



# VETERINARY

## *executive report*

## Dog stem cell transplant puts WSU on world stage

### CNN: procedure video among its most requested

The image of a sleeping beagle captured the attention of the nation, as Bailey rested quietly after undergoing a rigorous stem cell transplant procedure. The six year old Beagle was brought to WSU's College of Veterinary Medicine for full body radiation, vital in helping treat her lymphoma.

"It's exciting, but somewhat nerve wracking," said **Dr. Pat Gavin '71**, a veterinary radiation oncologist with WSU. "You take those extra steps to ensure this first case goes smoothly, but it's exciting in that this really is groundbreaking in the treatment of cancer in pets."

Bailey was brought here by **Dr. Ed Sullivan**, a veterinarian from Bellingham who completed the very first stem cell procedure worldwide for a client animal. "This was no easy task," said Dr. Sullivan, adding, "the real challenge came in finding one of Bailey's siblings who was a perfect match for a stem cell treatment."

Much of the work in using radiation treatment for animals was pioneered at WSU by Dr. Gavin. For him, it's just the latest chapter in advancing care. "With lymphoma right now there is no cure, in both animals and humans, unless you get pretty aggressive, so for animals this is a whole new area with plenty of promise."

At last check, Bailey's recovery continues. The story was picked up by television stations in Seattle, and ultimately CNN. By mid-afternoon CNN's Web site showed the story to be among its more requested videos in the country.



*Bailey rests comfortably after procedure*

## Cougars nurse beaver back to health

Washington State University veterinarians nursed a juvenile beaver back to health after it was struck by a car.

The 41-pound animal was struck accidentally by a motorist near Lewiston, Idaho. The accident resulted in the young female breaking off her four front teeth and suffering numerous bruises and scrapes.

"The good news is Bailey's two large front teeth should grow back," said **Dr. Nickol Finch**, who heads up the exotic animal service for the WSU Veterinary Teaching Hospital.



### Inside...

- Communication
- New Facilities
- Peregrine Falcon Released

# From the Dean...



Dean Warwick Bayly

Washington State University's College of Veterinary Medicine is playing an \$80 million role in the upcoming University-wide capital development campaign. The University is focusing on three areas:

- improving human and animal health,
- creating a safe and abundant food supply, and
- educating leaders for a global society.

Below are the college's major priorities in the campaign plan.

## Addressing Society's Health Concerns

### 1. *The global infectious disease challenge*

Infectious disease is the greatest natural threat to both human and animal life. In all nations, human health is directly linked to agricultural animal health. We have an unmatched core of accomplished researchers tackling the world's major infectious cattle diseases. Their innovative work involves understanding complex disease agents and the development of effective and affordable vaccines and control methods.

WSU is recognized as a world leader in vector-borne infectious cattle disease research. Groundbreaking research into new methods of developing molecular level vaccines may lead to control of diseases that have, to date, evaded traditional methods of control.

### 2. *Molecular medicine and the heart in health and disease*

Three of only 128 academic board-certified veterinary cardiologists in the world are faculty at WSU's veterinary college. Complementing clinical service is one of the world's finest groups of cardiac muscle researchers. Together, these two groups are one of the most productive in the world. Current animal studies will help human hearts better survive and accommodate cardiac disease with less medication and intervention. At the molecular level, we are determining how cardiac muscle can repair and remodel itself. This has direct application for aging humans. Our newest faculty member, **Dr. Kate Meurs**, has discovered heart disease genetic markers in cats and dogs (hypertropic cardiomyopathy) that can be treated preemptively. Humans suffer similarly. WSU discoveries with the body's largest protein, titin, have unlocked the secret of infant heart elasticity. This work advances the understanding of some human heart diseases, as well as heart muscle maturation and aging.

### 3. *Finding the mind within the brain*

One of the world's top sleep research groups can be found at WSU's CVM. **Dr. Jim Krueger**, one of the leading investigators in sleep and neuroscience, brings an unmatched wealth of knowledge, funding, and research aimed at understanding brain organization and the role of sleep. **Dr. David Rector's** recent

discovery shows that parts of the brain are asleep or awake at all hours of the day. Internationally renowned researcher **Dr. Jaak Panksepp** is studying links between emotions and brain function. Collectively, this represents some of the best collaborative university research in the world. Together they are advancing an understanding of the brain, and what makes us and our animal friends unique.

## Enhancing the Contributions of Tomorrow's Veterinarians to Society

### 1. *Scholarships*

Soaring educational costs strike hardest in veterinary training. Veterinary students assume the largest debt loads of any health professional. Measured against earning potential, the disparity is even more pronounced. We want all WSU veterinary students to receive "recycled dollar" scholarships coupled with an expectation of giving from their eventual earnings to benefit successive students. We call it the Heritage Scholarship Fund.

### 2. *Advanced leadership and communication training*

Universally, Fortune 500 companies say incoming employees lack a combination of emotional intelligence, leadership, and communications skills. Veterinary medicine is similarly affected. WSU is the profession's unquestionable leader in curricular development and implementation of these skills. WSU's hallmark programs are now taught to some degree in the entire continent's other veterinary colleges.

### 3. *Sustaining instructional excellence*

The WSU CVM requires complete and sustained funding in order to offer services and instruction in the world's best equipped veterinary teaching hospital and to maintain the most advanced professional curriculum. These funds are not provided regularly by the state.

Future funds will come from blended sources, including:

- Revenue generation;
- Specialties that enhance our teaching, service, and research missions;
- Technical staff additions maximizing investments in people, facilities, and instrumentation; and
- Adjusting the overwhelming burden of operating a clinical teaching program juxtaposed with a self-sustaining veterinary hospital.

The highest quality student instruction and professional service occurs in a properly supported hospital. In teaching hospitals, the case is that much more urgent because of the basic mission to teach.

## Campaign Support

Beginning now, we are asking you to join our effort to help us build on the strengths of our past and ensure an even greater future. Most importantly, you can also help us identify people who have the means and inclination to join WSU's commitment to animal health and wellness not just for future veterinarians, but for the world.

# It's more than just talking to the animals.

## New teaching curriculum aimed at communication with owners

Physicians now integrate new methods of talking to patients into the curriculum of nearly all medical schools. In fact, most doctors must pass a series of communications exams as part of their certification boards. Believing that this non-traditional skill is essential to veterinary medicine as well, WSU's College of Veterinary Medicine has embarked on a new and exciting project to begin teaching students how to better communicate with their clients. These skills can help ensure that the clients know exactly what is needed to help their animal get better, and to facilitate a better interaction for both client and veterinarian.



Dr. Suzanne M. Kurtz

### WSU CVM welcomes communications expert

As a key component of this effort, the college welcomes the addition of **Dr. Suzanne M. Kurtz, Ph.D.**, a professor of communications in education and medicine from the University of Calgary. There she served as the director of the Clinical Communication Project. Her pioneering work in this area began in 1974 when she did her doctoral research on the relationship between the nonverbal communication of physicians and patient satisfaction. Since then, her career has focused on improving communication practices in health care and education and on developing methods for teaching communication skills.

### Exploring the human-animal bond

"I am excited about the chance to link human and veterinary medicine together as a shared communication experience, said Dr. Kurtz. "I'll be relying on my years of experience in human medicine, but will be looking forward to learning on the job the specifics it takes to apply these exciting skills to

veterinary medicine. Before I'm finished, I would like to explore research and applied work around the human-animal bond and its connection to human health, and perhaps even animal health as well."

Along with numerous articles, her publications include co-authoring two companion books, *Teaching and Learning Communication Skills in Medicine* and *Skills for Communicating with Patients*.

## Leading veterinary radiologist joins WSU veterinary team

An internationally recognized specialist in veterinary medical imaging, **Dr. John S. Mattoon**, has joined the Washington State University College of Veterinary Medicine.

Dr. Mattoon is the current president of the American College of Veterinary Radiology and now becomes part of the advanced medical imaging service at WSU's Veterinary Teaching Hospital.

"Clearly, this hire fortifies our strength in diagnostic ultrasound and fills our program at a time when imaging specialists have been very difficult to identify and recruit," says search chair **Dr. Richard DeBowes**, chair of Veterinary Clinical Sciences at WSU.

For Dr. Mattoon, his return is a homecoming. He graduated from WSU's College of Veterinary Medicine in 1984. His specialties include the clinical and research applications of ultra-high frequency ultrasound. In what has been hailed as "trailblazing research," Dr. Mattoon reviewed more than 40,000 images of yearling horses in Australia to determine if minor problems, such as bone cysts, have any impact on the horse's subsequent racing career.

Dr. Mattoon joins WSU from the Veterinary Teaching Hospital at The Ohio State University. He is expected to begin work in July 2006.



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# Achievements

**Scott Davis '06** won first place in the American Board of Veterinary Toxicology national student competition. The competition is open to U.S. and Canadian veterinary students.



Cassandra Mundy

**Cassandra Mundy '08** received a \$1,500 scholarship from the Association for Women Veterinarians, given to only four students nationwide.

**Dr. Patricia Talcott** is this year's recipient of the Carl J. Norden Distinguished Teacher Award by the class of 2006. This is Dr. Talcott's third time to receive the award for her exemplary instruction in veterinary toxicology.

Six WSU veterinary college faculty members are recognized as 2006 Wescott Clinical Teaching Scholars, selected by this year's graduating class. The designation of "Wescott Clinical Teaching Scholar" is awarded to faculty for excellence in teaching. This year's recipients are: **Dr. James Evermann, Matthew Mickas, Erin Groover, Steve Parish, Margie McEwen, and Rance Sellon.**

**Dr. Henk Granzier**, professor in the Department of Veterinary and Comparative Anatomy, Pharmacology, and Physiology, has received one of only six annual International Research Awards from the Alexander von Humboldt Foundation and the Helmholtz Association of National Research Centres. Award-winners are invited to conduct their research projects in cooperation with German scientists at one of the 15 member-centers of the Helmholtz Association for up to a year.

## Alumni Awards



Doug Butchart

**Dr. Doug Butchart '54** received a 2006 WSU College of Veterinary Medicine Distinguished Veterinary Alumnus Award for Outstanding Service. A previous recipient of the Distinguished Diplomate Award by the American College of Veterinary Preventive Medicine, Dr. Butchart served as an agricultural officer with the Agency for International Development in Tunisia and Morocco.



Steve Haskins

**Dr. Steve Haskins '69** received a 2006 WSU College of Veterinary Medicine Distinguished Veterinary Alumnus Award for Excellence in Teaching and Research. Dr. Haskins is recognized as a pioneer and world authority in the area of critical care of veterinary patients. He is credited with making many key discoveries and innovations in veterinary intensive care.



Loren Koller

**Dr. Loren Koller '65** received a 2006 WSU College of Veterinary Medicine Distinguished Veterinary Alumnus Award for Excellence in Teaching and Research. He is credited with pioneering and founding the scientific discipline of immunotoxicology. Recognized by the National Academy of Sciences for his medical and scientific expertise, he has a long history of government service at the highest levels in the federal system and is a former dean of Oregon State University's College of Veterinary Medicine.



Charles Martin

**Dr. Charles Martin '65** received a 2006 WSU College of Veterinary Medicine Distinguished Veterinary Alumnus Award for Excellence in Teaching and Research. A charter diplomate of the American College of Veterinary Ophthalmologists and its past president, Dr. Martin's pioneering work and reference material in biomicroscopy has been recognized as a vital foundation for training veterinary ophthalmologists.



Marc Mattix

**Dr. Marc Mattix '83** received a 2006 WSU College of Veterinary Medicine Distinguished Veterinary Alumnus Award for Outstanding Service. A Colonel in the U.S. Army Reserves, he serves as the assistant chief of the U.S. Army Veterinary Corps. He is internationally recognized in the fields of animal and public health surveillance and emergency preparedness and is an anti-terrorism preparedness expert.



Kenneth Sinibaldi

**Dr. Kenneth Sinibaldi '69** received a 2006 WSU College of Veterinary Medicine Distinguished Veterinary Alumnus Award for Excellence in Veterinary Practice. Dr. Sinibaldi has dedicated his entire career to developing new and improved veterinary surgical procedures.

**Dr. Olin Balch '80** was inducted into the International Equine Veterinarians Hall of Fame, sponsored by *American Farriers Journal*. The honor was established in 1997 to recognize veterinarians who have contributed to the knowledge and recognition of proper hoof care for horses.

**Dr. Mark Knudson '74** was honored with the first Distinguished Graduate Alumnus Award from Washington State University's Department of Veterinary and Comparative Anatomy, Pharmacology, and Physiology. Dr. Knudson lives in St. Paul, Minnesota, where he is chair and chief executive officer of Venturi Group LLC, a venture capital-backed medical device incubator.

# Message from the Executive Director of Development



I am pleased to announce one of the most forward thinking and powerful gifts I have come across at WSU's College of Veterinary Medicine. The great care given by one of our veterinary alums and by our college has led to what may become the largest gift ever made to this institution.

Bill and Merodee Smith wanted to leave behind a legacy of giving that would support our efforts forever. What makes their gift unique is that their endowment is left entirely to the discretion of future deans of the college. In making their decision, the Smiths felt their gift would be best used to fill the needs of tomorrow's veterinary students. This forward thinking is almost revolutionary in the way this gift guarantees future success, by leaving the critical decision on an endowed leader in the hands of leaders of this college.

While this gift may well prove immeasurable in its impact on future veterinary education, remember that it all begins with the care we show our clients. Our future may well depend on it!

Norma Fuentes, Executive Director of Development

*Bill and I have been clients of Dr. Robert Privette (Kennewick, Washington) since he graduated from WSU Vet School. During those years, when he felt that additional diagnosis was necessary, he did not hesitate to send us to Pullman.*

*We have had three cocker spaniels who have needed the services of the WSU Vet School. Heart problems, allergies, protein losing enteropathy, and double hip surgery have brought us to the Vet School late at night and on weekends.*

*We have received wonderful service from the staff regardless of time of day or day of the week. Going the extra mile for people who are very worried about their sick or injured animals has left a deep impression on us.*

*In planning for our estate we liked the idea that when giving to a University the money is not used up, but continues to give year after year. And where better for us to give than the WSU Vet School who has been there to help us over the years.*

*With the world of veterinary medicine and its problems changing so quickly we decided that for the greatest good of the Vet School we would leave the decision as to the naming of our endowed chair up to the dean of the Vet School. What we might consider to be an urgent need today might not be a relevant need at all in the years ahead. We have the utmost confidence that the dean will make the best decision for the good of the School and its students.*

*Since our first association with the WSU Veterinary School we have been very impressed. The staff have always been helpful, caring, and knowledgeable. The management and leadership is unequalled. The facility is excellent. We hope to contribute and support the continued success of the College.*

*Best regards,  
Merodee Smith*



Reagan and Bailey Smith



Dr. Prieur: 18 years as chair of VMP and counting

**Dr. David Prieur '71** was reappointed to serve a fifth term as chair of the Department of Veterinary Microbiology and Pathology by WSU Provost Dr. Robert Bates. Dr. Prieur's strong performance in areas of research support, faculty recruitment, external relations, administrative expertise, and overwhelming support by his department were cited as key reasons for reappointment.

"Under David's administration the department has come to be regarded as a powerhouse at WSU," said **Dean Warwick Bayly**. Dr. Prieur has now held this position for 18 years and is believed to be among the longest sitting chairs currently at WSU. Dr. Bayly adds, "This achievement is a fitting testament to the great value of having continuity in leadership positions."

# WSU expansion means new large animal facilities

Washington State University's expansion has benefited the College of Veterinary Medicine. The WSU Regents approved \$2.2 million in new construction for a 12,000-square-foot large animal teaching barn, and a 10,000-square-foot research barn. The University needed to demolish and relocate aging, existing facilities to make room for a proposed golf course.

"This gives us the room we need to work, and to expand our ability to perform much needed research, teaching, and service to the community," said **Dean Warwick Bayly**.

## From the drawing board...



to reality!



Construction is completed on a new equine research barn that will house one of the most unique herd of horses in the world. Since the mid-1970s, WSU's College of Veterinary Medicine has been home to a herd of Arabian horses critical to research on infectious diseases.

"This new facility is safer, cleaner, and better designed, while allowing for the possibility of expanded research," said **Dr. Robert Mealey**, who heads up the research project.

## Herd critical to research

The herd has been critical to several important discoveries for horses, such as the disease in Arabian horses called severe combined immunodeficiency (CID), in which the foal has no lymphocytes and, therefore, no antibody production, leading to fatal infections.

The herd is being used currently to evaluate a new vaccine that stimulates "killer T-cells," that recognize and kill other cells in the body infected with foreign elements, such as viruses. In a recent test, five horses responded to the vaccine by producing killer T-cells.



## Vaccinations on the way

"This is the first time we have been able to consistently induce the production of killer T-cells," said Dr. Mealey. "Our prototype vaccine is designed to stimulate the killer T-cell response against EIAV (equine infectious anemia virus) proteins. What we learn here could be used to help make better vaccines against a variety of important infectious horse diseases."

The work has attracted interest from the National Institutes of Health, because EIAV is the same type of virus as the human immunodeficiency virus that causes AIDS.

## New teaching barn



A new 10,000 square foot teaching barn housing the WSU College of Veterinary Medicine's large animal breeding reproduction service, research, and teaching components has been completed. "In the theriogenology facility, or reproductive medicine facility, we will combine teaching and service on large animals including equine, bovine, and camelids," said **Dr. Ahmed Tibary**, chief of large animal theriogenology.

The facility features a service area for stallions and room for more than two dozen mares. Ongoing research could eventually lead to advances in semen preservation and embryo transfer. For cattle, there is room for 45 animals in a teaching herd. Separate sections will be used for housing camelids and sheep with biosecurity measures in place to keep University herds isolated from client animals.

"All of our research is focused on the outcome. With multiple species the advantage is you learn a lot faster," said Dr. Tibary. "Our comparative approach to reproductive studies is our strength, and allows faster learning and adaptation of various techniques in large animal reproduction."

"This allows us the opportunity to redesign the program and position ourselves as a world class breeding facility," said **Dr. Richard DeBowes**, chair of Veterinary Clinical Sciences. "The next step is to acquire specialty equipment necessary to make this goal a reality more quickly."

# Peregrine Falcon returns to the skies over Idaho



A peregrine falcon has been successfully released back into the wild by the staff and volunteers at WSU's Raptor Rehabilitation Section. Nicknamed Narisah, the adult bird was found by a couple driving near Garfield, Washington. "I saw the falcon standing oddly by the side of the road," said the anonymous rescuer. "When I stopped, she walked over to me and jumped up on my leg when I crouched down for a closer look."

The couple contacted the Raptor Rehabilitation Service at WSU's Veterinary Teaching Hospital.

"When she was admitted to the hospital, she was very vocal," said **Dr. Nickol Finch**, who heads up the service. "She was also very weak, dehydrated, and malnourished, and her beak was broken."

After a complete physical examination, a beak trim and antibiotics, the rehabilitation also included plenty of good food, rest, and supportive care. "She's doing great," said Finch. "Her prognosis for survival looks really, really good."

Veterinarians at WSU treat hundreds of sick or injured wild animals every year. The majority of the support for this program comes from private donations to the college. The college recently developed an "Adopt a Raptor Program" to help provide medical care to sick or injured birds of prey. For more information, log on to the College of Veterinary Medicine Web site at [www.vetmed.wsu.edu](http://www.vetmed.wsu.edu).



## In the WSU Veterinary Teaching Hospital...

### Idahoans ease police dog into retirement

A campaign to save a popular police dog has ended happily, thanks to WSU veterinarians. With donations from north Idaho residents, along with the Good Samaritan Fund at WSU's College of Veterinary Medicine, Baron received a badly needed spinal surgery. He is doing well and will likely be retired with a pain free lifestyle. "The procedure went very well," said **Dr. Daniel Hicks '04**, a WSU neurosurgery resident. "In fact, the damage was more severe than we expected. He certainly is a tough canine to be able to perform with the kinds of injuries we saw."



In his career, Baron assisted in the arrest of more than 100 suspects and used his remarkable nose to remove hundreds of pounds of illicit drugs from circulation in the Coeur d'Alene area.

### WSU helps air safety dog beat cancer

Puddy, one of the top bomb detection dogs in the country, is back on the job in Seattle's international airport, thanks to the cancer treatments he received at WSU's College of Veterinary Medicine. His owner, Port of Seattle Officer Hannah Corbin, says what started out as a simple lump discovered during a routine exam ended up being a malignancy. "It's very rare I hear," said Corbin. "The first veterinarian told me that without treatment Puddy had nine months, so I was devastated."



The best option available included a series of radiation treatments at WSU. "This is a type of cancer that responds well to treatment with our linear accelerator," said WSU veterinary oncologist **Dr. Janean Fidel**. "Catching the disease early increased his chances dramatically."

The treatments have proven to be a resounding success. After six months, Puddy has remained cancer free.

# Calendar

## September

2 WSU Football at Auburn  
9 WSU Football vs. Idaho  
16 WSU Football vs. Baylor in Seattle  
Pre-game event September 15 at McCormick and Schmicks  
22 Equine Board Meeting  
23 WSU Football at Stanford  
30 WSU Football vs. USC

## October

7 WSU Football at Oregon  
14 WSU Football vs. California (Homecoming)  
20 Class of '76 Reunion  
21 WSU Football vs. Oregon  
CVM Pre-game event  
28 WSU Football at UCLA

## November

4 WSU Football vs. Arizona (Dad's Weekend)  
11 WSU Football at Arizona State  
18 WSU Football vs. Washington (Apple Cup)

## January

11–12, 2007 MR Imaging of the Equine Musculoskeletal System  
Coeur d'Alene, Idaho

## March

15–17, 2007 Camelids—A Practical Hands On Workshop  
Pullman, Washington

## April

31–April 1, 2007 2007 Annual Conference for Veterinarians and Veterinary Technicians  
Pullman, Washington



*Buster*

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