CAREER OPTIONS :

- Medicine and Dentistry
- Health Professional Programs
- Biomedical Research
- Bioinformatics
- Biotechnology and Biopharmaceuticals
- Academia

MISA:

The Microbiology & Immunology Student Association (MISA) serves as a liaison between its students and department to ensure everyone's voices are heard. We address student issues and academic concerns on top of planning fun and inclusive social events throughout the year.

STUDENT TESTIMONIALS :

"Not only is the material learned in MIMM incredibly vast and interesting, but it is extremely relevant to today's world and allows for so many opportunities. While the academic aspect of the program is great, the community in the MIMM department is something I have never seen before. I know that this tight knit community will leave me with lifelong friends." - *Morgan Gold*

"For me, MIMM is an interdisciplinary field that enabled me to explore not only science, but also global health, biotechnology, and more. Whether you want to pursue research, or take alternate avenues, MIMM allows you to delve into your passions." - *Harry Kim*

STUDENT AFFAIRS OFFICE

Student Affairs Officer

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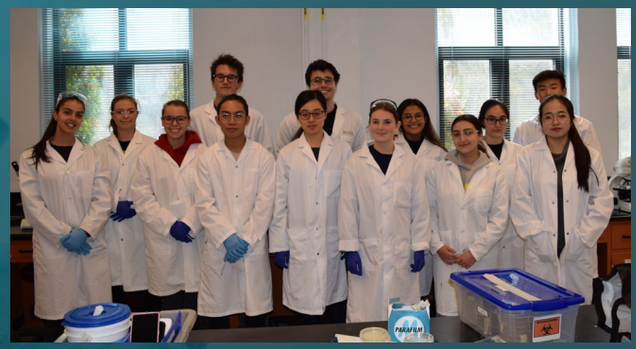
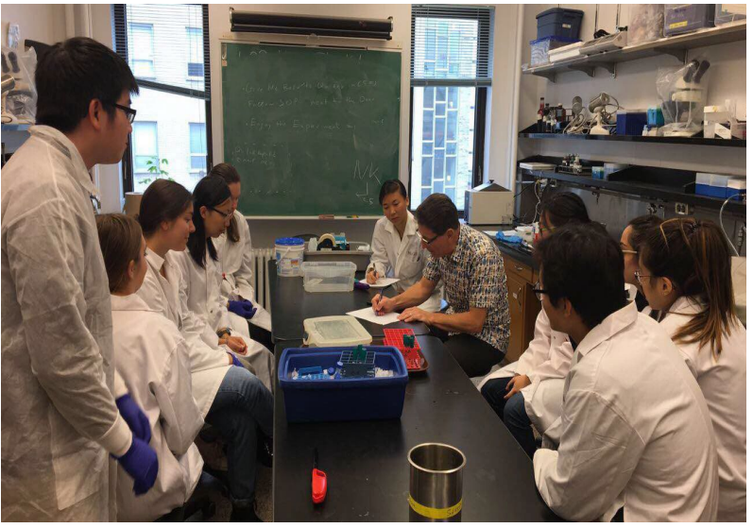
DEPARTMENT OF MICROBIOLOGY & IMMUNOLOGY



UNDERGRADUATE STUDIES

McGill
Faculty of Medicine



WHAT IS MIMM?

Microbiology is the study of microorganisms including bacteria, archaea, viruses, fungi, protozoa and algae. Immunology is the study of the immune system, including our host defense against pathogens, autoimmunity, allergy and cancer. Students in MIMM learn the biology of all microorganisms including human pathogens of bacterial, viral and parasitic origin, develop an understanding of how the immune system functions and controls infection, and host-pathogen interactions. Our students gain knowledge in fundamental microbiology & immunology, and have the opportunity to participate and engage in cutting-edge research. Our program builds skills in scientific and critical thinking, oral and written communication, and provides opportunities to explore how science impacts society.

PROGRAM OPTIONS

LIBERAL: A concentration in Microbiology & Immunology with the flexibility to pursue a minor in another specialty to broaden their education (at least one minor required).

MAJOR: An in-depth concentration in Microbiology & Immunology and related disciplines to prepare for professional or graduate school, government, or industry.

HONOURS: An elite program that offers broad exposure to different areas of the biomedical sciences and includes a significant research experience to prepare students for graduate research.

INTER-DEPARTMENTAL HONOURS-IMMUNOLOGY (IHI): Combining elements of Biochemistry, Microbiology & Immunology, and Physiology, this program prepares students for graduate research in Immunology.

U1 YEAR

The 1st year provides strong foundation in life sciences. Pathogens and the immune system are presented, and the laboratory course allows students to contribute to a university-driven effort to counter antibiotic resistance.

BIOL 200	Molecular Biology
BIOL 202	Basic Genetics
CHEM212	Organic Chemistry 1
CHEM 222	Organic Chemistry 2
MIMM 211	Introduction to Microbiology
MIMM 212	Laboratory in Microbiology
MIMM 214	Introduction to Immunology

One course selected from:

BIOL 201	Cell Biology and Metabolism
BIOC 212	Molecular Mechanisms of Cell Function

U2 YEAR

In the 2nd year, theory is complemented with hands-on laboratory courses each semester, where essential techniques are applied. Classes are more focused and elucidate finer details. The knowledge gaps in the field of Microbiology & Immunology are discussed.

BIOC 311	Metabolic Biochemistry
MIMM 301	Scientific Writing Skills
MIMM 314	Intermediate Immunology
MIMM 323	Microbial Physiology
MIMM 324	Fundamental Virology
MIMM 384	Molecular Microbiology Laboratory
MIMM 385	Laboratory in Immunology

U3 YEAR

The final year offers the opportunity to choose life-science courses that satisfy the students' interests. Many decide to undertake research opportunities in the laboratories of world-renowned researchers. Semester- or year-long projects can be completed for credit, including our flagship Honours program*.

MIMM 413 Parasitology

Two Complementary Courses selected from:

MIMM 414	Advanced Immunology
MIMM 465	Bacterial Pathogenesis
MIMM 466	Viral Pathogenesis

**For the MIMM Major, MIMM Honours or IHI programs - up to 3 complementary courses & 1 statistics course are additionally required in either U1, U2, or U3.*

RESEARCH OPPORTUNITIES:

We offer several opportunities for undergraduate students to meaningfully engage in research through supervised experiences in lab courses and independent research. Our students have the option of pursuing 3 or 6- credit independent research opportunities in world- renowned research labs with our Primary and Associate Faculty members. In addition, our flagship 9 and 12-credit Honours Programs allow students to engage in-depth in research projects and also gain practical skills in data collection, analysis, and scientific communication.

UNDERGRADUATE RESEARCH PROJECT :

MIMM 396 (Microbiology) / 397 (Immunology)

MICROBIOLOGY & IMMUNOLOGY ADVANCED RESEARCH PROJECT:

MIMM 496D1,2 (Microbiology)
MIMM 497D1,2 (Immunology)

INTERDEPARTMENTAL HONOURS PROGRAM IN IMMUNOLOGY (IHI):

PHGY 419D1	Immunology Research Project
PHGY 419D2	Immunology Research Project

HONOURS RESEARCH PROJECT :

MIMM 501D1,2 (Immunology)
MIMM 502D1,2 (Microbiology)