PHGY 516
Physiology of Blood
COURSE SCHEDULE
Winter 2020

Lecturers:
Dr. Volker Blank (Coordinator), Lady Davis Institute, 514-340-8260 x24984, volker.blank@mcgill.ca
Dr. Sonia Cellot, CHU Sainte-Justine, 514-345-4931 x6026, sonia.cellot@umontreal.ca
Dr. Ann English, Concordia University, Loyola Campus, 514-848-2424 x3338, ann.english@concordia.ca
Dr. Kostas Pantopoulos, Lady Davis Institute, 514-340-8260 x25293, kostas.pantopoulos@mcgill.ca
Dr. Amel Hamdi, Lady Davis Institute (Coordinator), 514-340-8260 x24666, amel.hamdi@mail.mcgill.ca
Dr. Sonia del Rincon, Lady Davis Institute, 514-340-8260 x22246, sonia.delrincon@mcgill.ca
Dr. Trang Hoang, Institue for Research in Immunology and Cancer (IRIC), 514-343-6970, trang.hoang@umontreal.ca
Dr. François Mercier, Lady Davis Institute, 514-340-8260 x27850, francois.mercier@mcgill.ca
Dr. Nathalie Johnson, Lady Davis Institute, 514-340-8260 x28434, nathalie.johnson@mcgill.ca
Dr. Christian Beauséjour, CHU Ste-Justine, 514-345-4931 x4385, christian.beausejour@recherche-ste-justine.qc.ca

Location: McIntyre Bldg. Room 1027, Mondays from 2:35pm - 5:25pm

Date	*Day*	*Lecture Title*	*Lecture*	*Lecturer*
Jan. 6	M	Hematopoietic stem cells and progenitors	1	Dr. S. Cellot
13	M	Hematopoiesis	2	Dr. V. Blank
20	M	Erythropoiesis and erythropoietin	3	Dr. V. Blank
27	M	Pathophysiology of erythroid cells	4	Dr. V. Blank
Feb. 3	M	Hemoglobin structure and function	5	Dr. A. English
10	M	Iron metabolism	6	Dr. K. Pantopoulos
17	M	Regulation of hemoglobin synthesis	7	Dr. A. Hamdi
24	M	Signal transduction in hematopoietic cells	8	Dr. S. del Rincon
Mar. 2	M	**Reading Week – NO CLASSES**		
9	M	Thymocyte development and T-cell leukemia	9	Dr. T. Hoang
16	M	Neutrophil biology and inflammation	10	Dr. F. Mercier
23	M	Myeloid physiology and AML	11	Dr. F. Mercier
30	M	B-cell development, function and pathology	12	Dr. N. Johnson
Apr. 6	M	Therapeutic gene transfer	13	Dr. C. Beauséjour

Final Exams held during exam period, April 17 - April 30

The lectures will be held on Mondays, 2:35pm -5:25pm. Each lecture will be followed by a seminar that will involve discussion of a research paper(s) related to a topic covered by the lecture. Students will be assessed by a seminar (15%), a term paper (40%) and a final written exam (45%).

**** Students are responsible for checking *MyCourses* for course notes/slides papers and any updates****

1. **Seminar:** A research paper (chosen by the lecturers) will be presented after each lecture. 1-2 student(s) will present each paper. The seminar **(total of 15%)** should be 30 minutes maximum, leaving 10 minutes for discussion.

   The seminar should be organized like a research paper:

   > Introduction – giving general background to the subject, relevant data from previous papers on the topic and general review articles.
   > Methods – to be presented only if techniques are novel or a crucial part of the paper itself.
   > Results – data (gels, tables,..) including critical analysis (missing controls, misinterpretation of data, etc.).
   > Discussion – includes critical evaluation based on data presented as well as previous literature.
   > Conclusions – the authors and yours as well as future outlook.

   Please Note: The PowerPoint presentation should be succinct. It is important that you provide a "synthesis" of the article. You do not have to necessarily present all the figures in a paper, in particular repetitive experiments or less important control assays. Critical analysis of the paper is crucial. The presenter(s) should prepare 5 questions to be asked during and/or after the talk. Their fellow students should submit 2-3 questions on the article to physiology516@yahoo.ca by 10:00am on the day of the seminar. One or two designated students will animate the discussion. Students attendance of the seminar is mandatory for all students. Consistent participation in the discussion of research articles presented by your fellow students will improve your grade.

2. **Term Paper** – As to the term paper (**total of 40%)**, part of the exercise is that each student will select his or her topic that must be related to one of the lectures in this course. The topic should be chosen with regard to the formatting requirements, and hence, should not be too narrow (no literature available) or too broad (you could write a book on the topic). The topics need to be approved by Dr. Volker Blank: please send a prospective title and short outline (one paragraph) by email to volker.blank@mcgill.ca. The topics can be chosen anytime during class, but final selections have to be made by **Monday, March 16th, 2020**. A hardcopy of the paper is due on **Monday, March 30th, 2020 by 4:00pm (Office of the Department of Physiology Office, McIntyre room 1021)**. No exceptions to this deadline can be made. In addition to your hardcopy, you will need to send an electronic version named "**Last name_first name_516_2018.pdf**" to volker.blank@mcgill.ca.

   The paper should be a maximum of 10 pages in length (double spaced), excluding figures, tables and references (minimum 20) and must provide a critical evaluation of the relevant literature. The paper should have the form of a review article published in a scientific journal, for example "Blood". It should be logically divided into sections and subsections with appropriate headings and subheadings. References should include not only review articles but also important primary research or clinical papers. References to websites are not accepted. You may include figures and schemes from published articles or books, but your own diagrams will also be highly appreciated.

3. **Final Exam** – The final exam will consist of three components **(15% each for a total of 45%)**. The first two are essay-type questions of a broad nature. The third component is represented by short answers to three specific questions (to be selected out of 10 to 12 questions). The final exam is based on the lectures of the course. The review articles handed out with each class only serve as help for the students to better understand the topic. Research articles presented by the students are not part of the exam.

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 http://www.mcgill.ca/srr/honest for more information)

Every student has the right to write term papers, examinations, and theses in English or French, except in courses where knowledge of the language is one of the objectives of the course.

In the event of extraordinary circumstances beyond the University's control, the content and/or evaluation scheme in this course is subject to change.