Veterinarian of the Year

Dr. Michael Dryden will be recognized on Feb. 12 as the 2010 Veterinarian of the Year by Ceva Animal Health at the Purina® Pro Plan® 56th Annual Show Dogs of the Year® Awards, presented by Dogs In Review in New York City.

Dr. Dryden, is a professor of veterinary parasitology, in the Department of Diagnostic Medicine and Pathobiology. He is active in several professional associations, including the American Association of Veterinary Parasitologists, the American Veterinary Medical Association and was a founding member of the Companion Animal Parasite Council. Dr. Dryden — known affectionately as "Dr. Flea" — is the author or co-author of more than 100 journal articles and book chapters, has lectured in 21 countries and presented over 750 invited seminars at national and international meetings. His current research efforts are directed towards flea and tick biology and control, investigating urban wildlife as vectors of parasitic diseases and diagnosis and control of gastrointestinal parasites.

In 1995, Dr. Dryden was awarded the “Pfizer Award for Research Excellence” for contributions that significantly advance our knowledge of animal health. He was awarded the Kansas Veterinary Medical Association’s “KSU-Distinguished Service Award” in 2005. He earned the Teaching Excellence Award in recognition of outstanding instruction of second-year veterinary students in 2006. He received the Recognition Award in Urban Entomology from the North Central Branch of the Entomological Society of America in 2007. In 2010, Dr. Dryden was awarded the “Excellence in Teaching Award” from the American College of Veterinary Dermatology, recognizing contributions to the education of future veterinary dermatologists at its residents’ forum. Dr. Dryden earned his DVM at K-State in 1984 and then earned a master’s degree in 1988 and Ph.D. in 1990 at Purdue University.

In addition to Dr. Dryden’s veterinarian-of-the-year award, the Show Dogs of the Year dinner will recognize the seven show dogs with the greatest number of Group Firsts in 2010, most of whom are going on to compete at the Westminster Kennel Club Dog Show next week. Along with those dogs, there will be Special Industry Awards honoring individuals whose dedication to the dog world is incomparable. These individuals will be honored for heightening public awareness of canine well-being and to elevating respect for the industry at large. Awards include Groomer of the Year, Veterinarian of the Year, Shelter of the Year and Trainer of the Year.
Helping cattle get a leg up

At any given time between 10 and 20 percent of dairy cattle in the United States are afflicted with lameness, making it one of their most common ailments.

That's why a K-State research team is working to reduce the percentage of cattle affected by bovine lameness.

Three researchers – Dr. David Anderson, professor of clinical sciences; Dr. Brad White, associate professor of clinical sciences; and Dr. Johann Coetzee, associate professor of clinical sciences – are involved with bovine pain and welfare assessment at the College of Veterinary Medicine. Because of their efforts to understand and treat lameness in cattle, they are becoming leaders in this critically important area of bovine research.

"K-State is one of the few universities in the country with a farm animal surgery program," Dr. Anderson said. "Because of the research we're doing here, we're getting national and international attention about these programs."

The team is developing a model to assess lameness and identify possible ways to treat it. Lameness can be excruciatingly painful for cattle and is caused by a variety of factors, including nutrition, environment and infectious organisms, Dr. Anderson said. When damage to the hoof and sole results in ulcers, abscesses or infection of the deep tissue of the foot, it causes severe pain during weight bearing.

The goal of their research is to identify risk factors for the prevention of lameness, validate tools for early detection, develop recommendations for effective treatment, and ultimately improve the health and welfare of cattle. Each researcher is focusing on a different area of the project.

Dr. Anderson is working on pressure map technology, which is a way of measuring the weight bearing and method of stride. Dr. White is working on accelerometry, which involves using monitors to measure the behavioral responses of animals. Dr. White can monitor an animal for 24 hours to determine how much time it spends lying down, moving around or standing still.

Dr. Coetzee, a pharmacokinetic and pharmacodynamic specialist, is working to analyze indicators of pain in the blood and analyzing drugs to determine the dosage to reduce pain.

Nanoparticles put the heat on cancer

Dr. Deryl Troyer continues his work in his lab. His research team is searching for a more effective cancer treatment by using nanoparticles.

In hopes of creating an effective cancer treatment that doesn't have the effects of traditional treatment practices, a K-State research team has developed a novel method of fighting tumors using magnetically induced hyperthermia.

Dr. Deryl Troyer, professor in anatomy and physiology, working with Drs. Stefan Bossman and Viktor Chikan in the department of chemistry, have developed a cancer-fighting technique that uses modified cells to introduce magnetic nanoparticles into tumors to initiate hyperthermia with a magnetic field.

The research is based on knowledge that cancer tumors are sensitive to elevated body temperature, or hyperthermia.

"Heat has been a very attractive modality for treating tumors," said Dr. Troyer. "The problem is that these tumors have to be accessible and often that isn't the case."

Researchers have focused on use of magnetic fields to apply hyperthermia to cancer. The magnetic coils have the ability to generate a field that efficiently heats metal objects without heating the coil itself. This concept can be applied to cancer treatment by introducing magnetic particles into a tumor.

For more in-depth coverage, check out the online video version at: www.vet.k-state.edu/depts/development/lifelines/1102.htm
Online training program for cattle care launches

The national online training program www.animalcaretraining.org for beef and dairy production was developed to educate English and Spanish-speaking beef and dairy producers, animal transporters, livestock auction market employees and bovine veterinarians. This novel program is the result of collaborations between the National Cattlemen's Beef Association (NCBA), American Association of Bovine Practitioners (AABP) and Livestock Marketing Association (LMA) with the Beef Cattle Institute at K-State. Web-based audiovisual training modules on topics such as animal husbandry, animal welfare, environmental stewardship and food safety practices for the beef and dairy industries are available.

“Producers and veterinarians continue to provide outstanding care for their beef and dairy cattle,” said Dr. Dan Thomson, director of the Beef Cattle Institute. “As new practices evolve or technologies emerge to improve animal welfare or food safety, we need a mechanism to rapidly share the information and training in remote locations. The goal of the program is to utilize modern technology to reach out to rural areas and provide up-to-date continuing education for all people involved with raising beef and dairy cattle to improve animal welfare, food safety and environmental stewardship.”

The Animal Care Training program is managed by the Beef Cattle Institute and features streaming multimedia modules in English and Spanish and is designed to provide valuable online training in various areas of animal care for employees worldwide.

Check it out at the Library

“Available Technology and Devices”

By Carol Elmore

Over the holidays you spent all of your extra money for travel or on gifts for others and now you can’t buy anything for yourself? One of your graduate public health classes will require taking a test on a computer and you don’t have one and don’t have extra money to buy one. One of your options is to take the test on a public computer at the Veterinary Medical Library (VML) but you know that you may not always be able to go to the library since you often need to stay home with your children. Another option is to check out one of the five loaner laptops available at the VML when it is time to take your exam.

Another option is to check out one of the camcorders that are available at the Veterinary Medical Library. The library has four mini-tape recorders whose tapes can be easily edited. Another camcorder that records directly to a DVD is extremely easy to use but only holds about 30 minutes of video. The newest video recorders that can be checked out are the FLIP cameras that are small and hold up to two hours of recording. The videos from these can be downloaded to a computer via a USB connection.

Your local humane society has asked you to give a talk on veterinary medicine. You have a tablet computer and can do a PowerPoint presentation on the topic but don’t have a way to project your work to a large group. Your friends don’t own an LCD projectors and the humane society doesn’t have one either. The Veterinary Medical Library can come to your aid by letting you check out one of their LCD projectors. The projector can be checked out for a limited time for educational uses.

As a faculty member you have been asked to set up a video conference with someone at the new K-State Olathe campus to discuss some cooperative research. You have a computer in your office but no camera on your computer. You aren’t sure what kind of camera to buy. The Veterinary Medical Library has a Logitech Quick Cam that can be checked out. This will enable you to try out a camera and set up the conference without investing in one yourself.

The above examples are just a few of the ways that faculty, staff, and students can utilize some of the library’s technology items. The library has other items for checkout such as click and shoot digital cameras, tripods for holding digital cameras and camcorders steady during long photography sessions, digital recorders to record lectures (with the teacher’s prior permission, of course), and even a drawing devise called the Wacom tablet which allows you to draw on your computer screen. We also have some new technology items on order and will write about them next month.

Gina Scott (scott@vet.k-state.edu or 532-6307) at the library is available to teach you how to use these devices and can check them out to you.
Kristen Sterneker, public health master’s student, participated in the 10th annual Animal Welfare Judging and Assessment Contest. Kristen had the highest individual score in the contest and the K-State team placed third in the graduate student division.

Sue Hageman, research assistant, and Ginger Biesenthal, grant specialist, made a quilt for the Kansas Thoroughbred Association auction on Jan. 15. The quilt sold for $900 to the Hurley family.

Dr. Terry McElwain, DVM 1980, was selected as the American Academy of Animal Scientists fellow. The selection was based on his distinguished contributions to public health through infectious diseases investigation and implementation of laboratory networks for detection and confirmation of pathogen emergence and spread.

This year is “World Veterinary Year” because the first veterinary school was founded in Lyon, France, in 1761, 250 years ago. The school was founded on Aug. 4, 1761 by Claude Bougelat, an expert horseman who was named the equerry of France and the director of Lyon Academy of Horsemanship in 1740. Congress passed resolutions marking the 250th anniversary as World Veterinary Year.

Dr. Antje Anji
Research Assistant Professor, A&P
Hometown: New Delhi, India
Family Information: I live with my sister.

What would you do if you had a snow day? You know, I believe in Murphy’s law. As it has happened in the past on the snow days, I had an important experiment going on and had to go to work. But if that is not the case, I would probably just watch a good movie.

What is your favorite childhood memory? Setting off fireworks for Diwali, the Indian festival of lights, with my brothers.

What is your favorite inspirational quote? “There is no need for temples, no need for complicated philosophies. My brain and heart are my temples; my philosophy is kindness.” Dalai Lama

What was your favorite subject in school? Physics. I hated subjects where you have to memorize material. Physics can explain the most fundamental concepts in nature.

What is your favorite song? “Don’t Worry, Be Happy” by Bobby McFerrin. I try to live by this.

Grad Students Win at CRWAD

Congratulations to (left to right): Stephane Guillosou, Ph.D. student of Drs. Jürgen Richt and Morgan Scott; Elena Gart, master’s student of Dr. Sanjeev Narayanan; and Raghavendra Amachawdi, Ph.D. student of Dr. Morgan Scott. They were recognized for their presentations at the Conference of Research Workers in Animal Diseases in Chicago which was held Dec. 6 and 7.