

# REGENERATIVE MEDICINE SYMPOSIUM

**Wednesday April 25, 2018**  
**Astellas Conference Room - Toronto General Hospital**  
 (585 University Avenue, Munk 11th floor Room 190)

7:45am – 8:00am	ARRIVAL & BREAKFAST	
8:00am	Welcoming Remarks & Keynote Introduction Dr. Atul Humar, Director, TPRM, UHN Transplant Program, Toronto Transplant Institute	
8:00am – 9:00am	<b>REGENERATIVE MEDICINE IN JAPAN: THE NICHI-IN INSTITUTE</b> <b>Dr. Samuel Abraham, Nichi In Centre for Regenerative Medicine</b>	
9:00am – 9:10am	BREAK	
9:10am – 9:15am	Presentation Guidelines & Grader Introduction – Anna Badner, Teaching Assistant	
GRADING PANEL: Anna Badner**, M. Cristina Nostro, Ian Rogers		
Time	Presentation Title and Student	Supervisor
9:15am – 9:30am	Ivan Linares – Targeting Kupffer Cell Polarization as a Strategy to Ameliorate Liver Ischemia-Reperfusion Injury	Dr. Markus Selzner
9:30am – 9:45am	Siraj Zahr – A Translational Repression Complex in Developing Mammalian Neural Stem Cells that Regulates Neuronal Specification	Dr. Freda Miller
9:45am – 10:00am	Priscilla Chan – Self-tracing human Neural Stem Cells to Map Transplant Integration **	Dr. Michael G. Fehlings
10:00am – 10:15am	Laura Smith – Development of a Glioblastoma Neural Stem Cell Microenvironment in 3D Hydrogel Culture	Dr. Molly Shoichet
10:15am – 10:30am	Mohammad Zavvarian – Blood-Spinal Cord Barrier Stabilization via Inhibition Protein Kinase C- $\beta$ can Improve Spinal Cord Injury (SCI) Recovery **	Dr. Michael G. Fehlings
10:30am – 10:40am	BREAK	
10:40am – 10:55am	Eric Ho – Local Co-delivery of PACAP and BDNF for Recovery After Stroke	Dr. Molly Shoichet
10:55am – 11:10am	Margaret Ho – Improving Cone Cell Survival after Transplantation for Treatment of Aged-Related Macular Degeneration	Dr. Molly Shoichet
11:10am – 11:25am	Victoria Fong – Neutrophil Polarization and Cell-Material Interactions for Ophthalmic Applications	Dr. Laura Wells
11:25am – 11:40am	Carter Teal – Controlled Release of Rod Derived Cone Viability Factor for the Treatment of Retinitis Pigmentosa	Dr. Molly Shoichet
11:40am – 11:55am	Emily Baldwin – The Development of DNA Oligomer-Crosslinked Hydrogels for Sustained Release Applications	Dr. Laura Wells
11:55am – 12:55pm	LUNCH	
GRADING PANEL: Anna Badner, Michael McDonald, Michael Sefton		
12:55pm – 1:10pm	Michail Paraskevopoulos – Novel Culturing Approaches to Assess the Role of Clonal Competition during Organoid Morphogenesis	Dr. Alison P. McGuigan
1:10pm – 1:25pm	Bailey Bernknopf – Characterization of a Sex-Dependency of Aortic Valve Disease in Mice	Dr. Craig Simmons
1:25pm – 1:40pm	Dawn Bannerman – Design and Fabrication of an Adhesive Patch for Myocardial Repair	Dr. Milica Radisic
1:40pm – 1:55pm	Trong Shen – Micropatterning Novel Deformable Culture Substrates for Enhanced Contraction Force Measurements of Heart Muscle Cells	Dr. Boris Hinz
1:55pm – 2:10pm	Candice Tang – Using Designer Biomaterials to Promote the Survival of Reparative Cardiac Macrophages in Ischemic Injury	Dr. Slava Epelman & Dr. Milica Radisic
2:10pm – 2:25pm	Edwin Wong – Design of a Biaxial Mechanobioreactor for Engineering Pediatric Aortic Valve	Dr. Craig Simmons
2:25pm – 2:40pm	Brady Gallant – Microfluidic Strategies for Bioprinting of Protein-Based Arterial Constructs	Dr. Axel Guenther
2:40pm – 2:55pm	Shouka Parvin – Engineering Pulmonary Valve Tissue for Pediatric Patients with Tetralogy of Fallot	Dr. Craig A. Simmons & Dr. Christopher Caldarone
2:55pm – 3:10pm	Ali Motahhari Moghaddam – Examining the Effect of Developmental Stage on the Zebrafish Host Response to Implanted Biomaterials	Dr. Lindsay Fitzpatrick
3:10pm	CLOSING REMARKS	

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7:45am – 8:00am	ARRIVAL & BREAKFAST	
8:00am	Welcoming Remarks & Keynote Introduction Dr. Michael McDonald, Education Director, MSC7000Y, UHN Transplant Program – Toronto Transplant Institute	
8:00am – 9:00am	<b>TRANSLATING HUMAN DEVELOPMENT TO NEW THERAPIES WITH PLURIPOTENT STEM CELLS</b> <b>Dr. Gordon Keller, University of Toronto</b>	
9:00am – 9:10am	BREAK	
9:10am – 9:15am	Presentation Guidelines & Grader Introduction – Peter Urbanellis, Teaching Assistant	
GRADING PANEL: Peter Urbanellis **, Gordon Keller, Lianne Singer		
Time	Presentation Title and Student	Supervisor
9:15am – 9:30am	Susanna Tan – Investigating the Role of the Microenvironment in Controlling Human Breast Tumourigenesis	Drs. Connie Eaves
9:30am – 9:45am	Ileana Co – An In Vitro Engineered Rollable 3D Tumour to Understand the Impact of Hypoxia on Tumour Associated Macrophages	Dr. Alison P. McGuigan
9:45am – 10:00am	Jennifer Kwan – Characterizing and Targeting Metabolic Drivers of Lymphedema	Dr. Fei-Fei Liu
10:00am – 10:15am	Nerea Jimenez Tellez – The Creation and Genetic Modification of Human iPSCs to Model a Rare Mitochondrial Cardiomyopathy	Dr. Steven Greenway
10:15am – 10:30am	Aisha Mohamed – Generation and Characterization of Induced Pluripotent Stem Cells (iPSCs) from Umbilical Cord Mesenchymal Stem Cells (MSCs)	Dr. Ian Rogers
10:30am – 10:40am	BREAK	
10:40am – 10:55am	Chanèle Cyr-Depauw – Lung Protective Effect of hUC-MSCs Isolated from Preterm Delivery in Neonatal Lung Injury	Dr. Bernard Thébaud
10:55am – 11:10am	Andrea Mariscal – Alpha 1 Antitrypsin as a Strategy to Decrease Ischemia Reperfusion Injury in Lung Transplantations	Dr. Shaf Keshavjee
11:10am – 11:25am	Khaled Ramadan – Photodynamic Therapy during In Vivo Lung Perfusion for Treatment of Lung Metastases	Dr. Marcelo Cypel
11:25am – 11:40am	Lindsay Caldarone – The Role of Neutrophil Extracellular Traps in Lung Transplantation	Dr. Shaf Keshavjee
11:40am – 11:55am	Matthew White – The Influence of Graft Infiltrating Regulatory T Cells on Lung Transplant Outcome	Dr. Stephen Juvet
11:55am – 12:55pm	LUNCH	

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GRADING PANEL: Peter Urbanellis, Harold Atkins, Michael Laflamme		
12:55pm – 1:10pm	Allen Duong – The Immunology of Early Events Post-Lung Transplant in a Pig Model	Dr. Tereza Martinu & Dr. Stephen Juvet
1:10pm – 1:25pm	Rafaela Vanin Pinto Ribeiro – Photodynamic Therapy during Extracorporeal Life Support for Treatment of Bacteremia	Dr. Marcelo Cypel
1:25pm – 1:40pm	Mitchell Adamson – Role of HLA-G and Other Immune Checkpoint Molecules in Post-Transplant Malignancy	Dr. Vivek Rao & Dr. Diego Delgado
1:40pm – 1:55pm	Zuhra Omary – Understanding the Apoptotic Phenotype of LRBA-Deficiency in Patients with Inflammatory Bowel Disease	Dr. Aleixo M. Muise
1:55pm – 2:10pm	Sahil Gupta – Tyrosine Phosphorylation of Caspase-8 Regulates Toll Like Receptor 4 Dependent Signaling During Clinical Sepsis	Dr. John C. Marshall
2:10pm – 2:25pm	Carlos Escudero – Identification of Novel miRNA that Regulate Myoblast Proliferation and Skeletal Muscle Regeneration in ICU-Acquired Weakness	Dr. Jane Batt
2:25pm – 2:40pm	Pranav Machiraju – Disrupted Mitochondria in iPSC-derived Cardiomyocytes from Patients with the Dilated Cardiomyopathy with Ataxia Syndrome (DCMA)	Dr. Steven Greenway
2:40pm – 2:55pm	Amanda Fantin – Optimizing Decellularization of Murine Pancreas: Exploring the Role of the ECM in Generating Mature Islets	Dr. Ian Rogers
2:55pm – 3:10pm	Jacqui Stone - Intra-Articular Platelet Rich Plasma and Hyaluronic Acid in Knee Osteoarthritis: Is there Evidence of a Synergistic Effect?	Dr. Vincent Gabriel
3:15pm	CLOSING REMARKS	