

BMDE 505: CELL AND TISSUE ENGINEERING

DATES: Start: Wednesday, January 10, 2018. End: April 11, 2018.

PLACE AND TIME: Duff Medical Building, 3755 University Street, Room 507/509; 4-6 PM.

CONTACTS:

A) Course coordinator: Dr. S. Prakash, Professor, Biomedical Eng.,
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B) Departmental contact: Ms. Pina Sorrini, Administrator, Biomedical Eng.,
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<u>DATE</u>	<u>TIME</u>	<u>TOPICS</u>	<u>LECTURER</u>
Jan. 10	4-6 pm	Cell Therapy for Myocardial Regeneration	Dr. D. Shum-Tim
Jan. 17	4-6 pm	Tissue Engineering of Heart Valve and Vascular Grafts	Dr. D. Shum-Tim
Jan. 24	4-6 pm	Cell & Tissue Engineering: Methods, Potential & Limitations	Dr. S. Prakash
Jan. 31	4-6 pm	Artificial Cells	Dr. T. M. S. Chang
Feb. 1	4-6 pm	Cell Fluorescence Technology for Cell Therapy	Dr. R. Grygorczyk
Feb. 7	4-6 pm	Ethics in Cell and Tissue Engineering	Dr. J. Kimmelman
Feb. 14	4-6 pm	Micro-technologies for Cell and Tissue Engineering	Dr. D Juncker
Feb. 21	4-6 pm	Postnatal Stem Cells – their Biology and Applications	Dr. M. Nagano
		READING WEEK – STUDY BREAK	STUDY BREAK
March 15	4-6 pm	Bone Tissue Engineering	Dr. B. M. Willie
March 21	4-6 pm	Seminar on Selected Topics I	Dr. S. Prakash
March 28	4-6 pm	Seminar on Selected Topics II	Dr. S. Prakash
April 4	4-6 pm	Seminar on Selected Topics III	Dr. S. Prakash
April 11	4-6 pm	Seminar on Selected Topics IV	Dr. S Prakash

COURSE GRADING

GRADE PERCENTAGES: Class Participations: 20%, Presentation: 40%, Term Paper/Grant Proposal: 40%

ASSIGNMENTS:

A) ORAL ASSIGNMENTS:

PRESENTATION: A class 15-20 minutes seminar, covering the following aspects: **Topic:** Relevant areas discussed in class. The seminar topic is due by **March 1**. Presentation slides (Power Point/PDF) must be emailed to Dr. Prakash one day prior to your seminar date. **Format:** *Background/Introduction, Problems, Strategy and/or Research Methods, Results and Discussion.*

B) WRITTEN ASSIGNMENTS: Term paper **OR** research grant proposal

TERM PAPER: A critical 20-page term paper. The subject choice is due by **March 1**.

Details: A 20-page (single spaced, including figures, excluding references) article.

Topic: Relevant area discussed in class. Format of the review paper: *Introduction. Research Methods, Results, Discussion, Reference Cited.* Paper is due to Dr. Prakash by **April 1**

OR

RESEARCH GRANT PROPOSAL: The subject choice is due by **March 1**.

Details: Follow the Canadian Institute of Health Research (CIHR) guidelines. You are requested to submit complete CIHR research module and budget modules (Except CV modules and detail budget justification). Grant Proposal is due to Dr. Prakash by **April 1**.

PROFESSOR CONTACTS:

<u>Name</u>	<u>Telephone</u>	<u>Email</u>
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IMPORTANT INFORMATION:

1) **Right to submit in English or French written work that is to be graded:**

In accord with McGill University's Charter of Students' Rights, students in this course have the right to submit in English or in French any written work that is to be graded.

2) **Academic Integrity statement** [approved by Senate on 29 January 2003]:

McGill University values academic integrity. Therefore, all students must understand the meaning and consequences of cheating, plagiarism and other academic offences under the Code of Student Conduct and Disciplinary Procedures (see www.mcgill.ca/students/srr/honest/) for more information).

L'université McGill attache une haute importance à l'honnêteté académique. Il incombe par conséquent à tous les étudiants de comprendre ce que l'on entend par tricherie, plagiat et autres infractions académiques, ainsi que les conséquences que peuvent avoir de telles actions, selon le Code de conduite de l'étudiant et des procédures.