**OVC PET TRUST** 

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## Celebrating JIN 12 A RESEARCH CHAMPION FOR FELINE HEART HEALTH

### Plus

UNCOVERING HOW VETERINARY CARE IS DELIVERED TO MADE-VULNERABLE COMMUNITIES

COMBATTING CANCER WITH NANOTECHNOLOGY





IMPROVE LIFE.



FROM THE DEAN, ONTARIO VETERINARY COLLEGE As some of you may have noticed, for the first time, we have featured a cat on the cover of Best Friends magazine. Introducing Jim on the cover aligns with our expanded focus on feline health, supported by the appointment of Dr. Sonja Fonfara as the University of Guelph's first Research Chair in Feline Health.

The stories in this issue highlight the significant role that research plays in shaping the future of veterinary care. Research at OVC ensures continuous improvement in our approaches to clinical care at several levels. Development of new programs and services will enhance the interaction of veterinary professionals with patients.

Research performed through the Kim and Stu Lang Community Healthcare Partnership Program (CHPP) explores fundamental questions about barriers to accessing veterinary care. Results from this research are shaping how programs and services are developed and delivered at the community level using community engagement approaches to empower veterinary professionals and their clients.

You'll also see a piece in this issue on research out of the Ontario Agricultural College (OAC) and OVC's Campbell Centre for the Study of Animal Welfare (CCSAW). This research examines how choice and consent affect therapy dogs' well-being; this new understanding can, in turn, lead to better patient care and interactions.

Research profoundly impacts how students, staff and faculty at OVC teach, train and provide care. Much of this research would not be possible without generous contributions from our donors. Together, we improve life for animals and those who love them.

Thank you for your ongoing and dedicated support for all the work we do.

Dr. Jeff Wichtel Dean and Professor Ontario Veterinary College University of Guelph BEST FRIENDS EDITORIAL TEAM

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As part of the Ontario Veterinary College (OVC) at the University of Guelph, OVC Pet Trust is Canada's first charitable fund dedicated to advancing pet health and well-being. We do this by raising funds to support innovative discoveries, healthcare and education that improves the prevention, diagnosis and treatment of diseases of companion animals. Since 1986, more than \$75 million has been raised to improve life for pets and the people who love them. As of 2024, OVC is ranked first in Canada, third in North America and among the top 10 worldwide for veterinary science by the Quacquarelli Symonds' World University Rankings.

#### TO LEARN MORE OR TO DONATE VISIT PETTRUST.CA

#### WINTER 2025

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## BACK COVER

# On cover: OVC patient Jim. Photo credit: Katie Duncan.





It has been just over a year since I started at the Ontario Veterinary College (OVC)... and what a year it's been! I have been doing a lot of learning, observing and listening, and one thing has become abundantly clear: OVC Pet Trust has *impact*.

When walking through the Companion Animal Hospital, it is evident that almost every space has been touched by OVC Pet Trust: surgery and anesthesia facilities, endoscopy and minimally invasive procedures suites, the intensive care unit, the cancer centre, the biobank, comfort rooms and the recently-created euthanasia garden, to name a few. But it doesn't end there.

Close to 80 per cent of clinical trials at OVC – the research that pushes veterinary medicine forward – are made possible through the generosity of OVC Pet Trust donors. Many faculty and staff positions, including our veterinary social worker, are funded as well. These employees, spaces and research all play a role in the care that our pets receive, both at OVC and in the broader veterinary community, where practitioners rely on the OVC Health Sciences Centre for specialty and emergency care. All of that is possible because of OVC Pet Trust supporters like you.

What might be less apparent is how all these areas work together to provide a comprehensive care experience for clients that come through the doors of the hospital. When my family dog, Ollie, was referred to OVC last November, I didn't know just how many departments and teams would provide care to him. Ollie came in needing spinal surgery, so his first stop was with the neurology team. He was subsequently seen by cardiology to ensure that his heart could handle the surgery, by anesthesiologists to prepare him for surgery, by the pharmacy team to provide the proper medications for his after-care, and even by oncology, which was called in to consult when they noticed an abnormal nodule on his thyroid.

Despite being a "neurology patient," our little Dachshund was seen by a range of specialists who worked collaboratively to ensure that he had the best possible outcome. And this is the case for almost every patient at OVC; it is rare that a pet will come into the hospital and see only one team. Our veterinary teams work crossfunctionally to support each other and, by extension, to support pet health. We are grateful that Ollie is back to his funny, playful self now.

I come to work every day and am humbled by the incredible work being done and by the brilliant people doing it. I am inspired by our donors and their stories and feel honoured that I get to play a small part in improving life for pets and the people who love them.

Alison McLaren Manager, OVC Pet Trust Ontario Veterinary College University of Guelph

## OVC MEWS

#### WORMS & GERMS BLOG AND PODCAST PROMOTES SAFE PET OWNERSHIP

An endless array of information is constantly available to us via the internet. That massive variety also means that companion animal caregivers can have trouble accessing accurate, unbiased and easily understood news and information. And that's why the Worms & Germs Blog (wormsandgermsblog.com) offers just the facts on current infectious diseases in household pets and horses, and occasionally other animals too.

The blog is coordinated by Dr. Scott Weese, professor in the Department of Pathobiology and director of the Centre for Public Health and Zoonoses at the Ontario Veterinary College, and Dr. Maureen Anderson, lead veterinarian, animal health and welfare with the Ontario Ministry of Agriculture, Food and Agribusiness.

Worms & Germs shares the latest information on zoonotic diseases – diseases that can be transmitted between animals and people. The blog provides information about many other infectious disease topics that have public impact, including diseases transmitted by urban wildlife, exotic pet ownership and emerging diseases in animals such as influenza.

Many of the blog topics are raised by questions received from the public and from veterinarians and public health professionals. The Worms & Germs Blog team also addresses topics through information sheets that are free for downloading, printing and distribution and through a podcast begun in 2024. You can access the first episodes of the *WormsandGermsPod* anywhere you tune in to podcasts.



#### NEW OUTDOOR "EUTHANASIA GARDEN" HELPS FAMILIES SAY THEIR FINAL GOODBYES AT THE OVC HEALTH SCIENCES CENTRE

When it's time to say goodbye to a beloved pet, the veterinary care team at the Ontario Veterinary College's (OVC) Health Sciences Centre (HSC) is committed to providing a compassionate and comfortable space for pets and their families.

Thanks to support from OVC Pet Trust, the OVC HSC can bring those final goodbyes into the sunshine and outdoors in its new euthanasia garden.

The secluded garden is tucked away in a private courtyard planted with carefully selected blooms and offering a range of comfortable seating options for both caregivers and their pets. This space allows companion animals to peacefully pass amid the smells and sounds of the outdoors.

"This space provides an alternative peaceful surrounding for owners to be able to have a dignified farewell for their special furry family member," says Vicky Heinbecker-Marsili, Registered Veterinary Technician (RVT) who works with the OVC HSC's oncology service. "My vision for this area was to have a beautiful, calming end-of-life outdoor setting. Thanks to OVC Pet Trust, this area will be memorable for many of our clients."



#### NEW OVC PROFESSORSHIPS TO ENHANCE RESEARCH ON HUMAN-ANIMAL BOND

Humans and companion animals often share lifelong bonds. At the Ontario Veterinary College, two new five-year professorship positions have been established to maintain and enhance the college's internationally recognized research program in studying the humananimal bond.

Funded by the Marion and Herb Hallatt Beau Valley gift, each professorship holder will study human-animal relationships and their roles in mediating the health and well-being of animals, people and communities. The award is inspired by Marion and Herb Hallatt's love of animals and their deep belief in the power of the human-animal bond.

One professorship was awarded to Dr. Lauren Grant, an assistant professor of environmental and public health in OVC's Department of Population Medicine. She aims to improve the health of pets and humans by exploring the effects of the human-animal bond with advanced analytical approaches and through a One Health lens, an integrated and unifying approach to balance and optimize the health of people, animals and the environment. Grant's work explores the interconnectedness of pet health and human health and the role of the human-animal bond in mediating these relationships and measures preferences for veterinary care using a patient-centered approach.

The second professorship was awarded to Dr. Lee Niel, an associate professor and holder of the Col. K.L. Campbell Chair in Companion Animal Welfare in OVC's Department of Population Medicine. Niel's research focuses on cats, rabbits and dogs and seeks to enhance animal welfare and human-animal interactions by increasing understanding of animal needs and developing new strategies to meet those needs. While most research on companion animal health and welfare focuses on dogs, Niel aims to fill a gap in research on cats and rabbits with this professorship.

#### OVC EMBARKS ON \$33-MILLION FUNDRAISING CAMPAIGN TO BUILD NEW MEDICAL AND SURGICAL LEARNING CENTRE

The Ontario Veterinary College (OVC) at the University of Guelph is Canada's top veterinary school, graduating around 120 veterinarians annually. To address Ontario's pressing need for veterinarians, particularly in underserved northern and rural communities, the University of Guelph has launched the Collaborative DVM Program (CDVMP) in partnership with Lakehead University. A crucial component of OVC's CDVMP expansion is the new Medical and Surgical Learning Centre (MSLC). Fundraising is underway to build a new multi-story centre in which students will hone their skills and build their confidence as they prepare for life as practicing veterinarians. The new MSLC will provide: modernized, dedicated areas for students to practice their foundational pre-surgical, surgical, post-surgical and medical skills; hands-on learning experiences through the development of two new, updated and expanded surgery suites - a surgical lab and a surgical foundations suite for training on animal models; dedicated patient preparation, treatment and recovery rooms; a designated room for dentistry training; and state-of-the-art facilities for teaching and learning clinical skills that are foundational to companion animal, equine, farm animal and wildlife practice. The MSLC will also provide space for the Kim and Stu Lang Community Healthcare Partnership Program (CHPP), expanding access to veterinary care in service to the community, as well as dedicated space for pets receiving care through partnerships with humane societies. Learn more about the project and how you can donate at uoguel.ph/OVCMSLC.





## CANADIAN VETERINARY MEDICINE PODCAST "VET SESSIONS" LAUNCHES ITS FOURTH SEASON

Smith Lane Animal Hospital, a small animal primary care clinic in the Hill's Pet Nutrition Primary Healthcare Centre at the Ontario Veterinary College, is home to more than a state-of-the-art companion animal hospital, education facility and fitness and rehabilitation centre.

It is also where Vet Sessions, a Canadian veterinary medicine podcast, is coordinated and recorded. Released biweekly throughout the academic year, Vet Sessions aims to tackle common clinical questions and examine what it means to be a primary care veterinarian. Each episode features a guest who is often a renowned expert in their field along with veterinarian hosts Drs. Omar Khan, Shannon Gowland and Tiffany Durzi.

Supported by OVC Pet Trust, Vet Sessions is intended for anyone interested in learning more about small animal veterinary clinical medicine and primary care. The podcast launched its fourth season this fall, and you are invited to join its more than 30,000 listeners wherever you get your podcasts.

## Barriers to Access

Uncovering how veterinary care is delivered to madevulnerable communities

Written by Katie Duncan



Dr. Quinn Rausch

For some, accessing veterinary care is a relatively easy decision that provides options and choices to pet caretakers for preventative, sick and emergency care. There is choice in the clinic, veterinarian, type of care and distance to the clinic.

For others, there are significant barriers to accessing veterinary care. The most often talked about is cost of care, but some caretakers also face challenges unique to them or their communities, including lack of available clinics or appointments in their geographical area, barriers to the vet-client relationship, lack of cultural safety or knowledge, limited hours of operation, transportation challenges and language barriers.

Lack of access to animal healthcare can have many implications, including poor welfare for untreated animals, as well as an increased risk of zoonotic diseases or behavioural concerns. It also directly impacts human mental and physical health as these barriers weigh on their caretakers. A new study funded by PetSmart Charities of Canada® and led by Postdoctoral Fellow, Dr. Quinn Rausch and Professor in Community and Shelter Medicine, Dr. Lauren Van Patter, seeks to understand the Canadian barriers to veterinary care and how those gaps are being addressed by programs and services across the country. This research comes from the Kim and Stu Lang Community Healthcare Partnership Program (CHPP) at the Ontario Veterinary College (OVC).

There are barriers to care in every community; however, where those barriers intersect in a particular area, is when we see significantly underserved communities. Rausch explains that it's important for veterinary clinics to do a scan of the communities they serve to glean insights into the challenges that are unique to them so services can be delivered in a holistic and accessible way.

"Understanding all of these challenges helps clinics better develop their services and give care to their clients," Rausch says. "[A practice] can offer a low-cost clinic in a certain location, but if that community also suffers from lack of transportation or has had a poor experience receiving veterinary care due to racism or systemic oppression, that low-cost clinic is going to look like it's not meeting a community need. Multiple intersecting barriers specific to the community need to be addressed for a service to be effective in increasing access."

Rausch and Van Patter undertook a national survey to understand what services currently exist across Canada that address barriers to accessing veterinary care. Ninetyseven organizations participated, with lots of variation in the services they offer to increase access to care, from telehealth, to pop-up clinics and northern remote brick-and-mortar clinics. There was also a mix of forprofit, non-profit and educational institutions who pair student learning with accessible care.

"Something that stood out to me in analyzing the survey results was how well service providers seem to understand the general barriers to accessing veterinary care, indicating that they're aware of what's going on at a national level," Rausch says.

Rausch found it encouraging that many organizations are using tools to lessen the financial and geographic barriers to care but found



services were happy with it and got what they needed and if they would use it again," Rausch explains.

More importantly, there is no data from the people who might need the service but didn't use it. If there is a gap in the service, that information might help clinics understand where and why. The research team's next steps will take what they learned about how services are delivered and work to develop an evaluation tool to help organizations measure their impact.

"We're hoping to build capacity, teach the value of evaluation and integrate it into organizations to make things easier," Rausch explains. "The hope is it will help them make the most of their resources for services that are useful to their communities while helping to build deeper relationships with the people they are hoping to help."

If Rausch could encourage pet caretakers to take away one thing from these research results, it would be to encourage practicing care before judgment.

"Removing the blame from madevulnerable populations and placing it rightfully on the systems that oppress allows us to have compassion for our fellow humans and community members. That care leads to giving other pet caretakers the benefit of the doubt, being generous with our shared resources and supporting social programs to dismantle inequity."

To learn more about CHPP, please visit chpp.uoguelph.ca.

it interesting that some of the tools selected may not be effective for the barrier they're trying to address.

"For instance, offering payment plans so clients can access services is great, but clients will be met with another barrier if they're required to do a credit check," Rausch shares. These service nuances are why it's so important for veterinarians and organizations setting up services to understand the community-level challenges their clients face.

The research team also uncovered that very few organizations address the intersecting points of barriers to care that could prevent madevulnerable communities from accessing care. For instance, in remote communities, having access to transportation via a clinic shuttle is helpful but it is also important to alleviate financial costs and provide assistive technology for people with disabilities, depending on the needs of that area.

"All it takes is for one barrier to prevent a client from seeking veterinary care," Rausch says. "We're hopeful this research can help us understand what support organizations need to achieve the least amount of barriers, with true partnership from individual communities."

One of the challenges identified by service providers in focus groups that followed the national survey was how to measure the efficacy of the services themselves, in particular, going back to their clients to follow up and ask questions about perceived access to care.

"We can look at how services are being used all day long, but that number measures the service, not the outcome. It's not telling us whether the people who used the

## a day in the life

of an Internal Medicine Resident

Written by Hannah James

Dr. Camille St. Jean scans her patient schedule for the day. This quiet early morning moment is the calm before the storm. As an Internal Medicine resident at the Ontario Veterinary College (OVC), Camille's job demands intense multitasking, critical thinking, and a positive attitude.

The Internal Medicine team at the OVC Health Sciences Centre (HSC) diagnose and manage a variety of conditions in their patients: autoimmune diseases, hormonal imbalances and thyroid disorders, bacterial, viral, and parasitic infections, inherited conditions and toxic diseases, digestive system disorders, and kidney and urinary system conditions. They uncover clues through history taking, physical exams, diagnostic imaging and laboratory testing.

During her three-year residency, Camille has collaborated closely with specialists in medicine, cardiology, oncology, and neurology to solve complex cases. She has mentored junior residents and student veterinarians, sharing her knowledge and passion for internal medicine. It's clear that Camille is respected among her colleagues for going the extra mile to arrive at a diagnosis and treatment plan and today is no different.



#### MORNING

Camille's morning begins in the Residents' Duty Office reviewing her schedule and preparing for her day. Her first patient is Duke, a six-yearold Shepherd-Malamute mixed breed from Kasabonika Lake First Nation in Northern Ontario. Duke's guardian, Erin Manahan, drove to OVC from the Thunder Bay area, seeking treatment for Duke's sneezing and nasal discharge. Duke was treated last year for aspergillosis, a spectrum of infections caused by fungi from the Aspergillus genus often found in wooded areas or leaf litter. Despite previous antifungal treatment, Duke's symptoms have returned.

In the exam room, Camille pets and cuddles Duke, who lopes around looking for attention, eventually squeezing onto one of the chairs meant for clients. All the while, he is sneezing, and his nose is running, but thankfully, Camille notes, no signs of blood.

The plan for the day includes blood work, a CT scan to examine his nasal passages, and inserting a tiny camera scope inside his nose in the Stone Endoscopy Unit, a space named after former OVC dean Dr. Elizabeth Stone, made possible by a \$500,000 gift from the estate of long-time donor Mona Campbell.

Camille leads Duke into a treatment room. Here, Registered Veterinary Technicians (RVTs), Jayme Moriarty and Sarah Birch take a blood sample. "He's face shy," Camille notes as they try to keep this gentle giant relaxed. Noticing Duke squirm for a moment, Camille empathizes saying, "Duke, I know. You would rather be home."

Camille pops down the hallway to consult with the Anesthesia team. RVT, Karen Avent, has booked Duke for a CT scan at 10:30 a.m. to get a clearer picture of what's going on in Duke's sinuses.

Next, it's time for a team huddle to assess cases and plans for the day. Camille is joined by OVC intern Dr. Brooklyn Bourgeois and Dr. Allison Collier, an assistant professor in the Department of Clinical Studies and board-certified internal medicine specialist. They review their individual patients. There's a cat with anemia; a dog whose owner has reported excessive panting and respiratory distress; a dog that has potentially eaten a pee pad; a senior cat with diabetes; and a dog with signs of Cushing's disease — a condition that occurs when the body produces too much cortisol hormone.

Dr. Collier quizzes Brooklyn on her cases: "Is there a history of coughing? What differentials do you have?" Differential diagnosis, a term used in medicine, is the process of critical evaluation and



In photos: Camille performs an endoscopy with Drs. Allison Collier and Alex zur Linden (above) and OVC patient Duke (below) is examined.



distinguishing between two or more conditions that may cause similar clinical signs. Now, Camille calls the Anesthesia team to prep Duke for his CT scan.

With the morning's team consult complete, there is no time to waste. Camille sees an adorable Scottish Fold cat whose owners have come from Toronto for specialized treatment. Moments later she is back to check on Duke's CT scan. Camille heads to radiology to speak with Dr. Alex zur Linden, a veterinary radiologist and assistant professor in the Department of Clinical Studies. "I don't like the look of those sinuses," he says.

Dr. Zur Linden notes bone thickening in Duke's nasal passage and no sinus on the right side. Typically, a nasal cavity is divided by a septum into left and right nostril passages, but Duke's septum had been completely eroded due to a previous bout of aspergillosis. The damage was so severe that, instead of a maze-like structure inside his nostrils, there was a cave-like opening. The bones around the entry to the sinuses have calcified, leaving a very narrow entrance to view the sinuses with a scope. Even with the smallest camera scope, about 10 per cent of even normal sinuses remain inaccessible remain inaccessible with this diagnostic tool.

Camille calls Duke's guardian to explain what they've found on the CT scan, potential treatment options, and the associated risks. The team is going to suction out as much mucous as they can, but there are potential negative side effects: the medication required to kill the fungus can irritate the brain and cause neurological problems, Camille explains. "It can go well, or it can go badly," she says. The success rate for the procedure is around 60 per cent and Duke would need two to three treatments with three weeks between each, Camille explains.

Erin, Duke's guardian, instructs Camille to proceed with the treatment plan.

Duke is asleep on the table in the endoscopy unit, and the medical team surrounds him. Anesthesia RVT Inez Jimenez monitors vital signs. Sarah Birch prepares medical tools for the procedure, including tiny suctions and probes. Camille notes that she needs a tiny scope to access Duke's sinus cavity so she can get a visual on the screen above the examination table of what is going on inside.

#### **AFTERNOON**

Camille steps out of the endoscopy suite to call Erin with an update. Although the earlier CT scan suggested that Duke's aspergillosis had returned, a thorough rhinoscopy uncovered severe inflammation and mucus, but no signs of fungal plaques that are characteristic of the fungal disease. Duke's owner opts to have biopsies of Duke's nasal cavity sent to the lab for further testing.

Camille's team collects the biopsies and flushes out Duke's nasal cavity before sending him to the recovery room. Camille thanks her team for their hard work and heads to her next appointment.

Next up — a cat and dog, each with their own medical concerns. Camille examines the senior cat "sister", while her "brother", a dog, is being examined in another room.

The cat has previously been diagnosed with benign pancreatic and liver cysts and chronic kidney disease. The guardian diligently monitors her cat's condition and has a notebook where she keeps track of her cat's daily behaviour noting her mood, facial expressions and glucose levels. Camille recommends an ultrasound to see if the cysts need to be drained and a blood test to recheck her renal (kidney) values.

Another OVC resident pops into the room momentarily to ask for the guardian's consent to do an ultrasound on the cat's dog brother, who's being assessed for gastric issues and Cushing's disease. "Of course," says the guardian. "I'll do anything for them. You don't even have to ask."

Camille takes a very quick lunch break at her computer. At the same time, she's filling out the request for her cat patient's ultrasound and printing out the paperwork to take Duke's biopsies to the lab.

Camille checks in on Duke. He's resting comfortably and still sleepy from the anesthetic.

Then a consult for Jasper, a cat with frequent vomiting and stage one kidney disease. Jasper's guardian, Brittany Naeckel, tells Camille that she's worried about Jasper's blood cell counts, and lack of appetite. Camille performs a physical exam and draws a blood sample.

Duke is now awake from the anesthetic and ready for discharge. Camille picks up his prescription at the OVC pharmacy and calls Erin to come and collect Duke after what has been a challenging day for this Northern boy.

Jasper is ready to go home as well. With new medication and an updated blood work panel, Brittany is visibly relieved. "Jasper wouldn't be here without you," she says.

It's now late afternoon, and the buzz of the hospital is calming somewhat. Camille and her colleagues, Dr. Collier and Brooklyn, gather to review the day. Duke's situation, including his CT scan results, are the first topic. If cytology confirms aspergillosis, they could begin treatment on Monday. They also review other cases and new avenues for their patients including care tips and a nutrition team consultation.

Camille's day is not yet done. She finishes back where it began — in the Residents' Duty Office — writing up her patient notes, updating her files, and tying up loose ends in preparation for another day of solving diverse health puzzles.

"Practicing internal medicine allows me to combine my passion for animal care with the challenge of solving complex medical puzzles," says Camille.

"Every day, I get to make a difference in the lives of pets and their families, providing them with the best possible care and improving their quality of life. For me, this is an honour."



In photos: Camille meets Jasper (top). Duke greets Camille in an exam room (middle) and Camille examines a Scottish Fold cat whose owners have travelled to OVC for specialized treatment (bottom).

#### ON THE FOREFRONT OF VETERINARY MEDICINE

## Combatting Cancer with Hanotechnology

Written by Becky Rothwell

In March 2024, Michael Emes brought his nine-year-old cat, Mittens, to his veterinarian for a routine dental procedure. The veterinary team noticed a mass under the cat's tongue. Aside from a preexisting asthma diagnosis, Mittens was a healthy cat and showed no signs of oral discomfort. But the underside of the tongue is the most common site of oral cancers in cats, so the team acted quickly to identify the mass.

Mittens was diagnosed with oral cavity squamous cell carcinoma (OCSCC), an aggressive type of oral cancer in cats. It typically originates in the gums, tongue and palate and presents as an ulcerative lesion that can cause drooling, bad breath and difficulty eating. OCSCC often progresses rapidly and locally into surrounding tissues and bone of the oral cavity.

Mittens was referred to the Ontario Veterinary College (OVC) and placed under the care of Dr. Michelle Oblak, a veterinary surgical oncologist, professor in the Department of Clinical Studies, and the Animal Health Partners Research Chair in Veterinary Medical Innovation.

Oblak and her research team were

embarking on a study funded by the Canadian Cancer Society that explores the use of specialized nanoparticles, called Porphysomes, and photodynamic therapy (PDT) as a non-surgical treatment approach for cats diagnosed with OCSCC.

Mittens underwent an MRI scan at OVC, and the team felt strongly that she was an excellent candidate for their study.

"While this research is relatively new with many unknowns, what we do know is that cats with OCSCC have a very poor prognosis," says Oblak. "Mittens' family wanted to give her every possible chance. She was the third cat treated in our study, and she quickly became a champion patient, leading the way for other pets and other families to get involved."

### A NEW APPROACH WHEN HOPE IS NEEDED MOST

For most cats with OCSCC, treatment aims to manage the primary tumour and potential metastasis (spread) of the disease, as well as to provide pain management.

Treatments vary based on the tumour size and location and may include

Mittens during a check-up at OVC. Photo by Hannah James

surgery, chemotherapy and radiation. Sadly, even with treatment, most cats live for only one to four months. Fewer than 10 per cent of cats survive for one year after diagnosis.

While it isn't yet known whether Porphysomes and PDT could help cure oral cancer, Oblak says this approach is a welcome alternative to surgery for pet owners like Michael Emes.

"Dr. Oblak's team reviewed the pros and cons of surgery with us," explains Michael. "We knew that chemotherapy and radiation wouldn't improve Mittens' chances of survival, and Dr. Oblak's study offered a less-invasive option that would result in a shorter recovery time and fewer side effects. Enrolling Mittens was an easy decision for us."

#### **HOW IT WORKS**

In this study, Oblak's team uses lightactivated Porphysomes in combination with PDT to target and destroy tumours.

"We start by injecting Porphysomes into the patient's bloodstream," explains Oblak. "These nanoparticles preferentially accumulate in cancerous tissues. Using a specialized camera and light system,



A cat undergoing laser therapy for an oral tumour in one of OVC's recently renovated operating rooms. Photo by Becky Rothwell.



Researchers from OVC and UHN look at images of a patient in Oblak's study who has received a Porphysome infusion, causing the cat's oral tumour to "glow" on the screen. Photo by Becky Rothwell.



Dr. Oblak (centre) and her team, including Charly McKenna, Research Manager, OVC Clinical Trials (left) and Bridget Bane, RVT and Clinical Trials Technician (right). Photo by Becky Rothwell.

we can make them glow in the dark to quickly visualize the tumour, its margins and where the cancer has spread."

An added benefit of Porphysomes is that they make tissue more vulnerable to damage from laser light. Oblak's team uses a nano-fibre to deliver a precise beam of laser light to the affected tissue, which activates the Porphysomes and induces tumour cell death, while leaving the healthy surrounding tissues unharmed.

PDT has been used previously at OVC in dogs with thyroid cancer, and Oblak's team is currently testing the therapy in dogs with all types of oral tumours.

#### COLLABORATIVE RESEARCH THAT BENEFITS PETS AND PEOPLE

Oblak's study is helping to refine the use of Porphysomes in naturally occurring cancers in companion animals. The Porphysome studies are a collaboration with researchers and human surgeons at the University Health Network (UHN) in Toronto, who initially developed this nanotechnology and are exploring the use of PDT therapy for treating various types of human cancer.

"The working partnership we've established between scientists, veterinarians and medical doctors benefits us all equally," says Charly McKenna, research manager for OVC Clinical Trials and the Veterinary Medical Innovation program.

UHN will begin a Phase 1 human study using Porphysome technology later this year. "This study is a perfect example of a bench-to-bedside approach – our OVC companion animal patients bridge the gap between laboratory studies and the use of this technology in humans," says McKenna. "The same nanoparticles that we're using in cats at OVC are also being used in humans at UHN, with the same potential to improve cancer treatment."

#### **TREATING MITTENS**

Mittens underwent her Porphysome infusion with PDT on March 13.

"We were able to visualize her tumour clearly," says Oblak. "The cancerous tissue was ablated quickly and accurately, and she did very well during the procedure."

Mittens went home the next day but returned several days later as she was not eating and had some facial swelling. She was hospitalized overnight and cared for by the OVC **Emergency and Critical Care team** until her reassessment with the research team. Oblak placed Mittens under anesthesia and debrided her tongue to remove damaged tissue. A feeding tube was placed to ensure that Michael could administer food and medications while Mittens continued to heal. Mittens experienced some asthma-related complications during her stay, but with time and diligent care provided by ICU staff and Oblak's team, she returned home to recover in the care of her family.

At Mittens's four-week post-treatment check, her owners reported that she had adjusted to the feeding tube and had been eating well. She did not exhibit any signs of discomfort; she was grooming herself and her facial swelling had decreased. Soon after, the feeding tube was removed, and Mittens quickly resumed her normal eating and behaviour at home.

Her visual exam was promising; what was once a large tumour now appeared to be healing tissue. An MRI was conducted, and a small sample of the tissue was collected for microscopic review by a pathologist.

Unfortunately, Mittens's histological report showed that, while the primary mass had been ablated, there were still some cancer cells remaining around the treatment site. While this was not the result anyone hoped for, the treatment was still considered beneficial.

"We knew from the start that this treatment may not be curative," says Michael. "But it was well worthwhile – it allowed us to fight the tumour as best we could without the complications of surgery, and it afforded us several extra months with Mittens. I'm pleased that Mittens could play such an important role in Dr. Oblak's research, which stands to benefit both cats and people. I cannot speak highly enough of the care Mittens received. At every stage, beginning at the reception desk through to the clinical studies team and the ICU, the levels of professionalism and compassion shown were exemplary."

Oblak and her team are continuing to recruit cats with OCSCC for the Porphysome and PDT study. More information and results from their study will eventually be published at https://ovcclinicaltrials.uoguelph.ca/.

## **Celebrating Jim:** A Research Champion for Feline Heart Health

Written by Becky Rothwell



Jim enjoys a quiet nap at home. Photo by Katie Duncan.

Jim sits contentedly on a fluffy couch in a sunbeam. He repositions himself periodically; his movements are slow and methodical. His soft, orange coat looks like that of a young feline. But his face reveals the wisdom of his years. Jim is a 22-year-old cat with a passion for cuddles and a penchant for french fries. He is the longtime family companion of veterinarian Dr. Cindy Favaro, and he is a feline heart health hero.

For three years, Jim participated in a study that is helping researchers better understand cardiac health in cats. The study aims to improve our knowledge about how a cat's heart changes with age and whether these changes resemble those seen in cats diagnosed with mild feline hypertrophic cardiomyopathy (HCM).

HCM is the most common feline heart disease and is characterized by thickening (hypertrophy) of the heart muscle, which leads to decreased heart efficiency. In some cats, HCM may go unnoticed; in others, it can cause a range of clinical signs, from lethargy and decreased appetite to difficulty breathing, collapse and sudden death. The cause of feline HCM is largely unknown, and while genetic predispositions have been identified in Maine Coons and Ragdolls, HCM is most common in domestic shorthair cats. Diagnosis typically involves a combination of physical examination and echocardiography (ultrasound of the heart). Regular checkups are crucial for monitoring and managing HCM.

Unfortunately, HCM can progress to congestive heart failure over time. While there is no cure for congestive heart failure, medication can aid in improving heart function and reducing clinical signs.

#### **Experts Looking for Answers**

Since 2012, Dr. Sonja Fonfara has conducted research aimed at improving our understanding and treatment of feline HCM. She is a board-certified specialist in companion animal cardiology and the Research Chair in Feline Health at the Ontario Veterinary College (OVC). Her chair position was established in 2023 thanks to generous donor contributions, including a major gift to OVC Pet Trust from the estate of Suzanne Szabolcs, as well as from the Shelagh O'Brien Memorial Research Fund. Fonfara plays a leadership role in enhancing feline research and medicine to improve the overall health and well-being of cats.

In 2019, her team launched a study funded by OVC Pet Trust seeking to understand how age influences cardiac structure and function in healthy cats. This work is co-led by Dr. Ananda



Drs. Sonja Fonfara and Ananda Pires.

Pires, board-certified cardiologist and a PhD student working alongside Fonfara.

"To date, we have very little data on the effects of aging on a cat's heart and how these changes impact overall health," says Fonfara. "As humans age, we develop thicker and stiffer heart walls. Similar changes may occur when cats age, and we suspect these changes look similar to what we often observe with early HCM, so we need to be able to differentiate between agerelated changes and disease-related changes to determine a patient's prognosis and how to manage these cats best."

#### Jim's Journey at OVC

Jim and his owner, Cindy, met Fonfara and Pires in 2021. A veterinarian with a busy practice of her own, Cindy often checks the OVC Clinical Trials website to keep up with studies under way.

"I'm passionate about feline medicine and am always looking for opportunities that could benefit my patients and clients," she says. "In this case, I noticed a study recruiting cats who fit my own pet's profile."

Fonfara and Pires were enrolling healthy cats, nine years of age and older, for their heart study. This healthy sample group would be monitored over three to four years to observe cardiac changes over time and to examine cardiac biomarkers that might improve diagnostic clarity



Jim wakes up from a nap. Photo by Katie Duncan.

and efficiency for cats with mild heart changes resembling HCM.

Jim visited OVC for regular cardiac ultrasounds and bloodwork over three years. Ultrasound imaging allowed the team to observe structural and functional changes in Jim's heart, while blood samples were used to evaluate biomarkers in his blood that could help veterinarians differentiate between age- and HCM-related changes in the heart.

"As a healthy patient with no pre-existing diagnosis of HCM, Jim helped us collect important data about the natural changes that occur in the heart as cats age," explains Pires. "And as the oldest of all 81 cats in our study, he also provided us with unique insights into cardiac health among very senior felines. His involvement was incredibly valuable to this research."

Fonfara and Pires note that this study could provide novel insights into the aging process of the feline heart. Findings may aid veterinary cardiologists in interpreting cardiac ultrasound results and may identify blood tests that could be used to diagnose, monitor and manage feline patients with both age-related cardiac changes and HCM.

As a practising veterinarian, Cindy sees many patients of her own with HCM and was thrilled that Jim could contribute to research that will advance our knowledge in this field.

"The more we know about HCM and the cardiac aging processes in cats, the more we can offer to pets and clients, so I was happy to enrol my own pet in this study," she says. "Anything that can help future pets – and my own future patients – is well worthwhile." Jim's last visit to OVC was in early 2024. Enrolment in this study is now closed, and data is being analyzed. Findings will be published in 2025.

This study is part of a larger investigation by Fonfara's team aimed at understanding how HCM develops and progresses. In other studies, the team investigates genes and regulatory factors in the heart and compares blood samples from healthy cats to those diagnosed with HCM to characterize the processes involved in the disease. This knowledge may identify treatment options and markers that can be measured in a patient's blood to detect and manage HCM.

#### Research with Translational Benefits

Advancing research in feline HCM may also offer



An ultrasound image (echocardiogram) shows the heart of an elderly cat. The labeled structures are the heart's chambers. The graph at the bottom is an electrocardiogram (ECG), monitoring the heart's electrical activity during the scan. This image helps veterinarians assess the heart's function and structure, which is crucial for differentiating normal age-related changes from potential heart disease in older cats. (LA: left upper chamber, or left atrium; LV: left lower chamber, or left ventricle; HM: heart muscle; AO: aorta, the main vessel leaving the left side of the heart; RV: right lower chamber, or right ventricle.)

benefits for human medicine. HCM is a common heart disease in humans, and there are many similarities in how the disease manifests and progresses in both species.

For Cindy, the broader translational potential of Fonfara's work to benefit human health makes Jim's involvement even more meaningful.

"As a veterinarian, I know that research drives important progress in companion animal medicine, and I see the benefit of this work for my own patients," she says. "It's not often that we're reminded of the cross-species benefits, though. It's wonderful to know that Jim's involvement in this study can have a positive impact on both animals and people."

To learn more about studies under way at OVC and Clinical Trials Superheroes like Jim, visit https://ovcclinicaltrials.uoguelph.ca/.

## The OVC Health Sciences Centre:

**Specialized Care for Your Companion** 

Written by Anya Barradas and Becky Rothwell



Each year, thousands of animals – big and small – receive expert care at the Ontario Veterinary College (OVC). Veterinary teams manage more than 20,000 patient visits annually in OVC's Health Sciences Centre (HSC), which is made up of three accredited veterinary hospitals: the OVC Companion Animal Hospital; the OVC Large Animal Hospital; and the OVC Smith Lane Animal Hospital, a primary veterinary care facility.

More than 6,000 companion animals visit our hospital each year in need of emergency or specialized care.

Just as your family doctor might give you a referral, your primary care veterinarian can refer your pet to OVC for care in many subspecialties of companion animal health. Specialists and veterinary teams provide advanced diagnostics and treatments for complex and uncommon disorders, offering cutting-edge care that may not be possible at your veterinary clinic.

OVC's service teams include boardcertified specialists, residents, interns and veterinary technicians. To become a board-certified specialist, three to five years of additional training is needed after completing the Doctor of Veterinary Medicine (DVM) program. Specialty examinations in the chosen field must be taken and successfully completed to become board certified. Final-year DVM students manage patients under supervision, with all surgeries and treatments overseen by certified specialists. A team-based approach ensures that pets have access to the expert, collaborative care they deserve, when they need it most.

The HSC is more than a veterinary care centre: it is a research and teaching hospital. This means that OVC continually advances important discoveries that improve pet health, while also training the next generation of veterinarians to ensure that pets continue to receive the care they need and deserve in the future.

In this special feature, we introduce the range of services available for pets at the HSC. From emergency care and cancer treatment to nutrition counselling and physical rehabilitation, OVC's experts are ready to help your companions.

Constable Mark Finnie and police dog Murphy with OVC's Dr. William Hawker

#### Emergency and Critical Care

The Emergency and Critical Care (ECC) service is home to OVC's Intensive Care Unit (ICU), which expanded and underwent a multimillion-dollar upgrade in 2023 thanks to OVC Pet Trust supporters. Dedicated teams provide specialized, round-the-clock care for animals in urgent medical situations. Pets from across Ontario can access emergency care through a referral from their primary care veterinarian, while walk-in services are available for residents of Guelph and the surrounding area as triage and capacity allow. The ECC service handles a wide range of emergencies, from traumatic injuries to severe illnesses, including life support interventions like mechanical ventilation and dialysis. Clinicians collaborate with specialists across the HSC to ensure that pets and their families receive comprehensive, compassionate medical care during critical times.

#### Murphy: Emergency and Critical Care Ambassador

It was 5 a.m. on a Wednesday morning. Constable Mark Finnie was preparing for his shift with the Peel Regional Police Canine Unit. He went outside to greet his partner of three years -- fiveyear-old German shepherd Murphy. Like all working police dogs, Murphy has separate living quarters outdoors on his handler's property, and he accompanies Mark to work each day.



Constable Mark Finnie and police dog Murphy visit OVC after Murphy's recovery. Photo by Hannah James.

Mark noticed that Murphy was not himself; he was lethargic and slow-moving. His dog bed had been upturned, and one side of his face was covered in saliva. Mark had been trained to recognize signs of potentially life-threatening ailments in his canine partner. He heard Murphy retching and felt that his belly was swollen. Mark was certain that Murphy was in trouble, and he called his unit to say that he wouldn't be coming in. He asked his team to phone OVC and alert them that he was on his way with a critical patient.

Upon arriving at the OVC HSC, Mark and Murphy were seen by Dr. Madlyn Lung, an intern with the Emergency and Critical Care team. On examination, she noted that Murphy was dehydrated and that his posture was hunched. His abdomen was bloated, and his stomach was filled with gas. A point-of-care ultrasound revealed concerning free fluid in his abdomen. Lung collected a blood sample and consulted with the Diagnostic Imaging Service to coordinate an x-ray.

Because Murphy is a trained apprehension dog, Mark accompanied him during all procedures to help keep him calm and provide insight to the medical teams working to help Murphy. From the emergency room, they made their way to the Diagnostic Imaging Department. Within 10 minutes, experts confirmed Lung's suspicion: Murphy was suffering from gastric dilatation-volvulus (GDV), a life-threatening condition in which the stomach fills up with gas and becomes twisted, trapping the gas and preventing blood flow to vital organs. Sometimes called "bloat," GDV is most prevalent in large, deep-chested dogs like German shepherds. If not treated quickly, GDV results in death.

With a confirmed diagnosis, Lung worked with the Surgery and Anesthesia teams to put a surgical treatment plan in motion. Murphy was taken to the Kim and Stu Lang Anesthesia and Pain Management Unit, where members of the team prepared him for emergency surgery. They installed an intravenous catheter, through which medications were delivered to anesthetize Murphy for surgery and manage his pain afterwards. They also placed a breathing tube carefully in his airway to aid in ventilation and oxygenation while Murphy was anesthetized.

Mark wished his canine partner well, and Murphy was taken to the James Slaight Advanced Surgical Complex,



Kenzie, Internal Medicine Ambassador

where Dr. William Hawker, an OVC small animal surgeon and faculty member in the Department of Clinical Studies, was ready to perform Murphy's life-saving surgery.

Hawker had been briefed on Murphy's case and knew that time was of the essence. Luckily for Murphy, HSC's specialized clinical teams worked quickly and collaboratively leading up to surgery: the elapsed time since Murphy arrived at OVC was just shy of 60 minutes.

In the operating room, Hawker and his surgical team relieved the gas from Murphy's stomach and rotated the stomach back to its normal position. They examined his abdomen to rule out any other medical concerns. Hawker placed several sutures to secure Murphy's stomach to the abdominal wall – a common procedure known as gastropexy that can prevent the recurrence of GDV.

Following surgery, Murphy was monitored closely by OVC's anesthesia recovery team as he woke up. After spending one night in the Intensive Care Unit, Murphy returned home to continue recovering in Mark's care.

Thanks to the treatment he received at HSC, Murphy was cleared to return to work after just three weeks.

"It's reassuring to know that there are so many different services available under one roof at OVC," says Mark. "While driving here, I knew that Murphy would have access to everything he could possibly need. Everyone was so knowledgeable and professional, and it was impressive to see different teams working together so quickly and seamlessly to save Murphy's life."

#### **Internal Medicine**

The Internal Medicine team focuses on diagnosing and treating diseases that affect internal organs and systems, such as infections, immune disorders, diabetes, anemia and diseases of the



Truffles, Surgery Ambassador

gastrointestinal tract, liver, kidneys and lungs. State-of-the-art endoscopy suites help diagnose these conditions using advanced techniques and equipment that allow specialists to closely examine internal organs and determine the best treatment options.

Kenzie was referred to the Internal Medicine team after presenting at her primary veterinarian as severely anemic, a condition affecting red blood cells in the body. At OVC, she was diagnosed with a serious immune condition that attacks red blood cells and causes blood vessel issues. Kenzie was treated in the OVC ICU and received blood transfusions and treatment to decrease her immune system's attack on its own red blood cells. Since the diagnosis, the Internal Medicine team has become an essential part of keeping Kenzie stable and enjoying life and giving her pet parents much appreciated extra time with their beloved companion. At almost 14 years old, Kenzie enjoys paddleboarding, a good nap, playing with toys and visiting her friends at OVC.

#### Surgery

The companion animal Surgery team performs soft tissue, orthopedic and neurosurgery. For certain conditions, minimally invasive procedures (MIPs) offer advanced techniques to reduce pain, minimize complications and





accelerate recovery. MIPs are used to treat conditions of the abdomen, chest and joints.

After being diagnosed with Cushing's syndrome, which happens when the body produces too much cortisol, Truffles was referred to OVC for surgery. The team performed a procedure to remove one of his adrenal glands and his spleen. Now that Truffles is recovering, his caregivers are happy to see him becoming his fun, playful self again.

#### Cardiology

The Cardiology team offers expert consultations for companion animals with known or suspected heart diseases detected by their primary care veterinarian. The team provides diagnostic services like cardiac ultrasound, ECG and 24-hour heart rhythm monitoring, and performs minimally invasive procedures in surgery such as pacemaker implantation, opening of narrowed valves and closing of abnormal blood vessels in the heart. Their expertise and state-of-the-art equipment ensure precise diagnosis, treatment and management for pets with heart diseases.

At just three months old, Finley was diagnosed with pulmonic stenosis, a condition where the valve between the pulmonary artery and the heart is narrowed. He was referred to OVC's Cardiology team for specialized care and, after further testing, it was determined that Finley needed the valve opened to ensure his survival. In the operating room, a minimally invasive procedure called balloon valvuloplasty was performed to open the narrowed valve. The procedure was successful, leading to a significant improvement in his condition, allowing Finley to enjoy a normal quality and length of life. He was able to stop taking heart medication and now returns to HSC for occasional checkups. Thanks to the Cardiology team, Finley is back to his bouncy self and thriving.

MewTwo, Neurology Ambassador

#### Neurology

The Neurology team specializes in the diagnosis and treatment of nervous system diseases like inflammation, degeneration and tumours, as well as epilepsy, spinal pain, and muscle and nerve disorders. Services encompass hearing tests, seizure and sleep disorder diagnosis by measuring the electrical activity of the brain, as well as muscle and nerve conduction tests. The team offers advanced treatments like spinal surgeries for disc disease, spinal or brain tumour reduction with sound waves, and brain biopsies or skull reconstruction surgery. This comprehensive approach ensures precise diagnosis and effective treatment for a range of nervous system issues in companion animals.

MewTwo first came into the lives of her caregivers as a foster kitten, but when she stopped gaining weight and showed signs of a neurological condition, the shelter advised the family to prepare for the worst. Yet MewTwo's foster family refused to give up hope. After MewTwo was referred to the Neurology team, her MRI showed that a large portion of her brain was occupied by fluid. Removing the fluid carried a risk of MewTwo not being able to walk again. Luckily, the seven-week-old "spicy kitty" (as her family lovingly calls her) made a full recovery in the hands of HSC specialists and with love and support from her foster parents, who ended up adopting her.

#### Oncology

The Oncology team specializes in the study and treatment of cancer. The collaborative team includes radiation oncologists, surgical oncologists, medical oncologists, registered veterinary technicians and a veterinary social worker. They work closely with other specialists at HSC to ensure comprehensive care. As cancer types vary and each requires a specific approach, the goal is to offer treatments that provide the best quality of life and extend survival, always considering

Finlay, Cardiology Ambassador



Penny, Oncology Ambassador

the unique needs and preferences of each family. Treatment options include surgery, radiation therapy, chemotherapy and immunotherapy.

Penny was diagnosed with inflammatory bowel disease and pancreatitis. After a little improvement from her medication. her original clinical signs returned worse than before. She became severely dehydrated from constant vomiting and was admitted to OVC's ICU, where she was treated for pneumonia. After a few days, her condition improved, but she still couldn't keep any food down. An ultrasound revealed a golf ball-sized tumour blocking her intestines. At just five pounds, Penny faced risks from surgery needed to remove the tumour. After the surgery, she went through 25 weeks of chemotherapy at OVC's Animal Cancer Centre. After a long journey to recovery, Penny's family says she is bright-eyed, loving and full of energy.

#### **Ophthalmology**

The Ophthalmology team provides expert medical and surgical eye care for companion animals. In addition to routine eye exams, they offer advanced tests to check eye pressure, examine eye structures and assess vision. Surgical treatment options include procedures for the eyelids, inside the eye and surrounding areas, with specialized surgeries such as traumatic corneal and dislocated lens or gland repairs. The team also offers therapy for glaucoma and retinal detachment.

After getting an eye ulcer and being diagnosed with "dry eye syndrome," Ellie showed only slight improvement with her initial medication. She also developed skin irritation around her



Ellie, Ophthalmology Ambassador

eyelids. After being referred to the OVC Ophthalmology team, Ellie started a new medication plan that helped clear up her skin issue. The team is now working on the best treatment plan for Ellie's eye condition, considering her sensitivity to certain medications. Her caregivers appreciate being able to contact her care team with questions and get quick advice.

#### **Fitness and Rehabilitation**

The Fitness and Rehabilitation (FAR) team, located within the OVC Smith Lane Animal Hospital, offers specialized physical rehabilitation services for companion animals. Their programs include weight loss and fitness plans, management of osteoarthritis and chronic pain, recovery from orthopedic and neurological conditions, and safe regaining of function after surgery. They also provide "prehab" programs to help pets prepare for surgery.

Willoughby was first seen by HSC's FAR team at seven months old due to a history of hip dysplasia, a condition where the hip joint fits improperly in the socket, causing pain and mobility issues. He has since participated in a formal rehabilitation program that includes nutrition advice, underwater treadmill therapy, swimming and exercise therapy. With a committed family and the team at OVC, he has stayed lean and strong, with his chronic painful disease kept in check. Willoughby is now nine years old and is moving well and loving life.

#### **Clinical Nutrition**

The Clinical Nutrition team works closely with other clinical services at the HSC, integrating therapeutic nutritional



Willoughby, Fitness and Rehabilition Ambassador

intervention in the treatment of various medical conditions to improve patient outcomes. Nutrition experts provide a range of services, including assessing the dietary needs of patients, developing diet plans for hospitalized or recovering pets, evaluating homemade diets and creating custom nutrition programs for different life stages.

Sierra was referred to the Clinical Nutrition team after she stopped eating while fighting pneumonia and anemia. A side effect of a previous medication to treat her skin condition also left her immunocompromised. The diet plan and medication cured Sierra's pneumonia and anemia, but she developed diabetes along the way. Sierra continues to visit HSC for checkups, and her diabetes is now under control with daily insulin injections.



Sierra, Clinical Nutrition Ambassador

#### GETTING TO KNOW... Dr. Ameet Singh

Dr. Ameet Singh

Dr. Ameet Singh, BSc, DVM, DVSc, is a professor of companion animal surgery in the Ontario Veterinary College's Department of Clinical Studies. Singh is an expert in minimally invasive surgery (MIS), and in 2017, he was named the first Canadian founding fellow of MIS by the American College of Veterinary Surgery. In 2021, Singh received the Small Animal Practitioner Award from the Canadian Veterinary Medical Association.

Dr. Ameet Singh (left) works alongside two veterinarians in the recently renovated Lindy Barrow Minimally Invasive Procedures Suite at OVC.

## What was your journey to becoming a veterinary surgeon at OVC?

I was lucky to have grown up in Charlottetown, Prince Edward Island, where there is a veterinary school called the Atlantic Veterinary College (AVC). Having the AVC so close gave me some exposure to the profession, and it's where my interest in veterinary medicine began. I proudly graduated from the AVC Doctor of Veterinary Medicine program in 2006. While I was a student there, I had the great fortune of working with the college's surgery service during the summer. This was an amazing experience that put me on the path to becoming a surgeon, and I credit the wonderful staff and faculty surgeons I worked with.

## How would you describe a typical day in your life at OVC?

Each day is a new challenge that depends on the cases that come through our hospital doors. OVC is located in the middle of a large population base, which provides us with an amazing range of unique and challenging cases. No two days are ever the same, and we are lucky to work alongside an array of veterinary specialists, which allows us to provide the best possible care for OVC pets.

#### You are an expert in minimally invasive surgery, which is a technique that uses small surgical incisions. What are the benefits of performing MIS versus conventional surgery?

We believe that MIS provides many advantages for many of the cases we see. This technique gives surgeons a better view of the anatomy we're operating on since we use a magnifying camera, and it allows pets to have a quicker recovery, since large incisions are not required.

We can also use MIS to treat a wide range of cases. For example, we recently treated a dog named Truffles who was found to have a large tumour of the adrenal gland, which is located above the kidney. We were able to remove the tumour using MIS techniques, and Truffles went home the following day after a routine recovery from surgery. The MIS approach allowed our team to perform a safe tumour removal and allowed Truffles to have an easy recovery following the surgery.

MIS is a real win/win scenario for veterinary surgeons and our patients, and we are lucky to have many veterinarians at OVC who perform MIS in different specialties including cardiology, internal medicine, radiology and surgery in both large and small animals.

## Is MIS a common approach used in veterinary medicine?

This technique has been used in veterinary medicine for a long time but has become a much more common practice in the past 10-15 years. Since I began working in MIS, it has been amazing to see how far the field has come in a short period of time. MIS is being adopted quickly, and veterinarians all over the world are now using it to treat their patients ... not just at specialty clinics.

It is also becoming quite common for OVC pet owners to ask us about MIS options for their pets. This technique is widely used to treat human conditions, and many owners are familiar with MIS because they or someone they know have had this type of surgery performed for a medical condition.

In your role at OVC, you lead a research program in MIS and you also train DVM students on MIS. What do you enjoy most about working alongside the next generation of aspiring veterinarians?

I have been fortunate to work with a number of talented veterinary students, interns, residents and graduate students on MIS-related research. Their inquisitive nature has been truly inspirational. Most of our group's research has focused on MIS of the chest and abdomen of dogs and cats, and our latest work has looked at outcomes following MIS for a variety of cancerous diseases. Our research group has even been a part of large, multi-institutional studies showing the benefits of the MIS approach for these complex procedures. Being able to teach and mentor aspiring veterinarians and graduate students is the ultimate privilege. 🏶

## Comfort and Care at OVC

*How Fitness and Rehabilitation Is Making a 'Paw'-sitive Impact* 

Written by Alicia Ashley

We all want a long, healthy and fulfilling life for our furry companions. But sometimes life throws a curveball. Accidents, injuries and health conditions can significantly impact our pets' quality of life and leave them sitting on the sidelines.

OVC's Dr. Tiffany Durzi and RVTs Jacy Erling and Charlotte Donohoe (pictured with a Bernese Mountain Dog patient) work with patients and their families with pain and mobility issues.

8



Since opening its doors in 2013, the Fitness and Rehabilitation (FAR) service, located in the Ontario Veterinary College (OVC) Smith Lane Animal Hospital, has been helping pets put their best paw forward and get back into the game.

#### **Who FAR Helps**

Several conditions can lead to disability and pain for our pets. "Typically, we see pets with arthritis, orthopedic conditions, neurological conditions or cancer who are experiencing some level of chronic pain," explains OVC alumna and FAR chief of service Dr. Tiffany Durzi. "We work with a lot of chronic pain cases."

#### The FAR Team

Durzi is certified as a Diplomate of the American Board of Veterinary Practitioners with a Specialty in Canine and Feline Practice. She is also certified in acupuncture and works alongside four registered veterinary technicians certified in rehabilitation: Charlotte Donohoe, Jacy Erling, Alicia Lorch and Kayla Malleck. Together, they help pets live life to the fullest, whatever that may look like for that pet and family. "Our entire team here is so committed and so good at what they do," says Durzi. "We're here to support our clients and their pets living with pain and mobility issues. We want to help them have the best quality of life possible."

#### Therapies

The FAR service offers a suite of therapies, including a hydrotherapy pool and underwater treadmill; therapeutic exercise and strength training; and treatments promoting pain relief and healing, such as therapeutic ultrasound and laser, acupuncture and electrical muscle stimulation. The team also provides customized carts, braces and slings that support pets and ease the physical toll on caregivers.

Pets undergoing surgery can benefit from prehabilitation (exercises and therapies prescribed before surgery) and rehabilitation after surgery, helping them recover faster, with better function and fewer complications.

#### Tele-rehab

Beginning in 2023, the OVC surgery, neurology, oncology and FAR services launched an exciting tele-rehab program providing virtual rehabilitation consultations.

The services identified procedures that would benefit from a follow-up virtual rehabilitation consultation. After a pet is discharged, the FAR team arranges a tele-rehab appointment to assess the pet's progress, pinpoint problems and make recommendations as needed — optimizing patient care and recovery, all in the comfort of home.

#### **Coming Together for PP**

In the fall of 2023, Valerie came to the FAR service seeking help for her nine-year-old Welsh Corgi,



PP. Having been previously diagnosed with arthritis, PP was experiencing some challenges.

"He was reluctant to go up and down stairs, and walked very slowly," notes Valerie, recounting PP's state before therapy. While medications eased some of his pain, he still struggled.

After an assessment by Durzi, PP began his fitness and rehabilitation journey, and the underwater treadmill provided an ideal therapy. Underwater treadmills reduce the stress on joints during exercise; pets can comfortably build muscle and stamina and improve flexibility. For many, including PP, it's a game-changer, and his transformation was remarkable.

"After the first course of treatments, he lost weight and walked very comfortably, chasing after the other two Corgis at home," says Valerie. "You can touch him [now]. He was very resistant to it before."

But while PP's mobility and fitness flourished, something more sinister was quietly taking root.

In the spring of 2024, Valerie noticed PP wasn't himself. He became subdued and lost his appetite. PP was referred to the OVC Emergency and Critical Care Service, where tests revealed lymphoma, a cancer involving white blood cells called lymphocytes.

The news was a terrible shock. "Suddenly, he got lymphoma. The only feeling [I had] was that I would rather be sick," Valerie recalls.

There was, however, a glimmer of hope offering a chance for more quality time with PP. He soon began receiving chemotherapy from the OVC Oncology Service. While lymphoma in dogs is typically not curable, many pets enjoy time in remission and usually tolerate chemotherapy well.

Of course, the treadmill had to wait while the chemo quelled PP's cancer. But after several weeks off, the resilient little dog felt much better and was back at FAR. "He's touched the hearts of everyone here, and we're happy to support him and Valerie on this journey," says Durzi. Thanks to Valerie's devotion and the expertise at OVC, PP is a testament to what living well with arthritis and cancer can look like.

"[It's] the best hospital in the world," says Valerie, referring to the medical services that have helped PP and granted her more quality time with her beloved companion. "As a dog owner, I can see that all the employees at OVC love animals very much. He is very lucky to be treated at OVC."

## YOUR GIFTS AT WORK

Each year, OVC Pet Trust invests more than \$600,000 in new projects and equipment to advance pets' health and well-being.



#### **CAT HEALTH**

#### Understanding Anemia in Cats Drs. Shauna Blois and Allison Collier

In immune-mediated anemia, the immune system mistakenly attacks its own red blood cells, leading to severe blood loss and requiring frequent transfusions and intensive care. Despite advances in treating similar conditions in people, there is limited understanding of this disease in cats. This study aims to pinpoint the specific immune system abnormalities responsible for anemia by analyzing blood and bone marrow samples. By examining immune changes at various stages of the disease, the researchers hope to enhance treatment methods and outcomes, ultimately improving care for cats with this challenging condition.

#### Improving the Safety of Blood Transfusions for Cats

#### Drs. Shauna Blois and Allison Collier

Blood transfusions are crucial for treating critically ill cats but carry risks if blood types are not compatible. Crossmatching (CM) tests help ensure compatibility by mixing blood samples from the donor and recipient to detect any reactions before a transfusion. This study will assess a new, faster point-of-care CM kit to see whether it is as accurate as traditional lab methods. Additionally, it will examine whether storing blood affects the accuracy of CM results. By improving CM testing methods, this research aims to make blood transfusions safer for cats by ensuring better compatibility and reducing the risk of adverse reactions.

#### Can Specialized Handling Reduce Kittens' Stress During Vet Visits?

#### Dr. Courtney Graham

Regular veterinary care is vital for our feline companions, but many cats become fearful and stressed during visits, leading to incomplete assessments. Early experiences, especially handling by humans, significantly impact a kitten's long-term behaviour and welfare. This project, in collaboration with local shelters, aims to improve kitten responses to veterinary care during their socialization period through short handling sessions by foster caretakers. Litters will be split into treatment and control groups, with the former receiving specialized handling mimicking veterinary practices, including full body palpation and investigation of the mouth and ears. Following the handling sessions, kittens will undergo in-home mock exams, and their behavioural responses will be recorded and analyzed. It is expected that kittens who receive specialized handling will show reduced stress, improving their future veterinary visit experiences, the kitten-caretaker relationship, and long-term health and welfare.

OVC patient Mo. Photo by Katie Duncan.

#### DOG HEALTH

#### **Understanding International Dog Adoption**

#### Dr. Katie Clow

International dog adoptions, while popular, raise health and welfare concerns, such as the risk of introducing foreign diseases and poor transport conditions. Current government regulations are limited and do not fully address the strong motivations behind this practice. This study aims to explore the knowledge, attitudes and practices of adopters and rescue organizations in Canada, understand the sociocultural factors driving international adoptions, and examine the bond between adopters and their dogs. Through surveys, focus groups and interviews, the research will generate insights to improve education for animal health professionals and support better practices for international pet adoption.

#### Examining How Blood Sugar Levels Affect Heart Rhythm in Dogs with Diabetes

#### Drs. Sonja Fonfara and Shari Raheb

Diabetes is a common condition in older dogs that leads to high blood sugar levels. While insulin helps to control blood sugar, this control is not always optimal and fluctuating blood sugar levels can cause complications, including problems with the heart rhythm. This study aims to understand how blood sugar levels impact the heart rhythm of diabetic dogs. Using a 24-hour heart rhythm monitor, researchers will track the dogs' heart rhythm and correlate results with blood sugar levels. By investigating how blood sugar affects the heart rhythm, this research could identify this little-recognized complication and help improve the management of diabetic dogs, ensuring better overall health and quality of life.

#### Improving Early Detection of Bone Cancer in Dogs

#### Drs. Huiyan Li and Alicia Viloria-Petit

Bone cancer in dogs is highly aggressive and spreads rapidly from the bone to other body parts, making it challenging to treat. The standard treatment involves amputation and multiple rounds of chemotherapy, which can extend life from a few weeks to more than two years. However, predicting which patients will benefit most from treatment remains difficult. Extracellular vesicles (EVs), tiny particles secreted into the blood by cells, hold promise for improving diagnosis and prognosis. These EVs contain information from the tumour and are detectable in the blood. This study aims to further develop EVs as a diagnostic tool, enhancing the ability to predict survival outcomes and assess treatment effectiveness in dogs with bone cancer.

#### Improving Fluorescent Dye Methodology to **Guide Canine Lung Cancer Surgeries**

#### Drs. Michelle Oblak and Jim Petrik

Lung cancer in dogs is increasingly common, highlighting the need for better surgical techniques. Researchers are developing a new fluorescent dye to improve tumour visibility during surgery. While a previous study used indocyanine green to make cancerous tissues "glow," the treatment lacked specificity. The team is now incorporating the c-Met receptor, which is uniquely expressed on cancer cells. By combining this receptor with the fluorescent dye, they aim to create a more precise imaging agent that directly targets cancer cells. This innovation will better distinguish cancerous tissue from healthy tissue, potentially improving surgical outcomes for dogs and offering insights for human medicine.

#### Do Stem Cells Play a Role in Bone Cancer **Development?**

#### **Dr. Courtney Schott**

Osteosarcoma is an aggressive bone cancer in dogs that often spreads to the lungs. Despite surgical removal and chemotherapy, the prognosis remains poor. This cancer commonly develops near the growth plates at the ends of bones, but the exact cause and cell types involved are unclear. This



OVC patient Deku. Photo by Katie Duncan.

research aims to study bone stem cells from different ends of the same bone to understand why tumours form at one end more commonly than the other. Identifying these differences could reveal new insights into the cancer's origin and lead to improved treatments. Current therapies have not changed in 40 years.

#### Identifying Early Markers of Chemotherapy **Resistance in Canine Lymphoma Patients**

#### **Dr. Robert Darren Wood**

Lymphoma is a common cancer in dogs, similar to non-Hodgkin's lymphoma in humans. It involves the rapid growth of white blood cells called lymphocytes, which cause swollen lymph nodes, and the malignant lymphocytes can spread throughout the body and eventually lead to organ failure. While chemotherapy can often put the disease into remission, many dogs relapse and develop resistance to treatment. This study aims to explore how small RNA molecules, called microRNAs, differ between chemosensitive and chemoresistant versions of canine lymphoma and lymphoid leukemia cell lines. By identifying microRNAs associated with resistance to chemotherapy, the study hopes to detect treatment failure earlier and improve treatment strategies. These microRNAs could serve as new biomarkers and targets for therapy, potentially enhancing our ability to manage and treat lymphoma in dogs.

#### Can microRNAs Predict Chemotherapy **Resistance in Canine Lymphoma?**

#### **Dr. Robert Darren Wood**

Lymphoma in dogs is a varied group of blood cancers, which can be aggressive. Treatment typically involves a multi-drug regimen known as CHOP (cyclophosphamide, doxorubicin, vincristine and prednisone). Despite initial successes with this protocol, most dogs eventually face relapse and develop resistance to therapy. This study aims to analyze the expression of microRNAs (miRNAs), or small regulatory RNA molecules, in dogs with both chemotherapy-sensitive and resistant forms of lymphoma. By assessing miRNA levels in lymph node samples from affected dogs, the research seeks to uncover distinct miRNA patterns linked to drug resistance. Identifying these patterns could improve early detection of treatment failure and provide new targets for developing more effective therapies, potentially transforming the management of lymphoma in dogs.

#### **COMPANION ANIMAL** HEALTH

#### New Cell Culture Equipment to Advance **Companion Animal Cancer Research**

#### Dr. Geoffrey Wood

To study cancer in dogs and other pets, researchers use special lab techniques to grow and test cancer cells under controlled conditions. This involves isolating cancer cells and growing them in sterile environments to understand how they behave and to test potential treatments. This funding will be used to purchase cell culture hoods, which will allow OVC researchers to ensure these experiments are conducted safely and effectively, helping to develop and evaluate new therapies before they are tested in animals. This process is crucial for advancing cancer treatment and ensuring that new therapies are both effective and safe.

#### 10X Chromium IX Platform to Map the Genetics of Companion Animal Cancers

#### **Dr. Samuel Workenhe**

Cancers are made up of various cell types that can either support or fight tumour growth. Previous technologies provided a broad overview of tumour genetics but lacked detailed mapping of individual cells. The acquisition of the 10X Chromium IX Platform will allow genetic mapping of individual cells within companion animal tumours. This will help oncologists to create the most effective treatments for patients at OVC's Health Sciences Centre. Additionally, this technology will enhance research into new treatments and help maintain OVC's global leadership in companion animal oncology. 🎕

## May I touch you?

## New research looks at touch, choice and control in therapy dogs

Written by Lisa McLean

Therapy dogs are a welcome and calming presence for humans in settings such as hospitals, care facilities, schools and prisons. They are specially trained to stay calm while working in situations where they lack control (or have the freedom to remove themselves from the situation) while they bring comfort and health benefits to the humans they help. But how do therapy dogs feel about those interactions?



Dr. Amir Sarrafchi, a veterinarian and welfare scientist.



A photo of the study underway, demonstrating the forced touch portion of the three-minute encounter. Dogs were held on a leash by their owners while participants continuously touched the dog.

New research from the Campbell Centre for the Study of Animal Welfare (CCSAW) focuses on identifying the subtle signs a dog is feeling stress with a goal to improve best practices for better therapy dog welfare.

Amir Sarrafchi, a trained veterinarian and animal welfare scientist, is a PhD candidate from the Department of Animal Biosciences at the Ontario Agricultural College (OAC). His position is funded through CCSAW, a research centre of the Ontario Veterinary College (OVC) at the University of Guelph. Sarrafchi says it's crucial to recognize subtle stress-related behaviours and understand dog body language.

"Humans need therapy dogs, and we benefit from interacting with them, but it is important that we also look at the silent part of that interaction – the dogs," Sarrafchi says. "Therapy animals receive special training to remain calm, but they do still experience stress, and it's important their handlers know how to recognize it." Sarrafchi notes that the nature of a therapy dog's work requires them to spend considerable time in conditions that are generally considered stressful for dogs. They are kept on a leash and not permitted to move freely for long periods, they are touched by many unfamiliar people and they are transported to and from various therapy environments. And, because therapy dog training programs emphasize obedience and maintaining composure during interactions with humans, dogs will be less likely to appear stressed than their non-trained counterparts.

"Much of the work a therapy dog does involves non-consensual activities, but choice and control are essential elements of welfare," Sarrafchi says. "We wanted to better understand the dogs' feelings during interactions in a therapy environment."

#### spotting subtle stressors

Sarrafchi's team conducted a study that involved 18 certified therapy dogs during interactions with 44 human participants. Each human interacted individually with up to four therapy dogs, and each dog participated in forced and free-choice touch treatments for three minutes.

During forced touch tests, dogs were held on a leash by their owners while participants continuously touched the dog. During freechoice touch tests, dogs roamed freely in a pen and participants touched them only if they approached within arm's reach. Each session was recorded.

#### How to spot subtle stressors

The researchers reviewed video footage of each interaction in the study with an eye toward subtle behaviours that are validated as stress-related behaviours in dogs. These include lip licking, panting, yawning and ears back.

During forced touch tests, the dogs exhibited a higher occurrence of the ears back, a subtle indicator of stress, and approach behaviours, where the dogs are actively engaged with the participant. Meanwhile, during free-choice touch interactions they displayed more avoidance behaviours like moving or leaning away from the participants.

"It gives us the message that the dog is experiencing some stress when they are

on leash and they are denied the choice of whether or not to interact with unknown people," says Sarrafchi. "The question is, what can we do to improve their stress?"

#### Address subtle responses early

Sarrafchi says if a dog is showing signs of stress through body language, it should be addressed before the stress escalates into a more serious condition.

"When animals are experiencing stress and those subtle signals get ignored, they begin to feel they have no escape, and a chronic condition called 'learned helplessness' may develop," says Sarrafchi.

In cases of learned helplessness, animals give up and stop showing the subtle behaviours to indicate they are stressed.

#### When to take a break

If a pet owner or handler recognizes subtle signs of stress, it may be time for a short break. Sarrafchi says time to get off leash for a while, or to have some quality interaction with their 'beloved person' before the next session goes a long way in restoring a dog's welfare.

"Owners should pay attention to their dogs, learn what their body language means, and figure out what works for them," Sarrafchi says. "Dogs need to interact with their owners. They get stressed when we are away, and sometimes they show signs of stress in other situations. To improve their welfare, we need to pay attention and give them the support they need."

The study has produced information Sarrafchi would like to see integrated into program guidelines for therapy dog interactions and various training programs. He notes evidence-based practices can be implemented to promote better dog welfare in therapy settings.

Sarrafchi's PhD research is under the supervision of Dr. Katrina Merkies, a researcher in animal behaviour and welfare. Sarrafchi has examined the effect of touch on both dogs and horses during humananimal interactions, the former of which was funded by Nestlé Purina.

Read more about the Campbell Centre for the Study of Animal Welfare (CCSAW) at ccsaw.uoguelph.ca.

## SIX DEGREES OF SEPARATION by Suzi Beber

Suzi Beber founded The Smiling Blue Skies<sup>®</sup> Cancer Fund in 2001 after losing her Golden Retriever, Blues, to lymphoma. To honour his memory, and in gratitude for the care he received at OVC, Smiling Blue Skies has raised more than \$3.2 million to support OVC Pet Trust's guest to find more and better ways to deal with canine cancer.

Photo by Erin Lynes.

#### "Memories are made of this . . ."

If we look around, we truly are all just "Six Degrees of Separation" from each other, brought together by threads of love for our companion animals, making us all kindred spirits. Thanks to you and your giving hearts, we have raised over \$3.2 million for canine cancer treatment and research.

We are thrilled to share that Dr. Valerie Poirier has been named the Marilyn Pocock Radiation Oncologist and Diagnostic Imaging Research Scientist, supported through Smiling Blue Skies. Marilyn's legacy, through decades of teaching and the love she had for her Golden Retrievers, continues in such a special way, through her very generous gift. Dr. Poirier is "the only person in the world that is a specialist in medical and radiation oncology, as well as diagnostic imaging." She loves working with her patients and their families, while always walking on the path towards new technology that can improve patient outcomes. As a researcher, she has many peer-reviewed publications, targeting optimal radiation and pharmaceutical dosing for a variety of cancers.

Thank you to the Golden Retriever Club of British Columbia (GRCBC) for your ongoing support of Smiling Blue Skies. Whether through annual donations or sporting dog events, we are thankful to the GRCBC membership.

This year's Golf for a Cause event, spearheaded by Tina Escobar and her

wonderful team, was held on July 13, at the Bear Creek Golf Club in Utopia, Ontario. It was a great success, with over \$3700 raised to help fund innovative cancer research.

Capital Comets Dog Sports held their "Maui Wowee" agility trial, and with Carol and Karen at the helm, \$4800 was raised for Smiling Blue Skies through their annual auction and barbecue with Chief Chef Paul. Six degrees of separation was shining brightly, when Sharon Good Ransom flew across the country to judge this year's trials. Our reunion was such a treat after 13 years. We learned that we share another link with Ali, who hosted Sharon and helped to make the agility trial such a great success, and whose dogs are also from Erin of Eromit Labradors, home to the Western Cup Challenge, the most exciting dock-diving event in Western Canada.

This year's event was another fabulous success, with 79 teams starting off the weekend, and 32 teams completing all four events, with qualifying scores to contend for the cup! The Tennis Ball Challenge raised \$3680 for Smiling Blue Skies; there were a variety of different games, raffles and nail trims, as well as an epicure box and BBQ, bringing the grand total to \$8829.45! Thank you to everyone who supported the Western Cup Challenge -- the donors, the volunteers, the sponsors and all those who "catched and matched!"

The 2024 Agility Association of Canada National Championships were held in August, and \$2463 was raised! Special thanks to Denise for organizing this year's special raffle, and to everyone who donated prizes.

This summer was a busy one for "Bark Avenue Remarkable K9s." Thank you Joan and Bill, and to everyone who participated in BARK events, including silent auctions and the Can/Am Challenge. BARK also donated \$1 per run to Smiling Blue Skies, for a grand total of \$3,034!

Linda Sowerby's "A Garden Gathering," was the perfect bouquet to bring closure to 14 years of fundraising events for Smiling Blue Skies. From the sumptuous food to the sociable, musical stylings of the great Pat Hewitt, the afternoon was an extra special event for everyone who attended, and those of us on the other side of the country were able to participate too. The event raised \$4185; when added to the \$7150 raised during the fall event, the total comes to an amazing \$11,335!

"Where flowers bloom, so does Hope."

Long live blue skies, where Hope is a kite, and dreams really do come true.

![](_page_25_Picture_17.jpeg)

#### Honour a Best Friend and Give Back to Pet Health

Did you know that you can support OVC Pet Trust through our Pet Memorial Program?

Each year we send more than 45,000 memorial letters to pet owners who have lost a pet. Gifts made in honour or in memory of a beloved pet support advancements in companion animal health at the Ontario Veterinary College.

Thank you to everyone who chooses to give back to improving and advancing companion animal health and well-being in this meaningful way.

Visit our website to learn how to make a gift at www.pettrust.ca/donate

#### Share Your *In Memory* Story

Pets leave paw prints on our hearts.

Have you recently lost a beloved companion whose memory has been honoured with a gift to OVC Pet Trust?

Connect with us on social media or contact us via email to share your story.

Email: ovcpet@uoguelph.ca facebook.com/ovcpet twitter.com/ovcpettrust Instagram: @ovcpettrust

## PETS IN MEMORY

"What we have once enjoyed, we can never lose. All that we love deeply becomes a part of us." – Helen Keller

![](_page_26_Picture_13.jpeg)

![](_page_26_Picture_14.jpeg)

Banjo and Snape.

#### We think we are here to

guide our pets as we accompany them on their journeys through life, but in truth, they become as much our guides as we do theirs. When we lost our beloved Basset Hound, Banjo, to cancer at eleven-and-a-half years, our pain and sorrow felt boundless. Our guide and guardian had now departed for good. Who would lead our hearts now?

We had named Banjo and his littermate Snape as puppies. Banjo was affectionate, gentle and kind, whereas his brother Snape seemed somewhat mischievous with a darker coat and slightly more irascible nature. The Harry Potter connection seemed right at the time! Banjo just felt more upbeat, lively, awake and heartfelt. But now that the music of Banjo has stopped over a decade later, we need to make sense of this silence. I am writing this tribute to you Banjo, but it's really for our family and other families who are going through this darkness and need the light you brought to our lives, as many pets do.

Banjo, I'm looking at your pictures now: your sad brown eyes etched in black, your outrageously floppy ears and super-sized paws, features which sometimes made you and your brother, Snape, a celebrity dog duo. How many times were we stopped

on the street by photographers, bloggers and random admirers asking if they could photograph you two? How many cars stopped suddenly as we strolled at home and away, with drivers rolling down the window and just smiling? Some of these people asked to photograph you but I have photographed your heart in my mind's eye and I know it was bigger than the world. You really did take care of us when times were difficult and would jump into our laps offering immediate cuddles and concerns, brushing your muzzle against our chest. You jumped for joy with your brother Snape when we celebrated birthdays and holidays, howling together but in different pitches, yours higher and squeakier, the tenor to Snape's baritone bawl. Sometimes we four would all howl in unison, a quartet of humans and hounds celebrating, well, our family.

And what tribute to you would be complete without an extended riff about your incredible cold, wet nose? Well, Basset Hounds are descended from Blood Hounds, so it was no surprise that walks with you could veer off course at any moment, for a scent seemingly hundreds of feet away and invisible to everyone but you. And then you would triumphantly sniff what you had discerned with leg raised to mark your victory. These were moments a true dog owner relishes and remembers — the superpowers of their floppy-eared and hopelessly goofy dog.

During and after the pandemic we also found ways to escape home with our road trips to Quebec and the United States. Ottawa, Quebec City, Montebello, La Malbaie, Portland, Manhattan, Boston, New Haven, Ithaca, Chicago and St Louis. We christened my Forester the "Bassetmobile" — you and Snape with ample room in the back with seats folded down-with me-your pilot— and my partner, as navigator in front. We explored the world as a team and honestly, it's hard to do that now without you, but I know you wouldn't want to see us in so much sorrow. So when we travel you are always with us, everywhere.

Banjo, we have learned so much from you over the almost twelve years we were blessed with your endlessly wagging tail — and that's why our family has decided to create the Banjo Fund at the Ontario Veterinary College (OVC) to help other families struggling when they suffer the loss of their pet. We want your kindness and compassion to help others deal with losing friends like you, who are irreplaceable, loyal and forever with us.

Steven and family, Toronto, Ontario

PET TRUST PALS Connect with OVC Pet Trust on social media to share your stories and photos: Facebook (facebook com/ovcpet) X (@OVCPetTrust) and Instagram (@OVCPet Facebook (facebook.com/ovcpet), X (@OVCPetTrust) and Instagram (@OVCPetTrust).

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- 1. OTS Dog Jog. The 14th annual OTS Dog Jog in support of OVC Pet Trust was held on March 23, 2024, and raised more than \$6,000. Thank you, OTS! Photo by Sydney Doucette.
- 2. OVC Pet Trust Virtual Forum. Last spring, OVC staff, faculty and researchers hosted a virtual forum to share what goes on behind the scenes at the Ontario Veterinary College. More than 70 people attended to hear about current research, experience a virtual tour, have their questions answered and learn what is on the horizon for OVC and OVC Pet Trust. Thank you to those who joined us for this exclusive look inside the walls of OVC.
- 3. Dogust. Ren's Pets and their customers raised an incredible \$48,296 during their 2024 Dogust Campaign! These funds will be used to advance companion animal health through OVC Pet Trust. Thank you to Ren's and their loyal customers for continuing to support OVC in this way. Pictured (left to right): Amber Pacheco (Brampton Team Lead, Ren's Pets), Laura Daniels (District Manager, Ren's Pets), Kaliska Gibson (Marketing Coordinator, Ren's Pets), Sandra Valeriote (Administrative Assistant, OVC Pet Trust), Kayla Wright (Marketing Specialist, Ren's Pets), Patrick Cook (Senior Development Manager, Ontario Veterinary College), Dr. Jeff Wichtel (Dean, Ontario Veterinary College), Alison McLaren (Manager, OVC Pet Trust). Photo by Katie Duncan.
- 4. Summer Events. It was a busy summer for OVC Pet Trust summer students Sammi Luk, Sarah Powaska and Surleen Sandhu (left to right). In addition to assisting with day-to-day tasks, they represented OVC Pet Trust at the Guelph Pride Puppy Parade, Dorchester Pet Fest, PHD Dog Sports UKI Agility International Challenge and Pawlooza. Thank you to all the event organizers, and to the wonderful people and pets that stopped to chat with our team.

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Attention: OVC Pet Trust, OVC Main Building, Dean's Office

#### MAKE A GIFT TO SUPPORT OVC PET TRUST TODAY:

![](_page_27_Picture_11.jpeg)

Or visit pettrust.ca/donate

#### **OVC PET TRUST**

OVC Pet Trust is part of the University of Guelph, a registered charity. You can visit our website to support companion animal health at www.pettrust.ca.

> The University of Guelph charitable registration number 10816 1829 RR 0001

> > **PETTRUST.CA**