When the Hill’s Pet Nutrition Primary Healthcare Centre (PHC) celebrates its fifth anniversary in June, it will not only mark the building’s opening, but also recognize this important hub for student veterinary learning, primary health-care provision and research.

“It’s an experiential learning lab — that’s really the philosophy — where students bring together what they have learned over the first three years of their education,” says Dr. Peter Conlon, Hill’s Pet Nutrition PHC director and OVC associate dean, students.

This student-centred learning environment gives student veterinarians hands-on experience with client interaction and day-to-day primary health-care practice.

An important piece in advancing these learning opportunities comes from input from veterinarians, industry and OVC representatives who serve on the Hill’s PHC advisory board.

“They are very knowledgeable, truly advisory and provide wonderful suggestions,” says Conlon. The advisory board members include Dr. Mary DeCaire, Centennial Animal Hospital; Dr. France Gagne, Novartis Animal Health Canada Inc.; Joe Giles, Hill’s Pet Nutrition Canada Inc.; Peter Mosney, IDEXX Laboratories Canada Corp.; Doug Raven, Ontario Veterinary Medical Association; Dr. Karyn Jones, Ajax Animal Hospital; Dr. John Reeve-Newson, The Animal Clinic; and

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This year’s OVC convocation and alumni weekend will be particularly poignant for me as I complete my tenure as dean of OVC. As the new graduates take on new adventures, I will also be exploring new possibilities. I will always remember my very first OVC alumni weekend in 2005 as the “new” dean, and the welcoming friendliness of the OVC Classes of 1950 and 1955 and many other alumni. Looking back over the past 10 years, I’m proud of what we have accomplished; looking forward, I see incredible opportunities for the college.

I was privileged to be the dean during OVC’s 150th anniversary celebrations in 2012. The alumni dinner in Creelman brought together alumni, faculty and staff from the past 60 years. I have particularly enjoyed learning about OVC’s rich heritage, which helps us keep in perspective our present day issues and challenges.

By learning how our predecessors managed great changes, we acknowledge how creative and determined they must have been to not only keep OVC going but to ensure its success — whether it be the founding of the college, the move from Toronto to Guelph, the Great Depression, the world wars when faculty and students left for military service, U of G’s creation in the 1960s, and multiple eras of expansion and contraction.

I have enjoyed getting to know and work with our many supporters, friends and donors. You bring new ideas and energy and sometimes have more confidence in us than we do in ourselves! I value the friendships I have made, ones that will last a lifetime.

Significant changes in technology and social media continue to occur, and the pace is only increasing. One of the biggest challenges facing OVC is to determine how and what students need to learn and do in an increasingly digital environment where people have higher expectations for how animals are regarded and managed.

The OVC continues to be a key differentiator and a “jewel in the crown” for the University of Guelph (and of course I’m biased!). We provide high-quality programs, attract talented B.Sc. students, make significant contributions to interdisciplinary programs, and provide leadership in innovative learning outcomes, public health and infectious disease, translational biomedicine, and animal health and welfare.

The OVC has adapted as societal needs have changed – but the core principles have remained the same: the craft of the veterinarian and OVC is for the good of the nation and the world.

I wish you all the best and hope you will keep in touch!

— Dean Elizabeth Stone
**GIVING**

**Gift helps preserve veterinary history**

Dr. Tom Hulland, DVM ’54, presented a $7,800 cheque to OVC dean Elizabeth Stone on behalf of the OVC Class of ’54 for the OVC Historical Archive Fund. The fund helps the college manage, store and label more than 10,000 artifacts in its collection.

Future plans include digitizing the collection so it can be viewed online. Recent renovations to the McNabb Memorial Room, located in the OVC Learning Commons, include a variety of cabinets to expand display space for the C.A.V. Barker Museum of Canadian Veterinary History.

*From left: Lisa Cox, OVC postdoctoral research fellow; Eleonore Hulland; Dr. Tom Hulland; OVC dean Elizabeth Stone; and Stefanie Sharp, OVC alumni advancement manager*

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OVC faculty members Drs. Stephanie Nykamp, Cate Dewey and Carolyn Kerr.

“The advisory board provides a cross-section of experience for the Hill’s Pet Nutrition PHC to use as a resource,” says Giles.

“We talk about nuances in practice,” adds Raven, a board member since the centre’s inception. “For example, there was great input from folks around the table on having practical discussions about nutrition with clients.”

Client interaction is complex, filled with emotions and decisions to be made. “Our health-care teams work in partnership with the client,” adds Conlon. “Our goal is to increase student confidence with a solid foundation of knowledge and skills. Once they learn the tools, they feel empowered by the knowledge and more confident working with the clients.”

“Every pet has an owner attached to it, and unless you treat the whole, you’re not going to be successful,” says Reeve-Newson, also an original board member. “Experience is the greatest teacher. The skills students learn at Hill’s PHC arm them better for the future and for understanding the human-animal bond.”

The experience also eases the students’ transition to practice, says Raven, “because they’ve had interactions with clients in a real-world setting.”

“The Hill’s PHC offers an opportunity to learn first-hand about communicating with clients,” says DeCaire. “It gives students the opportunity to see the routine cases they will see in everyday practice such as infected eyes and torn toenails.”

“A sure-fire way to improve in a skill is to practice the skill until it becomes second nature,” adds Giles. “The Hill’s Pet Nutrition PHC is designed to enhance students’ skills through hands-on practice. These enhanced skills are a value-add to their new practice, new clients and the pet patients for which they provide care.”
Even as a student, Zee Leung was drawn to international work. “I always knew I didn’t want to work in a traditional veterinary practice,” he says. After graduating with a DVM, he enrolled in the master of public health program. His early career involved working for Public Health Ontario, the Canadian Integrated Program for Antimicrobial Resistance and the Public Health Agency of Canada before he was hired by the International Development Research Centre (IDRC).

“Ecohealth, the area I work in, is really just a flashy name for an intuitive concept,” says Leung. “It makes sense that our well-being is dependent on human health, the health of our livestock and the health of the environment. The task of researchers is to translate that concept into meaningful and tangible actions. We need the scientific evidence to answer important questions, such as how are global environmental changes influencing diseases that spread between animals and people? How are vulnerable and minority populations impacted? How can we reduce poverty and improve food security through healthier environments and healthier animal populations?”

At IDRC, Leung oversees the work of researchers studying emerging and re-emerging diseases in China and Southeast Asia for the Ecosystems and Human Health Program.

“My job is to support our researchers, to help them share their results with policy makers and other researchers, and to build up a community of researchers in these areas,” says Leung. “It is all based on local researchers leading and taking ownership of their work, which makes it more effective and more sustainable. We fund research across borders and across disciplines. You need veterinary medicine, human medicine, social sciences and economic science in order to really get a handle on these diseases.”

For example, past research on avian influenza in Vietnam, Thailand and Indonesia has focused on how to stop the disease from spreading.

Leung oversees research that examines outcomes of these and other policies, such as culling chickens within a certain radius of an influenza outbreak, on communities where small poultry farms were common, and on the affected farmers’ health and ability to make a living. “This enriches our understanding of avian influenza and the impact of these changes,” he says.

Leung describes OVC as a “hub of ecohealth,” adding that “even veterinarians who are not working on ecohealth in a formal way are still very much at the intersection of human and animal health. Those links are fundamental to the work we do wherever we are.”
**RESEARCH NEWS**

**New parasite in Ontario raises concern**

In 2012, OVC student Alicia Skelding was completing an externship at a southern Ontario veterinary clinic when a two-year-old boxer, who had never left the province, was brought in.

During surgery, the veterinarian saw what looked like a large mass in the liver. Although liver masses are common in boxers, Skelding opted to use her “case study” money to have further testing done. The dog was diagnosed with an infection of *Echinococcus multilocularis*.

“Until that testing was done, we didn’t know this parasite was even in Ontario,” says pathobiology professor Andrew Peregrine. Prior to 2009, the only cases described in dogs in North America were seen in Alaska; the 2009 case was in British Columbia.

*Echinococcus multilocularis* is a tapeworm usually found in the small intestines of foxes and coyotes. The eggs in the animals’ feces are picked up by rodents, where they develop into an intermediate stage and cause alveolar hydatid cysts in the liver that are ultimately fatal. When foxes or coyotes eat these rodents, the adult tapeworm develops and the cycle continues. The parasite can also infect dogs and cats if they eat rodents.

Peregrine says the parasite poses a significant health risk to humans: if people ingest the parasite’s eggs they may develop the intermediate stage in the liver, which has a high mortality rate if left untreated. Much of the research on this parasite has been done in Switzerland, where it is becoming a significant problem.

The Ontario boxer most likely consumed a “massive number of eggs” from coyote or fox feces, explains Peregrine. Since then, two more dogs have been diagnosed in southern Ontario. Neither of these dogs had travelled outside the province. To date, no human cases have been described in Ontario.

“To date, all people in contact with the three Ontario dogs have tested negative. Cases in dogs may have been missed because the infection in the liver looks grossly like a tumour.”

Peregrine is urging veterinarians to be aware of this emerging disease. Bayer Canada is assisting veterinarians with diagnostic testing for dogs with suspicious abdominal lesions. Peregrine is also working with Public Health Ontario and other groups on further research and prevention strategies.
When Elizabeth Stone became the 10th dean of OVC in 2005, her vision for the college was clear, and it continues to guide her in the way she approaches programs and envisions the future.

“I want to increase the contributions, relevance and awareness of OVC to society, whether it be animal owners, other scientists, government, industry or the general public,” she says.

Stone is the first OVC dean who didn’t graduate from the college (except OVC founder Andrew Smith). This vantage point gave her a different perspective on some of OVC’s unique qualities.

“I recognized that many of our programs were exceptionally strong for a veterinary medical school,” she says, “for example, an innovative curriculum, data-driven health management, engaged researchers, B.Sc. teaching — and the list goes on.” She was drawn to OVC by these strengths and a University-wide focus on a learner-centred environment.

Stone says that OVC’s accomplishments are the result of its people and programs. Under her leadership, OVC has created and strengthened interdisciplinary centres, bringing together U of G faculty and students with scientists and policymakers from other universities, government agencies and industry.

“In a word, dean Stone is a visionary and stays true to that vision in actions big and small,” says Dr. Peter Conlon, associate dean, students, and director of the Hill’s Pet Nutrition Primary Health Care Centre.

Soon after joining OVC, Stone spearheaded an integrated plan for the college, and three major OVC priorities were implemented. The Centre for Public Health and Zoonoses, the master’s of public health (MPH) and the Institute for Comparative Cancer Investigation received a boost from U of G’s Priority Investment Fund. “This enabled us to recruit more outstanding faculty to these programs,” she says.

The MPH program, the only one
In honour of Elizabeth Stone’s 10-year tenure as OVC dean, alumni, staff and friends of OVC have joined together to create the **Stone Scholarship for Student Veterinarian Exploration**. The award will be presented to the student who submits the best proposal for an interdisciplinary project in which they will use their skills and creativity to broaden their career horizons, foster collaborations both within and beyond OVC, and expand the role of veterinarians in society. If you would like to help support this initiative, please contact Stefanie Sharp at 519-824-4120, Ext. 56679, or ssharp03@uoguelph.ca.

In a veterinary school, underlines the value of this planning approach. Last year, the MPH attracted more than 300 applications for the 20 available seats, a testament to its quality and reputation.

In addition, OVC has expanded its capabilities by establishing donor-supported chairs in animal welfare, clinical nutrition, communication, dairy health management and, most recently, in the role of technology and animal-human bond-centred healthcare.

“..."In a time of budgetary challenges, dean Stone’s ability to liaise with external donors to bring in significant dollars has been a vital component in helping OVC accomplish its integrated plan,” says Dr. Kerry Lissemore, associate dean, academic.

A critical aspect of Stone’s vision has been to expand learning opportunities for students to broaden their perspectives. Working closely with key faculty and college leaders, OVC developed a new global model for primary health-care learning. Following the opening of the Hill’s Pet Nutrition Primary Healthcare Centre in 2010, all OVC student veterinarians now interact directly with clients and their patients to apply what they have learned in classrooms and laboratories.

When Stone looks over the past 10 years, she credits her dedicated leadership team and hard-working faculty, staff and students. “We all need to remember the remarkable achievements that are happening every day on the farms and in the organizations we serve and in our research labs, classrooms and the OVC Health Sciences Centre.”

Whether it’s public health, global development or community engagement, animals are an essential part of the equation. Stone co-chaired two Global Development Symposia at U of G in 2012 and 2014 to demonstrate the critical links between animal and human health.

Her focus on fostering collaboration within and beyond OVC and expanding the role of veterinarians in society will continue with the creation of a DVM student scholarship in her name.

“The OVC has benefited enormously from the leadership, vision and commitment of Elizabeth Stone,” says Dr. Alastair Summerlee, U of G president from 2003 to 2014 and professor in OVC’s Department of Biomedical Sciences. “The first female dean at the college, her passion for the role of the veterinarian in world health and her commitment to bringing the OVC into the 21st century have left the college in a strong position.

“She has used her quiet powers of persuasion to ensure that donors and industry partners who share her vision have supported the college. During her tenure, the college has experienced unprecedented growth in external support. Elizabeth Stone will be recognized in time, among the many strong leaders of the college, as one of the most effective and forward thinking.”
A new series of workshops for DVM students from the office of the associate dean, students, is designed to help them to bounce back from stress. Sponsored by Zoetis Canada, the Wellness Wednesday series ran for eight months during the 2014-15 DVM program, covering a variety of topics to enhance the resiliency of DVM students. “We are very pleased that Zoetis Canada has agreed to sponsor this important initiative for our students,” says Dr. Peter Conlon, associate dean, students.

Up to 60 per cent of Doberman Pinschers share a genetic legacy: an inherited form of heart disease called dilated cardiomyopathy (DCM). Although the disease is prevalent in Doberman Pinschers, other large-breed dogs such as Irish Wolfhounds, Great Danes and Boxers also have high rates. And the prognosis is not good: DCM is a fatal condition.

Biomedical sciences professor Glen Pyle is working on improving our understanding of this disease. “There are two reasons to study DCM in Dobermans and other large-breed dogs,” he says. “One is to help us treat this in dogs. The other is that people can also have inherited DCM, and the process is very similar, so it may also help people with the condition.”

Pyle explains that the cause is genetic, but not all of the genes that are associated with this type of DCM are known. Although one genetic mutation has been identified in Doberman DCM to date, others likely exist. A mutation in a gene produces an incorrect protein, which affects how the heart functions, ultimately leading to heart failure.

“Our goal is to identify genes — as there is likely more than one involved — and the proteins that cause this cascade of effects,” says Pyle. “Then we can find drugs or other therapies that will work on that protein.”

Pyle is currently collaborating with researchers from Finland to sequence the genetic information in dogs with DCM and with a laboratory in Washington to test a new gene therapy treatment on tissues taken from dogs who arrive at OVC with DCM. “It is hard for owners to know that their dog has this disease and may die,” he says. “But if they consent to giving us tissue samples, we may learn something that will help save the next Doberman.”

He adds that identifying genes may lead to tests that can identify the genetic potential for the disease in puppies. Not only could owners then make an informed choice about breeding dogs that carry the mutation, but dogs with the abnormal gene could be monitored and treated early. “Not long ago, most dogs diagnosed at the heart failure stage lived only a couple of weeks,” says Pyle, “but now with regular screenings and earlier treatment, dogs can live years before heart failure develops and some longer than a year after heart failure occurs.”

Dr. Lynne O’Sullivan and Dr. Mike O’Grady (now retired) are the clinical cardiologists who run the Doberman DCM screening program at OVC. O’Sullivan, a cardiologist at OVC’s Health Sciences Centre, is one of only 10 board-certified cardiologists in Canada. “Without their efforts, none of this would be possible,” Pyle says.
BOOK LAUNCH

Writer shares story’s inspiration

“If only I had known I was going to make the little girl sick, I would have left long ago. I’m not nasty by nature, though it may seem that way to my family. I once considered myself quite handsome, but time has expanded the waistline, thinned the hair, and the muscles that in my youth professed to my strength, have long since gone. I live with my Bobby and his wife, Sylvia,… I sit in this box of a room all day and observe their life as though they are my television to reality.”

Dr. Donna Curtin, DVM ’12, contributed a story called The Old Man’s Guilt to SICK! Curious Tales of Pests and Parasites We Share With Animals, a book recently published by OVC. She is an owner with the Walkerton-Hanover Veterinary Clinic. She is waiting to hear back from an agent about her first novel and is now working on her second.

What gave you the inspiration for The Old Man’s Guilt?

When I was a young girl, I helped my grandfather trap a baby raccoon from the space above their garage. My grandfather was a kind man and once he held this tiny, spitting creature in his hands and realized the poor soul was only terrified, he agreed to allow me to soothe the orphaned raccoon baby. I hand raised this masked mischief maker for about three weeks, feeding him pieces of banana. From then on I was rather fascinated with raccoons. In veterinary school, when we learned about the raccoon roundworm, I was pretty shocked, considering how closely I handled that baby raccoon. Little did we know that the piles of feces on our hay bales were actually raccoon latrines, and that our barns were likely parasite egg havens.

Have you always enjoyed writing?

As far back as I can remember I have always enjoyed writing. What can possibly be more fun than making stuff up? But it wasn’t until after I graduated from veterinary college that I realized I had a bigger story to tell. I lost a dear friend and mother figure to breast cancer at a time in my life when I mistakenly thought other things like getting good grades and passing exams were so important.

In the end, I learned the hard way that the people we share our lives with are far more valuable than making the grade. I started writing my first novel during the night when, after breastfeeding my first-born to sleep, I would find myself wide awake. From there, writing became my head space while I was on maternity leave. This was my time when I could let my imagination go and write out how something could have gone better, how I could have been the hero.

Why did you decide to contribute to SICK! Curious Tales of Pests and Parasites We Share With Animals?

I love the concept of world medicine without barriers. In many ways I feel that veterinary medicine is an extension of human health, just as is the case with environmental studies and agricultural science. Without a healthy environment and nutritious food we cannot expect to be healthy, not to mention the fact that animals and people can share and transmit diseases to each other. If we have healthier animals, it goes to say humans will benefit.
Growing up in Oakville, Ont., Chanelle Taylor, DVM ‘14, never considered a career in the poultry industry. In fact, her sights were set on being a companion-animal veterinarian when she entered the animal biology program at U of G.

Taylor didn’t have an agricultural background, and the animal biology degree was a game changer for her. “I got to know about animal agriculture and found it fascinating,” she says. She started exploring poultry options, including a course with a poultry physiologist. Then she heard that Dr. Michele Guerin, a new epidemiologist at OVC, was looking for a summer student. “I was impressed by the poultry producers,” she says. “They were happy to explain what they did to introduce me to poultry medicine and husbandry.” Taylor never looked back.

She got a job at the Arkell Poultry Research Station during the next school year to learn more about poultry husbandry and nutrition. “Every year I found a new job in poultry research,” she says.

By the time Taylor was in her fourth year of the DVM degree, she had many connections in the poultry industry, making it easier to find external rotations. She now works as a poultry veterinarian for the meat processing side of Cargill. Her work focuses on the company’s processing plant in London, Ont., and the hatchery in Jarvis, Ont.

There are a wide range of opportunities available in the poultry industry working in areas such as animal welfare, nutrition and research, as well as a diverse range of employers, including government, pharmaceutical companies, commodity organizations and private practice.

As a member of the Poultry Health Research Network, Taylor has two main interests: animal welfare and antimicrobial use.

“Animal welfare is a huge component of my job. I’m very passionate about avian welfare,” she says. “You raise these animals in large groups for human consumption. You need to treat them with respect and comfort while they are alive. You are their advocates.”

Similarly, antimicrobials are a growing concern with the public, government and industry. “Work in this area safeguards the public and the agriculture industry. It’s important to find an appropriate solution for the public but also for the animal industry so poultry welfare and safety isn’t compromised,” says Taylor.

ALUMNI GIVE BACK TO OVC

The Class of 2012 had $8,018 left in their class fund and saw it as an opportunity to give back to OVC areas that support veterinary students: the OVC Pet Trust and Student Equipment Fund.

“OVC Pet Trust helped provide funding for summer jobs for many of our classmates and colleagues, and we believe it’s a very valuable program,” says Dr. Janessa Brown, DVM ’12. “I sat on the student equipment fund as an OVC 2012 representative and saw first-hand how the money is used, considering student use and learning opportunities as the number one priority when making decisions on equipment purchases. We know just how important the student equipment fund is and have that program to thank for numerous pieces of equipment used in labs and in the teaching hospital.”
Recent renovations to the OVC Health Sciences Centre’s Companion Animal Hospital include a new front entrance, lobby and reception area, exam rooms, client comfort room, call centre, and billing and discharge area. The renovations were designed to enhance the staff, student, clinician and client experience, and ensure individuals visiting the Companion Animal Hospital with their pet feel comfortable and secure in an environment that reflects the expert attention they receive.

**COLLEGE NEWS**

**Prof enjoys patient, client and student interaction**

A familiar face joined emergency and critical care in clinical studies recently when Dr. Shane Bateman took on a full-time faculty position. He brings extensive teaching and clinical experience to the role.

Bateman is no stranger to OVC; he completed his internship in small-animal medicine, followed by a residency and a D.V.Sc. in emergency and critical care before a stint in Ohio State University’s College of Veterinary Medicine.

In addition to the teaching and client interaction he loves, Bateman is involved in a number of community roles, including serving as chair of the Guelph Humane Society board and working with the Guelph Cat Population Task-force, which is looking at cat overpopulation issues and potential solutions.

Bateman is also the Golden Triangle regional director for Community Veterinary Outreach, an organization started in Ottawa by another OVC alumnus, Michelle Lem. The organization works in partnership with local social agencies to connect clients with preventive veterinary care for their pets, but also has wider benefits. “When we can provide veterinary care and bring them in to that environment, we have the possibility to influence human health as well,” says Bateman.

**PROF BRINGS FOCUS ON AVIAN DISEASE**

Pathobiology professor Leonardo Susta studies avian diseases that threaten economic and human health. Originally from Italy, he came to OVC last fall from Georgia, where he completed a doctorate and worked on Newcastle disease virus (NDV) in poultry.

He will continue to study NDV here and look at other diseases whose human health impacts have captured headlines in recent years, including bird flu and salmonella.

Working at the cellular level, Susta studies resistance to the virus that causes the disease. He also plans to devise better vaccines to control NDV.

“The Newcastle disease virus changes constantly, so new measures to improve vaccines are needed,” he says.

Susta completed his PhD at the University of Georgia with Corrie Brown, a veterinary pathologist and OVC DVM graduate. He worked at the Southeast Poultry Research Laboratory run by the United States Department of Agriculture in Athens, Georgia, prior to joining OVC.
GIVING

Class of ’73 supports Animal Cancer Centre

In honour of their 40th anniversary, the OVC Class of 1973 was looking for a project to recognize their dedication and significant contributions to veterinary medicine.

“The uniqueness and extent of the Animal Cancer Centre capabilities made it an attractive option for the class,” says Dr. Russ Tate, DVM ’73, who spearheaded the initiative. Letters went out to all OVC 1973 grads outlining the proposal with a very positive response.

“Our goal was to reach $100,000,” says Tate. “We were able to exceed that and reach $151,770.”

The Animal Cancer Centre is privately funded, so this was an opportunity for the class to help with research and treatment protocols, adds Tate. Two rooms have been named in honour of OVC 1973: the Feline Radioiodine Therapy Room, and the Anesthesia and Recovery Ward. In addition to the room dedications, a tile was added to the Animal Cancer Centre donor wall, recognizing the Class of OVC 1973 gift.

The class also wished to honour the last request of classmate Dr. Lance Lam who left a gift to OVC in honour of Dr. Trevor Lloyd Jones (1952 to 1968), the dean during the class’s undergraduate year. To honour Lam’s wishes, the class shared the Feline Radioiodine Therapy room naming with Lloyd Jones.

A tile honouring the gift was added to the Animal Cancer Centre’s donor wall.