

3rd ANNUAL SYMPOSIUM



Cell and Gene Therapy

DECEMBER 4, 2018, 8:00 AM TO 5:15 PM

MARS DISCOVERY DISTRICT AUDITORIUM - 101 COLLEGE STREET, TORONTO M5G 1L7

08.00	08.30	REGISTRATION & BREAKFAST	
<i>Morning Moderator: Julien Muffat - SickKids</i>			
08.30	08.35	Welcome remarks	Vivek Goel, Vice-President, Research & Innovation, U of T
08.35		Opening remarks	Michael Sefton – Executive Director, Medicine by Design, U of T
SESSION 1: Muscle engineering			
8.45	9.15	Opposite functions of macrophage subpopulations during tissue repair and chronic disease - example of skeletal muscle	Bénédicte Chazaud – Université Claude Bernard Lyon 1
9.15	9.35	Translating human heart development to biological pacemaker therapies	Stephanie Protze – University Health Network
9.35	9.55	Heart regeneration with pluripotent stem cells	Michael Laflamme – University Health Network
9.55	10.15	REFRESHMENT BREAK	
SESSION 2: Gene engineering			
10.15	11.05	Epigenetic regulation in development, aging and disease	Rudolf Jaenisch – Massachusetts Institute of Technology
11.05	11.25	Synthetic decision-making gene circuits for differentiation control in human pluripotent stem cells	Laura Prochazka – Institute of Biomaterials and Biomedical Engineering, U of T
11.25	11.45	Using CRISPR genome engineering to probe regulatory networks in stem cells	Jennifer Mitchell – Department of Cell & Systems Biology, U of T
11.45	12.45	LUNCH & POSTER SESSION	
<i>Afternoon Moderator: Melanie Woodin – Department of Cell & Systems Biology, U of T</i>			
SESSION 3: Neural engineering			
12.45	13.35	Cell and gene therapy for regenerative medicine	Lorenz Studer – Memorial Sloan Kettering Cancer Center
13.35	13.55	Modelling human development and diseases in neurons and brain organoids	Yun Li – SickKids
13.55	14.15	Endogenous regeneration of auditory neurons for the treatment of hearing loss	Alain Dabdoub – Sunnybrook Research Institute
14.15	14.35	REFRESHMENT BREAK	
14.35	15.05	Artificial Intelligence methods for generating drug candidates	Alán Aspuru-Guzik – Departments of Chemistry and Computer Science, U of T
SESSION 4: Immune engineering			
15.05	15.35	Engineering next-generation T cells for cancer immunotherapy	Yvonne Chen – University of California, Los Angeles
15.35	15.55	Targeting innate lymphoid cells to improve immunotherapies	Sarah Crome – University Health Network
15.55	16.15	Regulation of macrophage abundance and phenotype in organ homeostasis, injury and repair	Clint Robbins – University Health Network
16.15	16.30	Closing remarks and trainee awards	Michael Sefton – Executive Director, Medicine by Design, U of T
16.30	17.15	NETWORKING RECEPTION	