Unlocking a Mysterious Killer of Big Horn Sheep
As the 109th class of veterinary students prepares to don their white coats at Washington State University, they are preparing themselves for a world very different from that of many of their predecessors.

Soaring educational costs strike hardest in veterinary training. Among health professionals, new graduates will carry some of the highest debt loads, while their earning capacities are not keeping pace with this disconcerting trend. For those 2007 graduates leaving here with debt, the average starting wage is roughly $58,000, while their average debt is over $100,000.

Fortunately, many of our alumni are recognizing this dilemma, and are working to “give back” to the institution that has given them so much. A legacy gift to the Heritage Scholarship Fund helps to establish a perpetual spirit of giving, with the expectation that those veterinary students helped today will in turn help the DVM students of tomorrow. Endowed scholarship funds awarded to all students bring costs down for everyone.

I challenge you to take a look at the chart below, and see how your own veterinary education costs compare to those of today’s students.

Concurrently, the passage of time is posing a greater challenge to a veterinary education than ever before. As with any societal entity, the WSU CVM requires sustained funding for maintenance and operations of the world’s best equipped veterinary teaching hospital; the world’s most advanced professional curriculum; and an internationally acclaimed, yet focused, research effort. There has become a growing, essential need for recurring funds for support of instructional programs and basic hospital maintenance to cover what is not currently provided by the state.

Our new funding initiative, “Ensuring Sustained Instructional Excellence,” is our response to this growing, critical problem. We see this as our best chance to add high-return specialists that enhance teaching, while bringing new service offerings and research to our college. We firmly believe that the highest quality student instruction and professional service occurs in a properly supported hospital.

The needs of today’s veterinary students and the associated education service programs are many, especially if we are to guarantee the quality and standards of Washington State University’s College of Veterinary Medicine will remain at the highest level for years to come.

Thank you for your continued support.

How does the cost of your veterinary education compare to today’s education?

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<tr>
<th>Annual costs</th>
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<th>WSU Average</th>
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<tr>
<td>Tuition, in state</td>
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<td>$16,044 (per year)</td>
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<tr>
<td>Room and board</td>
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<td>$8,700 ($912 per month)</td>
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<tr>
<td>Books and equipment</td>
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</tr>
<tr>
<td>Transportation</td>
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<tr>
<td>Healthcare</td>
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<td>Personal expenses</td>
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<tr>
<td>Other</td>
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<tr>
<td>Total costs per year</td>
<td>$32,688</td>
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Many people ask, “How can the cost of a DVM degree at WSU be more than $120,000?” Fill out this form to find out.

Remember to factor in inflation. For example, average Pullman rent in 1977 was $150; average rent in 2007 was $500.

It’s no surprise that the average debt for a WSU veterinary graduate in 2007 is now $101,509. While nine students graduated debt free, three had debts of over $200,000 (when adding in the additional costs of an undergraduate degree.) These numbers are even more dramatic when you consider the salaries many will receive. A poll of our graduating seniors shows the average private practice starting salary of a WSU graduate is $58,000 (range $45,000 to $77,000).
Washington State University Professor Tom Besser has identified a microorganism thought to be partly responsible for thousands of bighorn sheep deaths over more than five decades in the Pacific Northwest.

Lung tissues and blood samples from dead and dying sheep were provided for analysis by U.S. and Canadian wildlife biologists from 18 herds in Idaho, Washington, Oregon, California, and Alberta, Canada. From these, the bacterium Mycoplasma ovipneumoniae, well-known for causing milder pneumonia in domestic sheep, was consistently involved in the severe bighorn sheep pneumonia.

For decades biologists observed that bighorn sheep were very susceptible to developing fatal pneumonia but did not know why. Dr. Besser and other researchers now believe the mycoplasma may be the initial organism that attacks the sheep. If so, it likely works by inhibiting the function of hair-like structures called cilia in the respiratory system. Normally, cilia sweep bacteria and foreign material from the airway. With cilia disabled by the mycoplasma, the sheep become susceptible to secondary infections from more lethal bacteria, including Pasteurella and Mannheimia.

The extreme susceptibility of bighorn sheep to Mannheimia haemolytica, the most lethal of these agents, is also under investigation at WSU, in the laboratory of Professor Srikumaran Subramaniam, who holds the prestigious Dr. Rocky Crate and Foundation for North American Wild Sheep Endowed Chair.

“The evidence we have so far provides a strong case for the role of this mycoplasma in predisposing bighorn sheep for the fatal pneumonias,” said Dr. Besser, a microbiologist in WSU’s Department of Veterinary Microbiology and Pathology and who also works within the Washington Animal Disease Diagnostic Laboratory.

Frances Cassirer, a wildlife research biologist with the Idaho Department of Fish and Game, said pneumonia is the leading killer of bighorn herds and notes that infected herds are failing to increase in size. In uninfected herds, the leading cause of death is predation, primarily by cougars, but these herds continue to expand.

Pneumonia outbreaks frequently kill 90 to 100 percent of lambs, as well as occasional adults in pneumonia-affected herds. Adult bighorn death losses are

Continued on page 6

Permanent Memorial Dedicated

The memory of a beloved standard poodle, Solar Chamberlin, will live forever at Washington State University’s College of Veterinary Medicine thanks to a new outdoor plaza donated by a thankful owner. Solar was the long time companion of Michael Chamberlin of Seattle. Chamberlin recognized a need for such a space when he spent time at the hospital while Solar was undergoing cancer therapy.

“There wasn’t a convenient grassy area close to the hospital entrance,” said Chamberlin. “I feel it is important for ailing pets to access natural space to spend time with their owners in the eastern Washington outdoors.”

Chamberlin suggested to Dr. Harmon Rogers, director of WSU’s Veterinary Teaching Hospital, that they restore a garden area near the hospital entrance for the convenience of in-patient animals. Chamberlin backed up his idea with a gift of $10,000 to the veterinary college. With a little power equipment and some manual labor from the University’s physical plant, the area was transformed.

The Solar Plaza, as it will be known, is located on the northeast corner of the Veterinary Teaching Hospital adjacent to the main entrance. The landscape design features a soothing natural basalt stone fountain and an eye pleasing collection of evergreen and deciduous trees and shrubs. Large natural stones and wood benches provide creature comforts for both animals and owners. A lazy, serpentine pathway made with crushed stone complements the layout. A bronze plaque provided by Chamberlin is inscribed with “In loving memory of Solar Chamberlin, 1992–2005. A ray of light, courage, and hope for all during his lifetime and beyond.”

“I wanted to make life a little easier for animals undergoing treatment at WSU’s world class Veterinary Teaching Hospital,” said Chamberlin, explaining his gift. “WSU is home to one of the nation’s best equipped veterinary teaching hospitals and today it is even more ‘pet friendly’ than before.”

“Most medical organizations receive lots of good suggestions for improving care and most are out of financial reach,” said Dr. Warwick Bayly, dean of the WSU veterinary college. “Rarely, though, does a person step forward with a gift to accompany a vision. We can’t thank Mr. Chamberlin enough.”
The Cancer Team at WSU’s College of Veterinary Medicine has added a new member! **Dr. Jeffrey Bryan** comes to WSU from the University of Missouri–Columbia where he served as an assistant professor in comparative oncology. After completing undergraduate and veterinary studies at the University of California, Davis, Dr. Bryan spent nine years in private practice where he became proficient in laparoscopic techniques and was certified in acupuncture.

During his residency in medical oncology at the University of Missouri, his master’s thesis examined delivery mechanisms for radioactive copper to treat colon cancer. Following his residency, Dr. Bryan was awarded a National Library of Medicine Postdoctoral Fellow in Informatics. During this time, he completed a doctorate; his dissertation evaluated epigenetic similarities between lymphoma in dogs and lymphoma in humans.

Dr. Bryan’s goal is to exploit these similarities to develop novel diagnostic tests and therapeutic strategies to benefit both dogs and humans. In addition to his professional pursuits, he loves spending time with his family and is an avid cyclist.

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Seattle woman finds innovative way to help grieving friends

The WSU College of Veterinary Medicine Pet Memorial program has long been a way for veterinarians to help their clients through the grieving process after losing a pet. Now, the service is growing more popular among friends wanting to help other friends.

“Three years ago, when my dog died, I got a letter from WSU—I was so, so touched by that. I kept the idea in the back of my mind that I would one day do that for a friend, sort of pay it forward,” said Linda Drahn, an elementary school teacher from the Seattle area.

It was her veterinarian, Dr. Larry Williams ’65, who first used the Pet Memorial program in her honor when her dog, named Seldom, passed away. The cross between a Chihuahua and a Yorkshire Terrier was hairless, and once won a Seattle television station prize for having a “face only a mother could love!” Linda would take the dog to school every Friday, where she taught first grade.

“I was so touched...what a wonderful cause.”

“I was so touched, and what a wonderful cause,” said Drahn. Over the years she has used the Pet Memorial program, but recently there have been a number of pet losses among friends and family members. One friend lost his cat in a fire. Another couple, Mike and Ann, lost their dog Rocco, and were so moved by the gesture that they made their own donation to WSU’s College of Veterinary Medicine. Her mother also lost her dog Bugsy.

For Drahn, it has been about honoring the friendship we develop with our furry friends. WSU, with its long tradition of honoring the human-animal bond, was a perfect fit.

“This is something that’s powerful, and it honors someone’s pet by continuing to do good for the animals,” said Drahn. “This brings much comfort and validation to grieving pet owners. The value of that part of the program cannot be underestimated. Our animals are so important to us, and they always will be.”
As we pause to recognize our biggest donors (see list of new laureates and benefactors below) you may notice a new trend in veterinary education. Increasingly, veterinary corporations are playing a greater role in helping provide a top rate veterinary education. Many companies join in this partnership because they see the value WSU students have as future leaders in the field. Nearly all of them are hopeful that students will, upon completing their formal education, be supportive of those companies who were major contributors to their education.

This year, a number of companies have come forward to support our school’s Veterinary Communication and Leadership programs, believing that the work we do now will have a lasting impact on the profession for years to come. This investment has already paid dividends in the promotion and enhancement of servant leadership, clinical communication skills, and emotional intelligence in current and future generations of veterinarians.

The key to obtaining this support has been the building of national awareness of our programs and their goals. To accomplish these objectives, we have expanded our WSU leadership programs as well as the AVMA Veterinary Leadership Experience (AVMA VLE), developed and hosted by Washington State University’s College of Veterinary Medicine. This year, nearly 180 students, faculty, and practitioner colleagues from nearly every veterinary school in the United States, Canada, Australia, and the Caribbean were in attendance. Student and faculty colleagues also came from Sweden, Greece, and Austria. The specifically tailored curriculum of the AVMA VLE was designed to enhance the personal leadership and communication skills of participants, who will then be better positioned to help shape the future of veterinary medicine. This unique training program challenges participants to explore and expand their professional mindsets to better meet the veterinary profession’s future needs. The AVMA VLE immerses participants in a novel five-day experiential curriculum geared toward strengthening individual and team leadership capacities. This approach links them together by way of a profound shared experience, and connects them to an influential network of leaders from veterinary medicine both during and after the VLE.

We believe that in addition to medical and surgical competencies, it is essential that veterinary students better understand the importance of personal leadership, communication, teamwork, emotional intelligence, and life balance and be equipped to practice and share these skills with colleagues, associates, and employers upon graduation. The AVMA VLE has proven to be an exceedingly effective vehicle to introduce and expand these capacities in participants, as judged by the reviews of participating practitioners, faculty, and students. Over 80% of those attending this program since its inception have described it as life changing. It has proven to be an excellent opportunity for WSU, donors, and animal health industry partners to leverage corporate support in order to further develop these important skills in our young professionals.

Without your continued support, our dream of building a stronger world of veterinary medicine will fall short. With the partnerships we have already formed, our dreams are becoming a reality.

For a full list of donors for this year’s Veterinary Leadership Experience, please go to www.vetmed.wsu.edu/orgvle/2007/sponsors07.asp.

Please join me in giving them our thanks and our support. We look forward to adding your name and your corporate friends to these lists in the future!
Dr. John R. Gorham ’46 received the Life-time Excellence in Research award from the American Veterinary Medical Association. Dr. Gorham is a professor in WSU’s Department of Veterinary Microbiology and Pathology. He retired from the Department of Agriculture’s Agricultural Research Service in 1995 but remains on a partial appointment in the veterinary college. Dr. Gorham is perhaps best known for the co-discovery of the rickettsia that causes salmon poisoning. Dr. Gorham also developed a spray vaccine that was used worldwide to immunize mink against distemper. He still comes to his office most days.

Dr. Stephen A. Hines received the Student AVMA Teaching Excellence Award in Basic Sciences. Dr. Hines is a Berger Keats Distinguished Professor in the Department of Veterinary Microbiology and Pathology at Washington State University’s College of Veterinary Medicine. He has previously been honored with numerous awards for teaching and curriculum innovation.

WSU Regents Professors Named

Two distinguished professors at WSU’s College of Veterinary Medicine were added to the ranks of Regents Professors:

Dr. James Krueger and Dr. Guy Palmer. Members are selected on the basis of scholarly achievement and demonstrated dedication to teaching and service, as well as individual judgment and integrity. There are less than 30 active Regents Professors at any time. Dr. Krueger is internationally known for sleep research. Dr. Palmer is internationally known for his work with tick-borne diseases of cattle.

Dr. Roger McClellan ‘60 was awarded the New Mexico Public Service Award. Dr. McClellan, of Albuquerque, New Mexico, is an advisor to public and private organizations on toxicology and risk analysis issues. His distinguished career of public service has been directed at providing advice and leadership for environmental and occupational health activities to the United States and to international agencies.

Dr. Gil Burns takes Caribbean position

Dr. Gil Burns, formerly associate dean of academic and student affairs at WSU’s College of Veterinary Medicine, has accepted a similar position at Ross University, located on the island of St. Kitts in the northeastern Caribbean. During his 15 year career at WSU, Dr. Burns, an anatomist by training, was an active instructor, researcher, and administrator. Dr. Burns remains active in WSU’s Veterinary Leadership Program, and presented the WSU-derived Emotional Competency Model at veterinary schools and national professional meetings in the United States and Canada.

Key Bighorn Pathogen, continued from page 3

often much worse when herds first experience the pneumonia outbreaks, suffering 25 to 75 percent mortality. Dr. Besser’s work shows that these severe initial pneumonia outbreaks typically coincide with the first exposure of the herds to the mycoplasma.

Researchers admit there is no clear-cut mechanism for controlling the disease in wild herds, even if all the parameters of the infection are determined. There is no vaccine currently available for mycoplasma in sheep, domestic or wild.

Dr. Besser makes it clear however, that it is not yet known whether domestic sheep transmit the mycoplasma to wild sheep.

Growing criticism and lawsuits have come from groups that are convinced, however, that domestic sheep are carriers. That criticism has forced the U.S. Forest Service to limit grazing by domestic species on some national forest lands.
Breeder Harriet Aiken insists **Dr. Ahmed Tibary** is the key reason her dream of establishing Anglo-Arabians as a prominent breed in North America is close to becoming a reality. “If the University hadn’t brought Dr. Tibary here, none of this would be possible,” said Aiken at her ranch outside Troy, Idaho. Dr. Tibary heads up the Large Animal Theriogenology program (reproductive medicine) at WSU’s College of Veterinary Medicine.

Aiken has been involved in competitive endurance riding for nearly three decades, representing the United States in a number of international competitions in various capacities. Many European countries have accepted Anglo-Arabians as a recognized breed for two centuries, but in North America the breed has no voice.

While endurance competition is dominated by Arabsians, Aiken was looking for something different. “I wanted to add the athleticism of the Thoroughbred. The combination produces a more comfortable horse to ride while increasing size and speed.”

“I am very familiar with the Anglo-Arabian breed,” said Dr. Tibary. “This is what my family breeds, and I have also worked with some of the largest Arabian stud farms in the world, including the Royal Stables in Morocco and the Amiri Stables in Abu Dhabi.” His experience, combined with Harriet Aiken’s passion, has proven to be the right combination to have this breed brought into prominence in the United States. At first, his connections in Abu Dhabi helped Harriet identify the right Arabian stallion, and then his introductions to members of the European and North African Anglo-Arabian community propelled this effort forward.

Later this year, one of Harriet’s Anglo-Arabs, named Marrakesh, will be put to the test at an endurance race near McCall, Idaho. The rider will be third year WSU vet student Jenny Freeling, who says working with Harriet has been a career-changing experience. “I have always loved horses,” said Freeling. “I came to vet school with an open mind, but now I’m hooked. An equine track is perfect for me.”

“I could not have done this without the expertise and friendship of Dr. Tibary. I could not have even gotten started. Now we are on the verge of starting the first Anglo-Arabian association in the United States—I have just finished the process of getting incorporation papers for the North American Anglo-Arabian Horse Association,” said Aiken. Dr. Tibary says, “One of the things I respect most is someone with vision and a dream. She has both, and has become a good friend because of her interest and her drive.”
**Important Dates to Remember**

<table>
<thead>
<tr>
<th>Date</th>
<th>Event Description</th>
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<tbody>
<tr>
<td>September 7</td>
<td>Seattle Football Weekend CVM Dean’s Reception</td>
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<tr>
<td>September 8</td>
<td>Seattle Football Weekend WSU Football vs. San Diego</td>
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<tr>
<td>September 22–23</td>
<td>WSU CVM Complementary and Alternative Veterinary Medicine Course, Pullman</td>
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<td>September 27–29</td>
<td>WSVMA Annual Meeting. WSU CVM reception on September 29.</td>
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<tr>
<td>October 5–7</td>
<td>Class of 1967, 1977, and 1997 Reunions</td>
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<td>October 6</td>
<td>Homecoming vs. Arizona State. WSU CVM pregame BBQ at 12:30.</td>
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<tr>
<td>December 1–5</td>
<td>AAEP. WSU CVM alumni reception on December 3.</td>
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Read the WSU *Veterinary Executive Report* at www.vetmed.wsu.edu.