The Comprehensive Cancer Care Team  
at Penn Vet’s Ryan Hospital

Ryan Hospital’s Comprehensive Cancer Care Program is led by a world-class team of board-certified veterinarians who each offer a unique set of techniques and expertise for treating cancer.

CORE TEAM

MEDICAL ONCOLOGY
Penn Vet’s medical oncologists treat animals suffering from cancer with chemotherapy, biological therapies, or other cancer-fighting drugs.

Erika Krick, VMD  
Assistant Professor of Oncology, Clinician Educator  
Diplomate, American College of Veterinary Internal Medicine (Oncology)  
Clinical Specialties: Medical Oncology, Chemotherapy  
Research Areas: Feline Lymphoma, Canine Mast Cell Tumors, Cancer Cachexia

Pascale Salah, DVM  
Staff Oncologist  
Diplomate, American College of Veterinary Internal Medicine (Oncology)  
Clinical Specialties: Medical Oncology, Chemotherapy  
Research Areas: Canine Lymphoma, Rescue Chemotherapy for Lymphoma, Canine Hemangiosarcoma

Karin Sorenmo, DVM  
Professor of Oncology  
Diplomate, American College of Veterinary Internal Medicine (Oncology)  
Diplomate, European College of Veterinary Internal Medicine - Companion Animal (Oncology)  
Clinical Specialties: Medical Oncology, Chemotherapy  
Research Areas: Canine Cancer, Mammary and Prostatic Cancer, Canine Hemangiosarcoma, Oncology

SURGICAL ONCOLOGY
Penn Vet’s surgical oncologists provide life-saving surgical procedures to remove a wide variety of tumors. Our surgical oncologists have advanced training and knowledge of tumor biology and the role of surgery in the multimodality treatment of cancer.
Lillian Aronson, VMD  
Professor of Surgery  
Diplomate, American College of Veterinary Surgeons  
Clinical Specialties: Soft-Tissue Surgery, Renal Transplantation Surgery  
Research Areas: Microvascular Surgery, Renal Transplantation, Urolithiasis, Urinary Tract Surgery

Michelle Giuffrida, VMD  
Lecturer in Surgical Oncology  
Clinical Trials Oncologist  
Fellow of Surgical Oncology, American College of Veterinary Surgeons  
Diplomate, American College of Veterinary Surgeons - Small Animal

David Holt, BVSc  
Chief, Section of Surgery  
Diplomate, American College of Veterinary Surgeons  
Clinical Specialties: Soft-Tissue Surgery  
Research Areas: Imaging Cancer During Surgery, Portosystemic Shunts, Brachycephalic Airway Disease, Laryngeal Paralysis

RADIATION ONCOLOGY
Penn Vet’s radiation oncology staff prescribe radiation therapy to shrink or eliminate tumors. Significant technological advances allow for improved targeting of the cancer and sparing of adjacent normal tissues. Penn Vet offers patients the widest range of radiation treatment options using a linear accelerator. Radiation therapy can be used as a sole treatment modality, or in combination with surgery and/or chemotherapy to achieve control of cancer and sometimes even cure it. When this cannot be achieved, radiation can still provide significant alleviation of symptoms and improved quality of life.

Veterinary patients are anesthetized for each dose of radiation to ensure they remain still during the treatment. The patient’s electrocardiogram, blood pressure, and respiration are monitored using sophisticated equipment. A wide selection of modern anesthesia drugs accommodates each patient’s individual requirements and provides a quick recovery from anesthesia. This allows radiation to be safely administered five days a week.

Treatment is performed by a team of specialists, including a board-certified radiation oncologist and anesthesiologist, in conjunction with certified veterinary technicians and nurse-anesthetists specifically trained in radiation oncology and anesthesia.

Lili Duda, VMD  
Staff Veterinarian and Service Head, Radiation Oncology
INTERVENTIONAL RADIOLOGY
Penn Vet’s interventional radiology staff use fluoroscopy, an imaging technique using X-rays to obtain real-time moving images of the internal structures of a patient. Through this technique, they gain access to different tubular structures in the body such as the trachea, ureter, and arteries in order to deliver materials for diagnostic and therapeutic purposes. Interventional radiology provides viable alternatives for patients in whom conventional therapies are declined, not indicated, or associated with excessive morbidity or mortality. And the procedures — such as tumor embolization (using beads or other substances to block a tumor’s blood supply) — are performed with very small incisions.

Our interventional radiologists also install subcutaneous vascular access ports (SVAPs) to reduce the time, trauma, and discomfort associated with the placement of multiple short-term catheters. Access to the circulatory system is necessary in order to ensure the patient’s safety during the multiple anesthesias required for animals undergoing radiation therapy. In many animals, there is difficulty maintaining this access throughout a course of therapy with multiple short-term catheters, because blood vessels can become scarred, collapsed, and inflamed when they are repeatedly used. SVAPs not only ensure a simple, non-stressful method to gain vascular access, but they also minimize the need to use multiple veins, thereby preserving these vessels for future use (such as for blood tests, anesthesia, fluid supplementation, or drug therapy).

Dana Clarke, VMD
Lecturer in Interventional Radiology and Critical Care
Diplomate, American College of Veterinary Emergency and Critical Care
Clinical Specialties: Interventional Radiology, Critical Care

ADDITIONAL RESOURCES

DENTISTRY & ORAL SURGERY
Ryan Hospital clients also have access to Penn Vet’s world-class dentistry and oral surgery team, distinguished by their training in maxillofacial cancer surgery. The oral cavity is the fourth most common site of malignant neoplasia in dogs and cats. The treatment of choice for most oral and maxillofacial tumors (lip, cheek, tongue, tonsil, mandible, maxilla, palate, etc.) is wide surgical excision. Most mandibulectomies, maxillectomies, and other radical surgeries can be performed without significant compromise of quality of life.

NUTRITION
Penn Vet is one of only a few veterinary schools in North America with board-certified small animal clinical nutrition specialists on staff. Nutrition is essential in managing any
disease, either by providing nutrients to support a pet through illness and treatment, or by affecting the disease process directly. This is particularly true in pets with cancer. Nutritional assessment and intervention can result in changes in diet or feeding strategies that may improve quality of life or treatment outcomes. Penn Vet’s clinical nutritionists and oncologists are collaborating on research to determine the relationships between nutritional status and response to cancer treatment. Types and symptoms of cancer vary widely, and there is much conflicting advice available to pet owners regarding types of diets and particular supplements, ingredients, or nutrients. Nutritional counseling can help pet owners provide the best care possible to their pet.

RADIOLOGY
Veterinary radiology at Penn Vet combines trailblazing research, outstanding education, and clinical excellence. Clinicians with specialty expertise provide clinical imaging and radiation therapy for Ryan Hospital patients. Our diagnostic imaging capabilities include digital radiography, fluoroscopy, ultrasonography, 16-slice helical computed tomography (CT Scan), and magnetic resonance imaging (MRI).

ANESTHESIA
Penn Vet was one of the first veterinary hospitals to have anesthesia as a special department. Throughout the years, veterinary anesthesiology has followed human medicine with regard to providing the safest possible anesthetics, assisted ventilation and oxygen delivery, and constant monitoring and support of vital status. Penn Vet’s anesthesia staff members are responsible for understanding and monitoring EKG, blood pressure, pulse oximetry, and end tidal CO2 using state-of-the-art anesthesia machines, ventilators, and monitors.

INTENSIVE CARE UNIT
The Intensive Care Unit at Penn Vet’s Ryan Hospital is dedicated to providing the highest quality care to critically ill patients. The unit is staffed 24 hours per day, 365 days per year by a team of board-certified faculty and specialty-trained technicians who work closely with residents, interns, and students. Sometimes cancer patients need stabilization in order to gain time to allow cancer treatments to work. The ICU team has particular expertise in managing frail cancer patients with problems such as difficulty breathing, bleeding from tumors, severe pain, or nutritional deficiencies. In addition, the team provides complete support to post-operative cancer patients during their recovery from life-saving cancer surgery, with a particular focus on cardiovascular stabilization, pain management, and heading off complications.

GRIEF SUPPORT
In addition to offering comprehensive diagnostics and treatment options, the Ryan Hospital Comprehensive Cancer Care team is also committed to excellent communication and emotional support for owners of pets suffering with cancer. Founded in 2010 and led by Penn Vet’s highly valued grief counselor, Michele Pich, MA, MS, Cleo’s Caregivers Group is a support group aimed at helping those caring for chronically ill, terminally ill, or aging pets. Michele’s background in psychology and counseling, her experience in counseling people with cancer and their family members,
and her expertise in the human-animal bond have influenced her work. The support group is named in memory of Michele’s loving dog, Cleo, who succumbed to cancer. Individual and family pet grief counseling services are also provided free of charge for clients via telephone or in person at the hospital.