

Pathobiology: GDip, MSc, PhD

Research in the Department of Pathobiology addresses such diverse areas as pathogens of animals and how they interact with their hosts, emerging and zoonotic pathogens, antimicrobial resistance, immunologic and genetic bases of resistance to infectious disease, development and progression of cancer, and immune-mediated and inflammatory diseases. We work on diseases of farm animals, laboratory animals, fish, wildlife, zoo and companion animals, from the molecular level to that of the population.

ovc.uoguelph.ca/pathobiology

PROGRAM

The Master of Science (MSc) program is a thesis-based program completed in approximately 6 semesters (2 years). The MSc program requires the successful completion and defence of a research-based thesis.

The PhD program in Pathobiology is a thesis-based program completed in approximately 12 semesters (4 years). The PhD program requires the successful completion of a qualifying exam and the completion and defence of a research-based thesis.

The Graduate Diploma in Pathobiology (GDip) is a course-based program completed in approximately 3 semesters (1 year).

FIELDS

- Comparative Pathology
- Immunology
- Veterinary Infectious Diseases
- Veterinary Pathology

COLLABORATIVE SPECIALIZATIONS

Collaborative Specializations allow students to enhance their degrees with multidisciplinary research. The Department of Pathobiology participates in the following Collaborative Specializations:

- One Health
- International Development

Additional information can be found in the [Graduate Calendar](#).



Collaborative Specializations in Neuroscience, Regenerative Medicine and Toxicology may also be available; please consult with your prospective advisor.

ADMISSION REQUIREMENTS

In the Pathobiology department, the minimum admission requirements are:

- MSc: an honours undergraduate degree in a relevant field with a minimum average of 73% (B)
- PhD: an approved Master's degree with a minimum average of 77% (B+)
- GDip: a Doctor of Veterinary Medicine degree (or its equivalent) with an acceptable academic standing

Applicants must also confirm a faculty advisor before they apply. Please direct any questions regarding admission requirements to the Graduate and Research Programs team.

APPLICATION DEADLINES:

Ongoing See [website](#) for dates.

Entry: Fall, Winter, Spring

ARE YOU INTERESTED IN:

- Infectious diseases of animals
- Immunology
- Cancer development and treatment
- Veterinary pathology diagnostics and research
- Zoo medicine and wildlife
- One Health

CAREER OPPORTUNITIES:

- Biomedical research
- Animal health research and development
- Diagnostic activities in private and public sector laboratories
- Academia

CONTACT INFORMATION

OVC Graduate Research and Programs Team:

ovc.pathgrad@uoguelph.ca

Graduate Program Coordinators:

Dr. Janet Beeler-Marfisi
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Dr. Jeff Caswell
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Veterinary Science (Pathobiology): DVSc

This advanced training opportunity is designed for Doctor of Veterinary Medicine (DVM, or equivalent) graduates who want to deepen their expertise in clinical or anatomic pathology and contribute to the advancement of veterinary medicine. Directed by board-certified Clinical and Anatomic Pathologists, the program combines applied training through diagnostic service, specialized coursework and a thesis-based research project. You'll gain hands-on experience in interpreting laboratory results, managing complex cases across species, and using advanced tools such as flow cytometry, immunochemistry, and molecular diagnostic techniques.

[Pathobiology < University of Guelph](#)

PROGRAM

The Doctor of Veterinary Science (DVSc) program is a thesis-based program combined with clinical work completed in approximately 9 semesters (3 years). The DVSc program requires the successful completion of a qualifying exam and the completion and defence of a research-based thesis.

AREAS OF STUDY

The DVSc program in Pathobiology offers expertise in a number of areas:

- Anatomic Pathology
- Clinical Pathology
- Wildlife and Zoo Animal Pathology

ADMISSION REQUIREMENTS

- A DVM or equivalent degree that would allow the applicant to be eligible for a licence to practice veterinary medicine in Ontario is required for admissions consideration.



APPLICATION DEADLINES:

Pathobiology DVSc positions are advertised on the College website ([OVC Career Opportunities](#)) and through the American College of Veterinary Pathologists trainee centre ([ACVP](#)). These advertisements describe the application deadlines and required materials for each available position.

ARE YOU INTERESTED IN:

- Developing hands-on diagnostic expertise in veterinary pathology
- Specializing in clinical, anatomic, or wildlife and zoo animal pathology
- Investigating real-world disease problems through applied research
- Preparing for certification by the American College of Veterinary Pathologists (ACVP)

CAREER OPPORTUNITIES:

- Comparative pathology
- Toxicologic pathology
- Animal models
- Specialized veterinary diagnostic pathologist
- Researcher

CONTACT INFORMATION

OVC Graduate Research and Programs Team:

ovc.pathgrad@uoguelph.ca

Department Chair:

Brandon Lillie

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