IMMUNOLOGY, PH.D.

Immunology **Head:** A. Marshall

Campus Address/General Office: 471 Apotex Centre, 750 McDermot

Avenue

Telephone: 204-977-5610

Email Address: Angela.Peloquin@umanitoba.ca

Website: umanitoba.ca/medicine/medicine/department-immunology (https://umanitoba.ca/medicine/medicine/department-immunology/) **Academic Staff:** Please see the Immunology website (https://

umanitoba.ca/medicine/medicine/department-immunology/#faculty-and-

staff) for Faculty information.

Immunology Program Information

The Department offers a diverse program of graduate studies and research in Immunology, leading to Master of Science and Doctor of Philosophy degrees.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (https://catalog.umanitoba.ca/graduate-studies/academic-guide/application-admission-registration-policies/).

Admission requirements for doctoral students are found in the Doctor of Philosophy General Regulations (https://catalog.umanitoba.ca/graduate-studies/academic-guide/doctor-philosophy-general-regulations/) section of the Guide.

Immunology Ph.D. Admission Requirements

The Department of Immunology requires a minimum TOEFL score of 250 (computer based) or 88 (internet based, with a minimum of 20 points from each section of the test.). In most cases a grade point average (GPA) above 3.5 is needed to be competitive for available positions in the program.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Immunology Ph.D. program of study (https://umanitoba.ca/explore/programs-of-study/immunology-phd/) page.

Degree Requirements

Candidates admitted directly into the Ph.D. program or wishing to transfer from the M.Sc. to the Ph.D. program must pass a thesis proposal defence taken within the first 18 or 16 months, respectively, of their admission into the Department. In addition, the candidacy examination required of all students in the Ph.D. program will be in the form of a research proposal.

Expected Time to Graduate: 4 - 5 years

Progression Chart

9 Credit Hour Option

Students Entering With a M.Sc. Degree in Immunology 1

| Students Entering With a M.Sc. Degree in Initialiology | | | |
|--|-----------------------------|-------|--|
| Course | Title | Hours | |
| Year 1 | | | |
| GRAD 7300 | Research Integrity Tutorial | 0 | |

| GRAD 7500 | Academic Integrity Tutorial | 0 |
|------------------------------|---|---|
| | Hours | 0 |
| Year 2 | | |
| IMMU XXXX | Courses in an area of the department | 6 |
| COURSE 7XXX | Approved coursework designated 7000 level | 3 |
| Thesis Proposal ² | | |
| | Hours | 9 |
| Year 3 | | |
| GRAD 8010 | Doctoral Candidacy Examination ³ | 0 |
| | Hours | 0 |
| Year 4 | | |
| GRAD 8000 | Doctoral Thesis | 0 |
| | Hours | 0 |
| | Total Hours | 9 |

- Students entering with a M.Sc. degree in Immunology do not need to take the IMMU 7070 or IMMU 7100. They will only need to take at least 6 credit hours offered by Immunology and/or other graduate departments.
- The thesis proposal is normally initiated within 18 months of beginning graduate studies in the Department, and must be completed within two years of starting the program.
- The written component of the exam is in the form of a grant proposal to a major funding agency.

Notes:

- All students are required to attend the weekly Immunology Research Seminar and weekly Immunology Journal Club for the duration of their program (2 hours per week Sept-May), and do a presentation once per year in each program. A minimum 80% attendance is required.
- Within the first 3 months of the program, advisory committee members should be presented with an outline of the proposed research.

15 Credit hour Option

M.Sc. Students Entering Without Adequate Background in Immunology

| Course | Title | Hours |
|------------------------------|---|-------|
| Year 1 | | |
| GRAD 7300 | Research Integrity Tutorial | 0 |
| GRAD 7500 | Academic Integrity Tutorial | 0 |
| IMMU 7070 | Introductory Immunology | 3 |
| IMMU 7100 | Advanced Topics in Immunology | 3 |
| IMMU XXXX | Courses in an area of the department | 3 |
| | Hours | 9 |
| Year 2 | | |
| IMMU XXXX | Courses in an area of the department | 3 |
| COURSE 7XXX | Approved coursework designated 7000 level | 3 |
| Thesis Proposal ¹ | | |
| | Hours | 6 |
| Year 3 | | |
| GRAD 8010 | Doctoral Candidacy Examination ² | 0 |
| | Hours | 0 |

Year 4

| Hours | 0 |
|-------------|----|
| Total Hours | 15 |

The thesis proposal is normally initiated within 18 months of beginning graduate studies in the Department, and must be completed within two years of starting the program.

Notes:

- All students are required to attend the weekly Immunology Research Seminar and weekly Immunology Journal Club for the duration of their program (2 hours per week Sept-May), and do a presentation once per year in each program. A minimum 80% attendance is required.
- Within the first 3 months of the program, advisory committee members should be presented with an outline of the proposed research.

18 Credit Hour Option

Students Entering with an Honours Bachelor Degree

| Course | Title | Hours |
|------------------------------|---|-------|
| Year 1 | | |
| GRAD 7300 | Research Integrity Tutorial | 0 |
| GRAD 7500 | Academic Integrity Tutorial | 0 |
| IMMU 7070 | Introductory Immunology | 3 |
| IMMU 7100 | Advanced Topics in Immunology | 3 |
| IMMU XXXX | Courses in an area of the department | 3 |
| | Hours | 9 |
| Year 2 | | |
| IMMU XXXX | Courses in an area of the department | 3 |
| COURSE 7XXX | Approved coursework designated 7000 level | 6 |
| Thesis Proposal ¹ | | |
| | Hours | 9 |
| Year 3 | | |
| GRAD 8010 | Doctoral Candidacy Examination ² | 0 |
| | Hours | 0 |
| Year 4 | | |
| GRAD 8000 | Doctoral Thesis | 0 |
| | Hours | 0 |
| | Total Hours | 18 |

The thesis proposal is normally initiated within 18 months of beginning graduate studies in the Department, and must be completed within two years of starting the program.

Notes:

 All students are required to attend the weekly Immunology Research Seminar and weekly Immunology Journal Club for the duration of their program (2 hours per week Sept-May), and do a presentation

- once per year in each program. A minimum 80% attendance is required.
- Within the first 3 months of the program, advisory committee members should be presented with an outline of the proposed research.

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (https://catalog.umanitoba.ca/graduate-studies/registration-information/). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

All new and returning students must meet with their advisor to determine their program of study prior to registration. Once the student has met with their advisor and subsequently receives approval from the Department Head, they must contact the Administrative Assistant, who will register the student in their courses.

All course additions and withdrawals (registration revisions) must be approved in the same manner.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (https://catalog.umanitoba.ca/graduate-studies/academic-guide/academic-performance-general/#BFAR) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- · GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (https://catalog.umanitoba.ca/graduate-studies/academic-guide/academic-performance-general/#GRAD7500) and Mandatory Research Integrity Online Course (https://catalog.umanitoba.ca/graduate-studies/academic-guide/academic-performance-general/#GRAD7300).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

The written component of the exam is in the form of a grant proposal to a major funding agency.

The written component of the exam is in the form of a grant proposal to a major funding agency.

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).