



# Veterinary

*executive report*

Winter 2009



# Pinnacle of Achievement

McElwain named to the  
National Academy of Science's  
Institute of Medicine

WASHINGTON STATE  
 UNIVERSITY

*World Class. Face to Face.*

# Message from the dean...



*Dr. Bryan Slinker*

One of the best things about our college and WSU is that you'll find an incredible pool of some of the world's greatest talents and yet they each remain genuine and likeable people you admire as much for the kind of person they are as for their success and talent.

Case in point: my friend and colleague **Dr. Terry McElwain**.

We have known each other for nearly 20 years. During that time I have watched Terry grow into one of the leading experts when it comes to global surveillance and control of some of the world's most costly and even deadly animal diseases.

Terry was the driving force behind development of the National Animal Health Laboratory Network. His work has taken him around the world. His service has included everything from working with the CDC to develop a Global Microbial Threats Strategy to assisting the Institute of Medicine in global assessments of disease threats and helping the World Organization for Animal Health as a veterinary representative.

Here at WSU, he serves as a pathology professor, the executive director of the Washington Animal Disease Diagnostic Laboratory, and is a founding leader in the new School for Global Animal Health.

Earlier this year, his many achievements earned him WSU's prestigious Sahlin Faculty Excellence Award for Outreach and Engagement. Now comes his latest honor, election to the National Academy of Sciences Institute of Medicine. Yet in the face of this international success and adulation, Terry remains the same genuine, hard working, easy going friend he has been from the very beginning.

Recently, he and I celebrated our shared passion for fly fishing in central Washington in search of the elusive steelhead. While sitting in a drift boat in the rain I was struck by the wonderful dichotomy of this man who shares the world stage in the battle against animal disease, yet can whoop it up with me as a steelhead rips off line and tail waltzes in the river.

To his accolades I say congratulations. To his achievements I offer my admiration. To his friendship I can only say thanks.

My (fishing) hat is off to you, Dr. McElwain. I look forward to seeing what your future holds in store.

Go Cougs!



*Homecoming 2009*

# WSU's Terry McElwain named to the National Academy of Science's Institute of Medicine

**Dr. Terry McElwain**, a professor of pathology and infectious diseases in the WSU College of Veterinary Medicine, has been elected to membership in the National Academy of Science's Institute of Medicine (IOM). Election to this prestigious body is one of the highest honors for those in biomedical research and human health care.

"Terry McElwain's election to the National Academies is a richly deserved acknowledgement of his innovative scientific leadership in disease surveillance and public health," said WSU **President Dr. Elson S. Floyd**. "His considerable work and expertise stand very much at the heart of our recent successes in the establishment of a new School for Global Animal Health here at WSU. It is altogether fitting that he should be recognized as he has today, with one of the highest honors that can be afforded a scientist."

"I am deeply honored to receive this recognition, and have many to thank for the support that has been instrumental to my success," McElwain said. "That includes WSU, the institution that has supported me through almost my entire career. I am humbled by my election to the IOM, which I suppose is natural when one looks at the past and current membership."

McElwain has been a leader in the development of a coordinated network of animal disease diagnostic laboratories. Together, these laboratories conduct disease surveillance based on shared standards, rapid dissemination of diagnostic surveillance data, and integrating communication with state public health laboratories and the Centers for Disease Control. His work has strengthened the linkages between animal disease surveillance and response networks at state, national, and international levels.

He served recently as a member of IOM's expert committee to provide consensus advice on the challenge of achieving sustainable global capacity for surveillance and response to emerging diseases of zoonotic origin, such as the H5N1 and H1N1 influenzas.

"More than 65 percent of human disease agents originate in domestic or wild animals and Dr. McElwain's election to the National Academies reflects the critical importance of both his research and service to human health," said WSU Provost **Dr. Warwick Bayly**.

A diplomate of the American College of Veterinary Pathologists, McElwain is executive director of the Washington Animal Disease Diagnostic Laboratory and is a founding member of the National Animal Health Laboratory Network and Laboratory Response Network for Bioterrorism. He also directs WSU's Animal Health Research Center and is a member of the board of directors of the World Association of Veterinary Laboratory Diagnosticians.

The Institute of Medicine is unique for its structure as both an honorific membership organization and an advisory organization. Established in 1970 by the National Academy of Sciences, the institute has become recognized as a national resource for independent, scientifically informed analysis and recommendations on issues related to human health. With their election, members make a commitment to devote a significant amount of volunteer time as members of IOM study committees.



## How to give to WSU's College of Veterinary Medicine

What is your passion? From small animal medicine to helping students, each year hundreds of alumni and friends of the college enhance teaching, research, and outreach programs through private philanthropy and charitable donations.

Generous gifts by individuals and organizations provide scholarships and fellowships, state-of-the-art equipment for teaching and research, funding for student clubs, and a variety of other important programs.

See what opportunities are available at [www.vetmed.wsu.edu](http://www.vetmed.wsu.edu).

# WSU professor discovers new test for bovine TB

**Dr. William Davis**, a professor in WSU's Department of Veterinary Microbiology and Pathology, together with science and industry colleagues, has developed an antibody-based test for bovine tuberculosis (bTB).

The new multiplex antibody test is able to detect antibody activity to 25 antigens at one time, something that was previously not possible. The new test may one day replace the current skin and gamma interferon tissue culture tests.

Currently there is no effective treatment for bTB, making early diagnosis critical. This new test can detect the disease faster and with great accuracy.

"Our test can provide results in a matter of hours rather than days with current methods," Davis said. "It also has increased specificity and is highly sensitive, so there are fewer false positives."

Early detection allows sick animals to be removed from the herd more quickly, reducing the spread of the disease. Because bTB is also a zoonotic pathogen—it can transfer from animals to humans—the test can have important global implications. In underdeveloped countries, animals and humans are particularly vulnerable.

"Bovine TB is a worldwide problem and it can be in a dairy or cattle herd a long time before an animal has symptoms," Davis said. "It can then spread to the rest of the herd. And if it is in animals, it can transfer to people."

Davis developed the test along with WSU colleague **Mary Jo Hamilton**, a research associate in the Department of Veterinary

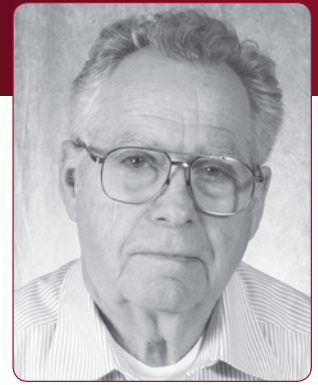
Microbiology and Pathology.

Colleagues from Enfer Scientific in Ireland, Fusion Antibodies in Ireland, Ireland's Department of Agriculture and Food, Central Veterinary Research Lab in Ireland, and Quansys Biosciences in Utah also helped with the development.

Enfer Scientific and Ireland's Department of Agriculture began a trial of the new bTB test in July 2009. Over the next six months they will test 100,000 cattle.

Currently, there is an effort to license this new test in the United States, which could have a positive effect on the dairy and cattle industries. Though bTB has been under control in the United States, the disease can be reintroduced to cattle from infected white-tailed deer or elk in some parts of the country. It can also come to the United States from cattle imports. England, Ireland, New Zealand, and Korea have all been taking steps to control bTB.

"Dr. Davis and his colleagues have made an important advance in diagnostic test development," said **Dr. Bryan Slinker**, dean of WSU's College of Veterinary Medicine. "Bovine TB can be devastating to dairy and cattle farmers across the globe, so this new method could have far reaching effects. It is also a good example of the breadth of research expertise we can bring to bear to promote global animal and human health."



## Major construction to get underway for WSU's College of Veterinary Medicine

The sounds of heavy equipment will fill the air in 2010 as two major construction projects are set to get underway. The \$35 million WSU School for Global Animal Health will soon become a reality thanks to a generous gift of \$25 million from the Bill and Melinda Gates Foundation. Efforts continue to raise the rest of the money required. Work is also set to begin on the long-awaited WSU Veterinary Medical Research Building with an estimated price tag of \$96 million.

"The College of Veterinary Medicine has been planning for new space to alleviate over-crowding and to allow us to abandon some truly awful research space," said **Dr. Bryan Slinker**, dean of the WSU College of Veterinary Medicine. "This is an outstanding result for our college and good news indeed in these times where it seems that most of the news is bad. Not only will these programs be advanced, but the overall result will also repurpose existing space to benefit the whole college."

It is anticipated that overall construction of these projects will take three to four years to complete.

# How the love of a teacher can be a powerful agent of change



## We all have them.

A teacher whose work profoundly changed our lives.

Whether it was the potential they saw in you that others missed, or the example they set within their own lives, we all have our own special teacher who has been that guiding light.

From this profound respect comes the power to shape lives.

Case in point, WSU College of Veterinary Medicine graduate **Dr. Caroline Engle** ('67 DVM) was a self-described non-traditional student in the 1960s. "WSU accepted me into veterinary school when it had been eight years since I had graduated from college," Engle notes.

Along the way she met **Professor Roger Spencer**, a faculty member in WSU's Department of Veterinary Microbiology and Pathology who would change her life forever. He helped her gain the necessary tools to successfully compete for a post-doctorate fellowship at the University of Pennsylvania. Studying under a grant from the National Cancer Institute, Engle's research into the cause of cancer in animals led to the discovery that mammary tumors in rats were caused by viruses. Her subsequent research project on feline leukemia formed the foundation for a cats-only clinical practice she founded in Vancouver, Washington.

Engle retired from her veterinary practice in 2005. To honor her college, and the professor who made her long career possible, she has now established the Caroline Engle Distinguished Professor in Research on Infectious Diseases. Her gift will provide the resources necessary to support a permanent faculty member with an established cutting-edge research program delving into the cause and treatment of infectious diseases in animals. Her gift expresses her appreciation for the opportunities provided by WSU to an older student wanting to pursue her love for animals and interest in science and medicine.

Engle's gift will serve to attract further support for the infectious diseases research program of the Department of Veterinary Microbiology and Pathology, explains department chair **Dr. David Priour**. "Dr. Engle's wonderful gift will have a substantial impact on the department's major research focus of developing the requisite information for the control of infectious diseases of animals in the years ahead," he notes.

The WSU Department of Veterinary Microbiology and Pathology has now selected Associate Professor **Dr. Douglas R. Call** as the inaugural Caroline Engle Distinguished Professor in Research on Infectious Diseases. Call is a nationally recognized, award-winning scholar who has an active research program in food- and water-borne diseases and salmonid aquaculture. He developed a cost-effective management and vaccine strategy to control bacteria coldwater disease in salmon farms that has become an industry standard.

It is Caroline Engle's way of giving back to WSU and to the memory of a professor who helped her along her way.

## Chocolate—one year later!

Chocolate, an abandoned Chesapeake Bay retriever that ran for months on two broken front legs in the Tri-Cities area of Washington, continues to live comfortably with his adopted family.

One year after being placed with his new family, Chocolate's personality continues to blossom. "He is a firecracker with a little wild streak in him who likes to try and steal your food, your hat, if you are wearing one, or your pillow, and loves to wrestle with you," says owner **Sarah Weidmer**. "He also is a boy who has a very sweet and loving personality and disposition. He likes to lay on you and love you and can demand attention for himself with just a look."

Chocolate underwent extensive surgery and months of physical therapy at WSU's College of Veterinary Medicine to repair broken limbs and to retrain him to walk correctly. His rehabilitation recently suffered a small setback after several toenails grew back out of alignment. A minor surgery performed by WSU veterinary graduate **Dr. Sharon Watson** has helped solve this problem. Chocolate spent most of the summer swimming every day, and still loves a good game of fetch every afternoon.

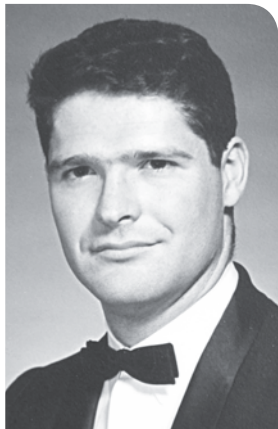
"Chocolate has firmly situated himself in our hearts and lives forever. We can not imagine life without him," said Weidmer, who is planning on a return trip to WSU soon to show off his progress.

See video of Chocolate's recovery at [www.vetmed.wsu.edu/features/chocolate](http://www.vetmed.wsu.edu/features/chocolate).



# A Legacy of Caring Lives On

It was 40 years ago when **Dr. Donald Weldin** ('69 DVM) graduated from Washington State University's College of Veterinary Medicine, yet his legacy still graces the halls of his alma mater. As a highly dedicated and respected veterinarian in Walnut Creek, California, Dr. Weldin was vitally interested in the improvement of animal care and the advancement of knowledge in veterinary medicine.



Following his early passing at the age of 38, family and friends established a special fund with the proceeds going to help fund research at WSU. In the weeks just before his death, he and his wife **Carol Weldin** had first talked of how they each wanted to be remembered.

"It was really ironic because we had signed our wills just weeks before, because we had planned to do some extensive traveling," said Carol. "He wanted to give back to his alma mater, and he wanted to ensure that his contribution go toward research aimed at improving and bettering the lives of animals."

There were friends with whom Donald Weldin had graduated; there were the clients and co-workers at Ygnacio Animal Hospital in Walnut Creek, the practice

he established in 1977, and there were family members who also had graduated from WSU. They all shared a need to establish a fitting tribute to Dr. Weldin's life.

"I was in so much shock," said Carol. "Yet, out of contributions from his death was born the idea to create this fund."

Being an endowed charity, the fund offers support to researchers at WSU's College of Veterinary Medicine in perpetuity. In the years since, this fund has been behind such important research as helping solve cat and dog obesity, helping identify a deadly swine disease that strikes mostly in third world countries, and in combating *E. coli*. What offers Carol Weldin the most comfort is how the college seeks out the best use of these funds now, and for all time. "I am really glad this was established and I am glad that the structure is such that it will live in perpetuity so it will be giving long after I am gone," said Carol.

As we celebrate the life of Dr. Weldin, join now by contributing to his fund, to remember who he was, and honor him by giving to the research fund he dreamed would always help animals. Or perhaps now is the time to join in his cause by establishing a legacy fund of your own.

Donald would have wanted it that way.



*Richard M. DeBones*



## Barb Robbins scholarship update

Gifts continue to pour in to support the **Barb Robbins Wildlife Scholarship**, established at WSU's College of Veterinary Medicine.

The fund honors the 35 years of service Robbins gave to WSU's College of Veterinary Medicine. "So far we've raised about \$9,500 for the fund," said **Lynne Haley**, WSU CVM Director of Development. The goal is to raise \$25,000 to establish an endowed fund that would provide scholarships in Robbins' name in perpetuity.

For more information on the Barb Robbins Wildlife Scholarship, please go to [www.vetmed.wsu.edu/robbins](http://www.vetmed.wsu.edu/robbins).

# Achievements



*Dr. Richard DeBowes receives his Distinguished Alumni Award.*

**Dr. Richard DeBowes**, associate dean of veterinary development and external relations, has been awarded the University of Illinois College of Veterinary Medicine 2009 Dr. Erwin Small Distinguished Alumni and Special Service Award.



*Dr. James Krueger*

**Dr. James Krueger**, WSU Regents Professor in the College of Veterinary Medicine, was selected to give the 2009 WWAMI Science in Medicine Lecture at the University of Washington. WWAMI is an ongoing partnership between the University of Washington School of Medicine and the states of Washington, Wyoming, Alaska, Montana, and Idaho.

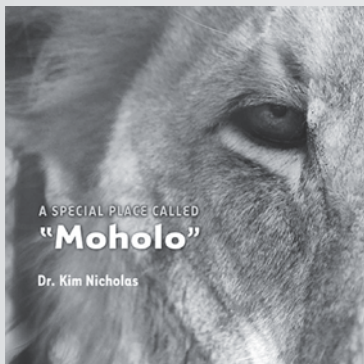
**Dr. Matthew Fricke** ('94 DVM) has received the Oregon Veterinary Medical Association's 2009 President's Award. Dr. Fricke is an associate veterinarian with McKenzie Animal Hospital in Springfield, Oregon.



*Regina Dugan, DARPA Director, presents the award to Dr. Jonathan Wisor*

**Dr. Jonathan Wisor**, assistant professor in CVM's Department of Veterinary and Comparative Anatomy, Pharmacology, and Physiology, has received the Defense Advanced Research Projects Agency (DARPA) Young Faculty Award for 2009. Dr. Wisor is affiliated with the Sleep and Performance Research Center at WSU Spokane.

**Dr. Kim Nicholas** ('84 DVM) has published a children's book based on his work with the Moholoholo Wildlife Rehabilitation Centre in South Africa. All of the proceeds will go to support the center.



*Book by Dr. Kim Nicholas*



# Bill Johnson rides again



For the fourth year in a row, **Bill Johnson** has made a special journey. He travels by bicycle along a familiar route from his home in Cle Elum to Pullman, all to raise money for Washington State University's College of Veterinary Medicine.

The idea began when Johnson's Golden retriever Sonny was lost to canine lymphoma in 2006. The route he takes retraces his friend's last days when the two would travel back and forth to WSU for treatment. Now, he makes the 217-mile trek every August 21 to the WSU Veterinary Teaching Hospital to honor his dog's passing, along with the loss of his second dog Cody Jo.

Donations continue to pour in, and in the course of four years Johnson has successfully raised nearly \$50,000 in donations. The money goes toward the Sonny Angel and Cody Jo's Gift of Hope Endowment, used to support and care for WSU animal patients who need life-saving procedures but have no owners, or whose owners do not have the means to pay for the care. "They were both gracious and giving, and I think this is what they would have wanted. So that's why I'm doing it," Johnson said.

Other riders are making plans to join with Johnson to complete the route next year.