study of Neurological Disease from Brain and Body Donors*  
Matt Huentelman, PhD  
Professor, Division of Neurogenomics

4:40 - 5:00 PM  
Break

**Session C: Keynote and Poster Session**

5:00 - 5:30 PM  
*Keynote Presentation: TBD*  
Ben Hurlbut, PhD  
Professor, School of Life Sciences  
Arizona State University

5:30 - 7:00 PM  
Reception and Poster Presentation
Saturday May 18, 2019

7:30 - 8:30 AM  Check-In and Breakfast

**Session D: Arizona State University**

8:30 - 8:45 AM  *Overview of Regenerative Medicine Efforts at Arizona State University*
David Brafman, PhD MBA
Assistant Professor, School of Biological and Health Systems Engineering
Director, Stem Cell Training and Research Program
Arizona State University

8:45 - 9:05 AM  *Next Generation Liver Organoids to Advance Human Precision Medicine*
Mo Ebrahimkhani, MD
Assistant Professor, School of Biological and Health Systems Engineering
Arizona State University

9:05 - 9:25 AM  *The Epigenetic Control of Regenerative Capacity*
Robin Harris, PhD
Assistant Professor, School of Life Sciences
Arizona State University

9:25 - 9:45 AM  *Designing Biomaterials for Spatial and Temporal Control of Stem Cell Behavior*
Julianne Holloway, PhD
Assistant Professor, School for the Engineering of Matter, Transport and Energy
Arizona State University

9:45 - 10:05 AM  *Experimental Stem Cell Treatment: Who Pays?*
Emma Frow, PhD
Assistant Professor, School for the Future in Innovation in Society and School of Biological and Health Systems Engineering
Arizona State University

10:05 - 10:30 AM  Break

**Session E: Northern Arizona University and Barrow Neurological Institute**

10:30 - 11:00 AM  *Overview of Regenerative Medicine Efforts at Northern Arizona University & Regulatory CD4+T cells (Treg) attenuate autoimmunity in lethally irradiated mice: exploring the role of radiation resistant hematopoietic stem cells in Treg Reconstitution*
Narendiran Rajasekaran, PhD
Assistant Professor, Department of Chemistry and Biochemistry
Northern Arizona University
11:00 - 11:20 AM  
*Genetically Encoded Materials for Control of Cell Fate*

Jennifer Martinez, PhD  
Director, Center for Materials Interfaces in Research and Applications, ¡MIRA!  
Professor, Department of Applied Physics and Materials Science  
Northern Arizona University

11:20 - 11:40 AM  
*Overview of Regenerative Medicine Efforts at BNI & Patient Derived iPSC Neuron and Glial Cells to Model the ALS/FTD Disease Spectrum*

Rita Sattler, PhD  
Associate Professor, Department of Neurobiology  
Barrow Neurological Institute

11:40 - 12:00 PM  
*Root of all Evil: Glioma Stem Cells and Therapy Resistance in GBM*

Shwetal Mehta, PhD  
Associate Professor, Department of Neurobiology  
Barrow Neurological Institute

12:00 - 12:15 PM  
*Closing Remarks*