

Dear Supporters of the Miso Harris Fund for Canine Cancer Research,

Since our last progress report, the Miso Harris Fund for Canine Cancer Research has supported **four additional studies** led by members of our clinical research team of board-certified veterinary oncologists.

These studies have direct, real-time clinical impact and were designed with the goal of improving the lives of dogs with cancer and their families, either through enhancing our ability to provide families with updated information to aid in treatment decision making, examining impact and side effects of existing treatment protocols, and developing novel treatment options.

1 **RESEARCH PROJECT ONE** LOPP Versus CHOP Chemotherapy for Canine T Cell Lymphoma

Lymphoma is the most common blood cancer in humans and dogs. Two main types of lymphocytes can develop into lymphoma: B lymphocytes (B cells) and T lymphocytes (T cells). The current standard of care for first-line treatment of lymphoma is chemotherapy, comprising a combination of vincristine, cyclophosphamide, doxorubicin, and prednisone (CHOP). Several studies have demonstrated that T cell lymphoma is associated with a poorer outcome compared to B cell lymphoma when treated with CHOP, and most dogs with T cell lymphoma die within 8 months.

Over the past several years, we conducted a prospective clinical trial treating dogs with T cell lymphoma at Penn Vet with the support of the Miso Harris Fund. Excitingly, we documented improved outcomes in patients receiving an alternative chemotherapy protocol combining lomustine, vincristine, procarbazine, and prednisone (LOPP). The results of this study were presented during the 2025 Veterinary Cancer Society conference and will have a global impact on evidenced-based treatment recommendations made by veterinary oncologists. We are currently writing the manuscript and plan to publish these results by the end of the year.

2 **RESEARCH PROJECT TWO** Lomustine (CCNU) Chemotherapy for Dogs with Cancer

This study collected data from veterinary institutions across the country to evaluate real-world use of lomustine (CCNU) chemotherapy to treat dogs with cancer. We identified more than 1,500 dogs treated across 30 sites in 21 states. Preliminary findings demonstrate regional variation in CCNU prescribing, supportive-care practices, documented toxicity, and treatment modification. This work has been selected for presentation at the national Veterinary Cancer Society conference in September 2026, and we are now finalizing the analyses and preparing the manuscript.

3 RESEARCH PROJECT THREE Antibody Sequencing for Canine B Cell Lymphoma

Funds generously donated from the Miso Harris Foundation enabled us to obtain a sequence from an antibody that will be used to help support the diagnosis and treatment of dogs with B cell lymphoma. The number of antibodies available to veterinary oncologists for diagnosing and treating canine patients is limited, so having this sequence is a highly valuable resource as we design clinical trials and look to improve diagnostics and treatment outcomes.

4 RESEARCH PROJECT FOUR T Cell Infiltration in Canine Lung Cancer (Pulmonary Carcinoma)

The prognostic implications of tumor infiltrating lymphocytes (TIL) have been recorded across multiple tumor types, such that patients with T cell inflamed (hot) tumors often have improved outcomes compared to patients with non-inflamed (cold) tumors. Following our successful publication in canine renal cell carcinoma (featured on the Miso Harris Fund website), we are conducting a sister study to evaluate TIL in canine pulmonary carcinoma.

Similar to renal cell carcinoma, dogs diagnosed with lung cancer have a wide spectrum of outcomes following surgery ranging from cure to the, often fatal, development of cancerous spread. Unfortunately, predicting which patients are at risk of spread remains challenging. The goal of this study is to help us better predict which patients are at higher risk of spread and determine whether or not they may benefit from treatment with immunotherapy. Resources from the Miso Harris Fund are earmarked to support this early phase study.

Together, these projects demonstrate how the Miso Harris Fund supports both immediately impactful clinical research and the foundational work needed to advance future cancer care. We are deeply grateful for this support and for the opportunities it has created for collaborative research, resident training, and improved outcomes for dogs with cancer.

Sincerely,

Clinician Researchers of the Comprehensive Cancer Care Service



SERVICE HEAD, COMPREHENSIVE CANCER CARE

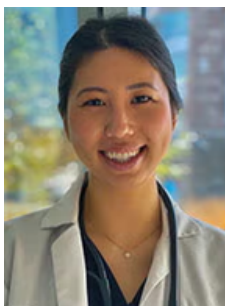
Pascale Salah, DVM, DACVIM

Professor, Clinical Medical Oncology



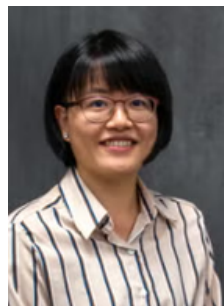
**Jennifer Lenz,
DVM, DACVIM**

Assoc. Professor of
Small Animal Medical
Oncology (CE)



**Ester Yang,
VMD, DACVIM**

Assistant Professor
of Clinical Medical
Oncology (AC)



**Hannah Cheng,
DVM, MVM, DACVIM**

Assistant Professor
of Medical Oncology
(AC)



**Matthew J. Atherton,
BVSc, PhD, DECVIM**

Assistant Professor of
Immuno-Oncology



**Thomas Lee,
DVM, DACVR**

Assistant Professor in
Radiation Oncology (CE)



**Lillian E. Duda,
VMD, DACVR**

Clinical Professor of
Radiation Oncology (AC)