

IOWA STATE UNIVERSITY

gentle doctor

COLLEGE OF VETERINARY MEDICINE FALL/WINTER 2014 | VOL.28 NO.2



Celebrating
Our **ALUMNI**

gentledoctor

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On the Cover

The Thomas Brothers.
Clockwise from top: Peter Thomas, John Thomas, Joe Thomas, Paul Thomas.
Story page 10
Photo: Tracy Ann Raef

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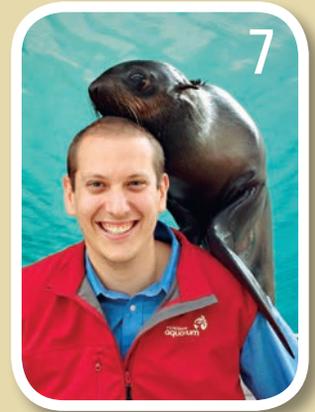
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Dear alumni and friends,

Having just returned from a trip to China, I can't help but reflect on the revolution going on there with respect to veterinary medicine. As animal protein consumption and pet ownership grow in that part of the world, the need for animal health and food supply infrastructure that can only be provided by veterinarians is growing exponentially.

It is pretty amazing to see what is happening there. A few years ago, there wasn't a Chinese Veterinary Medical Association. Today the meetings are standing room only. And the stream of pets getting veterinary attention is staggering ... there is no caseload shortage in Beijing!

Likewise, the trip was a reminder that there aren't many places you go that haven't been touched by graduates of our college. I always marvel at the lives our graduates have lived and the impacts they have made. In China, two of our alumni, Dr. S.C. Cheng ('26) and Dr. T.S. Hsuing ('27) are revered for their contributions to veterinary medicine. They have set the stage for today's revolution in Chinese veterinary medicine (See story on page 17).

As you will see in the following pages, our graduates continue to provide leadership and make huge contributions to animal and human welfare. They are having global impacts as they follow in the footsteps of Drs. Cheng and Hsuing, and people like Dr. Stan Benbrook with his years of infectious disease research, providing humanitarian aid, and caring for animals in need.

Dean Lisa K. Nolan and Dr. Degui Lin, associate dean for academic affairs, China Agricultural University College of Veterinary Medicine, with a sculpture of ISU alumnus Dr. T.S. Hsuing ('27), founding dean of the college.



Seeing the work these people are doing, we want you to be as proud of our college as we are of our alumni. We will continue to develop the best veterinarians possible ... helping students reach their potential to become leaders of this dynamic, caring, and rewarding profession.

Looking ahead, there are several factors that may significantly affect our college and our profession:

- > **Cost and Debt:** The overall cost of a veterinary education and associated student debt continue to be concerns at all levels of the profession. We are continuously working to add value to the Iowa State DVM degree, improve the quality of education, and control and reduce costs. This takes time. In the meantime, your continued student support through scholarships is making a huge difference in the futures of our students.
- > **Accreditation:** The AVMA Council on Education is under review by the U.S. Department of Education. The outcome, expected in early 2015, could well impact the entire veterinary accreditation process.

> **Supply and Demand:** At numerous state and national meetings, people ask: "Are we producing too many veterinarians?" There is a lot of information out there, some of it conflicting. At this point, our focus remains on providing a sound and well-rounded education that makes our graduates excellent veterinarians, as practice-ready as possible, highly employable, and competitive in the workplace.

Your continued support helps us address all three of these and we truly thank you for all you do!

Best wishes for a happy holiday season and a great new year.

Best regards,

Lisa K. Nolan, DVM, PhD
Dr. Stephen G. Juelsgaard
Dean of Veterinary Medicine

Lambs advance treatments for respiratory disease in infants

By Fred Love



Dr. Mark Ackermann
File Photo

Veterinary research involving lambs at Iowa State University is helping to advance new treatments to a common virus in humans that sometimes poses a serious threat to newborns.

Mark Ackermann, DVM, PhD, professor, and interim chair of the Department of Veterinary Clinical Sciences at Iowa State University, leads the research, which tests experimental medications in lambs that have been infected with respiratory syncytial virus (RSV).

The virus infects the vast majority of humans, and it usually results in nothing more serious than cold symptoms in healthy adults. In infants, especially those born prematurely, however, the virus can lead to pneumonia and serious health complications, Ackermann said.

Lambs make a good model for studying the illness in humans for a few reasons, he said. Lambs are roughly the same size as human infants, and the virus replicates well in their respiratory systems. The virus also causes the same kind of damage to the bronchioles — or the tiny airways leading to the lungs — of lambs and infants.

Researchers have made progress studying the virus in rodents and other animals, but the studies in lambs provide additional advantages due to some of the similarities of RSV disease with humans.

“The lambs are an intermediate step between rodents and human trials,” Ackermann said. “If there was a better model, you can bet pharmaceutical companies would be using it,” he said. Ackermann’s laboratory is currently testing a pair of drugs, one delivered as a nasal aerosol through a mask placed on the lambs’ noses and another administered orally. One drug stops the virus from attachment to the body, while the other prevents viral replication, he said.

There’s no vaccine for the virus, and new treatments have developed slowly since the 1960s, Ackermann said. At that time, a vaccine was developed, but it led to disastrous results during human trials. The vaccine sparked altered immune responses that in some cases resulted in death, and work on the vaccine was delayed for years as a result.

Beyond helping to test new treatments for the virus, Ackermann’s research has shed new light on how the virus causes disease and invokes immune responses. The work has led to a better understanding of the factors that lead to severe infection of the lungs in newborn and premature infants, he said.

“Aside from just testing new drugs, we’re looking at why and how the virus replicates and how it causes the damage that it does,” he said. **gd**



Research explores new possibilities for the treatment of **epilepsy**

By Fred Love

Ongoing research at Iowa State University is investigating the connection between initial seizures and the onset of epilepsy later in life. Nearly one in 10 Americans will experience an initial seizure, but only 3 percent of those who experience a seizure will go on to develop epilepsy, according to the Centers for Disease Control and Prevention. Thimmasettappa Thippeswamy, PhD, a professor of biomedical sciences in the ISU College of Veterinary Medicine, is studying why some who suffer a seizure develop the disease and others don't.

A related question Thippeswamy is investigating is why a small fraction that develops the disorder doesn't respond to the most common drug treatments for epilepsy. Thippeswamy said medical science has a poor understanding of why only some people who have a seizure develop

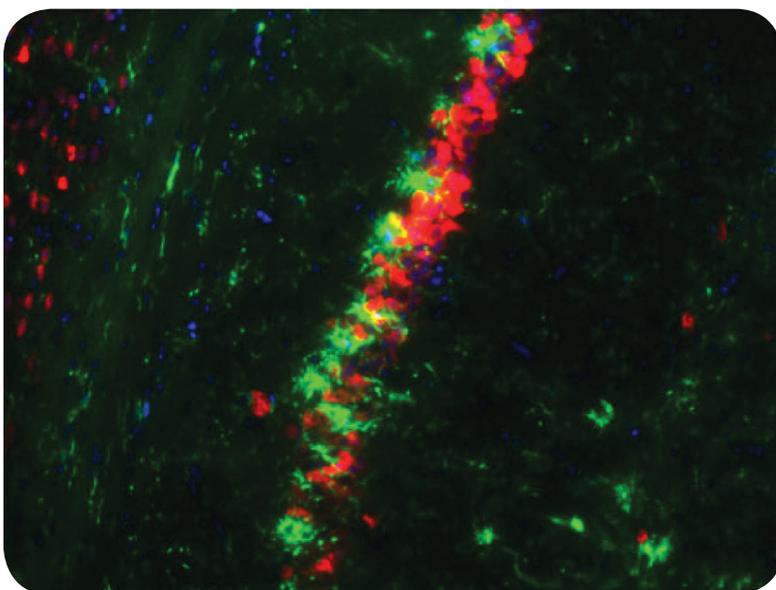
epilepsy — sometimes years after the initial seizure — and why conventional medications don't always help. His lab members are tracking long-term brain activity in rodents after experimentally induced seizures. They're looking closely at how two experimental drugs work in concert with one another to gain a better understanding of epileptogenesis, or the process that leads to the development of epilepsy. Thippeswamy said gaining a better understanding of epileptogenesis may hold the key to halting the progression of the disease.

They're using radiotelemetry to study effects of the drugs in real time. The research has offered new insight into how seizures affect the behavior of neurons and glial cells, critical brain cells that process and relay information, in the parts of the brain that govern learning and memory.

Thippeswamy said seizures can stimulate the birth of new neurons, but the new cells don't always integrate well with the existing neurons. The two drugs Thippeswamy is studying may be able to make the transition easier for new neurons.

"When neurons don't work in a coordinated manner after the first seizure, they send a 'wrong message' to the glial cells," Thippeswamy said. "The glial cells will turn into bad guys and may pick on bystanders such as newborn neurons. We're investigating whether the drugs can turn these bad guys into good guys." He also said antioxidants, such as those found in natural food products like grapes or greens, may act in a similar way as the experimental drugs, since some antioxidants affect the same targets in the brain.

Thippeswamy said his research also has implications beyond classical epilepsy; for example, he said it could impact those who suffer from traumatic brain injuries, such as veterans or athletes competing in contact sports. **gd**



This image depicts a section of a brain a week after an initial seizure. In such cases, microglial cells, stained green, sometimes engulf and attack neurons, stained red. Two drugs currently being tested in an ISU biomedical sciences lab may silence or control the microglial cells and prevent spontaneous seizures.

Photo: Thimmasettappa Thippeswamy



Dakota, a blood donor at the Lloyd Veterinary Medical Center, relaxes in a treatment room prior to sedation and blood donation. Photo: Tracy Ann Raef

“Blood donors are a **valuable resource** in veterinary medicine.”
— Amy Hodnefield, registered veterinary technician and coordinator of the Animal Blood Bank

Pets *saving* pets

By Mary E. Huerter

In a busy animal hospital, such as Iowa State University’s Lloyd Veterinary Medical Center, treating patients suffering from extensive blood loss, toxicities, and anemia is inevitable. In many cases, the patient’s survival can depend on the need for blood-component therapy. In 1998, the Animal Blood Bank was established to meet these needs.

While packed red blood cells’ plasma may be stored for future use, whole blood, used for emergency or trauma cases, must be fresh. Therefore, donors are asked to also be available during overnight hours and holidays in the event an emergency or severe trauma case arrives and needs a transfusion.

“On occasion, an owner has been asked to bring in his or her donor in the middle of the night, but they are usually willing to help whenever they are needed,” Hodnefield says.

“Blood donors are a valuable resource in veterinary medicine. Blood transfusions may be needed for ICU patients, trauma patients, and surgery patients, such as those undergoing a splenectomy,” explains Amy Hodnefield, registered veterinary technician and coordinator of the Animal Blood Bank. Hodnefield keeps the blood bank stocked by recruiting local canines and felines volunteered by their owners (mainly veterinary students, faculty, and staff of the veterinary college).

Donating blood takes approximately 10 minutes. After a quick physical exam, history, and check of their packed cell volume and total serum protein, the donors are lightly sedated and blood is collected. Dogs usually donate 450 mL every four weeks, and cats usually donate 60 mL every eight weeks. Following their session, donors receive fluids and a snack. In addition, the blood donor program offers a number of perks for the volunteer to reward them for their service.

Once recruited into the program, a physical exam is conducted and the potential donor is screened for blood type, general wellness, and bloodborne diseases. Donors also are required to be on a monthly heartworm preventative, current on vaccinations, and have a negative fecal examination. All donors must be between two and seven years of age and cannot be on any medications, such as antihistamines, steroids, or aspirin. Accepted candidates are asked to commit for a minimum of two years.

While the blood bank currently only serves patients at the Lloyd VMC, future sourcing could include other veterinary clinics in the state. “We are currently evaluating the demand for blood products at local and area clinics,” Hodnefield said. “The blood bank’s new, larger fridge and freezer units allow us to store more blood products, so more canines and felines in need might be saved.” **gd**



Blood Bank Program

If you have questions about the blood bank program, please contact Amy Hodnefield at achally@iastate.edu.

Lions and Tigers and Bears *and Sea Cucumbers*

By Veronica Lorson Fowler

At Iowa State, there aren't a lot of killer whales, stingrays, or rhinos to work on, but that didn't stop Dr. Justin Rosenberg from getting the veterinary medical education he needed to launch a promising career with some of North America's top zoos and aquariums.

Since boyhood, growing up near Atlantic City, the New Jersey native knew he wanted to be a veterinarian and specialize in aquatic and exotic species. "Ever since I was a kid, that's what I wanted to do. I don't know how to explain it, but I was drawn to it."

Rosenberg got his undergraduate degree in mathematics at Marietta College in Ohio. He then applied to a variety of veterinary schools and was accepted at Iowa State. He jumped at the chance. Iowa State, after all, may be hundreds of miles from the nearest ocean or jungle, but it's the oldest state veterinary program in the country and has cultivated a rock-solid reputation for excellence in teaching the fundamentals and producing practice-ready veterinarians.

"At Iowa State, they really teach the fundamentals of good medicine across all species. Having that knowledge makes it easy to apply it," Rosenberg says.

And with a professional goal as uncommon as his, Rosenberg knew it would be smart to focus on a

strong foundation. After all, no veterinary school in the country offers a degree that focuses on exotic species, he said. Once at Iowa State, he knew he'd made the right decision. "I was so impressed with the faculty and the staff."

Iowa State was also exceptional in making sure he got training and experience in his chosen area of specialty. It helped facilitate his participation in programs that took him to Australia and South Africa to do work on exotics, such as giraffes, wildebeests, lions, and rhinoceros. Since then, he's racked up a series of impressive internships, including working with primates at the MD Anderson Cancer Center in Texas and externships with the Columbus Zoo and Aquarium in Ohio and the Walt Disney World Resort in Florida.

This summer, he started a one-year veterinary fellowship at the Vancouver (Canada) Aquarium, where he has helped rescue a false killer whale calf, performed surgery on fish, X-rayed frogs, and helped rescue and rehabilitate 160 harbor seal pups. "For me, a typical day is very atypical," he said. "It might start with performing physical exams on sea cucumbers and end with an ultrasound on a beluga whale."

That solid foundation he received at Iowa State is indispensable, he says, because there's no way to know how to treat every single species.



*Dr. Justin Rosenberg with one of the zoo's fur seals. Northern fur seals (*Callorhinus ursinus*) are native to the northern Pacific Ocean. There are four adult females (all age six years old) in the collection at the Vancouver Aquarium. All of the fur seals are trained for basic husbandry behaviors, which allows the staff to perform routine physical examinations without the need for anesthesia. Photo: Vancouver Aquarium*

"For example, the way we go about tropical freshwater fish is completely different than the way we go about cold saltwater fish."

Learning the specifics of each species "can be a little overwhelming at times," he confesses. But he absolutely loves what he is doing. "I find everything I am doing phenomenal," he says. "This is everything I wanted to do my entire life. I get to live my dream." *gd*



2014

DISTINGUISHED ALUMNI RECOGNIZED

Four alumni of the College of Veterinary Medicine were honored October 10. Recipients of the Stange Award for Meritorious Service and the William P. Switzer Award in Veterinary Medicine were recognized at an all-college breakfast at the Gateway Hotel, and later at the university awards ceremony at the Scheman Building.

Dr. Lisa K. Nolan, professor and Dr. Stephen G. Juelsgaard Dean of Veterinary Medicine, presented the awards.

STANGE AWARD FOR MERITORIUS SERVICE

The Stange Award for Meritorious Service is presented annually and recognizes distinguished alumni for outstanding professional achievements. It is the highest honor given to alumni of the College of Veterinary Medicine. It is co-sponsored with the Veterinary Medical Alumni Association at Iowa State University.

Joel K. Elmquist, DVM '92, PhD Veterinary Anatomy '93 Southlake, Texas

The Carl H. Westcott Distinguished Chair in Medical Research; professor of internal medicine, pharmacology, and psychiatry; and the Maclin Family Professor in Medical Science at the University of Texas Southwestern Medical Center, Dr. Joel Elmquist's distinguished research career has advanced understanding of the brain pathways that regulate food intake, body weight, and blood glucose levels and provided insights into the physiology and potential treatment of obesity and diabetes in humans and companion animals.

As the founding director of the Hypothalamic Research Center at the Southwestern Medical School, Elmquist recruited a group of faculty investigators working to understand brain pathways controlling body weight and metabolism. He has worked closely with investigators and centers at UT Southwestern to increase public awareness and ultimately develop rational strategies to combat the growing problems of obesity and diabetes.

He currently serves on the editorial boards of several major scientific journals. He has served on numerous National Institutes of Health study sections and chaired the NIH Integrative Physiology of Obesity and Diabetes study section. Elmquist is currently the principal investigator on several NIH grants.

In 2008, The Endocrine Society announced Elmquist as the recipient of the Ernest Oppenheimer Award. In 2014, he was chosen by the American Diabetes Association as the recipient of the Outstanding Scientific Achievement Award supported by Eli Lilly and Company. This prestigious award recognizes research in diabetes that demonstrates particular independence of thought and originality. In 2014, he received the Mentor of the Year Award from the National Postdoctoral Association.

Janet C. Garber, DVM '76 Pinehurst, North Carolina

Dr. Janet Garber is a globally recognized leader in the field of laboratory animal medicine, using her expertise and talents to increase the scientific knowledge base for higher standards for the use of animals in biomedical research. She is best known for her visionary leadership style and ability to unify diverse individuals for the common good of animals and science.

Because of her extraordinary communication skills and commitment to animal welfare, Garber was tapped to chair the National Academy of Sciences' Institute for Laboratory Animal Research Committee tasked with updating the *Guide for the Care*

Dean Lisa K. Nolan with the 2014 Stange Award recipients (from left) Drs. Janet C. Garber, Marcus Kehrli; Switzer Award recipient Dr. Richard F. Ross, and Stange Award recipient Dr. Joel Elmquist.
Photo: Dr. Catherine Logue

and *Use of Laboratory Animals*. The guide is the key reference that sets the standards for research grant recipients.

Her early career began at the U.S. Army Medical Research Institute of Infectious Diseases as a research scientist. Garber continued her career in veterinary medicine at the Wisconsin Regional Primate Center while earning her PhD at the University of Wisconsin-Madison. Later, she joined Baxter Healthcare and retired as the company's vice president for safety assessment.

Garber is a recipient of the Association for Assessment and Accreditation of Laboratory Animal Care's highest honor — the Bennett J. Cohen Award, which recognizes exceptional commitment to advancing science through the promotion of the highest standards of laboratory animal care.

**Marcus Kehrli, BS Bacteriology and Dairy Science '78, DVM '82, PhD Immunobiology '89
Ames, Iowa**

Dr. Marcus Kehrli has had a commendable career that has improved the health of both livestock and companion animals through conducting groundbreaking research and applying it to vaccines, diagnostics, and procedures.

Kehrli is most noted for his expertise on bovine immunology and mastitis. One of his significant contributions is the discovery of bovine leukocyte adhesion deficiency syndrome in dairy calves and development of a DNA test to detect the genetic defect, which led to the elimination of the disease in the Holstein breed.

During his career at the U.S. Department of Agriculture-Agricultural Research Service, he has a proven track record of leadership beginning with his early career as a research scientist, then as research leader of the Virus and Prion Diseases Research Unit, and now as director of the agency's National Animal Disease Center.

Kehrli is a frequent guest speaker internationally on topics such as biotechnology in agriculture, mastitis, immunology, and the prevention of infectious diseases in animals. He has authored more than 200 scientific publications and is an inventor or co-inventor on four granted patents and four additional patent filings.

In 2011, Kehrli was one of seven veterinarians in the world to receive the prestigious Doctor Honoris Causa insignia

from the University of Liège, Belgium, in recognition of his years of research contributions to veterinary medicine, immunology, and genetics that have had a global impact on animal health. The USDA also has honored him for exceptional service and outstanding research.

**WILLIAM P. SWITZER AWARD
IN VETERINARY MEDICINE**

The William P. Switzer Award was established in 1998 to recognize exemplary individuals who have made significant contributions to society through their achievements, or have made major contributions to the enhancement of the College of Veterinary Medicine.

**Richard F. Ross, DVM '59, MS Veterinary Microbiology '60, PhD Veterinary Microbiology '65
Ames, Iowa**

Internationally known as a leader in the field of veterinary microbiology, Dr. Richard Ross made his greatest mark with cutting-edge research on infectious diseases of swine, with specific contributions on swine respiratory diseases caused by mycoplasmas. His research has had a significant impact on the understanding of mycoplasmal infections in animals and humans.

Throughout his career, Ross has been committed to the veterinary profession and agricultural industry. During his tenure as dean of ISU's College of Veterinary Medicine, he was instrumental in obtaining legislative funding for the Healthy Livestock Initiative and the planning and funding of the Livestock Infectious Disease Isolation Facility. He also served as dean of the College of Agriculture for a short time, underscoring his devotion to the livestock industry.

He has received numerous awards for outstanding achievements, including recognition by the U.S. Secretary of Agriculture with an award for personal and professional excellence. This award is the highest honor given to a private citizen by the USDA. He also has received the Howard Dunne Memorial Award from the American Association of Swine Veterinarians and the Award for Research by the American Veterinary Medical Association and American Feed Industry Association. He was a presidential appointee to the Secretary of Agriculture's Strategic Planning Board and also was named a Clarence Hartley Covault Distinguished Professor in Veterinary Medicine by Iowa State University. **gd**

Band of Brothers

By Tracy Ann Raef

The Thomas brothers have been a fixture at the veterinary college for more than a decade. In a couple years, the last Thomas brother will graduate. Peter, the oldest, graduated from the College of Veterinary Medicine in 2007; John graduated in 2009; Paul in 2013; and, the youngest, Joe, is a third-year veterinary student.

Dr. Darren Berger, assistant professor of dermatology, and classmate of Pete Thomas explains: “When I came back two years ago, I met the younger brothers and it hit me that a Thomas has been at the college for the last 12 years. When you consider not only that, but how well they have done and that three will graduate with a concurrent master’s, it is fascinating.”

Pete, a swine veterinarian at Murphy-Brown, explains he didn’t consider veterinary medicine until he was a senior in high school. John started Iowa State as an architecture major before deciding on veterinary medicine. Pete wasn’t surprised that Paul and Joe took

the same path. “My parents instilled three important qualities in all of us ... 1) a passion for animal husbandry, 2) a strong work ethic, and 3) the importance of education.”

John and Merydith Thomas have 14 children, eight boys and six girls. They grew up on a farrow-to-finish swine farm in eastern Iowa. The farm, now a cow/calf farm, has been in the Thomas family for almost 150 years.

Besides life on the farm, the brothers spent a fair amount of time shadowing veterinarians at the DeWitt Veterinary Clinic during high school and college.

Dr. Pat Halbur, professor and chair of the Department of Veterinary Diagnostic and Production Animal Medicine recalls: “When Pete and I were traveling to collect samples for a research project, I had the pleasure of visiting the family farm and meeting the rest of the Thomas family at mealtime. Having grown up with eight siblings myself, I had some idea what mealtime for a family of 14 might look like. It was an impressive scene indeed. It was obvious to me that everyone had their role on the farm, in the house, and in the community ... all had great respect for their parents and each other ... the type of family environment that prepared them well for whatever career they chose to pursue.”

Paul decided to go into veterinary medicine when he was in high school after visiting Pete while he was in veterinary school and working in the Veterinary Diagnostic Laboratory. “I watched the veterinarians investigating cases,” says Paul. “The whole process was very interesting and exciting to me.”

Paul is a postdoctoral fellow with ISU’s Swine Medicine Education Center and an associate veterinarian at AMVC

Management Services. He’s also a master’s degree candidate. In fact, three of the brothers have earned or are working toward a master’s degree.

John and his wife, Jennifer Negley-Thomas, who is also a veterinarian and former classmate, own and operate a general practice in Waterloo. They have two sons and a daughter.

Joe wanted to go into the military after high school, but his parents convinced him to go to college first. “More education is always a good thing,” said Joe. “You can do so much with a DVM degree — research, practice, or business.”

To fulfill that desire to go into the military, Joe applied for, and received, one of the U.S. Army’s competitive health professions scholarships. After graduation, he’ll have to complete his military obligation but says he’s open to the possibilities that a career in the Veterinary Corps offers.

About growing up in a large family, Joe says, “There was always someone to do something with.” He also notes another important lesson learned. “A large family makes you less centered on yourself. There are no illusions about being the center of the universe.”

Joe has a younger brother who is an undergraduate at ISU. Does he plan to become a veterinarian? “No,” says Joe, “I’m the last one.”

“We are fortunate that Pete, John, Paul, and Joe chose the veterinary profession,” Halbur said. “It is no surprise that they have already enjoyed remarkable success. Although they are early in their careers, they are giving back to the profession through being involved with various professional associations and the college. Their parents taught them well.” **gd**



The Thomas Brothers. Clockwise from top: Peter Thomas, John Thomas, Joe Thomas, Paul Thomas
Photo: Tracy Ann Raef

Topher the Wonder Dog

By Veronica Lorson Fowler

Malerie Dideriksen always knew that her golden retriever, Topher, was, as she puts it, “in tune” with her. “I can’t start crying around him.” If she does, he comes up to her and starts stroking his paw on her arm because he’s worried and wants to comfort her.

But the 62-year-old Ames woman would have never guessed that Topher would be capable, on a freezing winter night last December, of possibly saving her life.

Dideriksen had been up late making grocery lists for holiday dinners. Around 11:30, she was finishing up when Topher came up to her with an expectant look — time to take him out to do his business.

They walked out through the garage and onto the driveway. Unknown to Dideriksen, who’d been indoors all day, freezing rain had coated her drive. She took a few steps; her feet flew out from under her; and she found herself prone on the driveway.

“For a few minutes, I was just stunned. I didn’t know what to do,” she recalls. Then Dideriksen tried to get up and found she couldn’t. Her right arm hurt so badly that thought she might have broken it. Between the pain in her arm, and the slickness of the driveway, she simply couldn’t get up.

It was brutally cold — in the 20°s — and the wind was blowing hard. She was wearing nothing more than jeans, a sweatshirt, and house slippers. A

van parked in the driveway blocked much of any view of her, so it was unlikely anyone driving by might see her — especially at that time of night. Hypothermia was a very real threat.

Dideriksen’s husband, David, was in the basement bedroom, long asleep and out of earshot, especially with the wind. Topher was next to her, concerned.

“I said to him, ‘We have to find David.’ His head came up and his chest went out,” she recalls, smiling. Topher knew he had a mission.

With her good arm, Dideriksen took hold of the leash and somehow Topher figured out that he could pull her toward the open garage. He managed to pull her 15 feet to the dry garage floor surface, where she was able to get on her feet. “I don’t know how he knew to do it, but he did it.”

She ended up in the emergency room with a nasty elbow fracture.

Now, in a sad twist of fate, it’s been put upon Dideriksen to try to save Topher’s life.

Last summer ISU’s Lloyd Veterinary Medical Center discovered a cancerous tumor the size of a small melon. Topher, who is nine years old, underwent surgery. But then he developed an infection from the surgery. Then he had what is believed to be an adverse drug reaction. Topher’s health was too fragile to start the chemotherapy recommended by Topher’s oncologist, Dr. Leslie Fox.



Malerie Dideriksen with Topher
Family Photo

Topher spent a lot of time at ISU and despite being very sick, loved the people and attention. “He developed sort of a fan club there,” Dideriksen said. When Topher was visiting dermatologist Dr. James Noxon for a persistent ear infection, “Dr. Noxon would say, ‘I just have to hug this guy. He just makes me feel so good.’”

With the new development of more tumors, Topher’s family’s options are now limited and keeping him comfortable is their main priority, Dideriksen says. “He’s done so much for us. We’d do anything for Topher. We’re just trying to live in the moment and enjoy him. He’s quite a dog.” **gd**



Left — Dr. Richard Ross, former dean of the veterinary college, and former dean of the design college Mark Engelbrecht (middle) with Dr. Stan Benbrook at the piano dedication for the alumni room
Family Photo



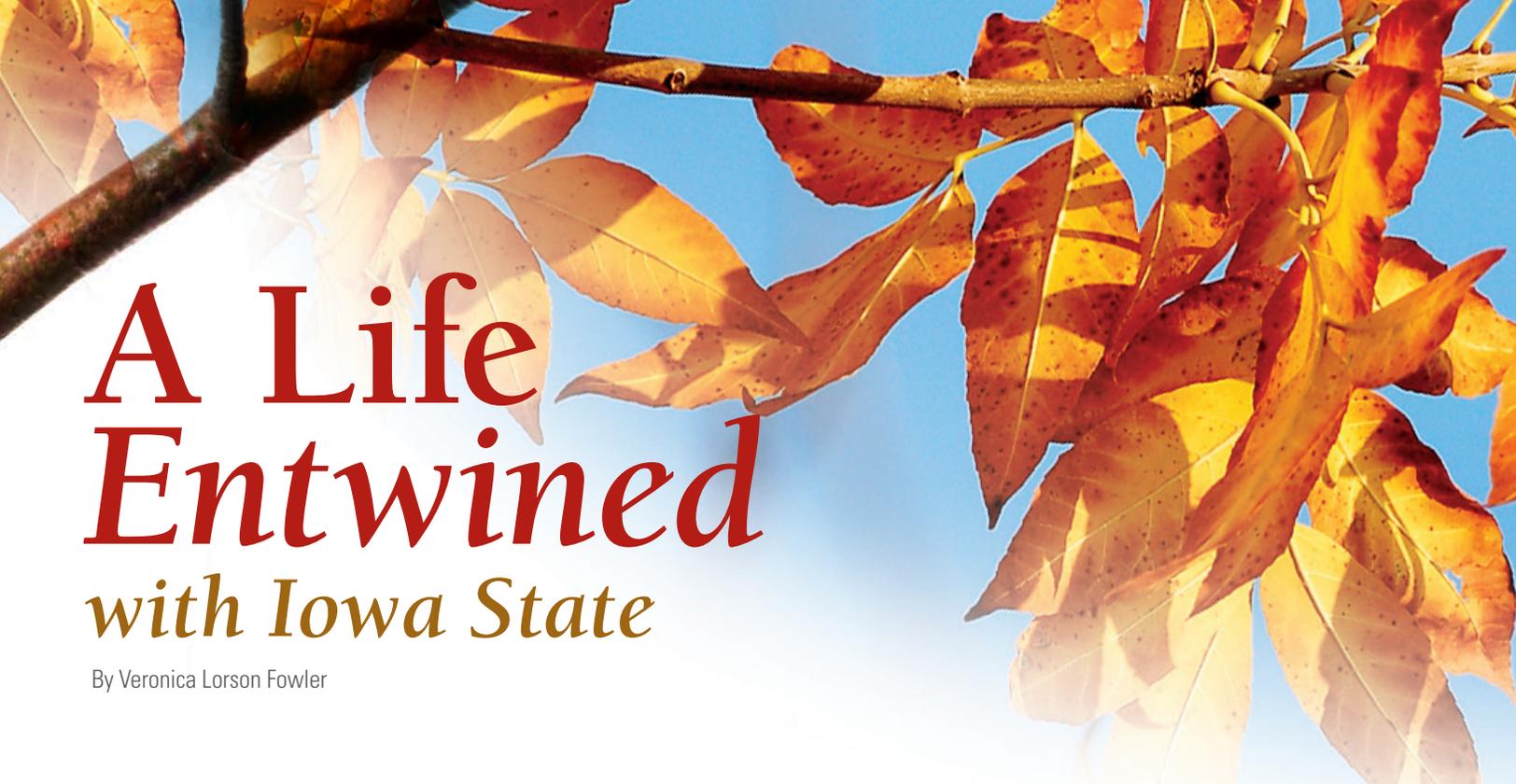
Dr. Stan Benbrook 1923
Family Photo



Even before he was born — in 1919 — Stanley Benbrook's life has been influenced by Iowa State's College of Veterinary Medicine. Now he's giving back to the college that has shaped his family and his life.



1996 — Dr. Stan Benbrook (left) with classmates Drs. Eugene Lloyd (middle) and Earl Maxwell
Family Photo



A Life *Entwined* with Iowa State

By Veronica Lorson Fowler

Dr. Stanley Benbrook, 95, one of Iowa State's oldest living veterinary medicine alums, is a walking history book who can tell the amusing personal stories behind some of ISU's legends.

He grew up the son of the highly respected ISU veterinary pathology professor, E.A. Benbrook, who was on faculty for nearly half a century. It seems the younger Benbrook was destined for veterinary medicine from the start. When his mother went into labor with Stanley during a snowstorm in Ames, Dr. Clarence Covault, head of the veterinary clinic, drove her to the local hospital in the old veterinary clinic ambulance. And Benbrook grew up as a boy with free run of the college in what is now Lagomarcino Hall.

He loved Margaret Sloss, veterinary medicine's first female graduate. As a child, he hung out with her in the lab, and she delighted him by popping chewing gum bubbles or giving him and her nephew money to go to the movies, complete with popcorn.

The third dean of the college, Dr. Charles Henry Stange, was a close family friend. Benbrook has met nearly every one of the 13 deans who followed.

When Benbrook's sister contracted scarlet fever and his family's home was quarantined, the older Dr. Benbrook and his young son set up cots in a vet med classroom and semi-lived there for weeks. Benbrook still remembers the evening visits in that classroom from "old Newt," the legendary campus night watchman who stopped in with his dog to chat. (Both the watchman and his dog are buried in the ISU cemetery.)

It isn't surprising then, that after a stint in World War II in the Navy, Benbrook chose veterinary medicine and got his degree in 1949. His younger sister, Kathryn, had already received her degree in textiles and clothing at Iowa State in 1943. He married his ISU sweetheart, Jane, who graduated in 1941 from what was then home economics.

After Iowa State, Benbrook returned to the military, spending most of his career in the Army Veterinary Corps before returning to Ames again in 1997.

About that same time, Benbrook decided he wanted to memorialize the role his father and family played at Iowa State.

"I saw so many people who were really important in the running and development of Iowa State who were never properly recognized," he says. With his father, E.A., "I thought, by golly, I'm going to do something to make sure he is remembered. And after all, he was a distinctive professor and an active member of the faculty."

So Benbrook set up a generous estate gift to create the Dr. E.A. Benbrook Endowed Chair in Pathology and Parasitology. But he didn't stop there. Benbrook's beloved only sibling, Katy, died in her 40s from cancer. In her memory, Benbrook also funded a scholarship in family and consumer sciences. To honor his mother, Jessie Benbrook, a gifted musician who played a piano professionally, Benbrook donated to the veterinary medicine college.

From the beginning of his life to the twilight, Iowa State has been a part of Stanley Benbrook's life. He says he's just glad he got the opportunity to make sure that all his family memories, so tightly entwined with ISU, continue on. **gd**



The Bench

By Tracy Ann Raef

When Mary Hayes Hemmer accepted the invitation to attend her 55-year high school class reunion in Waterloo, she knew it was time to visit her father's alma mater. She had never been to Ames. She was at an age when it was important to make the trip to a place her father spoke fondly of and that had educated him in the profession he loved.

Born and raised in Iowa, Hemmer left Waterloo in 1959 to attend The Ohio State University. A big fan and supporter of the Buckeyes, Hemmer also bleeds Cardinal and Gold. Never was it so apparent as she walked up the courtyard at the college. In front of her was the *Gentle Doctor* statue and something a little more special. The bench.

There are five Georgian marble benches on the courtyard surrounding the *Gentle Doctor* statue. But one bench has more significance than the others. The bench that is placed directly across from the statue facing it and on its side carved: In memoriam — Dr. Isaac “Ike” Hayes 1937. The benches that were installed at the Veterinary Quadrangle in 1957 were donated from the

proceeds of a memorial funded by Hayes’ community in Waterloo to honor Hemmer’s father.

Ike Hayes graduated from veterinary college in 1937. An Ohio native, he moved to Iowa to attend Iowa State and pursue his dream of becoming a veterinarian. He loved horses and football. Hayes’ father was a school superintendent, so education was in his blood. So was athletics.

Hayes was an All-American football player at Iowa State, a guard and team captain. One of his greatest boosters was his younger brother, Woody. Yes, *that* Woody Hayes who went on to become the legendary football coach at The Ohio State University. “Woody idolized his older brother,” Hemmer said during her visit to the college.

After Hayes graduated from Iowa State, he opened a general practice in Waterloo. Hemmer has fond memories of watching her father take care of his patients. “He was very dedicated to the practice and hated to leave it in case an animal was sick and needed veterinary care.”



*Dr. Ike Hayes '37, All-American football player and team captain
Photo: Special Collections Department/
Iowa State University Library*



There's a bench that sits across from the Gentle Doctor statue on the plaza courtyard at the College of Veterinary Medicine. Many pass it every day. Like its famous companion on the courtyard, the bench has a story, perhaps not as well known ... until now.

Photo: Heather Brewer

Hemmer remembers the reluctance her father had at leaving the practice to travel to Pasadena, Calif., for the 1955 Rose Bowl to watch his brother coach the Buckeyes as they defeated the University of Southern California Trojans. "We didn't have a lot of money, so my parents, my sister, and I traveled by train to California."

A few weeks after returning from Pasadena, Hayes had a heart attack and died at the age of 43.

Hemmer graduated from high school a few years later and went on to enroll as a nursing student at OSU, later switching her major to education. "I think I would have liked veterinary medicine, but my dad said being a veterinarian wasn't a good career choice for women."

As Hemmer toured the College of Veterinary Medicine, she spoke with many of the female students and veterinarians. "It's good to see women in the profession and hear their amazing stories," Hemmer said.

Although it was Hemmer's first time visiting the college, she has stayed

connected to veterinary medicine while living in Columbus. She attends some of the football tailgate parties as a guest of the veterinary students at OSU. Hemmer and one of the football players will often team up as "boosters" for the tailgates. She continues to represent the Woody Hayes family at special events at the university.

It was Hemmer's relationships at OSU that led her to a September afternoon at Iowa State. Good friend, Dr. Michelle Harcha, professional development director at OSU, made the initial contacts at ISU for Hemmer. In coming to ISU, Hemmer was following in her Uncle Woody's footsteps as he came to ISU several times to speak at veterinary meetings. In 1979, he was the keynote speaker at SCAVMA Symposium held at the college.

Both were merely following a path already paved by Ike Hayes in 1937.

The benches are a reminder of a past life. They also are part of memories that have been made since that time and in the future for all who stop to see the Gentle Doctor statue. **gd**

Mary Hayes Hemmer with ISU football coach Paul Rhodes in the team's strength training room during a tour of the football facility. Hemmer is holding the football given to her father, Ike Hayes, after the Kansas-ISU game in '37.
Photo: Tracy Ann Raef





Photo courtesy of Flash Photography

CLASS OF 2018 PROFILE

TOTAL CLASS: 148

MEN: 30 (20%)

WOMEN: 118 (80%)

AGE:

Mean: 24 years

Range: 21–40

DEGREES:

No Degree: 2

Bachelor's: 139

Master's: 7

GPA:

Science GPA: 3.34

Last 45 GPA: 3.55

STATES OF RESIDENCE:

Alaska	Illinois	North Carolina
California	Iowa	North Dakota
Colorado	Massachusetts	Ohio
Connecticut	Michigan	Oregon
District of Columbia	Minnesota	Pennsylvania
Florida	Nebraska	South Dakota
Georgia	New Hampshire	Wisconsin
Hawaii	New York	

WHITE COAT CEREMONY

Each year, the incoming class of veterinary students at Iowa State University participates in the White Coat Ceremony where each student receives a white lab coat. This year, 148 students participated in the 10th annual ceremony held on August 22.

“The ceremony formally admits the class into the four-year professional curriculum and marks a rite of passage in the journey to becoming a veterinarian,” said Rachel Juelsgaard ('16), president of Iowa State’s

Student Chapter of the American Veterinary Medical Association. “Each student is ‘coated’ by a veterinarian or mentor of his or her choosing in front of friends and family; it’s a very exciting time for those joining the profession.”

Being inducted into the veterinary program, these students are veterinarians in training. As such, they will be held to the highest standards of professionalism. During the ceremony, each student signs the Student Honor Code and recites the

Veterinary Student Oath, which reminds them of their obligations and responsibilities as medical students.

“Reciting the Veterinary Student Oath and signing the Honor Code are great opportunities for the incoming students to show the veterinary community their dedication to ethical and professional conduct, reflecting especially on compassion and integrity,” said Kate Prichard ('16), college Honor Board chair.

CVM ADMINISTRATORS VISIT CHINA

Drs. Lisa K. Nolan, dean of the ISU veterinary college; Qijing Zhang, associate dean for research and graduate studies; and Rodney S. Bagley, interim associate dean for clinical operations; traveled to China in November, participating in a Zoetis-sponsored summit of deans from several U.S., U.K., and China colleges of veterinary medicine. They also visited China Agricultural University (CAU) in Beijing, Qingdao Agricultural University, and the Animal Health and Epidemiology Center at Qingdao on China's East Coast.

The trip provided an excellent start to establishing relationships and exploring possibilities for collaborative efforts created by China's growing animal industry, including the possibility of bringing Chinese veterinary students to ISU. According to Dr. Nolan, "Veterinary medicine is an area of vital interest to the Chinese. Their consumption of animal protein is growing by leaps and bounds, and their interest in pet ownership is soaring. Not surprisingly, they are very

much interested in strengthening their animal healthcare and food safety infrastructure in ways that only veterinarians can provide."

The demand is great for veterinarians and the expertise provided by U.S. veterinary medical programs. "The Chinese regard Iowa State as a top veterinary college, due, in part, to the work of two of our alumni," said Dr. Nolan. "Dr. S.C. Cheng ('26) is revered as an early leader in revolutionizing veterinary medicine in China, and Dr. T.S. Hsuing ('27) was the founding dean of the CAU College of Veterinary Medicine, which is considered to be the number one veterinary college in China. We were treated like royalty there."

Next steps include a comparison of curricula and a visit by Chinese administrators and faculty to Iowa State to meet college faculty and staff, and to experience the environment in which their students might learn.



"The Chinese regard Iowa State as a top veterinary college, due, in part, to the work of two of our alumni, Dr. S.C. Cheng ('26), and Dr. T.S. Hsuing ('27)."

– Dr. Lisa K. Nolan

UPDATE: *Class of 1964 Scholarship Fund*

Fifteen years ago a group of visionary leaders of the College of Veterinary Medicine's Class of 1964 created a scholarship fund to support Iowa State University's veterinary students. As members of the class celebrated their 50th reunion on campus in August, they also celebrated a tremendous achievement: the scholarship endowment they had created had now grown to more than \$400,000! Thanks to the support of class members and friends, 35 students have now received over \$120,000 in educational support.

The class' intent in creating the Veterinary Medicine Class of 1964 Fund was to provide veterinary students greater opportunities to develop the skills and perspectives needed to lead in their profession. With the ever-increasing cost of education at the forefront of students' minds, scholarships, such as the Class of 1964 Scholarship, help make attending the Iowa State University College of Veterinary Medicine possible for the next generation of veterinarians. The Class of 1964 Scholarship "is an admirable example of the generosity

toward and passion for the profession shown by our alumni," said Dr. Lisa K. Nolan, Dr. Stephen G. Juelsgaard Dean of the College of Veterinary Medicine. "College alumni, such as the members of the graduating class of 1964, help students to pursue their academic and professional dreams each and every day, and the college could not be more grateful."



Accolades & Awards

The following alumni and faculty were honored with awards at the 2014 annual meeting of the American Association of Bovine Practitioners:

Dr. Angela Daniels ('99) was named Dairy Quality Assurance Veterinarian of the Year.

Dr. Maarten Drost ('62) was one of two recipients of the Veterinary Hall of Fame award.

Dr. Jesse Goff ('84), professor of biomedical sciences and Anderson Chair, received the Zoetis Distinguished Service Award.

Dr. Hans Coetzee, ISU associate professor of veterinary diagnostic and production animal medicine, received the AABP Award of Excellence.

Dr. Grant Dewell, ISU beef extension veterinarian, received a 2014 Foundation Competitive Research Grant.

McKenzie Steger ('16) received the AABP Merck Student Recognition Award for the second year in a row.

The following awards were presented to the college's faculty during a university ceremony on September 22, 2014:

Iowa State University Award for Outstanding Achievement in Teaching was presented to College of Veterinary Medicine's **Dr. Gayle Brown** who is a senior lecturer in the Department of Veterinary Microbiology and Preventive Medicine.

Iowa State University Award for Early Achievement in Extension or Professional Practice was awarded to **Dr. Darin Madson**, assistant professor of veterinary diagnostic and production animal medicine.

Dr. Lisa K. Nolan, dean of the College of Veterinary Medicine, received the Phibro Animal Health Excellence in Poultry Research Award at the annual meeting of the American Association of Avian Pathologists.

Dr. Nolan also received an Honorary Diplomate status from the American Association of Veterinary Epidemiologists this summer.

Drs. Danelle Bickett-Weddle ('99) and **Glenda Dvorak** ('01), Center for Food Security and Public Health, were selected to receive the American College of Veterinary Preventive Medicine President's Award in July 2014.

Dr. Charles O. Thoen, professor of veterinary microbiology and preventive medicine, received the Distinguished Research Alumnus Award by the University of Minnesota College of Veterinary Medicine in October 2014.

Call for Nominations!

The College of Veterinary Medicine invites nominations for the 2015 Stange Award for Meritorious Service and the William P. Switzer Award in Veterinary Medicine. Nominations will be accepted until Feb. 15, 2015. Nomination forms are available at www.vetmed.iastate.edu/alumni/awards-and-recognitions.



Endowed Lecture to Honor Dr. Darrell Trampel

By Tom Ligouri

Dr. Darrell Trampel, a longtime poultry extension veterinarian and diagnostician with the Iowa State University College of Veterinary Medicine, passed away unexpectedly in August. In honor of his many contributions to the poultry industry, an endowment has been established that will invite a distinguished speaker to present the *Dr. Darrell W. Trampel Lecture in Poultry Medicine* at the Iowa Egg Industry Symposium, held annually at Iowa State University.

In announcing the new endowment, Dr. Pat Halbur, chair of the Department of Veterinary Diagnostic and Production Animal Medicine, said, “Dr. Trampel was an extremely talented poultry diagnostician and a nationally renowned expert in poultry diseases. No one cared more about or contributed more to advancing the health and success of the Iowa and U.S. poultry industries.”

Dr. Trampel joined Iowa State in 1982 and is credited with having had a substantial impact on the growth and success of Iowa’s poultry and game bird industries. His work included the annual egg symposium, Pullorum Testing School, National Egg Quality School, annual Iowa-area turkey meetings, and numerous other local and regional meetings. He also taught a number of veterinary and graduate students and contributed lectures to undergraduate courses.

“Dr. Trampel exemplified the land-grant university mission,” Halbur said. “We are honored to recognize his 32-year career with this endowment and lecture at one of the premier egg industry gatherings in the nation.” Funding for the lecture was provided by the Department of Veterinary Diagnostic and Production Animal Medicine, the College of Veterinary Medicine and anonymous donors. **gd**

“No one cared more about or contributed more to **advancing the health and success** of the Iowa and U.S. **poultry industries.**”

– Dr. Pat Halbur



File Photo



File Photo



Dr. Patrick Halbur presents Christine Trampel with a Gentle Doctor statue during a recognition of her husband Darrell's life and accomplishments at the Iowa Egg Industry Symposium in November. Photo: Heather Brewer



File Photo

Ames, Iowa 50011
Return Service Requested

Dr. Cy Finds a Home at Vet Med

The Leadership Ames Class XXVII founded CyclONE City, a "tour" of life-sized Cy statues throughout the community, as a fundraiser to support local Ames charities and provide a scholarship to an Ames resident to attend ISU. Each statue has been sponsored by a supporter and decorated by an artist. The college supported *Dr. Cy* dressed in a white lab coat with a stethoscope around his neck, designed by artist Molly Nagel of Mason City, Iowa. *Dr. Cy* is located at the intersection of Riverside Drive and the small animal hospital client parking lot. The statues have been on parade this fall in Ames and some of the statues will be available for an auction at a later date.



Jessica Ludvik ('15) stops by the Dr. Cy statue on her way to the Field Services Building at the College of Veterinary Medicine.