## Doctor of Philosophy (PhD) Degree – Thesis Program

All students wishing to apply for this MSc graduate program in Veterinary Pathology must first have a faculty member in the Department of Veterinary Pathology who has agreed to supervise their program. Interested students should contact the department prior to making any application. If a supervisor is identified, the student is then invited to submit an application. In the event that no supervisor is found, the Department of Veterinary Pathology is unable to accept any application.

In the PhD program, the degree of expertise and independence expected is much greater than in the MSc program. Independent research with guidance is the main component. Knowledge of the subject area should be both broad and deep. At completion, the PhD graduate should be an expert in the dissertation topic. The place of diagnostic veterinary pathology in the PhD program is variable. Veterinarians in the PhD program may, upon graduation, seek academic positions that require clinical service and teaching as well as research. PhD students with DVM degrees may choose to learn diagnostic pathology provided that adequate progress has been made on their research project. Diagnostic training should not negatively impact the development of the skills and expertise in PhD research area. The time required to acquire the research skills and expertise cannot be reduced to acquire the additional diagnostic experience. Instead, the duration of the total program must be increased. Combined diagnostic and research training during PhD program should be discussed with and approved by the supervisor and the Graduate Advisory Committee.

Graduates should be ready to enter junior academic or research positions. They should be capable of independent research and know how to create hypotheses that can be tested. They should have experience in presentation of data at scientific meetings and at least some teaching experience.

Graduates of doctoral programs will demonstrate exceptional aptitude within an area of study (often having completed a master's degree prior to admission). They should have broad knowledge of general area of their discipline and in-depth knowledge of their research field. Doctoral programs will cultivate a thorough understanding of the subject matter, autonomy, creativity, sound judgment skills, ethical maturity and academic integrity, exceptional written and oral communication skills, and analytic thinking skills. Doctoral programs require coursework, written and oral exams (qualifying and comprehensive) in relevant discipline, and satisfactory defense of an original contribution to knowledge presented in the form of a dissertation in the area of study. A doctoral program is expected to be able to be completed in four years unless it is combined with diagnostic training.