



Cornell University College of Veterinary Medicine

Pre-Vet Newsletter

December 2011



Applicants for the Class of 2016

Thank you to all who completed an application to our Doctor of Veterinary Medicine degree program this year! We are honored that you choose to apply to Cornell and delighted to have the opportunity to review your application.

We understand applicants are anxious to know when they might hear from us regarding their application, so we are providing a timetable that covers the next few months. Please note **we do not require Fall transcripts.**



Admissions Timetable

- Decisions will be sent out early January 2012
- Applicants will receive an email directing them to their **Tracking Page** with a PIN Number that will allow them to access their decision letter

For applicants made an offer of admission or an alternate offer:

- You will be invited to an Information Session (option to choose one of the four weekends to attend):
 - January 27 & 28, 2012
 - February 3 & 4, 2012
 - February 10 & 11, 2012
 - February 24 & 25, 2012
- Deadline to submit Financial Aid applications is February 1, 2012
- Deadline for Dean's Certification is March 15, 2012
- Deadline to notify the Admissions Office of decision regarding offer of admission is April 16, 2012
- Final Transcripts are due by June 15, 2012
- All prerequisite course work must be completed and on a final transcript by the above date



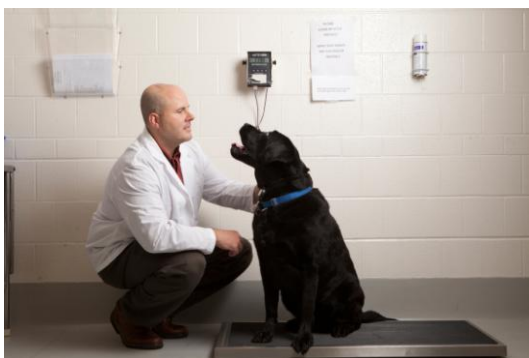


Photo by UPhoto

Weighing in on weighing less

Nutrition research reveals paths to weight loss and the secret life of fat

Americans are getting fatter and so are their pets. Following rising trends in human obesity, nearly half of pet dogs and cats weigh too much, and it's taking heavy tolls on their health. Cancer, diabetes, arthritis, and other bone and joint problems disproportionately plague overweight animals. Nutrition clinicians at Cornell's Companion Animal Hospital are helping downsize this growing problem by creating knowledge and solutions that could help humans and pets reach healthy weights.

"Obesity is the number one preventable health problem in veterinary medicine today," said Dr. Joseph Wakshlag, head of Cornell's nutrition and obesity management services. "Food equals love; people give treats; pets get fatter. Education and prevention are the only real tools against obesity."

Dr. Wakshlag's team of two resident trainees and one nutrition technician offers personalized nutritional support and weight-management planning for pets. Their clinical research has attracted sponsorship from Nestle Purina and resulted in three papers this year and several studies in progress.

The first paper proved pedometers attached to bungee cord collars can

accurately count a dog's steps and used the technique to show that dogs that walk more stay fitter. The second paper used the pedometer methodology to demonstrate for the first time that exercising dogs could help them lose weight and determined how many calories dogs can eat per 1,000 steps of walking while still trimming down. Dr. Wakshlag uses his findings to develop intervention plans based on dog walking to prevent canine obesity.

The hospital's nutrition residents are expanding on Dr. Wakshlag's third study addressing a new finding that is changing the way veterinarians and human doctors look at fat.

"Historically people saw fat tissue as inert energy deposits," said Dr. Jason Gagne '09, second-year resident in the nutrition service. "Recently we've realized it acts more like endocrine tissue, releasing proteins called adipokines that activate the immune system and cause chronic inflammation. This can exacerbate many disease processes and lower insulin resistance, leading to diabetes. We're trying to learn which cells in fat tissue produce adipokines."

First-year resident Dr. Renee Streeter studies how heavy hounds handle hidden health hazards from pro-inflammatory proteins. Her research compares dogs' adipokine levels to their body conditions and the levels of anti-inflammatory omega three fatty acids in their blood. While most adipokines increase with body score (higher is fatter) and harm the body, one kind does the opposite.

"Adiponectin is the single beneficial thing released from fat," said Dr. Wakshlag. "Unlike other adipokines, it's an anti-inflammatory insulin sensitizer. An injection of adiponectin will make your insulin work better. When you're lean, you release a lot of it, when you're fat, you release a lot less."

That's why you have to lose weight to become more sensitive to insulin."

In the nutrition team's clinical trials, inflammatory responses decreased due to lowering levels of bad adipokines after dogs lost weight.

"While most adipokines fell, we were surprised to find that canine adiponectin levels stayed the same. Dogs have much more adiponectin than cats or humans, no matter if they're fat or thin. This may be one reason why dogs are less prone to Type-II diabetes than other species." Cornell's headway on the obesity battlefield owes its success largely to corporate sponsors investing in the future of healthy pets.

"Nestle Purina has been phenomenally generous," said Dr. Wakshlag. "They funded our pedometer-based weight-loss studies, Renee's study, and Jason's entire two-year residency. Proctor and Gamble, who makes Natura Products, IAMS, and Eukanuba, recently stepped up to fund Renee's three-year residency program, with plans to make this a continual position for the Cornell University Hospital for Animals.

"These partnerships meet the rising demand for nutrition knowledge in the private and corporate sectors. Two Cornell veterinary alumni—Dr. Kurt Venator '03 of Nestle Purina and Dr. Susan Giovengo '91 of Proctor and Gamble—helped make our residencies possible. These pet food companies know the value of having nutrition experts in hospitals and hope to help fight the obesity epidemic these future clinicians will face."

Article by Carly Hodes



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South of the Border

Students hone their skills and serve society with new program launched in Mexico

It's easy to talk about problems that need fixing. It's especially easy to assume that someone else will fix them. Taking responsibility, though, well that's usually a different story, unless you happen to be a Cornell veterinary student passionate about putting a dent in pet overpopulation.

In June, seven Cornell students and one fellow veterinary student from Guelph headed to Mexico through the newly launched ShelterVet program. The result, according to one of the program's founders, Dr. Paul Maza, was a win-win scenario for all involved: students were provided with multiple opportunities to hone their primary care and spay/neuter surgical skills and the pet population in Mexico received a much-needed deterrent.

ShelterVet is an offshoot of MarVet, a program that trains veterinary students in marine animal medicine. Designed to emphasize the significance of companion animal medicine and population control in countries outside the U.S., ShelterVet explores the well-being of the animals themselves, public health, and the health of the ecosystem as exploding feral populations of companion species threaten surrounding natural ecosystems and the wild species that are native to the environment.

“Under the direction of Dr. Maza, ShelterVet 2011 in Mexico was particularly successful, and represents the first time that this workshop has been conducted independently as a stand-alone initiative,” said Dr. Raymond J. Tarpley, a senior associate professor at Texas A&M University and founder of MarVet. “We particularly appreciate the grant support we received from Cornell's Feline Health Center, which permitted an expansion of ShelterVet's impact in Mexico. We look forward to possibilities for conducting ShelterVet in other venues that introduce veterinary students to global conservation medicine and the contribution our profession can make in under-served regions of the world.”

This year, ShelterVet collaborated with CoCo's Cat Rescue in Playa Del Carmen, Mexico, to set up and run a spay and neuter clinic. During the five-day experience, students spent two days at Tierra De Animales, a dog rescue facility in Cancun, doing physical examinations, vaccinations, baths, parasite control, and other medical treatments for more than 100 dogs. During the final three days, students ran a surgical clinic at CoCo's, where they treated several animals with life-threatening infected uteri and other animals that were infested with parasites and dehydrated from viruses.

“The interactions between the Cornell team and the medical staffs in Mexico were very important,” said Dr. Maza. “This was new territory. We weren't sure what to expect in terms of language barriers and receptiveness. We found genuine enthusiasm and excellent teachers who were impressed with level of medical and surgical competence, collegiality, and professionalism that the student team demonstrated.”

In addition to hands-on work that emphasized proficiency in sterilization

surgical techniques, including gentle tissue handling, instrument control, and suture management, students discussed a variety of topics, including clinical anatomy as it pertains to the surgical approach to the sterilization surgeries as well as the reproductive organs themselves; aspects of clinical pharmacology related to the use of drugs involved in the anesthesia of the patients; physical examinations, fecal testing, vaccinations, infectious disease testing, parasite control, and mild medical treatment of sick animals; and the implications of overpopulation and its effects on the pet population, human population, native wildlife, and the environment.



Photo by Stephanie Specchio

“There were a lot of ‘firsts’ on this trip for me as a developing veterinary professional, and I am grateful I got to do so much in so little time, said Lisa Schupak '13. “Beyond refining skills that many of us already had (deworming, vaccination), many of us placed our first catheters, induced patients for surgery for the first time, and got to perform our first spays and neuters alongside Dr. Maza and two dedicated Mexican vets. There is no doubt in my mind that I developed my professional skills during my time there. It is surely refreshing to step out of the classroom and get to get your hands dirty now and then.”



"My trip to Mexico was truly unique. I got to get my hands wet with my first surgery, but more than that I got to see a different version of the human-animal bond outside of my normal American bubble. Initially, I was completely overwhelmed; we were out of our comfort zones in so many ways: standards of medical treatment, the view of companion animals in a foreign country, language barriers, and most of all, trying to make a difference in a way that would be safe for us, the people from Mexico we were working with, and the animals."

~ Lisa Schupak '13

Article by Stephanie Specchio

Pre-Vet Club Meetings

Would your club like to learn more about Cornell University's College of Veterinary Medicine and the DVM admissions process? There are options electronically! If you have video conference capability or can Skype™, we can meet! Contact Jennifer Mailey, Director of Admissions at vet_admissions@cornell.edu to start the process. The *video conference* option allows for a formal powerpoint presentation and question and answer. *Skype™* is a more informal discussion and question and answer.

Open House
Saturday, April 14, 2012
10:00-4:00



Open House is a day-long event held each April that is run by students. Exhibits and information booths are set up to educate the public about animals in general, pet care, wildlife, and just about anything else that is related to veterinary medicine. The Open House Committee is composed of second-years, with the assistance of first year students. Popular attractions include the painted horse and cow, large animal exercise treadmill, cow milking, baby animals, and many others.

If your family and friends are looking for a special time to come visit, we recommend Open House weekend. Admissions presentations with a DVM student panel will be held 3 times during the Open House.

