

8<sup>TH</sup>ANNUAL  
SYMPOSIUM

Intentional Innovation



DECEMBER 6

 MaRS Auditorium, 101 College St., Toronto, ON  
 (Live streaming available)  
 8:30 A.M. TO 6:00 P.M. EST

## INTRODUCTION

08:30	08:40	Welcome remarks	<b>Leah Cowen</b> – Vice-President, Research and Innovation, and Strategic Initiatives, and Professor, Department of Molecular Genetics, University of Toronto (U of T)
08:40	08:50	Opening remarks	<b>Michael Sefton</b> – Scientific Director, Medicine by Design, and University Professor, Department of Chemical Engineering and Applied Chemistry and Institute of Biomedical Engineering, U of T

## SESSION 1

*Moderator: Cindi Morshead – Professor and Chair, Division of Anatomy, Department of Surgery, U of T*

08:50	09:20	Exploring skin cell heterogeneity at single cell resolution	<b>Fiona Watt</b> – EMBO Director, European Molecular Biology Laboratory
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## Living therapy innovations in neurological diseases

09:20	09:40	Manipulating material transfer in the retina	<b>Molly Shoichet</b> – University Professor, Institute of Biomedical Engineering and Department of Chemical Engineering and Applied Chemistry and Scientific Director, PRiME, U of T
09:40	09:50	Astrocyte to neuron reprogramming for stroke recovery	<b>Jack Hickmott</b> – Postdoctoral Fellow (Morshead Lab), Department of Surgery, U of T
09:50	10:10	Genetic therapies for ultra rare neurogenetic disorders	<b>Dr. James Dowling</b> – Senior Scientist, Genetics and Genome Biology, The Hospital for Sick Children (SickKids)

10:10 10:40 BREAK

## SESSION 2

*Moderator: Hai-Ling Margaret Cheng – Professor, Institute of Biomedical Engineering, U of T*

10:40	11:10	Regenerating and rejuvenating aged tissues by targeting a gerocyte	<b>Helen Blau</b> – Donald E. and Delia B. Baxter Foundation Professor and Director, Baxter Laboratory for Stem Cell Biology, Stanford University School of Medicine
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## Tackling cardiac disease with regenerative approaches

11:10	11:30	Heart regeneration with human pluripotent stem cells	<b>Dr. Michael Laflamme</b> – Senior Scientist, McEwen Stem Cell Institute, UHN
11:30	11:40	Cell-based vascularization for cardiac regeneration post myocardial infarction	<b>Xuetao Sun</b> – Research Associate (Vasconcelos Lab), Toronto General Hospital Research Institute, UHN
11:40	12:00	Algorithm-directed bioprocess optimization for advanced physiological maturation of iPSC-derived cardiomyocytes	<b>Craig Simmons</b> – Professor, Institute of Biomedical Engineering and Department of Mechanical and Industrial Engineering, U of T and Scientific Director, Translational Biology and Engineering Program, Ted Rogers Centre for Heart Research
12:00	12:05	Medicine by Design updates	<b>Allison Brown</b> – Executive Director, Medicine by Design

12:05 1:30 LUNCH AND POSTER PRESENTATIONS

SESSION 3

*Moderator: Michael May – President and Chief Executive Officer, CCRM*

01:30	02:00	Stem cell science and the genesis of new therapeutic strategies for patients	<b>Derrick Rossi</b> – President and CEO, Convelo Therapeutics and Co-founder of Moderna Therapeutics
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Panel Discussion: Driving discovery to impact in regenerative medicine: the role of innovative partnerships

02:00	02:55	<b>Helen Blau</b> – Donald E. and Delia B. Baxter Foundation Professor and Director, Baxter Laboratory for Stem Cell Biology, Stanford University School of Medicine <b>Derrick Rossi</b> – President and CEO, Convelo Therapeutics and Co-founder of Moderna Therapeutics <b>Fiona Watt</b> – EMBO Director, European Molecular Biology Laboratory <b>Peter Zandstra</b> – Professor and Director, School of Biomedical Engineering and Michael Smith Labs, University of British Columbia and Co-Founder ExCellThera and Notch Therapeutics	
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02:55 03:25 BREAK

SESSION 4

*Moderator: Dana Philpott – Professor and Associate Chair, Research, Department of Immunology, U of T*

03:25	03:55	Engineering stem cell development and differentiation	<b>Peter Zandstra</b> – Professor and Director, School of Biomedical Engineering and Michael Smith Labs, University of British Columbia and Co-Founder ExCellThera and Notch Therapeutics
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Novel strategies for immunomodulation

03:55	04:15	New insights into IL-10-producing ILC2s and their applications in cell therapies	<b>Sarah Crome</b> – Scientist, Toronto General Hospital Research Institute and Ajmera Transplant Centre, UHN
04:15	04:25	In vitro generation of human CD4 T lineage cells from stem cells	<b>Julius Landas</b> – PhD Candidate (Zúñiga-Pflücker Lab), Department of Immunology, U of T
04:25	04:45	Why different is good: immunomodulation through heteroatomic tuning of ionizable lipids	<b>Omar Khan</b> – Assistant Professor, Institute of Biomedical Engineering and Department of Immunology, U of T

04:45 04:55 CLOSING REMARKS & POSTER AWARDS

04:55 06:00 RECEPTION AND NETWORKING

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