

MSC7000Y: REGENERATIVE MEDICINE 2023-2024

Toronto General Hospital (585 University Ave) Munk 12th floor bridge room 9006

TRANSPLANT AND ORGAN FAILURE			
SEPTEMBER 14	9:00AM 10:00AM	Welcome and Student Introductions Regenerative Approaches in the Liver	Dr. Sonya MacParland, Humna Noman
SEPTEMBER 21	9:00 AM 10:00 AM	Disease and Pathophysiology of the Lung Disease and Pathophysiology of the Liver	Dr. Cecilia Chaparro (V) Dr. Mamatha Bhat
SEPTEMBER 28	9:00 AM 10:00 AM	Transplant Ethics - Current and Emerging Issues Surgical Innovations in the Liver	Jed Gross Dr. Chaya Shwaartz
OCTOBER 5	9:00 AM 10:00 AM	Organ Preservation - Current and Future Strategies Disease and Pathophysiology of the Kidney	Dr. Markus Selzner Dr. Christopher Chan
OCTOBER 12	9:00 AM 10:00 AM	Surgical Innovations for the Kidney Islet Cell Transplantation	Dr. Jason Lee Dr. Cristina Nostro
OCTOBER 19	9:00 AM 10:00 AM	Disease and Pathophysiology of the Heart Surgical Innovations for the Heart	Dr. Michael McDonald Dr. Terrence Yau
OCTOBER 26	9:00 AM 10:00 AM	Surgical Innovations for the Lung Quality of Life: A Transplant Patient Perspective	Dr. Laura Donahoe Eddie Sabat
STEM CELLS, REPAIR AND REGENERATION			
NOVEMBER 2	9:00 AM 10:00 AM	Neural Stem Cells Muscle Stem Cells	Humna Noman Dr. Natasha Chang (V)
NOVEMBER 4			ASSIGNMENT #1 DUE (9:00AM)
NOVEMBER 9	9:00 AM 10:00 AM	Esc and Ips Cells Marrow Stem Cells for Regeneration	Dr. Amy Wong Dr. Harry Atkins (V)
NOVEMBER 16 (VIRTUAL CLASS)	9:00 AM 10:00 AM	Spinal Cord Repair and Regeneration 3D Bioprinting for Skin Regeneration	Dr. Michael Fehlings (V) Dr. Yufei Chen (V)
NOVEMBER 23	9:00 AM 9:45 AM	Liver Stem Cells JOURNAL CLUB	Dr. Shin Ogawa
NOVEMBER 30 (VIRTUAL CLASS)	9:00 AM 10:00 AM	Corneal Stem Cells Biomaterials for Regeneration of Ocular Tissues	Dr. May Griffith (V) Dr. Laura Wells (V)
DECEMBER 7	9:00 AM 10:00 AM	Organ on a Chip Technologies Lab on a Chip Technologies	Dr. Axel Guenther Dr. Craig Simmons
DECEMBER 14	9:00 AM 10:00 AM	Large Animal Models in Regenerative Medicine Musculoskeletal Regeneration and Repair	Dr. Sarah Lepage (V) Dr. Rita Kandel
DECEMBER 16			MIDTERM EXAM DUE (9:00 AM)
WINTER BREAK			

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MODULE – BUSINESS OF REGENERATIVE MEDICINE			
JANUARY 11 (VIRTUAL CLASS)	9:00 AM 10:00 AM	Bio-manufacturing lecture Canadian Regulation in Regenerative Medicine	Christian Euler Yohannes Haile
JANUARY 18	9:00 AM 10:00 AM	Development of Cell Therapies in Industry and the move from Academia to Industry IP for Regenerative Medicine	Stacey Ivanchuk/ Jeehoon Lee Dhara Patel (V)
JANUARY 25	9:00 AM 10:00 AM	DRAGON'S DEN (Assignment 2)	
FEBRUARY 1	9:00 AM 10:00 AM	Regeneration of the Brain Cardiac Regeneration and Repair	Dr. Maryam Faiz Dr. Michael Laflamme
FEBRUARY 8	9:00 AM 10:00 AM	Abstract Writing and How to Present Your Research	Humna Noman
FEBRUARY 15	9:00 AM 10:00 AM	Bioengineering Approaches for the Generation of Vascularized Human Tissues Immune Tolerance in Transplantation	Dr. Sara Vasconcelos Dr. Stephen Juvet
MODULE – CLINICAL TRIALS AND TRANSLATION			
FEBRUARY 22 (VIRTUAL CLASS)	9:00 AM 10:00 AM	Ethics in Regenerative Medicine - Gene Editing, Chimeras and Organoids	Dr. Zubin Master
FEBRUARY 29	9:00 AM 10:00 AM	CAR Treg Cell Therapy: from Bench to Clinic JOURNAL CLUB	Dr. Elmar Jaeckel
MARCH 7 (VIRTUAL CLASS)	9:00 AM 10:00 AM	Scientific Misconduct COVID-19 and Regenerative Medicine	Dr. Ivan Oransky Dr. Duncan Stewart
MARCH 8		FINAL EXAM PROJECT TITLE DUE (9:00 AM)	
MARCH 14	9:00 AM 10:00 AM	Regenerative Medicine Clinical Trials Stem Cell Manufacturing	Dr. Sabiha Hacibekiroglu Dr. Michael Kallos (V)
MARCH 21	9:00 AM 10:00 AM	Perspectives of Gene Engineered T-Cells Airway Regeneration	Dr. Marcus Butler Dr. Golnaz Karoubi
MARCH 20		FINAL EXAM ABSTRACT DUE (9:00 AM)	
MODULE - STEM CELLS, REPAIR AND REGENERATION			
MARCH 28 (VIRTUAL CLASS)	9:00 AM 10:00 AM	Implementation Science CRISPR/CAS9 methods to design living cells with new functions	Justin Presseau Dr. Michael Garton
APRIL 4	9:00 AM 10:00 AM	Dentistry in Regenerative Medicine Regenerative Medicine Nanotechnology	Dr. Christopher McCulloch Dr. Gang Zheng
APRIL 11 (VIRTUAL CLASS)	9:00 AM 10:00 AM	Using Mesenchymal Stem Cells, Microvesicles and Growth Factors for Tissue Regeneration Gene Therapy Applications	Dr. Bernard Thebaud (V) Dr. Carl Richards (V)
April 17	8:00 AM – 4:00 PM	REGENERATIVE MEDICINE SYMPOSIUM	
April 18	8:00 AM – 4:00 PM	REGENERATIVE MEDICINE SYMPOSIUM	
April 19		CEAPRO NSERC PD Day	

Notes: Drop date deadline February 20, 2024

Final grades due to SGS by May 10, 2024*

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