

**MIMM 501/502 D1, D2**  
***Independent Studies in***  
***Microbiology and Immunology***

**Honours Research Project; 12 Credits\***

Course Coordinator:

Dr. Irah King (irah.king@mcgill.ca)

[www.mcgill.ca/microimm/student-affairs/courses/mimm502](http://www.mcgill.ca/microimm/student-affairs/courses/mimm502)

# 3 Main Learning Outcomes

By the end of this course, students will be able to:

1. To design and execute a **hands-on research project** in *Immunology* or in *Molecular Microbiology*
2. To **write** a scientific proposal and manuscript
3. To **present** a research seminar at the conclusion of the course.

# Course Structure & Content

## Laboratory component

- Devote at least 40% of your academic efforts working in a laboratory
- With a supervisor you will design a hypothesis-driven research project, complementing the PI's long-term program
- Propose project specific aims and organize experiments through regular discussion and direction from the PI
- Acquire scientific background about a selected project by reading and learning
- Master skills at the bench, acquiring expertise and techniques in a laboratory setting

# Course Structure & Content:

## in-class component

**~15 classes throughout the year (mostly in the Fall semester) that focus on skills for scientists**

**\*Includes your required participation in **PHGY531** in the Fall Semester**

- Evolve from competition towards collaboration as colleagues
- Learn and practice communication tools (writing and oral presentation)
- Engage with clinicians and scientists from diverse disciplines
- Learn about scientific, philosophy, ethics and integrity
- Hone writing skills by creating research proposals and manuscripts
- Present your scientific achievements at student research day

# MIMM 501 / 502:

## Eligibility Requirements

- Must be a MIMM student
- CGPA > 3.5\* by the end of Fall term of U2
- All required courses completed at end of U2, winter term
- Commitment from a supervisor
- Space is limited ~20 students
- Application receives final approval from coordinator

\*subject to change depending on the number of applicants

# Application Procedure

Submit the following to Christine de Santis  
([undergrad.microimm@mcgill.ca](mailto:undergrad.microimm@mcgill.ca)) by **Jan 13, 2025**:

1. Statement of interest in MIMM 501/502 (1 sentence)
2. Subject area identified (Micro or Immuno)
3. Unofficial McGill transcript

# Application Procedure

\*Eligible students will be notified the following week and provided an **entrance exam** (short answer, 3-5 questions) to complete

Exam answers are due by midnight, **Feb. 6, 2025**  
Submit to [undergrad.microimm@mcgill.ca](mailto:undergrad.microimm@mcgill.ca)

You will then be informed by March 3, 2025 whether you are eligible to find a supervisor

# Eligible students must find a supervisor

- **Prospective Supervisors**
  - **ANY** McGill Professor performing research related to microbiology and/or immunology
  - Have replied to course coordinator indicating willingness to accept an honours student
  - List of available supervisors emailed to all interested students in the first week of February
- **Student-Supervisor Match Making**
  - Student's responsibility to contact potential supervisor for interview
  - Meet with at least 3 supervisors, if possible
  - Consider topics, size, locations of laboratories when choosing
  - Present, agree, and co-sign *Guidelines* (provided to eligible students)



# Full Application

Eligible students must provide the following:

1. Signed Letter of agreement between supervisor and student
2. Description of project: 2 paragraphs written by the supervisor using template provided upon application submission

Submit the 3 docs to Christine ([undergrad.microimm@mcgill.ca](mailto:undergrad.microimm@mcgill.ca))  
by **Tuesday, April 1, 2025**

Notice of acceptance by end of April 15, 2025

# MIMM 501 / 502 classes

- Mondays 14:35 to ~17:00h
- Location: Duff 507/509
- Autumn: ~12 in-class sessions
- Winter: ~3 in-class sessions
- Honours research day in late April

# Do you want to get started early in your Honours lab?

- Start in the summer (may-august 2025)
- Personal agreement with your supervisors
- Funding opportunities
  - [www.mcgill.ca/studentaid/](http://www.mcgill.ca/studentaid/)
  - [www.mcgill.ca/medresearch/students-postdocs/biomedical/nserc](http://www.mcgill.ca/medresearch/students-postdocs/biomedical/nserc)
  - Canadian Association of Gastroenterology (<https://www.cag-acg.org>)
  - Canadian Institutes of Health Research (<http://www.cihr-irsc.gc.ca/e/193.html>)

# Final Comments

- Reach out to current Honours students
- Identify specific projects/research programs that interest you
- Interview with 2-3 professors and come prepared with simple questions related to research and lab culture
- Submit application to Christine on/before **January 13, 2025** → submit entrance exam by midnight, **Feb 6, 2025**  
→ results by **March 3, 2025**
- Submit student-supervisor agreement to Christine by Friday, **Tuesday April 1, 2025**
- **PHGY531 is a required course as part of the Honours program**

\*Those that are not accepted into the program should consider MIMM496/497: full-year research project, 6 credits