Pre-veterinary student researches breast cancer in pets

Randi King works with Dr. Annelise Nguyen on cancer research in cats and dogs

Just like in humans, cancer can occur in any part of the body of dogs and cats. That's why one K-State student is researching breast cancer in common pets.

Randi King, junior in animal science and industry and pre-veterinary medicine, Rose Hill, Kan., is conducting animal breast cancer cell research with Dr. Annelise Nguyen, assistant professor of diagnostic medicine and pathobiology.

King is examining samples of breast cancer cells from cats and dogs, which were provided by the Kansas State Veterinary Diagnostic Laboratory. She is characterizing various biomarkers in the mammary tumors, which have shown to play a crucial role in human cancer, to eventually establish their differential patterns.

There are only a limited number of drugs currently available in cancer treatment for dogs and cats, and by establishing differential patterns it will allow for an increase of treatments that have been approved for humans to extend to veterinary medicine, according to King.

Cancer accounts for about 50 percent of pet deaths each year, and King's research will add more information to the medical field, where less is known about cat and dog breast cancer than about breast cancer in people.

"I know it's an area that needs more research," she said. "It would be really cool to start seeing more advanced cancer therapy at veterinary clinics."

Dr. Nguyen said the mapping of the genome sequence of dogs and cats has been completed, which gives researchers an advantage when studying diseases. She said King's research has more implications than the health of pets.

"Many of the new cancer treatments and cures that we find for dogs and cats will help treat and cure humans as well," Dr. Nguyen said. "We are comparing the similarity of a specific gene expression in a dog or cat with humans."

King's project started in fall 2008, and her research will continue as part of a two-year program through the CVM.

King said she wanted to become a veterinarian after her childhood pet, a cat, died from leukemia.

"The veterinarians couldn't do anything for him," she said. "I decided then to become a veterinarian because I thought, 'I'm going to figure out what to do and be able to save some little girl's best friend someday.'"

At first, King said she was intimidated at the idea of doing cancer research.

"I was a little nervous, but after I talked to Dr. Nguyen, she has such a warm personality that she just put me at ease," King said. "When she was explaining everything, I realized how cool the whole big picture of it was."

King came to K-State wanting to be a small-animal veterinarian, but she has since worked with much larger animals through K-State's College of Agriculture.

She plans to apply to the CVM and would like to own a clinic eventually, though she said university research also is a possibility in her future.

- story and photo by Media Relations
Phi Zeta Day puts research in the spotlight

Mark your calendars for March 3 — this year’s Phi Zeta Research Day. This event showcases the research efforts of instructors, house officers, and graduate and professional students at the CVM. Oral presentations are given on basic or clinical research areas and case reports. An award ceremony is held in the evening, featuring the announcement of winners and also the presentation of the Pfizer Animal Health Award for Excellence in Research to an outstanding member of our faculty. New members of Phi Zeta will be initiated that night and a number of non-Phi Zeta awards of excellence will be presented.

Phi Zeta was originated in 1925 by a group of senior veterinary students in the New York State Veterinary College at Cornell University. The organizers of the society, when seeking a suitable name, sought the help of a Greek scholar, Professor George P. Bristol, Cornell University, who suggested a Greek word, which in the Latin form is spelled PHILOZOEI and means “love for animals.” The abbreviation of Phi Zeta was adopted as the society’s name.

In 1929, a charter was granted to the School of Veterinary Medicine at the University of Pennsylvania, and the Beta Chapter was established. In 1931, the executive committee approved the petition of a group from Iowa State College, and the Gamma Chapter was established. Since then twenty-four chapters have been chartered, bringing the total number of chapters to 27.

In 1969, the Sigma Chapter of Phi Zeta was established at K-State to recognize and promote scholarship and research pertaining to animal welfare and diseases.

Web site gets facelift: new features add functionality

As of the middle of January, visitors to the CVM Web site may have noticed some big changes. The Web site now has a new look.

Joe Nisil, computer information specialist, is responsible for the changes as the webmaster.

“Technology has changed since the last redesign of our Web site,” Joe said. “We wanted to incorporate more technology and make our site more in line with the K-State design. We also need to make some updates.”

While making changes to the site, Joe consulted with the CVM’s Web advisory committee.

“The site is more than halfway finished with reformatting,” Joe said. “It’s very time consuming. Our biggest priority is getting course materials to students. We’ve been working with the departments and units, who have been very enthusiastic and helpful in transitioning to the new design.”

In addition to a new look, there are some new features.

“We have a new search engine that is integrated and indexed with the K-state search engine,” Joe said. “We are taking advantage of K-State’s services so we don’t have to duplicate them. We have also set up a couple of campus news feeds (called RSS feeds) for those who wish to keep up with college news. One is for CVM news and the other is for pet health news. The important thing to realize about our new site is that we’ve added functionality and not taken away any functionality.”

Visitors to the CVM Web site will see a new design with some extra features to help to keep them informed about the latest news.

Dr. Chanran Ganta, right, explains his research on nanoparticles to Dr. Patricia Payne at Phi Zeta Research Day 2008.
Development officer joins CVM team
Meet Chris Stephens: From Herefords to veterinary medicine

There's a new face in the development office in Trotter Hall. Chris Stephens has been hired by the KSU Foundation as a development officer for the CVM.

Prior to joining the CVM, Chris served as the director of the Hereford Youth Foundation of America and director for youth activities for the National Junior Hereford Association in Kansas City, Mo. In this position, Chris coordinated fundraising efforts for the foundation and provided day-to-day management for the 3,000-member junior association.

Chris also previously worked for Bader Rutter and Associates in Lincoln, Neb., as a public relations specialist and account manager for Dow AgroSciences.

A native of Wesson, Miss., Chris earned his bachelor's degree in agricultural sciences and natural resources and agricultural communications in 2002 from Oklahoma State University.

Chris will be responsible for assisting with the direction and implementation of a comprehensive development program for raising private support for the CVM.

Check it Out
at the Library
Gina Scott: Microsoft Office Specialist

Gina Scott, a member of the Veterinary Medical Library DISC Services, is well-versed in computer skills and applications. She is certified as a Microsoft Office Specialist in PowerPoint and Word as well as being certified in computing fundamentals by the Certiport Internet and Computing Core Certification program.

Acquiring these certifications has been due to Gina's attendance at workshops and classes as well as her spending time on self-study and researching computer-related questions. The first part of Gina's Certiport exam tested her on computer fundamentals such as computer hardware, computer software, and using an operating system. She was also tested in key applications that included word processing and spreadsheet functions and common program functions. The final part of the exam tested her knowledge of networks, the Internet, electronic mail and the impact of computing on society. For her Microsoft exams Gina had to demonstrate her proficiency in PowerPoint and Word.

Gina uses the skills that she has been tested on in her daily DISC Services work because she is the person responsible for answering questions for the faculty, staff, and students in the College of Veterinary Medicine about various computer programs and applications. Gina gets our faculty started on their individual requests and answers the many questions that they encounter. Students, both veterinary and graduate, rely on Gina to help them with their class projects. For all groups, Gina provides both individual and group sessions and often has up to 15 students in her office area learning new computer applications.

In addition to her training and problem-solving skills, Gina maintains and checks out technology items for the library. She recently helped select the new technology tools purchased with the library's most recent book sale funds. The library will now have a Garmin Nuvi 255W GPS portable Navigator, a Targus mini 10 key keypad for use with a laptop when doing number input, a Targus lapop wireless presenter to advance slides with a laptop, and a 60 inch by 60 inch Tripod portable pull-up projection screen available soon. The library has many other technological items as well as a blood pressure cuff and heart monitor that can be checked out. Remember February is national heart month so our health monitoring equipment can help in your health maintenance efforts.

By Carol Elmore

New development officer, Chris Stephens

Check it Out, right, answers a question from Jennifer Sutton, during an instruction class on OneNote for the Class of 2011, while Melanie Summers follows along.

Gina Scott, right, answers a question from Jennifer Sutton, during an instruction class on OneNote for the Class of 2011, while Melanie Summers follows along.
In January, Dr. James W. Carpenter presented a variety of presentations on exotic animal medicine to the 7th semester class at Ross University’s School of Veterinary Medicine in St. Kitts. He also presented “Patagonian Wildlife ... with Emphasis on the Reintroduction of the Andean Condor” to their Exotic Animal, Zoo and Wildlife Club.


On Jan. 26, Dr. Hans Coetzee lectured at Iowa State University about clinical pharmacokinetics.

Congratulations to Dr. Judilee Marrow, exotic animal intern, who was selected for a residency at the National Zoo at Washington D.C.

Custodial services memo
Due to K-State’s current budget situation, CVM’s facilities office has been unable to fill vacant custodial positions. Some cutbacks have been made on services such as trash pickup and vacuuming. We are obligated to clean the restrooms and public areas daily, and have installed new hands-free towel dispensers to help reduce waste. The dispensers were provided at a discount by the vendors, and towels are comparable in price to the previous towels. We ask you to bear with us and understand the custodians are doing the best job possible. Please contact Noel with questions at 2-0808.

Witnessing change

Some CVM staff and students took a break on the morning of Jan. 20 to watch the historical inauguration of President Barack Hussein Obama, as it was being televised in the Trotter Hall basement.

CVM News Ticker

In January, Dr. James W. Carpenter presented a variety of presentations on exotic animal medicine to the 7th semester class at Ross University’s School of Veterinary Medicine in St. Kitts. He also presented “Patagonian Wildlife ... with Emphasis on the Reintroduction of the Andean Condor” to their Exotic Animal, Zoo and Wildlife Club.


On Jan. 26, Dr. Hans Coetzee lectured at Iowa State University about clinical pharmacokinetics.

Congratulations to Dr. Judilee Marrow, exotic animal intern, who was selected for a residency at the National Zoo at Washington D.C.

Custodial services memo
Due to K-State’s current budget situation, CVM’s facilities office has been unable to fill vacant custodial positions. Some cutbacks have been made on services such as trash pickup and vacuuming. We are obligated to clean the restrooms and public areas daily, and have installed new hands-free towel dispensers to help reduce waste. The dispensers were provided at a discount by the vendors, and towels are comparable in price to the previous towels. We ask you to bear with us and understand the custodians are doing the best job possible. Please contact Noel with questions at 2-0808.

Witnessing change

Some CVM staff and students took a break on the morning of Jan. 20 to watch the historical inauguration of President Barack Hussein Obama, as it was being televised in the Trotter Hall basement.