The New Face of Cancer

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WSU Proposes a School of Global Animal Health

I’m happy to announce one of the most exciting initiatives ever proposed for the College of Veterinary Medicine at Washington State University.

Under the leadership of President Elson S. Floyd, we are in the process of forming the School for Global Animal Health. The school will principally involve faculty from the Department of Veterinary Microbiology and Pathology, although members will also come from other units within the College of Veterinary Medicine as well as other university colleges. The school’s principal mission is to provide practical, innovative solutions to global infectious disease challenges through research, education, global outreach, and application of disease control at the animal-human interface. The goal is to advance the science, people, and policy needed to discover novel approaches for disease intervention and delivery of preventative health care that benefits both animals and humans.

The WSU Board of Regents elected to make the WSU School of Global Animal Health a top priority for funding in the next legislative session. Initial requests would provide four critical new faculty members with expertise in global health, to add to our world class team of immunologists and infectious disease experts. These positions include:

- **Professor in Zoonotic Disease Transmission** to provide new expertise in mapping routes of transmission of pathogens from animals and their environments to humans, with an emphasis on new strategies to block transmission.
- **Professor in Vaccine Development** to provide new expertise in the developing vaccines targeted at animals with the primary goal of preventing ongoing transmission to humans.
- **Professor in Emerging Disease Surveillance** to provide new expertise in the detection of emerging diseases at the global level that threaten human or animal health within the state, while focusing on development of novel testing procedures and screening methodology.
- **Professor in Global Animal Health Policy and Metrics** to provide the expertise needed to measure intervention outcomes and to formulate science-based policy to control the international spread of animal and zoonotic diseases.

From avian influenza to West Nile virus, the greatest potential threat to human health comes most often from organisms carried in animal populations. This threat strikes hardest in developing countries.

Our efforts point out a new importance in today’s society for the modern day veterinarian. We believe the time to move forward on this initiative is immediate and we are pleased the University agrees and supports our efforts.

Happy Holidays!

Dr. Warwick Bayly
Dean, WSU College of Veterinary Medicine

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Dr. William Dernell to lead WSU’s Veterinary Clinical Sciences Department

A former surgery resident at WSU’s College of Veterinary Medicine is returning to take over the department chair position at Veterinary Clinical Sciences. Dr. William Dernell, an assistant chair in clinical sciences at the Colorado State University Veterinary College, will begin at WSU on March 1.

“Dr. Dernell has that rare combination of skills with a great background in clinics, research, and administration,” said Dr. Warwick Bayly, dean of WSU’s College of Veterinary Medicine. “His vision for moving clinical services forward clearly captured the imagination of the faculty and staff.”
WSU Expands Exciting New Oncology Initiative

New research could provide new treatments

Cancer claims the lives of nearly half of all dogs and cats in the United States. To help battle this epidemic, the Cancer Team at WSU’s College of Veterinary Medicine is working on several fronts and now hopes to develop an aggressive new transplantation medicine project that could see its first patient within a year.

“It has long been my goal to use advanced human techniques to help animals with cancer,” said Dr. Jeff Bryan, oncologist at WSU’s College of Veterinary Medicine. “Many of the techniques used in humans were first developed in animals, and should be used to benefit those animals directly.”

The project is just the latest in advanced cancer treatments available at Washington State University’s College of Veterinary Medicine. Led by Dr. Janean Fidel, WSU senior faculty oncologist, the team is looking at a host of anti-cancer therapies being developed for humans. Dr. Fidel’s team is focused on developing new treatments for melanomas and osteosarcomas by looking at the genetic basis of cancer invasiveness and survival. Dr. Fidel’s research interests also include modification of typical fractionation schemes for radiation therapy, and the use of simple therapies like COX2 inhibitors (aspirin).

Dr. Rance Sellon, internist and soon to be oncologist, has been working more and more with oncology over the past three years. He brings a special awareness of endocrine tumors (thyroid, pituitary, pancreatic) and paraneoplastic syndromes. He and Dr. Fidel share an interest in Histiocytic tumors.

“There are a number of promising treatments for human cancer patients that may be applied to our animal friends,” said Dr. Fidel, adding, “The age of more targeted therapeutics has come.”

To take vision to reality, the WSU College of Veterinary Medicine has launched an aggressive $10 million campaign aimed at providing long-term support for projects that include everything from endowed professorships to state-of-the-art equipment and facilities.

“We began this effort to treat animals with cancer, not to treat cancer because it occurs in animals,” said Dr. Warwick Bayly, dean of the College of Veterinary Medicine. “We see it as the difference between care and caring.”

The project relies heavily on the world-class expertise and experience already in place at WSU. In collaboration with other Washington researchers and practitioners, WSU is developing a transplantation medicine program that advances cancer care. “This brings new hope of prolonged survival to dogs with cancer,” said Dr. Bryan. “The Comparative Oncology Laboratory would be the flagship of this research effort at the intersection of human and animal disease.”

Researchers at the Fred Hutchinson Cancer Research Institute have pledged assistance to WSU to make this project a reality by providing decades of research involving canine models used in refining transplantation techniques for humans.

“There can be no greater loss than losing a beloved pet to cancer,” said Dr. Bayly. “We can think of no greater endeavor for the advancement of veterinary medicine.”
Seven-year-old Walter, a Dromedary camel from Red Bluff, California, has found the help he needed at WSU. “We first noticed Walter had some swelling in his right jaw,” said owner Larry Leepin. “After talking with a number of camel experts the consensus was for us to come to WSU.”

A CT scan revealed a mass in the jaw near the rear molar that needed to be treated immediately. “The surgery went well,” said Dr. Stacey Byers, an agriculture animal resident at WSU. “Walter was a stable patient through the whole process and tolerated his treatments without too much complaining.”

The team at WSU was concerned about a tumor, but the histopathology came back as negative. While the cause of the injury is unknown, owner Larry Leepin has his suspicions. “I think he may have been injured by our water buffalo.”

The Leepins have quite an extensive group of animals on their Northern Californian farm. The collection includes a second camel, miniature horses, and even a zebra. “Everyone here has just been great to work with,” said Leepin. After his successful but short stay, Walter went back home.

WSU resident trades career in aerospace for large animals

Dr. Stacey Byers has specialized training you don’t usually find in a large animal veterinarian. She came to WSU to obtain her DVM, bringing along a degree in metallurgical engineering. For nine years, Byers worked for the Boeing Company. But with the merger on the horizon with McDonnell Douglas, the company was filled with uncertainty.

“The truth is, I was growing bored at Boeing,” said Byers. “The merger gave me the chance to go back to school for something more meaningful. That led me to begin pursuing a degree in wildlife biology.” After a stint volunteering at PAWS Wildlife Rehabilitation Center and working at a large animal hospital, Byers says she realized that working with large animals, especially with camels, was her true calling. “I had so much fun working with the animals. While working as a veterinary assistant at a practice in Snohomish, we saw a lot of llamas. That’s when I got hooked.”

“She is an incredible role model,” said Dr. Steven Parish, large animal internal medicine professor at WSU. “She brings with her a refreshing outside perspective on veterinary medicine. Someone with real integrity, who is willing to adapt to the complex changes in today’s large animal practice.”
From the Office of Development

This holiday season, we have much to be thankful for at the WSU College of Veterinary Medicine. We began with a solid vision for seeking external gifts and you have responded with your support. We have a long way to go, but I wanted you to see the success for yourself.

WSU College of Veterinary Medicine
Giving totals for fiscal year 2006–07

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Donors come from a variety of sources. Corporate partnerships once led the way, along with CVM alumni. However, the development model of today shows more then half of our greatest donors have no direct professional link to the college. Instead, they are friends of animals, of our clients, and our alumni who have had a wonderful experience and want to continue to support our mission of helping animals and training the best veterinarians.

None of this is possible without the connections you provide. You are the bridge to our most sizeable population of donors and friends. Once you provide that initial introduction, our development personnel work to explore a donor’s interest, ambitions, and passions. These often translate into areas of greatest need, and greatest support based on the vision set by our dean and department chairs. Ultimately, it is our donors who tell us where their gift will be used. This past year alone, major gifts provided everything from an underwater treadmill to more than $350,000 in scholarships for students.

Thank you again for your continued support of the WSU College of Veterinary Medicine. Here’s to a great year behind us, and an even brighter one ahead.

Dr. Richard DeBowes
Associate Dean of Veterinary Development and External Relations

Seattle Slew endowment completed!

Thanks to the generous gift of $10,000 from Karen and Mickey Taylor, the Seattle Slew Spinal Cord Research Fund has been fully endowed at WSU’s College of Veterinary Medicine. The fund has been established to continue research into the diagnosis and treatment of equine spinal cord disease. Washington State University developed the surgical technique for treatment of compression of the spinal cord. The College of Veterinary Medicine is the alma mater of four members of Seattle Slew’s surgical team. Seattle Slew’s quality of life was greatly enhanced when he received surgery for the treatment of spinal cord compression.
A Kindness Repaid

How a Pet Memorial 35 years ago turns into a major gift for WSU

Dr. Jim Benson (’69) says he had only been practicing veterinary medicine for a few years when he first met Charlotte Hayes.

“When you first met her you could tell she was a gentle soul,” recalls Dr. Benson. Back then, her favorite pet was an African Grey parrot named Chrissy. The bird was a clinic favorite and always took up a spot on the back of a chair. The parrot never seemed to be bothered by the dogs and cats around her.

When Chrissy died, Dr. Benson enrolled her in the Pet Memorial Program at the WSU College of Veterinary Medicine, a program where grieving owners receive a letter from the dean honoring the strong bond between the pet and the owner on behalf of the veterinarian. “She was so touched,” said Dr. Benson, “I think that’s what really started her thinking about the vet school and doing something for you.”

In the years that followed, the two developed a friendship. Dr. Benson remembers seeing a long line of cats and dogs. “I think she had three or four dogs at a time and at least that many cats,” said Dr. Benson, “She often took on strays and never thought twice.”

After a difficult battle with breast cancer, Charlotte Hayes passed away this summer. In her will, she left a sizeable portion of her estate to the College of Veterinary Medicine. The total now exceeds $700,000.

“At that point, I had no idea, wow!” exclaimed Dr. Benson upon hearing the news. “To look at her you would never know she had that level of means. She was the nicest, kindest, most wonderful person you could ever meet, and she truly loved her animals.”

Charlotte Hayes only asked once about her veterinarian’s alma mater. “She only asked about it one time,” remembers Dr. Benson. “I directed her to the right people at WSU. She had said she wanted to leave something to herself, and to her pets.”

WSU’s CVM offers new online learning for 4th-graders

“Welcome to King Arthur’s Court and the realm of the Knights of the Roundtable...” That’s the message that greets viewers when they visit the latest edition of the WSU College of Veterinary Medicine’s educational Web site for children.

Under the title, “Dogs as Companion Animals,” the interactive program features Cabal (King Arthur’s dog) and Percival (a young page) and his dog Baldric. Cabal and Percival guide children through the history of dogs as companion animals and help them understand the responsibilities of owning and caring for a dog. Along the journey through the Middle Ages, children also learn about the many ways that dogs and people interact.

You can check out the site at www.vetmed.wsu.edu/depts-pppp/child.aspx. The site has programs for children from kindergarten to fourth grade. All of it has been developed by WSU’s People-Pet Partnership as a way to foster the relationship between people and their pets. The fourth grade project is sponsored in part by the Banfield Charitable Trust.
Two newly elected American Association for Advancement of Science Fellows are from WSU’s College of Veterinary Medicine, Department of Veterinary Microbiology and Pathology.

Professor Wendy C. Brown was cited for “Distinguished contributions to understanding T-lymphocyte responses to obligate intracellular tick-borne protozoal and rickettsial pathogens yielding vaccine candidates and novel mechanisms used to modulate host immunity.” Professor Brown is a native of upstate New York and earned her bachelor’s degree from Smith College and master’s and doctoral degrees from Yale University. Dr. Brown conducted research on theileriosis at the International Laboratory for Research on Animal Diseases in Nairobi, Kenya, and joined Texas A&M University as an assistant professor in 1988. In 1995 she joined the Department of Veterinary Microbiology and Pathology at Washington State University as a professor. Dr. Brown has published over 150 scientific papers in refereed journals, been a principal investigator and co-principal investigator on many NIH grants, served on the editorial boards of several prestigious journals, been very active in graduate education, was awarded the SmithKline Beecham Award for Research Excellence and a Burroughs-Wellcome Visiting Professorship, was named the Distinguished Veterinary Immunologist by the American Association of Veterinary Immunologists, was awarded the Pfizer Research Excellence Award, and was named the Distinguished International Veterinary Immunologist by the International Union of Immunologic Societies. Dr. Brown’s research is focused on tick-transmitted pathogens including Babesia bovis and Anaplasma marginale. Her research is contributing to discovering novel antigens that will be important in developing efficacious vaccines against these pathogens and related pathogens of humans.

“There is no greater scientific accolade than being lauded by one’s peers and this is a great example of that.”
—Dean Warwick Bayly

Dr. Pat Gavin (’71) has been honored by the Washington State Veterinary Medical Association as the WSU Faculty Member of the Year. During his tenure Dr. Gavin has generated 175 publications, five chapters, one textbook on MRI, and over $5 million in grants for his work on Boron Neutron Capture Therapy.

Dr. Clive Gay (retired) has been awarded the 2007 Association for Veterinary Epidemiology and Preventive Medicine Lifetime Achievement Award.

Travis White, president of the VBMA and third year DVM student at WSU, was awarded one of the Amstutz awards, an award given nationally to a handful of students by the American Association of Bovine Practitioners.
Did You Know?

It’s estimated that Americans will spend over $40 billion on our pets in 2007. For veterinary care, that means nearly $10 billion. According to the 2007–2008 National Pet Owners survey by the American Pet Products Manufacturing Association, some 63 percent of all U.S. households now own a pet, with cats still leading the way.

Here’s how that breaks down:
- Cats: 88.3 million
- Dogs: 74.5 Million
- Reptiles: 13.4 million
- Birds: 6.4 million

Overall, the industry continues to grow at a pace of 5 percent per year.