

## MSC7000Y REGENERATIVE MEDICINE



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### 2011-2012 Course Outline

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#### Contact Information

**Program Director:** Dr. Gary Levy  
**Course Director:** Dr. Heather Ross

**Program/Course Coordinator:** Ashley Lau  
Office Hours: Monday–Friday 8:00am - 4:00pm  
Office: Toronto General Hospital, 585 University Avenue, 11C-1239  
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#### Teaching Assistants

Amanda Ali email: [sa.ali@utoronto.ca](mailto:sa.ali@utoronto.ca)  
Vacant - Junior TA email:  
Justin William (*NCRM students*) email: [TA-TPRM@ncrm.org](mailto:TA-TPRM@ncrm.org) and [ta\\_tprm@nichimail.jp](mailto:ta_tprm@nichimail.jp)

#### Stem Cell Network Students pre-enrolment:

Sophie Chargé, Stem Cell Network Director of Research and Training Programs  
Telephone: (613) 739-6672 email: [scharge@stemcellnetwork.ca](mailto:scharge@stemcellnetwork.ca)



#### Nichi-In Centre for Regenerative Medicine (NCRM) Students pre-enrolment:

Dr. Samuel Abraham, NCRM Director email: [drabrahamsj@ybb.ne.jp](mailto:drabrahamsj@ybb.ne.jp)



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#### Course Lectures

##### Part I: Background: Organ Failure

- Heart, Lung, Liver, Kidney, Pancreas *Failure* including physiology, human impact, ethics and cost, medical management, and the implications for regenerative medicine
- Current Approaches to Surgical Management of Organ Failure including transplant and non-transplant approaches

##### Part II: Regenerative Medicine and Innovative Technologies

- Stem Cells series
- Gene Therapy
- Tolerance
- Biomarkers and Assays
- Tissue Manufacturing
- Regenerative Neuroscience

### Part III: Clinical Applications of Regenerative Medicine

- a) Translation of New Therapies from Bench to Bedside
- b) Fundamentals of Clinical Trials Design
- c) Evaluation of Health-Related Quality of Life
- d) Patient Issues and Concerns
- e) Health Economics
- f) Role of Foundations in Regenerative Medicine

### Part IV: Ethics and Society

- a) Research Ethics
- b) Transplantation Ethics
- c) Regenerative Medicine Ethics
- d) The Media & Public
- e) Biomedical Research Commercialization, Financing and the Biotechnology Industry
- f) Regulation of Regenerative Medicine: Position of Health Canada

### Part V: Visiting Speaker Lectures

There are a total of four lectures through the year, which are held in conjunction with the Multi Organ Transplant (MOT) Rounds at 8:00am (all students to attend).

- a) - Wednesday, September 28, 2011
- b) - Monday, December 12, 2011
- c) - Wednesday, February 8, 2012
- d) - Wednesday, April 4, 2012

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### Pre-requisites

The course will be open to all qualified students in the Institute of Medical Science as well as the University of Toronto's Faculty of Nursing, Institute of Biomaterials and Biomedical Engineering, Department of Pathology and Molecular Medicine, Department of Immunology, and the Department of Medicine, as well as students in affiliated departments at the University of Ottawa and McMaster University, and students whose supervisors are members of the Stem Cell Network and the CIHR Training Program in Regenerative Medicine (TPRM). Students registered in this course must be doing research in the field of Regenerative Medicine.

### Enrolment Restrictions

An enrolment limit of 20 students at the University of Toronto and 20 students across Canada (SCN) is in place for the 2011-2012 academic year.

### Webcasting Requirements:

Students must register for their webcasting profile at <http://epresence.med.utoronto.ca> prior to viewing live/archived web casts. If you have problems, please contact one of the teaching assistants.

**Offsite students are required** to have access to the following below in order to take the course via webcasting;

- Operating System: Any
- Adobe Flash Player 9.0.124+ (Test your Flash version at: <http://www.adobe.com/software/flash/about/>)
- High-speed broadband internet connection
- Modern web browser, such as IE7/8, Firefox 2+, Chrome 1+, or Safari 3+
- Microsoft PowerPoint 2003+
- Daily access to email

### Course Communication

All course information will be communicated to students through the Blackboard as the main mechanism (<http://portal.utoronto.ca/>), in addition to the email address associated with BlackBoard account. Students will be provided with a login and password for BlackBoard once their registration is completed through ROSI (this takes 2 business days to be setup by the University of Toronto). It is **YOUR** responsibility to ensure you check your account daily.

### Logging in to your Blackboard Course Website

Like many other courses, MSC7000Y uses Blackboard for its course website. To access the MSC7000Y website, or any other Blackboard-based course website, go to the University of Toronto portal login page at

<http://portal.utoronto.ca> and login using your UTORid and password. Once you have logged in to the portal using your UTORid and password, look for the **My Courses** module, where you'll find the link to the MSC7000Y course website along with the link to all your other Blackboard-based courses.

### Activating your UTORid and Password

If you need information on how to activate your UTORid and set your password for the first time, please go to [www.utorid.utoronto.ca](http://www.utorid.utoronto.ca). Under the "First Time Users" area, click on "activate your UTORid" (if you are new to the university) or "create your UTORid" (if you are a returning student), then follow the instructions. New students who use the link to "activate your UTORid" will find reference to a "Secret Activation Key". This was originally issued to you when you picked up your Tcard at the library. If you have lost your Secret Activation Key you can call 416-978-HELP or visit the Help Desk at the Information Commons on the ground floor of Robarts Library to be issued a new one. **The course instructor will not be able to help you with this.** 416-978-HELP and the Help Desk at the Information Commons can also answer any other questions you may have about your UTORid and password.

### Email Communication with the Course Coordinator

At times, the course coordinator may decide to send out important course information by email. To that end, all UofT students are required to have a valid UofT email address. You are responsible for ensuring that your UofT email address is set up AND properly entered in the ROSI system. You can do that by using the following instructions:

To submit the information to activate your UTORid and password (see above), you will need to click the "Validate" button. Follow the instructions on the subsequent screens to receive your utoronto.ca address. Once you have your UofT email address, go to the ROSI system ([www.rosi.utoronto.ca](http://www.rosi.utoronto.ca)), log in and update the system with your new UofT email address.

You can **check your University of Toronto email** account from

1. The UofT home page <http://www.utoronto.ca>: From the Quick Links menu on the top right, choose "my.utoronto.ca". Enter your UTORid and password, and when the Welcome page opens, click "WEBMAIL".
2. Email software installed on your computer, for example Microsoft Outlook or Mozilla Thunderbird. Visit the Help Desk at the Information Commons or call 416-978-HELP for help with the set up.

**Forwarding** your utoronto.ca email to a Hotmail, Gmail, Yahoo or other type of email account is not advisable. In some cases, messages from utoronto.ca addresses sent to Hotmail, Gmail or Yahoo accounts are filtered as junk mail, which means that emails from your course instructor may end up in your spam or junk mail folder.

*You are responsible for:*

1. Ensuring you have a valid U of T email address that is properly entered in the ROSI system;
2. Checking your U of T email account on a regular basis.

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### Grading scheme for examinations, assignments

Specific criteria are specified below:

(a) Evaluation methods:

Assignments (2)	20%
Take-home Midterm Exam (1)	25%
Final Project Presentations–Student Symposium (1)	40%
Participation and Attendance	15%

(b) Evaluation Breakdown:

Component	Total
First Term Assignment (short essay)	10%
Mid Term Take home exam	25%
Second Term Assignment (short essay)	10%
Final Abstract	10%
Final Presentation (Symposium)	30%
Participation	15%

(c) Criteria for assessing participation:

- i) In class attendance for University of Toronto students and Real-time live webcast attendance for offsite students (\*students with a big time zone difference will view Archives). This data will be tracked.
- ii) Participation in discussions, and questions during the lecture.

***If unable to attend class, notification must be given in advance to the teaching assistants and the course coordinator.***

(d) Schedule of Evaluation Deadlines:

Assignment 1:	November 10 <sup>th</sup> 2011
Mid Term Exam (Take Home)	December 15 <sup>th</sup> 2011
Assignment 2	February 16 <sup>th</sup> 2012
Final Exam Project Title Due	February 23 <sup>rd</sup> 2012
Final Exam Abstract Due	March 15 <sup>th</sup> 2012
Final Exam Presentation Slides Due	April 2 <sup>nd</sup> , 2012
Final Exam Presentations – Students' Symposium*	April 4 <sup>th</sup> -5 <sup>th</sup> 2012

**All assignments and exams are to be submitted through the Turnitin.com** with the exception of the final presentations, which are oral presentations. **A hard copy of all assignments and exams must be handed in on the due date.** You may also send back-up copies to the Teaching Assistants.

### **TURNITIN.COM**

Normally, students will be required to submit their course essays to Turnitin.com for a review of textual similarity and detection of possible plagiarism. In doing so, students will allow their essays to be included as source documents in the Turnitin.com reference database, where they will be used solely for the purpose of detecting plagiarism. The terms that apply to the University's use of the Turnitin.com service are described on the [www.turnitin.com](http://www.turnitin.com) website. Students must setup an account by following instructions in the enclosed *Turnitin Guide for Students (attached)*.

### **FINAL EXAM PRESENTATIONS - STUDENTS' SYMPOSIUM**

**\*All students must make arrangements to be available for the entire duration of the Student Symposium from April 4-5, 2012.** This will include a Networking Dinner on the night of the 5<sup>th</sup>. Supervisors are encouraged to attend along with colleagues.

#### Late submission of work

**For overdue assignments:** a deduction of **10% of a grade per day for five days**, after which **a grade of zero** is assigned.

Students must contact the course coordinator *as soon as possible* if they anticipate they will not be able to meet a deadline (**at least within 48 hours of the deadline of assessment**). The student may request special consideration based on health problems or other personal circumstances. Course directors have the right to extend evaluation deadlines at their own discretion in such circumstances.

(e) Responsibility of each evaluator (includes TA's):

Each faculty member will deliver a lecture for approximately 90 minutes providing an overview of the assigned topic. Then, a session will be dedicated to discussion in which participation is required. Students will be given the opportunity to email questions directly to the faculty member for further discussion. Grading standards will be set by a committee of faculty members and all assignments will be graded by at least two faculty members in addition to the teaching assistant(s). Consensus grades will be assigned.

### **Course & Lecture Evaluations**

All lectures are to be evaluated by students in-class after the lecture. A link will be sent to offsite students to evaluate. Evaluations will be anonymous and aids in the assistance of revising and creating lecture content and changes. At the end of the course, an overall course evaluation is to be completed in the same manner.