

Requirements

- Potential students are strongly advised to obtain a written agreement with a supervisor prior to submitting admissions application.
- Applicants are required to possess a four year bachelor's degree (or academically equivalent program) from an academic institution recognized by the Faculty of Graduate Studies.
- All applicants must meet the minimum GPA requirement of 3.1 out of 4.0 or equivalent in their last two full years of university study (60 credit hours).
- An admission fee of \$100.00 is REQUIRED at the time of application for Canadian/Permanent Residents and International Applicants.
- Official transcripts must be submitted from all post-secondary institutions attended.
- Proficiency in English is required by all applicants. This can be demonstrated prior to admission by:
 - i) Possessing a high school diploma or university degree from Canada or one of the countries on the English Language Proficiency Test Exemption List.
 - ii) Successfully completing an English Language Proficiency Test.
- two letters of recommendation
- a curriculum vitae

Course Requirement

Introduction to Pathology- PATH7020

- 6 credit hours

- Offered (January – May, alternating years)

1. Introduction to the principles of disease processes.
2. Multidisciplinary approach with instructors from across the Faculty of Medicine & other research institutes
3. Current/topical (e.g. Forensics, HIV, molecular diagnostics, West Nile)
4. Small class size and group discussions

TIPS for contacting a potential supervisor:

- Write an email of inquiry
- Introduce yourself: briefly state your interests & goals; education & GPA; past lab or work experience; hobbies
- Use proper grammar and punctuation
- Attach a 1 page c.v. or resume

Please submit graduate studies application material to:

Faculty of Graduate Studies
University of Manitoba
500 University Centre
Winnipeg, Manitoba
CANADA R3T 2N2



**Department of Pathology
Faculty of Medicine
University of Manitoba**

Graduate Studies in Pathology

Research Based MSc. Program

**Chair: Dr. Yvonne Myal,
Professor**

Department of Pathology
401 Brodie Centre
727 McDermot Avenue
Winnipeg, Manitoba
R3E 3P5

umanitoba.ca/faculties/medicine/pathology

Graduate Programs in Pathology

The Department of Pathology offers two programs leading to a Master of Science degree. Honours Science graduates with a strong background in biology can carry out course work plus either:

- 1) a [Research Based Program](#) and thesis (requires an agreement with a supervisor)
- 2) a Practicum leading to a paramedical qualification as a [Pathologists' Assistant](#)

Course offerings:

PATH7010 Investigative Pathology (6) The student will complete a supervised project in the field of anatomic and/or clinical pathology, the results to be submitted in an acceptable report. The student will be examined on his/her knowledge in the field relating to his/her project. *Prerequisite: PATH 7020 or departmental consent.*

PATH7020 Introduction to Pathology (6) This course introduces the student to the basic principles of disease processes, using case models to illustrate mechanisms. The pathologies of current infectious diseases such as HIV, West Nile, prion diseases are discussed as well as new molecular diagnostic approaches and forensics. Seminar presentations are required.

PATH7020 is a required course for both research and practicum M.Sc. programs

General info: pathology@cc.umanitoba.ca

Research Based M.Sc. Program

All students in this program are required to take a minimum of 12 credit hours of 700 level courses, to carry out a supervised research project and to present an acceptable thesis. Students interested in further research may continue in the same laboratory but register in the Ph.D. program of another department, or in the interdisciplinary Ph.D. program.

Potential applicants are strongly advised to contact a member of the research faculty to arrange a mutually agreed upon project and funding source before making an application.

Potential Supervisors:



Del Bigio, M.R., M.D. (1982), Ph.D. (1987) University of Manitoba, F.R.C.P.(C), Professor; Canada Research Chair in Developmental Neuropathology

Experimental neuropathology, hydrocephalus, brain hemorrhage, brain complications of premature birth, effects of substance abuse on brains, comparative neuropathology during brain development.



Ellison, C.A., Ph.D., (1998) University of Manitoba; D(ABHI); Assistant Professor

Immunological mechanisms underlying the development of pathological changes associated with graft-versus-host disease (GVHD), a complication of bone marrow transplantation in humans; regulation of immune responses directed against tumors of epithelial origin.



Gartner, J.G., M.D. (1976) McGill University, FRCP(C); Professor and Department Head

Immunopathogenesis of graft-versus-host disease (GVHD); the role of NK and gamma/delta T cells in the development and progression of intestinal GVHD; the mechanism underlying the ability of Keratinocyte Growth Factor to protect the recipient from developing acute lethal GVHD.



Myal, Y., Ph.D. (1989) University of Manitoba; Professor

Identifying breast/breast cancer specific biomarkers and understanding the biological role of these markers in tumorigenesis and breast cancer progression. Current focus of my laboratory is two specific proteins; claudin 1 in breast cancer, and studies on the function of the prolactin inducible protein/gross cystic disease fluid protein PIP/GCDFP-15.



Oble, D.A., M.D. (1999) University of Manitoba, Ph.D. (2004) University of British Columbia; Assistant Professor

Understanding enigmatic skin diseases including: cutaneous lymphomas and the pathophysiology of human psoriasisiform diseases.

