

COURSE OUTLINE – Winter 2023

Location and Time: 4:35 – 5:55 PM / Days: Mondays, Wednesdays, McIntyre Medical Building, Room 335 (or Room 521)

Coordinators: Christos Tsoukas, Montreal General, 1650 Cedar avenue, Room A6-173, Tel: 514-934-8035 (christos.tsoukas@mcgill.ca)

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Teaching Assistant: Wided Akik (wided.akik@mail.mcgill.ca)

Date	Topic	Instructor	Student
Jan 09 M	Introduction – Mandatory attendance (McIntyre 521)	Dr. M. Denis maxime.denis@mcgill.ca	
11 W	Communication in Science	Dr. M. Denis maxime.denis@mcgill.ca	
16 M	Regulatory T-cells: How they develop, mechanisms of action and Role in Disease.	Dr. C. McCusker christine.mccusker@mcgill.ca	Gabriel & Sebastian
18 W	NK cells and their receptors in health and disease.	Dr. Nicole Bernard nicole.bernard@mcgill.ca	David
23 M	B cell development and the development of antibody deficiency syndromes.	Dr. R. Alizadehfar reza.alizadehfar@muhc.mcgill.ca	Hannah
25 W	Dendritic Cells.	Dr. D. Radzioch Danuta.radzioch@gmail.com	Hugh
30 M	The controversy surrounding the Role of Mast Cells in non-allergic immunity.	Dr. Ghislaine Isabwe ghislaine.isabwe@muhc.mcgill.ca	Andy & Jeffrey
Feb 01 W	Pulmonary Immunity	Dr. C. Costiniuk cecilia.costiniuk@mcgill.ca	Gabriel
06 M	Statutory MUHC Holiday – no class		
08 W	Inflammatory Bowel Disease-animal models and human susceptibility genes	Dr. M. Fein michael.fein@mcgill.ca	Zilan
13 M	The role of NK cells in reproductive failure.	Dr. G. Genest genevieve.genest@mail.mcgill.ca	Sebastian
15 W	Immune mechanisms in anaphylaxis	Dr. Ana-Maria Copaesu ana-maria.copaescu@mcgill.ca	Alan & David
20 M	Mechanisms of HIV Induced Immunodeficiency	Dr. Nicole Bernard nicole.bernard@mcgill.ca	Hannah
22 W	The inflammasome - pathophysiology of Periodic Fever Syndromes.	Dr. C. Tsoukas christos.tsoukas@mcgill.ca	Tonya
27 – Mar. 3	McGill University March Study Break – no class		
06 M	Lymphoproliferative Syndromes – FAS: FAS Ligand diseases (McIntyre 521)	Dr. R. Alizadehfar reza.alizadehfar@muhc.mcgill.ca	Jeffrey
08 W	Cardiovascular Immunopathology	Dr. C. Tsoukas christos.tsoukas@mcgill.ca	Andy
13 M	Hereditary Disorders of the Complement Cascade	Dr. C. Tsoukas christos.tsoukas@mcgill.ca	Huanyi
15 W	Immune response and immune evasion by Mycobacterium Tuberculosis	Dr. M. Reed michael.reed@mcgill.ca	Alan
20 M	Cancer vaccines – current status	Dr. Ghislaine Isabwe ghislaine.isabwe@muhc.mcgill.ca	Hugh & Zilan
22 W	Immune mechanisms “Celiac Disease”	Dr. Natacha Tardio natacha.tardio@mcgill.ca	William
27 M	Cytokine Storm Syndrome	Dr. C. Tsoukas christos.tsoukas@mcgill.ca	Tuong
29 W	Autoimmune Polyglandular Type I (Aire Deficiency) and IPEX syndrome are examples of the role of genetics in autoimmune Endocrine Disease	Dr. F. Noya francisco.noya@mcgill.ca	Tonya & Huanyi
Apr 03 M	The Immunology of Food Allergic Diseases.	Dr. M. Fein michael.fein@mcgill.ca	William & Tuong
05W	Debate – Immunogenicity of mRNA is better than attenuated viral vaccines	Dr. C. Tsoukas christos.tsoukas@mcgill.ca	All students
10 M	Easter Monday - No class		
12 W	No class / Presentations makeup (if needed)		
14-28	FINAL EXAM - TBD		

BIOC 503 – BIOCHEMISTRY OF IMMUNE DISEASES

Pre-requisites

Mandatory: BIOC 311, BIOC 312. Recommended: MIMM 214

Course description

This course aims at developing student's skills in reflecting on and communicating about current basic and clinical research topics in immunochemistry.

Under the guidance of a MD and/or PhD supervisor, students are assigned a topic that they present to their peers. These topics cover the molecular, genetic and structure-function events that occur in the humoral immune response. Interleukins and other mediators of inflammation are also discussed. The clinical significance of fundamental biochemical findings is described.

Instructional Method in this Course

- Mentor/mentee-based learning
- Literature review and problem-based learning
- Mandatory oral presentations (seminars) to peers, in person (preferred) or via Zoom (depending on public health protocols). Students access online live session through MyCourses/Zoom
- Note that instructional delivery mode is subject to change based on public health protocols

Within the first week, students pick a topic from a pre-defined list. Each student should contact their seminar supervisor at least 1 week before scheduled seminar to discuss the seminar organization. The supervisor will suggest a clinical/basic research problem that the student will answer during her/his presentation. Students must upload **a literature review paper and their seminar presentation** at least 24 h prior to their talk to the 'Assignment' section on MyCourses. The literature review paper is worth 5% of presentation and must allow someone with a general scientific background to get a good introduction of the topic.

Seminars last 45 minutes with the first 20 - 30 minutes being an introduction to subject – students come from diverse backgrounds. Then, the presenting student opens a 10-min discussion with the audience about a problem related to their topic. The presenting student concludes (5 min) with her/his point of view on the question.

Seminars are peer- and instructor-evaluated (fill out the form available on MyCourses, select the 'Evaluate Presentations' tab or <https://forms.gle/LKZESPgyJWY7dkhY7>). Students will get feedback from their instructor following their presentation. There are 20 seminars – first 20 student registrants are eligible to take the course. If fewer than 20 students are registered for the course, each student may be required to do a second seminar subject.

Evaluation Method

- **Mandatory attendance.** More than 2 absences results in a 5 % penalty.
- **70 % Oral presentation(s).** Peer-evaluation 20 % + instructor 50%.
- **25 % Final exam.** The Final is a 3 h-in-person exam and consists of a short-answer questions and/or multiple-choices.
- **5% In-class debate.**
- *In the event of extraordinary circumstances beyond the University's control, the content and/or evaluation scheme in this course is subject to change. Assessments may be subjected to text-matching in accordance with the Policy on Text-Matching Software.*
- **Language of Assessment**

Les étudiants peuvent soumettre en anglais ou en français tout travail écrit destiné à l'évaluation.

In accord with McGill University's Charter of Students' Rights, students have the right to submit in English or in French any written work that is to be graded (except in courses where knowledge of a language is one of the objectives of the course). However, oral assessments must be presented in English.

Medical notes

Students unable to give their oral presentation(s) for medical reasons must contact the course coordinator as soon as possible to reschedule their presentation.

Deferred Final and Supplemental

The Deferred Final (worth like the Final) and Supplemental (worth 100% of the grade) are managed by Exam Center and are usually written during August. Students unable to attend the regular final exam must contact the Exam Center and follow the procedure stated here <https://www.mcgill.ca/exams/>. The Exam Center may require a valid medical note.

Procedure for Challenging Grades

1. Politely ask for explanations

Students have the right to seek additional feedback on their grades **without any penalty**.

However, students and graders alike have the right to be treated with dignity and respect. Hence, students may **respectfully** email graders to get further explanations of their mistakes. McGill University being a safe place to study and work, any verbal, written and/or physical violence will NOT be tolerated and immediately reported to the Disciplinary Officer (<https://www.mcgill.ca/medhealthsci-respectful-environments/about>).

Hint: If you feel angry while writing an email, it may be wiser to sleep on it and send that email on a calmer day.

Etiquette for writing professional emails: https://www.mcgill.ca/onboardingcentral/files/onboardingcentral/student_email_etiquette_tips.pdf

2. Request a re-read

Rereads of the **Final Exams** are centrally managed: <https://www.mcgill.ca/student-records/reread>

Course Grades: The department of Biochemistry does **NOT** revise/upgrade marks except on sound academic grounds. Once computed, the marks in this course will **NOT** be altered/increased. Decimal points will be “rounded of” as follows: if the final aggregate mark is computed to be 79.5%, the mark will be reported as 80% (an A-); a final aggregate mark of 79.4% will be reported as 79% (a B+). These marks are **FINAL and NON-NEGOTIABLE**. Any unsupported request to increase marks will be systematically turned down.

Useful resources

- Student Rights and Responsibilities

<https://www.mcgill.ca/students/srr/academicrights>

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/students/srr/honest/> for more information).

- McGill Academic Calendar (add/drop, withdrawal and other deadlines)

<https://www.mcgill.ca/importantdates/key-dates>

- Time management

<https://www.mcgill.ca/access-achieve/learner-support/time-management-0>

- Stress management

<https://www.mcgill.ca/thewelloffice/isonspotscsd/wellness-support/curriculum/take-home-messages/stress-management-tips>

- Students Accessibility and Achievement office (SAA)

<https://www.mcgill.ca/access-achieve/>

- Health and Wellness Resources at McGill

All of our health and wellness resources have been integrated into a single Student Wellness Hub, your one-stop shop for everything related to your physical and mental health. If you need to access services or get more information, visit the Virtual Hub at www.mcgill.ca/wellness-hub or drop by the Brown Student Services Building (downtown) or Centennial Centre (Macdonald Campus). Within your faculty, you can also connect with your Local Wellness Advisor (to make an appointment, visit <https://mcgill.ca/lwa>).