PATHOLOGICAL RESERCH PROJECTS IN VETERINARY PATHOLOGY

Veterinary Pathologists diagnose and investigate diseases of animals. Clinical Pathologists are specialized in laboratory assessment of samples such as blood, bone marrow, urine and tissue biopsies.

CANCER RESEARCH

Leukemia and lymphoma

- Cancer of blood cells is as common in animals as in people
- There are many different types of leukemia and lymphoma
- Some cause very little disease and allow the animal to live a long time, while others cause death within weeks

Research goals: Develop better tests to diagnose and characterize different types of leukemia and lymphoma

Collaborators:
- Dr. Paul Woods, Medical Oncologist / Internal Medicine, Ontario Veterinary College
- Dr. Tony Mutua, Medical Oncologist, Ontario Veterinary College
- Dr. Vicky Sabine, Clinical Research Coordinator, Ontario Veterinary College

ASTHMA RESEARCH

Asthma in horses

- Many older horses in Canada develop “heaves” or “recurrent airflow obstruction” (RAO)
- Disease results from chronic exposure to dusty hay, straw and mold spores
- Affected horses cough, have excess mucus production and airway constriction, and have difficulty expiring air

Research goals: Identify why this disease develops and how to diagnose it earlier

Collaborators:
- Dr. Cameron Aikenley, Hospital for Sick Children

FELINE VIRUS RESEARCH

Host response to FIV

- Cats are susceptible to infection by the feline immunodeficiency virus (FIV)
- FIV is very similar to HIV and causes AIDS in cats
- Cats vary in how they respond to FIV infection and how quickly they develop immunodeficiency

Research goal: Identify determinants of variable progression from FIV infection

Collaborators:
- Dr. Steve Little, Dvm, New Cat Hospital
- Dr. Olaf Beke, Ontario Veterinary College