



VETERINARY

executive report

Ott Chair Discovers Feline Gene Mutation Behind Heart Disease

WSU's Newest Veterinary Cardiologist Makes Discovery

A gene mutation responsible for a devastating heart disease in cats has been discovered by the newest addition to the College of Veterinary Medicine, **Dr. Kate Meurs**, the Dr. Richard K. Ott Endowed Chair in Companion Animal Medicine and Research.

Dr. Meurs' pioneering work discovered the first spontaneous genetic mutation linked to feline hypertrophic cardiomyopathy, the most common form of heart disease in cats. Her work is published in the November edition of the *Journal of Human Molecular Genetics*.

"This is exciting work," said Dr. Meurs, who completed the research at The Ohio State University before joining the faculty at WSU. She adds, "We are currently working on developing a screening test that helps owners identify the problem early, and hope to have this available in December."

Owners of Maine coon cats have long observed the heart disease. Dr. Meurs' early research identified that Maine coon cats affected with hypertrophic cardiomyopathy had a marked reduction in one of the sarcomeric proteins, known as cardiac myosin binding protein C. Back-tracking genetically, she and her colleagues identified the specific genetic mutation responsible for the protein deficit. Current research hopes to identify similar mutations in other cat breeds and species.



Dr. Kate Meurs

Potential human application

Hypertrophic cardiomyopathy is the leading cause of death in young athletes, such as Loyola Marymount University basketball player Hank Gathers in 1990 and Boston Celtics player Reggie Lewis in 1993. Often there are no symptoms, but sudden cardiac death can occur due to an electrical disturbance (cardiac arrhythmia). In other cases, the patient can develop progressive fatal congestive heart failure.

"In both human beings and in Maine coon cats, this is an inherited disease due to a mutation in an important cardiac protein that helps the heart contract. Affected patients develop thickening of the heart muscle, which can result in abnormalities of the electrical activity of the heart or an inability of the heart to fill normally," said Dr. Meurs.

Dr. Meurs completes world class cardiac team

Dr. Meurs collaborated her research with teams from the University of California Davis, Baylor, and Ohio State. She joins Dr. Lynne Nelson and cardiology resident Dr. Sunshine Lahmers. "We have now assembled one of the finest animal cardiac teams in the nation," said Dr. Richard DeBowes, chair of WSU's Veterinary Clinical Services. "Not only in terms of unmatched service to our clients but in regard to truly world class research. We couldn't be more pleased!"



Maine coon kittens

Inside...

- Holiday Pet Memorial
- Eagle Released
- Miracle Baby—Sara Rose



World Class. Face to Face.

From the Dean...



Dean Warwick Bayly

At the Bayly Thanksgiving table, each of us is asked to speak about what they are most thankful for in the previous year. What strikes me most is the changing culture I see among our finest alumni veterinarians. Many have chosen to give back to the College of Veterinary Medicine in hopes of lifting up the students of today, just as

they were helped themselves. This is a tradition of excellence celebrated by the finest of private institutions, and an emerging model for today's universities given the continuing erosion of public support.

Rising rates

Since 1975, tuition at WSU's College of Veterinary Medicine has increased fifteen fold, to a current rate of \$13,776 per year. Unfortunately, starting salaries for new veterinary graduates have increased only four fold to an average of \$48,000. The difficult truth is that our veterinary students now begin their careers owing an average of \$85,000 each. This is why we have established the WSU College of Veterinary Medicine Heritage Fund, which aims to build an unmatched legacy of giving whereby which each veterinarian who goes before reaches back to help the veterinarians who follow. Our proposal asks you to consider donating to this unique scholarship fund at the level of a President's Associate (\$1,000) or the equivalent of one premium coffee drink a day—a latté-a-day if you will. It's trite but true that for a little less than \$3 per day, significant alumni participation could easily raise the funds needed to begin this landmark scholarship effort.

How do others do it?

I came upon the idea for the fund by looking at schools like Stanford University and Harvard University. You might also ask, "How do small, private liberal arts colleges have extremely high tuitions, yet send graduates out into the world with less student debt than WSU veterinary students?" Quite

Let's build an unparalleled legacy of giving in which each veterinarian who goes before reaches back to help the veterinarian who follows at WSU.

simply, outstanding universities have fostered in each of their alumni a refined culture of giving back to the institution that gave them the tools that made them successful in their daily work. I believe in this model and want to instill that same sense of giving at WSU.

Our goal

My dream is to provide each WSU veterinary student with a Heritage Scholarship contributed collectively by our alumni. In turn, we are asking each graduate as they leave to do the same. This is especially important for those graduates who were helped through scholarships and donations. This will also be an alumni- and graduating class-based project with the goal of raising \$2 million annually—that could provide every student as much as \$5,000 a year in debt relief!

My Vision

Wouldn't it be great to tell prospective Washington State University veterinary students that their college, their colleagues, and their fellow alumni want them to succeed and are contributing to their success? My dream is to soon see

all WSU DVM students' educational outlay decrease significantly thanks to those that have preceded them into the profession. To do this, I am asking WSU veterinary alumni to proudly create and support an unmatched heritage and culture of giving, just as they received help.

Please join with us this holiday season by becoming a member of WSU's Heritage Scholarship Fund. It will be a gift that not only impacts the students of today immediately, but sets this college on a course of giving that lasts forever.



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Owls, Eagles Heal, Take Wing at WSU



The skies over Washington are filling up with former patients of the Raptor Rehabilitation Program within the College of Veterinary Medicine. In July, a team released Freeway, a great horned owl who was given the name when he was discovered injured along U.S. Highway 195.

The release was extremely gratifying for WSU veterinary technician **Angela Teal**, who had originally found the owl and helped nurse it back to health. "It's so rewarding to see him fly away, back to his natural environment," said Teal after being the one to set Freeway free.

Then in October, River, a majestic bald eagle, was successfully released back into the wild near Kettle Falls, Washington. With a group of well-wishers and photographers on hand, River quickly flew back into the wild, settling into familiar territory. The raptor was named River by the WSU staff after she was discovered with her foot wedged under a rock. **Laney Thompson**, 11 years old, discovered the sick and injured bird and ran to find her father. "She didn't look so well," said the young girl. "She looked like she was badly hurt or sick, so my dad called, and some people picked her up."

The animal was near death, with little outward sign of trauma. X-rays by Colville veterinarian **Dr. Edward Kowitz**

(76) showed the animal's internal system had shut down. He referred the animal to the Exotics and Wildlife section at WSU's Veterinary Hospital.

After multiple tests, it was found that the animal was very weak and nearly starved, but there were no major injuries. After supportively caring for the bird with fluids and antibiotics, River quickly showed signs of rehabilitation. Within two weeks she was moved to the outside flight cages at WSU where she began a series of exercises to return lost strength to her wings.

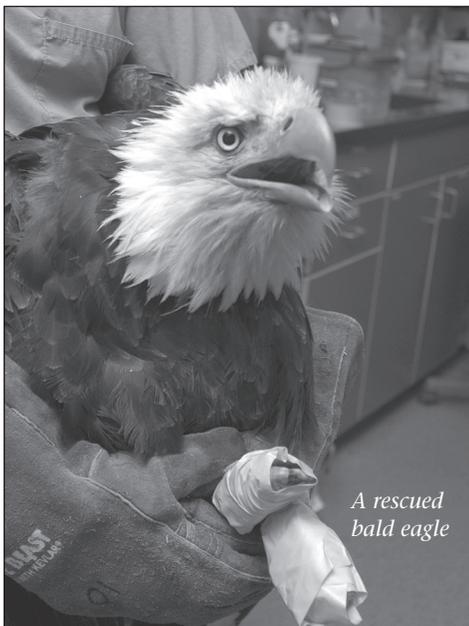
"It's exciting to see these magnificent animals returned to their natural environment," said **Dr. Nickol Finch**, the clinician in the wildlife section at WSU's Veterinary Hospital. "It is days like this that make everything we do worthwhile."

Veterinarians at WSU treat hundreds of sick or injured wild animals every year, at no cost to the taxpayer. Much of the support for this program comes from donations to the college. Yet the real success may be judged by the look in young Laney Thompson's eyes, as River flew majestically back into familiar territory. "I thought I'd never see her again, because I thought she might have died, and now I'm pretty happy because she's still alive," she said.

"Adopt-a-Raptor" Kicks Off Looking for an exciting holiday gift idea?

Why not adopt a raptor?

Benefits can include photos, decals, and a personal invitation to the release of a rehabilitated raptor. See giving levels at www.vetmed.wsu.edu/features/raptors.



A rescued bald eagle

An exciting new program has been launched at the College of Veterinary Medicine. In response to growing interest in our Raptor Rehabilitation program, the new "Adopt-a-Raptor Program" helps provide humane medical care to sick or injured birds of prey. The goal is to return as many of them as possible to the wild in a location at or near where they were injured. The raptor program also remains critical to teaching future veterinarians raptor biology and necessary skills in raptor husbandry, medicine, and surgery.

Yet our rehabilitation program relies almost entirely on private support. Hundreds of animals are brought to the college every year where they receive world class treatment and sanctuary. Many will be returned to the wild in the area where they were first found by game control agents or concerned neighbors. Others that cannot be released are placed in educational centers. In fact, WSU is home to several raptors that are used by our volunteers as living teaching tools for schools and for workshops.

Use the attached envelope to be involved in this exciting program!

Sara Rose Born Thanks to WSU



The sight of a frisky colt romping in the pasture warms the heart of the owner Dawn MacNamara from San Diego. “She is just so special—Dr. Tibary made it all happen!”

This story begins when Dawn and her husband bought Megan, a rare Lippit Morgan mare, in hopes of continuing this special bloodline. Many consider them to be one of the oldest American breeds, with only 2,000 left in the country. “We think these animals are a part of American history that’s worth saving,” said MacNamara.

But the 12-year-old mare had a difficult time getting pregnant. After a number of visits to area veterinarians, and a long list of treatments, Dawn worried their dream was slowly coming to an end. “We had a trainer even tell us that sometimes mares just can’t produce, and that we had to accept that. But we just weren’t ready to give up.”

That’s when the couple found **Dr. Ahmed Tibary** at the College of Veterinary Medicine. Coincidentally, Dr. Tibary was working with a Lippit Morgan stallion, whose owner agreed to help out. Megan was shipped to Pullman from San Diego to try



Sara Rose

one more time. “She needed very close supervision,” remembers Dr. Tibary. “She was a mare with a typical susceptibility to endometritis. She was very sweet.”

In no time Dawn MacNamara received the good news. The live cover had worked. Within the year, Megan gave birth to Quail Mountain Sara Rose, known as Sara for short. “I think it was critical to have Dr. Tibary on the case. I’ve found that very few experts truly understand what’s really going on. Dr. Tibary had the knowledge and the commitment to make it happen. We couldn’t be more pleased.”

“I am touched by the compliments of the owner,” said Dr. Tibary, who says he often wonders how these cases turn out. “We work many times on mares like this that come from a different state and I always wonder what happened to the pregnancy.”

Now Dr. Tibary and the students involved in the case have a photo for their wall as a living reminder of the specialty they bring to WSU’s College of Veterinary Medicine.

Rare Treatment for Equine Cancer a Success!



Ghostbuster and the equine surgical team

The equine surgical team at the College of Veterinary Medicine has successfully treated a cancerous tumor near the eye of a horse by using a method typically reserved for dogs and cats.

Ghostbuster, a cross between a Clydesdale and a Thoroughbred, suffered persistent weeping in his right eye due to a cancerous tumor. “The owners had tried a variety of treatments that didn’t seem to work,” said **Dr. Kelly Farnsworth**, a professor and large animal surgeon at the CVM. “The Linear Accelerator works extremely well in similar tumors with dogs and cats, and we thought why not try it in this case?”

But treating a 1,200 pound horse with this technology proved to be the real challenge. CVM’s cancer specialist **Dr. Janean Fidel** developed the protocols to be used. Yet Ghostbuster’s physical size was an enormous hurdle. “We had to figure out how to anesthetize the horse, and move him in a safe and rapid manner,” said Dr. Farnsworth. His team designed a system where the entire process took less than 10 minutes from first anesthesia to recovery.

In the end, Ghostbuster’s prognosis is solid. The tumor began shrinking away with just a few treatments, and appears to have been eliminated completely. More importantly, the incessant weeping of the eye has stopped.

“It’s exciting to see such a positive outcome,” said Dr. Farnsworth. “The real reward can be seen in Ghostbuster’s owners, who are so thankful this nagging problem has been eliminated.”

Day at the Races



Another successful Celebration of the Equine Athlete brought people from all over the Puget Sound region to Emerald Downs. The event gave some of the College’s top equine specialists a chance to meet face to face with many of their customers.

The now famous Equine Prognosticator Cup has been handed to **Dr. Ahmed Tibary** who correctly picked four of the first six winners of the day. Admittedly, Dr. Tibary says he used his favorite number early on, but buckled down and did his homework when “the competition heated up.”

Among the noted guests were members of the Washington Horse Council, who recently raised over \$10,000 for the College of Veterinary Medicine during their first annual Ride for Research. “They are an amazing group,” said College of Veterinary Medicine’s Lynne Haley. “They truly value the work we do for horses, and love to have fun at the same time!”

Pet Memorial Program

The Pet Memorial program is now online! As of September, pet owners can submit photographs and stories of their lost pets. Within weeks, dozens of heartfelt stories were posted from owners about how their lives have been touched by their favorite family pet. "It's surprising how many different stories there are from donors eager to have their pet memorialized on the Web site," said Kayla Thomas, who runs the Pet Memorial Program for WSU's College of Veterinary Medicine.

Touching Stories

"The stories range from sweet to funny to so heart-wrenching that they bring tears to my eyes when I read them while putting them online!" says Dr. Cheryl Dhein, who heads up the instructional technology division of veterinary information services at WSU's College of Veterinary Medicine.

The Pet Memorial program is a way for veterinarians and friends to make a donation to the college in the



memory of a lost family pet. Counselors tell us the loss of a family pet can have the same impact as losing a beloved human friend. "We've actually seen an increase in the number of donations to the program when owners have the chance to memorialize their favorite pets with photos and stories," said Thomas.

Want to read these stories for yourself? Visit www.vet-med.wsu.edu/plh/stories.

Actual Letter from Our Online Pet Memorial Program

Miss Rudi



Miss Rudi

My name is Lexi. I'm 27 years old and also a wheelchair user. Miss Rudi was my companion animal and did more for me than I ever could have imagined. I first met her at four weeks old and brought her home to live with me a day before her sixth week birthday. She had one blue eye and was the smallest, which were endearing and cute qualities, but also made me hesitate to take her because of the poten-

tial problems both those things can hold. I wasn't sure what to do, take her or not; but she knew. From then on, Miss Rudi was a huge part of my heart and many days, my whole heart. She was with me always, from running errands or traveling to other places, to volunteering in a K-5 school or simply hanging out with friends.

From the beginning I knew that something was off about her but I didn't know what. At almost two years old, she started changing. I took her into my vets. We did



Lexi with her companion, Miss Rudi

every test we could but found nothing wrong. Then one day she had a seizure and we knew she needed more help than was available in my town.

We rushed her to the WSU vet school the next morning where they worked on her and came up with a "tentative" diagnosis of GME. GME is a neurological condition that can't really be diagnosed except by elimination [a diagnosis by exclusion] or a brain biopsy, which for obvious reasons isn't practical. One month after I brought her home on medicines, Miss Rudi had 10 seizures within 6 hours and I had to have her put to sleep. Because of all the knowledge and care we received at WSU, I knew what was happening and was able to prepare. I'm so thankful for every day that we were able to be together and the love we shared. Thanks to WSU vets for helping me to love my puppy to the fullest in this life and literally hold her through her physical death.

Miss Rudi definitely lives on in my heart and in the hearts of the people she met in her two short, yet very full years. Special thanks to my vet who contributed in her name to the Pet Memorial Program. Miss Rudi gave out a lot of joy in her life and for me, that joy will never stop. Please contribute to this program in honor of the little loves in our lives, in order to help the lives of our future loves.

Signed, Lexi

Message from the Director of Development

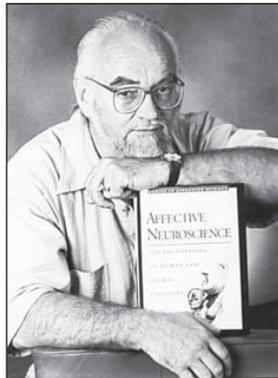


Norma Fuentes

There is no greater moment in a development director's life then to see the fulfillment of a dream. This holiday season we are pleased to see the realization of not one, but two important visions. I am happy to announce that we have filled two endowed chairs within the WSU College of Veterinary Medicine.

First, the Bernice Gilman Baily and Joseph Baily Endowed Chair in Animal Well-

Being Science. It was the dream of the Gilmans to leave behind a legacy of understanding of animals. "We're happy to give this gift to ensure that the best interest of animals remains forever," Joseph Baily said just before his death. In keeping with this vision, we are pleased to announce the hiring of **Dr. Jaak Panksepp**, a world renowned scholar whose critically acclaimed work



in the field of psychobiology has led to new understandings of the emotions expressed by animals.

Second, the Dr. Richard L. Ott Endowed Chair in Small Animal Medicine and Research. Both his family and close friends believed Dr. Ott would be best remembered with a permanent faculty position in his name that honors his gift as an educator and his contribution to small animal research. To this end, we are pleased to announce the addition of **Dr. Kathryn Meurs**, who brings her extensive expertise and research into cardiovascular disease. As an educator, she was recently awarded the Norden Distinguished Teaching Award and the Faculty Clinical Teaching Award from The Ohio State University. We feel Dr. Ott would be proud to have Dr. Meurs following in his footsteps.



These new chairs join **Dr. "Sri" Srikumaran**, the holder of the Dr. Rocky Crate and Foundation for North American Wild Sheep Endowed Chair, our first ever endowed chair. Dr. Srikumaran joined our staff just last year.

The holiday season is a wonderful time to reflect on how we would like to be remembered. For those who have chosen a permanent gift to the WSU College of Veterinary Medicine we are eternally grateful. Our mission will be to ensure that your legacy will be carried on forever.

Alumnus Makes Large Gift



A surprise gift came to the College of Veterinary Medicine this fall by one of the school's most distinguished alumni. **Dr. Dean Smith** ('49) invited the dean of the CVM to his hometown of Walla Walla and presented him with a personal check for \$50,000.

"It was no problem—the College has been pretty good to me," said Dr. Smith in presenting the gift. "WSU gave me a fine education that led to a long and fulfilling career. I felt it has all been worthwhile and it was time for me to give back."

Dr. Smith has enjoyed a long and distinguished career, owning his own practice, serving as the Washington State Veterinarian, and as the director of the diagnostic lab at Oregon State University. He has also holds the WSU College of Veterinary Medicine's Distinguished Veterinary Alumnus Award for Excellence in Practice.

The gift has been directed to the dean's discretionary fund, to be used for immediate and emerging needs by the College of Veterinary Medicine.



Watch the College of Veterinary Medicine star in Steve Irwin's new show *New Breed Vets*, December 22 on *Animal Planet!*



Dr. Larry Fox has received the Pfizer Research Award for advancing understanding of mastitis. Dr. Fox currently serves as the interim director of field disease research for WSU's College of Veterinary Medicine.



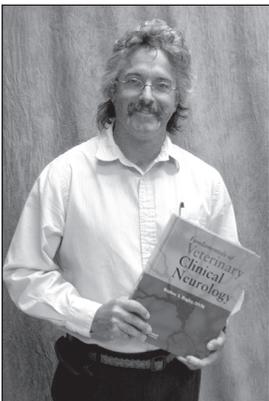
Dr. Ron Faoro, '81, has been installed as president-elect of the California Veterinary Medical Association (CVMA). The CVMA is a membership organization that represents more than 5,300 veterinary professionals in California. Dr. Faoro currently owns the St. Francis Pet Clinic, a small-animal practice in Santa Barbara where he first began his career 24 years ago.



Dr. Travis McGuire has been named to the Gluck Equine Research Foundation "Hall of Fame" at the University of Kentucky. Dr. McGuire has recently retired from WSU's College of Veterinary Medicine's Department of Veterinary Microbiology and Pathology.



Dr. Jim Krueger, a neuroscientist at the College of Veterinary Medicine, has been awarded with the "Doctor Honoris Causa" title of the University of Szeged in Hungary. The honor was bestowed following his years of extensive sleep research.



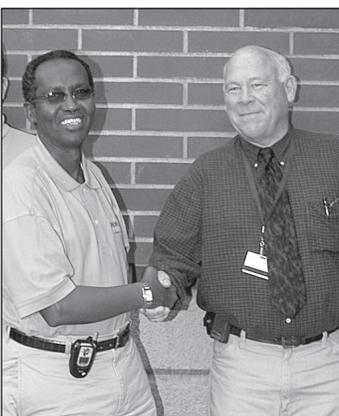
Dr. Rodney Bagley has completed a long awaited textbook, *Fundamentals of Veterinary Clinical Neurology*. What began as a resource for veterinary students has evolved into a book for all practitioners needing information on neurological cases. "What makes this unique is that it is set up in the same logical thought process you'd use in a clinical practice," said Dr. Bagley, who serves as a professor of neurology and neurosurgery at WSU's College of Veterinary Medicine.



Dr. Katrina Mealey has been named WSU's Faculty Member of the Year by the Washington State Veterinary Medical Association. Dr. Mealey was selected for her research, teaching, and service to veterinary students.

WSU CVM students **Erica Pribyl**, **Tony Parsons**, and **Ryan Ferris** have all received scholarships from the American Association of Bovine Practitioners. It is believed to be the first time three students from one school have been presented with this award.

Somalia Visit



Partners with a handshake

A group of livestock business leaders are working to develop a long term partnership with the College of Veterinary Medicine. Their goal is to help rebuild the food infrastructure around the war-torn region of Mogadishu. "After 14 years of civil war, many of the key facilities have been destroyed. Now, things are returning to normal," said Rashid Mohamed, president of the URUR Livestock Company. "We came to WSU because they are a leader in agricultural and animal sciences."

"Democracy has taken hold there," said Mike Hackett with WSU's Ag Extension Program, which is also involved in the partnership. "We can help improve the health and quality of their food animals, and dramatically help in the accessibility to these food stocks by people in outlying areas."

The group met with WSU's leading expert in large animal internal medicine, **Dr. Steven Parish**. "We gave them plenty of ideas to help improve both the health and the quality of their program," said Dr. Parish. "They truly believe that the key to keeping stability in that part of the world relies heavily on getting quality food products to the outlying areas."

Following his team's visit, an openly excited Rashid Mohamed left with a new understanding of what is needed, saying, "We plan on putting up a big WSU banner at the Mogadishu airport to let everyone know about the importance of this new partnership."

Pakistan's Veterinary College Forges Pact with WSU

With the simple stroke of a pen in November, a new relationship was established between the University of Veterinary and Animal Sciences (UVAS) in Lahore, Pakistan, and the College of Veterinary Medicine at WSU.

The new memorandum of understanding between the two universities lays the foundation for exchanging students and faculty.

A WSU student could be leaving for Pakistan as early as this summer, where the hope is to get first hand experience in fighting foot and mouth disease.

"This disease is not seen in the United States," said **Dr. Mushtaq Memon**, associate professor of animal reproduction and coordinator of international veterinary education at WSU. "The student could literally become one of the few veterinarians in this country with hands on experience preventing this disease from occurring here and bringing that experience



back to teach others." Currently, the United States trains veterinarians at a special facility on Plum Island, New York, with look-a-like diseases. As part of the new agreement, faculty from the University in Lahore would come to WSU for short term studies, and even graduate studies.

The Pakistani official that signed the agreement is no stranger to WSU. **Dr. Manzoor Ahmad**, the vice chancellor of UVAS, graduated as a Cougar with his master's degree in 1961 and his doctorate in 1966. A respected

scientist in reproduction, he has worked with the United Nations and half a dozen countries in establishing sound animal practices. While on campus, Dr. Ahmad was presented with the prestigious WSU Alumni Achievement Award, becoming one of less than 500 alumni to ever receive the award.



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